

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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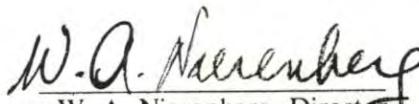
and

CalCOFI Cruise 7503
24 February - 28 March 1975

Sponsored by
Marine Research Committee

SIO Reference 84-10
12 March 1984

Approved for distribution:


W. A. Nierenberg
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	δ_T Thermometric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1) \cdot 10^3$ where $\rho_{s,t,0}$ is the density the parcel of sea water would have if moved isothermally to the sea surface.	g/L
or		
SIGMA T		
DD	Geopotential anomaly, referred to the sea surface.	dynamic meters

FOOTNOTES

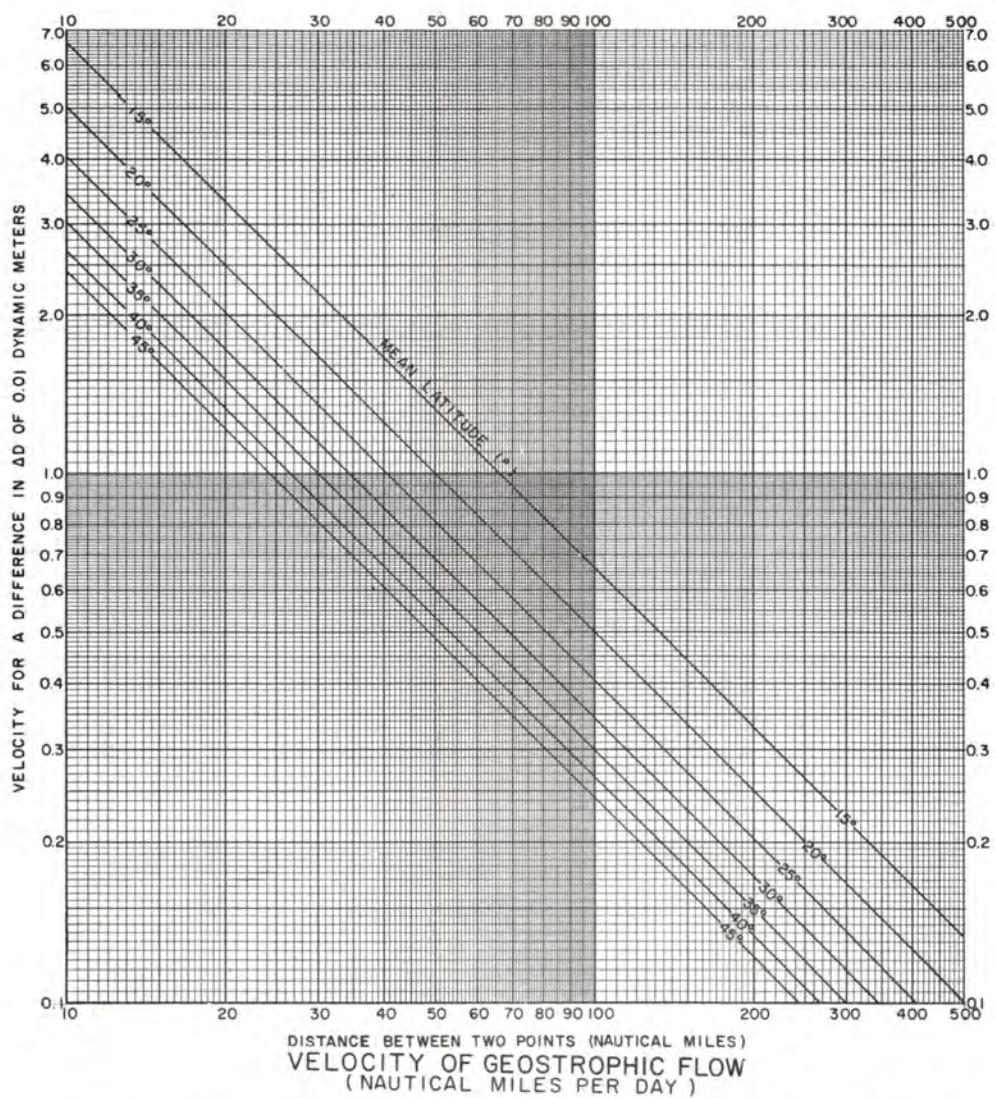
In addition to footnotes, special notations are used without footnotes because the meaning is always the same.

P: After depth values indicates the Nansen bottle poststripped.

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.
- Klein, Hans T., 1973. A new technique for processing physical oceanographic data. SIO Ref. No. 73-14.
- Matthews, D. J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, H. D. 282, 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	KNOTS NM/DAY	0.02 0.47	0.04 0.93	0.06 1.40	0.08 1.86	0.10 2.33	0.12 2.80	0.14 3.26	0.16 3.73	0.17 4.20
10	0.19 4.66	0.21 5.13	0.23 5.59	0.25 6.06	0.27 6.53	0.29 6.99	0.31 7.46	0.33 7.93	0.35 8.39	0.37 8.86
20	0.39 9.32	0.41 9.79	0.43 10.26	0.45 10.72	0.47 11.19	0.49 11.66	0.51 12.12	0.52 12.59	0.54 13.05	0.56 13.52
30	0.58 13.99	0.60 14.45	0.62 14.92	0.64 15.38	0.66 15.85	0.68 16.32	0.70 16.78	0.72 17.25	0.74 17.72	0.76 18.18
40	0.78 18.65	0.80 19.11	0.82 19.58	0.84 20.05	0.85 20.51	0.87 20.98	0.89 21.45	0.91 21.91	0.93 22.38	0.95 22.84
50	0.97 23.31	0.99 23.78	1.01 24.24	1.03 24.71	1.05 25.17	1.07 25.64	1.09 26.11	1.11 26.57	1.13 27.04	1.15 27.51
60	1.17 27.98	1.18 28.44	1.20 28.90	1.22 29.37	1.24 29.84	1.26 30.30	1.28 30.77	1.30 31.24	1.32 31.70	1.34 32.17
70	1.36 32.63	1.38 33.10	1.40 33.57	1.42 34.03	1.44 34.50	1.46 34.96	1.48 35.43	1.50 35.90	1.52 36.36	1.53 36.83
80	1.55 37.30	1.57 37.76	1.59 38.23	1.61 38.69	1.63 39.16	1.65 39.63	1.67 40.09	1.69 40.56	1.71 41.03	1.73 41.49
90	1.75 41.96	1.77 42.42	1.79 42.89	1.81 43.36	1.83 43.82	1.85 44.29	1.86 44.76	1.88 45.22	1.90 45.69	1.92 46.15
100	1.94 46.62	1.96 47.09	1.98 47.55	2.00 48.02	2.02 48.48	2.04 48.95	2.06 49.42	2.08 49.88	2.10 50.35	2.12 50.82

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

1 cm/sec = 0.019 knts = 0.466 NAUTICAL MILES / DAY

1 knt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec

1 NAUTICAL MILE / DAY = 0.042 knts = 2.14 cm/sec

FIGURES

Cruise 7501

1. CalCOFI Cruise 7501, 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

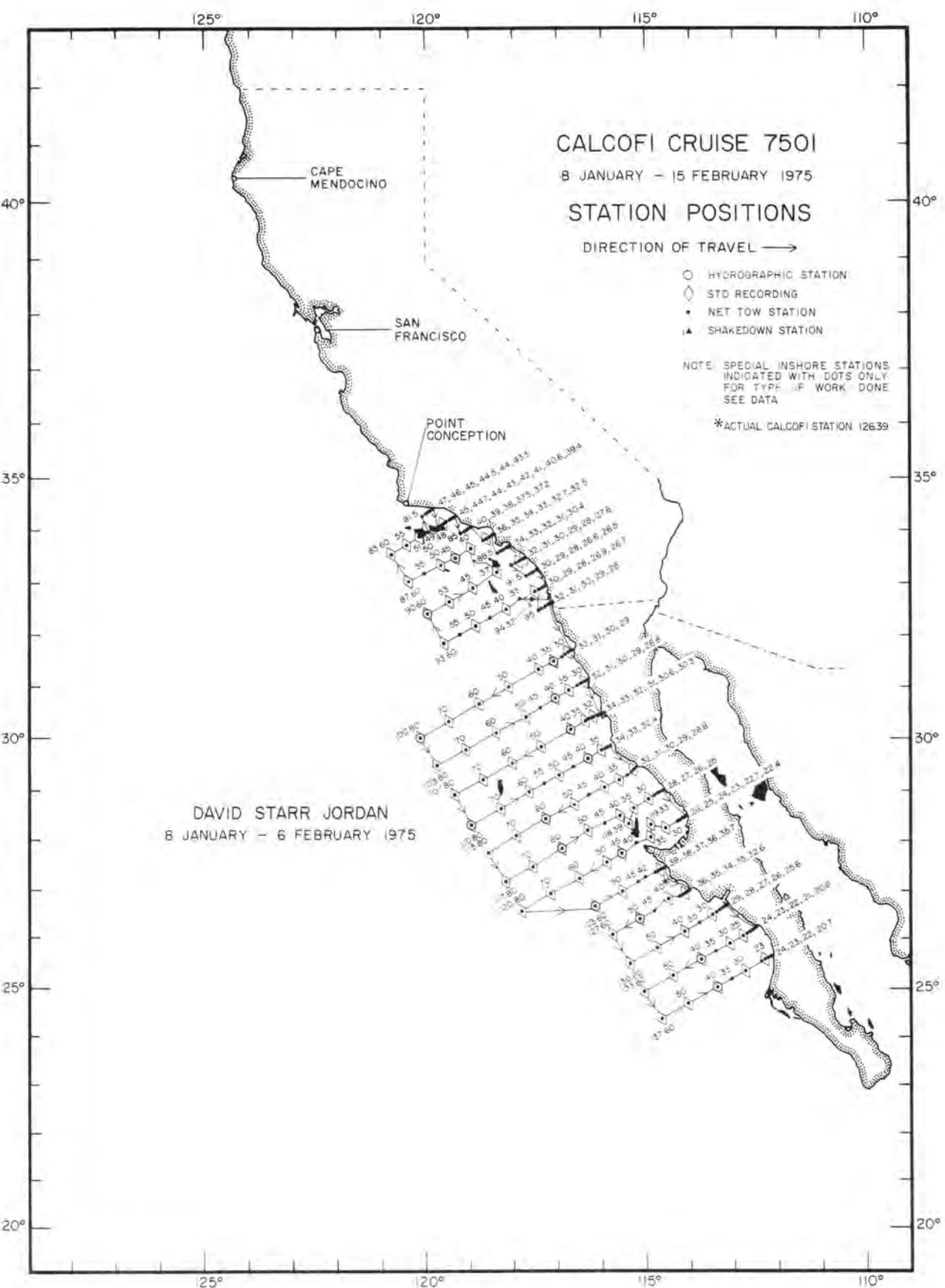


FIGURE I

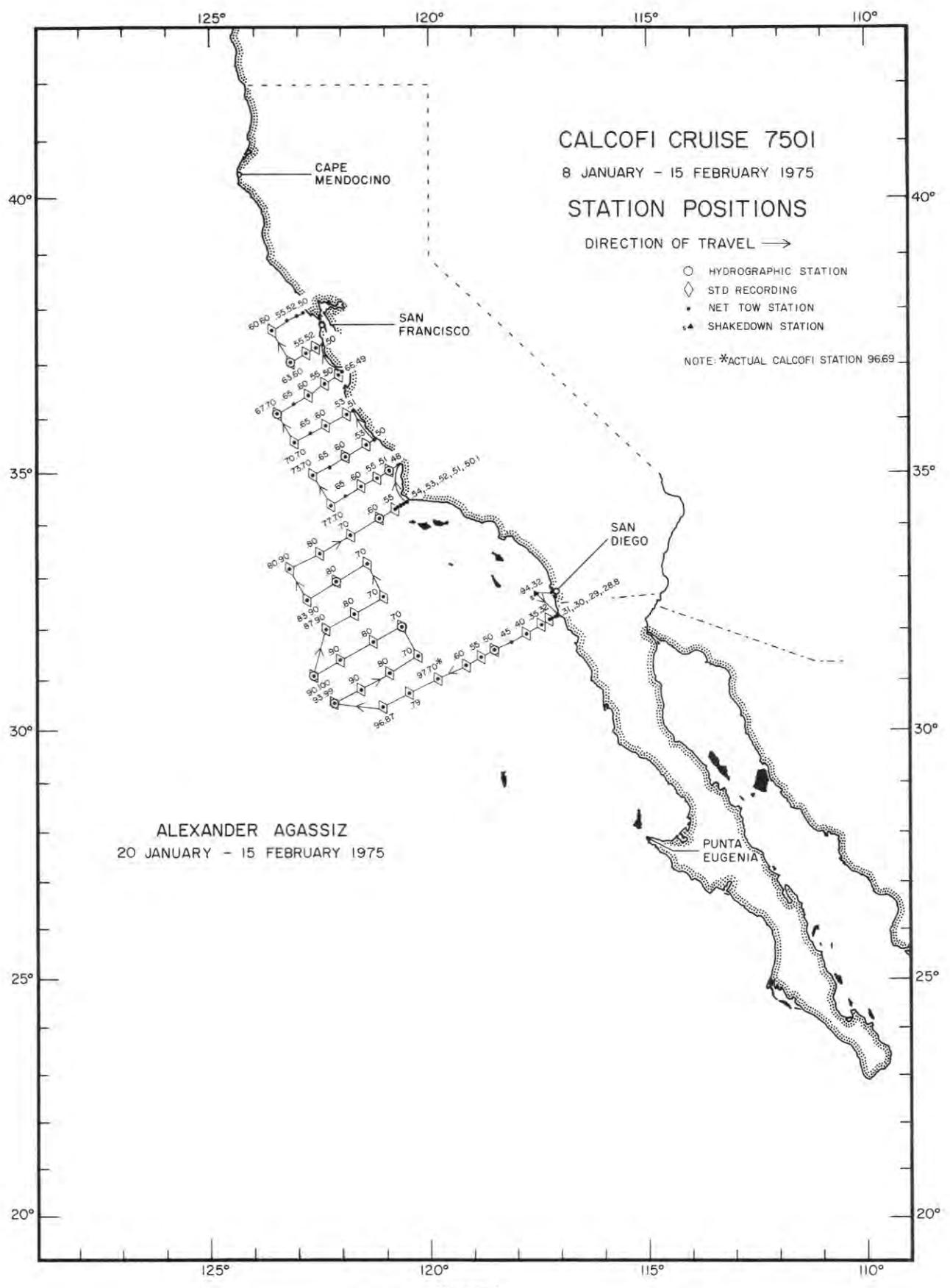


FIGURE 1A

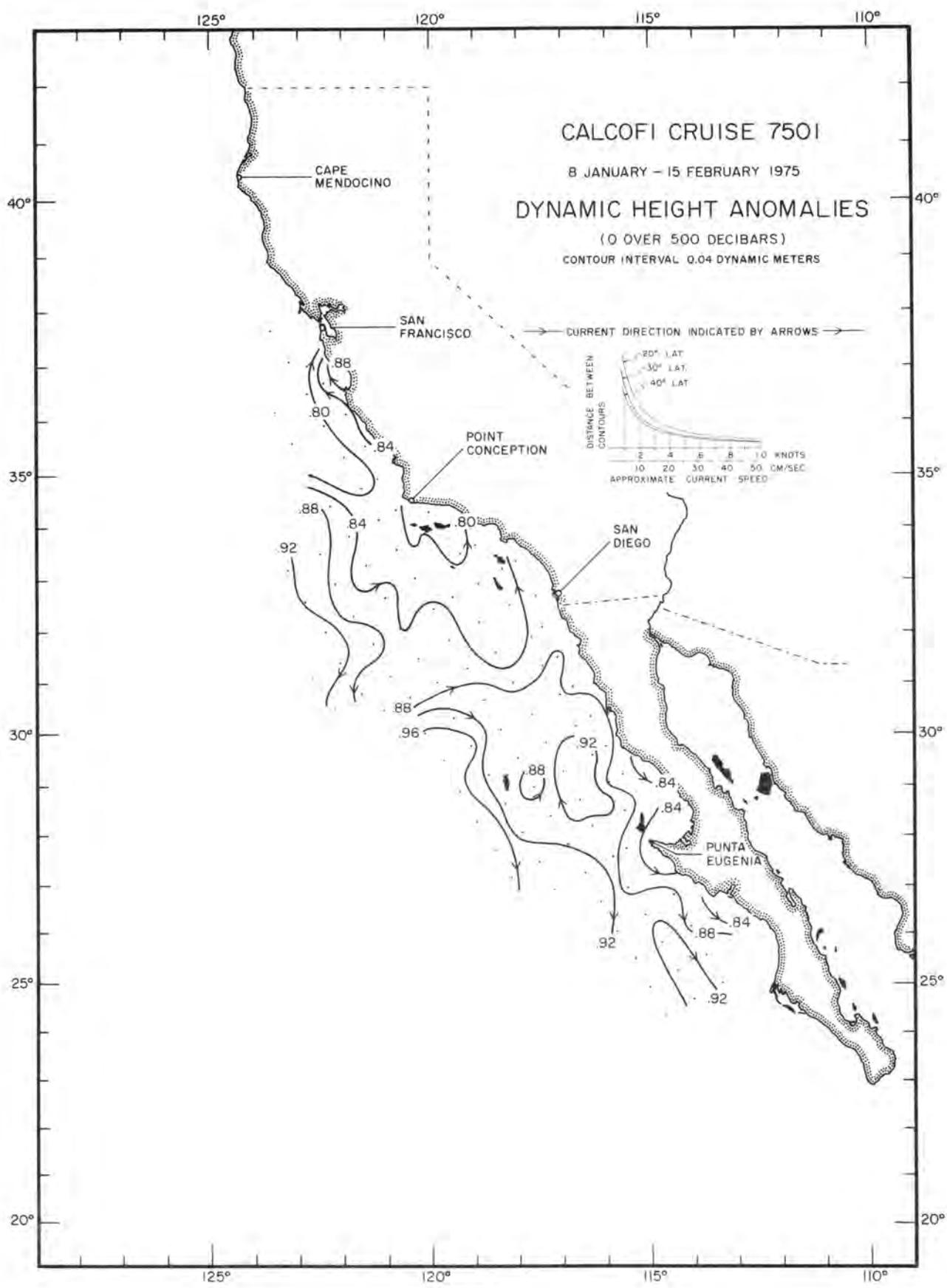
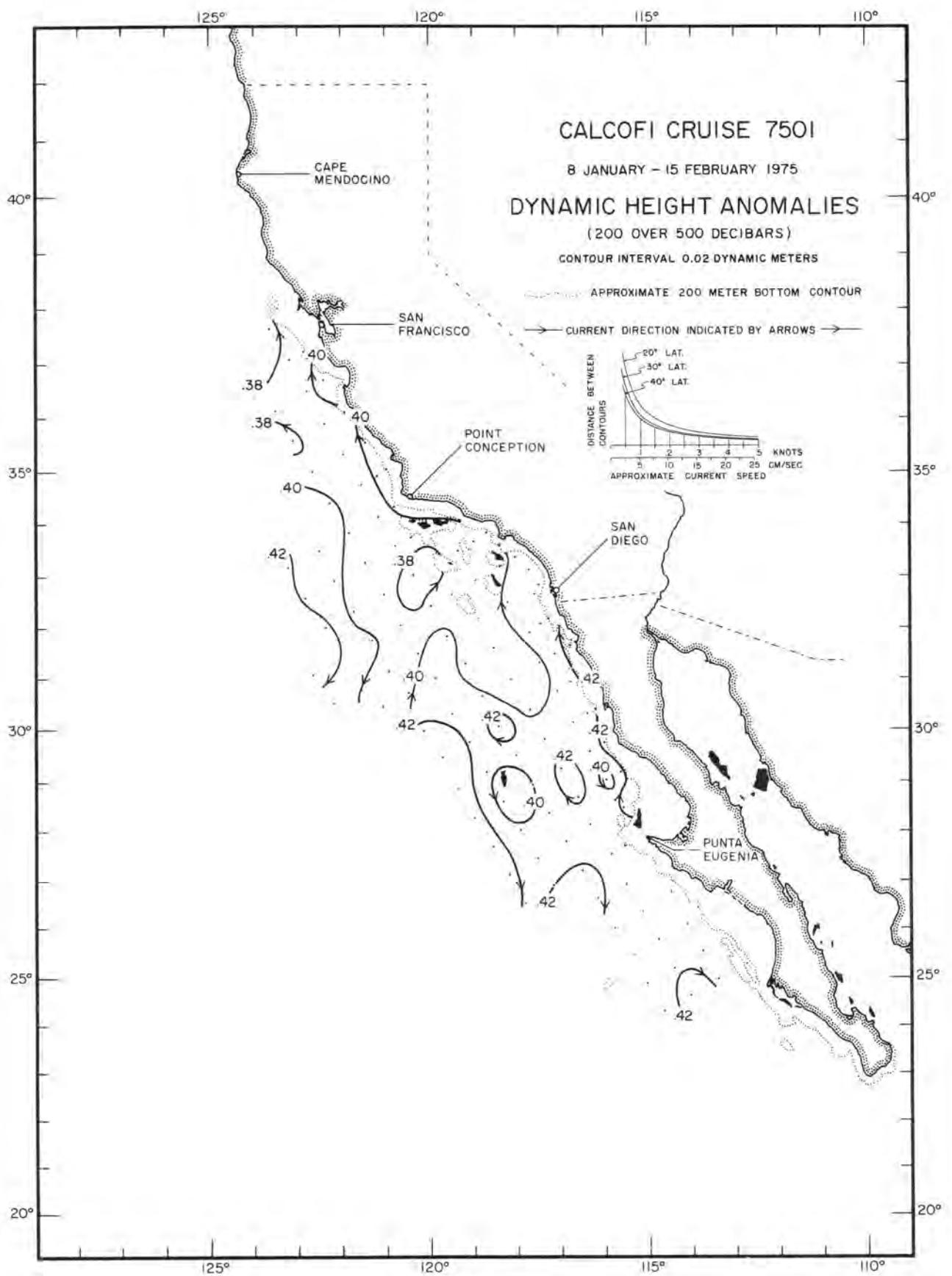
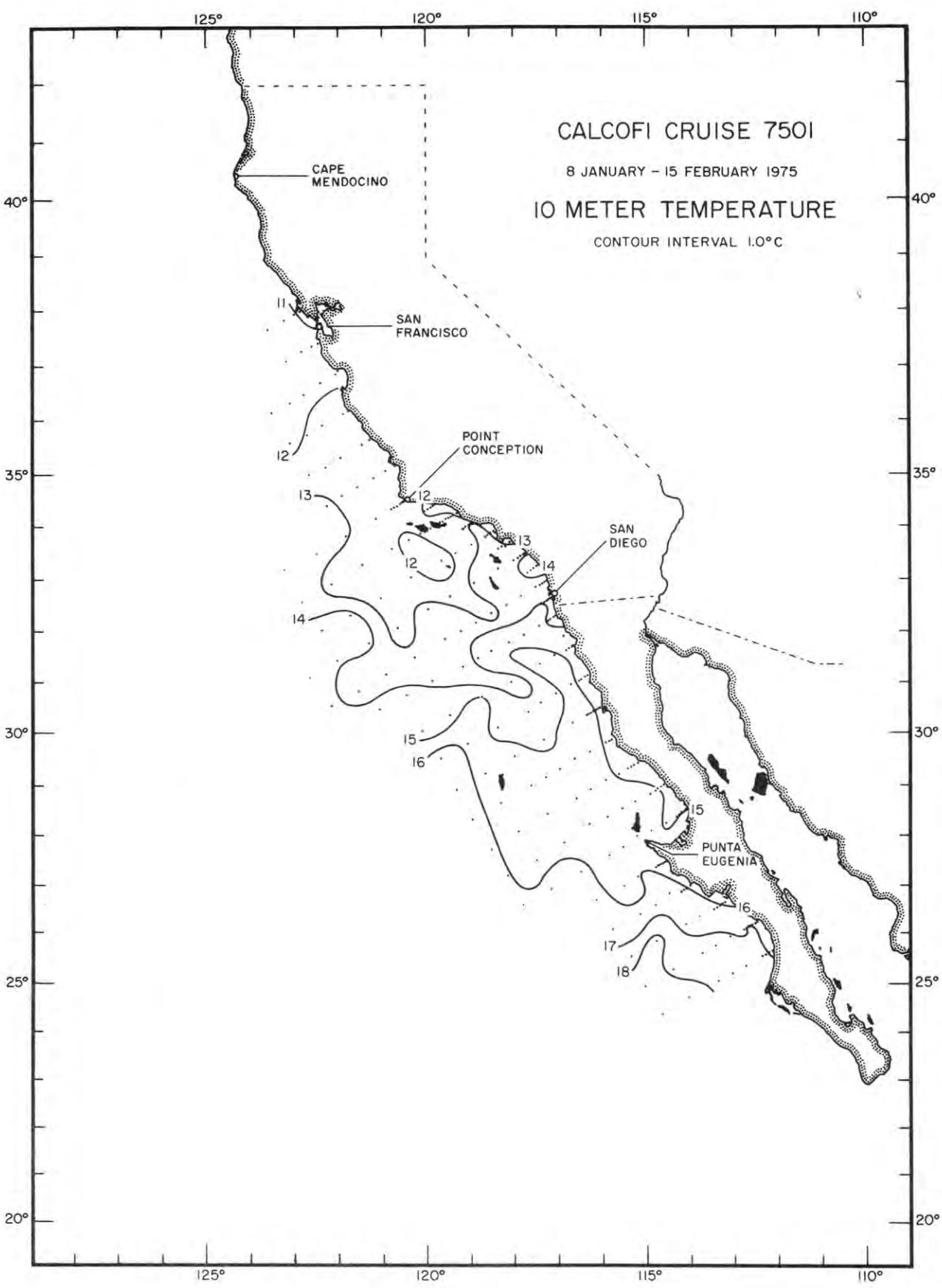


FIGURE 2





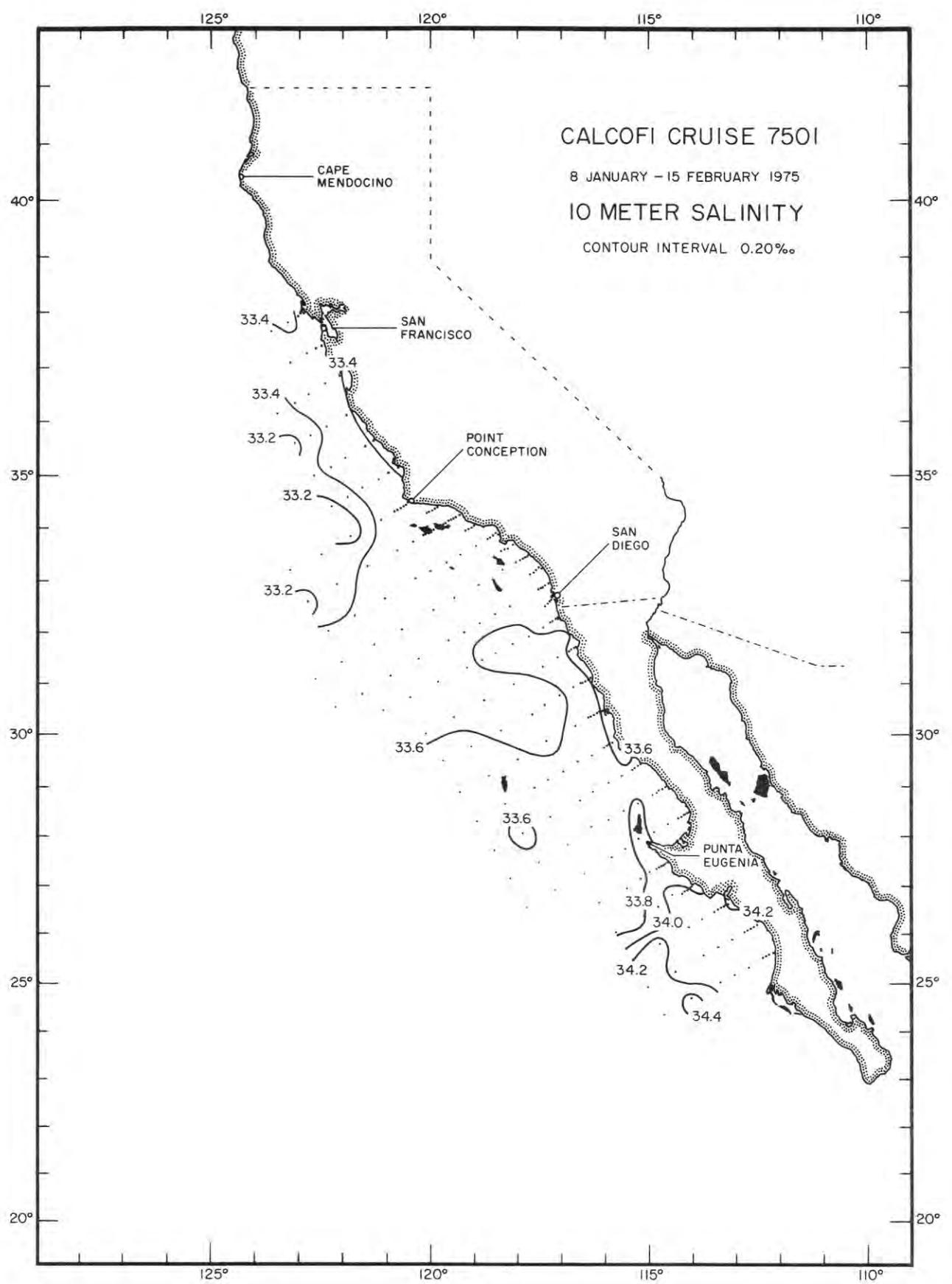


FIGURE 5

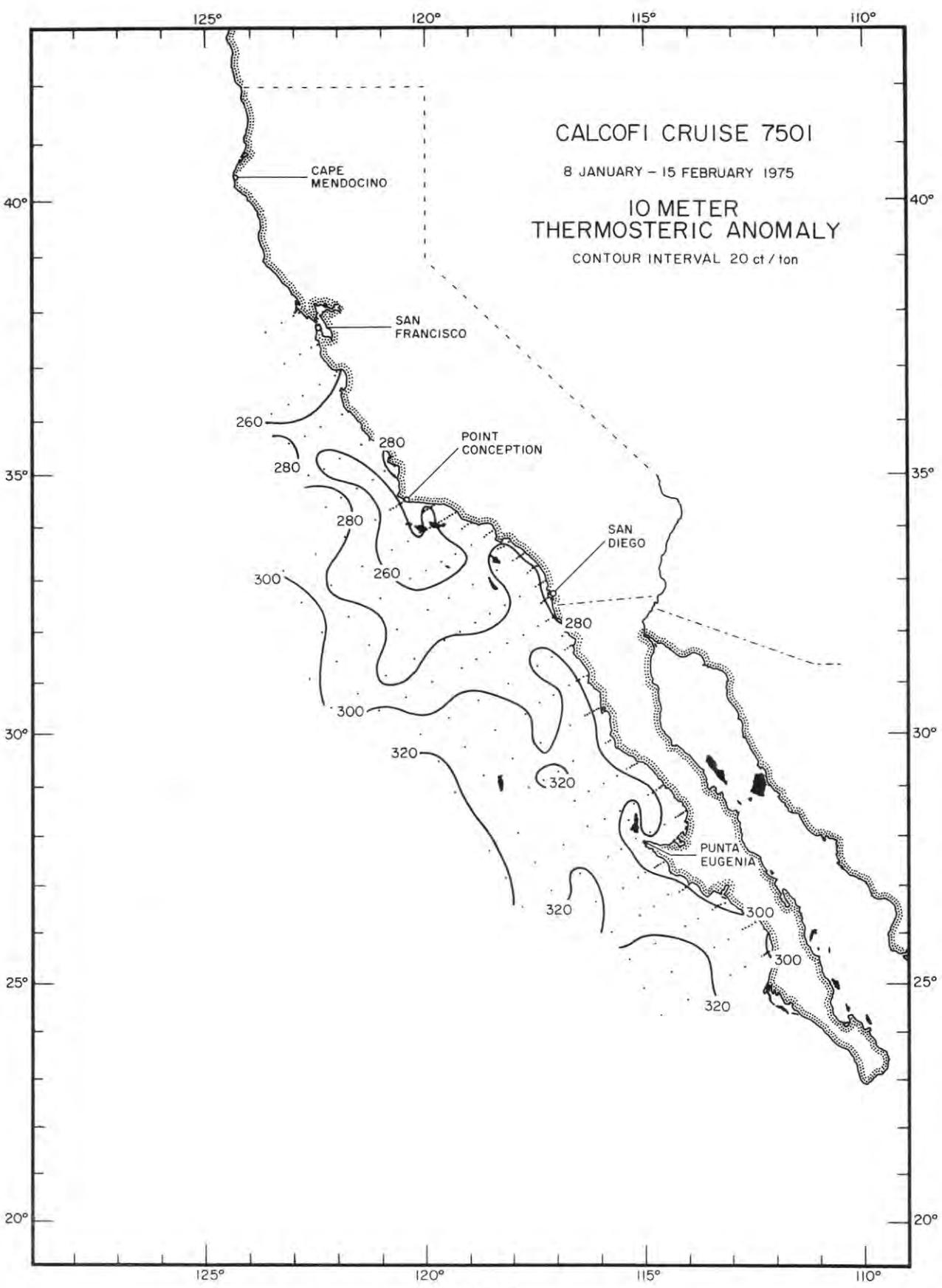


FIGURE 6

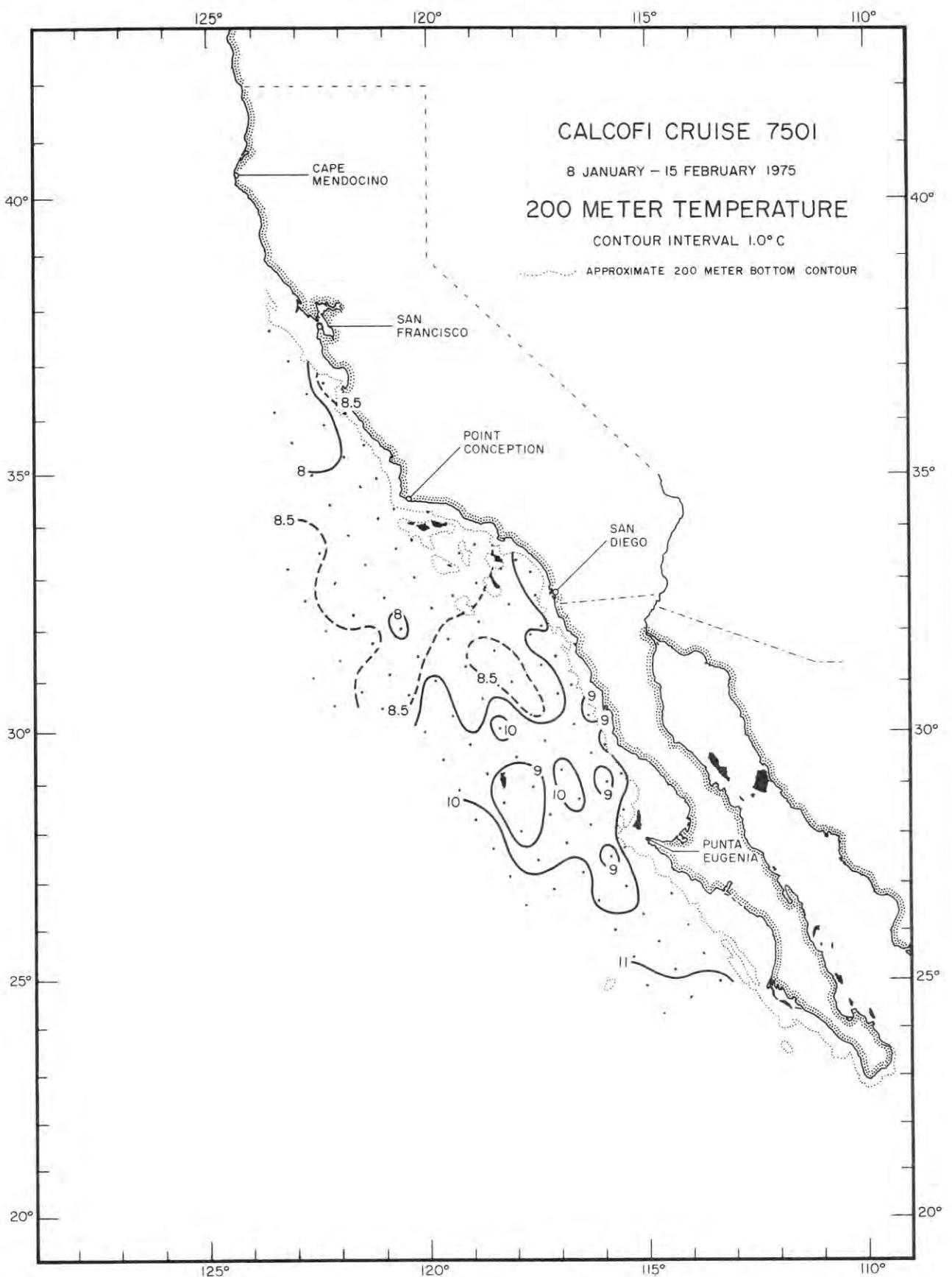


FIGURE 7

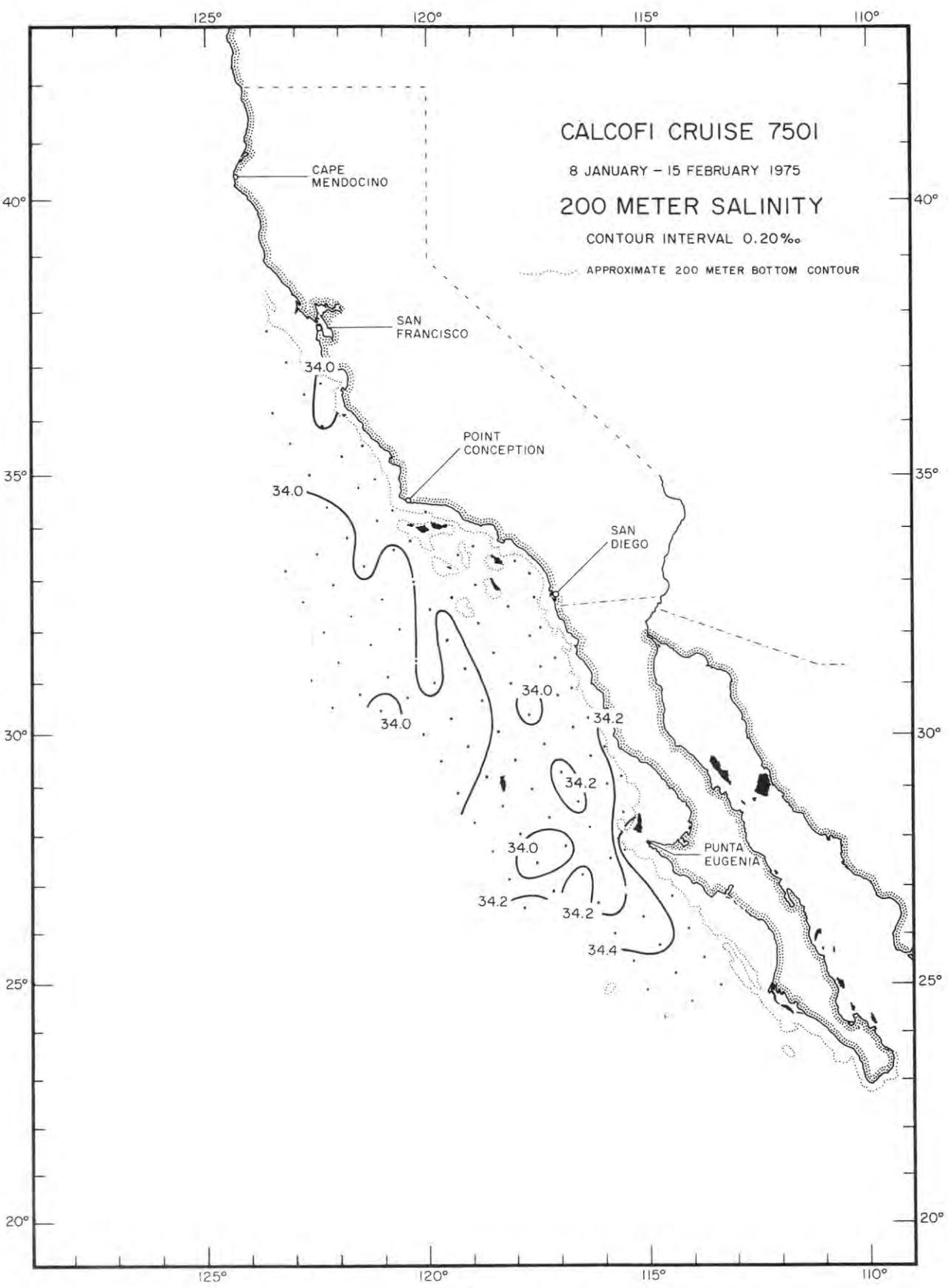


FIGURE 8

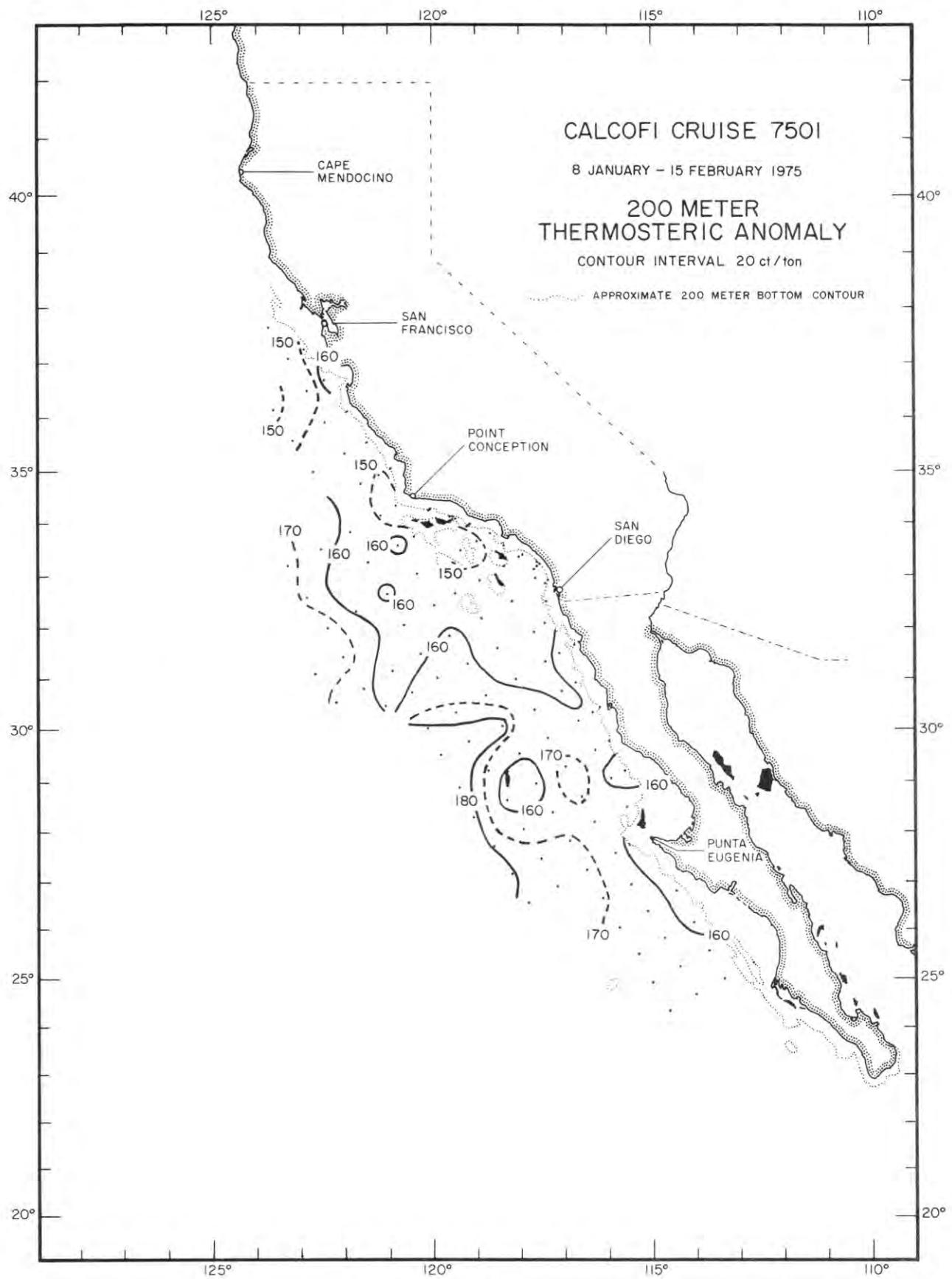


FIGURE 9

PERSONNEL

Cruise 7501

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*

Thomas, James E. (in charge)	Marine Technician, SIO
Conway, Carol B.	Engineering Aide, SIO
Mead, Richard V.	Marine Technician, SIO
Patla, Susan M.	Marine Technician, SIO
Singleton, James R.	Electronics Technician, SIO
Yates, Robert E.	Marine Technician, SIO

RV *David Starr Jordan*

Counts, Robert C. (in charge)	Fishery Biologist, NMFS
Bliss, Kenneth A.	Oceanographer, NMFS
Brown, Jack C.	Electronics Technician, NMFS
Casian, Jorge A. R.	Student, ECM
Kellogg, Durrant	Marine Technician, SIO
Metoyer, Jack D.	Biological Technician, NMFS
Millan, Roberto	Student, ECM
Price, William H.	Biological Technician, NMFS
Stevens, Elizabeth	Biological Technician, NMFS

60060 RV ALFRED R. AGASSIZ CALCUTT CRUISE 7501 63052
 LATITUDE LONGITUDE MO/DAY/YR START TIME LATITUDE LONGITUDE MO/DAY/YR START TIME
 37 31.0N 123 37.0W 02/15/75 2312 GMT 37 19.5N 122 36.0W 02/15/75 1107 GMT
 BOTTOM WIND SPEED WEATHER DOMINANT WAVES BOTTOM WIND SPEED WEATHER DOMINANT WAVES
 3163M 340 17KT 1 310 20 7 78M 360 19KT 1 310 20 7

Z	T	S	SIGMA	T	DT	DD	Z	T	S	SIGMA	T	DT	DD
0	11.28	33.51	25.587	240.8	0.000		0	11.42	33.53	25.577	241.8	0.000	
10	11.29	33.51	25.585	241.0	0.024		10	11.41	33.53	25.579	241.6	0.024	
20	11.29	33.51	25.585	241.0	0.048		20	11.42	33.53	25.577	241.8	0.048	
30	11.29	33.51	25.585	241.0	0.072		30	11.43	33.53	25.575	242.0	0.072	
40	11.27	33.51	25.589	240.7	0.096		40	11.43	33.53	25.575	242.0	0.096	
50	10.71	33.58	25.743	226.0	0.120		50	11.43	33.52	25.567	242.7	0.121	
65	10.15	33.70	25.933	207.9	0.174		58	11.41	33.53	25.579	241.6	0.140	
100	9.00	33.83	26.223	180.3	0.223								
125	8.60	33.94	26.372	166.2	0.267								
150	8.39	33.99	26.444	159.4	0.308								
175	8.04	34.03	26.527	151.4	0.348								
200	7.66	34.04	26.591	145.4	0.386								
225	7.43	34.05	26.632	141.5	0.422								
250	7.10	34.05	26.678	137.1	0.458								
275	6.73	34.07	26.745	130.8	0.493								
300	6.60	34.10	26.786	126.9	0.526								
350	6.50	34.19	26.870	119.0	0.590								
400	5.84	34.15	26.923	113.9	0.651								
450	5.75	34.20	26.974	109.1	0.708								
500	5.64	34.27	27.042	102.6	0.765								
550	5.35	34.28	27.085	98.5	0.819								
600	5.19	34.37	27.136	93.7	0.870								
700	4.80	34.34	27.197	88.0	0.968								
800	4.56	34.38	27.255	82.4	1.061								
900	4.22	34.41	27.316	76.7	1.149								
1000	3.86	34.44	27.377	70.9	1.232								

63055 RV ALFRED R. AGASSIZ CALCUTT CRUISE 7501 63060
 LATITUDE LONGITUDE MO/DAY/YR START TIME LATITUDE LONGITUDE MO/DAY/YR START TIME
 37 13.0N 122 50.0W 02/15/75 1314 GMT 37 03.5N 123 11.5W 02/15/75 1607 GMT
 BOTTOM WIND SPEED WEATHER DOMINANT WAVES BOTTOM WIND SPEED WEATHER DOMINANT WAVES
 272M 320 21KT 1 310 20 7 2410M 340 19KT 1 310 20 7

Z	T	S	SIGMA	T	DT	DD	Z	T	S	SIGMA	T	DT	DD
0	11.37	33.55	25.601	239.5	0.000		0	11.44	33.49	25.542	245.1	0.000	
10	11.38	33.55	25.600	239.6	0.023		10	11.44	33.50	25.550	244.4	0.024	
20	11.38	33.55	25.600	239.6	0.047		20	11.44	33.50	25.550	244.4	0.048	
30	11.38	33.55	25.600	239.6	0.071		30	11.44	33.50	25.550	244.4	0.073	
40	11.37	33.55	25.601	239.5	0.096		40	11.42	33.49	25.546	244.7	0.098	
50	11.05	33.60	25.698	230.3	0.119		50	11.37	33.48	25.547	244.6	0.122	
75	9.83	33.77	26.042	197.6	0.173		75	9.96	33.73	26.071	194.8	0.177	
100	9.28	33.89	26.225	180.1	0.221		100	8.76	33.83	26.230	179.7	0.225	
125	8.82	33.95	26.345	168.7	0.265		125	8.64	33.93	26.358	167.5	0.269	
150	8.37	34.02	26.470	156.9	0.306		150	8.41	34.00	26.448	159.0	0.310	
175	8.27	34.04	26.501	154.0	0.346		175	8.13	34.03	26.514	152.7	0.350	
200	8.11	34.05	26.533	150.9	0.385		200	7.15	34.05	26.586	145.9	0.388	
225	8.08	34.06	26.545	149.8	0.423		225	7.47	34.09	26.658	139.1	0.424	
250	8.06	34.07	26.556	148.7	0.462		250	7.78	34.10	26.692	135.8	0.460	
							275	7.13	34.12	26.729	132.3	0.494	
							300	6.90	34.12	26.761	129.3	0.528	
							350	6.50	34.16	26.846	121.2	0.593	
							400	6.25	34.18	26.895	116.6	0.655	
							450	6.06	34.23	26.959	110.6	0.715	
							500	5.74	34.26	27.022	104.5	0.772	
							550	5.53	34.29	27.072	99.8	0.826	
							600	5.39	34.31	27.104	96.7	0.879	
							700	4.93	34.37	27.206	87.1	0.978	
							800	4.58	34.40	27.269	81.1	1.070	
							900	4.21	34.43	27.333	75.1	1.157	
							1000	3.88	34.46	27.391	69.6	1.238	

RV ALEXANDER AGASSIZ CALCUTT CRUISE 7501 63060
 LATITUDE LONGITUDE MO/DAY/YR MESSANGER TIME BOTTOM WIND SPEED WEATHER DOMINANT WAVES
 37 03.5N 123 11.5W 2/15/75 1712 GMT 2410M 340 19KT 1 310 20 7

Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
0	11.45	33.483	6.25						245.8	0	11.45	33.483	6.25	25.535	245.8	0.000
10	11.46	33.484	6.22						245.9	10	11.46	33.484	6.22	25.534	245.9	0.024
30	11.44	33.482	6.28						245.7	20	11.45	33.484	6.24	25.535	245.8	0.049
60	11.28	33.477	6.19						243.3	30	11.44	33.482	6.28	25.536	245.7	0.073
80	9.61	33.664	3.89						202.0	50	11.33	33.480	6.22	25.553	244.1	0.123
95	9.17	33.767	3.33						187.6	75	10.02	33.611	4.46	25.884	212.6	0.180
110	8.90	33.832	3.27						178.7	100	9.06	33.792	3.31	26.183	184.2	0.230
139	8.60	33.927	2.82						167.2	125	8.72	33.886	3.05	26.309	172.2	0.275
164	8.31	33.993	2.59						158.0	150	8.47	33.960	2.70	26.407	162.9	0.318
194	7.97	34.022	2.52						151.1	200	7.87	34.030	2.42	26.551	149.2	0.397
228	7.47	34.066	1.91						140.9	250	7.28	34.085	1.67	26.680	137.0	0.471
301	6.98	34.113	1.34						130.9	300	6.98	34.113	1.34	26.744	130.9	0.540
404	6.21	34.174	0.80						116.6	400	6.23	34.172	0.81	26.889	117.1	0.669
510	5.66	34.257	0.42						103.8	500	5.70	34.250	0.44	27.018	104.9	0.786
616	5.22	34.310	0.34						94.8	600	5.28	34.303	0.35	27.112	96.0	0.893
751	4.69	34.374	0.35						84.2	700	4.88	34.351	0.34	27.196	88.0	0.992
905	4.19	34.423	0.40						75.4	800	4.52	34.392	0.35	27.268	81.2	1.085
1070	3.68	34.466	0.53						67.2	1000	3.89	34.449	0.46	27.381	70.5	1.254

70053

RV ALFRED XANDER AGASSIZ

CALCOFI CRUISE 7501

70060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
36 06.5N	121 54.0W	02/13/75	2103 GMT	35 53.0N	122 23.0W	02/14/75	0122 GMT				
BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.10	33.38	25.334	264.9	0.000	0	12.27	33.41	25.325	265.7	0.000
10	12.08	33.47	25.407	257.9	0.026	10	12.27	33.42	25.333	265.0	0.026
20	12.03	33.48	25.424	256.3	0.051	20	12.18	33.43	25.358	262.6	0.052
30	11.84	33.51	25.483	250.1	0.077	30	11.80	33.44	25.437	255.1	0.078
40	11.70	33.54	25.533	246.0	0.102	40	11.67	33.51	25.515	247.7	0.104
50	11.40	33.53	25.580	241.5	0.126	50	11.60	33.54	25.551	244.2	0.128
75	10.24	33.62	25.855	215.3	0.186	75	10.60	33.58	25.762	224.2	0.187
100	9.49	33.80	26.121	190.1	0.235	100	9.16	33.76	26.143	187.9	0.234
125	9.24	33.89	26.232	179.5	0.282	125	8.78	33.46	26.282	174.8	0.285
150	8.79	33.99	26.382	165.3	0.325	150	8.54	33.93	26.374	166.1	0.328
175	8.49	34.04	26.457	157.2	0.366	175	8.17	33.96	26.453	158.5	0.370
200	8.20	34.07	26.535	150.7	0.406	200	7.84	34.00	26.534	150.4	0.409
225	7.94	34.10	26.597	148.8	0.444	225	7.16	34.06	26.595	145.0	0.447
250	7.71	34.11	26.639	140.9	0.480	250	7.51	34.08	26.644	140.4	0.446
275	7.45	34.14	26.700	135.1	0.516	275	7.26	34.11	26.703	134.8	0.514
300	7.21	34.16	26.741	131.2	0.550	300	7.06	34.14	26.755	129.4	0.553
350	6.86	34.18	26.814	124.3	0.617	350	6.72	34.17	26.825	123.3	0.619
400	6.61	34.20	26.855	120.4	0.681	400	6.38	34.21	26.901	116.0	0.682
450	6.12	34.22	26.943	112.0	0.742	450	6.09	34.23	26.955	110.0	0.741
500	5.87	34.26	27.006	106.1	0.800	500	5.79	34.26	27.016	105.1	0.798
550	5.75	34.27	27.029	103.9	0.855	550	5.47	34.28	27.071	99.9	0.853
600	5.49	34.30	27.084	98.6	0.910	600	5.23	34.31	27.123	94.9	0.905
700	4.93	34.38	27.214	86.4	1.010	700	4.89	34.34	27.186	88.9	1.004
800	4.52	34.40	27.275	80.5	1.101	800	4.56	34.40	27.271	80.9	1.097
900	4.23	34.44	27.339	74.5	1.187	900	4.29	34.42	27.316	76.6	1.185
1000	3.91	34.47	27.396	69.1	1.268	1000	3.90	34.44	27.373	71.3	1.267

70070

RV ALFRED XANDER AGASSIZ

CALCOFI CRUISE 7501

73053

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
35 33.5N	123 06.0W	02/14/75	0730 GMT	35 31.5N	121 28.5W	02/13/75	1227 GMT				
BOTTUM	WIND	SPEED	WEATHER	DIMINANT WAVES		BOTTUM	WIND	SPEED	WEATHER	DIMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	11.88	33.06	25.128	284.5	0.000	0	12.39	33.42	25.310	267.2	0.000
10	11.90	33.15	25.194	278.2	0.028	10	12.39	33.45	25.333	265.0	0.026
20	11.83	33.19	25.238	274.1	0.055	20	12.17	33.46	25.383	260.3	0.052
30	11.65	33.24	25.310	267.2	0.082	30	12.02	33.47	25.419	256.8	0.078
40	10.94	33.37	25.459	245.4	0.108	40	11.92	33.48	25.445	254.3	0.104
50	10.80	33.41	25.595	240.1	0.133	50	11.89	33.48	25.451	253.7	0.130
75	10.05	33.60	25.872	213.7	0.190	75	11.44	33.52	25.565	242.9	0.192
100	9.03	33.76	26.164	186.0	0.240	100	10.21	33.61	25.853	215.6	0.250
125	8.71	33.93	26.347	168.6	0.285	125	9.29	33.81	26.161	186.2	0.301
150	8.33	34.00	26.460	157.8	0.326	150	9.00	33.97	26.333	169.9	0.346
175	7.99	34.03	26.535	150.7	0.366	175	8.83	34.01	26.422	161.4	0.388
200	7.61	34.02	26.583	146.2	0.405	200	8.34	34.03	26.482	155.7	0.428
225	7.15	34.00	26.632	141.5	0.440	225	8.01	34.05	26.548	149.5	0.468
250	6.85	34.02	26.689	136.1	0.476	250	7.81	34.08	26.601	144.5	0.505
275	6.53	34.02	26.732	132.1	0.510	275	7.53	34.09	26.644	139.4	0.542
300	6.30	34.07	26.802	125.5	0.544	300	7.52	34.12	26.674	137.5	0.578
350	5.88	34.09	26.871	118.9	0.607	350	7.15	34.17	26.766	128.8	0.647
400	5.90	34.19	26.947	111.6	0.667	400	6.83	34.18	26.814	123.9	0.713
450	5.83	34.24	26.995	107.1	0.724	450	6.45	34.22	26.900	116.1	0.776
500	5.60	34.25	27.031	103.6	0.780	500	6.24	34.24	26.943	112.0	0.837
550	5.38	34.28	27.082	98.9	0.834	550	5.85	34.26	27.009	105.8	0.895
600	5.12	34.31	27.136	93.7	0.885	600	5.52	34.29	27.073	99.7	0.950
700	4.78	34.35	27.207	87.0	0.983	700	5.05	34.35	27.176	89.9	1.052
800	4.46	34.40	27.282	79.9	1.074						
900	4.13	34.43	27.341	74.3	1.160						
1000	3.81	34.47	27.406	68.1	1.239						

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7501

73060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 18.0N	121 57.5W	2/12/75	1727 GMT	1962M	140	BKT	2	SIGT	DT	DD	
Z	T	S	DT	N02	N03	DT	2	SIGT	DT	DD	
0	12.20	33.495	6.32			260.0	0	12.30	33.495	6.32	25.385
10	12.28	33.492	6.41			259.9	10	12.28	33.492	6.41	25.386
30	12.11	33.504	6.17			255.9	20	12.19	33.499	6.29	25.407
54	10.57	33.680	4.33			216.3	30	12.11	33.504	6.17	25.428
69	10.03	33.711	3.92			205.2	50	10.84	33.649	4.64	25.771
84	9.78	33.748	3.68			198.5	75	9.90	33.723	3.82	25.991
99	9.61	33.841	3.31			188.9	100	9.59	33.846	3.29	26.139
128	9.15	33.912	3.03			176.5	125	9.20	33.909	3.04	26.253
153	8.78	33.946	2.95			168.4	150	8.82	33.943	2.95	26.339
177	8.37	34.002	2.75			158.2	200	8.10	34.048	2.45	26.532
212	7.97	34.065	2.30			147.8	250	7.36	34.071	1.97	26.657
275	6.97	34.064	1.81			134.4	300	6.68	34.074	1.60	26.754
373	6.12	34.128	1.05			118.9	400	6.02	34.161	0.87	26.908
470	5.88	34.245	0.52			107.3	500	5.78	34.269	0.44	27.023
571	5.53	34.310	0.35			98.3	600	5.39	34.326	0.33	27.117
698	4.92	34.371	0.30			86.9	700	4.91	34.372	0.30	27.209
849	4.42	34.421	0.37			77.9	800	4.56	34.407	0.33	27.277
1001	4.05	34.455	0.52			71.6	1000	4.05	34.455	0.51	27.369

80070				RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7501				80080						
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
33 49.0N	121 50.0W	01/6/75	1203 GMT	33 29.0N	122 30.5W	01/26/75	0633 GMT	3599M	350	17Kt	0	DOMINANT WAVES	3952M	350	19Kt	1	DOMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		Z	T	S	SIGMA T	DT	DD
0	13.06	33.18	24.993	297.3	0.000	0	13.31	33.25	24.998	296.9	0.000		0	13.31	33.25	24.998	296.9	0.000
10	13.07	33.19	24.999	296.7	0.029	10	13.32	33.25	24.996	297.1	0.029		10	13.32	33.25	24.996	297.1	0.029
20	13.07	33.18	24.992	297.5	0.059	20	13.31	33.25	24.998	296.9	0.059		20	13.31	33.25	24.998	296.9	0.059
30	12.77	33.24	25.097	287.4	0.088	30	13.18	33.25	25.024	294.4	0.089		30	13.18	33.25	25.024	294.4	0.089
40	12.40	33.29	25.207	276.9	0.117	40	12.91	33.28	25.100	287.1	0.118		40	12.91	33.28	25.100	287.1	0.118
50	12.12	33.30	25.268	271.1	0.144	50	12.84	33.34	25.160	281.4	0.146		50	12.84	33.34	25.160	281.4	0.146
75	11.87	33.36	25.362	262.2	0.211	75	12.27	33.32	25.255	272.4	0.216		75	12.27	33.32	25.255	272.4	0.216
100	11.91	33.47	25.440	254.9	0.276	100	11.70	33.40	25.424	256.3	0.283		100	11.70	33.40	25.424	256.3	0.283
125	9.42	33.72	26.070	194.9	0.333	125	10.46	33.50	25.724	227.8	0.344		125	10.46	33.50	25.724	227.8	0.344
150	8.95	33.87	26.263	176.6	0.380	150	9.52	33.67	26.015	200.1	0.398		150	9.52	33.67	26.015	200.1	0.398
175	8.58	33.92	26.360	167.4	0.424	175	9.04	33.83	26.217	180.9	0.446		175	9.04	33.83	26.217	180.9	0.446
200	8.21	33.98	26.463	157.6	0.465	200	8.53	33.94	26.483	165.2	0.490		200	8.53	33.94	26.483	165.2	0.490
225	7.75	33.99	26.539	150.4	0.505	225	8.14	33.98	26.474	156.6	0.532		225	8.14	33.98	26.474	156.6	0.532
250	7.28	33.99	26.606	144.0	0.543	250	8.04	34.04	26.535	150.7	0.571		250	8.04	34.04	26.535	150.7	0.571
275	7.08	33.98	26.626	142.1	0.579	275	7.80	34.09	26.610	143.6	0.609		275	7.80	34.09	26.610	143.6	0.609
300	6.71	34.00	26.692	135.8	0.615	300	7.40	34.10	26.675	137.4	0.645		300	7.40	34.10	26.675	137.4	0.645
350	6.57	34.08	26.774	128.1	0.684	350	6.87	34.10	26.749	130.4	0.715		350	6.87	34.10	26.749	130.4	0.715
400	5.73	34.08	26.881	117.9	0.748	400	6.41	34.13	26.834	122.3	0.781		400	6.41	34.13	26.834	122.3	0.781
450	5.29	34.12	26.966	109.8	0.807	450	5.99	34.16	26.912	115.0	0.843		450	5.99	34.16	26.912	115.0	0.843
500	5.02	34.17	27.037	103.1	0.863	500	5.60	34.19	26.984	108.1	0.902		500	5.60	34.19	26.984	108.1	0.902
550	4.89	34.23	27.099	97.2	0.916	550	5.25	34.20	27.034	103.4	0.958		550	5.25	34.20	27.034	103.4	0.958
600	4.67	34.26	27.148	92.6	0.967	600	5.16	34.27	27.100	97.2	1.011		600	5.16	34.27	27.100	97.2	1.011
700	4.40	34.34	27.241	83.8	1.061	700	4.73	34.33	27.197	88.0	1.111		700	4.73	34.33	27.197	88.0	1.111
800	4.12	34.40	27.318	76.4	1.149	800	4.42	34.37	27.262	81.7	1.204		800	4.42	34.37	27.262	81.7	1.204
900	3.95	34.45	27.376	71.0	1.230	900	4.16	34.42	27.330	75.3	1.290		900	4.16	34.42	27.330	75.3	1.290
1000	3.72	34.48	27.423	66.5	1.307	1000	3.86	34.44	27.377	70.9	1.372		1000	3.86	34.44	27.377	70.9	1.372

80090				RV ALF XANDER AGASSIZ				CALCOFI CRUISE 7501				80080						
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves
33 10.5N	123 13.0W	01/26/75	0108 GMT	4116M	010.	15Kt	4	330	3	10			Z	T	S	SIGMA T	DT	DD
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	12.43	33.27	24.989	297.7	0.000	0	12.43	33.27	24.989	297.7	0.029		0	12.43	33.27	24.989	297.7	0.029
10	13.43	33.27	24.989	297.7	0.029	10	12.43	33.27	24.989	297.7	0.029		10	12.43	33.27	24.989	297.7	0.029
20	12.38	33.26	24.991	297.5	0.059	20	12.43	33.27	24.991	297.5	0.059		20	12.43	33.27	24.991	297.5	0.059
30	13.32	33.27	25.011	295.6	0.089	30	12.43	33.27	25.011	295.6	0.089		30	12.43	33.27	25.011	295.6	0.089
40	12.83	33.28	25.116	285.6	0.118	40	12.43	33.27	25.116	285.6	0.118		40	12.43	33.27	25.116	285.6	0.118
50	12.59	33.28	25.163	281.2	0.146	50	12.43	33.27	25.163	281.2	0.146		50	12.43	33.27	25.163	281.2	0.146
75	12.21	33.31	25.259	272.0	0.216	75	12.43	33.27	25.259	272.0	0.216		75	12.43	33.27	25.259	272.0	0.216
100	11.93	33.36	25.351	263.3	0.283	100	12.43	33.27	25.351	263.3	0.283		100	12.43	33.27	25.351	263.3	0.283
125	11.08	33.42	25.553	244.1	0.347	125	12.43	33.27	25.553	244.1	0.347		125	12.43	33.27	25.553	244.1	0.347
150	9.84	33.60	25.908	210.4	0.405	150	12.43	33.27	25.908	210.4	0.405		150	12.43	33.27	25.908	210.4	0.405
175	9.11	33.76	26.152	187.2	0.456	175	12.43	33.27	26.152	187.2	0.456		175	12.43	33.27	26.152	187.2	0.456
200	8.76	33.90	26.316	171.5	0.501	200	12.43	33.27	26.316	171.5	0.501		200	12.43	33.27	26.316	171.5	0.501
225	8.35	33.95	26.418	161.8	0.544	225	12.43	33.27	26.418	161.8	0.544		225	12.43	33.27	26.418	161.8	0.544
250	8.03	34.00	26.505	153.6	0.584	250	12.43	33.27	26.505	153.6	0.584		250	12.43	33.27	26.505	153.6	0.584
275	7.80	34.02	26.555	148.8	0.623	275	12.43	33.27	26.555	148.8	0.623		275	12.43	33.27	26.555	148.8	0.623
300	7.38	34.01	26.608	143.8	0.661	300	12.43	33.27	26.608	143.8	0.661		300	12.43	33.27	26.608	143.8	0.661
350	6.98	34.09	26.727	132.6	0.733	350	12.43	33.27	26.727	132.6	0.733		350	12.43	33.27	26.727	132.6	0.733
400	6.53	34.12	26.811	124.6	0.800	400	12.43	33.27	26.811	124.6	0.800		400	12.43	33.27	26.811	124.6	0.800
450	6.17	34.16	26.889	117.1	0.863	450	12.43	33.27	26.889	117.1	0.863		450	12.43	33.27	26.889	117.1	0.863
500	5.66	34.19	26.977	108.8	0.923	500	12.43	33.27	26.977	108.8	0.923		500	12.43	33.27	26.977	108.8	0.923
550	5.47	34.25	27.047	102.1	0.979	550	12.43	33.27	27.047	102.1	0.979		550	12.43	33.27	27.047	102.1	0.979
600	5.26	34.28	27.096	97.5	1.032	600	12.43	33.27	27.096	97.5	1.032		600	12.43	33.27	27.096	97.5	1.032
700	4.83	34.35	27.201	87.5	1.132	700	12.43	33.27	27.201	87.5	1.132		700	12.43	33.27	27.201	87.5	1.132
800	4.49	34.40	27.279	80.2	1.224	800	12.43	33.27</td										

5 5
 81044 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 5 81045
 LATITUDE LONGITUDE MO/DAY/YR START TIME LATITUDE LONGITUDE MO/DAY/YR START TIME
 34 22.0N 119 52.0W 01/14/75 2318 GMT 34 21.0N 119 54.0W 01/14/75 2120 GMT
 BOTTOM WIND SPEED WEATHR DOMINANT WAVES BOTTOM WIND SPEED WEATHR DOMINANT WAVES
 75M 030 SKT 0 270 2 4 390M 0 270 2 4
 Z T S SIGMA T DT DD Z T S SIGMA T DT DD
 0 12.71 33.51 25.317 266.5 0.000 0 12.18 33.57 25.466 252.3 0.000
 10 12.59 33.51 25.341 264.2 0.026 10 12.22 33.57 25.458 253.1 0.025
 20 12.04 33.54 25.469 252.0 0.052 20 11.76 33.57 25.545 244.8 0.050
 30 11.70 33.57 25.556 243.7 0.077 30 11.46 33.60 25.624 237.3 0.074
 40 11.50 33.59 25.609 238.8 0.101 40 11.24 33.62 25.679 232.1 0.097
 50 11.40 33.60 25.635 236.3 0.125 50 11.11 33.62 25.703 229.8 0.121
 67 10.70 33.69 25.830 217.7 0.164 75 10.38 33.71 25.901 210.9 0.176
 100 9.82 33.85 26.105 191.5 0.227
 125 9.41 33.94 26.243 178.4 0.274
 150 9.00 34.03 26.380 165.5 0.317
 175 8.91 34.04 26.402 163.4 0.359
 200 8.73 34.06 26.446 159.2 0.400

5
 81046 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 5 81047
 LATITUDE LONGITUDE MO/DAY/YR START TIME LATITUDE LONGITUDE MO/DAY/YR START TIME
 34 19.0N 119 58.0W 01/14/75 1913 GMT 34 17.0N 120 02.5W 01/14/75 1530 GMT
 BOTTOM WIND SPEED WEATHR DOMINANT WAVES BOTTOM WIND SPEED WEATHR DOMINANT WAVES
 473M 030 SKT 0 270 2 4 593M 0 270 2 4
 Z T S SIGMA T DT DD Z T S SIGMA T DT DD
 0 11.89 33.57 25.521 247.1 0.000 0 11.76 33.58 25.553 244.1 0.000
 10 11.65 33.59 25.581 241.4 0.024 10 11.62 33.58 25.579 241.6 0.024
 20 11.39 33.61 25.644 235.4 0.048 20 11.48 33.58 25.605 239.1 0.048
 30 11.20 33.62 25.687 231.3 0.071 30 11.22 33.60 25.667 233.2 0.072
 40 11.11 33.63 25.710 229.1 0.094 40 10.83 33.66 25.784 222.1 0.094
 50 10.55 33.70 25.864 214.5 0.117 50 10.39 33.71 25.899 211.1 0.116
 75 9.88 33.81 26.064 195.4 0.168 75 9.55 33.86 26.158 186.5 0.166
 100 9.33 33.97 26.280 175.0 0.215 100 9.21 33.94 26.276 175.3 0.212
 125 8.93 34.05 26.406 162.9 0.258 125 8.90 33.98 26.357 167.7 0.255
 150 8.88 34.06 26.422 161.4 0.299 150 8.74 34.03 26.421 161.6 0.297
 175 8.75 34.08 26.458 158.0 0.340 175 8.56 34.06 26.472 156.7 0.338
 200 8.58 34.09 26.492 154.8 0.380 200 8.47 34.08 26.502 153.9 0.377
 225 8.30 34.11 26.551 149.2 0.416
 250 8.10 34.13 26.597 144.9 0.454
 275 7.80 34.15 26.657 139.2 0.491
 300 7.65 34.17 26.695 135.6 0.526
 350 7.17 34.20 26.786 126.9 0.594
 400 6.89 34.22 26.841 121.7 0.660
 450 6.54 34.24 26.904 115.7 0.722
 500 6.38 34.25 26.933 113.0 0.783

5
 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 5 81047
 LATITUDE LONGITUDE MO/DAY/YR MESSENGER TIME LATITUDE LONGITUDE SPEED WEATHER DOMINANT WAVES
 34 17.0N 120 02.5W 1/14/75 1620 GMT 593M 0 270 2 4
 Z T S D2 P04 S103 N02 N03 DT Z T S D2 SIGT DT DD
 0 11.66 33.586 6.11 241.9 0 11.66 33.586 6.11 25.576 241.9 0.000
 10 11.59 33.588 5.80 240.5 10 11.59 33.588 5.80 25.590 240.5 0.024
 29 11.06 33.626 5.02 228.5 20 11.35 33.603 5.41 25.644 235.4 0.047
 58 9.83 33.799 3.55 195.5 30 11.01 33.632 4.96 25.728 227.4 0.071
 77 9.47 33.882 3.23 183.7 50 10.15 33.747 3.91 25.968 204.6 0.114
 91 9.30 33.930 3.06 177.5 75 9.49 33.875 3.24 26.178 184.6 0.163
 106 9.13 33.939 2.89 174.2 100 9.19 33.938 2.95 26.276 175.4 0.208
 135 8.84 34.001 2.56 165.2 125 8.92 33.978 2.66 26.350 168.3 0.252
 159 8.73 34.032 2.39 161.3 150 8.76 34.022 2.45 26.410 162.6 0.294
 187 8.55 34.068 2.10 156.0 200 8.47 34.083 1.98 26.503 153.8 0.375
 221 8.34 34.103 1.80 150.3 250 8.08 34.130 1.55 26.598 144.7 0.451
 292 7.69 34.162 1.50 136.7 300 7.62 34.167 1.17 26.696 135.4 0.524
 392 6.94 34.215 0.59 122.7 400 6.88 34.219 0.54 26.840 121.8 0.658
 474 6.46 34.242 0.20 114.6

83039⁴ RV DAVID STARR JORDAN CALCOFI CRUISE 7501 6 83040⁶
 LATITUDE LONGITUDE MO/DAY/YR START TIME LATITUDE LONGITUDE MO/DAY/YR START TIME
 34 14.5N 119 19.5W 01/15/75 1734 GMT 34 12.5N 119 24.0W 01/15/75 1600 GMT
 BOTTOM WIND SPEED WEATHR DOMINANT WAVES BOTTOM WIND SPEED WEATHR DOMINANT WAVES
 15M 320 SKT 0 270 1 2 35M 0 260 1 3
 Z T S SIGMA T DT DD Z T S SIGMA T DT DD
 0 11.79 33.58 25.547 244.6 0.000 0 12.39 33.53 25.395 259.1 0.000
 10 11.79 33.58 25.547 244.6 0.024 10 12.25 33.54 25.429 255.8 0.025
 20 11.92 33.56 25.507 248.4 0.051

83041			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			83042		
LATITUDE	LONGITUDE	M/DAY/YR	START TIME	LATITUDE	LONGITUDE	M/DAY/YR	START TIME				
34 11.5N	119 26.0W	01/15/75	1500 GMT	34 09.5N	119 30.0W	01/15/75	1225 GMT				
BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES				
60M	OKT	O 250	1 3	233M	240 SKT	O 270	2 3				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.31	33.54	25.418	256.9	0.000	0	12.34	33.54	25.412	257.4	0.000
10	12.29	33.54	25.422	256.5	0.025	10	12.24	33.53	25.423	256.4	0.025
20	12.05	33.55	25.475	251.5	0.051	20	12.16	33.55	25.454	253.4	0.051
30	11.63	33.57	25.569	242.5	0.075	30	12.09	33.55	25.467	252.2	0.076
40	11.24	33.63	25.687	231.3	0.099	40	12.06	33.55	25.473	251.6	0.101
46	11.02	33.66	25.750	225.3	0.113	50	11.76	33.58	25.553	244.1	0.126
						75	10.86	33.67	25.786	221.9	0.185
						100	10.33	33.82	25.996	202.0	0.238
						125	9.52	33.92	26.210	181.6	0.287
						150	8.89	34.05	26.413	162.3	0.331
						175	8.68	34.08	26.469	157.0	0.371
						200	8.59	34.10	26.499	154.2	0.411

83043			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			83044		
LATITUDE	LONGITUDE	M/DAY/YR	START TIME	LATITUDE	LONGITUDE	M/DAY/YR	START TIME				
34 08.0N	119 34.0W	01/15/75	1021 GMT	34 05.5N	119 38.0W	01/15/75	0826 GMT				
BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES				
251M	280 6KT	O 250	1 3	149M	300 SKT	O 270	2 3				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.40	33.54	25.400	258.6	0.000	0	13.02	33.52	25.264	271.5	0.000
10	12.40	33.54	25.400	258.6	0.025	10	12.60	33.51	25.339	264.4	0.026
20	12.31	33.53	25.410	257.6	0.051	20	12.53	33.51	25.352	263.1	0.053
30	12.18	33.54	25.443	254.5	0.077	30	12.42	33.52	25.381	260.4	0.079
40	12.15	33.55	25.456	253.3	0.102	40	12.26	33.53	25.419	256.7	0.105
50	12.02	33.55	25.481	250.9	0.128	50	11.72	33.56	25.545	244.8	0.130
75	10.45	33.74	25.913	209.9	0.186	75	9.69	33.82	26.104	191.7	0.185
100	9.71	33.88	26.147	187.6	0.236	100	9.12	33.96	26.306	172.5	0.231
125	9.05	34.00	26.348	168.5	0.281	125	8.99	33.99	26.350	168.3	0.274
150	8.91	34.04	26.402	163.4	0.323	141	8.92	34.00	26.369	166.5	0.301
175	8.76	34.07	26.449	158.9	0.364						
200	8.56	34.10	26.503	153.7	0.404						
225	8.42	34.11	26.533	150.9	0.443						

83044			RV DAVID STARR JORDAN			CALCOFI CRUISE 7501			83045		
LATITUDE	LONGITUDE	M/DAY/YR	START TIME	LATITUDE	LONGITUDE	M/DAY/YR	START TIME				
34 04.0N	119 41.0W	01/15/75	0637 GMT	34 03.5N	119 42.5W	01/15/75	0510 GMT				
BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES				
84M	300 1KT	O 250	1 3	84M	120 3KT	O 270	2 3				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.82	33.52	25.303	267.8	0.000	0	12.70	33.50	25.312	267.0	0.000
10	12.54	33.51	25.350	263.3	0.026	10	12.68	33.51	25.323	265.9	0.026
20	12.45	33.52	25.375	260.9	0.052	20	12.45	33.52	25.375	260.9	0.053
30	12.42	33.53	25.389	259.6	0.078	30	12.27	33.54	25.425	256.2	0.078
40	12.14	33.55	25.458	253.1	0.104	40	11.93	33.56	25.505	248.6	0.104
50	11.05	33.65	25.731	226.6	0.128	50	10.77	33.66	25.794	221.1	0.127
61	10.38	33.72	25.909	210.2	0.152	61	10.22	33.73	25.944	206.8	0.151

83051			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			83055		
LATITUDE	LONGITUDE	M/DAY/YR	START TIME	LATITUDE	LONGITUDE	M/DAY/YR	START TIME				
33 52.0N	120 08.5W	01/14/75	0958 GMT	33 44.0N	120 24.5W	01/14/75	0648 GMT				
BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTUM	WIND SPEED	WEATHER	DOMINANT WAVES				
103M		O 250	1 3	879M	320 BKT	O 270	2 3				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.41	33.51	25.375	260.9	0.000	0	12.04	33.55	25.477	251.3	0.000
10	12.41	33.51	25.315	260.9	0.026	10	12.05	33.56	25.483	250.7	0.025
20	12.39	33.51	25.379	260.6	0.052	20	11.84	33.56	25.522	247.0	0.050
30	12.21	33.52	25.421	256.6	0.078	30	11.81	33.56	25.528	246.5	0.074
40	11.99	33.54	25.479	251.1	0.103	40	11.76	33.56	25.537	245.6	0.099
50	11.85	33.56	25.520	247.2	0.128	50	11.23	33.60	25.666	233.3	0.123
75	11.23	33.62	25.681	231.9	0.188	75	10.49	33.74	25.974	204.0	0.178
100	9.86	33.80	26.060	195.9	0.242	100	9.41	33.88	26.197	182.9	0.227
112	9.58	33.86	26.153	187.0	0.266	125	9.00	33.99	26.348	168.5	0.271
						150	8.91	34.01	26.378	165.6	0.314
						175	8.70	34.03	26.427	161.0	0.355
						200	8.32	34.10	26.540	150.2	0.395
						225	7.95	34.13	26.619	142.7	0.433
						250	7.81	34.14	26.648	140.0	0.469
						275	7.66	34.16	26.685	136.5	0.505
						300	7.58	34.17	26.705	134.6	0.540
						350	6.88	34.20	26.827	123.1	0.607
						400	6.70	34.21	26.859	120.0	0.670
						450	6.41	34.23	26.913	114.9	0.732
						500	5.95	34.28	27.012	105.5	0.791
						550	5.65	34.30	27.065	100.5	0.845
						600	5.40	34.33	27.119	95.3	0.898
						700	5.13	34.36	27.175	90.0	0.998

83060

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 34.0N	120 46.0W	01/14/75	0230 GMT	1618M	320	10KT	0	320 2 3
Z	T	S	SIGMA T	DT	DD			
0	12.33	33.46	25.352	263.2	0.000			
10	12.20	33.46	25.377	260.8	0.026			
20	12.13	33.46	25.390	259.5	0.052			
30	12.07	33.48	25.417	257.0	0.078			
40	12.09	33.50	25.429	255.9	0.103			
50	12.06	33.51	25.442	254.6	0.129			
75	12.00	33.51	25.453	253.5	0.193			
100	10.12	33.58	25.485	216.3	0.252			
125	9.62	33.68	26.006	201.0	0.305			
150	9.08	33.80	26.187	183.8	0.354			
175	8.71	33.90	26.324	170.8	0.399			
200	8.43	33.98	26.430	160.7	0.441			
225	7.86	34.03	26.554	148.9	0.481			
250	7.40	34.05	26.636	141.1	0.518			
275	6.95	34.06	26.707	134.4	0.553			
300	6.39	34.05	26.774	128.1	0.587			
350	6.46	34.16	26.851	120.7	0.652			
400	6.22	34.20	26.914	114.8	0.713			
450	6.05	34.25	26.975	108.9	0.772			
500	5.70	34.27	27.035	103.3	0.828			
550	5.43	34.32	27.108	96.4	0.881			
600	5.21	34.36	27.165	91.0	0.932			
700	4.80	34.41	27.252	82.7	1.026			
800	4.42	34.44	27.318	76.4	1.113			
900	4.13	34.47	27.373	71.3	1.195			
1000	3.84	34.49	27.419	66.9	1.273			

CALCOFI CRUISE 7501

83070

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
33 15.0N	121 27.0W	01/25/75	0829 GMT	3768M	360	8KT	1	320 2 3
Z	T	S	SIGMA T	DT	DD			
0	12.46	33.47	25.335	264.8	0.000			
10	12.36	33.47	25.354	263.0	0.026			
20	12.21	33.48	25.390	259.5	0.052			
30	12.17	33.48	25.398	258.8	0.078			
40	12.06	33.50	25.434	255.3	0.104			
50	12.03	33.50	25.440	254.8	0.129			
75	11.57	33.53	25.549	244.4	0.192			
100	9.89	33.69	25.969	204.5	0.249			
125	9.15	33.82	26.192	183.3	0.298			
150	8.70	33.91	26.333	169.9	0.343			
175	8.40	33.97	26.426	161.1	0.385			
200	8.04	34.03	26.527	151.4	0.425			
225	7.78	34.06	26.589	145.6	0.463			
250	7.24	34.05	26.659	139.0	0.499			
275	6.95	34.05	26.699	135.2	0.535			
300	6.74	34.07	26.743	131.0	0.569			
350	6.42	34.13	26.833	122.4	0.635			
400	5.87	34.15	26.919	114.3	0.696			
450	5.67	34.20	26.984	108.2	0.755			
500	5.47	34.24	27.039	102.9	0.810			
550	5.31	34.29	27.098	97.3	0.864			
600	5.02	34.34	27.172	90.3	0.914			
700	4.76	34.40	27.249	83.0	1.008			
800	4.44	34.44	27.316	76.7	1.095			
900	4.15	34.47	27.371	71.5	1.178			
1000	3.84	34.49	27.419	66.9	1.256			

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7501

83080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 54.0N	122 09.0W	1/25/75	1455	4177M	360	14KT	1	320 2 3
Z	T	S	02	P04	S103	N02	N03	DT
0	12.50	33.280	6.22					279.5
10	12.50	33.277	6.18					279.7
31	12.51	33.277	6.25					279.9
55	12.09	33.292	6.18					271.2
70	11.88	33.404	5.80					259.2
85	11.50	33.420	5.77					251.3
100	10.99	33.467	5.32					239.1
125	9.54	33.630	4.23					203.4
154	9.00	33.809	3.82					181.9
178	8.70	33.913	3.10					169.7
213	8.05	33.974	3.13					155.7
276	7.21	34.005	2.80					141.9
312	6.23	34.059	1.61					125.4
469	5.51	34.124	0.96					112.0
569	5.23	34.259	0.44					98.8
695	4.61	34.303	0.30					88.7
1000	3.83	34.466	0.61					68.6
								1000
								3.83
								34.466
								0.61
								27.401
								68.6
								1.334

83080

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7501

83090

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 54.5N	122 49.5W	01/25/75	1938 GMT	4177M	360	10KT	2	330 4 14
Z	T	S	SIGMA T	DT	DD			
0	12.51	33.21	25.171	280.4	0.000			
10	12.51	33.27	25.171	280.4	0.028			
20	12.51	33.27	25.171	280.4	0.056			
30	12.51	33.28	25.178	279.7	0.084			
40	12.26	33.29	25.234	274.4	0.112			
50	12.13	33.29	25.259	272.0	0.139			
75	11.75	33.40	25.415	257.2	0.205			
100	10.93	33.48	25.626	237.1	0.268			
125	9.79	33.59	25.908	210.3	0.324			
150	9.15	33.78	26.161	186.3	0.375			
175	8.69	33.89	26.319	171.2	0.420			
200	8.10	33.97	26.472	156.8	0.462			
225	7.82	33.99	26.529	151.3	0.501			
250	7.59	33.98	26.554	148.9	0.540			
275	7.26	34.02	26.633	141.5	0.577			
300	6.89	34.02	26.684	136.6	0.613			
350	6.24	34.03	26.778	127.7	0.681			
400	5.93	34.07	26.849	121.0	0.746			
450	5.62	34.11	26.919	114.4	0.808			
500	5.22	34.14	26.990	107.5	0.866			
550	5.29	34.25	27.069	100.1	0.921			
600	4.92	34.24	27.104	96.8	0.973			
700	4.66	34.32	27.197	88.0	1.073			
800	4.38	34.40	27.291	79.0	1.164			
900	4.18	34.44	27.344	74.0	1.249			
1000	3.85	34.45	27.386	70.0	1.329			
								1000
								3.87
								34.46
								27.392
								69.5
								1.380

85037² **RV DAV ID STARR JORDAN** **CALCOFI CRUISE 7501** **85037⁵**

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 02.5N	118 58.5W	01/16/75	0330 GMT	34 02.0N	118 59.5W	01/16/75	0220 GMT
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES
30M	300 8KT	1	290 2 2	56M	300 12KT	1	290 2 2
Z T S SIGMA T	DT DD	Z T S SIGMA T	DT DD				
0 12.97 33.50 25.258 272.1 0.000	0 13.18 33.49 25.209 276.8 0.000						
10 12.95 33.49 25.255 272.4 0.027	10 13.17 33.49 25.211 276.6 0.027						
20 12.86 33.49 25.272 270.8 0.054	20 12.91 33.49 25.262 271.7 0.055						
	30 12.67 33.49 25.310 267.2 0.082						
	38 12.47 33.53 25.379 260.6 0.103						

85038 **RV DAVID STARR JORDAN** **CALCOFI CRUISE 7501** **85039**

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 01.0N	119 02.5W	01/16/75	0045 GMT	33 59.0N	119 06.5W	01/15/75	2251 GMT
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES
22M	310 10KT	1	290 2 2	59M	320 3KT	0	300 2 3
Z T S SIGMA T	DT DD	Z T S SIGMA T	DT DD				
0 12.95 33.52 25.278 270.2 0.000	0 13.31 33.50 25.190 278.5 0.000						
10 12.92 33.52 25.284 269.7 0.027	10 13.05 33.50 25.242 273.6 0.027						
20 12.81 33.52 25.305 267.6 0.053	20 12.72 33.50 25.307 267.4 0.054						
30 12.18 33.53 25.435 255.3 0.080	30 12.57 33.51 25.344 263.9 0.081						
40 11.95 33.56 25.502 248.9 0.105	40 12.49 33.51 25.360 262.4 0.107						
50 11.94 33.56 25.503 248.8 0.130	50 12.20 33.53 25.431 255.7 0.133						
75 11.01 33.67 25.160 224.4 0.189	75 10.53 33.57 25.766 223.8 0.194						
100 10.69 33.74 25.871 213.9 0.245	100 10.15 33.74 25.964 205.0 0.248						
125 10.47 33.77 25.932 208.0 0.298	125 9.66 33.89 26.163 186.0 0.297						
150 9.46 33.94 26.235 179.2 0.347	150 9.33 34.01 26.311 172.0 0.343						
175 9.05 34.01 26.356 167.7 0.391	175 8.88 34.07 26.430 160.7 0.385						
200 8.76 34.07 26.449 158.9 0.433	200 8.56 34.10 26.503 153.7 0.425						

85040 **RV DAVID STARR JORDAN** **CALCOFI CRUISE 7501** **87032⁵**

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 57.0N	119 10.5W	01/15/75	2021 GMT	33 53.5N	118 26.5W	01/16/75	1500 GMT
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES
73M	240 3KT	0	220 2 3	17M	OKT	1	300 1 3
Z T S SIGMA T	DT DD	Z T S SIGMA T	DT DD				
0 13.07 33.48 25.223 275.4 0.000	0 13.82 33.49 25.079 289.2 0.000						
10 12.95 33.50 25.262 271.7 0.027	10 13.09 33.50 25.234 274.3 0.028						
20 12.87 33.50 25.278 270.2 0.054	13 12.90 33.51 25.280 270.0 0.036						
30 12.73 33.49 25.298 268.3 0.081							
40 12.46 33.49 25.350 263.3 0.108							
50 11.66 33.48 25.494 249.7 0.133							
75 10.73 33.61 25.763 224.1 0.193							
100 9.89 33.74 26.008 200.8 0.247							
125 9.59 33.86 26.152 187.2 0.296							
150 9.16 33.93 26.276 175.3 0.342							
175 8.90 33.99 26.364 166.9 0.385							
200 8.56 34.03 26.449 158.9 0.427							

87032⁷ **RV DAVID STARR JORDAN** **CALCOFI CRUISE 7501** **87033**

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 54.5N	118 28.0W	01/16/75	1400 GMT	33 54.0N	118 29.0W	01/16/75	1250 GMT
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES
24M	OKT	1		50M	OKT	1	
Z T S SIGMA T	DT DD	Z T S SIGMA T	DT DD				
0 13.14 33.50 25.224 275.3 0.000	0 13.24 33.52 25.220 275.7 0.000						
10 12.81 33.51 25.298 268.3 0.027	10 13.10 33.52 25.248 273.1 0.027						
20 12.41 33.52 25.383 260.2 0.053	20 12.79 33.52 25.309 267.2 0.054						
	30 12.40 33.51 25.377 260.8 0.080						
	40 11.95 33.53 25.478 251.1 0.106						

87034 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 87035

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
33 52.0N	118 33.0W	01/16/75	1117 GMT	33 50.0N	118 37.5W	01/16/75	0900 GMT			
BOTTUM	WIND	SPEED	WEATHER	Dominant Waves		BOTTUM	WIND	SPEED	WEATHER	Dominant Waves
69M	060	2KT				602M	260	2KT		

Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.24	33.46	25.174	280.1	0.000	0	13.02	33.49	25.241	273.7	0.000
10	13.02	33.49	25.241	273.7	0.027	10	13.01	33.49	25.243	273.6	0.027
20	12.97	33.50	25.258	272.1	0.055	20	12.99	33.49	25.247	273.2	0.054
30	12.73	33.50	25.306	267.6	0.082	30	12.80	33.50	25.292	268.9	0.081
40	12.24	33.52	25.416	257.1	0.108	40	12.14	33.50	25.419	256.8	0.108
50	11.69	33.57	25.558	243.6	0.133	50	11.42	33.58	25.616	238.1	0.133
60	11.35	33.60	25.644	235.4	0.164	75	10.84	33.69	25.805	220.1	0.190
						100	10.25	33.81	26.002	201.4	0.243
						125	9.70	33.96	26.211	181.5	0.292
						150	9.30	34.05	26.347	168.6	0.336
						175	8.99	34.11	26.444	159.4	0.378
						200	8.82	34.13	26.486	155.4	0.418
						225	8.45	34.13	26.544	149.9	0.458
						250	8.31	34.15	26.581	146.4	0.496
						275	8.09	34.17	26.630	141.7	0.533
						300	7.91	34.19	26.672	137.7	0.569
						350	7.41	34.21	26.760	129.3	0.639
						400	7.23	34.25	26.817	123.9	0.705

87036 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 87040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
33 48.0N	118 40.5W	01/16/75	0629 GMT	33 39.5N	118 58.0W	01/13/75	0657 GMT			
BOTTUM	WIND	SPEED	WEATHER	Dominant Waves		BOTTUM	WIND	SPEED	WEATHER	Dominant Waves
870M	190	5KT				741M	010	11KT		

Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.33	33.47	25.163	281.1	0.000	0	12.84	33.50	25.284	269.6	0.000
10	13.15	33.49	25.215	276.2	0.027	10	12.78	33.49	25.288	269.3	0.026
20	12.99	33.49	25.247	273.2	0.055	20	12.61	33.48	25.313	266.8	0.053
30	12.90	33.49	25.264	271.5	0.082	30	12.60	33.50	25.331	265.2	0.080
40	12.88	33.49	25.268	271.1	0.109	40	12.41	33.49	25.360	262.4	0.106
50	12.85	33.50	25.282	269.8	0.137	50	12.10	33.47	25.404	258.3	0.133
75	11.01	33.67	25.760	224.4	0.199	75	10.39	33.56	25.783	222.2	0.193
100	9.97	33.79	26.033	198.4	0.252	100	9.57	33.85	26.147	187.4	0.245
125	9.87	33.96	26.183	184.2	0.300	125	9.34	33.92	26.239	178.8	0.291
150	9.63	34.02	26.270	176.0	0.346	150	9.02	34.04	26.384	165.0	0.335
175	9.34	34.07	26.356	167.7	0.390	175	8.72	34.11	26.486	155.4	0.376
200	8.83	34.05	26.422	161.4	0.432	200	8.24	34.11	26.560	148.3	0.414
						225	8.04	34.13	26.606	144.0	0.452
						250	7.89	34.15	26.644	140.4	0.488
						275	7.63	34.16	26.690	136.1	0.524
						300	7.47	34.19	26.736	131.7	0.554
						350	7.15	34.21	26.797	125.9	0.626
						400	6.76	34.25	26.882	117.8	0.690
						450	6.38	34.29	26.964	110.0	0.750
						500	6.03	34.31	27.025	104.2	0.806
						550	5.84	34.33	27.065	100.4	0.861
						600	5.65	34.35	27.104	96.7	0.914
						650	5.44	34.37	27.146	92.8	0.965

RV DAVID STARR JORDAN CALCOFI CRUISE 7501 87045

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	RITTUM	WIND	SPEED	WEATHER	Dominant Waves							
33 29.0N	119 19.0W	1/13/75	1202 GMT	1572M	350	10KT	0								
Z	T	S	02	P04	S103	N12	N03	DT	Z	T	S	02	-SIGT	DT	DD

1	12.13	33.541	8.08						253.6	0	12.13	33.541	6.08	25.453	253.6	0.000
11	12.04	33.547	6.01						251.5	10	12.05	33.548	6.01	25.472	251.8	0.025
30	11.69	33.553	5.88						244.8	20	11.90	33.549	5.94	25.501	249.0	0.050
58	10.81	33.643	4.58						223.0	30	11.69	33.553	5.88	25.545	244.8	0.075
77	9.59	33.790	3.54						192.3	50	11.13	33.606	5.03	25.686	231.4	0.122
92	9.42	33.831	3.38						186.7	75	9.70	33.776	3.63	26.066	195.3	0.176
106	9.15	33.897	3.14						177.6	100	9.27	33.869	3.24	26.210	181.6	0.224
135	8.67	33.997	2.73						163.0	125	8.81	33.967	2.86	26.358	167.5	0.268
159	8.40	34.067	2.41						153.8	150	8.48	34.044	2.52	26.470	156.9	0.309
188	8.20	34.116	2.07						147.3	200	8.10	34.129	1.96	26.596	145.0	0.386
220	7.93	34.145	1.81						141.4	250	7.70	34.163	1.60	26.680	137.0	0.459
293	7.41	34.182	1.35						131.4	300	7.35	34.187	1.30	26.750	130.4	0.528
394	6.69	34.247	0.74						117.1	400	6.66	34.250	0.72	26.895	116.6	0.657
499	6.23	34.289	0.53						108.2	500	6.22	34.290	0.52	26.984	108.1	0.775
605	5.64	34.343	0.43						97.1	600	5.66	34.340	0.43	27.094	97.7	0.886
740	4.83	34.413	0.37						82.8	700	5.07	34.392	0.37	27.206	87.1	0.986

87045		RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				87050	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
33 29.0N	119 19.0W	01/13/75	1055 GMT	33 20.0N	119 39.5W	01/13/75	1425 GMT				
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES				
1572M	350	10KT	0	93M	030	7KT	0	320	2	3	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.18	33.54	25.443	254.5	0.000	0	11.82	33.55	25.518	247.4	0.000
10	12.04	33.55	25.477	251.3	0.025	10	11.81	33.55	25.520	247.2	0.024
20	11.77	33.55	25.528	246.5	0.050	20	11.79	33.55	25.524	246.8	0.049
30	11.70	33.56	25.548	244.5	0.074	30	11.66	33.55	25.548	244.5	0.074
40	11.65	33.56	25.558	243.6	0.099	40	11.24	33.58	25.648	235.0	0.098
50	11.61	33.56	25.565	242.9	0.123	50	10.93	33.62	25.735	226.8	0.121
75	9.78	33.76	26.042	197.6	0.179						
100	9.32	33.88	26.211	181.5	0.227						
125	8.87	33.97	26.353	168.0	0.271						
150	8.56	34.03	26.449	158.9	0.312						
175	8.30	34.09	26.535	150.7	0.352						
200	8.18	34.13	26.585	146.0	0.390						
225	8.02	34.15	26.624	142.2	0.421						
250	7.83	34.18	26.676	137.4	0.463						
275	7.57	34.19	26.722	133.0	0.497						
300	7.42	34.19	26.743	131.0	0.532						
350	6.98	34.23	26.836	122.1	0.598						
400	6.63	34.26	26.907	115.4	0.660						
450	6.40	34.29	26.962	110.3	0.719						
500	6.03	34.31	27.025	104.2	0.776						
550	5.94	34.33	27.052	101.6	0.831						
600	5.72	34.35	27.096	97.5	0.885						
700	5.24	34.39	27.186	89.0	0.986						
800	4.64	34.44	27.294	78.8	1.078						
900	4.32	34.47	27.353	73.2	1.163						
1000	4.23	34.48	27.370	71.5	1.244						

87060		RV DAVID STARR JORDAN				87070				RV ALFRED AGASSIZ	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
33 01.0N	120 21.0W	01/13/75	2101 GMT	32 38.5N	121 02.0W	01/25/75	0214 GMT				
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES				
585M		0	330 2 6	3737M	330	12KT	1				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	12.43	33.49	25.356	262.8	0.000	0	12.73	33.43	25.251	272.7	0.000
10	12.34	33.49	25.373	261.1	0.026	10	12.74	33.43	25.250	272.9	0.027
20	12.15	33.49	25.409	257.7	0.052	20	12.73	33.43	25.251	272.7	0.054
30	12.14	33.49	25.411	257.5	0.078	30	12.61	33.45	25.290	269.0	0.081
40	12.11	33.49	25.417	257.0	0.103	40	12.55	33.45	25.302	267.9	0.108
50	12.10	33.49	25.419	256.8	0.129	50	12.48	33.47	25.331	265.2	0.135
75	11.77	33.50	25.489	250.1	0.193	75	12.37	33.48	25.360	262.4	0.201
100	9.72	33.64	25.959	205.5	0.250	100	11.83	33.46	25.447	254.2	0.266
125	8.99	33.82	26.217	180.9	0.299	125	10.55	33.52	25.724	227.8	0.327
150	8.76	33.89	26.308	172.3	0.344	150	9.36	33.73	26.088	193.2	0.381
175	8.38	33.97	26.430	160.8	0.386	175	8.91	33.84	26.246	178.2	0.428
200	8.07	34.00	26.500	154.1	0.427	200	8.43	33.94	26.398	163.7	0.471
225	7.61	34.05	26.606	144.0	0.465	225	7.97	34.00	26.515	152.7	0.512
250	7.20	34.09	26.696	135.5	0.501	250	7.74	34.04	26.580	146.5	0.550
275	6.95	34.11	26.746	130.7	0.535	275	7.45	34.05	26.629	141.8	0.587
300	6.70	34.14	26.804	125.2	0.568	300	7.11	34.08	26.700	139.0	0.623
350	6.28	34.18	26.891	117.0	0.631	350	6.41	34.11	26.818	123.8	0.690
400	6.12	34.24	26.959	110.6	0.690	400	6.10	34.15	26.890	117.0	0.753
450	5.93	34.27	27.006	106.0	0.747	450	5.80	34.21	26.975	108.9	0.812
500	5.70	34.29	27.051	101.8	0.802	500	5.33	34.24	27.056	101.3	0.868
550	5.46	34.33	27.112	96.0	0.855	550	5.08	34.25	27.093	97.8	0.921
				600	4.93	34.28	27.134		93.9	0.972	
				700	4.76	34.37	27.225		85.3	1.069	
				800	4.43	34.41	27.293		78.8	1.158	
				900	4.16	34.45	27.354		73.1	1.243	
				1000	3.88	34.47	27.399		68.8	1.322	

90100			RV ALFRED AGASSIZ			91026			RV DAVID STARR JORDAN		
LATITUDE 31° 05.0N	LONGITUDE 122° 39.5W	MO/DAY/YR 01/24/75	START TIME 0738 GMT	LATITUDE 33° 14.5N	LONGITUDE 117° 27.5W	MO/DAY/YR 01/17/75	START TIME 2306 GMT				
BOTTOM 4002M	WIND 360	SPEED 11Kt	WEATHER 1	DOMINANT WAVES		BOTTOM 19M	WIND 310	SPEED 8Kt	WEATHER 4	DOMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.89	33.53	24.884	307.7	0.000	0	12.43	33.52	25.182	279.4	0.000
10	14.89	33.53	24.884	307.7	0.030	10	13.36	33.52	25.196	278.0	0.027
20	14.56	33.46	24.901	306.1	0.061	16	13.20	33.52	25.228	275.0	0.044
30	14.14	33.45	24.982	298.4	0.091						
40	14.05	33.44	24.993	297.3	0.121						
50	12.92	33.44	25.020	294.8	0.151						
75	13.56	33.41	25.070	290.0	0.224						
100	12.99	33.41	25.185	279.1	0.296						
125	11.33	33.42	25.508	248.4	0.363						
150	10.09	33.57	25.842	216.6	0.422						
175	9.20	33.76	26.137	188.5	0.473						
200	8.86	33.86	26.269	176.0	0.520						
225	8.57	33.94	26.377	165.8	0.563						
250	8.28	34.00	26.471	156.8	0.605						
275	8.04	34.02	26.520	152.2	0.644						
300	7.66	34.04	26.591	145.4	0.683						
350	7.09	34.09	26.711	134.0	0.755						
400	6.55	34.14	26.824	123.3	0.822						
450	6.22	34.17	26.891	117.0	0.885						
500	5.70	34.21	26.988	107.8	0.945						
550	5.50	34.27	27.060	101.0	1.000						
600	5.33	34.30	27.104	96.8	1.053						
700	4.96	34.37	27.202	81.4	1.153						
800	4.59	34.41	27.276	80.5	1.245						
900	4.30	34.44	27.331	75.2	1.331						
1000	3.94	34.47	27.393	64.4	1.412						

91026			RV DAVID STARR JORDAN			CALCOFI CRUISE 7501			91028		
LATITUDE 33° 14.5N	LONGITUDE 117° 29.5W	MO/DAY/YR 01/17/75	START TIME 2146 GMT	LATITUDE 33° 12.0N	LONGITUDE 117° 34.0W	MO/DAY/YR 01/17/75	START TIME 1940 GMT				
BOTTOM 52M	WIND 330	SPEED 10Kt	WEATHER 4	DOMINANT WAVES		BOTTOM 55.6M	WIND 320	SPEED 8Kt	WEATHER 4	DOMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.11	33.49	25.223	275.5	0.000	0	14.30	33.55	25.025	294.3	0.000
10	13.05	33.49	25.235	276.3	0.027	10	14.27	33.57	25.047	292.2	0.029
20	12.60	33.50	25.331	265.2	0.054	20	14.13	33.57	25.076	289.4	0.058
30	12.38	33.52	25.389	259.7	0.080	30	13.75	33.55	25.140	283.4	0.087
40	12.23	33.56	25.449	254.0	0.106	40	13.38	33.52	25.192	278.4	0.115
50	12.07	33.59	25.502	248.9	0.131	50	12.90	33.51	25.280	270.0	0.142
						75	11.18	33.58	25.659	234.0	0.206
						100	10.62	33.76	25.899	211.2	0.262
						125	9.85	33.89	26.132	189.0	0.313
						150	9.51	34.00	26.274	175.5	0.359
						175	9.50	34.12	26.369	166.5	0.402
						200	9.33	34.17	26.436	160.2	0.444

91029			RV DAVID STARR JORDAN			CALCOFI CRUISE 7501			91030		
LATITUDE 33° 10.0N	LONGITUDE 117° 38.0W	MO/DAY/YR 01/17/75	START TIME 1805 GMT	LATITUDE 33° 07.5N	LONGITUDE 117° 42.0W	MO/DAY/YR 01/17/75	START TIME 1617 GMT				
BOTTOM 75.6M	WIND 320	SPEED 7Kt	WEATHER 4	DOMINANT WAVES		BOTTOM 83.3M	WIND 330	SPEED 6Kt	WEATHER 4	DOMINANT WAVES	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.30	33.58	25.048	292.1	0.000	0	14.02	33.54	25.076	289.4	0.000
10	14.25	33.59	25.066	290.3	0.029	10	13.99	33.55	25.090	288.1	0.028
20	14.00	33.57	25.103	286.8	0.058	20	13.88	33.54	25.105	286.7	0.057
30	13.45	33.53	25.185	279.0	0.086	30	13.82	33.54	25.117	285.5	0.086
40	13.22	33.51	25.216	276.1	0.114	40	12.69	33.56	25.360	262.4	0.113
50	12.77	33.55	25.336	264.7	0.141	50	11.96	33.55	25.492	249.8	0.139
75	11.15	33.70	25.758	224.6	0.202	75	11.19	33.66	25.719	228.2	0.199
100	10.27	33.84	26.021	199.5	0.256	100	10.39	33.77	25.946	206.7	0.254
125	10.06	34.02	26.197	182.8	0.304	125	10.15	33.99	26.159	186.5	0.304
150	9.86	34.07	26.270	175.9	0.350	150	9.93	34.06	26.250	177.7	0.350
175	9.71	34.11	26.326	170.5	0.394	175	9.65	34.11	26.336	169.6	0.394
200	9.45	34.15	26.401	163.5	0.437	200	9.37	34.16	26.421	161.5	0.437
						225	9.02	34.20	26.509	153.2	0.477
						275	8.38	34.22	26.625	142.2	0.553
						300	8.25	34.23	26.653	139.6	0.590
						350	7.48	34.24	26.774	128.1	0.660
						400	6.70	34.23	26.875	118.5	0.724
						450	6.39	34.24	26.924	113.9	0.785
						500	6.24	34.30	26.990	107.5	0.844
						550	5.79	34.30	27.048	102.1	0.900
						600	5.53	34.33	27.103	96.8	0.953
						700	5.08	34.39	27.204	87.2	1.053
						750	4.88	34.42	27.251	82.8	1.100

93026 ⁷ RV DAVID STARR JORDAN						CALCOFI CRUISE 7501						93026 ⁹					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 57.0N	117 17.0W	01/18/75	0200 GMT	85M	020	6Kt	4	Z T S SIGMA T DT DD	32 57.0N	117 18.5W	01/18/75	0300 GMT	85M	020	6Kt	4	Z T S SIGMA T DT DD
0 12.51	33.53	25.173	280.2	0.000	0	13.52	33.51	25.156	281.8	0.000	0	13.45	33.53	25.185	279.0	0.028	
10 13.40	33.53	25.195	278.1	0.027	10	13.45	33.53	25.234	274.4	0.055	20	13.17	33.52	25.325	265.8	0.082	
20 12.97	33.54	25.289	269.1	0.055	30	12.79	33.54	25.439	254.9	0.108	40	12.20	33.54	25.509	248.2	0.134	
					50	11.91	33.56	25.509	248.2	0.134							
93028 RV DAVID STARR JORDAN						CALCOFI CRUISE 7501						93029					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 54.5N	117 22.0W	01/18/75	0408 GMT	574M	170	4Kt	4	Z T S SIGMA T DT DD	32 52.5N	117 26.5W	01/18/75	0544 GMT	574M	320	3Kt	4	Z T S SIGMA T DT DD
0 14.02	33.54	25.076	289.4	0.000	0	13.82	33.54	25.117	285.5	0.000	10 13.62	33.53	25.151	282.3	0.028		
10 13.97	33.55	25.094	287.7	0.028	20	13.41	33.53	25.194	278.2	0.056	30 13.31	33.53	25.214	276.3	0.084		
20 13.46	33.54	25.191	278.5	0.057	40 13.02	33.53	25.271	270.8	0.111	50 12.34	33.54	25.412	257.4	0.138			
30 13.18	33.52	25.232	274.6	0.084	75 11.25	33.64	25.693	230.7	0.199	100 10.42	33.77	25.941	207.2	0.254			
40 12.89	33.52	25.290	269.1	0.112	125 10.03	33.88	26.094	192.7	0.305	150 9.71	34.03	26.264	176.5	0.352			
50 12.08	33.56	25.477	251.3	0.138	175 9.34	34.12	26.395	164.0	0.395	200 8.91	34.14	26.480	156.0	0.436			
75 10.91	33.66	25.470	223.5	0.198													
100 10.44	33.78	25.945	206.7	0.252													
125 9.97	33.90	26.119	190.2	0.302													
150 9.66	34.03	26.272	175.7	0.349													
175 9.44	34.11	26.371	166.3	0.392													
200 8.97	34.11	26.447	159.1	0.434													
93030 RV DAVID STARR JORDAN						CALCOFI CRUISE 7501						93040					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTUM	WIND	SPEED	WEATHER	DOMINANT WAVES
32 50.5N	117 31.0W	01/18/75	0736 GMT	815M	350	5Kt	4	Z T S SIGMA T DT DD	32 30.0N	118 11.5W	01/10/75	2310 GMT	1839M	280	25Kt	1	310 6 5
0 12.72	33.52	25.123	285.0	0.000	0	13.29	33.50	25.194	278.1	0.000	10 13.29	33.50	25.194	278.1	0.027		
10 13.74	33.53	25.126	284.6	0.028	20 13.28	33.50	25.197	278.0	0.055	30 13.28	33.50	25.197	278.0	0.083			
20 13.72	33.53	25.130	284.3	0.056	40 13.26	33.50	25.200	277.6	0.111	50 12.14	33.52	25.435	255.3	0.138			
30 13.44	33.53	25.187	278.8	0.085	75 10.38	33.61	25.824	218.3	0.197	100 9.97	33.71	25.971	204.3	0.251			
40 13.01	33.53	25.214	270.6	0.112	125 9.56	33.86	26.156	186.7	0.300	150 9.29	33.95	26.271	175.8	0.346			
50 11.95	33.52	25.470	251.9	0.139	175 9.04	34.04	26.381	165.4	0.389	200 8.68	34.09	26.477	156.2	0.431			
75 10.97	33.65	25.751	225.2	0.199	225 8.30	34.12	26.559	148.5	0.470	250 8.11	34.14	26.603	144.3	0.507			
100 10.23	33.83	26.020	199.6	0.252	275 7.96	34.17	26.649	139.9	0.544	300 7.82	34.19	26.686	136.5	0.580			
125 9.91	33.96	26.176	184.8	0.301	350 7.38	34.20	26.757	129.7	0.649	400 6.98	34.22	26.824	122.9	0.715			
150 9.66	34.06	26.296	173.5	0.346	450 6.40	34.23	26.914	114.7	0.778	500 6.01	34.27	26.996	107.0	0.836			
175 9.32	34.14	26.414	162.2	0.389	550 5.82	34.29	27.036	103.2	0.897	600 5.58	34.31	27.081	98.9	0.946			
200 8.99	34.17	26.491	154.9	0.430	700 5.12	34.37	27.184	89.2	1.048	800 4.64	34.42	27.278	80.2	1.141			
					900 4.27	34.45	27.342	74.2	1.227	1000 3.97	34.48	27.397	68.9	1.308			

93050		RV DAVID STARR JORDAN				CALCOFF CRUISE 7501				93060	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
32 10.0N	118 52.5W	01/11/75	2119 GMT	31 50.0N	119 34.0W	01/12/75	0416 GMT				
BOTTOM	WIND SPEED	WEATHER	Dominant Waves	BOTTOM	WIND SPEED	WEATHER	Dominant Waves				
1433M	350	11Kt	1 320 8 6	2321M	340	18Kt	1 330 7 6				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.31	33.51	25.198	277.8	0.000	0	13.46	33.51	25.168	280.7	0.000
10	13.32	33.51	25.196	278.0	0.027	10	13.46	33.51	25.168	280.7	0.028
20	13.27	33.51	25.206	277.0	0.055	20	13.47	33.51	25.166	280.9	0.056
30	13.24	33.51	25.212	276.4	0.083	30	13.47	33.51	25.166	280.9	0.084
40	13.22	33.51	25.216	276.1	0.111	40	13.44	33.50	25.164	281.0	0.112
50	12.89	33.50	25.274	270.6	0.138	50	13.40	33.50	25.172	280.3	0.140
75	10.72	33.60	25.757	224.7	0.200	75	12.58	33.41	25.265	271.4	0.210
100	10.02	33.78	26.017	199.9	0.254	100	10.28	33.53	25.779	222.6	0.272
125	9.70	33.94	26.196	183.0	0.302	125	9.49	33.69	26.035	198.2	0.325
150	9.46	34.02	26.298	173.3	0.348	150	9.12	33.81	26.189	183.6	0.373
175	9.30	34.04	26.339	169.3	0.391	175	8.82	33.91	26.314	171.7	0.419
200	8.91	34.12	26.464	157.5	0.433	200	8.62	33.96	26.385	165.0	0.462
225	8.47	34.12	26.533	150.9	0.472	225	8.28	34.01	26.476	156.4	0.503
250	8.31	34.18	26.604	144.2	0.510	250	7.77	34.05	26.583	146.2	0.542
275	7.90	34.17	26.658	139.1	0.547	275	7.42	34.07	26.649	139.9	0.578
300	7.64	34.20	26.712	133.9	0.582	300	7.20	34.10	26.704	134.7	0.614
350	6.97	34.19	26.806	125.0	0.650	350	6.85	34.14	26.784	127.1	0.682
400	6.49	34.23	26.902	115.9	0.713	400	6.48	34.19	26.872	118.7	0.746
450	6.20	34.27	26.972	109.3	0.772	450	6.04	34.22	26.953	111.1	0.806
500	5.90	34.28	27.018	104.9	0.829	500	5.76	34.27	27.028	104.0	0.863
550	5.60	34.30	27.071	99.9	0.883	550	5.49	34.30	27.084	98.6	0.917
600	5.37	34.33	27.122	95.0	0.936	600	5.28	34.32	27.125	94.7	0.969
700	4.99	34.38	27.207	87.0	1.034	700	4.81	34.38	27.227	85.1	1.066
800	4.67	34.42	27.275	80.6	1.126	800	4.48	34.42	27.296	78.6	1.156
900	4.30	34.45	27.339	74.5	1.212	900	4.20	34.46	27.358	72.7	1.240
1000	3.90	34.48	27.405	68.2	1.293	1000	3.90	34.48	27.405	68.2	1.319

93070		RV ALFRED MARSHALL AGASSIZ				CALCOFF CRUISE 7501				93080	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
31 29.5N	120 16.0W	01/23/75	1036 GMT	31 09.5N	120 55.5W	01/23/75	0530 GMT				
BOTTOM	WIND SPEED	WEATHER	Dominant Waves	BOTTOM	WIND SPEED	WEATHER	Dominant Waves				
3866M	040	10Kt	4	3832M	010	4Kt	1				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.10	33.48	25.217	216.0	0.000	0	13.35	33.50	25.182	279.3	0.000
10	13.08	33.48	25.221	215.6	0.027	10	13.35	33.50	25.182	279.3	0.027
20	13.06	33.49	25.233	214.5	0.055	20	13.29	33.50	25.194	278.1	0.055
30	13.05	33.49	25.235	214.3	0.082	30	13.26	33.50	25.200	277.6	0.083
40	13.03	33.49	25.239	213.9	0.110	40	12.95	33.48	25.247	273.2	0.111
50	12.87	33.47	25.255	212.4	0.137	50	12.82	33.48	25.272	270.7	0.138
75	11.64	33.46	25.482	250.8	0.203	75	12.52	33.46	25.316	266.7	0.206
100	10.29	33.54	25.784	222.0	0.262	100	10.14	33.55	25.818	218.9	0.267
125	9.52	33.67	26.015	200.1	0.316	125	9.44	33.71	26.059	195.9	0.319
150	9.08	33.80	26.187	183.8	0.364	150	8.97	33.83	26.228	179.9	0.367
175	8.76	33.90	26.316	171.5	0.410	175	8.50	33.93	26.380	165.5	0.411
200	8.30	34.00	26.465	157.4	0.452	200	8.36	33.99	26.448	159.0	0.452
225	7.84	34.04	26.565	147.9	0.491	225	7.96	34.01	26.524	151.8	0.492
250	7.70	34.08	26.617	143.0	0.528	250	7.56	34.05	26.614	143.3	0.530
275	7.39	34.10	26.677	131.3	0.564	275	7.17	34.07	26.684	136.6	0.566
300	7.23	34.15	26.739	131.4	0.599	300	6.77	34.09	26.755	129.9	0.600
350	6.86	34.17	26.806	125.0	0.666	350	6.07	34.07	26.831	122.7	0.666
400	6.46	34.22	26.896	116.5	0.729	400	5.85	34.12	26.898	116.3	0.728
450	5.90	34.24	26.986	107.4	0.788	450	5.73	34.21	26.984	108.1	0.787
500	5.70	34.26	27.027	104.0	0.844	500	5.61	34.27	27.046	102.2	0.843
550	5.44	34.30	27.090	98.0	0.898	550	5.35	34.30	27.101	97.0	0.896
600	5.29	34.35	27.148	92.6	0.949	600	5.29	34.36	27.156	91.8	0.946
700	4.96	34.39	27.218	85.9	1.046	700	4.80	34.40	27.244	83.5	1.041
800	4.53	34.43	27.298	78.4	1.136	800	4.44	34.43	27.308	77.4	1.130
900	4.22	34.45	27.347	73.7	1.220	900	4.14	34.46	27.364	72.1	1.213
1000	3.88	34.48	27.407	68.0	1.300	1000	3.86	34.48	27.410	67.8	1.291

103060		RV DAV ID STARR JORDAN				CALCOFI CRUISE 7501				103070	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
30 05.5N	118 24.0W	01/22/75	0245 GMT	29 46.0N	119 05.0W	01/21/75	2137 GMT				
BOTTOM	WIND	SPEED	WEATHER	Dominant Waves		BOTTOM	WIND	WEATHER	Dominant Waves		
3357M	320	10KT				3545M	310	2	340	4	6
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.67	33.54	24.939	302.5	0.000	0	15.92	33.69	24.779	317.7	0.000
10	14.60	33.54	24.954	301.0	0.030	10	15.92	33.69	24.779	317.7	0.031
20	14.60	33.54	24.954	301.0	0.060	20	15.91	33.69	24.781	317.5	0.063
30	14.28	33.53	25.014	295.3	0.090	30	15.90	33.69	24.784	317.2	0.095
40	14.20	33.52	25.023	294.5	0.119	40	15.92	33.70	24.787	316.9	0.127
50	14.09	33.52	25.046	292.3	0.149	50	15.93	33.70	24.785	317.2	0.159
75	11.74	33.67	25.626	237.1	0.215	75	15.84	33.94	24.797	316.0	0.238
100	11.12	33.83	25.864	214.5	0.272	100	13.65	33.53	25.145	282.9	0.314
125	10.89	33.93	25.983	203.2	0.325	125	12.85	33.57	25.336	264.7	0.383
150	10.77	33.99	26.051	196.7	0.376	150	11.40	33.56	25.604	239.2	0.447
175	10.66	34.05	26.117	190.6	0.425	175	9.89	33.66	25.946	206.7	0.503
200	10.49	34.13	26.209	181.7	0.473	200	9.06	33.83	26.214	181.2	0.553
225	10.38	34.20	26.317	171.4	0.518	225	8.58	33.94	26.375	165.9	0.597
250	9.76	34.24	26.419	161.7	0.561	250	8.26	33.99	26.463	157.6	0.639
275	9.51	34.30	26.508	153.3	0.602	275	8.05	34.05	26.542	150.1	0.678
300	9.18	34.31	26.569	147.5	0.641	300	7.73	34.08	26.612	143.4	0.716
350	8.41	34.30	26.683	136.7	0.715	350	6.92	34.08	26.727	132.5	0.788
400	7.28	34.20	26.771	128.4	0.784	400	6.38	34.15	26.854	120.5	0.854
450	6.79	34.22	26.855	120.4	0.850	450	5.89	34.17	26.933	113.0	0.915
500	6.59	34.26	26.913	114.9	0.912	500	5.66	34.22	27.001	106.6	0.973
550	5.91	34.27	27.009	105.8	0.971	550	5.58	34.30	27.073	99.7	1.028
600	5.67	34.30	27.063	100.7	1.026	600	5.32	34.33	27.129	94.4	1.080
700	5.12	34.36	27.176	89.9	1.129	700	5.03	34.40	27.218	86.0	1.178
800	4.67	34.41	27.267	81.3	1.223	800	4.62	34.43	27.288	79.3	1.268
900	4.29	34.45	27.340	74.4	1.310	900	4.30	34.47	27.355	73.0	1.353
1000	3.98	34.48	27.396	69.0	1.391	1000	3.98	34.49	27.404	68.3	1.433

103080		RV DAV ID STARR JORDAN				CALCOFI CRUISE 7501				107032	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
29 29.0N	119 42.0W	01/21/75	1630 GMT	30 26.0N	116 11.0W	01/24/75	0230 GMT				
BOTTOM	WIND	SPEED	WEATHER	Dominant Waves		BOTTOM	WIND	WEATHER	Dominant Waves		
3737M	310	14KT	1	310 3 6		399M	030	BKT	1	340 2 2	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.12	33.70	24.741	321.3	0.000	0	15.37	33.64	24.863	309.6	0.000
10	16.13	33.70	24.739	321.5	0.032	10	15.38	33.65	24.869	309.1	0.030
20	16.13	33.71	24.747	320.8	0.064	20	15.23	33.65	24.902	306.0	0.061
30	16.13	33.71	24.747	320.8	0.096	30	15.11	33.64	24.920	304.2	0.092
40	16.13	33.71	24.747	320.8	0.128	40	14.78	33.61	24.969	299.6	0.122
50	16.13	33.71	24.747	320.8	0.160	50	13.95	33.56	25.106	286.6	0.152
75	16.12	33.71	24.749	320.5	0.241	75	12.09	33.58	25.491	250.0	0.219
100	14.22	33.65	25.119	285.3	0.317	100	10.89	33.74	25.835	217.2	0.278
125	13.04	33.57	25.298	268.3	0.387	125	10.33	33.94	26.089	193.1	0.330
150	11.12	33.52	25.623	237.4	0.451	150	10.11	34.03	26.197	182.9	0.378
175	5.16	33.46	25.960	205.4	0.508	175	10.04	34.07	26.240	178.8	0.424
200	9.03	33.81	26.203	182.2	0.557	200	9.82	34.23	26.401	163.4	0.467
225	8.75	33.91	26.325	170.7	0.602	225	9.61	34.29	26.483	155.6	0.508
250	8.31	34.00	26.464	157.5	0.644	250	9.36	34.31	26.540	150.2	0.548
275	7.85	34.03	26.556	148.8	0.684	275	9.11	34.32	26.589	145.6	0.586
300	7.42	34.04	26.626	142.1	0.721	300	8.96	34.33	26.620	142.6	0.624
350	6.73	34.07	26.745	130.8	0.792	350	8.08	34.33	26.757	129.7	0.695
400	6.27	34.11	26.837	122.1	0.858						
450	6.04	34.18	26.922	114.1	0.920						
500	5.59	34.21	27.001	106.5	0.978						
550	5.26	34.26	27.080	99.0	1.032						
600	4.94	34.30	27.144	93.0	1.084						
700	4.67	34.38	27.243	83.6	1.179						
800	4.41	34.43	27.311	77.1	1.267						
900	4.17	34.47	27.369	71.7	1.350						
1000	3.91	34.50	27.420	66.4	1.428						

107035		RV DAVID STARR JORDAN			CALCOFI CRUISE 7501			107040			
LATITUDE	LONGITUDE	MO/DA YR/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
30 21.5N	116 22.5W	01/24/75	0534 GMT	30 10.5N	116 42.5W	01/24/75	0900 GMT				
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES				
1756M	340	7KT	1	2602M	320	7KT	1				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.54	33.65	24.833	312.5	0.000	0	15.54	33.66	24.841	311.8	0.000
10	15.55	33.65	24.831	312.7	0.031	10	15.54	33.66	24.841	311.8	0.031
20	15.46	33.65	24.851	310.8	0.062	20	15.54	33.66	24.841	311.8	0.062
30	15.43	33.65	24.858	310.2	0.093	30	15.53	33.66	24.843	311.6	0.093
40	15.38	33.64	24.861	309.8	0.124	40	15.48	33.65	24.847	311.2	0.124
50	14.88	33.57	24.917	304.6	0.155	50	15.28	33.64	24.883	307.7	0.155
75	12.72	33.50	25.307	267.4	0.227	75	13.10	33.47	25.209	276.7	0.229
100	11.41	33.63	25.656	234.3	0.290	100	11.45	33.56	25.594	240.1	0.294
125	10.58	33.75	25.898	211.3	0.347	125	10.67	33.81	25.929	208.4	0.351
150	9.97	33.93	26.142	188.0	0.397	150	9.91	33.98	26.192	183.4	0.401
175	9.60	34.02	26.275	175.5	0.443	175	9.61	34.05	26.296	173.4	0.446
200	8.98	34.09	26.430	160.7	0.486	200	9.34	34.12	26.395	164.0	0.489
225	9.29	34.24	26.497	154.3	0.527	225	9.09	34.20	26.498	154.2	0.530
250	9.28	34.32	26.561	148.2	0.566	250	8.56	34.21	26.589	145.6	0.569
275	9.00	34.33	26.614	143.2	0.604	275	8.39	34.26	26.655	139.4	0.605
300	8.47	34.29	26.666	138.3	0.640	300	8.21	34.28	26.698	135.3	0.641
350	8.13	34.32	26.741	131.2	0.710	350	7.77	34.30	26.779	127.6	0.710
400	7.39	34.32	26.850	120.9	0.777	400	7.35	34.32	26.855	120.3	0.775
450	7.02	34.35	26.925	113.7	0.839	450	6.86	34.33	26.931	113.1	0.836
500	6.46	34.32	26.977	108.8	0.898	500	6.32	34.32	26.996	107.0	0.895
550	6.03	34.33	27.041	102.7	0.954	550	6.00	34.36	27.068	100.1	0.950
600	5.82	34.35	27.083	98.7	1.009	600	5.69	34.37	27.115	95.7	1.003
700	5.23	34.39	27.187	88.9	1.111	700	5.13	34.39	27.198	87.8	1.103
800	4.72	34.42	27.269	81.1	1.204	800	4.73	34.42	27.268	81.2	1.196
900	4.40	34.44	27.320	76.2	1.291	900	4.37	34.45	27.331	75.2	1.283
1000	4.04	34.47	27.382	70.4	1.374	1000	4.06	34.48	27.388	69.8	1.364

RV DAVID STARK JORDAN					GALCOP I CRUISE 7501							107040			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
30 10.5N	116 42.5W	1/24/15	1001	GMT	2602M	320	7KT	1	D	DT	DD				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
1	15.63	33.648	5.77					314.6	0	15.63	33.648	5.77	24.812	314.6	0.000
11	15.55	33.646	5.78					313.0	10	15.55	33.647	5.77	24.827	313.1	0.031
30	15.52	33.643	5.81					312.6	20	15.53	33.645	5.80	24.830	312.9	0.062
58	15.19	33.659	5.64					304.5	30	15.52	33.643	5.81	24.833	312.6	0.094
77	12.80	33.478	5.27					270.5	50	15.28	33.655	5.68	24.893	306.8	0.156
92	11.85	33.561	4.96					247.1	75	13.06	33.492	5.31	25.233	274.5	0.229
106	10.86	33.602	4.65					226.9	100	11.26	33.581	4.79	25.644	235.4	0.293
134	10.33	33.985	3.47					189.8	125	10.40	33.860	3.84	26.014	200.3	0.348
159	9.74	34.053	3.13					175.2	150	9.93	34.042	3.20	26.235	179.2	0.396
187	9.49	34.160	2.89					163.4	200	9.32	34.202	2.65	26.461	157.7	0.482
220	9.05	34.253	2.25					149.7	250	8.67	34.291	1.79	26.635	141.2	0.559
291	8.21	34.309	1.31					133.1	300	8.13	34.311	1.22	26.734	131.8	0.630
389	7.42	34.312	0.70					121.9	400	7.31	34.311	0.66	26.854	120.5	0.762
492	6.43	34.313	0.48					108.9	500	6.37	34.317	0.46	26.986	107.9	0.883
596	5.76	34.365	0.35					96.9	600	5.73	34.366	0.35	27.106	96.5	0.993
728	5.07	34.397	0.40					86.6	700	5.20	34.392	0.38	27.191	88.5	1.093
882	4.45	34.443	0.51					76.5	800	4.76	34.419	0.44	27.263	81.6	1.187
1047	3.91	34.482	0.70					68.2	1000	4.05	34.472	0.63	27.383	70.3	1.357

107050				RV DAVID STARR JORDAN				CALCOUL CRUISE 7501				107060			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
29 50.0N	117 22.0W	01/24/75	1510 GMT	29 31.5N	118 01.5W	01/24/75	2015 GMT								
BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND SPEED	WEATHER	DOMINANT WAVES								
2569M	330	5KT	0 330 2 4	3545M	340	7KT	0 270 3 4								
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD				
0	14.49	33.53	24.970	299.5	0.000	0	15.65	33.66	24.817	314.1	0.000				
10	14.47	33.53	24.974	299.1	0.029	10	15.52	33.66	24.846	311.3	0.031				
20	14.47	33.53	24.974	299.1	0.059	20	15.49	33.66	24.852	310.7	0.062				
30	14.47	33.53	24.974	299.1	0.089	30	15.48	33.66	24.854	310.5	0.093				
40	14.47	33.53	24.974	299.1	0.119	40	15.47	33.66	24.857	310.3	0.124				
50	14.34	33.52	24.994	297.3	0.149	50	15.19	33.63	24.895	306.6	0.155				
75	13.95	33.50	25.060	291.0	0.223	75	12.91	33.56	25.317	266.5	0.227				
100	11.50	33.56	25.585	241.0	0.290	100	11.04	33.59	25.692	230.8	0.290				
125	10.52	33.68	25.854	215.5	0.348	125	10.22	33.74	25.952	206.1	0.345				
150	10.04	33.87	26.084	193.6	0.400	150	9.45	33.88	26.190	183.5	0.395				
175	9.72	34.02	26.254	177.4	0.447	175	9.21	34.04	26.354	167.9	0.439				
200	9.30	34.11	26.394	164.1	0.491	200	9.05	34.11	26.434	160.3	0.481				
225	9.02	34.15	26.470	156.9	0.532	225	8.91	34.14	26.480	156.0	0.522				
250	8.57	34.16	26.549	149.4	0.571	250	8.56	34.19	26.574	147.1	0.561				
275	8.31	34.18	26.604	144.2	0.609	275	8.33	34.24	26.648	140.0	0.598				
300	8.04	34.22	26.676	137.3	0.646	300	8.22	34.27	26.688	136.2	0.634				
350	7.18	34.19	26.777	127.8	0.715	350	7.62	34.27	26.777	127.7	0.703				
400	6.86	34.24	26.861	119.8	0.779	400	7.23	34.31	26.864	119.5	0.767				
450	6.40	34.27	26.946	111.7	0.841	450	6.71	34.33	26.952	111.2	0.828				
500	6.11	34.30	27.007	105.9	0.898	500	6.31	34.35	27.021	104.7	0.886				
550	5.96	34.35	27.066	100.4	0.953	550	5.89	34.36	27.083	98.8	0.940				
600	5.67	34.36	27.110	96.2	1.005	600	5.55	34.37	27.132	94.1	0.992				
700	5.09	34.40	27.211	86.6	1.106	700	5.06	34.41	27.222	85.5	1.090				
800	4.71	34.44	27.286	79.5	1.197	800	4.68	34.45	27.297	78.4	1.180				
900	4.40	34.46	27.336	74.8	1.283	900	4.25	34.48	27.368	71.7	1.264				
1000	3.97	34.48	27.397	68.9	1.364	1000	3.97	34.50	27.413	67.4	1.342				

107070

RV DAVID STARR JORDAN

CALCOFI CRUISE 7501

107080

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
29 11.0N	118 41.0W	01/25/75	0105 GMT	28 51.0N	119 20.0W	01/25/75	0600 GMT
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
3075M	340	SKT	0	330	2 6		
Z	T	S	SIGMA T	DT	DD	Z	T
0	15.61	33.63	24.803	315.4	0.000	0	16.31
10	15.51	33.63	24.869	309.1	0.031	10	16.30
20	15.21	33.63	24.891	307.0	0.062	20	16.25
30	14.90	33.61	24.943	302.1	0.092	30	16.30
40	14.74	33.59	24.962	300.3	0.122	40	16.29
50	14.66	33.59	24.979	298.6	0.152	50	16.19
75	13.09	33.50	25.234	274.3	0.224	75	15.81
100	11.42	33.63	25.654	234.4	0.289	100	14.22
125	10.35	33.72	25.914	209.7	0.345	125	12.11
150	9.92	33.83	26.073	194.6	0.396	150	10.88
175	9.62	33.99	26.248	178.0	0.443	175	10.04
200	9.09	34.06	26.389	164.6	0.487	200	9.65
225	8.63	34.09	26.485	155.5	0.528	225	9.16
250	8.06	34.09	26.512	147.3	0.567	250	8.90
275	7.75	34.09	26.617	142.9	0.605	275	8.42
300	7.51	34.13	26.683	136.6	0.641	300	7.82
350	7.17	34.21	26.794	126.1	0.709	350	7.32
400	6.79	34.25	26.878	118.2	0.773	400	6.87
450	6.32	34.28	26.964	110.0	0.833	450	6.42
500	5.80	34.30	27.046	102.2	0.889	500	5.88
550	5.72	34.35	27.096	97.5	0.943	550	5.49
600	5.37	34.37	27.154	92.0	0.994	600	5.18
700	5.02	34.42	27.235	84.3	1.089	700	4.97
800	4.59	34.44	27.299	78.2	1.179	800	4.58
900	4.33	34.47	27.352	73.3	1.263	900	4.26
1000	3.96	34.49	27.407	68.1	1.343	1000	3.98

110035

RV DAV ID STARR JORDAN

CALCOFI CRUISE 7501

110040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
29 46.0N	116 00.0W	01/26/75	1436 GMT	29 36.5N	116 19.5W	01/26/75	0955 GMT
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
1298M	350	12KT		330	3 5		
Z	T	S	SIGMA T	DT	DD	Z	T
0	15.40	33.65	24.864	309.5	0.000	0	15.69
10	15.40	33.65	24.864	309.5	0.030	10	15.70
20	15.34	33.64	24.870	308.0	0.061	20	15.69
30	15.01	33.62	24.927	303.6	0.092	30	15.69
40	14.38	33.60	25.047	292.2	0.122	40	15.62
50	12.78	33.58	25.157	281.8	0.151	50	15.54
75	11.56	33.74	25.714	226.8	0.215	75	14.92
100	10.72	33.92	26.005	201.1	0.269	100	12.41
125	10.62	33.99	26.077	194.2	0.319	125	11.76
150	10.48	34.03	26.133	188.9	0.368	150	10.63
175	10.34	34.15	26.250	177.8	0.415	175	9.97
200	10.05	34.21	26.347	168.6	0.459	200	9.50
225	9.79	34.26	26.430	160.7	0.501	225	9.25
250	9.55	34.30	26.501	154.0	0.542	250	8.99
275	9.43	34.33	26.544	149.9	0.581	275	8.48
300	6.15	34.35	26.605	144.0	0.619	300	8.07
350	8.41	34.35	26.722	133.0	0.692	350	7.77
400	8.00	34.36	26.192	126.3	0.760	400	7.44
450	7.27	34.34	26.882	117.8	0.825	450	7.08
500	6.85	34.34	26.941	112.2	0.886	500	6.46
550	6.35	34.33	27.000	106.6	0.944	550	6.21
600	5.87	34.35	27.077	99.3	1.000	600	5.86
700	5.36	34.39	27.171	90.4	1.103	700	5.32
800	4.83	34.42	27.257	82.3	1.198	800	4.78
900	4.46	34.45	27.322	76.1	1.286	900	4.37
1000	4.09	34.48	27.385	70.1	1.388	1000	4.03

RV DAVID STARR JORDAN

CALCOFI CRUISE 7501

110040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves									
29 36.5N	116 19.5W	1/26/75	1106	GMT	2042M	320	6KT										
Z	T	S	02	04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
1	15.71	33.669	5.77						314.7	0	15.71	33.669	5.77	24.810	314.7	0.000	
11	15.72	33.656	5.78						315.9	10	15.71	33.658	5.77	24.799	315.8	0.031	
30	15.59	33.652	5.87						315.5	20	15.70	33.655	5.82	24.800	315.7	0.063	
59	15.40	33.658	5.72						308.9	30	15.69	33.652	5.87	24.802	315.5	0.094	
78	14.01	33.519	5.47						290.8	50	15.48	33.657	5.76	24.849	311.0	0.157	
93	12.64	33.545	4.88						262.6	75	14.27	33.539	5.53	25.021	294.6	0.233	
107	11.97	33.573	4.92						248.3	100	12.24	33.554	4.89	25.440	254.8	0.303	
137	11.52		3.52							125	11.68	33.760	4.07	25.707	229.4	0.364	
161	10.44		3.88							150	10.96	33.868	3.68	25.921	209.1	0.419	
190	9.89	33.982	3.29							200	9.69	34.034	3.04	26.269	176.0	0.518	
222	9.30	34.132	2.51							162.5	250	8.95	34.199	2.03	26.518	152.4	0.602
293	8.55	34.241	1.54							143.1	300	8.47	34.246	1.47	26.631	141.6	0.678
393	7.48	34.273	0.91							125.6	400	7.40	34.274	0.88	26.811	124.6	0.817
497	6.52	34.287	0.60							112.0	500	6.49	34.289	0.59	26.948	111.6	0.942
600	5.82	34.350	0.40							98.7	600	5.82	34.350	0.40	27.083	98.7	1.055
734	5.13	34.398	0.36							87.2	700	5.29	34.388	0.37	27.178	89.7	1.157
888	4.41	34.448	0.50							75.8	800	4.80	34.420	0.40	27.260	82.0	1.251
1052	3.90	34.495	0.69							67.1	1000	4.03	34.481	0.62	27.392	69.5	1.421

110050					RV DAY ID STARR JORDAN					CALCOFI CRUISE 7501					110060				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES		
29 16.5N	116 59.0W	01/26/75	0403 GMT	3169M	360	15Kt	WEATHR	WAVES	28 56.5N	117 39.0W	01/25/75	2225 GMT	3137M	360	12Kt	0	340 2 4		
0	15.99	33.67	24.748	320.6	0.000				0	15.81	33.63	24.758	319.7	0.000					
10	15.99	33.67	24.748	320.6	0.032				10	15.73	33.66	24.799	315.8	0.031					
20	15.96	33.67	24.755	320.0	0.064				20	15.68	33.66	24.810	314.7	0.063					
30	15.88	33.67	24.773	318.3	0.096				30	15.58	33.65	24.825	313.4	0.094					
40	15.86	33.67	24.777	317.8	0.128				40	15.49	33.65	24.845	311.4	0.126					
50	15.77	33.66	24.790	316.7	0.159				50	15.27	33.62	24.870	309.0	0.157					
75	14.22	33.54	25.034	293.4	0.236				75	11.99	33.48	25.432	255.5	0.228					
100	12.44	33.67	25.493	249.7	0.305				100	10.44	33.70	25.883	212.7	0.287					
125	11.18	33.79	25.822	218.5	0.364				125	10.07	33.81	26.032	198.5	0.339					
150	10.90	34.03	26.059	196.0	0.416				150	9.51	33.97	26.250	177.8	0.387					
175	10.14	34.06	26.215	181.1	0.464				175	9.08	34.06	26.390	164.5	0.430					
200	10.29	34.24	26.329	170.3	0.509				200	8.70	34.12	26.497	154.3	0.471					
225	10.07	34.32	26.429	160.8	0.552				225	8.47	34.15	26.556	148.7	0.510					
250	9.48	34.32	26.528	151.4	0.592				250	8.28	34.18	26.609	143.7	0.547					
275	9.39	34.37	26.582	146.3	0.631				275	8.06	34.21	26.666	138.3	0.584					
300	8.90	34.34	26.638	141.0	0.668				300	7.96	34.23	26.696	135.4	0.619					
350	8.42	34.37	26.736	131.6	0.739				350	7.51	34.27	26.793	126.2	0.688					
400	7.89	34.37	26.816	124.0	0.807				400	7.15	34.30	26.868	119.1	0.752					
450	7.35	34.38	26.902	115.9	0.870				450	6.62	34.30	26.940	112.3	0.813					
500	6.71	34.35	26.968	109.7	0.930				500	6.25	34.32	27.005	106.1	0.871					
550	6.19	34.35	27.036	103.2	0.987				550	5.89	34.34	27.067	100.3	0.926					
600	5.93	34.37	27.085	98.5	1.042				600	5.64	34.36	27.113	95.9	0.979					
700	5.35	34.42	27.196	88.0	1.143				700	5.25	34.42	27.208	86.9	1.078					
800	4.76	34.44	27.280	80.0	1.236				800	4.63	34.43	27.287	79.4	1.170					
900	4.38	34.46	27.338	74.6	1.322				900	4.29	34.47	27.356	72.9	1.255					
1000	3.93	34.49	27.410	61.8	1.402				1000	3.91	34.49	27.411	67.6	1.334					

110070					RV DAY ID STARR JORDAN					CALCOFI CRUISE 7501					110080				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES		
28 36.0N	118 18.0W	01/25/75	1729 GMT	3737M	050	7KT	1	320 2 6	28 16.5N	118 57.5W	01/25/75	1106 GMT	3926M	030	7KT	1			
0	15.45	33.63	24.838	312.1	0.000				0	16.25	33.75	24.750	320.4	0.000					
10	15.43	33.63	24.843	311.6	0.031				10	16.23	33.75	24.755	320.0	0.032					
20	15.21	33.62	24.883	307.7	0.062				20	16.24	33.75	24.752	320.2	0.064					
30	15.01	33.60	24.912	305.1	0.092				30	16.22	33.75	24.757	314.8	0.096					
40	14.94	33.60	24.927	303.6	0.123				40	16.18	33.74	24.758	319.6	0.128					
50	14.76	33.56	24.935	302.8	0.153				50	16.17	33.74	24.761	319.4	0.160					
75	14.27	33.55	25.031	293.7	0.228				75	16.19	33.76	24.771	318.4	0.240					
100	11.70	33.50	25.502	248.9	0.297				100	15.32	33.63	24.867	309.3	0.319					
125	10.41	33.69	25.881	212.9	0.355				125	13.02	33.61	25.333	264.9	0.392					
150	9.17	33.85	26.212	181.4	0.405				150	11.90	33.76	25.666	233.3	0.455					
175	8.89	33.99	26.386	160.8	0.449				175	10.88	33.91	25.969	204.5	0.511					
200	8.70	34.08	26.466	157.3	0.491				200	10.46	34.08	26.175	184.4	0.560					
225	8.23	34.08	26.538	150.4	0.530				225	10.25	34.21	26.313	171.8	0.606					
250	8.30	34.18	26.606	144.0	0.568				250	9.89	34.29	26.436	160.1	0.649					
275	8.01	34.19	26.657	139.1	0.605				275	9.61	34.34	26.522	151.9	0.684					
300	7.54	34.20	26.734	131.9	0.640				300	9.13	34.35	26.609	143.7	0.728					
350	7.37	34.26	26.805	125.1	0.707				350	8.85	34.43	26.716	133.5	0.800					
400	7.09	34.32	26.892	116.9	0.770				400	8.00	34.37	26.800	125.6	0.868					
450	6.66	34.33	26.959	110.6	0.830				450	6.78	34.29	26.911	115.1	0.932					
500	6.24	34.33	27.014	105.3	0.888				500	6.29	34.29	26.976	108.9	0.991					
550	5.91	34.36	27.080	99.0	0.942				550	6.14	34.34	27.035	103.3	1.048					
600	5.50	34.37	27.138	93.5	0.994				600	5.79	34.36	27.095	97.6	1.102					
700	4.95	34.41	27.235	84.3	1.091				700	5.35	34.41	27.188	88.8	1.203					
800	4.59	34.44	27.299	78.2	1.180				800	4.75	34.41	27.258	82.2	1.297					
900	4.17	34.48	27.376	70.9	1.263				900	4.52	34.46	27.323	76.0	1.385					
1000	3.89	34.50	27.422	66.6	1.341				1000	4.09	34.48	27.385	70.0	1.462					

RV DAVID STARR JORDAN					CALCOFI CRUISE 7501					110080									
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENDER TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DIMINANT WAVES		
28 16.5N	118 57.5W	1/25/75	1232	GMT	3926M	030	7KT	1	28 16.5N	118 57.5W	01/25/75	2225 GMT	3926M	030	7KT	1			
1	16.30	33.745	5.72						321.9	0	16.30	33.745	5.72	24.735	321.9	0.000			
12	16.24	33.742	5.70						320.8	10	16.24	33.743	5.70	24.744	321.0	0.032			
31	16.19	33.737	5.76						320.1	20	16.21	33.740	5.72	24.751	320.4	0.064			
58	16.18	33.740	5.72																

113030					RV DAVID STARR JORDAN					CALCOFI CRUISE 7501					113035		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME									
29 22.0N	115 18.0W	01/27/75	0020 GMT		29 11.0N	115 38.0W	01/27/75	0414 GMT									
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES								
58M	290	3KT	1	260 1 4	1391M	330	12KT	WEATHER	DOMINANT WAVES	Z	T	S	SIGMA T	DT	DD		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.79	33.64	24.990	297.6	0.000	0	15.15	33.64	24.912	305.0	0.000						
10	14.57	33.64	25.037	293.1	0.029	10	15.12	33.64	24.918	304.4	0.030						
20	14.44	33.65	25.072	289.7	0.058	20	14.98	33.64	24.949	301.5	0.060						
30	13.96	33.65	25.173	280.2	0.087	30	14.90	33.63	24.959	300.6	0.091						
40	13.36	33.66	25.304	261.7	0.114	40	14.52	33.60	25.017	295.0	0.120						
50	12.34	33.67	25.316	266.6	0.141	50	13.87	33.61	25.161	281.3	0.149						
						75	12.16	33.80	25.647	235.0	0.214						
						100	11.25	33.95	25.933	207.9	0.270						
						125	10.72	34.08	26.129	189.2	0.320						
						150	10.32	34.14	26.246	178.2	0.367						
						175	9.71	34.13	26.342	169.1	0.411						
						200	9.54	34.24	26.456	158.2	0.453						
						225	9.68	34.34	26.511	153.1	0.493						
						250	9.16	34.31	26.572	147.2	0.532						
						275	8.94	34.36	26.647	140.1	0.569						
						300	8.75	34.40	26.708	134.3	0.605						
						350	8.26	34.39	26.776	127.8	0.673						
						400	7.61	34.38	26.885	119.4	0.739						
						450	7.09	34.37	26.931	113.1	0.800						
						500	6.53	34.35	26.992	107.6	0.859						
						550	6.06	34.36	27.061	100.8	0.915						
						600	5.83	34.36	27.090	98.1	0.968						
						700	5.18	34.39	27.192	88.4	1.070						
						800	4.75	34.42	27.266	81.4	1.163						
						900	4.29	34.46	27.348	73.6	1.249						
						1000	3.96	34.49	27.407	68.1	1.329						

113040					RV DAVID STARR JORDAN					CALCOFI CRUISE 7501					113050		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME									
29 02.0N	115 57.5W	01/27/75	0730 GMT		28 41.0N	116 36.5W	01/27/75	1302 GMT									
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES								
1856M	300	8KT	1	260 10KT	3545M	260	10KT	WEATHER	DOMINANT WAVES	Z	T	S	SIGMA T	DT	DD		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.59	33.66	24.830	312.8	0.000	0	15.85	33.66	24.772	318.4	0.000						
10	15.58	33.66	24.832	312.6	0.031	10	15.80	33.66	24.783	317.3	0.031						
20	15.56	33.65	24.829	312.9	0.062	20	15.81	33.66	24.781	317.5	0.063						
30	15.52	33.65	24.838	312.1	0.093	30	15.76	33.65	24.787	317.0	0.095						
40	15.48	33.65	24.857	311.2	0.125	40	15.65	33.65	24.809	314.8	0.127						
50	14.64	33.58	24.976	298.9	0.155	50	15.63	33.65	24.813	314.4	0.158						
75	12.43	33.57	25.418	256.9	0.225	75	15.00	33.60	24.914	304.9	0.236						
100	11.38	33.17	25.131	221.1	0.286	100	12.40	33.69	25.516	247.5	0.306						
125	10.47	33.79	25.948	206.5	0.341	125	11.93	33.78	25.676	232.4	0.366						
150	10.30	34.03	26.164	186.0	0.391	150	11.44	33.83	25.806	220.0	0.424						
175	9.40	34.03	26.315	171.6	0.436	175	10.84	33.99	26.029	198.8	0.477						
200	8.85	34.08	26.443	159.5	0.479	200	10.21	34.72	26.327	170.5	0.524						
225	8.60	34.14	26.528	151.3	0.519	225	10.08	34.33	26.435	160.2	0.567						
250	8.42	34.17	26.580	146.5	0.557	250	9.86	34.37	26.505	153.5	0.607						
275	8.26	34.24	26.659	139.0	0.594	275	9.65	34.39	26.555	148.9	0.646						
300	8.00	34.26	26.714	133.8	0.629	300	9.39	34.43	26.629	141.8	0.684						
350	7.43	34.29	26.821	123.6	0.696	350	8.66	34.41	26.730	132.7	0.756						
400	7.37	34.36	26.884	117.6	0.760	400	7.92	34.39	26.827	123.0	0.823						
450	6.92	34.36	26.947	111.7	0.820	450	7.64	34.41	26.884	117.6	0.887						
500	6.34	34.34	27.009	105.8	0.878	500	6.69	34.37	26.986	107.9	0.947						
550	5.93	34.35	27.069	100.0	0.933	550	6.27	34.38	27.050	101.4	1.003						
600	5.64	34.37	27.121	95.1	0.986	600	5.67	34.32	27.078	99.2	1.057						
700	5.17	34.40	27.201	87.5	1.085	700	5.45	34.40	27.168	90.7	1.160						
800	4.71	34.42	27.270	81.0	1.178	800	4.98	34.44	27.255	82.4	1.256						
900	4.42	34.46	27.318	76.4	1.265	900	4.47	34.46	27.329	75.5	1.344						
1000	4.09	34.48	27.385	70.1	1.348	1000	4.13	34.50	27.397	69.0	1.425						

RV DAVID STARR JORDAN					CALCOFI CRUISE 7501					113060						
LATITUDE	LONGITUDE	MO/DAY/YR	MESSINGER TIME	GMT	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	2	290	3	4	DT	DD	
28 22.0N	117 16.0W	1/27/75	1931	GMT	3641M	290	13KT	2	290 3 4							
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
3	15.86	33.676	5.77			317.4	0	15.86	33.676	5.77	24.782	317.4	0.000			
11	15.87	33.676	5.76			317.6	10	15.86	33.677	5.76	24.780	317.6	0.031			
31	14.89	33.551	5.94			306.2	20	15.48	33.624	5.83	24.825	313.3	0.063			
60	14.37	33.559	5.81			295.0	30	14.95	33.559	5.93	24.892	306.9	0.094			
78	13.09	33.613	5.05			266.0	50	14.59	33.541	5.85	24.955	301.0	0.155			
92	12.39	33.659	4.													

113060			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			113070		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 22.0N	117 16.0W	01/27/75	1830 GMT			28 02.0N	117 55.0W	01/28/75	0001 GMT		
BOTTUM	WIND SPEED	WEATHR	DOMINANT	WAVES		BOTTUM	WIND SPEED	WEATHER	DOMINANT	WAVES	
3641M	290	13KT	2	290	3 4	3451M	330	13KT	5	340	4 5
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.91	33.68	24.774	318.2	0.000	0	15.30	33.61	24.856	310.4	0.000
10	15.88	33.67	24.773	318.3	0.031	10	15.30	33.61	24.856	310.4	0.031
20	15.29	33.57	24.828	313.1	0.063	20	15.27	33.60	24.855	310.5	0.062
30	14.85	33.55	24.908	305.4	0.094	30	15.24	33.60	24.861	309.8	0.093
40	14.61	33.53	24.944	302.0	0.124	40	14.90	33.60	24.935	302.8	0.123
50	14.43	33.54	24.990	297.6	0.155	50	14.64	33.58	24.976	298.9	0.154
75	13.07	33.62	25.331	265.2	0.225	75	13.03	33.49	25.239	273.9	0.226
100	11.48	33.55	25.581	241.4	0.289	100	11.56	33.51	25.535	245.7	0.291
125	10.33	33.68	25.887	212.3	0.346	125	10.33	33.71	25.910	210.1	0.349
150	9.75	33.92	26.172	185.2	0.397	150	9.65	33.85	26.134	188.9	0.399
175	9.47	34.04	26.311	171.9	0.442	175	9.16	33.99	26.323	170.9	0.445
200	9.19	34.10	26.404	163.2	0.485	200	8.83	34.02	26.399	163.7	0.488
225	8.65	34.14	26.521	152.1	0.526	225	8.44	34.04	26.475	156.4	0.529
250	8.47	34.17	26.572	147.2	0.564	250	8.00	34.05	26.549	149.4	0.568
275	8.56	34.26	26.628	141.8	0.602	275	7.64	34.08	26.625	142.1	0.606
300	8.23	34.28	26.695	135.6	0.638	300	7.28	34.12	26.708	134.3	0.641
350	7.46	34.26	26.793	126.3	0.706	350	7.00	34.19	26.802	125.4	0.709
400	7.03	34.27	26.861	119.8	0.770	400	6.73	34.25	26.886	117.4	0.772
450	6.67	34.31	26.942	112.2	0.832	450	6.55	34.29	26.942	112.1	0.833
500	6.22	34.32	27.009	105.8	0.889	500	6.28	34.31	26.993	107.3	0.891
550	5.80	34.31	27.054	101.5	0.945	550	5.94	34.32	27.045	102.4	0.947
600	5.52	34.33	27.104	96.7	0.998	600	5.63	34.37	27.122	95.0	1.000
700	5.10	34.38	27.194	88.2	1.098	700	5.11	34.39	27.201	87.6	1.100
800	4.62	34.41	27.272	80.8	1.191	800	4.69	34.42	27.273	80.8	1.192
900	4.28	34.45	27.341	74.3	1.277	900	4.35	34.46	27.341	74.2	1.278
1000	3.98	34.48	27.396	69.0	1.358	1000	3.83	34.49	27.420	66.8	1.358

113080			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			117025		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
27 41.0N	118 33.0W	01/28/75	0529 GMT			28 58.0N	114 37.0W	01/29/75	2120 GMT		
BOTTUM	WIND SPEED	WEATHR	DOMINANT	WAVES		BOTTUM	WIND SPEED	WEATHER	DOMINANT	WAVES	
3737M	320	12KT	2	280	2 5	52M	280	10KT	1	280	2 5
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.13	33.70	24.739	321.5	0.000	0	14.70	33.71	25.063	290.6	0.000
10	16.14	33.70	24.737	321.7	0.032	10	14.69	33.71	25.065	290.4	0.029
20	16.14	33.70	24.737	321.7	0.064	20	14.46	33.72	25.122	285.0	0.057
30	16.14	33.70	24.737	321.7	0.096	30	14.04	33.71	25.203	277.4	0.086
40	16.14	33.70	24.737	321.7	0.128	40	13.83	33.71	25.246	273.7	0.113
50	16.14	33.70	24.737	321.7	0.161	50	13.73	33.71	25.267	271.3	0.141
75	16.14	33.70	24.737	321.7	0.242						
100	14.14	33.57	25.074	289.6	0.319						
125	12.43	33.67	25.495	249.5	0.317						
150	11.30	33.81	25.816	219.1	0.446						
175	10.56	33.96	26.064	195.4	0.499						
200	10.20	34.09	26.228	179.9	0.547						
225	9.90	34.14	26.318	171.4	0.592						
250	9.74	34.27	26.446	159.2	0.634						
275	9.37	34.31	26.538	150.4	0.674						
300	9.25	34.35	26.589	145.6	0.713						
350	8.58	34.37	26.711	134.0	0.786						
400	8.17	34.40	26.798	125.8	0.854						
450	7.52	34.38	26.878	118.2	0.919						
500	7.04	34.37	26.938	112.5	0.981						
550	6.38	34.34	27.004	106.3	1.039						
600	5.95	34.35	27.067	100.3	1.095						
700	5.41	34.40	27.173	90.2	1.198						
800	4.80	34.43	27.268	81.2	1.293						
900	4.36	34.46	27.340	74.3	1.379						
1000	4.03	34.48	27.391	69.5	1.460						

117030			RV DAV ID STARR JORDAN			CALCOFI CRUISE 7501			117035		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 48.0N	114 56.5W	01/29/75	1644 GMT			28 38.0N	115 16.0W	01/29/75	1352 GMT		
BOTTUM	WIND SPEED	WEATHR	DOMINANT	WAVES		BOTTUM	WIND SPEED	WEATHER	DOMINANT	WAVES	
101M	260	8KT	2	330	2 6	205M	270	10KT			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.25	33.73	24.959	300.5	0.000	0	15.30	33.81	25.009	295.7	0.000
10	15.25	33.73	24.959	300.5	0.030	10	15.26	33.81	25.018	294.9	0.029
20	15.25	33.73	24.959	300.5	0.060	20	15.23	33.82	25.033	293.5	0.059
30	15.24	33.73	24.961	300.3	0.090	30	14.86	33.82	25.113	285.9	0.088
40	15.20	33.72	24.962	300.2	0.120	40	14.46	33.82	25.199	277.7	0.116
50	14.91	33.69	25.002	296.4	0.150	50	13.51	33.78	25.366	261.8	0.143
75	13.53	33.72	25.316	266.6	0.221	75	12.14	33.84	25.682	231.7	0.205
88	12.50	33.79	25.575	242.0	0.254	100	11.08	33.97	25.980	203.5	0.260
						125	10.91	34.18	26.173	185.1	0.309
						150	10.66	34.22	26.249	177.9	0.355
						175	10.41	34.26	26.324	170.8	0.400
						195	10.20	34.31	26.399	163.6	0.434

117040		RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				117050	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE		LONGITUDE	MO/DAY/YR	START TIME			
28 28.0N	115 35.5W	01/29/75	0815 GMT	28 10.0N	116 20.0W		01/29/75	0205 GMT			
BOTTOM		WIND	SPEED	WEATHER	DIMINANT WAVES	BOTTOM		WIND	SPEED	WEATHER	DIMINANT WAVES
929M		320	15KT			4308M	340	11KT		2	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.29	33.72	24.942	302.1	0.000	0	15.31	33.67	24.900	306.2	0.000
10	15.27	33.72	24.947	301.7	0.030	10	15.31	33.67	24.900	306.2	0.030
20	15.28	33.72	24.945	301.9	0.060	20	15.32	33.67	24.898	306.4	0.061
30	15.28	33.72	24.945	301.9	0.090	30	15.24	33.67	24.915	304.7	0.091
40	15.28	33.72	24.945	301.9	0.121	40	14.91	33.63	24.978	298.7	0.122
50	15.27	33.72	24.947	301.7	0.151	50	14.55	33.66	25.057	291.2	0.151
75	15.95	33.56	25.106	286.6	0.225	75	12.81	33.78	25.506	248.5	0.219
100	11.78	33.65	25.603	239.3	0.291	100	11.87	33.87	25.757	224.7	0.279
125	11.19	33.73	25.774	223.1	0.350	125	10.77	33.93	26.004	201.2	0.333
150	10.87	33.97	26.017	199.9	0.403	150	10.42	34.07	26.174	185.0	0.382
175	10.47	34.21	26.275	175.5	0.451	175	9.55	34.01	26.275	175.4	0.428
200	10.44	34.30	26.350	168.3	0.495	200	9.37	34.15	26.414	162.3	0.471
225	10.29	34.36	26.472	161.4	0.537	225	9.36	34.26	26.501	154.0	0.512
250	10.05	34.42	26.510	153.1	0.578	250	9.40	34.37	26.580	146.4	0.550
275	9.55	34.43	26.602	144.3	0.617	275	9.18	34.39	26.632	141.5	0.588
300	9.11	34.40	26.651	139.7	0.654	300	8.75	34.36	26.677	137.3	0.624
350	8.73	34.40	26.711	134.0	0.725	350	8.40	34.41	26.770	128.4	0.693
400	7.98	34.39	26.818	123.8	0.793	400	7.83	34.40	26.849	121.0	0.759
450	7.47	34.39	26.893	116.8	0.857	450	7.44	34.42	26.921	114.1	0.821
500	6.74	34.38	26.987	107.8	0.917	500	7.09	34.43	26.978	108.7	0.881
550	6.35	34.39	27.047	102.2	0.973	550	6.62	34.42	27.035	103.3	0.938
600	5.99	34.39	27.093	97.8	1.027	600	6.25	34.42	27.084	98.7	0.993
700	5.31	34.42	27.201	87.6	1.128	700	5.71	34.45	27.176	89.9	1.096
750	4.97	34.44	27.257	82.3	1.175	800	5.22	34.46	27.243	83.6	1.192
						900	4.76	34.47	27.304	77.8	1.282
						1000	4.37	34.49	27.363	72.2	1.367

117060		RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				117060					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	LATITUDE		LONGITUDE	MO/DAY/YR	START TIME							
27 48.0N	116 53.0W	1/28/75	2126	GMT	3737M	360	15KT	02							
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
0	15.91	33.692	5.81			317.3	0	15.91	33.692	5.81	24.783	317.3	0.000		
11	15.91	33.693	5.78			317.2	10	15.91	33.694	5.78	24.784	317.2	0.031		
30	15.38	33.608	5.93			312.2	20	15.68	33.657	5.84	24.805	315.2	0.063		
58	14.98	33.570	5.80			306.6	30	15.38	33.608	5.93	24.837	312.2	0.094		
77	13.79	33.463	5.63			290.5	50	15.15	33.585	5.83	24.868	309.2	0.157		
91	12.41	33.408	5.46			268.4	75	13.95	33.476	5.65	25.040	292.8	0.232		
106	12.07	33.525	5.26			253.7	100	12.14	33.473	5.34	25.396	259.0	0.302		
135	10.89	33.609	4.50			226.9	125	11.33	33.590	4.76	25.638	236.0	0.364		
159	9.92	33.697	4.27			204.5	150	10.26	33.661	4.34	25.883	212.7	0.421		
188	9.21	33.860	3.87			182.2	200	9.10	33.922	3.72	26.278	175.1	0.520		
221	8.85	34.012	3.44			164.6	250	8.32	34.079	2.81	26.522	152.0	0.604		
292	7.60	34.133	1.88			137.7	300	7.52	34.146	1.75	26.694	135.6	0.678		
389	6.92	34.258	0.82			119.3	400	6.84	34.266	0.75	26.883	117.7	0.810		
493	6.27	34.317	0.46			106.6	500	6.23	34.323	0.44	27.009	105.8	0.928		
596	5.77	34.389	0.32			95.2	600	5.74	34.390	0.32	27.124	94.8	1.036		
727	5.11	34.427	0.35			84.8	700	5.23	34.421	0.34	27.210	86.7	1.135		
879	4.57	34.475	0.47			75.4	800	4.83	34.451	0.39	27.280	80.0	1.227		
1044	3.95	34.505	0.69			66.9	1000	4.11	34.499	0.62	27.397	69.0	1.394		

117060		RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				117070				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE		LONGITUDE	MO/DAY/YR	START TIME						
27 48.0N	116 53.0W	01/28/75	2014	GMT	27 27.5N	117 32.5W	01/28/75	1511	GMT					
BOTTOM		WIND	SPEED	WEATHER	DIMINANT WAVES	BOTTOM		WIND	SPEED	WEATHER	DIMINANT WAVES			
3737M		360	15KT	2	320	8	8	3926M	360	14KT	2	330	8	7
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD			
0	15.88	33.70	24.796	316.1	0.000	0	15.83	33.69	24.799	315.8	0.000			
10	15.88	33.70	24.796	316.1	0.031	10	15.83	33.69	24.799	315.8	0.031			
20	15.88	33.70	24.796	316.1	0.063	20	15.84	33.69	24.797	316.0	0.063			
30	15.61	33.65	24.818	314.0	0.094	30	15.83	33.69	24.799	315.8	0.094			
40	15.30	33.61	24.856	310.4	0.126	40	15.79	33.68	24.801	315.6	0.126			
50	15.22	33.62	24.881	308.0	0.157	50	15.66	33.66	24.814	314.3	0.158			
75	12.95	33.50	25.060	291.0	0.232	75	15.16	33.61	24.887	307.5	0.236			
100	12.09	33.49	25.421	256.6	0.301	100	14.24	33.54	25.030	293.8	0.312			
125	11.00	33.62	25.722	227.9	0.362	125	12.89	33.66	25.398	258.8	0.381			
150	9.95	33.71	25.975	204.0	0.417	150	11.34	33.70	25.723	227.9	0.443			
175	9.36	33.85	26.181	184.3	0.466	175	9.85	33.81	26.069	195.0	0.497			
200	9.05	33.95	26.309	172.2	0.512	200	9.21	33.92	26.260	176.8	0.544			
225	8.62	34.05	26.455	158.3	0.554	225	8.68	34.00	26.407	162.9	0.588			
250	8.16	34.09	26.556	148.7	0.594	250	8.37	34.05	26.494	154.7	0.629			
275	7.82	34.12	26.631	141.7	0.631	275	8.05	34.09	26.573	147.1	0.667			
300	7.54	34.15	26.695	135.6	0.667	300	7.64	34.11	26.649	139.9	0.705			
350	7.49	34.27	26.796	126.0	0.735	350	7.29	34.18	26.754	129.9	0.775			
400	6.93	34.28	26.882	117.7	0.799	400	6.76	34.22	26.859	120.0	0.840			
450	6.69	34.32	26.947	111.7	0.859	450	6.55	34.31	26.958	110.6	0.901			
500	6.24	34.33	27.014	105.3	0.917	500	6.22	34.33	27.017	105.0	0.958			
550	6.01	34.37	27.075	99.5	0.972	550	5.80	34.33	27.070	100.0	1.013			
600	5.66	34.39	27.135	93.9	1.024	600	5.69	34.37	27.115	95.7	1.066			
700	5.20	34.42	27.214	86.3	1.122	700	5.10	34.40	27.210	86.7	1.165			
800	4.79	34.44	27.277	80.4	1.214	800	4.63	34.43	27.287	79.4	1.256			
900	4.41	34.48	27.351	73.4	1.300	900	4.29	34.46	27.348	73.6	1.341			
1000	3.94	34.49	27.408	67.9	1.379	1000	3.95	34.49	27.407	68.0	1.421			

117080						CALCOFI CRUISE 7501						118039					
LATITUDE	LONGITUDE	MO/DAY/YR		START TIME		LATITUDE	LONGITUDE	MO/DAY/YR		START TIME							
27 08.0N	118 10.5W	01/28/75		0955 GMT		28 18.5N	115 23.5W	01/29/75		1057 GMT							
BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES		BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES							
4116M	330 16KT	2				242M	320 8KT										
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD						
0	16.11	33.71	24.751	320.3	0.000	0	15.50	33.92	25.049	291.9	0.000						
10	16.11	33.71	24.751	320.3	0.032	10	15.51	33.92	25.047	292.1	0.029						
20	16.12	33.71	24.749	320.5	0.064	20	15.52	33.92	25.045	292.3	0.058						
30	16.08	33.71	24.758	319.7	0.096	30	15.52	33.92	25.045	292.3	0.087						
40	15.59	33.64	24.815	314.3	0.128	40	15.48	33.92	25.054	291.5	0.117						
50	15.31	33.59	24.838	312.0	0.159	50	13.94	33.73	25.239	273.9	0.145						
75	14.85	33.56	24.915	304.7	0.237	75	13.05	33.92	25.567	242.7	0.210						
100	14.25	33.54	25.028	294.0	0.312	100	11.49	34.04	25.959	205.4	0.267						
125	13.03	33.66	25.370	261.5	0.382	125	11.12	34.21	26.159	186.5	0.316						
150	11.44	33.72	25.120	228.1	0.444	150	10.87	34.22	26.212	181.5	0.363						
175	10.91	33.95	25.995	202.1	0.499	171	10.84	34.29	26.271	175.8	0.401						
200	10.12	34.03	26.195	183.0	0.548												
225	9.55	34.08	26.330	170.3	0.593												
250	8.96	34.10	26.441	159.7	0.636												
275	8.71	34.17	26.535	150.7	0.676												
300	8.40	34.20	26.606	144.0	0.714												
350	8.04	34.26	26.708	134.3	0.786												
400	7.48	34.27	26.198	125.8	0.855												
450	6.91	34.30	26.901	116.0	0.918												
500	6.35	34.29	26.968	109.6	0.978												
550	6.06	34.33	27.037	103.1	1.035												
600	5.91	34.37	27.088	98.3	1.089												
700	5.26	34.41	27.199	87.8	1.191												
800	4.82	34.43	27.266	81.4	1.284												
900	4.34	34.45	27.335	74.9	1.371												
1000	4.04	34.49	27.398	68.9	1.452												

119033						CALCOFI CRUISE 7501						120030					
LATITUDE	LONGITUDE	MO/DAY/YR		START TIME		LATITUDE	LONGITUDE	MO/DAY/YR		START TIME							
28 18.5N	114 54.0W	01/30/75		0945 GMT		28 13.0N	114 34.0W	01/30/75		0723 GMT							
BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES		BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES							
112M	230 7KT	2				93M	300 4KT										
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD						
0	15.46	33.72	24.905	305.7	0.000	0	15.49	33.73	24.906	305.6	0.000						
10	15.45	33.73	24.915	304.7	0.030	10	15.49	33.74	24.914	304.9	0.030						
20	15.45	33.73	24.915	304.7	0.061	20	15.49	33.74	24.914	304.9	0.061						
30	15.40	33.73	24.926	303.7	0.091	30	15.44	33.73	24.917	304.5	0.091						
40	15.07	33.72	24.991	297.5	0.121	40	15.15	33.70	24.958	300.7	0.121						
50	14.70	33.72	25.071	289.9	0.151	50	14.82	33.69	25.022	294.6	0.151						
75	12.88	33.72	25.446	254.2	0.219	75	12.60	33.69	25.478	251.2	0.220						
100	12.00	33.83	25.701	230.0	0.280												

120035						CALCOFI CRUISE 7501						120045					
LATITUDE	LONGITUDE	MO/DY/YR		START TIME		LATITUDE	LONGITUDE	MO/DAY/YR		START TIME							
28 03.0N	114 54.0W	01/30/75		1200 GMT		27 43.0N	115 33.0W	01/30/75		1714 GMT							
BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES		BOTTOM	WIND SPEED	WEATHER	DOMINANT	WAVES							
82M	220 7KT	2				2135M	280 10KT	1									
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD						
0	15.29	33.73	24.950	301.4	0.000	0	15.66	33.68	24.830	312.9	0.000						
10	15.29	33.73	24.950	301.4	0.030	10	15.66	33.68	24.830	312.9	0.031						
20	15.30	33.73	24.948	301.6	0.060	20	15.65	33.68	24.832	312.6	0.062						
30	14.97	33.71	25.005	296.2	0.090	30	15.62	33.68	24.839	312.0	0.093						
40	14.60	33.68	25.061	290.8	0.119	40	14.60	33.54	24.954	301.0	0.124						
50	14.14	33.66	25.143	283.0	0.148	50	13.87	33.56	25.122	285.0	0.154						
75	12.20	33.78	25.624	237.2	0.214	75	12.40	33.75	25.563	243.1	0.220						
100	11.46					100	11.46	33.92	25.872	213.8	0.278						
125	11.76					125	11.76	34.33	26.134	188.8	0.329						
150	11.32					150	11.32	34.41	26.277	175.2	0.375						
175	11.07					175	11.07	34.48	26.377	165.7	0.419						
200	10.65					200	10.65	34.48	26.453	158.5	0.460						
225	10.05					225	10.05	34.46	26.542	150.1	0.500						
250	9.88					250	9.88	34.51	26.610	143.7	0.538						
275	9.57					275	9.57	34.50	26.654	139.4	0.575						
300	9.20					300	9.20	34.48	26.699	135.2	0.611						
350	8.64					350	8.64	34.47	26.780	127.4	0.679						
400	8.03					400	8.03	34.46	26.866	119.3	0.744						
450	7.52					450	7.52	34.45	26.933	113.0	0.806						
500	6.93					500	6.93	34.44	27.008	105.8	0.865						
550	6.59					550	6.59	34.44	27.055	101.4	0.921						
600	6.26					600	6.26	34.45	27.106	96.6	0.974						
700	5.62					700	5.62	34.44	27.179	89.6	1.076						
800	5.01					800	5.01	34.44	27.252	82.7	1.171						
900	4.54					900	4.54	34.47	27.329	75.5	1.259						
1000	4.11					1000	4.11										

BY DAVID STARR JORDAN

CALCO FI CRUISE 7501

120045

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER		TIME	BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES		
27	43.0N	115	33.0W	1/30/75	1811		GMT	2135M	280	10KT	1	290	2	3		
Z	T	S	O2	PD4	SI03	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
2	15.69	33.673	5.79					314.0	0	15.69	33.673	5.79	24.818	314.0	0.000	
9	15.66	33.671	5.81					313.5	10	15.65	33.673	5.81	24.825	313.3	0.031	
30	15.56	33.691	5.90					309.9	20	15.60	33.683	5.85	24.843	311.6	0.062	
59	13.06	33.559	5.13					269.4	30	15.56	33.691	5.90	24.861	309.9	0.093	
76	12.19	33.756	3.85					238.8	50	13.91	33.573	5.51	25.122	285.0	0.153	
91	11.86	33.868	3.32					224.6	75	12.22	33.744	3.92	25.590	240.5	0.219	
106	11.16	33.924	3.14					208.2	100	11.42	33.897	3.22	25.859	214.9	0.277	
133	11.43	34.374	1.29					179.8	125	11.35	34.259	1.83	26.155	186.9	0.327	
157	11.18	34.381	1.30					174.9	150	11.28	34.396	1.29	26.273	175.6	0.374	
185	10.69	34.434	0.99					162.6	200	10.43	34.437	0.94	26.458	158.1	0.459	
218	10.15	34.434	0.92					153.6	250	9.81	34.454	0.73	26.577	146.8	0.538	
289	9.47	34.477	0.50					139.6	300	9.33	34.476	0.46	26.673	137.6	0.612	
388	8.23	34.451	0.30					122.9	400	8.08	34.449	0.29	26.848	121.0	0.748	
493	7.11	34.442	0.26					108.0	500	7.05	34.443	0.25	26.994	107.2	0.866	
597	6.23	34.451	0.17					97.4	600	6.30	34.450	0.17	27.100	97.1	0.980	
728	5.35	34.436	0.32					86.8	700	5.54	34.439	0.27	27.187	88.8	1.081	
880	4.70	34.461	0.42					77.8	800	5.00	34.445	0.36	27.256	82.3	1.176	
1042	4.06	34.495	0.61					68.7	1000	4.22	34.485	0.55	27.375	71.0	1.348	

120050

RV DAVID STARR JORDAN

GALCOTEI CRUISE 7501

120060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
27 33.0N	115 52.5W	01/30/75	2111 GMT	27 13.0N	116 30.0W	01/31/75	0215 GMT				
BUTTUM	WIND	SPEED	WEATHER	DIMINANT	WAVES	BUTTUM	WIND	SPEED	WEATHER	DIMINANT	WAVES
4021M	270	10KT	1	260	3 4	313/M	310	11KT			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	15.69	33.70	24.838	312.0	0.000	0	16.22	33.74	24.749	320.5	0.000
10	15.71	33.71	24.842	311.7	0.031	10	16.22	33.74	24.749	320.5	0.032
20	15.53	33.72	24.890	307.2	0.062	20	16.21	33.74	24.751	320.3	0.064
30	15.47	33.72	24.903	305.9	0.092	30	16.20	33.74	24.754	320.1	0.096
40	15.39	33.71	24.913	304.9	0.123	40	16.19	33.74	24.756	319.9	0.128
50	14.39	33.59	25.037	293.1	0.153	50	16.19	33.74	24.756	319.9	0.160
75	12.97	33.53	25.281	269.9	0.224	75	14.94	33.67	24.981	298.5	0.238
100	11.57	33.69	25.673	232.6	0.287	100	13.02	33.54	25.279	270.1	0.309
125	10.74	33.80	25.908	210.3	0.343	125	11.69	33.66	25.628	237.0	0.373
150	10.15	33.96	26.135	188.7	0.394	150	10.63	33.77	25.904	210.6	0.430
175	9.35	33.97	26.277	175.3	0.440	175	10.14	33.89	26.083	193.7	0.482
200	8.96	34.05	26.402	163.4	0.483	200	10.43	34.21	26.281	174.8	0.529
225	8.63	34.14	26.524	151.8	0.524	225	10.14	34.25	26.363	167.1	0.573
250	8.58	34.20	26.578	146.6	0.562	250	9.91	34.31	26.448	158.9	0.615
275	8.22	34.21	26.641	140.6	0.599	275	9.43	34.31	26.529	151.3	0.655
300	8.17	34.26	26.688	136.2	0.635	300	9.17	34.35	26.602	144.3	0.693
350	7.56	34.26	26.778	127.6	0.704	350	8.55	34.40	26.739	131.3	0.765
400	7.34	34.34	26.812	118.7	0.769	400	8.07	34.41	26.821	123.6	0.832
450	7.32	34.43	26.946	111.7	0.830	450	7.49	34.40	26.898	116.3	0.896
500	6.79	34.43	27.020	104.7	0.888	500	7.09	34.43	26.978	108.7	0.956
550	6.47	34.45	27.078	99.2	0.943	550	6.12	34.43	27.029	103.8	1.013
600	6.09	34.44	27.120	95.2	0.995	600	6.21	34.41	27.081	98.9	1.068
700	5.55	34.45	27.195	88.1	1.095	700	5.45	34.42	27.184	89.2	1.171
800	4.97	34.46	27.212	80.8	1.189	800	4.82	34.44	27.274	80.7	1.264
900	4.61	34.48	27.329	75.4	1.276	900	4.49	34.46	27.326	75.7	1.351
1000	4.31	34.50	27.377	70.8	1.359	1000	4.13	34.48	27.381	70.5	1.434

120070

BY DAVID STARR JOHNSON

CALCOEL CRUISE 7501

120080

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
26 53.0N	117 10.0W	01/31/75	0700 GMT			01/31/75	1215 GMT				
BOTTUM	WIND	SPEED	WEATHER	Dominant Waves	BOTTUM	WIND	SPEED	WEATHER	Dominant Waves		
3926M	320	8KT	1		3926M	070	5KT				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.06	33.72	24.770	318.5	0.000	0	16.05	33.71	24.765	319.0	0.000
10	16.05	33.72	24.773	318.3	0.031	10	16.05	33.71	24.765	319.0	0.031
20	16.05	33.72	24.773	318.3	0.063	20	16.05	33.71	24.765	319.0	0.063
30	16.06	33.73	24.778	317.8	0.095	30	16.05	33.71	24.765	319.0	0.095
40	16.07	33.73	24.776	318.0	0.127	40	16.05	33.71	24.765	319.0	0.127
50	16.07	33.73	24.776	318.0	0.159	50	16.05	33.72	24.773	318.3	0.159
75	15.25	33.66	24.905	305.7	0.237	75	14.43	33.61	25.044	292.5	0.236
100	13.07	33.54	25.269	271.0	0.310	100	12.31	33.66	25.511	248.1	0.304
125	11.68	33.61	25.591	240.5	0.375	125	11.42	33.86	25.832	217.5	0.363
150	10.71	33.79	25.906	210.5	0.432	150	10.68	34.07	26.129	189.3	0.415
175	10.74	34.12	26.157	186.6	0.482	175	10.49	34.17	26.240	178.8	0.462
200	10.34	34.18	26.274	175.5	0.529	200	10.37	34.29	26.354	167.9	0.506
225	9.65	34.20	26.407	162.9	0.572	225	10.22	34.36	26.434	160.3	0.548
250	9.41	34.28	26.508	153.2	0.613	250	9.82	34.39	26.526	151.6	0.589
275	9.17	34.32	26.579	146.6	0.652	275	9.63	34.42	26.581	146.3	0.627
300	8.93	34.35	26.641	140.7	0.689	300	9.36	34.43	26.634	141.4	0.665
350	8.43	34.38	26.742	131.0	0.760	350	8.73	34.44	26.743	131.0	0.736
400	7.84	34.38	26.831	122.6	0.827	400	7.97	34.41	26.835	122.2	0.803
450	7.14	34.36	26.916	114.6	0.890	450	7.25	34.37	26.909	115.3	0.866
500	6.73	34.38	26.989	101.7	0.949	500	6.76	34.38	26.985	108.1	0.925
550	6.42	34.40	27.046	102.3	1.005	550	6.42	34.39	27.038	103.0	0.982
600	6.10	34.41	27.095	97.6	1.059	600	5.99	34.39	27.093	97.8	1.036
700	5.48	34.42	27.180	89.5	1.161	700	5.41	34.42	27.189	88.7	1.138
800	4.87	34.45	27.276	80.5	1.255	800	4.96	34.45	27.266	81.4	1.231
900	4.53	34.48	27.338	74.6	1.342	900	4.50	34.46	27.325	75.8	1.319
1000	4.26	34.50	27.383	70.3	1.424	1000	4.13	34.49	27.389	69.8	1.401

123037				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				123050					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME										
27 24.0N	114 40.0W	02/01/75	1225 GMT	26 56.5N	115 31.0W	02/01/75	0320 GMT	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves	Bottom	Wind	Speed	Weather	Dominant Waves
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD						
0	15.93	33.89	24.930	303.3	0.000	0	15.83	33.80	24.884	307.7	0.000						
10	15.93	33.89	24.930	303.3	0.030	10	15.83	33.80	24.884	307.7	0.030						
20	15.92	33.90	24.940	302.3	0.060	20	15.81	33.81	24.896	306.5	0.061						
30	15.40	33.87	25.033	293.5	0.090	30	15.63	33.84	24.959	300.5	0.091						
40	15.15	33.85	25.073	289.7	0.119	40	15.30	33.81	25.009	295.7	0.121						
50	14.72	33.83	25.151	282.3	0.148	50	14.48	33.67	25.079	289.1	0.151						
						75	12.42	33.66	25.489	250.1	0.219						
						100	11.65	33.84	25.775	223.0	0.278						
						125	10.95	34.04	26.057	196.1	0.331						
						150	10.39	34.10	26.203	182.3	0.379						
						175	9.97	34.17	26.329	170.3	0.424						
						200	9.67	34.20	26.403	163.3	0.467						
						225	10.13	34.42	26.497	154.4	0.508						
						250	9.80	34.42	26.553	149.0	0.547						
						275	9.12	34.36	26.618	142.8	0.585						
						300	9.19	34.44	26.669	138.0	0.621						
						350	8.65	34.46	26.771	128.4	0.691						
						400	8.09	34.46	26.857	120.2	0.757						
						450	7.50	34.44	26.928	113.4	0.819						
						500	7.07	34.43	26.981	108.4	0.878						
						550	6.64	34.45	27.056	101.3	0.935						
						600	6.27	34.45	27.105	96.7	0.988						
						700	5.63	34.46	27.194	88.2	1.089						
						800	5.05	34.48	27.279	80.2	1.183						
						900	4.57	34.50	27.349	73.5	1.269						
						1000	4.21	34.51	27.396	69.1	1.350						

123060				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				123060					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENDER TIME	LATITUDE	LONGITUDE	MO/DAY/YR	TIME	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves
26 39.5N	116 09.0W	01/31/75	2132 GMT	26 39.5N	116 09.0W	02/01/75	1940 GMT	3926M	350	350	7KT	1	3926M	350	350	4	6
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
1	16.21	33.689	5.71					324.0	0	16.21	33.689	5.71	24.713	324.0	0.000		
11	16.15	33.687	5.74					322.9	10	16.15	33.688	5.73	24.724	323.0	0.032		
30	16.07	33.688	5.82					321.0	20	16.10	33.688	5.78	24.735	321.9	0.064		
60	16.05	33.688	5.80					320.8	30	16.07	33.688	5.82	24.744	321.0	0.096		
79	15.52	33.616	5.72					310.3	50	16.05	33.688	5.80	24.746	320.9	0.161		
94	13.82	33.548	5.54					284.9	75	15.55	33.635	5.74	24.819	313.9	0.241		
109	13.06	33.582	5.16					267.7	100	13.46	33.557	5.39	25.202	277.5	0.315		
138	11.73	33.663	4.54					237.4	129	12.32	33.623	4.79	25.479	251.1	0.382		
162	10.55	33.776	4.23					208.9	150	11.09	33.709	4.42	25.774	223.0	0.442		
191	10.19	34.068	2.82					181.4	200	10.09	34.123	2.55	26.271	175.8	0.544		
224	9.86	34.220	2.06					164.8	250	9.57	34.269	1.76	26.472	156.7	0.629		
296	9.03	34.288	1.49					146.8	300	8.96	34.289	1.46	26.586	145.8	0.708		
396	7.56	34.290	0.91					125.4	400	7.51	34.291	0.88	26.809	124.7	0.849		
500	6.58	34.324	0.47					110.0	500	6.58	34.324	0.47	26.964	110.0	0.973		
604	5.87	34.371	0.35					97.7	600	5.89	34.369	0.35	27.089	98.2	1.085		
736	5.15	34.420	0.38					85.8	700	5.32	34.407	0.37	27.189	88.7	1.187		
887	4.69	34.486	0.44					75.8	800	4.93	34.450	0.39	27.268	81.2	1.280		
1050	4.06	34.513	0.59					67.4	1000	4.26	34.510	0.53	27.390	69.7	1.450		

123060				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				127034					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves	BOTTOM	WIND	SPEED	WEATHER	Dominant Waves
26 39.5N	116 09.0W	01/31/75	2132 GMT	26 39.5N	114 06.5W	02/01/75	1940 GMT	3926M	350	350	12KT	1	3926M	350	350	3	4
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD						
0	16.17	33.69	24.722	233.1	0.000	0	16.45	34.05	24.934	302.9	0.000						
10	16.14	33.69	24.729	322.4	0.032	10	16.45	34.05	24.934	302.9	0.030						
20	16.06	33.70	24.755	320.0	0.064	20	16.45	34.05	24.934	302.9	0.060						
30	16.05	33.70	24.757	319.8	0.096	30	16.44	34.05	24.936	302.7	0.091						
40	16.03	33.70	24.762	319.3	0.128	40	16.40	34.04	24.938	302.6	0.121						
50	15.96	33.68	24.762	319.3	0.160	50	14.48	33.83	25.202	277.4	0.150						
75	14.78	33.556	24.931	303.2	0.238	70	12.88	34.03	25.685	231.4	0.201						
100	13.06	33.58	25.302	267.9	0.310												
125	11.78	33.67	25.619	237.8	0.374												
150	10.76	33.80	25.905	210.6	0.431												
175	9.97	33.96	26.166	185.8	0.482												
200	9.66	34.06	26.296	173.5	0.527												
225	9.61	34.21	26.421	161.6	0.570												
250	9.46	34.30	26.516	152.5	0.611												
275	9.16	34.30	26.565	147.9	0.650												
300	8.89	34.32	26.624	142.3	0.687												
350	8.12	34.31	26.735	131.8	0.759												
400	7.52	34.31	26.823	123.4	0.826												
450	6.97	34.31	26.901	116.0	0.889			</td									

127040				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				127050				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME									
26 48.5N	114 29.5W	02/01/75	2334 GMT	26 23.0N	115 08.0W	02/02/75	0530 GMT									
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
2885M	310	8KT	1	330 3 4	3545M	330	12KT	WEATHER	DOMINANT WAVES							
0	16.54	33.98	24.859	310.0	0	16.17	33.85	24.845	311.4	0.000						
10	16.54	33.98	24.859	310.0	0	16.17	33.85	24.845	311.4	0.031						
20	16.52	33.98	24.864	309.6	0	16.18	33.85	24.843	311.6	0.062						
30	16.52	33.98	24.864	309.6	0	16.19	33.86	24.848	311.1	0.093						
40	16.52	33.99	24.872	308.9	0	16.20	33.87	24.853	310.6	0.124						
50	16.09	33.90	24.901	306.0	0	15.65	33.92	24.971	299.4	0.155						
75	15.05	33.81	25.482	250.8	0	14.68	33.81	25.144	282.4	0.228						
100	12.01	33.96	25.800	220.6	0	12.09	33.79	25.653	234.5	0.293						
125	11.82	34.19	26.014	200.2	0	11.57	33.94	25.867	214.2	0.350						
150	11.15	34.38	26.285	174.4	0	10.78	34.04	26.088	193.2	0.402						
175	11.14	34.50	26.380	165.4	0	10.41	34.18	26.262	176.7	0.449						
200	10.84	34.52	26.450	158.8	0	10.18	34.27	26.371	166.3	0.493						
225	10.48	34.51	26.506	153.5	0	9.83	34.34	26.486	155.4	0.534						
250	10.01	34.48	26.564	148.0	0	9.68	34.38	26.542	150.1	0.574						
275	9.78	34.47	26.595	145.0	0	9.64	34.43	26.587	145.7	0.612						
300	9.43	34.47	26.653	139.5	0	9.57	34.50	26.654	139.4	0.649						
350	8.75	34.47	26.763	129.1	0	9.695	34.53	26.750	130.3	0.720						
400	8.22	34.46	26.831	122.1	0	9.71	34.41	26.840	121.8	0.766						
450	7.83	34.46	26.896	116.5	0	9.824	34.40	26.938	112.5	0.848						
500	7.31	34.45	26.963	110.1	0	9.885	34.43	26.999	106.7	0.907						
550	6.74	34.43	27.026	104.1	0	9.493	34.43	27.049	101.9	0.963						
600	6.25	34.44	27.099	97.2	0	9.997	34.44	27.108	96.3	1.017						
700	5.68	34.44	27.172	90.3	0	1.100	34.46	27.218	85.9	1.116						
800	5.10	34.46	27.257	82.2	0	1.195	34.47	27.284	79.7	1.208						
900	4.68	34.47	27.313	76.9	0	1.284	34.49	27.350	73.4	1.294						
1000	4.36	34.50	27.372	71.3	0	1.368	34.50	27.392	69.4	1.375						

127050				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				127050			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	LATITUDE	LONGITUDE	MO/DAY/YR	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
26 23.0N	115 08.0W	2/ 2/75	0637 GMT	26 23.0N	115 08.0W	2/ 2/75	0637 GMT	3545M	330	12KT	1				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
2	16.07	33.798	5.81		313.0	0	16.07	33.798	5.81	24.828	313.0	0.000			
11	16.07	33.798	5.84		313.0	10	16.07	33.799	5.83	24.828	313.0	0.031			
30	16.19	33.843	5.82		312.3	20	16.13	33.823	5.83	24.831	312.7	0.062			
58	15.82	33.899	5.52		300.3	30	16.19	33.843	5.82	24.835	312.3	0.093			
77	13.83	33.630	5.06		279.1	50	15.92	33.858	5.64	24.906	305.6	0.156			
90	12.55	33.747	4.04		246.1	75	14.06	33.651	5.14	25.151	282.3	0.229			
105	12.01	33.819	3.63		230.9	100	12.12	33.800	3.71	25.654	234.5	0.295			
133	11.40	33.946	3.03		210.8	125	11.55	33.912	3.18	25.847	216.1	0.352			
155	10.83	34.039	2.66		194.1	150	10.95	34.016	2.74	26.038	197.9	0.404			
183	10.47	34.223	1.96		174.5	200	10.28	34.289	1.65	26.368	166.6	0.497			
217	10.13	34.336	1.40		160.6	250	9.94	34.414	0.97	26.524	151.8	0.579			
286	9.13	34.463	0.63		144.7	300	9.55	34.464	0.59	26.628	141.8	0.656			
383	8.35	34.428	0.37		126.3	400	8.12	34.424	0.33	26.824	123.3	0.795			
485	7.14	34.420	0.23		110.1	500	7.01	34.423	0.21	26.983	108.3	0.918			
587	6.41	34.441	0.19		99.1	600	6.31	34.443	0.19	27.093	97.7	1.029			
716	5.48	34.460	0.22		86.5	700	5.59	34.458	0.21	27.197	87.9	1.131			
864	4.65	34.480	0.39		75.9	800	4.97	34.471	0.31	27.281	80.0	1.224			
1025	4.13	34.500	0.52		69.0	1000	4.18	34.498	0.50	27.389	69.8	1.392			

127060				RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				130028			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
26 03.5N	115 46.5W	02/02/75	1125 GMT	26 33.0N	113 21.5W	02/03/75	1015 GMT	3545M	030	16KT	1				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	DT
0	16.13	33.80	24.816	314.2	0.000	0	16.52	34.08	24.940	302.3	0.000				
10	16.13	33.80	24.816	314.2	0.031	10	16.51	34.08	24.943	302.1	0.030				
20	16.13	33.80	24.816	314.2	0.062	20	16.51	34.08	24.943	302.1	0.060				
30	16.13	33.80	24.816	314.2	0.094	30	16.38	34.06	24.958	300.7	0.090				
40	16.13	33.80	24.816	314.2	0.125	40	16.26	34.07	24.993	297.3	0.120				
50	15.96	33.718	24.839	312.0	0.157	50	14.87	34.04	25.280	270.0	0.149				
75	14.13	33.59	25.092	287.9	0.232										
100	12.34	33.66	25.505	248.6	0.300										
125	11.07	33.73	25.795	221.0	0.359										
150	10.41	33.848	26.028	198.9	0.413										
175	9.99	34.06	26.240	178.7	0.461										
200	10.26	34.33	26.404	163.1	0.504										
225	9.75	34.31	26.475	156.4	0.545										
250	9.35	34.29	26.526	151.6	0.585										
275	8.96	34.31	26.605	144.1	0.623										
300	8.74	34.35	26.671	137.9	0.660										
350	8.30	34.38	26.762	129.1	0.730										
400	7.63	34.37	26.854	120.4	0.796										
450	7.12	34.37	26.927	113.											

130030 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 130040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
26 29.0N	113 29.0W	02/03/75	0626 GMT	26 09.0N	114 06.5W	02/03/75	0218 GMT	
BOTTUM	WIND	SPEED	WEATHER	DIMINANT WAVES	BOTTUM	WIND	WEATHER	DIMINANT WAVES
80M	060	11Kt			2227M	310		

Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.80	34.10	24.891	307.0	0.000	0	16.59	34.02	24.878	308.2	0.000
10	16.74	34.10	24.905	305.7	0.030	10	16.60	34.03	24.884	307.7	0.030
20	16.75	34.10	24.902	305.9	0.061	20	16.63	34.10	24.930	303.2	0.061
30	16.74	34.10	24.905	305.7	0.091	30	16.62	34.12	24.948	301.6	0.091
40	16.21	34.03	24.974	299.1	0.122	40	16.52	34.11	24.963	300.1	0.121
50	14.65	33.87	25.197	217.9	0.151	50	15.12	33.90	25.118	285.4	0.151
75	13.25	34.15	25.104	229.7	0.215	75	13.33	33.96	25.541	245.1	0.218
					100	12.08	34.09	25.887	212.2	0.275	
					125	11.29	34.17	26.097	192.3	0.327	
					150	11.21	34.37	26.266	176.2	0.373	
					175	10.59	34.37	26.378	165.7	0.417	
					200	10.39	34.43	26.460	157.9	0.459	
					225	10.25	34.48	26.523	151.9	0.499	
					250	10.08	34.48	26.552	149.1	0.537	
					275	9.90	34.49	26.590	145.4	0.576	
					300	9.39	34.47	26.660	138.9	0.613	
					350	8.66	34.47	26.777	127.7	0.683	
					400	8.20	34.46	26.840	121.8	0.748	
					450	7.64	34.45	26.916	114.6	0.811	
					500	7.20	34.44	26.971	109.4	0.871	
					550	6.75	34.43	27.025	104.2	0.929	
					600	6.26	34.44	27.098	97.3	0.983	
					700	5.68	34.45	27.179	89.6	1.085	
					800	5.08	34.46	27.260	82.0	1.180	
					900	4.63	34.47	27.319	76.4	1.269	
					1000	4.29	34.51	27.388	69.9	1.352	

130050 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 130060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
25 49.0N	114 46.0W	02/02/75	2125 GMT	25 30.0N	115 21.0W	02/02/75	1632 GMT				
BOTTUM	WIND	SPEED	WEATHER	DIMINANT WAVES	BOTTUM	WIND	WEATHER	DIMINANT WAVES			
3737M	340	9KT	2	340 3 3	3545M	350	5KT	2 340 3 6			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	18.16	34.32	24.732	322.2	0.000	0	17.96	34.20	24.689	326.2	0.000
10	18.16	34.32	24.732	322.2	0.032	10	17.94	34.21	24.702	325.0	0.032
20	18.12	34.31	24.734	321.9	0.064	20	17.95	34.21	24.699	325.2	0.065
30	18.10	34.31	24.739	321.5	0.096	30	17.94	34.21	24.702	325.0	0.097
40	18.11	34.31	24.736	321.7	0.129	40	17.94	34.21	24.702	325.0	0.130
50	18.11	34.31	24.736	321.7	0.161	50	17.93	34.21	24.704	324.8	0.163
75	16.63	34.04	24.884	307.6	0.240	75	15.55	33.95	25.061	290.8	0.240
100	13.25	33.85	25.472	251.7	0.311	100	13.01	34.07	25.690	230.9	0.305
125	12.54	34.18	25.868	214.1	0.370	125	12.13	34.18	25.947	206.5	0.361
150	11.44	34.24	26.123	189.8	0.421	150	11.40	34.32	26.193	183.2	0.411
175	11.13	34.31	26.234	179.3	0.468	175	10.98	34.38	26.316	171.5	0.456
200	10.55	34.35	26.369	166.4	0.512	200	10.81	34.49	26.432	160.5	0.499
225	10.46	34.40	26.424	161.3	0.554	225	10.38	34.50	26.516	152.5	0.539
250	10.52	34.55	26.530	151.2	0.595	250	10.09	34.52	26.581	146.3	0.578
275	9.87	34.49	26.595	145.0	0.633	275	9.81	34.53	26.637	141.1	0.615
300	9.40	34.47	26.658	139.0	0.670	300	9.58	34.54	26.683	136.6	0.651
350	8.58	34.41	26.743	131.0	0.741	350	9.03	34.52	26.758	129.6	0.721
400	8.14	34.44	26.834	122.4	0.808	400	8.33	34.51	26.860	119.9	0.787
450	7.60	34.44	26.913	114.8	0.871	450	7.91	34.51	26.923	113.9	0.849
500	7.17	34.45	26.983	108.3	0.930	500	7.35	34.49	26.989	107.7	0.909
550	6.79	34.45	27.035	103.2	0.987	550	6.86	34.45	27.026	104.2	0.966
600	6.27	34.44	27.097	97.4	1.042	600	6.33	34.45	27.097	97.4	1.020
700	5.68	34.45	27.179	89.6	1.144	700	5.58	34.46	27.200	87.7	1.122
800	5.06	34.46	27.262	81.8	1.239	800	5.03	34.48	27.281	80.0	1.215
900	4.58	34.48	27.332	75.1	1.327	900	4.63	34.49	27.334	74.9	1.301
1000	4.27	34.52	27.398	68.9	1.408	1000	4.24	34.51	27.391	69.6	1.383

133025 RV DAVID STARR JORDAN CALCOFI CRUISE 7501 133030

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
26 04.5N	112 48.0W	02/03/75	2134 GMT	25 54.5N	113 07.5W	02/03/75	2356 GMT				
BOTTUM	WIND	SPEED	WEATHER	DIMINANT WAVES	BOTTUM	WIND	WEATHER	DIMINANT WAVES			
82M	320	16Kt	1	290 4 6	205M	320	14Kt	0 340 4 7			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.89	34.12	24.885	307.6	0.000	0	17.29	34.13	24.798	315.9	0.000
10	16.89	34.12	24.885	307.6	0.030	10	17.29	34.13	24.798	315.9	0.031
20	16.88	34.11	24.880	308.1	0.061	20	17.28	34.13	24.800	315.7	0.063
30	16.83	34.11	24.891	307.0	0.092	30	17.18	34.12	24.816	314.1	0.094
40	16.73	34.08	24.892	306.9	0.123	40	17.13	34.12	24.828	313.0	0.126
50	15.38	33.89	25.053	291.6	0.153	50	16.25	34.01	24.949	301.5	0.157
75	13.52	34.04	25.564	242.9	0.220	75	13.36	33.89	25.481	250.8	0.226
					100	12.12	34.04	25.841	216.6	0.285	
					125	11.54	34.24	26.105	191.6	0.337	
					150	11.42	34.31	26.181	184.3	0.385	
					175	11.06	34.49	26.387	164.8	0.429	

RV DAVID STARR JORDAN								CALCOFI CRUISE 7501								133040	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER	TIME	BUTTOM	WIND	SPEED	WEATHER		DOMINANT WAVES							
25 34.5N	113 45.5W	2/ 4/75	0619	GMT	2602M	330	18Kt										
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
1	17.59	34.130	5.53					322.7	0	17.59	34.130	5.53	24.726	322.7	0.000		
11	17.61	34.128	5.60					323.3	10	17.60	34.129	5.55	24.720	323.3	0.032		
30	17.61	34.128	5.60					323.3	20	17.61	34.128	5.57	24.719	323.3	0.064		
58	14.83	33.730	4.88					291.8	30	17.61	34.128	5.60	24.719	323.3	0.097		
77	13.45	33.813	3.96					258.2	50	15.74	33.830	5.16	24.924	303.8	0.160		
91	13.01	34.000	2.80					236.1	75	13.56	33.794	4.08	25.365	261.9	0.231		
106	11.66	33.978	2.91					213.0	100	12.21	33.994	2.86	25.787	221.8	0.292		
134	10.86	34.132	2.34					187.8	125	10.96	34.073	2.57	26.079	194.0	0.344		
157	10.60	34.238	1.91					175.6	150	10.65	34.209	2.03	26.240	178.7	0.392		
187	10.36	34.323	1.57					165.3	200	10.60	34.418	1.16	26.412	162.4	0.479		
220	11.02	34.565	0.54					158.5	250	10.78	34.605	0.46	26.524	151.7	0.560		
292	9.96	34.550	0.36					142.0	300	9.82	34.445	0.34	26.646	140.2	0.636		
392	8.41	34.503	0.21					121.6	400	8.31	34.502	0.20	26.855	120.3	0.773		
498	7.38	34.499	0.16					107.4	500	7.36	34.499	0.16	26.994	107.2	0.895		
603	6.47	34.489	0.16					96.3	600	6.49	34.489	0.16	27.106	96.5	1.005		
738	5.65	34.487	0.20					86.5	700	5.85	34.487	0.18	27.187	88.9	1.107		
888	4.89	34.492	0.28					77.5	800	5.32	34.487	0.22	27.253	82.6	1.202		
1051	4.18	34.519	0.46					68.1	1000	4.38	34.508	0.39	27.375	71.0	1.376		

133040								RV DAVID STARR JORDAN								CALCOFI CRUISE 7501								133040	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	CALCOFI CRUISE 7501								133050													
25 34.5N	113 45.5W	02/04/75	0508 GMT	CALCOFI CRUISE 7501								133050													
BUTTUM	WIND	SPFFD	WEATH-R	DOMINANT WAVES		BUTTUM								WIND		SPEED	WEATHER	DOMINANT WAVES							
2602M	330	18KT				3832M								360		18KT									
Z	T	S	SIGMA T	DT	DU	Z	T	S	SIGMA T	DT	DU	Z	T	DT	DD										
0	17.63	34.14	24.724	322.9	0.000	0	17.77	34.17	24.713	324.0	0.000	0	17.77	34.17	24.713	324.0	0.032								
10	17.60	34.13	24.723	323.0	0.032	10	17.77	34.17	24.713	324.0	0.032	10	17.77	34.17	24.713	324.0	0.064								
20	17.60	34.13	24.723	323.0	0.064	20	17.77	34.17	24.713	324.0	0.097	20	17.77	34.17	24.713	324.0	0.129								
30	17.61	34.13	24.721	323.2	0.097	30	17.77	34.17	24.713	324.0	0.162	30	17.77	34.17	24.713	324.0	0.243								
40	17.61	34.13	24.721	323.2	0.129	40	17.77	34.17	24.713	324.0	0.243	40	17.77	34.17	24.713	324.0	0.317								
50	17.59	34.13	24.726	322.7	0.161	50	17.77	34.17	24.713	324.0	0.317	50	17.77	34.17	24.713	324.0	0.484								
75	13.67	33.79	25.341	264.2	0.235	75	17.14	34.06	24.780	317.6	0.243	75	17.14	34.06	24.780	317.6	0.484								
100	12.47	33.94	25.696	230.4	0.298	100	14.09	33.82	25.277	270.3	0.317	100	14.09	33.82	25.277	270.3	0.528								
125	11.12	34.06	26.042	197.5	0.352	125	12.88	33.96	25.631	236.6	0.381	125	12.88	33.96	25.631	236.6	0.686								
150	10.93	34.24	26.216	181.0	0.400	150	12.06	34.29	26.046	197.2	0.436	150	12.06	34.29	26.046	197.2	0.824								
175	10.44	34.28	26.334	169.8	0.445	175	11.38	34.38	26.243	178.4	0.445	175	11.38	34.38	26.243	178.4	0.887								
200	10.60	34.43	26.423	161.4	0.487	200	10.94	34.47	26.393	164.2	0.528	200	10.94	34.47	26.393	164.2	1.003								
225	10.96	34.55	26.483	155.7	0.528	225	10.73	34.53	26.477	156.2	0.569	225	10.73	34.53	26.477	156.2	1.243								
250	10.59	34.59	26.549	149.4	0.568	250	10.58	34.56	26.527	151.4	0.609	250	10.58	34.56	26.527	151.4	1.426								
275	10.31	34.58	26.590	145.5	0.606	275	10.42	34.58	26.571	147.3	0.648	275	10.42	34.58	26.571	147.3	1.426								
300	10.00	34.57	26.636	141.2	0.643	300	10.01	34.55	26.619	142.8	0.686	300	10.01	34.55	26.619	142.8	1.426								
350	9.14	34.54	26.755	129.8	0.714	350	9.23	34.53	26.733	131.9	0.758	350	9.23	34.53	26.733	131.9	1.426								
400	8.37	34.51	26.853	120.5	0.781	400	8.29	34.49	26.850	120.8	0.824	400	8.29	34.49	26.850	120.8	1.426								
450	7.77	34.50	26.936	112.7	0.843	450	7.15	34.49	26.931	113.2	0.887	450	7.15	34.49	26.931	113.2	1.426								
500	7.42	34.50	26.987	107.9	0.902	500	7.29	34.47	26.982	108.4	0.946	500	7.29	34.47	26.982	108.4	1.426								
550	6.98	34.50	27.049	102.0	0.959	550	6.94	34.47	27.028	104.0	1.003	550	6.94	34.47	27.028	104.0	1.426								
600	6.58	34.49	27.189	88.7	1.115	600	6.53	34.47	27.086	98.4	1.058	600	6.53	34.47	27.086	98.4	1.426								
600	6.35	34.44	27.086	98.4	1.027	600	5.72	34.46	27.182	89.3	1.161	600	5.72	34.46	27.182	89.3	1.426								
650	5.77	34.45	27.168	90.6	1.130	650	5.14	34.48	27.268	81.2	1.225	650	5.14	34.48	27.268	81.2	1.426								
700	5.20	34.48	27.261	81.8	1.225	700	4.63	34.48	27.327	75.6	1.343	700	4.63	34.48	27.327	75.6	1.426								
700	4.86	34.49	27.331	75.2	1.313	700	4.30	34.51	27.386	70.0	1.426	700	4.30	34.51	27.386	70.0	1.426								
700	4.25	34.52	27.400	68.7	1.395	700	4.25	34.52	27.400	68.7	1.395	700	4.25	34.52	27.400	68.7	1.426								

133060								RV DAVID STARR JORDAN								CALCOFI CRUISE 7501								137023	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	CALCOFI CRUISE 7501								137023													
24 54.5N	115 02.0W	02/04/75	1625 GMT	CALCOFI CRUISE 7501								137023													

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137030		RV DAVID STARR JORDAN				CALCOFI CRUISE 7501				137040	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
25 20.0N	112 45.5W	02/06/75	1059 GMT	25 00.0N	113 23.5W	02/06/75	0350 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
334M	330	14KT			3169M	340	14KT	1			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	17.06	34.12	24.845	311.4	0.000	0	17.45	34.15	24.775	318.1	0.000
10	17.07	34.12	24.842	311.6	0.031	10	17.45	34.15	24.775	318.1	0.031
20	17.07	34.12	24.842	311.6	0.062	20	17.46	34.15	24.772	318.3	0.063
30	17.07	34.12	24.842	311.6	0.093	30	17.46	34.16	24.780	317.6	0.095
40	17.07	34.12	24.842	311.6	0.124	40	17.45	34.17	24.790	316.8	0.127
50	17.07	34.12	24.842	311.6	0.156	50	17.28	34.14	24.808	314.9	0.159
75	16.67	33.89	25.208	276.9	0.230	75	14.19	33.88	25.302	267.9	0.232
100	13.06	34.13	25.727	227.5	0.293	100	13.22	33.99	25.587	240.8	0.296
125	12.37	34.29	25.986	202.8	0.348	125	12.61	34.22	25.885	212.4	0.354
150	11.75	34.48	26.252	177.6	0.396	150	11.35	34.32	26.202	182.3	0.404
175	11.37	34.54	26.369	166.5	0.440	175	11.44	34.51	26.333	169.9	0.449
200	11.30	34.59	26.421	161.6	0.482	200	11.16	34.57	26.431	160.6	0.491
225	11.00	34.61	26.491	154.9	0.523	225	10.86	34.58	26.493	154.7	0.532
250	10.80	34.61	26.527	151.5	0.563	250	10.54	34.57	26.542	150.0	0.571
275	10.57	34.60	26.560	148.3	0.602	275	10.25	34.56	26.585	146.0	0.610
300	10.51	34.61	26.578	146.6	0.640	300	9.86	34.54	26.636	141.1	0.647
						350	8.99	34.48	26.733	132.0	0.719
						400	8.20	34.45	26.832	122.5	0.786
						450	7.56	34.44	26.919	114.3	0.849
						500	7.09	34.44	26.986	107.9	0.908
						550	6.64	34.43	27.040	102.8	0.965
						600	6.35	34.45	27.094	97.7	1.019
						700	5.57	34.46	27.201	87.5	1.121
						800	5.04	34.48	27.280	80.1	1.213
						900	4.57	34.50	27.349	73.5	1.300
						1000	4.26	34.52	27.399	68.8	1.380

RV DAVID STARR JORDAN						CALCOFI CRUISE 7501						137040			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
25 00.0N	113 23.5W	2/ 6/75	0459	GMT	3169M	340	14KT								
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
1	17.46	34.150	5.47					318.3	0	17.46	34.150	5.47	24.772	318.3	0.000
10	17.46	34.150	5.51					318.3	10	17.46	34.150	5.51	24.772	318.3	0.031
29	17.46	34.153	5.58					318.1	20	17.46	34.152	5.55	24.773	318.2	0.063
58	17.33	34.124	5.40					317.2	30	17.45	34.152	5.57	24.775	318.1	0.095
77	14.35	33.877	3.93					271.3	50	17.36	34.132	5.44	24.781	317.5	0.159
91	13.83	33.899	3.66					259.3	75	14.65	33.896	4.08	25.215	276.2	0.234
105	13.31	33.983	3.12					243.1	100	13.49	33.948	3.33	25.498	249.3	0.300
134	12.20	34.267	1.78					201.4	125	12.54	34.184	2.14	25.871	213.8	0.359
157	11.39	34.325	1.55					182.7	150	11.59	34.311	1.59	26.151	187.2	0.410
186	11.52	34.493	0.86					172.6	200	11.32	34.527	0.71	26.367	166.6	0.500
219	10.97	34.549	0.62					158.9	250	10.66	34.579	0.42	26.527	151.5	0.582
290	10.30	34.584	0.26					145.0	300	10.13	34.575	0.26	26.616	143.0	0.659
390	8.54	34.470	0.30					126.0	400	8.38	34.464	0.29	26.814	124.2	0.800
495	7.19	34.438	0.23					109.4	500	7.14	34.439	0.22	26.977	108.7	0.924
598	6.40	34.462	0.20					97.4	600	6.38	34.462	0.20	27.099	97.2	1.035
731	5.37	34.478	0.28					83.9	700	5.59	34.474	0.25	27.209	86.7	1.136
882	4.66	34.498	0.37					74.6	800	4.99	34.487	0.32	27.290	79.1	1.228
1044	4.18	34.528	0.47					67.4	1000	4.28	34.519	0.44	27.396	69.1	1.395

137050		RV DAV ID STARR JORDAN				CALCOFI CRUISE 7501				137060	
LATITUDE	LONGITUDE	MO/DAY/YR		START TIME		LATITUDE	LONGITUDE	MO/DAY/YR		START TIME	
24 40.0N	114 02.5W	02/05/75		0234 GMT		24 20.0N	114 39.5W	02/04/75		2111 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT	WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT	WAVES
3926M	350	18KT				3737M	010	15KT	1	330	7 5
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	18.90	34.41	24.615	333.2	0.000	0	18.54	34.34	24.653	329.7	0.000
10	18.88	34.41	24.620	332.7	0.033	10	18.54	34.34	24.653	329.7	0.032
20	18.76	34.39	24.635	331.3	0.066	20	18.50	34.34	24.663	328.7	0.065
30	17.92	34.19	24.691	326.0	0.099	30	18.46	34.34	24.673	327.8	0.098
40	17.76	34.17	24.715	323.7	0.132	40	18.46	34.34	24.673	327.8	0.131
50	17.71	34.17	24.727	322.6	0.164	50	18.45	34.34	24.675	327.6	0.164
75	15.02	33.78	25.048	292.1	0.241	75	14.83	33.87	25.158	281.6	0.241
100	12.81	33.88	25.583	241.1	0.309	100	12.58	33.89	25.636	236.1	0.306
125	12.03	34.14	25.935	207.7	0.365	125	11.77	34.10	25.954	206.0	0.362
150	11.55	34.24	26.103	191.7	0.416	150	11.52	34.31	26.163	186.0	0.412
175	11.58	34.44	26.253	177.5	0.463	175	11.07	34.37	26.292	173.8	0.458
200	11.51	34.55	26.351	168.2	0.508	200	11.04	34.51	26.406	163.0	0.501
225	11.15	34.57	26.433	160.4	0.550	225	10.60	34.52	26.493	154.7	0.542
250	10.86	34.59	26.500	154.0	0.591	250	10.30	34.52	26.545	149.7	0.581
275	10.58	34.59	26.551	149.2	0.630	275	10.12	34.55	26.600	144.6	0.620
300	10.26	34.58	26.599	144.7	0.669	300	9.74	34.54	26.656	139.2	0.657
350	9.50	34.57	26.720	133.2	0.741	350	8.93	34.52	26.773	128.1	0.727
400	8.78	34.53	26.805	125.1	0.810	400	8.46	34.51	26.839	121.8	0.793
450	7.96	34.49	26.900	116.1	0.874	450	7.80	34.48	26.916	114.6	0.856
500	7.29	34.47	26.982	104.0	0.934	500	7.38	34.47	26.969	109.6	0.916
550	6.77	34.48	27.062	100.8	0.991	550	7.02	34.48	27.027	104.0	0.973
600	6.30	34.47	27.117	95.6	1.044	600	6.42	34.45	27.085	98.5	1.028
700	5.70	34.48	27.201	81.6	1.144	700	5.74	34.46	27.180	89.5	1.131
800	5.13	34.50	27.285	79.6	1.237	800	5.23	34.47	27.250	82.9	1.227
900	4.67	34.51	27.346	73.8	1.323	900	4.90	34.48	27.296	78.5	1.317
1000	4.18	34.52	27.407	68.0	1.404	1000	4.51	34.50	27.356	72.9	1.403

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 7501	Z	T	10 METER DATA	DATA
							S	NO 2	DT	
60.050	02/16/75	0730GMT	37 57.5N	122 53.0W	BOTTOM 41M WIND 330 2 KT WEATHER 1 DOMINANT WAVES		10	10.99		
60.052	02/16/75	0420GMT	37 54.0N	122 01.5W	BOTTOM 71M WIND 330 30KT WEATHER DOMINANT WAVES		10	11.01	33.454	240.4
60.055	02/16/75	0350GMT	37 47.5N	123 15.5W	BOTTOM 134M WIND 340 36KT WEATHER 1 DOMINANT WAVES		10	11.01	33.292	252.3
60.060	02/15/75	2338GMT	37 37.0N	123 37.0W	BOTTOM 3163M WIND 340 17KT WEATHER 1 DOMINANT WAVES 310 20 7		10	11.22	33.499	240.6
63.050	02/15/75	0945GMT	37 22.5N	122 28.5W	BOTTOM 30M WIND 360 14KT WEATHER 1 DOMINANT WAVES		10	11.60	33.473	249.1
63.052	02/15/75	1119GMT	37 19.5N	122 36.0W	BOTTOM 78M WIND 360 14KT WEATHER DOMINANT WAVES		10	11.42	33.520	242.5
63.055	02/15/75	1320GMT	37 13.0N	122 50.0W	BOTTOM 272M WIND 320 21KT WEATHER DOMINANT WAVES		10	11.40	33.535	241.1
66.049	02/15/75	0505GMT	36 53.0N	122 01.5W	BOTTOM 56M WIND 300 14KT WEATHER 1 DOMINANT WAVES 340 4 6		10	11.67	33.332	260.8
67.050	02/15/75	0400GMT	36 49.0N	122 04.5W	BOTTOM 101M WIND 320 14KT WEATHER 1 DOMINANT WAVES 340 6 8		10	11.74	33.400	257.0
67.055	02/15/75	0005GMT	36 40.0N	122 25.5W	BOTTOM 1999M WIND 340 22KT WEATHER 1 DOMINANT WAVES 330 20 7		10	11.58	33.529	244.7
67.060	02/14/75	2026GMT	36 28.0N	122 47.0W	BOTTOM 2924M WIND 350 25KT WEATHER 1 DOMINANT WAVES 350 8 4		10	11.78	33.491	251.0
67.065	02/14/75	1720GMT	36 18.0N	123 06.5W	BOTTOM 3255M WIND 340 24KT WEATHER 1 DOMINANT WAVES 340 6 8		10	11.56	33.407	253.3
70.051	02/13/75	1932GMT	36 11.0N	121 44.0W	BOTTOM 168M WIND 140 12KT WEATHER 6 DOMINANT WAVES 270 3 7		10	12.16	33.388	265.4
70.053	02/13/75	2132GMT	36 06.5N	121 54.0W	BOTTOM 1051M WIND 320 7KT WEATHER 2 DOMINANT WAVES 49		10	12.08	33.421	261.5
70.060	02/14/75	0147GMT	35 53.0N	122 23.0W	BOTTOM 3211M WIND 320 16KT WEATHER 1 DOMINANT WAVES 250 7 7		10	12.26	33.419	264.9
70.065	02/14/75	0502GMT	35 43.5N	122 44.5W	BOTTOM 1332M WIND 340 16KT WEATHER 1 DOMINANT WAVES		10	12.00	33.348	265.5
70.070	02/14/75	0800GMT	35 33.5N	123 06.0W	BOTTOM 3730M WIND 340 1 KT WEATHER 1 DOMINANT WAVES		10	11.90	33.115	280.8
73.050	02/13/75	1524GMT	35 37.0N	121 17.0W	BOTTOM 93M WIND 110 3KT WEATHER 6 DOMINANT WAVES 270 5 6		10	12.30	33.359	270.1
73.053	02/13/75	1251GMT	35 31.5N	121 28.5W	BOTTOM 741M WIND 140 13KT WEATHER 6 DOMINANT WAVES		10	12.26	33.455	262.2
73.065	02/12/75	1405GMT	35 06.0N	122 18.5W	BOTTOM 3877M WIND 170 11KT WEATHER 1 DOMINANT WAVES		10	12.14	33.498	256.9
73.070	02/12/75	1111GMT	34 58.0N	122 40.0W	BOTTOM 4057M WIND 170 8KT WEATHER 1 DOMINANT WAVES		10	12.28	33.323	272.3
77.048	02/11/75	1630GMT	35 08.5N	120 43.5W	BOTTOM 22M WIND 130 3KT WEATHER 0 DOMINANT WAVES 280 4 5		10	12.94	33.323	284.5
77.055	02/11/75	2130GMT	34 54.0N	121 12.5W	BOTTOM 556M WIND 300 10KT WEATHER 1 DOMINANT WAVES 280 5 6		10	12.17	33.495	257.7
77.060	02/12/75	0033GMT	34 44.5N	121 34.0W	BOTTOM 824M WIND 310 10KT WEATHER 1 DOMINANT WAVES 320 8 10		10	12.42	33.446	265.8
77.065	02/12/75	0334GMT	34 34.0N	121 55.5W	BOTTOM 3918M WIND 270 8KT WEATHER 1 DOMINANT WAVES 320 8 10		10	12.43	33.250	280.4
77.070	02/12/75	0616GMT	34 23.5N	122 16.0W	BOTTOM 3918M WIND 230 8KT WEATHER 1 DOMINANT WAVES		10	13.06	33.157	299.0

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7501

			Z	T	10 METER DATA S	DATA N2	DT
80.050 ¹	01/27/75	0400GMT 34 28.5N 120 29.5W BOTTOM 37M WIND 330 1 KKT WEATHER 1 DOMINANT WAVES 330 10 7		10	12.64	33.544	262.7
80.051	01/27/75	0312GMT 34 26.0N 120 33.0W BOTTOM 93M WIND 330 2 KKT WEATHER 1 DOMINANT WAVES 330 10 7		10	12.54	33.544	260.8
80.052	01/27/75	0213GMT 34 25.0N 120 36.0W BOTTOM 286M WIND 330 2 KKT WEATHER 1 DOMINANT WAVES 330 10 7		10	12.41	33.556	257.6
80.053	01/27/75	0105GMT 34 22.5N 120 40.0W BOTTOM 464M WIND 330 22 KKT WEATHER 1 DOMINANT WAVES 330 8 7		10	12.51	33.549	259.9
80.054	01/26/75	2343GMT 34 21.0N 120 44.0W BOTTOM 630M WIND 340 2 KKT WEATHER 1 DOMINANT WAVES 340 9 7		10	12.22	33.562	253.7
80.055	01/26/75	2213GMT 34 19.5N 120 48.0W BOTTOM 741M WIND 350 2 KKT WEATHER 1 DOMINANT WAVES 350 7 11		10	12.19	33.488	258.6
80.070	01/26/75	1235GMT 33 49.0N 121 50.0W BOTTOM 3599M WIND 350 1 KKT WEATHER 1 DOMINANT WAVES		10	13.08	33.184	297.4
80.080	01/26/75	0634GMT 33 29.0N 122 30.5W BOTTOM 3952M WIND 350 1 KKT WEATHER 1 DOMINANT WAVES		10	13.33	33.261	296.5
80.090	01/26/75	0131GMT 33 10.5N 123 13.0W BOTTOM 4116M WIND 010 1 KKT WEATHER 4 DOMINANT WAVES 330 3 10		10	13.42	33.272	297.4

RV DAVID STARR JORDAN

CALCOFI CRUISE 7501

			Z	T	10 METER DATA S	DATA N2	DT
81.043 ⁵	01/15/75	0230GMT 34 24.0N 119 48.0W BOTTOM 22M WIND 0 KT WEATHER 0 DOMINANT WAVES 270 2 3		10	12.29	33.533	5.95 257.1
81.044 ⁵	01/15/75	0050GMT 34 23.0N 119 50.0W BOTTOM 56M WIND 0 KT WEATHER 0 DOMINANT WAVES 270 2 3		10	12.54	33.516	6.03 262.9
81.044 ⁵	01/14/75	2335GMT 34 22.0N 119 52.0W BOTTOM 75M WIND 030 4 KT WEATHER DOMINANT WAVES 270 2 4		10	12.54	33.513	6.00 263.1
81.045 ⁵	01/14/75	2120GMT 34 21.0N 119 54.0W BOTTOM 390M WIND 0 KT WEATHER 0 DOMINANT WAVES 270 2 4		10	11.81	33.574	245.4
81.046 ⁵	01/14/75	1906GMT 34 19.0N 119 58.0W BOTTOM 473M WIND 030 4 KT WEATHER 0 DOMINANT WAVES 270 2 4		10	11.60	33.590	240.5
83.039 ⁴	01/15/75	1745GMT 34 14.5N 119 19.5W BOTTOM 15M WIND 320 7 KT WEATHER 0 DOMINANT WAVES 320 1 2		10	11.83	33.577	245.5
83.040	01/15/75	1613GMT 34 12.5N 119 24.0W BOTTOM 35M WIND 0 KT WEATHER 0 DOMINANT WAVES 260 1 3		10	12.23	33.538	5.87 255.6
83.041	01/15/75	1507GMT 34 11.5N 119 26.0W BOTTOM 60M WIND 0 KT WEATHER 0 DOMINANT WAVES 250 1 3		10	12.20	33.541	5.86 254.8
83.042	01/15/75	1240GMT 34 09.5N 119 30.0W BOTTOM 233M WIND 240 5 KT WEATHER 0 DOMINANT WAVES 270 2 3		10	12.24	33.534	5.73 256.1
83.043	01/15/75	1025GMT 34 08.0N 119 34.0W BOTTOM 251M WIND 280 4 KT WEATHER DOMINANT WAVES		10	12.37	33.539	6.20 258.1
83.044	01/15/75	0830GMT 34 05.5N 119 38.0W BOTTOM 149M WIND 300 5 KT WEATHER DOMINANT WAVES		10	12.65	33.510	5.90 265.4
83.044 ⁷	01/15/75	0658GMT 34 04.0N 119 41.0W BOTTOM 84M WIND 300 4 KT WEATHER DOMINANT WAVES		10		33.512	
83.045	01/15/75	0530GMT 34 03.5N 119 42.5W BOTTOM 84M WIND 120 3 KT WEATHER DOMINANT WAVES		10	12.50	33.524	261.6
83.048	01/14/75	1306GMT 33 58.0N 119 55.0W BOTTOM 138M WIND 330 10 KT WEATHER DOMINANT WAVES		10	12.38	33.531	258.8
83.049	01/14/75	1220GMT 33 55.5N 119 59.0W BOTTOM 24M WIND 730 3 KT WEATHER DOMINANT WAVES		10	12.22	33.537	255.5
83.050	01/14/75	1120GMT 33 54.0N 120 03.5W BOTTOM 26M WIND 250 4 KT WEATHER DOMINANT WAVES		10	12.08	33.551	251.9

RV DAVID STARR JORDAN							CALCOFI CRUISE 7501						
							Z	T	S	10 METER DATA	O2	DT	
83.051	01/14/75	0100GMT	33 52.0N	120 08.5W	BOTTOM 103M WIND 0KT WEATHER	DOMINANT WAVES		10	12.44	33.526	6.37	260.3	
83.055	01/14/75	0717GMT	33 44.0N	120 24.5W	BOTTOM 879M WIND 320 1KT WEATHER	DOMINANT WAVES		10	11.93	33.571	6.04	247.8	
83.060	01/14/75	0300GMT	33 34.0N	120 46.0W	BOTTOM 1618M WIND 320 1KT WEATHER 0	DOMINANT WAVES 320 2 3		10	12.12	33.473	6.16	258.4	
RV ALEXANDER AGASSIZ							CALCOFI CRUISE 7501						
							Z	T	S	10 METER DATA	O2	DT	
83.070	01/25/75	0859GMT	33 15.0N	121 27.0W	BOTTOM 3768M WIND 360 1KT WEATHER 1	DOMINANT WAVES		10	12.33	33.479		261.8	
83.090	01/25/75	2008GMT	32 34.5N	122 49.5W	BOTTOM 3737M WIND 360 1KT WEATHER 2	DOMINANT WAVES 330 4 14		10	13.30	33.148		204.2	
RV DAVID STARR JORDAN							CALCOFI CRUISE 7501						
							Z	T	S	10 METER DATA	O2	DT	
85.037 ²	01/16/75	0345GMT	34 02.5N	118 58.5W	BOTTOM 30M WIND 300 1KT WEATHER 1	DOMINANT WAVES 290 2 2		10	12.94	33.494	6.36	272.0	
85.037 ⁵	01/16/75	0239GMT	34 02.0N	118 59.5W	BOTTOM 56M WIND 300 1KT WEATHER 1	DOMINANT WAVES 290 2 2		10	13.09		6.57		
85.038	01/16/75	0051GMT	34 01.0N	118 02.5W	BOTTOM 227M WIND 310 1KT WEATHER 1	DOMINANT WAVES 290 2 2		10	12.92	33.519	6.84	269.7	
85.039	01/15/75	2305GMT	33 59.0N	119 06.5W	BOTTOM 593M WIND 320 1KT WEATHER 0	DOMINANT WAVES 300 2 3		10	12.78	33.504	6.22	268.2	
85.040	01/15/75	2036GMT	33 57.0N	119 10.5W	BOTTOM 731M WIND 260 1KT WEATHER 0	DOMINANT WAVES 220 2 3		10	12.93	33.501	6.53	271.3	
87.032 ⁵	01/16/75	1517GMT	33 53.5N	118 26.5W	BOTTOM 17M WIND 1KT WEATHER 1	DOMINANT WAVES 300 1 3		10	12.75		6.27		
87.032 ⁷	01/16/75	1411GMT	33 54.5N	118 28.0W	BOTTOM 24M WIND 1KT WEATHER 1	DOMINANT WAVES		10	12.83	33.514	6.45	268.4	
87.033	01/16/75	1306GMT	33 54.0N	118 29.0W	BOTTOM 50M WIND 1KT WEATHER 1	DOMINANT WAVES		10	12.96	33.515	6.79	270.8	
87.034	01/16/75	1126GMT	33 52.0N	118 33.0W	BOTTOM 69M WIND 060 2KT WEATHER	DOMINANT WAVES		10	13.00	33.498	6.55	272.8	
87.035	01/16/75	0917GMT	33 50.0N	118 37.5W	BOTTOM 602M WIND 260 2KT WEATHER	DOMINANT WAVES		10	13.01	33.494	6.34	273.3	
87.036	01/16/75	0643GMT	33 48.0N	118 40.5W	BOTTOM 870M WIND 190 1KT WEATHER	DOMINANT WAVES		10		33.483			
87.040	01/12/75	0727GMT	33 39.5N	118 58.0W	BOTTOM 741M WIND 010 1KT WEATHER	DOMINANT WAVES		10	12.68	33.492	6.23	267.2	
87.050	01/13/75	1505GMT	33 20.0N	119 39.5W	BOTTOM 93M WIND 030 1KT WEATHER 0	DOMINANT WAVES 320 2 3		10	11.83	33.544	6.02	248.0	
87.055	01/13/75	1824GMT	33 10.0N	120 00.0W	BOTTOM 110M WIND 030 1KT WEATHER 0	DOMINANT WAVES 090 5 6		10	11.93	33.516		251.8	
87.060	01/13/75	2118GMT	33 01.0N	120 21.0W	BOTTOM 585M WIND 1KT WEATHER 0	DOMINANT WAVES 330 7 6		10	12.20	33.493	5.99	258.4	
RV ALEXANDER AGASSIZ							CALCOFI CRUISE 7501						
							Z	T	S	10 METER DATA	O2	DT	
87.070	01/25/75	0347GMT	32 38.5N	121 02.0W	BOTTOM 3737M WIND 330 1KT WEATHER 1	DOMINANT WAVES		10	12.68	33.441		271.0	
87.080	01/24/75	2124GMT	32 18.0N	121 44.0W	BOTTOM 3545M WIND 340 1KT WEATHER 1	DOMINANT WAVES 340 4 3		10	14.06	33.449		296.9	
87.090	01/24/75	1556GMT	32 00.0N	122 22.0W	BOTTOM 4177M WIND 340 2KT WEATHER 1	DOMINANT WAVES 340 2 2		10	14.34	33.465		301.3	

RV DAVID STARK JURDAN

			CALCOFI CRUISE	7501	Z	T	10 METER DATA	S	02	01
5	4	88.030	01/17/75 0043GMT	33 41.5° 118 07.0W		10	12.99	33.430	5.88	277.6
			BOTTOM	21M WIND 250 3KT WEATHER 4						
			Dominant Waves	250 2 3						
5	8	88.032	01/16/75 2143GMT	33 37.5° 118 13.0W		10	13.12	33.449	6.94	278.6
			BOTTOM	35M WIND 220 2KT WEATHER 4						
			Dominant Waves	270 2 4						
5	8	88.033	01/16/75 2005GMT	33 36.0° 118 18.0W		10	13.64	33.502	6.95	284.8
			BOTTOM	183M WIND 250 3KT WEATHER 4						
			Dominant Waves	270 2 4						
5	8	88.034	01/16/75 1800GMT	33 34.0° 118 22.0W		10	13.58	33.509		283.1
			BOTTOM	870M WIND 170 2KT WEATHER 4						
			Dominant Waves	280 3 6						
6	6	90.027	01/17/75 0331GMT	33 29.5° 117 45.5W		10	13.04	33.490	6.61	274.1
			BOTTOM	43M WIND 330 4KT WEATHER 4						
			Dominant Waves	310 2 3						
90.028	01/17/75 0425GMT	33 28.5° 117 46.5W			10	13.24	33.487		278.1	
			BOTTOM	445M WIND 320 4KT WEATHER 4						
			Dominant Waves							
90.029	01/17/75 0632GMT	33 27.0° 117 49.5W			10	13.31	33.501		278.5	
			BOTTOM	611M WIND 270 2KT WEATHER 4						
			Dominant Waves							
90.030	01/17/75 0810GMT	33 25.0° 117 53.5W			10	13.59	33.512	6.50	283.0	
			BOTTOM	639M WIND 180 1KT WEATHER 4						
			Dominant Waves							
90.031	01/17/75 1000GMT	33 23.0° 117 57.5W			10	13.37	33.516	6.40	278.5	
			BOTTOM	310 3KT WEATHER 4						
			Dominant Waves							
90.032	01/17/75 1227GMT	33 21.0° 118 02.0W			10	13.61	33.512	6.71	283.4	
			BOTTOM	731M WIND 300 5KT WEATHER 4						
			Dominant Waves							
90.037	01/13/75 0050GMT	33 11.0° 118 22.5W			10	13.70	33.514	6.47	285.1	
			BOTTOM	1202M WIND 250 4KT WEATHER 4						
			Dominant Waves	240 1 3						
90.045	01/12/75 1934GMT	32 54.5° 118 55.5W			10	13.02	33.479	5.93	274.6	
			BOTTOM	1664M WIND 080 0KT WEATHER 0						
			Dominant Waves	100 8 6						
90.053	01/12/75 1500GMT	32 39.0° 119 28.5W			10	12.57	33.482	5.92	266.0	
			BOTTOM	1341M WIND 360 7KT WEATHER 0						
			Dominant Waves	320 4 5						

RV ALFRED AGASSIZ

			CALCOFI CRUISE	7501	Z	T	10 METER DATA	S	02	01
90.080	01/23/75 2148GMT	31 45.0° 121 18.5W			10	14.05	33.445		297.0	
			BOTTOM	3733M WIND 350 12KT WEATHER 1						
			Dominant Waves	350 2 3						
90.090	01/24/75 0331GMT	31 25.0° 122 02.0W		-	10	14.01	33.449		295.9	
			BOTTOM	3926M WIND 340 11KT WEATHER 1						
			Dominant Waves							

RV DAVID STARK JURDAN

			CALCOFI CRUISE	7501	Z	T	10 METER DATA	S	02	01
5	5	91.026	01/17/75 2309GMT	33 14.5° 117 27.5W		10	13.24	33.522	7.15	275.6
			BOTTOM	19M WIND 310 4KT WEATHER 4						
			Dominant Waves							
5	8	91.026	01/17/75 2150GMT	33 14.5° 117 29.5W		10	13.36	33.493	7.32	280.0
			BOTTOM	51M WIND 330 10KT WEATHER 4						
			Dominant Waves							
5	8	91.028	01/17/75 1953GMT	33 12.0° 117 34.0W		10	14.24	33.566		291.9
			BOTTOM	558M WIND 320 11KT WEATHER 4						
			Dominant Waves	49						
5	9	91.029	01/17/75 1817GMT	33 10.0° 117 38.0W		10	14.24	33.575		291.2
			BOTTOM	798M WIND 320 11KT WEATHER 4						
			Dominant Waves	320 2 3						
5	10	91.030	01/17/75 1616GMT	33 07.5° 117 42.0W		10	14.03	33.541	6.24	289.5
			BOTTOM	833M WIND 330 7KT WEATHER 4						
			Dominant Waves	290 2 2						
7	7	93.026	01/18/75 0209GMT	32 57.0° 117 17.0W		10	13.18	33.543	6.69	272.9
			BOTTOM	28M WIND 020 4KT WEATHER 4						
			Dominant Waves							
9	9	93.026	01/18/75 0313GMT	32 57.0° 117 18.5W		10	13.34	33.526	7.13	277.2
			BOTTOM	65M WIND 020 4KT WEATHER 4						
			Dominant Waves							
9	9	93.028	01/18/75 0420GMT	32 54.5° 117 22.0W		10	13.74	33.530		284.6
			BOTTOM	574M WIND 170 4KT WEATHER 4						
			Dominant Waves							
9	9	93.029	01/18/75 0600GMT	32 52.5° 117 26.5W		10	13.49	33.528		279.9
			BOTTOM	574M WIND 320 3KT WEATHER 4						
			Dominant Waves							

RV DAVID STARR JORDAN						CALCOFI CRUISE 7501					
						Z	T	S	10 METER DATA	DATA	DT
93.030	01/18/75	0755GMT	32 50.5N	117 31.0W			10	13.75	33.534		284.6
	BOTTOM	815M	WIND 350	4KT WEATHER 4	DOMINANT WAVES						
93.035	01/19/75	1950GMT	32 40.5N	117 51.5W			10	13.30	33.497		278.6
	BOTTOM	639M	WIND 310	1KT WEATHER 1	DOMINANT WAVES 310	4 5					
93.040	01/19/75	2328GMT	32 30.0N	118 11.5W			10	13.28	33.501	6.09	277.9
	BOTTOM	1839M	WIND 280	2KT WEATHER 1	DOMINANT WAVES 310	6 5					
93.045	01/20/75	1903GMT	32 20.0N	118 32.0W			10	12.85	33.482		271.1
	BOTTOM	1479M	WIND 330	1KT WEATHER 1	DOMINANT WAVES 320	10 5					
93.050	01/21/75	2146GMT	32 10.0N	118 52.5W			10	13.27	33.507	5.92	277.2
	BOTTOM	1433M	WIND 350	1KT WEATHER 1	DOMINANT WAVES 320	8 6					
93.055	01/22/75	0102GMT	32 00.0N	119 13.5W			10	13.10	33.487		275.5
	BOTTOM	1669M	WIND 320	13KT WEATHER 1	DOMINANT WAVES 310	7 5					
93.060	01/22/75	0351GMT	31 50.0W	119 34.0W			10	13.47	33.506	5.95	281.2
	BOTTOM	2321M	WIND 340	18KT WEATHER 1	DOMINANT WAVES 330	7 6					
RV ALEXANDER AGASSIZ						CALCOFI CRUISE 7501					
						Z	T	S	10 METER DATA	DATA	DT
93.070	01/23/75	1059GMT	31 29.5N	120 16.0W			10	13.08	33.488		275.0
	BOTTOM	3866M	WIND 040	10KT WEATHER 4	DOMINANT WAVES						
93.080	01/23/75	0554GMT	31 09.5N	120 55.5W			10	13.36	33.503		279.3
	BOTTOM	3832M	WIND 010	4KT WEATHER 1	DOMINANT WAVES						
93.090	01/23/75	0048GMT	30 48.5N	121 33.0W			10	13.22	33.439		281.3
	BOTTOM	4143M	WIND 080	5KT WEATHER 2	DOMINANT WAVES 330	3 5					
RV DAVID STARR JORDAN						CALCOFI CRUISE 7501					
						Z	T	S	10 METER DATA	DATA	DT
95.028	01/18/75	1830GMT	32 37.0N	117 10.5W			10	12.92	33.549		267.5
	BOTTOM	15M	WIND 210	7KT WEATHER 4	DOMINANT WAVES 290	2 4					
95.029	01/18/75	1702GMT	32 35.5N	117 14.5W			10	13.60	33.536	6.40	281.5
	BOTTOM	41M	WIND 170	5KT WEATHER 4	DOMINANT WAVES 150	2 3					
95.030	01/18/75	1522GMT	32 33.0N	117 18.5W			10	14.06	33.576	6.23	287.6
	BOTTOM	116M	WIND 160	5KT WEATHER 4	DOMINANT WAVES 100	1 2					
95.031	01/18/75	1340GMT	32 31.0N	117 22.5W			10	14.00	33.560	6.33	287.6
	BOTTOM	408M	WIND 140	9KT WEATHER 4	DOMINANT WAVES 090	2 2					
95.032	01/18/75	1200GMT	32 29.0N	117 27.0W			10	13.94	33.548	6.25	287.2
RV ALEXANDER AGASSIZ						CALCOFI CRUISE 7501					
						Z	T	S	10 METER DATA	DATA	DT
96.079	01/22/75	0826GMT	30 44.0N	120 28.5W			10	14.26	33.522		295.5
	BOTTOM	3850M	WIND 330	1KT WEATHER	DOMINANT WAVES						
96.082	01/22/75	1257GMT	30 28.0N	121 04.5W			10	14.59	33.533		301.4
	BOTTOM	3850M	WIND 360	4KT WEATHER	DOMINANT WAVES						
97.028 ^H	01/21/75	0058GMT	32 18.0N	117 04.0W			10	13.40	33.567		275.3
	BOTTOM	41M	WIND	6KT WEATHER 1	DOMINANT WAVES						
97.029	01/21/75	0121GMT	32 17.5N	117 04.5W			10	13.64	33.564		280.2
	BOTTOM	47M	WIND 010	6KT WEATHER 1	DOMINANT WAVES						
97.030	01/21/75	0158GMT	32 16.0N	117 07.0W			10	13.70	33.562		281.5
	BOTTOM	47M	WIND 010	6KT WEATHER 1	DOMINANT WAVES						
97.031	01/21/75	0247GMT	32 13.0N	117 13.0W			10	13.52	33.564		277.9
	BOTTOM	1335M	WIND 010	8KT WEATHER 1	DOMINANT WAVES						
97.032	01/21/75	0426GMT	32 12.0N	117 15.0W			10	13.57	33.563		278.9
	BOTTOM	1383M	WIND 010	8KT WEATHER 1	DOMINANT WAVES						

RV	NAME	TIME	LAT	LONG	DEPTH	WIND DIRECTION	WIND SPEED	WEATHER	DOMINANT WAVES	CALCOFT CRUISE	7501	10 METER DATA			
										Z	T	S	D2	DT	
97.035	01/21/75	0010GMT	32 05.5N	117 27.5W	BOTTOM 1272M	WIND 300	4KT	WEATHER 1	DOMINANT WAVES		10	14.08	33.566		288.3
97.040	01/21/75	1027GMT	31 55.5N	117 47.5W	BOTTOM 1453M	WIND 300	17KT	WEATHER	DOMINANT WAVES		10	14.74	33.625		297.7
97.045	01/21/75	1338GMT	31 46.0N	118 08.5W	BOTTOM 981M	WIND 300	13KT	WEATHER	DOMINANT WAVES		10	14.77	33.634		297.6
97.055	01/21/75	1946GMT	31 28.0N	118 50.5W	BOTTOM 1224M	WIND 310	11KT	WEATHER 2	DOMINANT WAVES 300	2 3	10	14.40	33.615		291.5
97.060	01/21/75	2126GMT	31 18.5N	119 10.5W	BOTTOM 2072M	WIND 330	11KT	WEATHER 2	DOMINANT WAVES 330	2 3	10	13.88	33.554		285.6
97.070	01/22/75	0332GMT	31 02.0N	119 51.0W	BOTTOM 3584M	WIND 330	4KT	WEATHER	DOMINANT WAVES		10	13.95	33.485		292.1
RV DAVID STARR JORDAN										CALCOFT CRUISE	7501				
100.029	01/20/75	0300GMT	31 42.0N	116 43.5W	BOTTOM 106M	WIND 320	4KT	WEATHER	DOMINANT WAVES		10	14.42	33.593	6.34	293.5
100.030	01/20/75	0420GMT	31 40.5N	116 46.5W	BOTTOM 408M	WIND 140	3KT	WEATHER	DOMINANT WAVES		10	14.10	33.577	6.76	288.3
100.031	01/20/75	0641GMT	31 38.5N	116 50.5W	BOTTOM 279M	WIND 070	2KT	WEATHER	DOMINANT WAVES		10	14.30	33.586	6.38	291.6
100.032	01/20/75	0743GMT	31 34.0N	116 54.5W	BOTTOM 1092M	WIND 300	11KT	WEATHER	DOMINANT WAVES		10	14.73	33.620	6.06	297.8
100.040	01/20/75	1351GMT	31 20.5N	117 27.0W	BOTTOM 1849M	WIND 280	4KT	WEATHER	DOMINANT WAVES		10	15.30	33.653	5.81	307.2
100.050	01/20/75	1900GMT	31 00.5N	118 07.0W	BOTTOM 1669M	WIND 320	4KT	WEATHER 0	DOMINANT WAVES 270	2 5	10	13.78	33.501	6.05	287.5
100.060	01/21/75	0032GMT	30 40.5N	118 47.5W	BOTTOM 2885M	WIND 310	12KT	WEATHER 1	DOMINANT WAVES 300	3 14	10	15.01	33.557	5.88	308.2
100.070	01/21/75	0549GMT	30 20.0N	119 28.0W	BOTTOM 3926M	WIND 300	12KT	WEATHER	DOMINANT WAVES		10	14.58	33.523	5.92	301.9
103.028 ^B	01/23/75	2010GMT	31 07.5N	116 20.0W	BOTTOM 21M	WIND 310	4KT	WEATHER 1	DOMINANT WAVES 300	2 4	10	14.03	33.597		285.4
103.029	01/23/75	1930GMT	31 07.0N	116 21.0W	BOTTOM 24M	WIND 310	4KT	WEATHER 1	DOMINANT WAVES 300	2 4	10	14.10	33.588		287.5
103.030	01/23/75	1818GMT	31 06.0N	116 24.5W	BOTTOM 67M	WIND 250	4KT	WEATHER 1	DOMINANT WAVES 300	2 4	10		33.605	6.07	
103.031	01/23/75	1705GMT	31 03.0N	116 29.0W	BOTTOM 103M	WIND 180	3KT	WEATHER 2	DOMINANT WAVES 270	2 6	10	14.74	33.623	5.96	297.8
103.032	01/23/75	1550GMT	31 02.0N	116 32.5W	BOTTOM 408M	WIND 130	3KT	WEATHER 1	DOMINANT WAVES 160	3 5	10	14.87	33.621		300.6
103.035	01/23/75	1327GMT	30 56.0N	116 45.0W	BOTTOM 1849M	WIND 090	4KT	WEATHER 0	DOMINANT WAVES		10	15.12	33.638	5.80	304.6
103.045	01/23/75	0648GMT	30 36.0N	117 24.0W	BOTTOM 2135M	WIND 250	7KT	WEATHER 0	DOMINANT WAVES		10	14.14	33.517		293.5
103.050	01/23/75	0317GMT	30 24.0N	117 42.5W	BOTTOM 2696M	WIND 280	4KT	WEATHER 0	DOMINANT WAVES		10	14.60	33.534	5.87	301.5
103.060	01/22/75	0310GMT	30 05.5N	118 24.0W	BOTTOM 3357M	WIND 320	1KT	WEATHER	DOMINANT WAVES		10	14.58	33.535	5.64	301.0
103.070	01/21/75	2202GMT	29 46.0N	119 05.0W	BOTTOM 3545M	WIND 310	12KT	WEATHER 2	DOMINANT WAVES 340	4 6	10	15.96	33.691	5.75	318.5

RV DAVID STARR JORDAN							CALCOFI CRUISE 7501				
							Z	T	10 METER DATA	DATA	
							S	02	DT		
103.080	01/21/75	1647GMT	29 29.0N	119 42.0W	BOTTOM 3737M WIND 310 14KT WEATHER 1 DOMINANT WAVES 310 3 6		10	16.12	33.707	5.69	320.8
107.030 ³	01/24/75	0029GMT	30 29.5N	116 04.0W	BOTTOM 19M WIND 350 4KT WEATHER 0 DOMINANT WAVES 310 1 5		10	14.14	33.581		288.8
107.030 ⁶	01/24/75	0101GMT	30 28.5N	116 05.5W	BOTTOM 24M WIND 340 7KT WEATHER 1 DOMINANT WAVES 340 2 2		10	14.27	33.586		291.0
107.031	01/24/75	0135GMT	30 28.0N	116 07.0W	BOTTOM 43M WIND 320 4KT WEATHER 1 DOMINANT WAVES 340 2 2		10	14.62	33.603		296.8
107.032	01/24/75	0251GMT	30 26.0N	116 11.0W	BOTTOM 399M WIND 030 1KT WEATHER 1 DOMINANT WAVES 340 2 2		10	15.32	33.650	5.90	307.9
107.033	01/24/75	0347GMT	30 24.0N	116 15.0W	BOTTOM 1479M WIND 340 1KT WEATHER 1 DOMINANT WAVES		10	15.41	33.650		309.7
107.034	01/24/75	0446GMT	30 22.0N	116 19.0W	BOTTOM 1664M WIND 340 1KT WEATHER 1 DOMINANT WAVES		10	15.47	33.651		310.9
107.035	01/24/75	0602GMT	30 21.5N	116 22.5W	BOTTOM 1756M WIND 340 1KT WEATHER 1 DOMINANT WAVES		10	15.53	33.656	5.78	311.8
107.050	01/24/75	1534GMT	29 50.0N	117 22.0W	BOTTOM 2509M WIND 330 1KT WEATHER 0 DOMINANT WAVES 330 2 2		10	14.48	33.529	5.96	299.4
107.060	01/24/75	2041GMT	29 31.5N	118 01.5W	BOTTOM 3545M WIND 340 1KT WEATHER 0 DOMINANT WAVES 210 3 4		10	15.51	33.658	5.79	311.3
107.070	01/25/75	0126GMT	29 11.0N	118 41.0W	BOTTOM 3075M WIND 340 5KT WEATHER 0 DOMINANT WAVES 330 2 6		10	15.20	33.630	5.87	306.8
107.080	01/25/75	0625GMT	28 51.0N	119 20.0W	BOTTOM 3737M WIND 050 4KT WEATHER 1 DOMINANT WAVES 310 3 6		10	16.31	33.757	5.69	321.2
110.032 ⁴	01/26/75	1825GMT	29 51.0N	115 49.5W	BOTTOM 37M WIND 350 8KT WEATHER 2 DOMINANT WAVES 320 1 6		10	14.04	33.580		286.9
110.033	01/26/75	1740GMT	29 50.0N	115 52.0W	BOTTOM 88M WIND 320 7KT WEATHER 2 DOMINANT WAVES 320 1 6		10	13.86	33.587		282.8
110.034	01/26/75	1639GMT	29 48.0N	115 56.0W	BOTTOM 502M WIND 340 1KT WEATHER 2 DOMINANT WAVES 310 2 4		10	14.54	33.593		295.9
110.035	01/26/75	1458GMT	29 46.0N	116 00.0W	BOTTOM 1298M WIND 350 12KT WEATHER 2 DOMINANT WAVES 330 3 5		10		33.644	5.86	
110.045	01/26/75	0739GMT	29 28.0N	116 39.0W	BOTTOM 371M WIND 350 1KT WEATHER DOMINANT WAVES		10	15.92	33.663		319.6
110.050	01/26/75	0434GMT	29 16.5N	116 59.0W	BOTTOM 3169M WIND 360 14KT WEATHER DOMINANT WAVES		10	15.98	33.670	5.76	320.4
110.055	01/26/75	0135GMT	29 06.0N	117 19.0W	BOTTOM 3641M WIND 340 12KT WEATHER 0 DOMINANT WAVES 330 3 5		10	15.96	33.665		320.4
110.060	01/25/75	2249GMT	28 56.5N	117 39.0W	BOTTOM 3737M WIND 360 14KT WEATHER 0 DOMINANT WAVES 340 2 4		10	15.82	33.665	5.84	317.4
110.070	01/25/75	1752GMT	28 36.0N	118 18.0W	BOTTOM 3737M WIND 050 7KT WEATHER 1 DOMINANT WAVES 320 2 6		10	14.36	33.622	5.86	
113.028 ⁸	01/26/75	2303GMT	29 25.0N	115 12.5W	BOTTOM 21M WIND 210 5KT WEATHER 1 DOMINANT WAVES 260 1 4		10	14.02	33.658		280.8
113.029	01/26/75	2334GMT	29 24.5N	115 13.5W	BOTTOM 26M WIND 280 3KT WEATHER 1 DOMINANT WAVES 260 1 4		10	14.12	33.651		283.3
113.030	01/27/75	0035GMT	29 22.0N	115 18.0W	BOTTOM 58M WIND 290 3KT WEATHER 1 DOMINANT WAVES 260 1 4		10	14.69	33.643		295.4
113.031	01/27/75	0120GMT	29 20.5N	115 21.5W	BOTTOM 84M WIND 300 10KT WEATHER 2 DOMINANT WAVES 300 1 2		10	14.54	33.625		293.6

RV	DAVID STARR JORDAN	CALCOFI CRUISE	7501	Z	T	10 METER DATA	S	02	DT
113.032	01/27/75	0208GMT	29 18.5N 115 26.0W			10	14.73	33.617	298.0
	BOTTOM	103M	WIND 300 11KT WEATHER 2						
	DOMINANT WAVES								
113.035	01/27/75	0438GMT	29 11.0N 115 38.0W			10	14.97	33.634	5.92 301.8
	BOTTOM	1391M	WIND 330 12KT WEATHER						
	DOMINANT WAVES								
113.040	01/27/75	0756GMT	29 02.0N 115 57.5W			10	15.60	33.649	5.83 313.9
	BOTTOM	1856M	WIND 300 10KT WEATHER						
	DOMINANT WAVES								
113.045	01/27/75	1045GMT	28 52.0N 116 18.0W			10	15.69	33.653	315.5
	BOTTOM	2321M	WIND 260 10KT WEATHER 2						
	DOMINANT WAVES								
113.050	01/27/75	1328GMT	28 41.0N 116 36.5W			10	15.81	33.660	5.78 317.5
	BOTTOM	3545M	WIND 260 11KT WEATHER						
	DOMINANT WAVES	340 4 5							
113.080	01/28/75	0549GMT	27 41.0N 118 33.0W			10	16.14	33.689	5.73 322.5
	BOTTOM	3737M	WIND 320 12KT WEATHER						
	DOMINANT WAVES								
117.025	01/29/75	2135GMT	28 58.0N 114 37.0W			10	14.69	33.711	6.00 290.4
	BOTTOM	52M	WIND 280 10KT WEATHER 1						
	DOMINANT WAVES	280 2 5							
117.026	01/29/75	2032GMT	28 56.0N 114 41.5W			10	14.64	33.672	292.2
	BOTTOM	75M	WIND 270 10KT WEATHER 2						
	DOMINANT WAVES	280 2 5							
117.027	01/29/75	1942GMT	28 54.0N 114 45.0W			10	14.57	33.629	293.9
	BOTTOM	84M	WIND 280 10KT WEATHER 2						
	DOMINANT WAVES	270 2 5							
117.028	01/29/75	1856GMT	28 52.0N 114 49.0W			10	15.10	33.646	303.6
	BOTTOM	90M	WIND 270 10KT WEATHER 2						
	DOMINANT WAVES	270 2 5							
117.030	01/29/75	1656GMT	28 48.0N 114 56.5W			10	15.25	33.720	5.89 301.3
	BOTTOM	101M	WIND 260 8KT WEATHER 2						
	DOMINANT WAVES	330 2 6							
117.035	01/29/75	1456GMT	28 38.0N 115 16.0W			10	15.18	33.806	5.60 293.5
	BOTTOM	205M	WIND 270 10KT WEATHER						
	DOMINANT WAVES								
117.040	01/29/75	0841GMT	28 28.0N 115 35.5W			10	15.24	33.710	5.86 302.8
	BOTTOM	929M	WIND 320 15KT WEATHER						
	DOMINANT WAVES								
117.045	01/29/75	0535GMT	28 18.0N 115 56.0W			10	15.38	33.642	309.7
	BOTTOM	3169M	WIND 310 8KT WEATHER 1						
	DOMINANT WAVES								
117.050	01/29/75	0229GMT	28 10.0N 116 20.0W			10	15.29	33.653	6.00 307.0
	BOTTOM	4308M	WIND 340 11KT WEATHER 2						
	DOMINANT WAVES								
117.070	01/28/75	1537GMT	27 27.5N 117 32.5W			10	15.86	33.677	5.74 317.3
	BOTTOM	3926M	WIND 360 14KT WEATHER 2						
	DOMINANT WAVES	330 8 7							
117.080	01/28/75	1019GMT	27 08.0N 118 10.5W			10	16.08	33.700	5.89 320.4
	BOTTOM	4116M	WIND 330 11KT WEATHER 2						
	DOMINANT WAVES								
118.039	01/29/75	1110GMT	28 18.5N 115 23.5W			10	15.50	33.910	5.68 292.6
	BOTTOM	242M	WIND 320 8KT WEATHER						
	DOMINANT WAVES								
119.033	01/30/75	1001GMT	28 18.5N 114 54.0W			10	15.44	33.717	5.88 305.5
	BOTTOM	112M	WIND 230 5KT WEATHER 2						
	DOMINANT WAVES								
120.022	01/30/75	0201GMT	28 28.0N 114 04.5W			10	15.04	33.796	291.3
	BOTTOM	11M	WIND 280 5KT WEATHER 1						
	DOMINANT WAVES								
120.022	01/30/75	0250GMT	28 27.5N 114 05.5W			10	14.94	33.786	290.0
	BOTTOM	19M	WIND 310 4KT WEATHER 1						
	DOMINANT WAVES								
120.023	01/30/75	0325GMT	28 27.0N 114 07.0W			10	14.90	33.770	290.4
	BOTTOM	22M	WIND 300 4KT WEATHER						
	DOMINANT WAVES								
120.024	01/30/75	0410GMT	28 25.0N 114 11.0W			10	15.03	33.711	297.3
	BOTTOM	32M	WIND 290 3KT WEATHER						
	DOMINANT WAVES								
120.025	01/30/75	0455GMT	28 22.5N 114 15.0W			10	15.01	33.713	296.8
	BOTTOM	56M	WIND 250 3KT WEATHER						
	DOMINANT WAVES								
120.026	01/30/75	0535GMT	28 21.0N 114 18.0W			10	14.80	33.744	290.2
	BOTTOM	78M	WIND 260 4KT WEATHER						
	DOMINANT WAVES								

RV DAVID STARK JURDAN							CALCUEI CRUISE	7501	Z	T	10 METER S	DATA #2	#T
120.030	01/30/75	0735GMT	28 13.0N	114 34.0W					10	15.48	33.731	5.92	305.3
	BOTTOM	93M	WIND 300	4KT WEATHER	DOMINANT	WAVES							
120.035	01/30/75	1219GMT	28 03.0N	114 54.0W					10	15.30	33.722	5.91	302.2
	BOTTOM	82M	WIND 220	4KT WEATHER 2	DOMINANT	WAVES							
120.040	01/30/75	1439GMT	27 56.5N	115 14.0W					10	15.02	33.824		288.9
	BOTTOM	37M	WIND 200	1KT WEATHER 2	DOMINANT	WAVES 250 3 4							
120.050	01/30/75	2139GMT	27 33.0N	115 52.5W					10	15.71	33.685	5.85	313.6
	BOTTOM	4021M	WIND 270	1KT WEATHER 1	DOMINANT	WAVES 260 3 4							
120.060	01/31/75	0235GMT	27 13.0N	116 30.0W					10	16.24	33.734	5.72	321.4
	BOTTOM	3737M	WIND 310	1KT WEATHER	DOMINANT	WAVES							
120.070	01/31/75	0727GMT	26 53.0N	117 10.0W					10	16.06	33.718	5.76	318.6
	BOTTOM	3926M	WIND 320	1KT WEATHER 1	DOMINANT	WAVES							
120.080	01/31/75	1236GMT	26 33.0N	117 49.0W					10	16.06	33.705	5.75	319.6
	BOTTOM	3926M	WIND 010	4KT WEATHER	DOMINANT	WAVES							
123.035	02/01/75	1400GMT	27 26.5N	114 35.0W					10	15.42	33.959		287.4
	BOTTOM	26M	WIND 340	4KT WEATHER 1	DOMINANT	WAVES							
123.036	02/01/75	1828GMT	27 26.0N	114 36.0W					10	15.66	33.955		292.8
	BOTTOM	47M	WIND 340	4KT WEATHER 1	DOMINANT	WAVES							
123.037	02/01/75	1237GMT	27 24.0N	114 40.0W					10	15.92	33.887		303.3
	BOTTOM	69M	WIND 350	4KT WEATHER 1	DOMINANT	WAVES							
123.038	02/01/75	1125GMT	27 22.0N	114 45.0W					10	15.70	33.948		294.1
	BOTTOM	82M	WIND 340	14KT WEATHER 1	DOMINANT	WAVES							
123.039	02/01/75	1029GMT	27 20.0N	114 48.5W					10	15.55	33.969		289.4
	BOTTOM	108M	WIND 300	12KT WEATHER 1	DOMINANT	WAVES							
123.042	02/01/75	0830GMT	27 15.5N	115 01.0W					10	16.31	33.904		310.5
	BOTTOM	1669M	WIND 360	10KT WEATHER 1	DOMINANT	WAVES							
123.045	02/01/75	0644GMT	27 08.0N	115 11.5W					10	15.68	33.718		310.5
	BOTTOM	4116M	WIND 350	12KT WEATHER 1	DOMINANT	WAVES							
123.050	02/01/75	0345GMT	26 56.5N	115 31.0W					10	15.82	33.795		307.9
	BOTTOM	3357M	WIND 340	4KT WEATHER 1	DOMINANT	WAVES							
127.032 ^b	02/01/75	1821GMT	26 58.0N	114 01.0W					10	15.82	33.996		293.2
	BOTTOM	28M	WIND 010	12KT WEATHER 1	DOMINANT	WAVES 280 3 5							
127.033	02/01/75	1853GMT	26 57.5N	114 02.0W					10	16.38	34.045		301.8
	BOTTOM	65M	WIND 350	12KT WEATHER 1	DOMINANT	WAVES 280 3 5							
127.034	02/01/75	1950GMT	26 55.0N	114 06.5W					10	16.43	34.043		303.0
	BOTTOM	82M	WIND 350	12KT WEATHER 1	DOMINANT	WAVES 340 3 4							
127.035	02/01/75	2049GMT	26 53.0N	114 10.5W					10	16.56	34.051		305.3
	BOTTOM	95M	WIND 010	4KT WEATHER 2	DOMINANT	WAVES 010 3 3							
127.036	02/01/75	2148GMT	26 51.0N	114 14.5W					10		34.026		
	BOTTOM	1003M	WIND 290	4KT WEATHER 2	DOMINANT	WAVES 010 3 3							
127.040	02/02/75	0000GMT	26 48.5N	114 24.5W					10	16.54	33.971		310.7
	BOTTOM	2885M	WIND 310	4KT WEATHER 1	DOMINANT	WAVES 330 3 4							
127.045	02/02/75	0255GMT	26 33.0N	114 48.0W					10	16.78	33.970		316.1
	BOTTOM	3545M	WIND 330	11KT WEATHER	DOMINANT	WAVES							
127.060	02/02/75	1155GMT	26 03.5N	115 46.5W					10	16.14	33.794		314.8
	BOTTOM	3545M	WIND 030	4KT WEATHER	DOMINANT	WAVES							
120.025 ^b	02/03/75	1310GMT	26 37.5N	113 12.0W					10	15.98	34.251		278.0
	BOTTOM	19M	WIND 010	1KT WEATHER 1	DOMINANT	WAVES							
130.026	02/03/75	1235GMT	26 37.0N	113 14.0W					10	16.18	34.148		289.4
	BOTTOM	32M	WIND 360	1KT WEATHER 1	DOMINANT	WAVES							
130.027	02/03/75	1146GMT	26 35.0N	113 15.0W					10	16.28	34.054		298.9
	BOTTOM	48M	WIND 360	1KT WEATHER 1	DOMINANT	WAVES							

RV DAVID STARR JORDAN	CALIFORNIA CRUISE 7501	L	T	10 METER DATA S 02	WT
130.028 02/03/75 1015GMT 26 33.0W 113 21.5W BOTTOM 58M WIND 030 1KT WEATHER DOMINANT WAVES		10	16.48	34.075	301.8
130.029 02/03/75 0925GMT 26 31.0W 113 25.0W BOTTOM 69M WIND 050 1KT WEATHER DOMINANT WAVES		10		34.122	
130.030 02/03/75 0835GMT 26 29.0W 113 29.0W BOTTOM 80M WIND 060 1KT WEATHER DOMINANT WAVES		10	16.75	34.101	305.9
130.035 02/03/75 0608GMT 26 19.0W 113 48.0W BOTTOM 464M WIND 350 1KT WEATHER DOMINANT WAVES		10	16.64	34.122	301.9
130.040 02/03/75 0241GMT 26 09.0W 114 06.5W BOTTOM 2227M WIND 310 12KT WEATHER DOMINANT WAVES		10	16.64	34.054	306.8
130.050 02/02/75 2247GMT 25 49.0W 114 46.0W BOTTOM 3137M WIND 340 4KT WEATHER 2 DOMINANT WAVES 340 3 3		10	18.16	34.326	321.7
130.060 02/02/75 1655GMT 25 30.0W 115 21.0W BOTTOM 3565M WIND 350 4KT WEATHER 2 DOMINANT WAVES 340 3 6		10	17.90	34.200	324.8
133.020 ⁶ 02/03/75 1740GMT 26 13.5W 112 31.0W BOTTOM 26M WIND 290 4KT WEATHER 0 DOMINANT WAVES 270 4 5		10	16.78	34.116	305.0
133.021 02/03/75 1817GMT 26 12.5W 112 32.5W BOTTOM 52M WIND 290 1KT WEATHER 0 DOMINANT WAVES 270 4 4		10	17.01	34.099	311.8
133.022 02/03/75 1905GMT 26 10.5W 112 36.5W BOTTOM 63M WIND 310 13KT WEATHER 1 DOMINANT WAVES 300 5 5		10	17.07	34.107	312.6
133.023 02/03/75 2000GMT 26 08.5W 112 40.0W BOTTOM 71M WIND 320 17KT WEATHER 1 DOMINANT WAVES 340 5 4		10	17.04		
133.024 02/03/75 2046GMT 26 06.5W 112 44.5W BOTTOM 80M WIND 310 17KT WEATHER 1 DOMINANT WAVES 300 5 5		10	16.95	34.122	308.8
133.025 02/03/75 2141GMT 26 04.5W 112 48.0W BOTTOM 82M WIND 320 16KT WEATHER 1 DOMINANT WAVES 290 4 6		10	16.89	34.114	308.0
133.030 02/04/75 0013GMT 25 54.5W 113 07.5W BOTTOM 205M WIND 320 14KT WEATHER 0 DOMINANT WAVES 340 4 7		10	17.29	34.138	315.3
133.035 02/04/75 0252GMT 25 44.0W 113 26.0W BOTTOM 1021M WIND 320 17KT WEATHER 0 DOMINANT WAVES		10	17.11	34.097	314.2
133.050 02/04/75 1126GMT 25 14.5W 114 24.0W BOTTOM 3832M WIND 360 18KT WEATHER DOMINANT WAVES		10	17.69	34.160	322.9
133.060 02/04/75 1646GMT 24 54.5W 115 02.0W BOTTOM 3926M WIND 010 14KT WEATHER 1 DOMINANT WAVES 360 4 5		10	18.42	34.353	325.9
137.020 ⁷ 02/06/75 1710GMT 25 38.5W 112 10.0W BOTTOM 19M WIND 140 6KT WEATHER 1 DOMINANT WAVES 260 3 6		10	16.20	34.034	298.6
137.022 02/06/75 1620GMT 25 36.0W 112 15.0W BOTTOM 50M WIND 330 6KT WEATHER 1 DOMINANT WAVES 270 3 4		10	16.78	34.087	307.5
137.023 02/06/75 1525GMT 25 34.0W 112 19.0W BOTTOM 75M WIND 340 4KT WEATHER 1 DOMINANT WAVES 340 5 7		10	17.03	34.110	311.5
137.024 02/06/75 1425GMT 25 32.0W 112 23.0W BOTTOM 80M WIND 330 7KT WEATHER 1 DOMINANT WAVES 270 4 6		10	17.16	34.139	312.3
137.030 02/06/75 1115GMT 25 20.0W 112 45.5W BOTTOM 334M WIND 330 14KT WEATHER DOMINANT WAVES		10	17.07	34.118	311.8
137.035 02/06/75 0824GMT 25 10.0W 113 04.5W BOTTOM 1298M WIND 330 14KT WEATHER 2 DOMINANT WAVES		10	17.46	34.194	315.1
137.050 02/05/75 0256GMT 24 40.0W 114 02.5W BOTTOM 3926M WIND 350 18KT WEATHER DOMINANT WAVES		10	18.86	34.406	332.6
137.060 02/04/75 2140GMT 24 20.0W 114 39.5W BOTTOM 3737M WIND 010 15KT WEATHER 1 DOMINANT WAVES 330 7 5		10	18.54	34.339	329.8