

PHYSICAL AND CHEMICAL DATA REPORT

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 7412
25 November - 18 December 1974

CalCOFI Cruise 7501
8 January - 15 February 1975

and

CalCOFI Cruise 7503
24 February - 28 March 1975

SIO Reference 84-10
12 March 1984

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Sponsored by
Marine Research Committee

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

FOOTNOTES

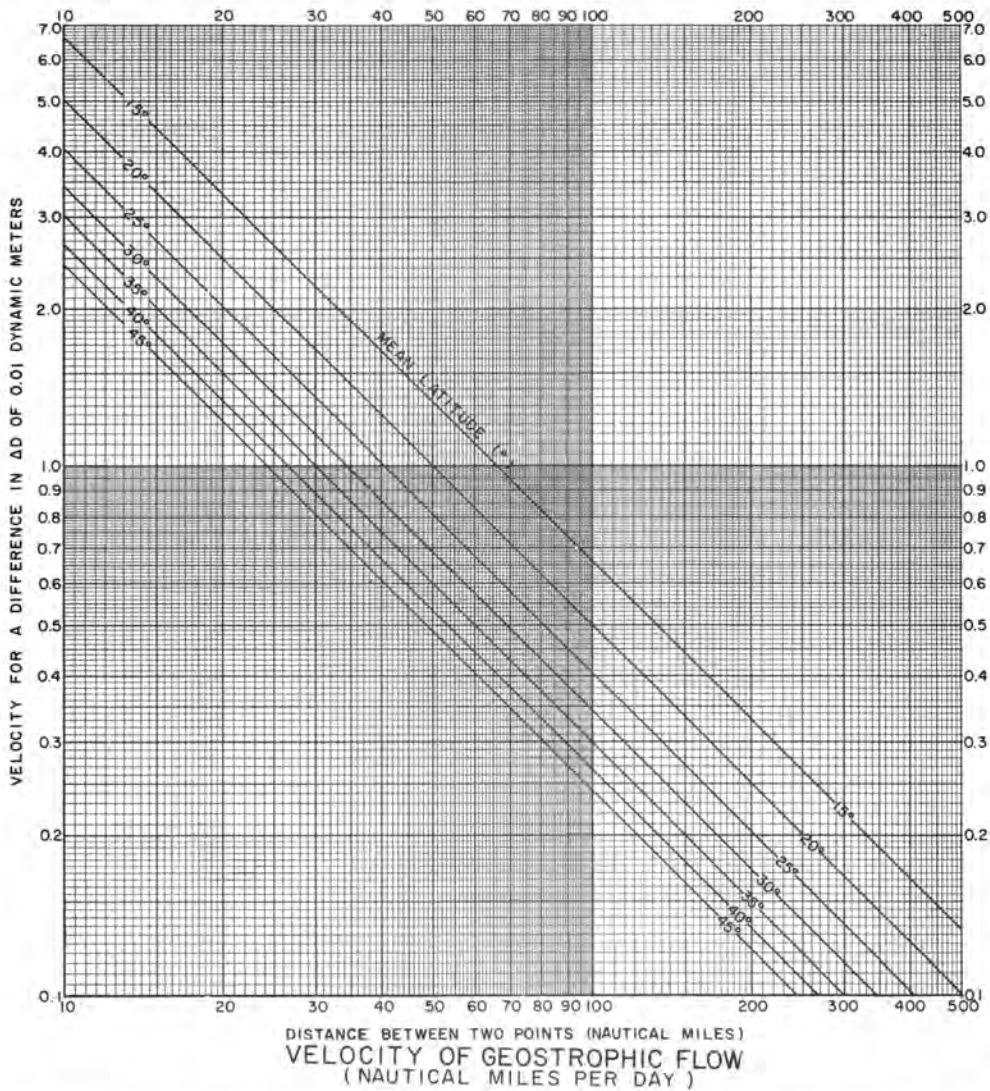
In addition to footnotes, special notations are used without footnotes because the meaning is always the same.

P: After depth values indicates the Nansen bottle posttripped.

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

LITERATURE CITED

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



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

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

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

FIGURES

Cruise 7412

1. CalCOFI Cruise 7412, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

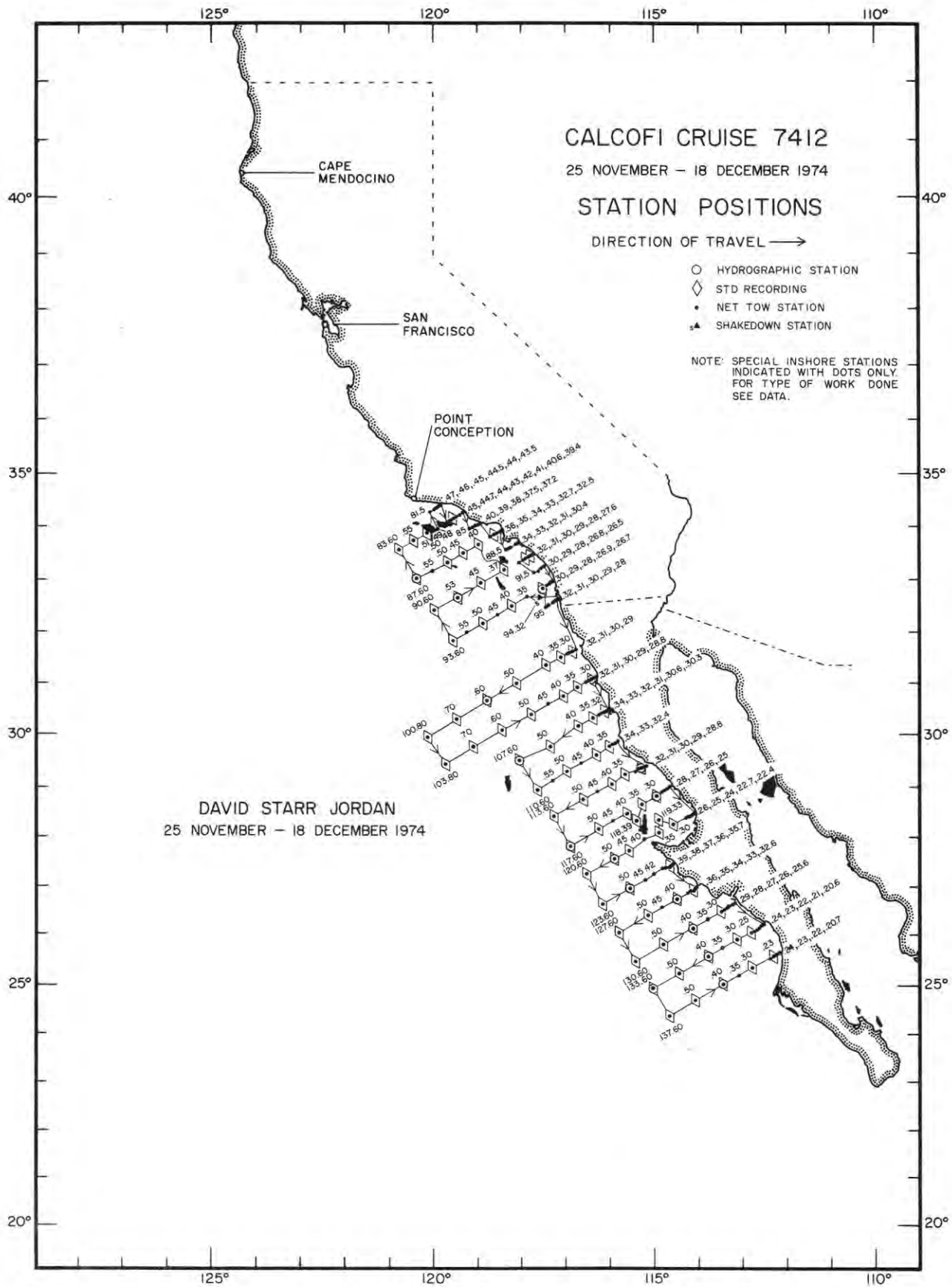


FIGURE 1

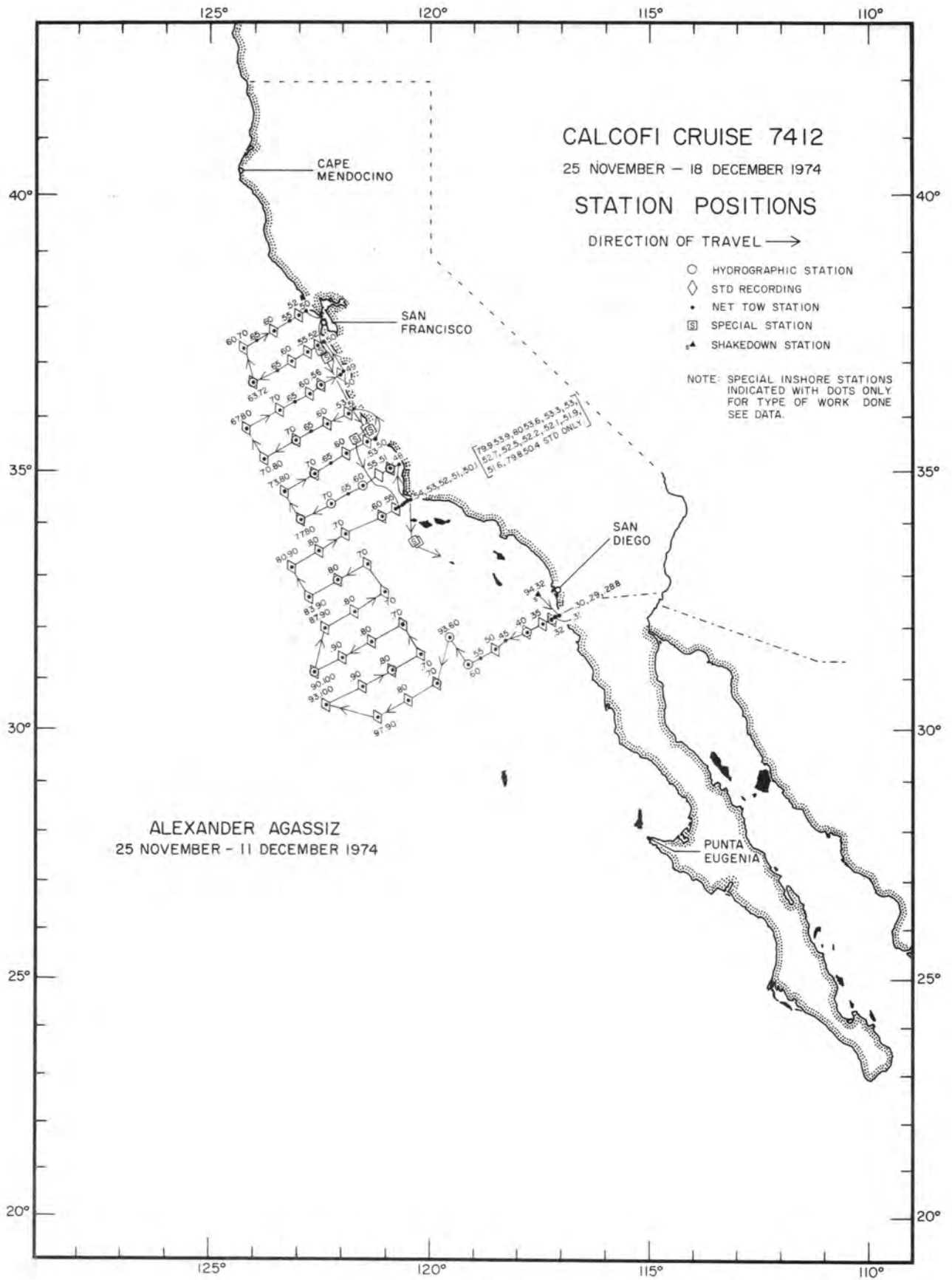


FIGURE 1A

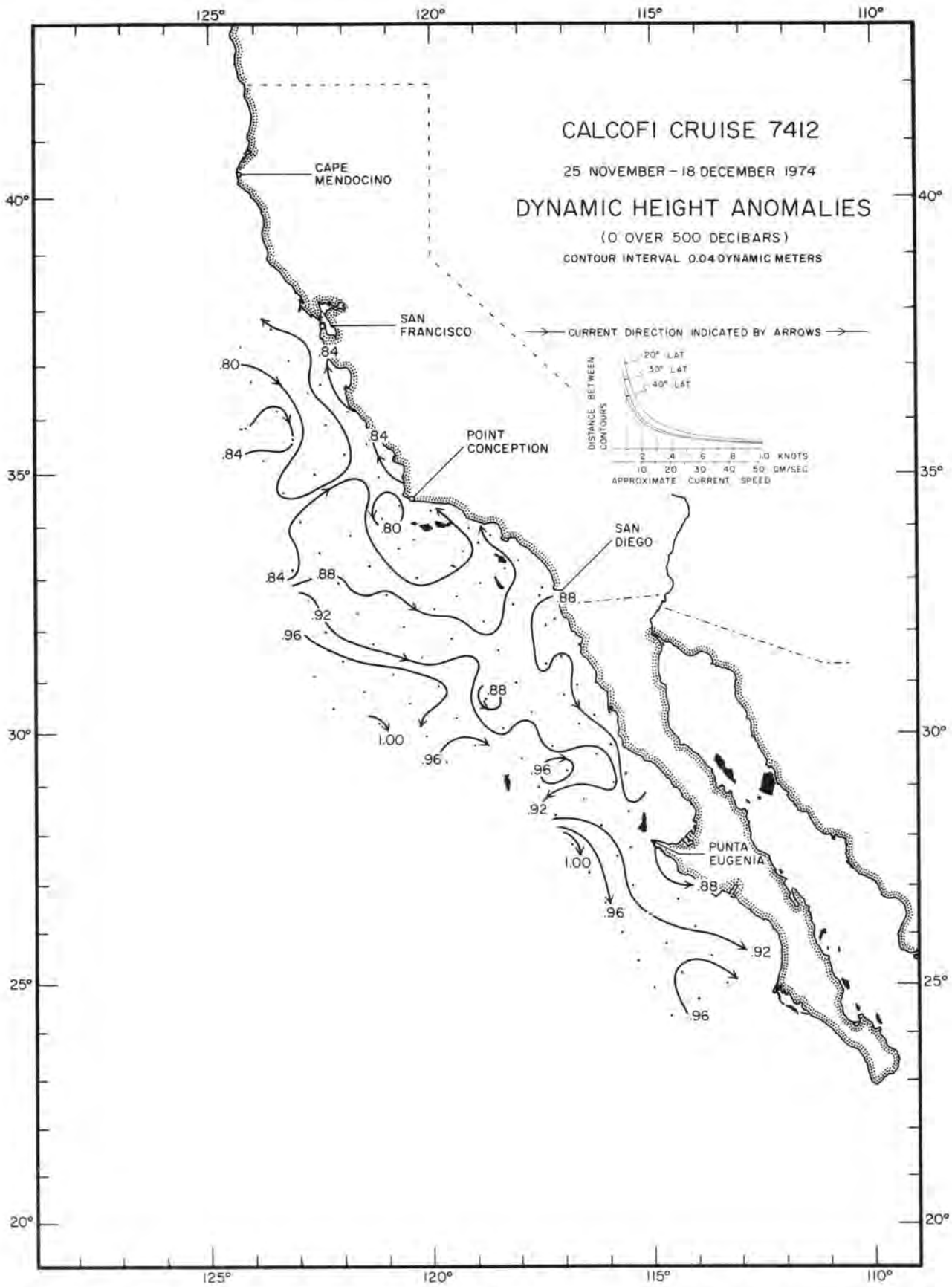


FIGURE 2

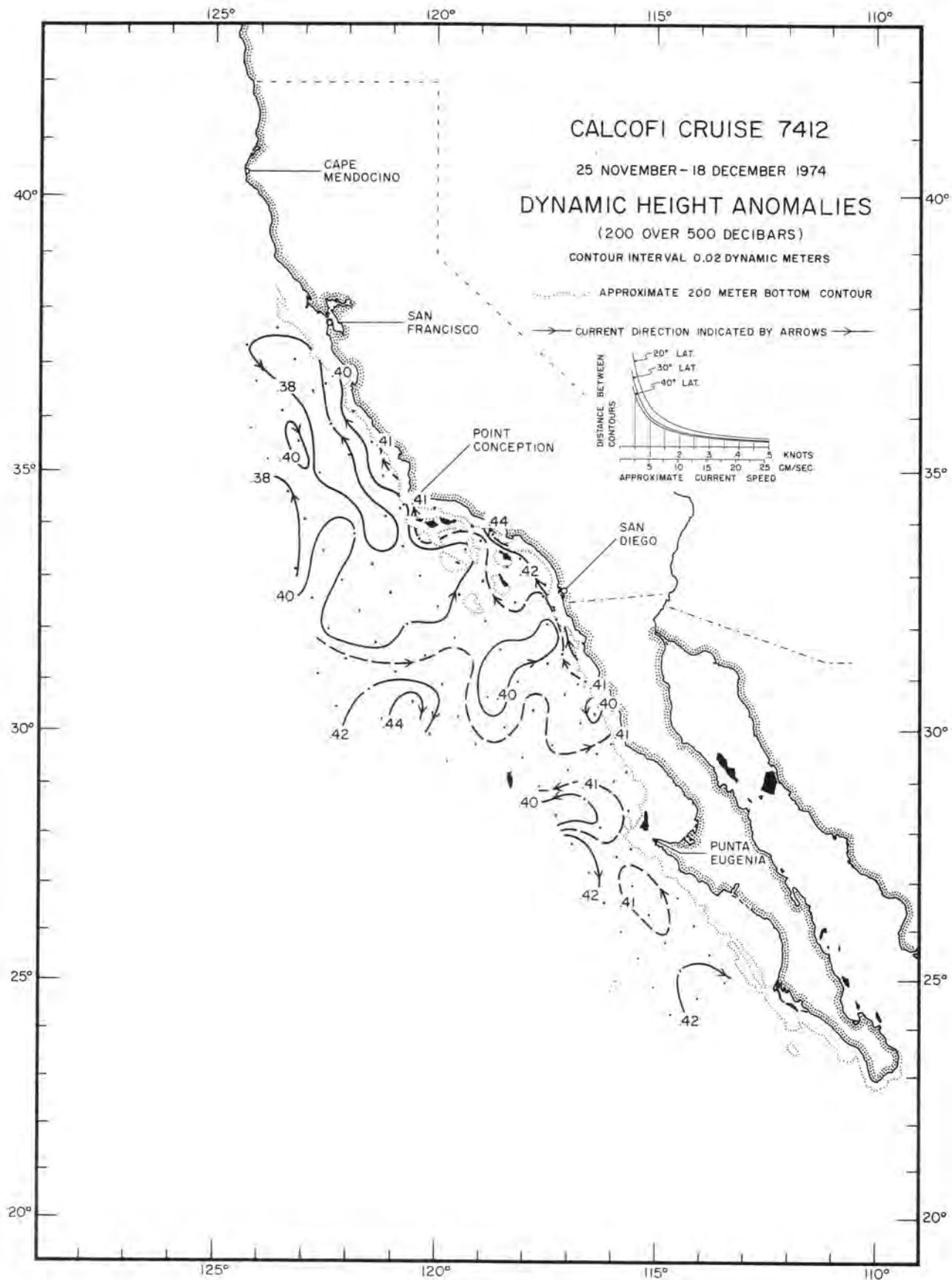


FIGURE 3

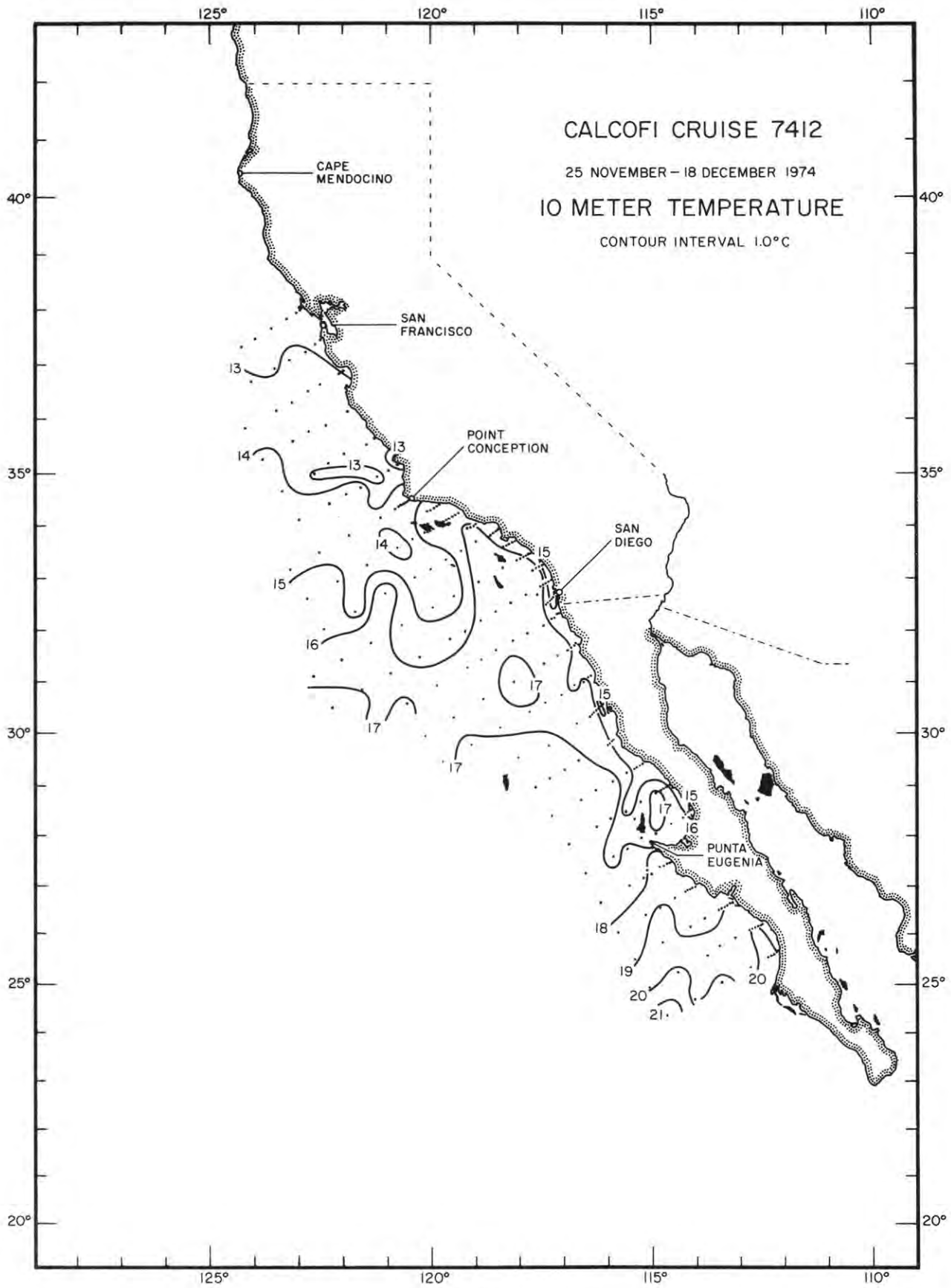


FIGURE 4

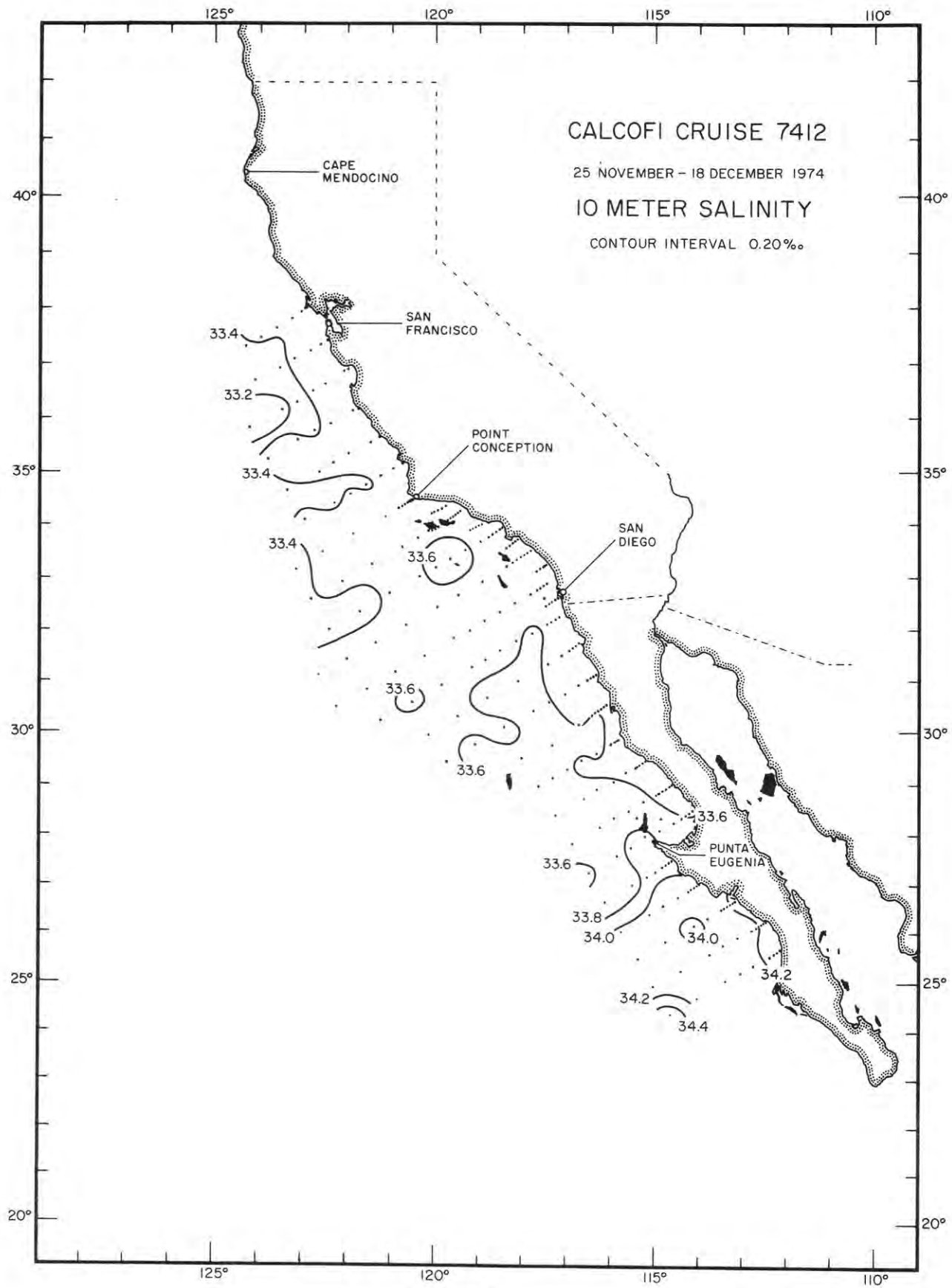


FIGURE 5

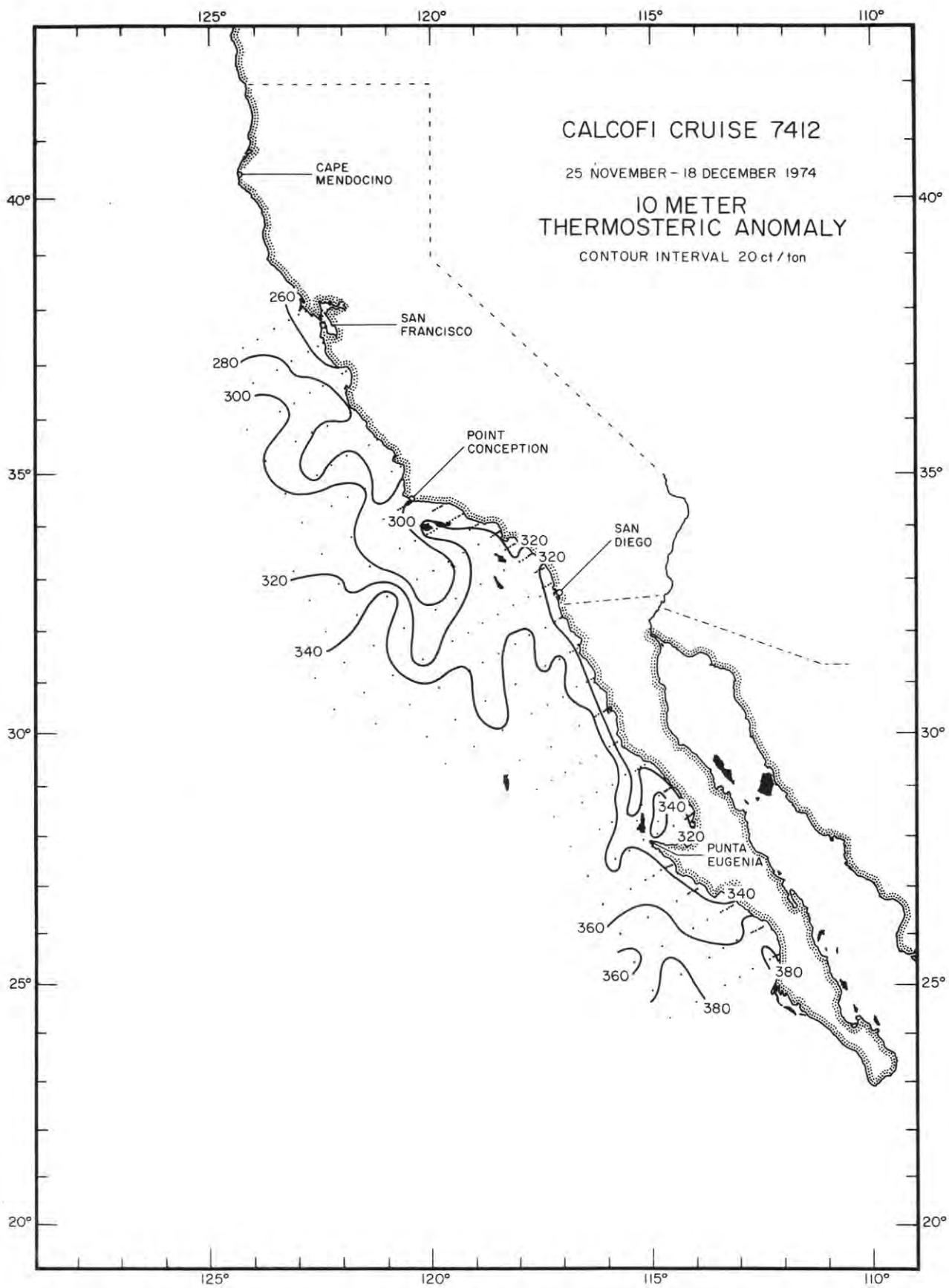


FIGURE 6

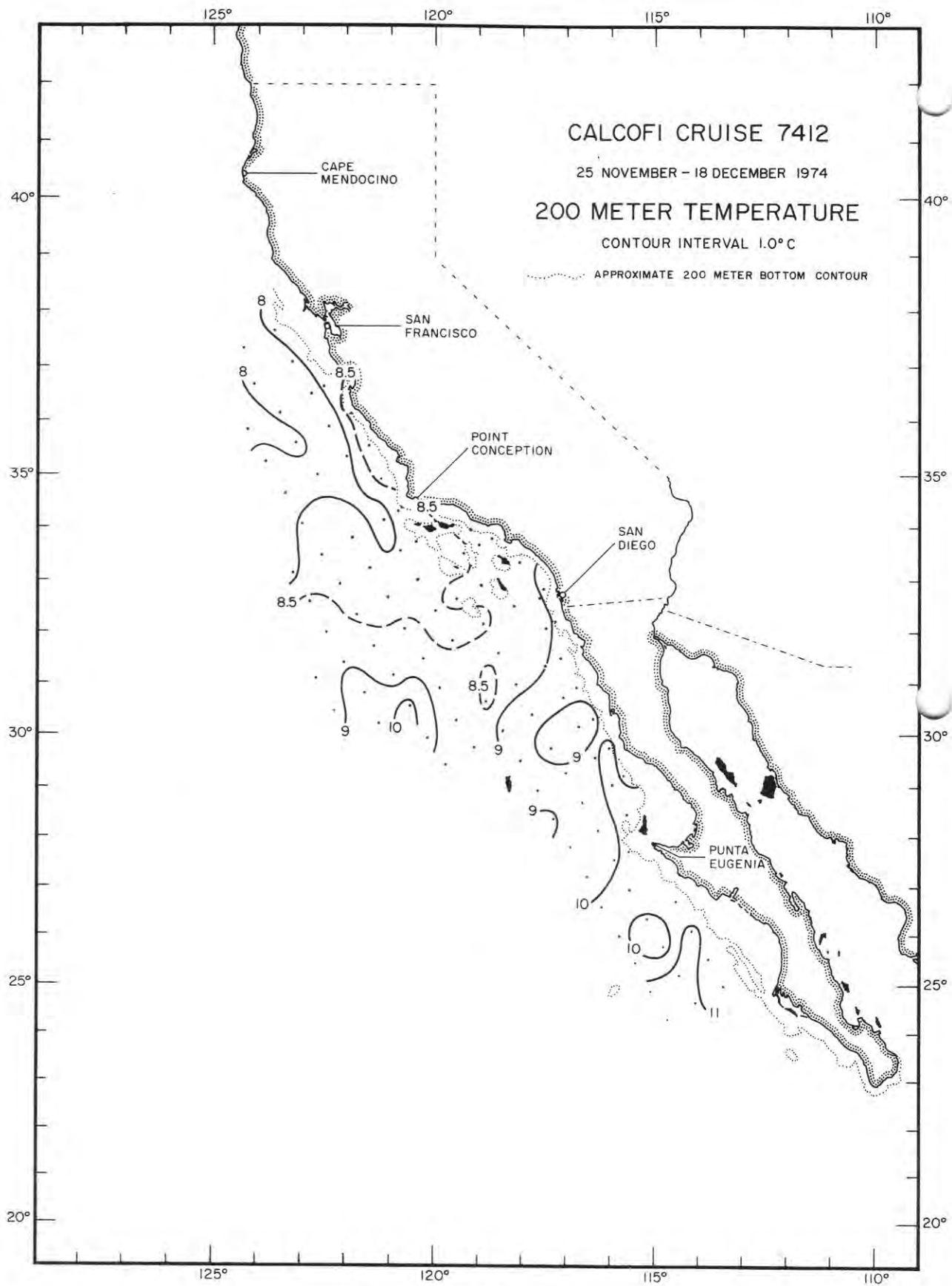


FIGURE 7

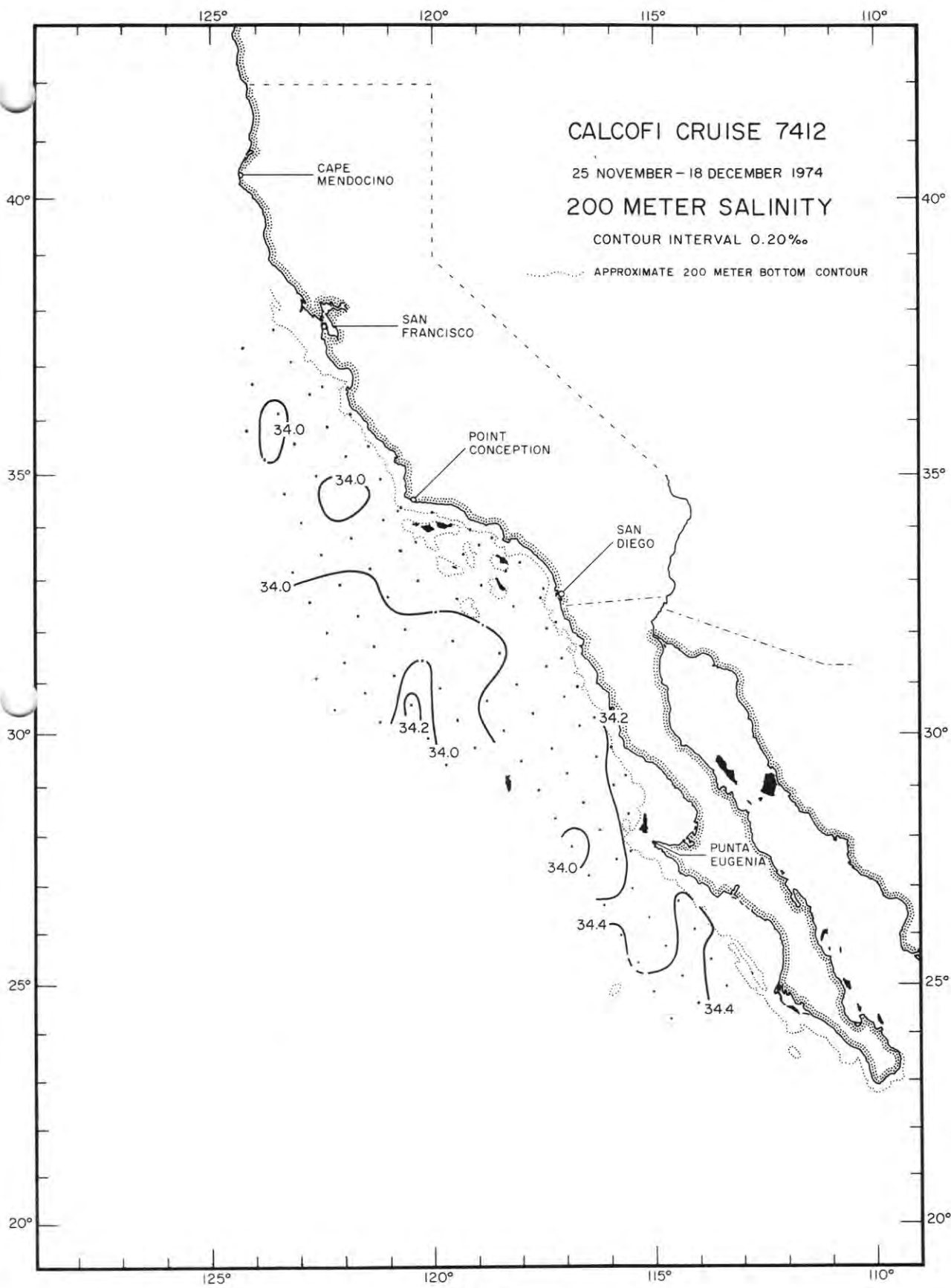


FIGURE 8

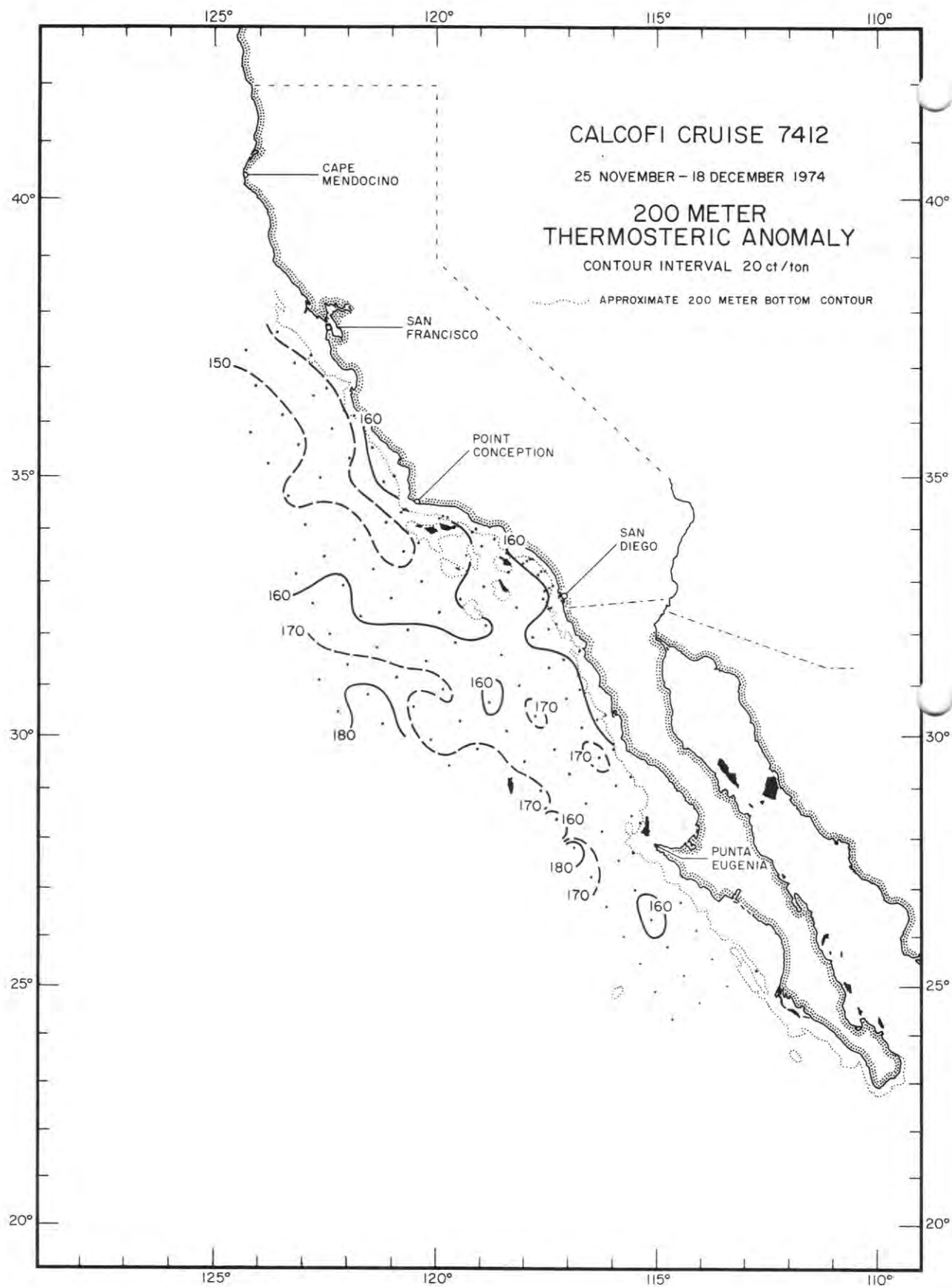


FIGURE 9

PERSONNEL

Cruise 7412

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

Muus, David A. (in charge)	Staff Research Associate, SIO
Matsui, Tetsuo (in charge)	Associate Specialist, SIO
Burnett, Bryan R.	Graduate Student, SIO
Castro, Noberto C.	Student, UCM
Costello, James P.	Staff Research Associate, SIO
Hayward, Thomas L.	Assistant Research Oceanographer, SIO
Kaye, H. Ross	Electronics Technician, SIO
Kimura, Makoto	Fishery Biologist, NMFS
McConnaughey, Ronald E.	Marine Technician, SIO
Pringle, Patrick T.	Volunteer
Purdue, Andrea K.	Graduate Student, Moss Landing Marine Lab.
Thomas, James E.	Marine Technician, SIO
Wilhelmy, Sergio S.	Student, UCM

RV David Starr Jordan

Counts, Robert C. (in charge)	Fishery Biologist, NMFS
Butler, John L.	Technician, Smithsonian Institute
Cioni, Philip G.	Student, Pitzer College
Conway, Carol B.	Engineering Aide, SIO
Mead, Richard V.	Marine Technician, SIO
Metoyer, Jack D.	Biological Technician, NMFS
Murdock, Don	Electronics Engineer, NUC
Patla, Susan M.	Marine Technician, SIO
Rangel Davalos, Carlos	Student, UCM
Robles, Jose M.	Oceanologist, INP
Rocha Coghlan, Eduardo	Student, UCM

60052			RV ALEXANDER AGASSIZ		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 53.5N	123 02.0W	12/09/74	0612 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
76M	020	7KT			
Z	T	S	SIGMA T	DT	DD
0	11.72	32.89	25.026	294.2	0.000
10	12.05	33.51	25.444	254.4	0.027
20	12.03	33.51	25.448	254.0	0.052
30	11.99	33.52	25.463	252.6	0.078
40	11.93	33.53	25.482	250.8	0.103
50	11.92	33.52	25.476	251.4	0.128
71	11.18	33.49	25.589	240.6	0.180

CALCOFI CRUISE 7412			60060		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 37.0N	123 36.5W	12/09/74	0030 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3344M	350	11KT	1	330	5 5
Z	T	S	SIGMA T	DT	DD
0	12.94	33.41	25.195	278.1	0.000
10	12.94	33.41	25.195	278.1	0.027
20	12.93	33.41	25.197	277.9	0.055
30	12.57	33.39	25.252	272.7	0.083
40	12.01	33.47	25.421	256.6	0.109
50	11.08	33.51	25.623	237.4	0.134
75	9.62	33.77	26.076	194.3	0.188
100	9.19	33.86	26.217	181.0	0.236
125	8.80	33.94	26.341	169.2	0.280
150	8.53	34.00	26.430	160.7	0.322
175	8.29	34.03	26.490	155.0	0.362
200	8.17	34.04	26.516	152.5	0.401
225	7.96	34.06	26.563	148.1	0.440
250	7.74	34.08	26.611	143.5	0.477
275	7.50	34.11	26.669	138.0	0.514
300	7.32	34.12	26.703	134.8	0.549
350	6.74	34.16	26.814	124.2	0.616
400	6.45	34.17	26.860	119.8	0.680
450	6.08	34.18	26.917	114.6	0.742
500	5.78	34.24	27.001	106.5	0.800
550	5.46	34.24	27.041	102.8	0.856
600	5.18	34.27	27.098	97.4	0.909
700	4.85	34.34	27.191	88.5	1.009
800	4.42	34.38	27.271	81.0	1.102
900	4.03	34.42	27.344	74.0	1.187
1000	3.79	34.44	27.384	70.2	1.268

60070			RV ALEXANDER AGASSIZ		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 17.5N	124 18.5W	12/08/74	1823 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3970M	350	8KT	2	340	3 3
Z	T	S	SIGMA T	DT	DD
0	12.24	33.38	25.307	267.4	0.000
10	12.22	33.38	25.311	267.1	0.026
20	12.21	33.38	25.313	266.9	0.053
30	12.20	33.38	25.315	266.7	0.080
40	12.11	33.36	25.317	266.5	0.106
50	11.90	33.42	25.403	258.3	0.133
75	9.74	33.56	25.893	211.7	0.192
100	8.94	33.79	26.202	182.4	0.242
125	8.60	33.88	26.325	170.7	0.286
150	8.26	33.98	26.456	158.3	0.328
175	8.13	34.02	26.506	153.5	0.368
200	7.84	34.05	26.573	147.1	0.406
225	7.54	34.05	26.616	143.0	0.443
250	7.20	34.06	26.672	137.7	0.479
275	7.10	34.12	26.733	131.9	0.514
300	6.93	34.13	26.765	128.9	0.548
350	6.52	34.17	26.851	120.7	0.613
400	5.84	34.14	26.915	114.7	0.674
450	5.61	34.19	26.983	108.2	0.732
500	5.52	34.24	27.033	103.5	0.788
550	5.22	34.26	27.085	98.5	0.842
600	4.98	34.27	27.121	95.2	0.894
700	4.64	34.33	27.207	87.0	0.992
800	4.35	34.37	27.270	81.0	1.083
900	3.98	34.41	27.341	74.3	1.169
1000	3.72	34.44	27.391	69.5	1.249

CALCOFI CRUISE 7412			63052		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 19.0N	122 36.0W	12/08/74	0050 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
82M	340	19KT	4	300	3 5
Z	T	S	SIGMA T	DT	DD
0	12.32	33.53	25.408	257.8	0.000
10	12.32	33.53	25.408	257.8	0.025
20	12.32	33.53	25.408	257.8	0.051
30	12.15	33.52	25.433	255.5	0.077
40	11.96	33.51	25.461	252.8	0.102
50	11.91	33.53	25.486	250.4	0.128
72	11.79	33.54	25.516	247.6	0.183

63055 RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 12.5N	122 50.0W	12/08/74	0252 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
308M	330	20KT	2		
Z	T	S	SIGMA T	DT	DD
0	13.06	33.49	25.233	274.5	0.000
10	13.06	33.49	25.233	274.5	0.027
20	13.06	33.49	25.233	274.5	0.054
30	13.05	33.48	25.227	275.1	0.082
40	12.43	33.52	25.379	260.6	0.109
50	12.04	33.49	25.431	255.7	0.135
75	10.30	33.69	25.899	211.1	0.194
100	9.73	33.78	26.066	195.3	0.245
125	9.34	33.85	26.176	184.8	0.293
150	9.05	33.88	26.255	177.4	0.339
175	8.65	33.98	26.396	164.0	0.382
200	8.44	34.02	26.459	157.9	0.423
225	8.06	34.07	26.556	148.7	0.463
250	7.70	34.09	26.624	142.2	0.500
275	7.46	34.12	26.683	136.7	0.536
295	6.93	34.15	26.780	127.4	0.563

CALCOFI CRUISE 7412 63060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
37 03.0N	123 12.0W	12/08/74	0552 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2539M	330	18KT	2		
Z	T	S	SIGMA T	DT	DD
0	13.06	33.44	25.194	278.2	0.000
10	13.06	33.44	25.194	278.2	0.027
20	13.06	33.44	25.194	278.2	0.055
30	13.06	33.44	25.194	278.2	0.083
40	12.74	33.44	25.257	272.2	0.111
50	11.47	33.52	25.560	243.4	0.137
75	9.68	33.62	25.949	206.3	0.193
100	9.04	33.77	26.170	185.4	0.243
125	8.51	33.90	26.355	167.8	0.287
150	8.16	33.99	26.478	156.1	0.328
175	7.80	33.99	26.532	151.1	0.367
200	7.50	34.04	26.614	143.2	0.405
225	7.24	34.08	26.682	136.7	0.441
250	7.16	34.12	26.725	132.7	0.475
275	7.02	34.15	26.768	128.6	0.509
300	6.70	34.13	26.796	126.0	0.542
350	6.04	34.14	26.890	117.1	0.605
400	5.57	34.15	26.956	110.8	0.665
450	5.31	34.17	27.003	106.3	0.721
500	5.11	34.22	27.066	100.3	0.776
550	5.16	34.29	27.116	95.6	0.828
600	5.04	34.33	27.161	91.3	0.878
700	4.70	34.36	27.224	85.4	0.973
800	4.38	34.41	27.298	78.3	1.063
900	4.09	34.43	27.345	73.9	1.147
1000	3.74	34.46	27.405	68.2	1.227

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME					
36 39.5N	124 04.0W	12/08/74	1308 GMT					
Z	T	S	U2	P04	S103	N02	N03	DT
1	13.07	33.231	6.19					293.7
11	13.08	33.231	6.21					293.9
31	12.98	33.243	5.79					291.2
55	12.30	33.294	5.97					274.8
70	10.61	33.413	4.66					236.7
85	9.72	33.637	3.95					205.7
99	9.20	33.754	3.82					189.0
129	8.69	33.858	3.54					173.6
153	8.37	33.956	2.94					161.7
177	8.19	33.977	2.66					157.5
211	7.77	34.009	2.54					149.2
275	7.11	34.048	1.85					137.4
371	5.61	34.012	1.62					121.6
467	4.77	34.068	1.16					108.1
568	5.02	34.278	0.37					95.0
693	4.69	34.357	0.31					85.5
843	4.22	34.412	0.32					76.5
995	3.82	34.461	0.52					68.9

CALCOFI CRUISE 7412 63072

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3918M	340	15KT				
Z	T	S	O2	SIGT	DT	DD
0	13.07	33.231	6.19	25.031	293.7	0.000
10	13.07	33.233	6.20	25.029	293.9	0.029
20	13.03	33.238	6.02	25.042	292.7	0.058
30	12.98	33.244	5.81	25.057	291.3	0.088
50	12.44	33.284	5.93	25.194	278.2	0.145
75	10.24	33.489	4.35	25.751	225.2	0.208
100	9.17	33.760	3.81	26.140	188.2	0.260
125	8.73	33.850	3.59	26.281	174.8	0.306
150	8.40	33.946	3.01	26.406	162.9	0.349
200	7.91	33.999	2.57	26.522	152.0	0.429
250	7.37	34.038	2.13	26.630	141.7	0.504
300	6.71	34.039	1.75	26.721	133.1	0.575
400	5.26	34.017	1.50	26.888	117.3	0.705
500	4.81	34.136	0.88	27.033	103.5	0.820
600	4.97	34.309	0.35	27.153	92.1	0.924
700	4.66	34.360	0.31	27.227	85.0	1.020
800	4.35	34.399	0.31	27.292	78.9	1.109
1000	3.78	34.470		27.409	67.8	1.273

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LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
36 39.5N	124 04.0W	12/08/74	1210 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3918M	340	15KT			
Z	T	S	SIGMA T	DT	DD
0	13.05	33.24	25.042	292.7	0.000
10	13.04	33.24	25.044	292.5	0.029
20	12.99	33.25	25.061	290.8	0.058
30	12.79	33.26	25.108	286.3	0.087
40	12.51	33.27	25.171	280.4	0.115
50	12.33	33.28	25.213	276.4	0.143
75	10.14	33.53	25.802	220.3	0.206
100	9.23	33.73	26.109	191.2	0.258
125	8.74	33.87	26.296	173.5	0.304
150	8.47	33.97	26.416	162.1	0.346
175	8.22	33.99	26.469	157.0	0.387
200	7.93	34.02	26.536	150.7	0.426
225	7.67	34.02	26.574	147.0	0.464
250	7.42	34.06	26.641	140.7	0.501
275	7.22	34.07	26.677	137.2	0.537
300	6.68	34.03	26.720	133.2	0.572
350	6.30	34.03	26.770	128.4	0.640
400	5.50	34.04	26.878	118.2	0.704
450	4.90	34.05	26.956	110.8	0.763
500	4.70	34.12	27.034	103.4	0.819
550	4.98	34.27	27.121	95.2	0.872
600	5.01	34.32	27.157	91.7	0.922
700	4.68	34.37	27.234	84.4	1.017
800	4.34	34.40	27.295	78.6	1.106
900	4.04	34.43	27.350	73.4	1.190
1000	3.81	34.46	27.398	68.9	1.270

CALCOFI CRUISE 7412 67050

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
36 49.0N	122 04.5W	12/07/74	1758 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
97M	050	6KT	0	280 3 5	
Z	T	S	SIGMA T	DT	DD
0	13.09	33.46	25.204	277.3	0.000
10	13.07	33.46	25.208	276.9	0.027
20	12.95	33.49	25.255	272.4	0.055
30	12.60	33.52	25.346	263.7	0.082
40	12.58	33.52	25.350	263.3	0.108
50	12.57	33.52	25.352	263.2	0.134
75	12.52	33.53	25.370	261.5	0.200
100	12.51	33.53	25.372	261.3	0.266

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
36 36.0N		122 30.5W		12/07/74		1430 GMT		2932M		340		18KT					
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD		
1	13.27	33.412	6.08					284.2	0	13.27	33.412	6.08	25.131	284.2	0.000		
11	13.26	33.409	6.14					284.3	10	13.26	33.411	6.13	25.130	284.2	0.028		
31	13.15	33.417	6.08					281.6	20	13.22	33.413	6.11	25.139	283.5	0.056		
56	12.80	33.434	5.92					273.7	30	13.15	33.418	6.08	25.156	281.8	0.085		
70	11.47	33.518	4.90					243.5	50	12.88	33.431	5.95	25.221	275.6	0.141		
85	9.98	33.667	3.85					207.6	75	10.91	33.567	4.51	25.695	230.6	0.204		
100	9.56	33.766	3.43					193.7	100	9.56	33.766	3.43	26.083	193.7	0.258		
129	9.04	33.867	3.12					178.2	125	9.09	33.857	3.14	26.230	179.7	0.305		
154	8.82	33.960	2.78					168.0	150	8.85	33.946	2.83	26.337	169.5	0.349		
178	8.48	34.035	2.40					157.4	200	8.15	34.062	2.18	26.535	150.7	0.431		
212	7.99	34.068	2.09					147.9	250	7.62	34.096	1.79	26.640	140.8	0.506		
276	7.42	34.111	1.61					136.8	300	7.18	34.128	1.42	26.727	132.5	0.576		
373	6.53	34.179	0.94					120.2	400	6.36	34.199	0.83	26.894	116.6	0.706		
469	5.99	34.248	0.64					108.4	500	5.77	34.271	0.55	27.026	104.1	0.823		
570	5.31	34.316	0.40					95.4	600	5.16	34.327	0.38	27.144	92.9	0.928		
695	4.78	34.351	0.33					86.9	700	4.76	34.353	0.33	27.211	86.6	1.025		
846	4.26	34.411	0.36					77.0	800	4.40	34.392	0.35	27.282	79.9	1.116		
1000	3.84	34.460	0.53					69.2	1000	3.84	34.460	0.53	27.395	69.2	1.282		

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RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

67060

LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME					
36 36.0N		122 30.5W		12/07/74		1326 GMT		36 28.0N		122 47.0W		12/07/74		1001 GMT					
BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
2932M		340		18KT						3083M		340		15KT		4			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD								
0	13.28	33.42	25.135	283.8	0.000	0	13.17	33.44	25.172	280.3	0.000								
10	13.28	33.42	25.135	283.8	0.028	10	13.17	33.44	25.172	280.3	0.028								
20	13.28	33.42	25.135	283.8	0.056	20	13.17	33.45	25.180	279.5	0.056								
30	13.29	33.42	25.133	284.0	0.085	30	13.15	33.44	25.176	279.9	0.084								
40	13.09	33.43	25.180	279.5	0.113	40	13.10	33.44	25.186	278.9	0.112								
50	13.03	33.44	25.200	277.6	0.141	50	12.86	33.42	25.218	275.9	0.140								
75	11.08	33.49	25.607	238.9	0.206	75	9.86	33.63	25.927	208.4	0.200								
100	9.69	33.72	26.026	199.1	0.261	100	9.09	33.78	26.170	185.4	0.250								
125	9.15	33.87	26.231	179.6	0.309	125	8.65	33.91	26.341	169.2	0.295								
150	8.80	33.97	26.364	166.9	0.353	150	8.23	33.99	26.468	157.1	0.336								
175	8.51	34.05	26.472	156.7	0.394	175	8.00	34.00	26.510	153.1	0.376								
200	8.07	34.08	26.562	148.2	0.433	200	7.71	34.03	26.576	146.9	0.414								
225	7.79	34.10	26.619	142.7	0.471	225	7.36	34.04	26.634	141.3	0.451								
250	7.51	34.12	26.675	137.4	0.507	250	7.02	34.07	26.705	134.6	0.486								
275	7.40	34.13	26.699	135.2	0.542	275	6.79	34.08	26.744	130.9	0.521								
300	7.18	34.16	26.754	130.0	0.576	300	6.60	34.11	26.793	126.2	0.554								
350	6.75	34.19	26.836	122.2	0.641	350	6.21	34.14	26.868	119.1	0.617								
400	6.43	34.22	26.903	115.9	0.704	400	5.86	34.16	26.928	113.4	0.678								
450	6.11	34.25	26.968	109.7	0.763	450	5.62	34.18	26.974	109.1	0.736								
500	5.76	34.28	27.035	103.2	0.819	500	5.45	34.23	27.034	103.4	0.792								
550	5.37	34.29	27.091	98.0	0.873	550	5.38	34.30	27.098	97.4	0.846								
600	5.24	34.33	27.138	93.5	0.924	600	5.14	34.32	27.142	93.2	0.897								
700	4.83	34.35	27.201	87.5	1.022	700	4.76	34.35	27.209	86.8	0.994								
800	4.39	34.40	27.290	79.2	1.113	800	4.45	34.39	27.275	80.5	1.086								
900	4.10	34.42	27.336	74.7	1.199	900	4.07	34.43	27.347	73.7	1.171								
1000	3.81	34.46	27.398	68.7	1.279	1000	3.75	34.45	27.396	69.1	1.251								

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RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

67080

LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME					
36 07.5N		123 29.0W		12/07/74		0348 GMT		35 48.0N		124 12.0W		12/06/74		2255 GMT					
BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
3656M		020		11KT		4				3965M		320		7KT		4		280 3 5	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD								
0	13.71	33.08	24.786	317.1	0.000	0	13.53	33.09	24.830	312.9	0.000								
10	13.71	33.09	24.793	316.3	0.031	10	13.35	33.10	24.874	308.7	0.031								
20	13.67	33.13	24.832	312.6	0.063	20	13.48	33.16	24.894	306.8	0.061								
30	13.60	33.14	24.854	310.5	0.094	30	13.52	33.23	24.940	302.4	0.092								
40	13.53	33.15	24.876	308.5	0.125	40	13.14	33.30	25.070	290.0	0.122								
50	13.33	33.16	24.924	303.9	0.156	50	12.56	33.35	25.223	275.5	0.150								
75	10.70	33.09	25.364	262.0	0.227	75	10.39	33.54	25.767	223.7	0.213								
100	9.27	33.33	25.790	221.5	0.288	100	9.57	33.66	25.999	201.7	0.266								
125	9.10	33.77	26.161	186.3	0.339	125	9.29	33.83	26.177	184.7	0.315								
150	8.66	33.87	26.308	172.3	0.385	150	8.93	33.94	26.321	171.1	0.360								
175	8.22	33.96	26.446	159.2	0.427	175	8.65	34.00	26.411	162.5	0.403								
200	7.78	33.99	26.535	150.8	0.466	200	8.34	34.03	26.482	155.7	0.444								
225	7.43	33.98	26.577	146.7	0.504	225	8.15	34.08	26.550	149.3	0.483								
250	7.48	34.07	26.641	140.7	0.541	250	7.88	34.11	26.614	143.3	0.520								
275	7.48	34.11	26.672	137.7	0.577	275	7.56	34.13	26.676	137.3	0.556								
300	6.82	34.02	26.693	135.7	0.613	300	7.35	34.14	26.714	133.8	0.591								
350	5.91	34.01	26.804	125.2	0.680	350	6.87	34.17	26.804	125.2	0.659								
400	5.98	34.13	26.890	117.1	0.743	400	6.47	34.21	26.889	117.1	0.722								
450	5.94	34.18	26.934	112.9	0.803	450	6.14	34.22	26.940	112.3	0.782								
500	5.48	34.18	26.991	107.5	0.861	500	5.74	34.23	26.999	106.7	0.840								
550	5.30	34.23	27.052	101.7	0.917	550	5.57	34.29	27.067	100.3	0.895								
600	4.98	34.26	27.113	95.9	0.970	600	5.18	34.29	27.113	95.9	0.948								
700	4.56	34.31	27.200	87.7	1.068	700	4.86	34.34	27.190	88.6	1.047								
800	4.38	34.38	27.275	80.6	1.160	800	4.47	34.39	27.273	80.7	1.140								
900	4.14	34.42	27.332	75.1	1.246	900	4.17	34.42	27.329	75.4	1.226								
1000	3.86	34.45	27.385	70.1	1.327	1000	3.83	34.42	27.364	72.1	1.309								

70053		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				70060				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
36 07.0N	121 53.0W	12/06/74	0108 GMT		35 52.5N	122 23.0W	12/06/74	0500 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
973M	310	10KT	1	320	4 5	3099M	340	2KT	1					
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD			
0	13.95	33.42	24.998	296.8	0.000	0	13.36	33.48	25.165	281.0	0.000			
10	13.87	33.43	25.022	294.5	0.029	10	13.18	33.48	25.201	277.5	0.027			
20	13.85	33.42	25.019	294.9	0.059	20	13.15	33.49	25.215	276.2	0.055			
30	13.81	33.43	25.035	293.3	0.088	30	13.15	33.49	25.215	276.2	0.083			
40	13.48	33.45	25.118	285.5	0.117	40	12.92	33.50	25.268	271.1	0.110			
50	12.35	33.50	25.379	260.6	0.145	50	11.42	33.42	25.491	249.9	0.136			
75	10.21	33.64	25.876	213.3	0.204	75	9.70	33.69	26.001	201.5	0.193			
100	9.60	33.80	26.103	191.8	0.255	100	9.25	33.88	26.223	180.4	0.241			
125	9.30	33.90	26.230	179.7	0.302	125	8.87	33.97	26.353	168.0	0.286			
150	9.06	33.96	26.315	171.6	0.347	150	8.50	34.01	26.442	159.5	0.327			
175	8.80	33.99	26.380	165.4	0.390	175	8.19	34.05	26.521	152.1	0.367			
200	8.61	34.03	26.441	159.7	0.431	200	7.85	34.04	26.563	148.0	0.405			
225	8.35	34.08	26.520	152.2	0.471	225	7.50	34.08	26.646	140.2	0.442			
250	8.12	34.07	26.547	149.6	0.510	250	7.33	34.12	26.701	135.0	0.477			
275	7.84	34.09	26.604	144.2	0.548	275	7.02	34.11	26.737	131.6	0.512			
300	7.40	34.10	26.675	137.4	0.584	300	6.74	34.11	26.775	128.0	0.545			
350	6.90	34.15	26.784	127.1	0.653	350	6.44	34.16	26.854	120.5	0.610			
400	6.42	34.16	26.857	120.2	0.717	400	6.02	34.16	26.908	115.3	0.671			
450	6.08	34.20	26.932	113.0	0.779	450	5.59	34.19	26.985	108.0	0.730			
500	5.91	34.26	27.001	106.5	0.837	500	5.38	34.25	27.058	101.1	0.785			
550	5.57	34.30	27.075	99.5	0.892	550	4.86	34.22	27.095	97.6	0.838			
600	5.38	34.31	27.106	96.6	0.944	600	4.71	34.26	27.144	93.0	0.888			
700	4.94	34.36	27.197	88.0	1.044	700	4.75	34.36	27.218	85.9	0.985			
800	4.51	34.40	27.277	80.4	1.136	800	4.31	34.41	27.306	77.6	1.074			
894	4.28	34.42	27.317	76.5	1.218	900	4.04	34.44	27.359	72.6	1.157			
						1000	3.72	34.47	27.415	67.3	1.236			

70070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				70070					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
35 34.5N	123 07.0W	12/06/74	1238	GMT	3802M	200	4KT	2							
Z	T	S	02	04	103	02	03	DT	Z	T	S	02	SIGT	DT	DD
0	13.64	33.500	6.34					284.9	0	13.64	33.500	6.34	25.124	284.9	0.000
10	13.51	33.504	6.19					282.1	10	13.51	33.504	6.19	25.153	282.1	0.028
30	13.48	33.506	6.01					281.4	20	13.49	33.506	6.10	25.157	281.7	0.056
55	11.60	33.565	4.35					242.4	30	13.48	33.506	6.01	25.161	281.4	0.084
70	10.44	33.659	3.75					215.7	50	12.06	33.545	4.71	25.468	252.1	0.138
85	10.03	33.709	3.57					205.3	75	10.25	33.680	3.66	25.898	211.2	0.196
100	9.75	33.759	3.36					197.2	100	9.75	33.759	3.36	26.046	197.2	0.248
129	9.44	33.849	3.03					185.6	125	9.47	33.838	3.07	26.152	187.1	0.296
154	9.13	33.916	2.79					175.9	150	9.18	33.906	2.82	26.253	177.5	0.343
178	8.83	33.985	2.51					166.3	200	8.62	34.031	2.34	26.439	159.8	0.428
212	8.52	34.048	2.27					157.0	250	8.18	34.072	2.11	26.539	150.4	0.508
276	7.95	34.077	2.01					146.7	300	7.69	34.092	1.82	26.626	142.1	0.584
373	6.95	34.143	1.22					128.2	400	6.72	34.164	1.02	26.819	123.8	0.722
470	6.20	34.215	0.63					113.4	500	6.01	34.238	0.53	26.970	109.4	0.845
566	5.62	34.279	0.41					101.7	600	5.37	34.285	0.36	27.086	98.4	0.956
696	4.76	34.303	0.29					90.3	700	4.74	34.305	0.29	27.175	90.0	1.057
846	4.33	34.406	0.34					78.1	800	4.39	34.367	0.32	27.262	81.7	1.151

70070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				70080				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
35 34.5N	123 07.0W	12/06/74	1120 GMT		35 13.5N	123 48.0W	12/06/74	1727 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
3802M	200	4KT	2			4078M	220	5KT	1					
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD			
0	13.66	33.51	25.127	284.6	0.000	0	14.13	33.43	24.968	299.7	0.000			
10	13.65	33.52	25.137	283.6	0.028	10	14.13	33.43	24.968	299.7	0.029			
20	13.50	33.52	25.167	280.7	0.056	20	13.69	33.46	25.083	288.8	0.059			
30	13.47	33.52	25.173	280.2	0.084	30	13.57	33.46	25.107	286.5	0.088			
40	12.93	33.50	25.266	271.3	0.112	40	12.85	33.51	25.290	269.1	0.116			
50	12.93	33.50	25.266	271.3	0.139	50	11.77	33.45	25.450	253.8	0.142			
75	10.42	33.66	25.856	215.3	0.200	75	9.70	33.59	25.923	208.9	0.200			
100	9.82	33.77	26.043	197.5	0.252	100	9.22	33.76	26.134	188.9	0.250			
125	9.47	33.86	26.171	185.3	0.301	125	8.84	33.87	26.280	175.0	0.296			
150	9.04	33.96	26.319	171.3	0.346	150	8.54	33.96	26.397	163.8	0.339			
175	8.76	34.02	26.410	162.6	0.389	175	8.12	33.97	26.469	157.0	0.380			
200	8.49	34.07	26.491	154.9	0.429	200	7.82	34.00	26.537	150.6	0.419			
225	8.30	34.09	26.535	150.7	0.468	225	7.57	34.01	26.581	146.4	0.457			
250	8.06	34.08	26.564	148.0	0.507	250	7.35	34.03	26.628	141.9	0.494			
275	7.74	34.11	26.635	141.3	0.544	275	7.11	34.05	26.677	137.3	0.530			
300	7.63	34.15	26.682	136.8	0.580	300	6.89	34.06	26.715	133.6	0.565			
350	7.25	34.14	26.728	132.4	0.650	350	6.48	34.12	26.817	124.0	0.632			
400	6.64	34.12	26.796	126.0	0.717	400	6.18	34.17	26.896	116.5	0.695			
450	6.31	34.22	26.918	114.4	0.781	450	5.83	34.19	26.956	110.8	0.754			
500	5.85	34.21	26.969	109.6	0.840	500	5.47	34.20	27.008	105.9	0.812			
550	5.60	34.26	27.039	102.9	0.896	550	5.15	34.24	27.077	99.3	0.866			
600	5.37	34.29	27.091	98.0	0.950	600	5.15	34.30	27.125	94.8	0.918			
700	4.65	34.33	27.206	87.1	1.050	700	4.49	34.33	27.223	85.4	1.015			
800	4.49	34.40	27.279	80.2	1.141	800	4.22	34.38	27.292	78.9	1.105			
900	4.14	34.44	27.348	73.6	1.226	900	3.93	34.42	27.354	73.1	1.188			
1000	3.87	34.47	27.400	68.7	1.306	1000	3.68	34.45	27.403	68.4	1.267			

73053		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				73060	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
35 31.5N	121 28.5W	12/05/74	1702 GMT		35 19.0N	121 58.0W	12/05/74	1248 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
726M		OKT	0	280 4 4		2728M	340	10KT	1		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.05	33.47	25.219	275.8	0.000	0	13.55	33.48	25.126	284.6	0.000
10	13.03	33.47	25.223	275.4	0.027	10	13.55	33.48	25.126	284.6	0.028
20	13.00	33.47	25.229	274.8	0.055	20	13.53	33.48	25.131	284.2	0.056
30	12.99	33.48	25.239	273.9	0.082	30	13.52	33.48	25.133	284.0	0.085
40	12.99	33.48	25.239	273.9	0.110	40	13.52	33.48	25.133	284.0	0.113
50	12.97	33.48	25.243	273.5	0.137	50	13.52	33.49	25.140	283.3	0.142
75	10.57	33.63	25.806	220.0	0.199	75	9.67	33.67	25.990	202.5	0.203
100	10.11	33.70	25.940	207.3	0.253	100	9.04	33.82	26.209	181.7	0.251
125	9.42	33.84	26.164	186.0	0.303	125	8.70	33.92	26.341	169.2	0.296
150	9.10	33.95	26.301	172.9	0.348	150	8.51	33.99	26.425	161.2	0.338
175	8.78	34.00	26.391	164.4	0.391	175	8.19	34.06	26.529	151.3	0.378
200	8.57	34.01	26.432	160.6	0.433	200	7.97	34.09	26.585	146.0	0.416
225	8.17	34.06	26.531	151.1	0.473	225	7.71	34.12	26.647	140.1	0.452
250	8.09	34.10	26.575	146.9	0.511	250	7.46	34.14	26.698	135.2	0.488
275	7.79	34.08	26.604	144.2	0.549	275	7.23	34.12	26.715	133.6	0.522
300	7.27	34.10	26.694	135.6	0.585	300	6.69	34.09	26.766	128.8	0.556
350	6.82	34.15	26.795	126.0	0.653	350	6.20	34.11	26.846	121.2	0.621
400	6.40	34.19	26.883	117.7	0.716	400	6.07	34.25	26.973	109.2	0.681
450	6.09	34.21	26.939	112.4	0.777	450	5.99	34.28	27.007	106.0	0.738
500	5.96	34.23	26.971	109.3	0.835	500	5.52	34.28	27.065	100.4	0.793
550	5.73	34.27	27.031	103.6	0.892	550	5.38	34.33	27.121	95.1	0.845
600	5.49	34.29	27.076	99.4	0.946	600	5.20	34.34	27.151	92.3	0.895
682	5.01	34.36	27.189	88.7	1.030	700	4.74	34.39	27.243	83.6	0.990
						800	4.37	34.43	27.316	76.7	1.078
						900	4.09	34.45	27.361	72.4	1.161
						1000	3.77	34.48	27.418	67.0	1.239

73070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				73070					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
34 58.0N	122 38.5W	12/05/74	0648 GMT		4053M	350	11KT								
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	U2	SIGT	DT	DD
1	12.98	33.447	6.40					276.2	0	12.98	33.447	6.40	25.215	276.2	0.000
11	12.99	33.447	6.45					276.4	10	12.98	33.448	6.44	25.214	276.3	0.027
31	12.84	33.466	6.05					272.1	20	12.92	33.457	6.35	25.233	274.5	0.055
56	11.22	33.576	4.58					235.0	30	12.84	33.466	6.08	25.255	272.4	0.082
70	10.48	33.640	3.88					217.8	50	11.66	33.544	4.96	25.542	245.1	0.134
85	9.77	33.714	3.60					200.8	75	10.22	33.664	3.76	25.892	211.9	0.192
100	9.32	33.811	3.25					186.6	100	9.32	33.811	3.25	26.157	186.6	0.242
129	8.94	33.924	2.90					172.4	125	8.97	33.914	2.92	26.293	173.7	0.287
154	8.52	33.959	2.78					163.6	150	8.59	33.955	2.80	26.384	165.0	0.330
178	7.98	34.010	2.39					152.1	200	7.72	34.029	2.18	26.572	147.2	0.410
212	7.64	34.034	2.10					145.6	250	7.39	34.082	1.74	26.662	138.7	0.483
275	7.25	34.113	1.52					134.4	300	7.03	34.131	1.33	26.751	130.2	0.553
371	6.41	34.174	0.89					119.1	400	6.20	34.199	0.72	26.915	114.7	0.680
466	5.82	34.253	0.45					106.0	500	5.66	34.274	0.42	27.043	102.6	0.795
567	5.37	34.310	0.38					96.5	600	5.17	34.329	0.35	27.145	92.9	0.899
691	4.66	34.378	0.32					83.6	700	4.62	34.382	0.32	27.250	82.9	0.994
840	4.12	34.429	0.42					74.3	800	4.24	34.418	0.38	27.320	76.3	1.082
992	3.74	34.465	0.53					67.8	1000	3.72	34.480		27.473	66.5	1.241

73070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				73080	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
34 58.0N	122 38.5W	12/05/74	0526 GMT		34 37.0N	123 21.0W	12/05/74	0017 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4053M	350	11KT				4124M	350	14KT	1	310 6 5	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	13.00	33.46	25.221	275.6	0.000	0	14.41	33.38	24.871	308.9	0.000
10	13.00	33.46	25.221	275.6	0.027	10	14.41	33.37	24.863	309.7	0.030
20	12.89	33.48	25.259	272.0	0.055	20	14.34	33.39	24.894	306.8	0.061
30	12.77	33.49	25.290	269.1	0.082	30	14.13	33.41	24.953	301.1	0.092
40	11.84	33.54	25.507	248.4	0.108	40	13.57	33.46	25.107	286.5	0.121
50	10.94	33.59	25.710	229.1	0.132	50	11.95	33.51	25.463	252.6	0.148
75	9.84	33.69	25.977	203.7	0.186	75	9.62	33.59	25.936	207.6	0.206
100	9.27	33.85	26.196	182.9	0.235	100	8.94	33.84	26.241	178.7	0.255
125	8.99	33.91	26.288	174.2	0.280	125	8.56	33.91	26.355	167.8	0.299
150	8.55	33.99	26.419	161.8	0.323	150	8.32	33.99	26.454	158.4	0.340
175	8.27	34.04	26.501	154.0	0.363	175	7.82	33.99	26.529	151.3	0.380
200	7.87	34.06	26.576	146.8	0.401	200	7.59	34.04	26.601	144.5	0.417
225	7.58	34.06	26.619	142.8	0.438	225	7.33	34.06	26.654	139.4	0.454
250	7.28	34.08	26.677	137.3	0.474	250	6.98	34.04	26.687	136.3	0.489
275	7.26	34.14	26.727	132.5	0.509	275	6.51	34.03	26.742	131.0	0.524
300	6.96	34.16	26.784	127.1	0.543	300	6.29	34.06	26.795	126.1	0.557
350	6.51	34.18	26.860	119.8	0.607	350	6.13	34.11	26.855	120.4	0.621
400	6.24	34.25	26.951	111.3	0.667	400	5.80	34.15	26.928	113.4	0.681
450	5.95	34.27	27.004	106.3	0.725	450	5.68	34.22	26.998	106.8	0.739
500	5.64	34.29	27.058	101.1	0.779	500	5.46	34.28	27.072	99.8	0.794
550	5.43	34.33	27.115	95.7	0.832	550	5.21	34.31	27.126	94.7	0.846
600	5.13	34.35	27.167	90.8	0.882	600	5.08	34.34	27.165	91.0	0.895
700	4.65	34.40	27.261	81.9	0.976	700	4.64	34.37	27.238	84.0	0.990
800	4.27	34.43	27.326	75.7	1.062	800	4.27	34.40	27.302	77.9	1.079
900	4.07	34.45	27.363	72.2	1.144	900	3.95	34.44	27.368	71.7	1.161
1000	3.76	34.47	27.411	67.7	1.222	1000	3.68	34.46	27.411	67.6	1.239

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

77051

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 02.5N		120 57.0W		12/03/74		2015				286M	150	32KT	2	150 6 3		
Z	T	S	02	04	SIG3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
1	13.18	33.507	5.95					275.5	0	13.18	33.507	5.95	25.222	275.5	0.000	
11	13.16	33.507	5.77					275.2	10	13.16	33.508	5.78	25.226	275.2	0.027	
31	13.15	33.507	5.75					275.0	20	13.15	33.508	5.76	25.227	275.1	0.055	
45	13.10	33.504	5.76					274.3	30	13.15	33.508	5.75	25.228	275.0	0.082	
55	12.99	33.503	5.69					272.2	50	13.04	33.505	5.72	25.246	273.3	0.137	
68	12.90	33.503	5.66					270.5	75	12.33	33.506	5.27	25.386	259.9	0.204	
82	11.65	33.520	4.82					246.6	100	10.63	33.609	4.19	25.778	222.6	0.265	
93	10.85	33.581	4.34					228.3	125	10.22	33.666	3.96	25.894	211.7	0.320	
121	10.33	33.659	4.01					213.9	150	9.58	33.756	3.53	26.071	194.8	0.372	
139	9.84	33.694	3.79					203.4	200	8.94	33.973	2.60	26.345	168.8	0.464	
170	9.22	33.878	3.05					180.1	250	8.10	34.080		26.558	148.6	0.546	
200	8.94	33.973	2.60					168.8								
240	8.23	34.068	2.09					151.3								

77051

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

77055

LATITUDE		LONGITUDE		MO/DAY/YR		START TIME				LATITUDE		LONGITUDE		MO/DAY/YR		START TIME				
35 02.5N		120 57.0W		12/03/74		1930 GMT				34 54.5N		121 12.5W		12/03/74		2325 GMT				
BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES				BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES				
286M		150	32KT	2		150 6 3				560M		150	35KT	6		150 8 5				
Z	T	S	SIGMA	T	DT	DD	Z	T	S	SIGMA	T	DT	DD	Z	T	S	SIGMA	T	DT	DD
0	13.21	33.51	25.218	275.9	0.000		0	12.92	33.44	25.222	275.5	0.000		0	12.92	33.44	25.222	275.5	0.000	
10	13.20	33.50	25.213	276.4	0.027		10	12.90	33.46	25.241	273.7	0.027		10	12.90	33.46	25.241	273.7	0.027	
20	13.19	33.50	25.214	276.2	0.055		20	12.60	33.42	25.269	271.1	0.054		20	12.60	33.42	25.269	271.1	0.054	
30	13.11	33.50	25.230	274.7	0.082		30	10.28	33.40	25.677	232.2	0.079		30	10.28	33.40	25.677	232.2	0.079	
40	13.07	33.50	25.239	274.0	0.110		40	10.16	33.43	25.721	228.1	0.103		40	10.16	33.43	25.721	228.1	0.103	
50	12.00	33.49	25.245	273.4	0.137		50	10.08	33.47	25.766	223.8	0.125		50	10.08	33.47	25.766	223.8	0.125	
75	11.54	33.50	25.531	246.1	0.203		75	9.65	33.76	26.064	195.5	0.178		75	9.65	33.76	26.064	195.5	0.178	
100	10.63	33.58	25.757	224.7	0.262		100	9.12	33.91	26.267	176.2	0.225		100	9.12	33.91	26.267	176.2	0.225	
125	10.03	33.67	25.930	208.2	0.317		125	9.01	33.93	26.300	173.1	0.269		125	9.01	33.93	26.300	173.1	0.269	
150	9.31	33.85	26.189	183.6	0.366		150	8.95	33.96	26.333	169.9	0.313		150	8.95	33.96	26.333	169.9	0.313	
175	9.11	33.93	26.284	174.6	0.412		175	8.86	33.98	26.363	167.1	0.356		175	8.86	33.98	26.363	167.1	0.356	
200	8.91	33.98	26.355	167.8	0.456		200	8.62	34.02	26.432	160.6	0.397		200	8.62	34.02	26.432	160.6	0.397	
250	8.10	34.09	26.566	147.8	0.537		225	8.35	34.03	26.481	155.9	0.438		225	8.35	34.03	26.481	155.9	0.438	
							250	7.96	34.04	26.547	149.6	0.477		250	7.96	34.04	26.547	149.6	0.477	
							275	7.55	34.09	26.646	140.2	0.514		275	7.55	34.09	26.646	140.2	0.514	
							300	7.40	34.11	26.683	136.6	0.550		300	7.40	34.11	26.683	136.6	0.550	
							350	6.95	34.14	26.770	128.5	0.619		350	6.95	34.14	26.770	128.5	0.619	
							400	6.45	34.18	26.868	119.1	0.684		400	6.45	34.18	26.868	119.1	0.684	
							450	6.16	34.22	26.938	112.5	0.745		450	6.16	34.22	26.938	112.5	0.745	
							500	5.85	34.23	26.985	108.0	0.803		500	5.85	34.23	26.985	108.0	0.803	
							522	5.81	34.24	26.998	106.8	0.828		522	5.81	34.24	26.998	106.8	0.828	

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

77060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 44.0N		121 33.5W		12/04/74		0707				1110M	300	10KT	1	99		
Z	T	S	02	04	SIG3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	
0	14.27	33.357	5.94					307.8	0	14.27	33.357	5.94	24.883	307.8	0.000	
11	14.28	33.362	5.92					307.7	10	14.27	33.363	5.92	24.885	307.7	0.030	
31	14.24	33.363	5.640					306.8	20	14.26	33.364	5.92	24.889	307.3	0.061	
60	13.15	33.505	5.96					275.1	30	14.24	33.364	5.93	24.893	306.8	0.092	
70	11.74	33.433	5.33					254.6	50	13.52	33.396	5.95	25.066	290.4	0.152	
85	10.25	33.514	4.59					223.3	75	11.14	33.444	5.07	25.560	243.4	0.219	
100	9.86	33.666	3.71					205.8	100	9.86	33.666	3.71	25.955	205.8	0.276	
114	9.45	33.748	3.47					193.3	125	9.18	33.797	3.38	26.168	185.6	0.325	
139	8.91	33.846	3.30					177.8	150	8.75	33.888	3.15	26.307	172.4	0.370	
158	8.67	33.914	3.04					169.2	200	8.30	33.992	2.69	26.458	158.1	0.455	
188	8.41	33.964	2.83					161.6	250	7.53	34.027	2.32	26.598	144.7	0.532	
217	8.11	34.022	2.52					153.0	300	6.82	34.042	1.82	26.711	134.1	0.604	
247	7.58	34.025	2.35					145.4	400	6.18	34.167	0.91	26.892	116.9	0.735	
296	6.88								500	5.91	34.295	0.42	27.028	104.0	0.851	
350	6.20	34.079	1.29					123.6	600	5.50	34.350		27.123	95.0	0.958	
433	6.18	34.214	0.71					113.2								
515	5.84	34.308	0.38					102.1								
597	5.53	34.337	0.32					96.3								

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	T TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
34 23.0N	122 18.0W	12/04/74	1315	GMT	3986M	340	9KT	1							
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
2	14.26	33.386	5.94					305.5	0	14.26	33.386	5.94	24.907	305.5	0.000
12	14.27	33.384	5.96					305.8	10	14.26	33.386	5.95	24.904	305.8	0.030
31	14.27	33.382	5.94					306.0	20	14.27	33.385	5.95	24.903	305.9	0.061
60	14.31	33.446	5.92					302.1	30	14.27	33.383	5.94	24.902	306.0	0.091
80	11.29	33.398	5.19					249.3	50	14.29	33.425	5.92	24.929	303.4	0.153
93	10.46	33.486	4.76					228.8	75	12.06	33.395	5.39	25.352	263.2	0.224
109	9.87	33.622	4.32					209.2	100	10.16	33.547	4.56	25.810	219.6	0.285
138	9.06	33.786	3.46					184.5	125	9.38	33.721	3.81	26.075	194.4	0.337
163	8.56	33.916	3.18					167.4	150	8.79	33.855	3.30	26.274	175.5	0.384
192	8.22	33.968	2.70					158.6	200	8.10	33.982	2.60	26.479	156.0	0.468
226	7.73	34.018	2.34					148.0	250	7.43	34.045	2.06	26.627	142.0	0.545
295	6.92	34.075	1.63					132.9	300	6.84	34.074	1.61	26.731	132.1	0.615
404	5.55	34.045	1.40					118.4	400	5.59	34.047	1.40	26.871	118.8	0.746
512	4.95	34.139	0.73					104.7	500	4.99	34.126	0.80	27.005	106.1	0.863
648	4.61		0.35						600	4.70	34.233	0.43	27.123	95.0	0.970
802	4.27	34.399	0.36					78.0	700	4.49	34.327	0.35	27.221	85.7	1.067
964	3.90	34.462	0.58					69.6	800	4.27	34.398	0.35	27.300	78.1	1.156
1171	3.38	34.511	0.83					61.0	1000	3.81	34.473	0.62	27.408	67.9	1.319

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

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LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	T TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
34 05.5N	122 58.5W	12/04/74	1924	GMT	4250M	330	7KT	1							
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
2	14.55	33.420	5.94					308.8	0	14.55	33.420	5.94	24.872	308.8	0.000
12	14.53	33.418	5.96					308.6	10	14.53	33.420	5.95	24.874	308.6	0.030
32	14.46	33.437	5.96					305.8	20	14.50	33.425	5.96	24.883	307.8	0.061
56	14.27	33.471	5.87					299.5	30	14.46	33.436	5.96	24.900	306.2	0.092
71	11.82	33.410	5.15					257.7	50	14.31	33.464	5.89	24.954	301.0	0.153
86	10.43	33.443	5.06					231.5	75	11.35	33.406	5.12	25.492	249.8	0.222
100	9.95	33.649	3.95					208.5	100	9.95	33.649	3.95	25.927	208.5	0.280
130	9.09	33.784	3.48					185.1	125	9.21	33.778	3.55	26.149	187.5	0.330
155	8.71	33.880	3.38					172.3	150	8.77	33.863	3.40	26.284	174.6	0.376
179	8.25	33.959	2.95					159.7	200	7.97	33.985	2.92	26.501	154.0	0.460
213	7.83	33.988	2.91					151.6	250	7.26	33.989	2.81	26.607	143.9	0.536
276	6.86	33.985	2.68					138.9	300	6.52	33.998	2.37	26.715	133.7	0.607
373	5.68	34.051	1.39					119.5	400	5.47	34.066	1.23	26.901	116.0	0.737
471	5.10	34.111	0.98					108.4	500	4.99	34.145	0.81	27.019	104.8	0.852
574	4.80	34.232	0.44					96.1	600	4.72	34.254	0.42	27.136	93.7	0.958
713	4.42	34.328	0.38					84.9	700	4.45	34.321	0.38	27.220	85.8	1.054
848A	4.04	34.409	0.39					75.0	800	4.17	34.383	0.38	27.299	78.3	1.143
997A	3.66	34.466	0.56					67.0	1000	3.65	34.470		27.422	66.6	1.304

A) THE LAST TWO BOTTLES MAY HAVE POSITRIPPED CAUSING THE DEPTHS TO BE SLIGHTLY UNCERTAIN.

77080

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

8 4
79050

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
34 05.5N	122 58.5W	12/14/74	1808 GMT	34 26.0N	120 33.5W	12/03/74	0827 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
4250M	330	7KT	1		104M	140	22KT				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.51	33.43	24.889	307.3	0.000	0	14.38	33.58	25.031	293.7	0.000
10	14.51	33.43	24.889	307.3	0.030	10	14.39	33.58	25.029	293.9	0.029
20	14.49	33.44	24.900	306.2	0.061	20	14.04	33.54	25.072	289.8	0.058
30	14.46	33.44	24.907	305.5	0.092	30	13.57	33.56	25.184	279.1	0.087
40	14.39	33.46	24.937	302.7	0.122	40	12.85	33.52	25.297	268.3	0.114
50	14.38	33.47	24.947	301.7	0.152	50	12.81	33.51	25.298	268.3	0.141
75	11.03	33.40	25.546	244.7	0.221	75	12.83	33.51	25.294	268.7	0.209
100	10.03	33.63	25.899	211.2	0.279	89	12.25	33.43	25.344	263.9	0.246
125	9.42	33.72	26.070	194.9	0.330						
150	8.73	33.89	26.313	171.8	0.376						
175	8.39	33.96	26.420	161.6	0.419						
200	8.13	34.01	26.498	154.2	0.459						
225	7.75	34.02	26.563	148.1	0.498						
250	7.47	34.03	26.611	143.6	0.535						
275	7.15	34.01	26.640	140.8	0.572						
300	6.48	34.00	26.723	132.9	0.607						
350	5.81	34.07	26.864	119.6	0.673						
400	5.40	34.08	26.922	114.1	0.733						
450	5.17	34.12	26.980	108.5	0.791						
500	5.01	34.20	27.062	100.7	0.846						
550	4.87	34.25	27.117	95.5	0.898						
600	4.71	34.29	27.167	90.8	0.948						
700	4.41	34.36	27.256	82.4	1.041						
800	4.12	34.40	27.318	76.4	1.128						
900	3.89	34.45	27.382	70.4	1.209						
1000	3.64	34.47	27.423	66.5	1.286						

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79053

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 22.0N	120 44.0W	12/02/74	1438 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
604M	150	11KT	2	180 2 4

Z	T	S	SIGMA T	DT	DD
0	14.52	33.58	25.002	296.5	0.000
10	14.49	33.57	25.000	296.6	0.029
20	13.83	33.51	25.092	287.9	0.058
30	13.35	33.52	25.198	277.8	0.087
40	12.40	33.41	25.300	268.1	0.114
50	11.44	33.52	25.565	242.9	0.140
75	10.46	33.63	25.825	218.2	0.198
100	9.87	33.74	26.011	200.5	0.251
125	9.50	33.81	26.127	189.5	0.300
150	9.14	33.94	26.287	174.3	0.346
175	8.83	34.05	26.422	161.4	0.389
200	8.57	34.05	26.463	157.6	0.430
225	8.36	34.10	26.534	150.8	0.469
250	8.07	34.12	26.593	145.2	0.507
275	7.92	34.15	26.639	140.8	0.544
300	7.73	34.15	26.667	138.2	0.580
350	7.18	34.16	26.754	130.0	0.650
400	6.76	34.19	26.835	122.3	0.716
450	6.32	34.22	26.917	114.5	0.778
500	5.87	34.26	27.006	106.1	0.836
550	5.53	34.32	27.095	97.6	0.891
585	5.38	34.34	27.129	94.4	0.927

CALCOFI CRUISE 7412

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79053

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 22.0N	120 44.0W	12/11/74	0305 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
610M	340	12KT		

Z	T	S	SIGMA T	DT	DD
0	14.27	33.50	24.993	297.3	0.000
10	14.21	33.49	24.998	296.9	0.029
20	13.79	33.49	25.085	288.6	0.059
30	13.22	33.50	25.209	276.8	0.087
40	11.36	33.53	25.588	240.8	0.113
50	10.67	33.59	25.758	224.6	0.136
75	9.97	33.71	25.971	204.3	0.190
100	9.65	33.79	26.087	193.3	0.240
125	9.41	33.84	26.165	185.8	0.288
150	9.24	33.88	26.224	180.3	0.335
175	8.98	33.95	26.320	171.1	0.379
200	8.80	33.99	26.380	165.4	0.422
225	8.48	34.05	26.477	156.3	0.464
250	8.18	34.09	26.554	149.0	0.503
275	7.93	34.11	26.607	144.0	0.541
300	7.59	34.15	26.688	136.3	0.577
350	7.14	34.17	26.767	128.7	0.646
400	6.80	34.20	26.837	122.0	0.711
450	6.33	34.22	26.916	114.6	0.774
500	5.99	34.24	26.975	109.0	0.833
550	5.65	34.28	27.049	102.0	0.889
595	5.38	34.32	27.113	95.9	0.936

80051²

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 26.0N	120 33.5W	12/11/74	0652 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
101M	330	7KT		

Z	T	S	SIGMA T	DT	DD
0	14.69	33.47	24.881	308.0	0.000
10	14.69	33.47	24.881	308.0	0.030
20	14.66	33.46	24.880	308.1	0.061
30	14.62	33.46	24.888	307.3	0.092
40	14.39	33.44	24.921	304.1	0.123
50	13.62	33.42	25.066	290.4	0.153
75	12.24	33.52	25.416	257.1	0.221
100	11.34	33.56	25.615	238.2	0.284

CALCOFI CRUISE 7412

80051⁹

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 25.0N	120 35.5W	12/03/74	0728 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
194M	140	25KT		

Z	T	S	SIGMA T	DT	DD
0	14.18	33.58	25.073	289.7	0.000
10	14.18	33.58	25.073	289.7	0.028
20	14.18	33.57	25.066	290.4	0.058
30	13.98	33.53	25.077	289.4	0.087
40	13.32	33.50	25.189	278.7	0.115
50	11.57	33.40	25.448	254.0	0.142
75	10.52	33.51	25.722	228.0	0.202
100	10.06	33.60	25.870	213.9	0.258
125	9.82	33.72	26.004	201.2	0.311
150	9.73	33.77	26.058	196.0	0.361
175	9.44	33.86	26.176	184.8	0.409
200	9.26	33.92	26.252	177.6	0.456

80051⁹

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 25.0N	120 35.5W	12/11/74	0731 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
205M	340	17KT		

Z	T	S	SIGMA T	DT	DD
0	14.61	33.49	24.913	304.9	0.000
10	14.60	33.49	24.915	304.7	0.030
20	14.11	33.45	24.988	297.8	0.060
30	12.82	33.49	25.280	270.0	0.089
40	11.96	33.49	25.446	254.3	0.115
50	11.34	33.55	25.607	238.9	0.140
75	10.71	33.61	25.766	223.8	0.198
100	9.87	33.76	26.027	199.0	0.251
125	9.54	33.84	26.144	187.9	0.300
150	9.46	33.86	26.173	185.1	0.347
175	9.37	33.88	26.203	182.3	0.394
200	9.23	33.92	26.257	177.1	0.440
218	9.20	33.92	26.262	176.7	0.473

CALCOFI CRUISE 7412

80052

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 25.0N	120 36.0W	12/03/74	1056 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
253M	140	22KT		

Z	T	S	SIGMA T	DT	DD
0	14.12	33.55	25.063	290.7	0.000
10	14.12	33.55	25.063	290.7	0.029
20	14.12	33.54	25.055	291.4	0.058
30	14.12	33.54	25.055	291.4	0.087
40	13.86	33.52	25.094	287.7	0.116
50	13.41	33.50	25.170	280.4	0.145
75	11.27	33.43	25.526	246.6	0.211
100	9.93	33.72	25.986	202.9	0.267
125	9.57	33.81	26.116	190.6	0.317
150	9.26	33.89	26.229	179.8	0.364
175	8.94	33.98	26.350	168.3	0.408
200	8.90	33.99	26.364	166.9	0.451
225	8.79	34.00	26.389	164.6	0.494
237	8.74	34.01	26.405	163.1	0.514

80052² RV ALXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 24.5N	120 36.5W	12/02/74	1748 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
305M	150	15KT	1	99 2	
Z	T	S	SIGMA T	DT	DD
0	14.69	33.60	24.981	298.5	0.000
10	14.69	33.60	24.981	298.5	0.029
20	14.63	33.60	24.993	297.3	0.059
30	14.24	33.57	25.053	291.6	0.089
40	13.83	33.55	25.123	284.9	0.118
50	13.06	33.54	25.271	270.9	0.146
75	11.91	33.45	25.424	256.3	0.212
100	10.11	33.70	25.940	207.3	0.270
125	9.67	33.80	26.091	192.4	0.321
150	9.39	33.89	26.208	181.8	0.368
175	9.10	33.94	26.294	173.7	0.414
200	8.88	34.03	26.399	163.7	0.457
225	8.89	34.03	26.397	163.8	0.499
250	8.60	34.08	26.482	155.8	0.540
275	8.28	34.14	26.577	146.7	0.579
295	7.91	34.15	26.641	140.7	0.608

CALCOFI CRUISE 7412 80052²

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 24.5N	120 36.5W	12/11/74	0554 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
288M	330	22KT			
Z	T	S	SIGMA T	DT	DD
0	14.58	33.49	24.920	304.3	0.000
10	14.32	33.47	24.959	300.5	0.030
20	13.58	33.48	25.120	285.2	0.059
30	12.90	33.42	25.210	276.6	0.087
40	12.08	33.43	25.376	260.9	0.114
50	11.59	33.50	25.522	247.0	0.140
75	10.93	33.58	25.704	229.7	0.200
100	10.26	33.68	25.899	211.2	0.255
125	9.73	33.78	26.066	195.3	0.307
150	9.41	33.85	26.173	185.1	0.355
175	9.16	33.93	26.276	175.3	0.401
200	9.14	33.93	26.279	175.0	0.445
225	9.02	33.95	26.314	171.7	0.490
250	8.68	34.02	26.422	161.4	0.533

80052⁷ RV ALXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 23.5N	120 39.0W	12/02/74	1653 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
406M	150	14KT	1	99 2	
Z	T	S	SIGMA T	DT	DD
0	14.46	33.62	25.045	292.4	0.000
10	14.44	33.61	25.042	292.7	0.029
20	13.84	33.60	25.160	281.5	0.058
30	13.37	33.59	25.248	273.1	0.085
40	12.82	33.57	25.342	264.1	0.112
50	11.73	33.57	25.550	244.3	0.138
75	10.86	33.64	25.763	224.1	0.197
100	10.12	33.75	25.977	203.7	0.251
125	9.62	33.84	26.131	189.1	0.300
150	9.33	33.92	26.241	178.7	0.347
175	9.14	34.00	26.334	169.8	0.391
200	9.02	34.03	26.377	165.8	0.434
225	8.75	34.09	26.466	157.3	0.476
250	8.52	34.10	26.510	153.1	0.516
275	8.28	34.10	26.546	149.7	0.555
300	8.01	34.15	26.626	142.1	0.592
350	7.62	34.18	26.707	134.4	0.664
375	7.38	34.19	26.749	130.4	0.699

CALCOFI CRUISE 7412 80052⁷

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 23.5N	120 39.0W	12/11/74	0505 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
406M	330	17KT			
Z	T	S	SIGMA T	DT	DD
0	14.53	33.49	24.930	303.3	0.000
10	14.52	33.48	24.925	303.8	0.030
20	13.95	33.50	25.060	291.0	0.060
30	13.48	33.50	25.156	281.8	0.088
40	13.05	33.50	25.242	273.6	0.116
50	12.22	33.51	25.412	257.5	0.143
75	10.79	33.60	25.744	225.9	0.204
100	10.09	33.72	25.959	205.5	0.258
125	9.66	33.80	26.093	192.7	0.308
150	9.32	33.89	26.219	180.8	0.356
175	9.09	33.95	26.303	172.8	0.401
200	8.93	33.99	26.360	167.4	0.444
225	8.60	34.04	26.450	158.8	0.486
250	8.40	34.08	26.512	152.9	0.526
275	8.20	34.09	26.551	149.3	0.565
300	7.79	34.13	26.643	140.5	0.602
350	7.31	34.17	26.743	131.0	0.673
386	7.02	34.19	26.800	125.6	0.721

80053 RV ALXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 23.5N	120 40.5W	12/03/74	1224 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
467M	140	25KT			
Z	T	S	SIGMA T	DT	DD
0	14.84	33.57	24.925	303.7	0.000
10	14.78	33.56	24.931	303.7	0.030
20	13.53	33.53	25.169	280.6	0.059
30	13.33	33.49	25.179	279.7	0.087
40	12.21	33.44	25.359	262.5	0.114
50	11.71	33.53	25.523	246.9	0.140
75	10.50	33.62	25.811	219.6	0.199
100	9.63	33.78	26.083	193.7	0.251
125	9.25	33.90	26.238	178.9	0.298
150	8.93	34.01	26.375	165.9	0.342
175	8.87	34.02	26.392	164.3	0.384
200	8.77	34.05	26.432	160.6	0.425
225	8.55	34.11	26.513	152.8	0.465
250	8.30	34.10	26.543	150.0	0.504
275	8.06	34.11	26.590	145.5	0.542
300	7.83	34.13	26.637	141.1	0.579
350	7.29	34.16	26.738	131.4	0.650
400	6.82	34.21	26.843	121.5	0.716
446	6.58	34.22	26.883	117.7	0.774

CALCOFI CRUISE 7412 80053²

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 22.5N	120 41.0W	12/02/74	1545 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
504M	140	11KT	2	180 2 4	
Z	T	S	SIGMA T	DT	DD
0	14.37	33.59	25.041	292.7	0.000
10	13.71	33.54	25.140	283.3	0.028
20	13.18	33.54	25.247	273.1	0.056
30	12.31	33.54	25.418	256.9	0.083
40	12.12	33.56	25.469	252.0	0.108
50	11.49	33.57	25.595	240.1	0.133
75	10.09	33.73	25.966	204.7	0.189
100	9.46	33.75	26.006	201.0	0.240
125	9.50	33.84	26.151	187.3	0.289
150	9.31	33.91	26.236	179.1	0.336
175	9.01	34.01	26.362	167.1	0.380
200	8.79	34.06	26.436	160.1	0.422
225	8.52	34.08	26.494	154.6	0.462
250	8.36	34.11	26.542	150.1	0.501
275	8.25	34.14	26.582	146.3	0.539
300	7.87	34.12	26.623	142.4	0.577
350	7.19	34.22	26.800	125.7	0.646
400	6.75	34.23	26.868	119.2	0.710
450	6.38	34.25	26.933	113.0	0.772
490	6.15	34.26	26.970	109.4	0.819

80053² RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 22.5N	120 41.0W	12/11/74	0410 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
502M	330	10KT		

Z	T	S	SIGMA T	DT	DD
0	14.40	33.50	24.966	299.9	0.000
10	14.41	33.50	24.963	300.1	0.030
20	14.35	33.50	24.976	298.9	0.060
30	13.78	33.51	25.103	286.9	0.089
40	13.34	33.52	25.200	277.6	0.117
50	12.28	33.50	25.393	259.3	0.144
75	10.72	33.62	25.772	223.2	0.205
100	9.76	33.77	26.053	196.5	0.258
125	9.63	33.80	26.098	192.2	0.307
150	9.30	33.90	26.230	179.7	0.354
175	8.93	33.98	26.352	168.1	0.398
200	8.80	34.02	26.404	163.2	0.441
225	8.60	34.05	26.458	158.0	0.482
250	8.44	34.09	26.514	152.7	0.522
275	8.12	34.15	26.610	143.7	0.560
300	7.84	34.13	26.635	141.2	0.597
350	7.24	34.16	26.745	130.8	0.668
400	6.75	34.20	26.844	121.4	0.733
450	6.49	34.23	26.902	115.9	0.796
489	6.11	34.26	26.976	108.9	0.842

CALCOFI CRUISE 7412 80054

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 21.5N	120 44.5W	12/02/74	1305 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
619M	120	10KT		

Z	T	S	SIGMA T	DT	DD
0	14.85	33.59	24.939	302.5	0.000
10	14.83	33.59	24.943	302.1	0.030
20	14.51	33.58	25.004	296.3	0.060
30	13.28	33.46	25.166	280.9	0.089
40	11.49	33.50	25.541	245.2	0.115
50	11.16	33.57	25.655	234.4	0.139
75	10.07	33.66	25.915	209.6	0.195
100	9.61	33.81	26.109	191.2	0.246
125	9.18	33.91	26.257	177.1	0.292
150	9.06	34.00	26.347	168.6	0.336
175	8.73	34.04	26.430	160.7	0.378
200	8.43	34.08	26.508	153.3	0.418
225	8.15	34.11	26.574	147.1	0.457
250	8.02	34.12	26.601	144.5	0.494
275	7.82	34.16	26.662	138.7	0.531
300	7.59	34.16	26.695	135.5	0.566
350	6.96	34.16	26.784	127.1	0.634
400	6.73	34.22	26.863	119.6	0.699
450	6.43	34.24	26.918	114.4	0.760
500	5.94	34.26	26.997	106.9	0.819
550	5.66	34.29	27.056	101.3	0.874
600	5.21	34.36	27.165	91.0	0.926

80055 RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 18.5N	120 48.5W	12/02/74	1117 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
763M	130	9KT		

Z	T	S	SIGMA T	DT	DD
0	14.54	33.60	25.013	295.4	0.000
10	14.54	33.60	25.013	295.4	0.029
20	14.51	33.58	25.004	296.3	0.059
30	12.22	33.52	25.224	275.3	0.087
40	11.16	33.55	25.639	235.8	0.113
50	10.59	33.60	25.779	222.5	0.136
75	9.98	33.72	25.977	203.7	0.190
100	9.51	33.86	26.165	185.9	0.239
125	9.03	33.94	26.305	172.6	0.284
150	8.74	34.01	26.405	163.1	0.327
175	8.53	34.06	26.477	156.3	0.367
200	8.30	34.08	26.528	151.4	0.407
225	8.03	34.12	26.599	144.6	0.445
250	7.80	34.15	26.657	139.2	0.481
275	7.54	34.17	26.711	134.1	0.516
300	7.36	34.18	26.744	130.9	0.551
350	7.05	34.22	26.819	123.8	0.617
400	6.47	34.20	26.881	117.9	0.680
450	6.27	34.25	26.947	111.6	0.741
500	5.89	34.27	27.011	105.5	0.798
550	5.76	34.29	27.043	102.5	0.854
600	5.55	34.33	27.101	97.1	0.907
700	5.00	34.39	27.213	86.4	1.007
725	4.85	34.40	27.239	84.0	1.030
750	5.37	34.47	27.233	84.5	1.053

CALCOFI CRUISE 7412 80060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 08.5N	121 08.0W	12/02/74	0732 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
2070M	170	7KT		

Z	T	S	SIGMA T	DT	DD
0	14.43	33.47	24.936	302.7	0.000
10	14.38	33.46	24.939	302.5	0.030
20	13.41	33.50	25.170	280.4	0.059
30	13.23	33.51	25.214	276.3	0.087
40	12.54	33.41	25.273	270.7	0.114
50	11.18	33.36	25.488	250.2	0.140
75	10.13	33.54	25.812	219.4	0.200
100	9.58	33.72	26.044	197.4	0.252
125	8.81	33.92	26.324	170.8	0.299
150	8.31	34.02	26.479	156.0	0.340
175	8.06	34.03	26.525	151.7	0.379
200	7.63	34.02	26.580	146.5	0.417
225	7.26	34.03	26.640	140.7	0.454
250	7.00	34.06	26.700	135.1	0.490
275	6.86	34.10	26.751	130.3	0.524
300	6.56	34.10	26.791	126.4	0.557
350	6.17	34.13	26.866	119.4	0.621
400	6.23	34.24	26.944	111.9	0.681
450	6.04	34.29	27.008	105.8	0.738
500	5.79	34.32	27.063	100.6	0.793
550	5.57	34.32	27.091	98.0	0.846
600	5.35	34.37	27.157	91.8	0.897
700	4.87	34.42	27.252	82.7	0.992
800	4.50	34.45	27.317	76.5	1.079
900	4.34	34.46	27.343	74.1	1.163
1000	4.06	34.48	27.388	69.8	1.244

RV ALEXANDER AGASSIZ CALCOFI CRUISE 7412 80060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34 08.5N	121 08.0W	12/ 2/ 74	0834 GMT	2070M	170	7KT		

Z	T	S	02	04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
1	14.29	33.441	6.14					302.0	0	14.29	33.441	6.14	24.943	302.0	0.000
11	14.05	33.431	6.29					298.0	10	14.07	33.432	6.28	24.980	298.6	0.030
31	13.25	33.471	6.19					279.5	20	13.77	33.454	6.24	25.058	291.1	0.059
55	10.94	33.366	5.26					245.7	30	13.30	33.471	6.19	25.168	280.7	0.088
70	10.19	33.444	4.94					227.5	50	11.42	33.381	5.46	25.459	253.0	0.141
84	9.85	33.590	4.28					211.9	75	10.05	33.497	4.70	25.790	221.5	0.201
99	9.62	33.674	3.87					201.4	100	9.59	33.682	3.83	26.011	200.5	0.254
130	8.82	33.876	3.21					174.2	125	8.95	33.847	3.27	26.244	178.4	0.302
154	8.33	33.941	3.44					162.2	150	8.40	33.935	3.39	26.398	163.7	0.345
178	8.02	33.962	3.35					156.2	200	7.66	33.967	3.26	26.533	150.9	0.426
212	7.47	33.969	3.19					146.1	250	7.08	34.008	2.49	26.647	140.1	0.500
277	6.88	34.040	1.93					135.0	300	6.65	34.058	1.62	26.745	130.8	0.570
375	6.06	34.120	0.96					118.8	400	5.98	34.153	0.81	26.907	115.4	0.698
472	5.85	34.239	0.53					107.4	500	5.77	34.255	0.45	27.014	105.3	0.814
575	5.53	34.288	0.33					100.0	600	5.40	34.306	0.32	27.099	97.2	0.922
702	4.90	34.378	0.32					86.2	700	4.91	34.377	0.32	27.213	86.4	1.022
852	4.41	34.427	0.41					77.3	800	4.55	34.415	0.37	27.283	79.8	1.113
1001	4.02	34.458	0.50					71.1	1000	4.02	34.458	0.49	27.374	71.1	1.281

80070		RV ALFAXANDER AGASSIZ				CALCOFI CRUISE 7412				80080			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
33 48.5N	121 51.0W	12/02/74	0225 GMT			33 29.0N	122 32.0W	12/01/74	2136 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
3618M	180	10KT	1	320 3 8		3962M	180	9KT	1	180 1 4			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	14.35	33.45	24.938	302.6	0.000	0	14.33	33.41	24.911	305.1	0.000		
10	14.29	33.44	24.943	302.1	0.030	10	14.27	33.40	24.916	304.6	0.030		
20	14.18	33.43	24.958	300.7	0.060	20	14.23	33.41	24.932	303.1	0.060		
30	14.17	33.43	24.960	300.5	0.090	30	14.20	33.40	24.931	303.2	0.091		
40	14.26	33.49	24.987	297.9	0.120	40	14.15	33.38	24.926	303.7	0.121		
50	13.74	33.46	25.072	289.8	0.150	50	13.71	33.28	24.940	302.4	0.152		
75	10.78	33.46	25.637	236.0	0.216	75	11.08	33.42	25.553	244.1	0.220		
100	9.92	33.65	25.933	207.9	0.272	100	10.01	33.66	25.926	208.6	0.277		
125	9.17	33.83	26.196	182.9	0.321	125	9.41	33.86	26.181	184.4	0.327		
150	8.96	33.99	26.355	167.8	0.366	150	9.07	33.97	26.322	171.0	0.372		
175	8.78	34.07	26.446	159.2	0.407	175	8.79	34.05	26.429	160.9	0.415		
200	8.51	34.12	26.527	151.5	0.447	200	8.60	34.09	26.489	155.1	0.455		
225	8.36	34.16	26.581	146.4	0.485	225	8.37	34.11	26.540	150.2	0.494		
250	8.19	34.18	26.623	142.4	0.522	250	8.19	34.16	26.607	143.9	0.532		
275	7.99	34.20	26.668	138.1	0.559	275	7.96	34.18	26.657	139.2	0.568		
300	7.75	34.20	26.704	134.8	0.594	300	7.77	34.20	26.700	135.0	0.604		
350	7.39	34.23	26.779	127.6	0.662	350	7.39	34.21	26.763	129.1	0.673		
400	6.97	34.23	26.838	122.0	0.728	400	6.82	34.24	26.866	119.3	0.738		
450	6.54	34.28	26.935	112.7	0.789	450	6.28	34.25	26.946	111.7	0.799		
500	6.15	34.31	27.010	105.7	0.847	500	5.89	34.28	27.019	104.8	0.856		
550	5.84	34.33	27.065	100.4	0.902	550	5.69	34.31	27.068	100.2	0.911		
600	5.56	34.36	27.123	94.9	0.955	600	5.47	34.34	27.118	95.4	0.963		
700	5.09	34.40	27.211	86.6	1.054	700	5.09	34.39	27.203	87.4	1.062		
800	4.64	34.44	27.294	78.8	1.144	800	4.57	34.43	27.294	78.8	1.153		
900	4.26	34.47	27.359	72.6	1.229	900	4.21	34.46	27.356	72.8	1.238		
1000	3.95	34.49	27.407	68.0	1.308	1000	3.86	34.49	27.417	67.1	1.316		

80090		RV ALFAXANDER AGASSIZ				CALCOFI CRUISE 7412				81044			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
33 09.5N	123 10.5W	12/01/74	1633 GMT			34 23.0N	119 50.0W	11/30/74	0632 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
4231M	170	9KT	1	320 3 8		52M	360	6KT	1	180 1 4			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	14.94	33.40	24.773	318.3	0.000	0	15.42	33.55	24.783	317.3	0.000		
10	14.86	33.40	24.791	316.6	0.031	0	15.42	33.55	24.783	317.3	0.000		
20	14.72	33.42	24.836	312.3	0.063	10	15.38	33.54	24.785	317.2	0.031		
30	14.69	33.41	24.835	312.4	0.094	20	14.72	33.53	24.920	304.2	0.062		
40	14.48	33.44	24.902	305.9	0.125	30	13.89	33.50	25.072	289.8	0.092		
50	13.88	33.46	25.044	292.5	0.155	37	13.32	33.52	25.204	277.2	0.112		
75	11.04	33.39	25.537	245.6	0.223								
100	10.16	33.63	25.877	213.3	0.281								
125	9.25	33.85	26.199	182.6	0.331								
150	8.68	33.93	26.352	168.1	0.375								
175	8.24	34.01	26.482	155.8	0.416								
200	7.94	34.04	26.550	149.3	0.455								
225	7.54	34.04	26.609	143.8	0.493								
250	7.24	34.06	26.667	138.2	0.529								
275	7.07	34.10	26.722	133.0	0.564								
300	6.83	34.12	26.770	128.4	0.598								
350	6.27	34.14	26.860	119.8	0.662								
400	5.70	34.14	26.933	113.0	0.723								
450	5.31	34.18	27.011	105.6	0.780								
500	5.04	34.22	27.074	99.6	0.834								
550	4.93	34.27	27.127	94.6	0.886								
600	4.84	34.33	27.184	89.1	0.935								
700	4.46	34.38	27.266	81.4	1.027								
800	4.10	34.42	27.336	74.7	1.112								
900	3.88	34.46	27.391	69.6	1.192								
1000	3.61	34.48	27.434	65.5	1.268								

81043		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				81044			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
34 24.0N	119 48.0W	11/30/74	0750 GMT			34 23.0N	119 50.0W	11/30/74	0632 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
22M	020	6KT	1	320 3 8		52M	360	6KT	1	180 1 4			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	15.11	33.56	24.859	310.1	0.000	0	15.42	33.55	24.783	317.3	0.000		
10	15.09	33.55	24.856	310.4	0.031	0	15.42	33.55	24.783	317.3	0.000		
16	14.67	33.55	24.947	301.8	0.049	10	15.38	33.54	24.785	317.2	0.031		
						20	14.72	33.53	24.920	304.2	0.062		
						30	13.89	33.50	25.072	289.8	0.092		
						37	13.32	33.52	25.204	277.2	0.112		

5 81044		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 22.0N	119 52.0W	11/30/74	0500 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
78M	010	5KT	Z	DT	DD
Z	T	S	SIGMA T	DT	DD
0	15.60	33.54	24.736	321.8	0.000
10	15.57	33.56	24.758	319.7	0.032
20	15.49	33.55	24.768	318.8	0.064
30	14.88	33.51	24.871	309.0	0.095
40	13.00	33.37	25.152	282.2	0.125
50	11.93	33.34	25.335	264.8	0.152

5 81045		CALCOFI CRUISE 7412			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 21.0N	119 54.0W	11/30/74	0322 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
325M	220	9KT	Z	DT	DD
Z	T	S	SIGMA T	DT	DD
0	15.65	33.56	24.740	321.4	0.000
10	15.56	33.56	24.760	319.5	0.032
20	14.74	33.46	24.862	309.8	0.063
30	14.08	33.43	24.979	298.7	0.094
40	13.60	33.52	25.147	282.6	0.123
50	12.76	33.51	25.307	267.4	0.150
75	10.85	33.52	25.671	232.8	0.213
100	9.99	33.72	25.976	203.9	0.268
125	9.41	33.85	26.173	185.1	0.317
150	9.05	33.95	26.309	172.2	0.363
175	8.84	34.00	26.382	165.3	0.406
200	8.67	34.03	26.432	160.6	0.447
225	8.53	34.06	26.477	156.3	0.488
250	8.19	34.12	26.576	146.9	0.527

5 81046		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 19.5N	119 58.0W	11/30/74	0117 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
482M	280	4KT	Z	DT	DD
Z	T	S	SIGMA T	DT	DD
0	14.94	33.56	24.896	306.5	0.000
10	14.92	33.57	24.908	305.4	0.030
20	13.12	33.50	25.229	274.9	0.059
30	12.60	33.50	25.331	265.2	0.086
40	12.14	33.52	25.435	255.3	0.112
50	11.50	33.55	25.578	241.7	0.137
75	10.51	33.61	25.801	220.5	0.195
100	10.05	33.68	25.935	207.8	0.249
125	9.57	33.80	26.108	191.3	0.300
150	9.34	33.87	26.200	182.5	0.347
175	9.08	33.94	26.297	173.4	0.393
200	8.81	34.01	26.394	164.1	0.438
225	8.59	34.05	26.460	157.9	0.477
250	8.39	34.10	26.530	151.3	0.517
275	8.10	34.13	26.597	144.9	0.555
300	7.89	34.15	26.644	140.4	0.592
332	7.57	34.17	26.706	134.5	0.631

5 81047		CALCOFI CRUISE 7412			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 17.0N	120 02.5W	11/29/74	2215 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
556M	330	8KT	Z	DT	DD
Z	T	S	SIGMA T	DT	DD
0	15.43	33.56	24.789	316.7	0.000
10	15.21	33.55	24.830	312.9	0.031
20	14.32	33.51	24.990	297.6	0.062
30	12.85	33.49	25.274	270.6	0.090
40	12.08	33.51	25.438	255.0	0.116
50	11.30	33.52	25.591	240.5	0.141
75	10.08	33.69	25.937	207.5	0.198
100	9.59	33.80	26.105	191.6	0.248
125	9.33	33.88	26.210	181.6	0.295
150	9.01	33.95	26.315	171.6	0.340
175	8.78	34.01	26.399	163.7	0.383
200	8.60	34.05	26.458	158.0	0.424
225	8.52	34.07	26.486	155.4	0.464
250	8.43	34.09	26.516	152.6	0.504
275	8.12	34.13	26.594	145.1	0.542
300	7.80	34.16	26.665	138.4	0.579
350	7.39	34.19	26.747	130.6	0.649
400	6.96	34.22	26.831	122.6	0.715
450	6.57	34.23	26.892	116.9	0.778
500	6.44	34.24	26.917	114.5	0.839

5 81048		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				81047			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 17.0N	120 02.5W	11/29/74	2305 GMT			556M	330	8KT	0	280 10 12			
Z	T	S	02	04	03	02	Z	T	S	02	SIGT	DT	DD
1	15.42	33.564	6.07			316.2	0	15.42	33.564	6.07	24.794	316.2	0.000
11	15.14	33.571	6.09			309.9	10	15.16	33.571	6.08	24.854	310.5	0.031
30	12.46	33.507	5.02			262.1	20	13.93	33.536	5.62	25.089	288.2	0.061
44	11.59	33.500	4.72			247.0	30	12.46	33.507	5.02	25.363	262.1	0.088
54	11.22	33.540	4.47			237.6	50	11.36	33.522	4.57	25.580	241.5	0.139
68	10.52	33.624	4.03			219.6	75	10.19	33.679	3.78	25.909	210.2	0.196
82	9.92	33.726	3.59			202.3	100	9.64	33.778	3.48	26.078	194.2	0.247
96	9.69	33.767	3.51			195.6	125	9.41	33.853	3.24	26.175	185.0	0.295
120	9.47	33.834	3.31			187.2	150	9.05	33.945	2.90	26.304	172.7	0.340
139	9.23	33.904	3.06			178.3	200	8.67	34.051	2.18	26.447	159.1	0.425
167	8.82	33.997	2.66			165.2	250	8.36	34.108	1.65	26.539	150.3	0.504
195	8.70	34.043	2.26			160.0	300	7.82	34.156	1.16	26.659	139.0	0.579
224	8.53	34.084	1.87			154.5	400	6.93	34.223	0.53	26.837	122.1	0.715
261	8.28	34.116	1.57			148.5							
318	7.60	34.174	0.98			134.6							
371	7.20	34.209	0.65			126.6							
427	6.71	34.233	0.44			118.4							
488A	6.46	34.241	0.21			114.7							

A) DUE TO THE MALFUNCTION OF BOTH PROTECTED THERMOMETERS IN THE DEEPEST NANSSEN BOTTLE, THE DEPTH WAS DETERMINED FROM AN EXTRAPOLATED DEPTH CURVE AND THE TEMPERATURE FROM COMPARISON WITH THE STD.

83039⁴ RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 14.5N	119 19.5W	11/30/74	2235 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
19M	320	7KT	2	290 4 11

Z	T	S	SIGMA T	DT	DD
0	15.58	33.55	24.748	320.7	0.000
10	15.44	33.54	24.771	318.4	0.031
16	15.23	33.54	24.818	314.0	0.050

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 12.0N	119 24.5W	11/30/74	2100 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
34M	270	9KT	2	270 6 11

Z	T	S	SIGMA T	DT	DD
0	15.93	33.54	24.662	328.9	0.000
10	15.82	33.54	24.687	326.5	0.032
20	15.56	33.53	24.737	321.7	0.065
24	15.16	33.49	24.795	316.2	0.078

83041 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 11.5N	119 26.0W	11/30/74	1948 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
65M	280	5KT	2	290 6 11

Z	T	S	SIGMA T	DT	DD
0	15.93	33.54	24.652	328.9	0.000
10	15.91	33.54	24.666	328.4	0.032
20	15.61	33.52	24.718	323.5	0.065
30	13.65	33.38	25.029	293.9	0.096
40	12.62	33.37	25.227	279.1	0.125
50	11.61	33.41	25.449	254.0	0.151

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 09.5N	119 30.0W	11/30/74	1743 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
223M	090	4KT	1	300 7 11

Z	T	S	SIGMA T	DT	DD
0	15.29	33.56	24.820	313.8	0.000
10	15.27	33.56	24.824	313.4	0.031
20	15.25	33.56	24.828	313.0	0.062
30	14.14	33.46	24.989	297.7	0.093
40	13.06	33.37	25.140	283.3	0.122
50	12.13	33.35	25.305	267.6	0.150
75	10.95	33.47	25.615	238.2	0.213
100	10.18	33.65	25.889	212.1	0.270
125	9.51	33.82	26.133	188.9	0.321
150	9.23	33.89	26.233	179.4	0.367
175	9.01	33.96	26.323	170.8	0.412
200	8.85	34.00	26.380	165.4	0.455

83043 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 08.0N	119 34.0W	11/30/74	1545 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
279M	060	4KT	1	

Z	T	S	SIGMA T	DT	DD
0	15.79	33.56	24.709	324.4	0.000
10	15.79	33.56	24.709	324.4	0.032
20	15.51	33.54	24.758	319.9	0.064
30	12.56	33.47	25.117	285.6	0.095
40	12.38	33.40	25.296	268.5	0.122
50	12.12	33.43	25.369	261.6	0.149
75	10.97	33.56	25.681	231.8	0.211
100	10.10	33.68	25.926	208.6	0.267
125	9.67	33.78	26.076	194.3	0.317
150	9.42	33.84	26.164	188.0	0.366
175	9.20	33.90	26.246	178.2	0.412
200	8.87	34.00	26.377	165.7	0.456

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 05.5N	119 38.0W	11/30/74	1403 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
168M	340	5KT		

Z	T	S	SIGMA T	DT	DD
0	15.72	33.54	24.709	324.4	0.000
10	15.68	33.54	24.718	323.5	0.032
20	15.33	33.53	24.788	316.8	0.064
30	14.57	33.45	24.891	307.0	0.095
40	12.87	33.41	25.209	276.8	0.125
50	12.24	33.43	25.346	263.7	0.152
75	11.11	33.53	25.633	236.4	0.215
100	10.32	33.64	25.857	215.1	0.271
125	9.78	33.76	26.042	197.6	0.324
134	9.56	33.79	26.102	191.9	0.341

83044⁷ RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 04.0N	119 41.0W	11/30/74	1245 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
75M	160	7KT		

Z	T	S	SIGMA T	DT	DD
0	15.23	33.56	24.833	312.6	0.000
10	15.24	33.56	24.831	312.8	0.031
20	15.17	33.55	24.838	312.0	0.062
30	14.13	33.41	24.953	301.1	0.093
40	12.86	33.38	25.187	278.8	0.122
50	12.16	33.42	25.353	263.0	0.149

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
34 04.0N	119 42.5W	11/30/74	1115 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
80M	310	4KT		

Z	T	S	SIGMA T	DT	DD
0	15.20	33.56	24.839	311.9	0.000
10	15.20	33.56	24.839	311.9	0.031
20	15.16	33.56	24.848	311.1	0.062
30	14.32	33.43	24.929	303.4	0.093
40	12.85	33.43	25.228	275.0	0.122
50	12.30	33.54	25.420	256.7	0.148
75	10.48	33.65	25.837	217.0	0.208

83051 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 52.0N	120 08.5W	11/19/74	1654 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
108M	140	7KT	1	270 3 7	
Z	T	S	SIGMA T	DT	DD
C	16.08	33.57	24.651	329.9	0.000
10	16.08	33.57	24.651	329.9	0.033
20	16.08	33.57	24.651	329.9	0.066
30	16.02	33.57	24.665	328.6	0.099
40	15.63	33.56	24.745	321.0	0.131
50	15.07	33.56	24.868	309.2	0.163
75	11.20	33.55	25.632	236.5	0.231
79	10.99	33.57	25.685	231.5	0.241

CALCOFI CRUISE 7412 83055

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 44.5N	120 24.5W	11/29/74	1406 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
984M	110	11KT	1	300 4 7	
Z	T	S	SIGMA T	DT	DD
0	14.97	33.60	24.920	304.2	0.000
10	14.89	33.61	24.945	301.9	0.030
20	13.33	33.51	25.194	278.2	0.059
30	11.79	33.49	25.478	251.3	0.085
40	11.35	33.52	25.582	241.3	0.110
50	10.80	33.57	25.719	228.2	0.134
75	10.02	33.67	25.932	208.0	0.189
100	9.46	33.81	26.134	188.8	0.239
125	9.07	33.89	26.259	176.9	0.285
150	8.69	34.02	26.421	161.6	0.328
175	8.52	34.06	26.478	156.1	0.368
200	8.28	34.06	26.515	152.6	0.408
225	8.22	34.07	26.532	151.0	0.447
250	7.99	34.10	26.590	145.5	0.485
275	7.77	34.12	26.638	141.0	0.522
300	7.52	34.13	26.682	136.8	0.558
350	7.32	34.15	26.726	132.6	0.628
400	6.97	34.20	26.814	124.2	0.695
450	6.33	34.20	26.900	116.1	0.758
500	6.06	34.21	26.943	112.1	0.818
550	5.83	34.25	27.003	106.3	0.876
600	5.62	34.28	27.053	101.6	0.932
700	5.16	34.34	27.155	91.9	1.037
800	4.63	34.41	27.271	80.9	1.131

83060 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 34.0N	120 45.0W	11/19/74	0941 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1474M	220	5KT			
Z	T	S	SIGMA T	DT	DD
0	13.81	33.51	25.096	287.5	0.000
10	13.81	33.52	25.104	286.7	0.028
20	13.82	33.52	25.102	287.0	0.057
30	13.81	33.51	25.096	287.5	0.086
40	13.51	33.49	25.142	283.1	0.114
50	12.43	33.33	25.232	274.5	0.142
75	10.74	33.47	25.652	234.6	0.206
100	9.55	33.71	26.041	197.6	0.261
125	9.05	33.88	26.255	177.4	0.308
150	8.69	33.97	26.382	165.3	0.352
175	8.36	34.03	26.479	156.0	0.393
200	8.08	34.06	26.545	149.8	0.432
225	7.76	34.11	26.632	141.6	0.469
250	7.57	34.13	26.675	137.5	0.505
275	7.42	34.15	26.712	134.0	0.540
300	7.20	34.17	26.759	129.5	0.574
350	6.78	34.20	26.840	121.8	0.639
400	6.54	34.22	26.888	117.2	0.702
450	6.09	34.24	26.963	110.2	0.762
500	5.62	34.28	27.053	101.6	0.818
550	5.39	34.32	27.112	96.0	0.870
600	5.18	34.35	27.161	91.4	0.921
700	4.77	34.38	27.232	84.6	1.016
800	4.45	34.41	27.291	79.0	1.106
900	4.16	34.44	27.346	73.8	1.190
1000	3.85	34.47	27.402	68.5	1.270

RV ALEXANDER AGASSIZ 83070

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 14.5N	121 26.0W	12/01/74	0032 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3790M	360	9KT	2	360 3 7	
Z	T	S	SIGMA T	DT	DD
0	14.73	33.43	24.842	311.8	0.000
10	14.35	33.41	24.907	305.5	0.030
20	14.20	33.43	24.954	301.1	0.061
30	14.09	33.44	24.984	298.1	0.091
40	14.03	33.43	24.989	297.7	0.121
50	14.01	33.43	24.993	297.3	0.151
75	11.57	33.34	25.402	258.4	0.220
100	10.72	33.41	25.609	238.7	0.283
125	9.75	33.57	25.899	211.2	0.340
150	9.23	33.75	26.124	189.7	0.391
175	8.73	33.90	26.321	171.1	0.437
200	8.32	34.01	26.470	156.9	0.478
225	8.03	34.05	26.545	149.8	0.518
250	7.92	34.11	26.608	143.8	0.555
275	7.73	34.19	26.699	135.2	0.591
300	7.59	34.19	26.719	133.3	0.626
350	7.08	34.23	26.823	123.4	0.693
400	6.35	34.22	26.913	114.9	0.755
450	5.88	34.21	26.965	109.9	0.814
500	5.61	34.29	27.062	100.7	0.870
550	5.29	34.30	27.108	96.3	0.923
600	5.09	34.34	27.164	91.1	0.973
700	4.80	34.40	27.244	83.5	1.067
800	4.37	34.44	27.324	76.0	1.155
900	4.10	34.46	27.368	71.7	1.237
1000	3.86	34.50	27.425	66.3	1.315

RV ALEXANDER AGASSIZ CALCOFI CRUISE 7412 83080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
32 55.0N	122 07.5W	12/ 1/74	0638 GMT	4168M	120	4KT	1		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	DD
1	15.85	33.523	5.77					328.4	0
11	15.86	33.519	5.79					328.9	10
31	15.84	33.514	5.75					328.8	20
55	14.54	33.470	5.81					304.9	30
70	13.05	33.390	5.85					281.7	50
85	11.70	33.397	5.69					256.5	75
100	10.94	33.453	5.08					239.3	100
129	9.55	33.667	3.98					200.8	125
154	8.99	33.840	3.29					179.4	150
178	8.49	33.933	3.16					165.1	200
212	7.92	33.981	3.17					153.4	250
276	7.15	34.043	2.13					138.3	300
373	6.64		1.04					6.04	400
471	6.07	34.230	0.61					110.7	500
573	5.45	34.281	0.40					99.6	600
699	4.97	34.365	0.31					87.9	700
850	4.35	34.423	0.38					77.0	800
1002	3.74	34.478	0.64					66.9	1000

B3080		RV ALF ALEXANDER AGASSIZ			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 55.0N	122 07.5W	12/01/74	0519 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
416M	120	4KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.83	33.52	24.669	328.1	0.000
10	15.85	33.52	24.665	328.6	0.032
20	15.84	33.52	24.667	328.4	0.065
30	15.79	33.51	24.670	328.0	0.098
40	14.77	33.48	24.871	308.9	0.130
50	14.57	33.47	24.906	305.6	0.161
75	12.68	33.39	25.234	274.4	0.234
100	10.98	33.42	25.571	242.4	0.299
125	9.98	33.63	25.907	210.4	0.356
150	9.18	33.81	26.179	184.5	0.406
175	8.82	33.94	26.338	169.5	0.451
200	8.40	33.98	26.434	160.3	0.493
225	7.87	34.01	26.537	150.5	0.533
250	7.50	34.01	26.591	145.4	0.571
275	7.26	34.06	26.664	138.5	0.608
300	7.05	34.09	26.717	133.5	0.643
350	6.80	34.14	26.790	126.5	0.710
400	6.38	34.19	26.885	117.5	0.774
450	6.13	34.24	26.957	110.7	0.834
500	5.86	34.28	27.023	104.4	0.891
550	5.69	34.30	27.060	100.9	0.946
600	5.39	34.34	27.128	94.5	0.998
700	4.98	34.38	27.208	86.9	1.096
800	4.56	34.42	27.287	79.4	1.188
900	4.13	34.44	27.349	73.5	1.272
1000	3.73	34.48	27.422	66.6	1.351

CALCIFI CRUISE 7412		B3090			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 35.0N	122 48.0W	12/01/74	1136 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4116M	190	4KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.84	33.37	24.552	339.3	0.000
10	15.85	33.37	24.550	339.6	0.033
20	15.85	33.37	24.550	339.6	0.067
30	15.86	33.37	24.547	339.8	0.102
40	15.32	33.33	24.637	331.3	0.135
50	14.53	33.35	24.823	313.6	0.168
75	12.68	33.40	25.238	274.0	0.241
100	11.93	33.44	25.412	257.4	0.308
125	11.32	33.54	25.603	239.3	0.371
150	9.44	33.66	26.020	199.6	0.427
175	8.99	33.87	26.256	177.2	0.475
200	8.53	33.92	26.367	166.7	0.518
225	8.17	34.02	26.500	154.0	0.559
250	7.82	34.04	26.568	147.6	0.598
275	7.59	34.08	26.633	141.5	0.635
300	7.19	34.08	26.690	136.1	0.671
350	6.70	34.11	26.780	127.5	0.740
400	6.20	34.14	26.870	119.0	0.804
450	5.94	34.18	26.934	112.9	0.865
500	5.72	34.24	27.009	105.8	0.922
550	5.39	34.26	27.065	100.5	0.977
600	5.16	34.30	27.124	94.9	1.030
700	4.73	34.35	27.212	86.5	1.127
800	4.32	34.39	27.289	79.2	1.218
900	4.06	34.44	27.356	72.8	1.302
1000	3.88	34.47	27.399	68.8	1.381

H5037		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 02.5N	118 58.5W	12/01/74	0810 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
348M	060	7KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.09	33.52	24.833	312.6	0.000
10	15.09	33.52	24.833	312.6	0.031
20	14.50	33.43	24.891	307.1	0.062
25	13.89	33.39	24.987	297.8	0.077

CALCIFI CRUISE 7412		B5037			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 02.0N	118 59.5W	12/01/74	0653 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
60M	330	6KT	2		
Z	T	S	SIGMA T	DT	DD
0	15.17	33.63	24.823	313.5	0.000
10	15.18	33.63	24.821	313.7	0.031
20	15.08	33.52	24.835	312.4	0.067
30	13.50	33.37	25.052	291.7	0.093
40	12.06	33.42	25.373	261.2	0.120

H5038		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
34 01.0N	119 02.5W	12/01/74	0536 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
139M	020	14KT	2	330 2 4	
Z	T	S	SIGMA T	DT	DD
0	15.19	33.52	24.811	314.6	0.000
10	15.14	33.52	24.811	314.6	0.031
20	15.66	33.42	25.058	291.7	0.061
30	12.47	33.36	25.248	273.1	0.090
40	11.63	33.45	25.416	251.4	0.116
50	11.39	33.47	25.536	245.7	0.141
75	10.88	33.54	25.682	231.8	0.201
90	10.45	33.62	25.819	218.7	0.235

CALCIFI CRUISE 7412		B5039			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 54.0N	119 06.5W	12/01/74	0342 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
648M	320	12KT	2	290 8 12	
Z	T	S	SIGMA T	DT	DD
0	15.43	33.54	24.662	328.9	0.000
10	15.92	33.54	24.664	328.6	0.032
20	15.38	33.52	24.769	318.6	0.065
30	14.79	33.47	24.859	310.1	0.096
40	13.00	33.36	25.144	282.9	0.126
50	11.91	33.47	25.401	258.5	0.153
75	10.78	33.58	25.730	227.2	0.214
100	10.23	33.66	25.888	212.7	0.270
125	9.10	33.82	26.102	191.8	0.321
150	9.41	33.69	26.204	182.1	0.368
175	9.16	33.99	26.319	171.2	0.413
200	8.69	34.02	26.421	161.6	0.456
225	8.53	34.06	26.477	156.3	0.496
250	8.41	34.12	26.542	150.1	0.536
275	8.06	34.16	26.626	142.0	0.573
300	7.91	34.18	26.664	138.5	0.610

85040 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 57.0N	119 10.5W	12/01/74	0125 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
722M	280	9KT	2	290 @ 12	
Z	T	S	SIGMA T	DT	DD
0	16.34	33.58	24.599	334.8	0.000
10	16.34	33.58	24.599	334.8	0.033
20	16.32	33.58	24.604	334.4	0.067
30	15.71	33.54	24.711	324.1	0.100
40	15.82	33.44	25.040	292.8	0.130
50	17.46	33.40	25.281	270.0	0.159
75	11.17	33.52	25.614	238.2	0.223
100	10.04	33.72	25.967	204.7	0.278
125	4.58	33.83	26.130	189.2	0.328
150	9.34	33.93	26.247	178.1	0.375
175	9.13	34.01	26.343	168.9	0.419
200	8.91	34.06	26.417	161.9	0.461
225	8.67	34.11	26.494	154.6	0.502
250	8.28	34.14	26.577	146.7	0.541
275	8.07	34.16	26.625	142.2	0.578
300	7.89	34.16	26.652	139.7	0.614
350	7.39	34.21	26.763	129.1	0.684
400	7.03	34.22	26.822	123.5	0.750
450	6.65	34.26	26.905	115.6	0.813
500	6.36	34.28	26.959	110.5	0.873
550	6.03	34.31	27.025	104.2	0.931
600	5.70	34.34	27.090	98.0	0.985
700	5.25	34.38	27.176	89.9	1.087

CALCOFI CRUISE 7412 87032⁵

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 55.0N	118 27.0W	12/01/74	1913 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
17M	210	6KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.83	33.51	24.661	328.9	0.000
5	15.75	33.49	24.664	328.6	0.016
10	15.40	33.50	24.750	320.5	0.032
15	15.30	33.51	24.779	317.7	0.048

87032⁷ RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 54.5N	118 28.0W	12/01/74	1817 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
26M	110	7KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.33	33.51	24.773	318.3	0.000
10	15.25	33.52	24.798	315.9	0.031
18	15.22	33.52	24.804	315.3	0.057

CALCOFI CRUISE 7412 87033

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 54.0N	118 29.0W	12/01/74	1700 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
47M	090	8KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.49	33.50	24.730	322.4	0.000
10	15.47	33.51	24.742	321.2	0.032
20	15.33	33.49	24.757	319.8	0.064
29	14.53	33.42	24.876	308.4	0.092

87034 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 52.0N	118 33.5W	12/01/74	1531 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
65M	020	6KT	1		
Z	T	S	SIGMA T	DT	DD
0	16.01	33.54	24.644	330.6	0.000
10	15.97	33.54	24.653	329.7	0.033
20	15.42	33.48	24.730	322.4	0.065
30	12.96	33.35	25.145	282.9	0.096
40	12.76	33.35	25.184	279.2	0.124
50	12.30	33.36	25.280	270.0	0.151
58	12.20	33.38	25.315	266.7	0.167

CALCOFI CRUISE 7412 87035

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 50.5N	118 38.0W	12/01/74	1336 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
187M	280	9KT	1		
Z	T	S	SIGMA T	DT	DD
0	16.13	33.55	24.624	332.4	0.000
10	16.13	33.55	24.624	332.4	0.033
20	15.92	33.49	24.626	332.3	0.066
30	13.98	33.37	24.953	301.1	0.098
40	12.06	33.39	25.349	263.4	0.126
50	11.61	33.45	25.480	251.0	0.152
75	10.80	33.60	25.742	226.0	0.212
100	10.43	33.64	25.838	216.9	0.268
125	9.91	33.75	26.012	200.4	0.321
150	9.44	33.85	26.168	185.6	0.369
175	9.21	33.92	26.260	176.8	0.416

87036		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				87040		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
33 48.0N	118 41.5W	12/01/74	1105 GMT			33 40.0N	118 58.0W	11/28/74	1110 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
833M	200	5KT	1				833M	110	11KT			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	16.17	33.57	24.631	331.8	0.000	0	16.43	33.56	24.563	338.2	0.000	
10	16.18	33.57	24.628	332.1	0.033	10	16.43	33.56	24.563	338.2	0.033	
20	16.17	33.57	24.631	331.8	0.066	20	16.28	33.55	24.590	335.7	0.067	
30	15.68	33.46	24.657	329.3	0.099	30	15.94	33.50	24.629	332.0	0.101	
40	13.11	33.31	25.084	288.7	0.130	40	13.62	33.30	24.973	299.2	0.132	
50	12.38	33.36	25.265	271.4	0.158	50	12.38	33.35	25.257	272.2	0.161	
75	11.12	33.52	25.623	237.4	0.222	75	11.04	33.50	25.622	237.5	0.225	
100	10.45	33.63	25.827	218.0	0.280	100	9.99	33.69	25.952	206.1	0.281	
125	9.85	33.76	26.030	198.7	0.332	125	9.55	33.87	26.166	185.8	0.330	
150	9.61	33.84	26.133	188.9	0.381	150	9.31	33.95	26.267	176.2	0.376	
175	9.18	33.96	26.296	173.4	0.428	175	9.05	34.02	26.364	167.0	0.420	
200	8.75	34.03	26.419	161.7	0.470	200	8.83	34.07	26.438	160.0	0.462	
225	8.51	34.05	26.472	156.7	0.511	225	8.60	34.12	26.513	152.8	0.502	
250	8.34	34.09	26.529	151.3	0.551	250	8.33	34.15	26.578	146.7	0.540	
275	8.08	34.11	26.584	146.1	0.589	275	8.30	34.20	26.621	142.5	0.578	
300	7.94	34.14	26.629	141.9	0.636	300	7.61	34.15	26.685	136.5	0.614	
350	7.55	34.19	26.725	132.7	0.725	350	7.29	34.20	26.770	128.5	0.683	
400	7.00	34.23	26.834	122.4	0.797	400	6.91	34.23	26.846	121.2	0.748	
450	6.64	34.26	26.906	115.5	0.855	450	6.50	34.29	26.948	111.5	0.810	
500	6.40	34.29	26.962	110.3	0.915	500	6.12	34.31	27.014	105.3	0.867	
550	5.95	34.32	27.043	102.5	0.972	550	5.87	34.32	27.053	101.6	0.922	
600	5.61	34.35	27.109	96.2	1.025	600	5.70	34.34	27.090	98.0	0.976	
700	5.30	34.37	27.163	91.2	1.127	700	5.36	34.37	27.155	91.9	1.079	
746	5.21	34.39	27.189	88.7	1.172							

87045		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				87050		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
33 30.0N	119 19.0W	11/28/74	1535 GMT			33 20.0N	119 39.5W	11/28/74	1855 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1655M	100	7KT	1	240 4 5			140	140	5KT	0	270 7 7	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	15.51	33.61	24.810	314.8	0.000	0	14.80	33.62	24.972	299.3	0.000	
10	15.51	33.61	24.810	314.8	0.031	10	14.73	33.62	24.987	297.8	0.029	
20	15.44	33.61	24.825	313.3	0.062	20	14.47	33.62	25.043	292.6	0.059	
30	15.20	33.60	24.870	309.0	0.094	30	12.24	33.59	25.470	252.0	0.086	
40	12.93	33.50	25.266	271.3	0.123	40	10.72	33.63	25.780	222.5	0.110	
50	11.20	33.48	25.578	241.7	0.149	50	10.12	33.69	25.930	208.2	0.132	
75	9.83	33.72	26.002	201.3	0.204	61	9.80	33.74	26.023	199.4	0.154	
100	9.30	33.78	26.136	188.6	0.253							
125	8.96	33.91	26.292	173.8	0.299							
150	8.82	34.01	26.342	164.3	0.342							
175	8.29	34.01	26.474	156.5	0.383							
200	8.20	34.07	26.535	150.7	0.422							
225	7.95	34.11	26.603	144.2	0.460							
250	7.80	34.13	26.641	140.7	0.497							
275	7.65	34.17	26.695	135.6	0.532							
300	7.43	34.19	26.742	131.1	0.567							
350	7.07	34.24	26.832	122.6	0.633							
400	6.74	34.26	26.893	116.8	0.696							
450	6.34	34.28	26.962	110.3	0.755							
500	6.12	34.29	26.998	106.8	0.813							
550	5.95	34.32	27.043	102.5	0.869							
600	5.73	34.34	27.087	98.4	0.923							
700	5.10	34.39	27.202	87.5	1.024							
800	4.69	34.42	27.273	80.8	1.116							
900	4.42	34.44	27.318	76.4	1.204							
1000	4.26	34.46	27.351	73.3	1.288							

RV DAVID STARR JORDAN		CALCOFI CRUISE 7412				87060							
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 00.0N	120 21.0W	11/29/74	0238	GMT		920M	360	9KT	0	310 4 7			
Z	T	S	02	04	03	02	03	04	02	SIGT	DT	DD	
1	14.26	33.553	5.95			293.2	0	14.26	33.553	5.95	25.036	293.2	0.000
11	14.03	33.510	5.96			291.8	10	14.04	33.514	5.95	25.049	292.0	0.029
29	13.85	33.519	5.93			287.6	20	13.94	33.516	5.94	25.073	289.7	0.058
52	11.45	33.448	4.90			248.4	30	13.75	33.513	5.89	25.110	286.2	0.087
66	10.93	33.574	4.27			230.2	50	11.66	33.448	5.01	25.466	252.3	0.141
80	10.50	33.620	4.04			219.6	75	10.66	33.607	4.11	25.771	223.4	0.201
94	9.78	33.711	3.60			201.2	100	9.60	33.746	3.38	26.059	196.0	0.254
122	9.14	33.848	2.86			181.1	125	9.03	33.861	2.90	26.241	178.7	0.301
145	8.43	33.937	3.16			164.0	150	8.35	33.960	3.02	26.424	161.3	0.344
168	8.20	34.029	2.42			153.8	200	7.97	34.072	2.03	26.569	147.4	0.423
201	7.97	34.072	2.03			147.3	250	7.53	34.094	1.69	26.651	139.7	0.496
262	7.43	34.097	1.64			138.0	300	7.22	34.134	1.43	26.727	132.5	0.567
355	6.93	34.188	1.13			124.6	400	6.52	34.212	0.80	26.884	117.6	0.697
449	6.08	34.233	0.51			110.6	500	5.79	34.258	0.46	27.014	105.3	0.815
548	5.57	34.281	0.43			101.0	600	5.30	34.307	0.37	27.112	96.0	0.922
699	4.82	34.358	0.31			86.8	700	4.81	34.359	0.31	27.210	86.7	1.021
804	4.37	34.419	0.41			77.5	800	4.38	34.416	0.40	27.303	77.9	1.111

87060		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				RV ALF KANDER AGASSIZ				87070			
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		
33 00.0N	120 21.0W	11/29/74	0120 GMT	32 41.0N	121 02.5W	11/30/74	1925 GMT										
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
920M	360	9KT	0	310 4 7	3622M	310	9KT	2	330 3 7								
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.52	33.59	25.009	295.8	0.000	0	16.45	33.54	24.543	340.1	0.000	0	16.45	33.54	24.543	340.1	0.000
10	14.52	33.59	25.009	295.8	0.029	10	16.45	33.54	24.543	340.1	0.034	10	16.45	33.54	24.543	340.1	0.034
20	14.15	33.54	25.049	292.0	0.059	20	16.44	33.54	24.546	339.9	0.068	20	16.44	33.54	24.546	339.9	0.068
30	14.00	33.54	25.080	289.0	0.088	30	16.15	33.52	24.597	335.1	0.101	30	16.15	33.52	24.597	335.1	0.101
40	13.77	33.50	25.097	287.4	0.117	40	15.98	33.50	24.620	332.9	0.135	40	15.98	33.50	24.620	332.9	0.135
50	12.62	33.44	25.319	266.3	0.144	50	14.65	33.40	24.836	312.3	0.167	50	14.65	33.40	24.836	312.3	0.167
75	10.46	33.61	25.810	219.6	0.205	75	12.07	33.28	25.262	271.7	0.241	75	12.07	33.28	25.262	271.7	0.241
100	9.60	33.76	26.072	194.7	0.258	100	10.97	33.44	25.588	240.7	0.305	100	10.97	33.44	25.588	240.7	0.305
125	9.20	33.85	26.207	181.9	0.305	125	9.73	33.62	25.941	207.1	0.362	125	9.73	33.62	25.941	207.1	0.362
150	8.62	33.95	26.377	165.8	0.349	150	9.19	33.87	26.274	180.2	0.411	150	9.19	33.87	26.274	180.2	0.411
175	8.20	34.00	26.480	155.9	0.390	175	8.77	33.97	26.369	166.5	0.455	175	8.77	33.97	26.369	166.5	0.455
200	8.12	34.06	26.539	150.4	0.430	200	8.33	34.09	26.531	151.1	0.496	200	8.33	34.09	26.531	151.1	0.496
225	7.92	34.09	26.592	145.3	0.467	225	8.11	34.11	26.580	146.5	0.534	225	8.11	34.11	26.580	146.5	0.534
250	7.77	34.10	26.622	142.5	0.504	250	7.66	34.12	26.654	139.4	0.571	250	7.66	34.12	26.654	139.4	0.571
275	7.43	34.12	26.687	136.3	0.540	275	7.41	34.14	26.706	134.5	0.606	275	7.41	34.14	26.706	134.5	0.606
300	7.26	34.14	26.727	132.5	0.575	300	7.15	34.19	26.781	127.3	0.640	300	7.15	34.19	26.781	127.3	0.640
350	6.95	34.19	26.809	124.7	0.642	350	6.99	34.26	26.859	120.0	0.704	350	6.99	34.26	26.859	120.0	0.704
400	6.40	34.18	26.875	118.5	0.706	400	6.72	34.29	26.919	114.3	0.766	400	6.72	34.29	26.919	114.3	0.766
450	6.11	34.25	26.968	109.7	0.766	450	6.45	34.31	26.971	109.4	0.825	450	6.45	34.31	26.971	109.4	0.825
500	5.85	34.28	27.024	104.3	0.822	500	6.14	34.33	27.027	104.1	0.881	500	6.14	34.33	27.027	104.1	0.881
550	5.60	34.29	27.063	100.6	0.877	550	5.88	34.35	27.076	99.4	0.936	550	5.88	34.35	27.076	99.4	0.936
600	5.39	34.31	27.104	96.7	0.930	600	5.66	34.37	27.119	95.3	0.988	600	5.66	34.37	27.119	95.3	0.988
700	4.85	34.37	27.215	86.3	1.029	700	5.16	34.40	27.203	87.4	1.087	700	5.16	34.40	27.203	87.4	1.087
800	4.53	34.41	27.282	79.9	1.120	800	4.72	34.44	27.285	79.6	1.179	800	4.72	34.44	27.285	79.6	1.179
850	4.33	34.43	27.320	76.3	1.163	900	4.37	34.46	27.339	74.4	1.265	900	4.37	34.46	27.339	74.4	1.265
892	4.27	34.44	27.334	74.9	1.198	1000	4.01	34.48	27.393	69.3	1.346	1000	4.01	34.48	27.393	69.3	1.346

87080		RV ALF KANDER AGASSIZ				CALCOFI CRUISE 7412				87090							
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME						
32 20.0N	121 43.5W	11/30/74	1443 GMT	32 00.0N	122 25.0W	11/30/74	0923 GMT										
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
4047M	160	3KT	2	320 2 7	4091M	99	3KT	2									
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	14.99	33.37	24.739	321.5	0.000	0	15.58	33.39	24.625	332.4	0.000	0	15.58	33.39	24.625	332.4	0.000
10	14.98	33.37	24.741	321.3	0.032	10	15.59	33.39	24.623	332.6	0.033	10	15.59	33.39	24.623	332.6	0.033
20	14.82	33.38	24.784	317.2	0.064	20	15.59	33.39	24.623	332.6	0.066	20	15.59	33.39	24.623	332.6	0.066
30	14.43	33.32	24.821	313.7	0.095	30	15.49	33.36	24.622	332.7	0.099	30	15.49	33.36	24.622	332.7	0.099
40	12.89	33.26	24.887	307.4	0.126	40	15.31	33.34	24.647	330.3	0.133	40	15.31	33.34	24.647	330.3	0.133
50	12.56	33.29	24.978	298.7	0.157	50	14.83	33.37	24.774	318.2	0.165	50	14.83	33.37	24.774	318.2	0.165
75	11.95	33.27	25.277	270.3	0.228	75	14.19	33.41	24.940	302.3	0.243	75	14.19	33.41	24.940	302.3	0.243
100	10.82	33.47	25.638	236.0	0.292	100	12.13	33.29	25.259	272.0	0.316	100	12.13	33.29	25.259	272.0	0.316
125	9.87	33.66	25.949	206.4	0.348	125	10.73	33.50	25.677	232.3	0.379	125	10.73	33.50	25.677	232.3	0.379
150	9.24	33.86	26.208	181.7	0.397	150	9.84	33.67	25.962	205.2	0.435	150	9.84	33.67	25.962	205.2	0.435
175	8.84	33.94	26.335	169.8	0.442	175	9.02	33.86	26.244	176.4	0.483	175	9.02	33.86	26.244	176.4	0.483
200	8.30	33.97	26.442	159.6	0.484	200	8.71	33.96	26.371	166.3	0.527	200	8.71	33.96	26.371	166.3	0.527
225	7.84	34.00	26.534	150.9	0.524	225	8.18	34.02	26.499	154.7	0.568	225	8.18	34.02	26.499	154.7	0.568
250	7.40	34.01	26.605	144.1	0.562	250	7.88	34.01	26.536	150.7	0.608	250	7.88	34.01	26.536	150.7	0.608
275	6.98	34.02	26.671	137.8	0.598	275	7.37	34.04	26.633	141.5	0.645	275	7.37	34.04	26.633	141.5	0.645
300	6.70	34.03	26.717	133.4	0.633	300	6.90	34.01	26.675	137.5	0.681	300	6.90	34.01	26.675	137.5	0.681
350	6.18	34.03	26.785	127.0	0.700	350	6.16	34.07	26.820	123.7	0.749	350	6.16	34.07	26.820	123.7	0.749
400	6.29	34.17	26.881	117.9	0.764	400	6.03	34.15	26.899	116.2	0.811	400	6.03	34.15	26.899	116.2	0.811
450	5.80	34.19	26.960	110.5	0.824	450	5.75	34.23	26.997	106.9	0.870	450	5.75	34.23	26.997	106.9	0.870
500	5.55	34.24	27.030	103.8	0.880	500	5.63	34.29	27.059	101.0	0.925	500	5.63	34.29	27.059	101.0	0.925
550	5.32	34.30	27.105	96.7	0.934	550	5.44	34.33	27.114	95.8	0.977	550	5.44	34.33	27.114	95.8	0.977
600	5.12	34.34	27.160	91.5	0.986	600	5.28	34.37	27.165	91.0	1.027	600	5.28	34.37	27.165	91.0	1.027
700	4.79	34.40	27.245	83.3	1.079	700	4.82	34.42	27.258	87.2	1.121	700	4.82	34.42	27.258	87.2	1.121
800	4.49	34.42	27.295	78.7	1.168	800	4.52	34.45	27.315	76.7	1.209	800	4.52	34.45	27.315	76.7	1.209
900	4.21	34.45	27.349	73.6	1.252	900	4.16	34.47	27.370	71.6	1.291	900	4.16	34.47	27.370	71.6	1.291
1000	3.94	34.48	27.401	68.6	1.292	1000	3.85	34.48	27.410	67.8	1.370	1000	3.85	34.48	27.410	67.8	1.370

88030		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				88031			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 41.5N	118 07.0W	12/02/74	0508 GMT	33 40.5N	118 09.5W	12/02/74	0358 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER

5
88032

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 38.5N	118 13.5W	12/02/74	0239 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
37M	280	10KT	1	

Z	T	S	SIGMA T	DT	DD
0	15.09	33.48	24.802	315.5	0.000
10	15.08	33.48	24.804	315.3	0.031
20	15.04	33.33	25.113	285.9	0.061
30	12.61	33.33	25.198	277.9	0.089
34	12.46	33.35	25.242	273.6	0.100

CALCOFI CRUISE 7412

5
88033

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 36.5N	118 17.5W	12/02/74	0104 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
168M	270	12KT	1	

Z	T	S	SIGMA T	DT	DD
0	16.04	33.56	24.652	329.8	0.000
10	16.04	33.56	24.652	329.8	0.032
20	15.40	33.44	24.703	324.9	0.065
30	12.84	33.34	25.160	281.4	0.096
40	12.04	33.42	25.376	260.9	0.123
50	11.67	33.47	25.484	250.6	0.149
75	10.81	33.59	25.733	226.9	0.209
100	10.26	33.69	25.906	210.4	0.264
125	9.62	33.81	26.108	191.4	0.315
150	9.35	33.95	26.261	176.8	0.361

5
88034

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 34.5N	118 22.0W	12/01/74	2255 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
833M	270	12KT	1	

Z	T	S	SIGMA T	DT	DD
0	16.08	33.55	24.636	331.4	0.000
10	16.04	33.55	24.645	330.5	0.033
20	15.94	33.54	24.660	329.1	0.066
30	15.09	33.45	24.779	317.7	0.098
40	12.64	33.33	25.192	278.4	0.128
50	12.07	33.36	25.324	265.8	0.155
75	11.10	33.60	25.689	231.1	0.218
100	10.52	33.68	25.854	215.5	0.274
125	9.87	33.76	26.027	199.0	0.326
150	9.50	33.87	26.174	185.0	0.375
175	9.16	34.00	26.331	170.1	0.420
200	8.96	34.05	26.402	163.4	0.463
225	8.66	34.09	26.480	155.9	0.504
250	8.41	34.12	26.542	150.1	0.543
275	8.09	34.13	26.598	144.7	0.581
300	7.96	34.18	26.657	139.2	0.618

CALCOFI CRUISE 7412

6
90027

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 29.0N	117 45.5W	12/02/74	0810 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
43M	070	7KT	1	

Z	T	S	SIGMA T	DT	DD
0	15.53	33.49	24.713	324.0	0.000
10	15.53	33.49	24.713	324.0	0.032
20	14.55	33.36	24.826	313.2	0.064
30	12.99	33.38	25.162	281.3	0.094
36	12.41	33.48	25.352	263.2	0.110

90028

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 28.5N	117 46.5W	12/02/74	0918 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
187M	020	4KT	1	

Z	T	S	SIGMA T	DT	DD
0	15.61	33.49	24.695	325.7	0.000
10	15.61	33.51	24.711	324.2	0.032
20	15.06	33.39	24.740	321.5	0.064
30	12.46	33.34	25.037	293.2	0.095
40	12.21	33.42	25.344	263.9	0.123
50	11.67	33.55	25.546	244.7	0.149
75	10.99	33.65	25.748	225.6	0.208
100	10.48	33.74	25.907	210.4	0.263

CALCOFI CRUISE 7412

90029

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 27.0N	117 49.5W	12/02/74	1100 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
611M	050	7KT	1	

Z	T	S	SIGMA T	DT	DD
0	16.17	33.56	24.623	332.6	0.000
10	16.18	33.56	24.621	332.8	0.033
20	16.16	33.55	24.617	333.1	0.066
30	14.88	33.38	24.771	318.5	0.099
40	12.99	33.35	25.139	283.5	0.129
50	12.45	33.36	25.252	272.7	0.157
75	11.30	33.55	25.614	238.2	0.221
100	10.57	33.66	25.829	217.8	0.279
125	10.22	33.80	25.999	201.7	0.332
150	9.82	33.96	26.191	183.4	0.381
175	9.19	33.99	26.318	171.3	0.426
200	8.83	34.05	26.422	161.4	0.468
225	8.74	34.12	26.491	154.9	0.509
250	8.43	34.12	26.539	150.4	0.548
275	8.22	34.16	26.602	144.3	0.586
300	8.09	34.17	26.630	141.7	0.623

90030

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 25.0N	117 53.5W	12/02/74	1257 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
621M	110	9KT	1	

Z	T	S	SIGMA T	DT	DD
0	16.42	33.57	24.573	337.3	0.000
10	16.42	33.57	24.573	337.3	0.033
20	16.43	33.57	24.571	337.5	0.067
30	15.85	33.55	24.688	326.4	0.100
40	13.96	33.43	25.004	296.3	0.132
50	12.74	33.43	25.250	272.9	0.160
75	11.54	33.55	25.570	242.4	0.225
100	10.34	33.62	25.838	216.9	0.283
125	9.82	33.78	26.051	196.7	0.335
150	9.42	33.90	26.211	181.5	0.383
175	9.32	34.01	26.313	171.8	0.428
200	8.87	34.03	26.400	163.5	0.471
225	8.59	34.11	26.507	153.4	0.512
250	8.40	34.14	26.559	148.4	0.550
275	8.01	34.13	26.610	143.6	0.588
300	7.93	34.18	26.661	138.7	0.625

CALCOFI CRUISE 7412

90031

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 23.0N	117 57.5W	12/02/74	1447 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
445M	090	4KT	1	

Z	T	S	SIGMA T	DT	DD
0	16.30	33.57	24.601	334.7	0.000
10	16.30	33.57	24.601	334.7	0.033
20	16.30	33.57	24.601	334.7	0.067
30	16.24	33.57	24.615	333.4	0.100
40	14.31	33.44	24.938	302.5	0.132
50	13.23	33.39	25.122	285.1	0.161
75	11.37	33.50	25.563	243.1	0.228
100	10.38	33.61	25.824	218.3	0.286
125	9.81	33.75	26.029	198.8	0.339
150	9.38	33.94	26.248	178.0	0.386
175	9.10	34.01	26.348	168.5	0.431
200	8.83	34.07	26.438	160.0	0.473
225	8.51	34.07	26.488	155.2	0.513
250	8.23	34.10	26.554	148.9	0.552
275	8.17	34.16	26.610	143.6	0.590
300	7.86	34.18	26.672	137.8	0.626
338	7.61	34.20	26.724	132.8	0.680

90032 RV DAV ID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 20.5N	118 03.0W	12/12/74	1733 GMT		
BOTTOM	WIND	SPEED	WEATHR	DOMINANT WAVES	
704M	110	6KT	1	110 1 4	
Z	T	S	SIGMA T	DT	DD
0	16.27	33.56	24.600	334.7	0.000
10	16.27	33.56	24.600	334.7	0.033
20	16.26	33.56	24.602	334.5	0.067
30	16.07	33.53	24.623	332.6	0.100
40	14.75	33.40	24.814	314.3	0.132
50	13.42	33.34	25.045	292.4	0.163
75	11.17	33.48	25.583	241.2	0.230
100	10.34	33.63	25.846	216.2	0.288
125	9.68	33.78	26.074	194.5	0.340
150	9.38	33.93	26.240	178.7	0.387
175	9.04	34.02	26.366	166.8	0.431
200	8.74	34.07	26.452	158.6	0.472
225	8.53	34.11	26.516	152.5	0.517
250	8.30	34.15	26.582	146.2	0.551
275	8.10	34.17	26.628	141.9	0.588
300	7.80	34.18	26.681	136.9	0.624
350	7.44	34.20	26.748	130.5	0.694
400	7.04	34.24	26.836	122.2	0.760
450	6.66	34.26	26.903	115.8	0.822
500	6.41	34.30	26.968	109.6	0.882
550	6.05	34.32	27.031	103.7	0.939
600	5.80	34.34	27.078	99.2	0.994
650	5.41	34.37	27.149	92.4	1.046

CALCOFI CRUISE 7412 90037

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 11.0N	118 22.5W	11/28/74	0448 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1178M	200	3KT			
Z	T	S	SIGMA T	DT	DD
0	16.47	33.56	24.554	339.1	0.000
10	16.46	33.57	24.564	338.2	0.033
20	16.41	33.56	24.568	337.8	0.067
30	15.47	33.38	24.642	330.8	0.101
40	13.06	33.36	25.133	284.1	0.132
50	12.43	33.34	25.240	273.8	0.160
75	11.07	33.48	25.601	239.5	0.224
100	10.01	33.71	25.965	204.9	0.280
125	9.65	33.87	26.149	187.4	0.330
150	9.48	33.99	26.271	175.8	0.376
175	8.97	34.02	26.377	165.8	0.419
200	8.74	34.05	26.436	160.1	0.461
225	8.51	34.10	26.511	153.0	0.501
250	8.18	34.14	26.593	145.3	0.539
275	8.22	34.21	26.641	140.6	0.576
300	7.94	34.20	26.675	137.4	0.612
350	7.46	34.21	26.753	130.0	0.682
400	7.11	34.22	26.810	124.6	0.749
450	6.74	34.23	26.869	119.0	0.813
500	6.37	34.25	26.934	112.9	0.874
550	5.99	34.29	27.014	105.2	0.932
600	5.75	34.33	27.076	99.4	0.987
700	5.12	34.39	27.200	87.7	1.089
800	4.60	34.43	27.290	79.1	1.180
900	4.28	34.45	27.341	74.3	1.266
1000	4.15	34.46	27.363	72.2	1.348

90045 RV DAV ID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 54.5N	118 55.5W	11/7/74	2305 GMT		
BOTTOM	WIND	SPEED	WEATHR	DOMINANT WAVES	
1664M	300	11KT	2	290 5 7	
Z	T	S	SIGMA T	DT	DD
0	16.55	33.57	24.543	340.1	0.000
10	16.40	33.56	24.570	337.6	0.033
20	16.37	33.55	24.570	337.6	0.067
30	13.74	33.34	24.980	298.6	0.099
40	13.10	33.33	25.101	287.0	0.128
50	12.29	33.37	25.290	269.1	0.156
75	10.84	33.53	25.681	231.9	0.219
100	10.19	33.60	25.848	216.0	0.276
125	9.85	33.76	26.030	198.7	0.328
150	9.45	33.90	26.206	182.0	0.377
175	9.19	33.99	26.318	171.3	0.422
200	8.82	34.04	26.416	162.0	0.464
225	8.27	34.06	26.516	152.5	0.504
250	8.12	34.10	26.570	147.4	0.543
275	8.00	34.14	26.620	142.7	0.580
300	7.80	34.16	26.665	138.4	0.617
350	7.10	34.15	26.757	129.7	0.686
400	6.73	34.19	26.839	121.9	0.752
450	6.31	34.23	26.926	113.6	0.814
500	6.05	34.26	26.983	108.2	0.873
550	5.77	34.29	27.042	102.6	0.929
600	5.46	34.33	27.112	96.0	0.982
700	5.10	34.38	27.194	88.2	1.082
800	4.70	34.42	27.271	80.9	1.175
900	4.30	34.45	27.339	74.5	1.261
1000	4.09	34.46	27.369	71.6	1.343

CALCOFI CRUISE 7412 90053

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 39.0N	119 28.5W	11/27/74	1735 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1295M	280	5KT	2	280 8 7	
Z	T	S	SIGMA T	DT	DD
0	14.29	33.43	24.935	302.9	0.000
10	14.29	33.43	24.935	302.9	0.030
20	14.28	33.43	24.937	302.7	0.060
30	14.28	33.43	24.937	302.7	0.090
40	14.27	33.43	24.939	302.5	0.121
50	13.33	33.37	25.086	288.4	0.150
75	10.91	33.46	25.606	239.0	0.217
100	10.17	33.60	25.852	215.6	0.274
125	9.41	33.77	26.111	191.0	0.325
150	9.02	33.89	26.267	176.2	0.372
175	8.98	34.00	26.359	167.4	0.414
200	8.70	34.04	26.435	160.2	0.458
225	8.35	34.06	26.504	153.6	0.498
250	7.87	34.08	26.592	145.3	0.536
275	7.52	34.08	26.643	140.5	0.573
300	7.23	34.11	26.707	134.4	0.609
350	6.87	34.17	26.804	125.7	0.676
400	6.53	34.21	26.881	117.9	0.740
450	6.38	34.25	26.933	113.0	0.800
500	6.15	34.27	26.978	108.7	0.859
550	5.92	34.28	27.015	105.2	0.916
600	5.58	34.32	27.089	98.1	0.971
700	5.17	34.37	27.184	89.7	1.072
800	4.66	34.41	27.268	81.2	1.166
900	4.20	34.45	27.350	73.5	1.251
1000	3.94	34.47	27.393	69.4	1.332

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME						
32 39.0N	119 28.5W	11/27/74	1908 GMT						
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
1295M	280	5KT	2	280 8 7					
Z	T	S	U2	P04	S103	N02	N03	DT	DD
2	14.39	33.432	6.08					304.7	0
11	14.30	33.433	6.08					302.8	10
30	14.26	33.433	6.04					302.0	20
58	11.79	33.276	5.66					267.0	30
77	10.80	33.448	5.02					237.3	50
92	10.20	33.583	4.21					217.4	75
105	9.93	33.627	3.97					209.8	100
133	9.28	33.809	3.26					186.1	125
158	9.06	33.915	3.01					174.9	150
186	8.64	33.971	2.75					164.5	200
219	8.37	34.071	2.25					153.1	250
290	7.43	34.139	1.43					134.9	300
390	6.61	34.199	0.80					119.7	400
497	6.21	34.250	0.48					110.9	500
601	5.58	34.318	0.28					98.3	600
735	4.96	34.377	0.32					86.9	700
886	4.30	34.437	0.37					75.5	800
1049	3.91	34.467	0.48					69.3	1000

CALCOFI CRUISE 7412 90053

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
32 39.0N	119 28.5W	11/27/74	1735 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
1295M	280	5KT	2	280 8 7		
Z	T	S	U2	SIGT	DT	DD
0	14.39	33.432	6.08	24.915	304.7	0.000
10	14.30	33.434	6.08	24.933	303.0	0.030
20	14.28	33.434	6.06	24.939	302.5	0.060
30	14.26	33.433	6.04	24.944	302.0	0.091
50	12.58	33.301	5.82	25.179	279.6	0.149
75	10.88	33.426	5.10	25.591	240.4	0.214
100	10.02	33.614	4.04	25.887	212.3	0.271
125	9.44	33.755	3.45	26.092	192.8	0.323
150	9.11	33.887	3.06	26.249	177.9	0.370
200	8.51	34.014	2.54	26.443	159.5	0.456
250	7.97	34.114	1.85	26.603	144.3	0.533
300	7.32	34.147	1.34	26.723	133.0	0.605
400	6.56	34.204	0.75	26.872	118.8	0.736
500	6.19	34.252	0.47	26.959	110.5	0.857
600	5.58	34.318	0.28	27.087	98.4	0.969
700	5.10	34.364	0.30	27.180	89.6	1.071
800	4.65	34.405	0.33	27.264	81.6	1.165
1000	3.99	34.462	0.44	27.381	70.5	1.334

90060		RV DAVID STARR JR DAN			CALCOFI CRUISE 7412			RV ALEXANDER AGASSIZ			90070		
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
32 25.0N	119 57.5W	11/27/74	1030 GMT			32 05.5N	120 39.0W	11/29/74	1123 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
929M	350	17KT	1	300 8 7			3517M	330	9KT	1	340 6 4		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	14.39	33.43	24.914	304.9	0.000	0	15.72	33.49	24.671	328.0	0.000		
10	14.37	33.43	24.918	304.4	0.030	10	15.74	33.49	24.666	328.4	0.032		
20	14.37	33.43	24.918	304.4	0.060	20	15.74	33.49	24.666	328.4	0.065		
30	14.37	33.44	24.926	303.7	0.091	30	15.74	33.49	24.666	328.4	0.098		
40	14.23	33.43	24.948	301.7	0.121	40	15.74	33.49	24.666	328.4	0.131		
50	13.47	33.34	25.035	293.3	0.151	50	15.75	33.49	24.664	328.6	0.164		
75	11.44	33.39	25.465	252.5	0.220	75	12.60	33.16	25.068	290.2	0.242		
100	10.56	33.56	25.753	225.0	0.280	100	11.36	33.33	25.433	255.5	0.311		
125	9.63	33.72	26.036	198.2	0.333	125	10.21	33.49	25.760	224.4	0.371		
150	9.11	33.87	26.237	179.0	0.381	150	9.47	33.64	26.000	201.6	0.425		
175	8.79	33.93	26.335	169.8	0.426	175	8.82	33.88	26.291	173.9	0.473		
200	8.46	34.00	26.441	159.7	0.468	200	8.56	33.98	26.410	162.6	0.516		
225	8.22	34.04	26.508	153.3	0.508	225	8.16	34.03	26.510	153.1	0.556		
250	7.76	34.08	26.608	143.8	0.546	250	7.87	34.06	26.576	146.8	0.595		
275	7.43	34.11	26.679	137.1	0.582	275	7.45	34.07	26.645	140.3	0.632		
300	7.24	34.13	26.722	133.0	0.617	300	7.03	34.06	26.696	135.5	0.667		
350	6.76	34.17	26.819	123.8	0.684	350	6.59	34.10	26.787	126.8	0.735		
400	6.27	34.21	26.916	114.6	0.746	400	6.21	34.18	26.900	116.1	0.799		
450	6.08	34.24	26.964	110.1	0.805	450	6.13	34.24	26.957	110.7	0.858		
500	5.83	34.28	27.027	104.1	0.862	500	5.85	34.26	27.009	105.8	0.916		
550	5.53	34.32	27.095	97.6	0.916	550	5.51	34.30	27.082	98.8	0.970		
600	5.41	34.35	27.134	94.0	0.967	600	5.28	34.33	27.133	94.0	1.022		
700	4.92	34.39	27.223	85.5	1.064	700	4.99	34.40	27.222	85.5	1.119		
800	4.50	34.42	27.293	78.8	1.154	800	4.61	34.43	27.289	79.2	1.210		
900	4.28	34.44	27.333	75.0	1.240	900	4.27	34.46	27.350	73.4	1.294		
940	4.10	34.45	27.360	72.5	1.273	1000	3.92	34.49	27.411	67.7	1.374		

90080		RV ALEXANDER AGASSIZ			CALCOFI CRUISE 7412			90090					
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
31 44.0N	121 21.5W	11/29/74	1611 GMT			31 25.0N	122 01.0W	11/29/74	2117 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3952M	350	7KT	1	340 4 5			3805M	230	5KT	1	340 3 5		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.45	33.54	24.543	340.1	0.000	0	16.84	33.58	24.483	345.8	0.000		
10	16.45	33.55	24.551	339.4	0.033	10	16.80	33.58	24.493	344.9	0.034		
20	16.37	33.54	24.562	338.4	0.067	20	16.80	33.58	24.493	344.9	0.069		
30	15.83	33.51	24.661	328.9	0.101	30	16.79	33.58	24.495	344.7	0.103		
40	15.35	33.51	24.768	318.7	0.133	40	16.80	33.58	24.493	344.9	0.138		
50	15.22	33.49	24.781	317.5	0.165	50	16.81	33.58	24.491	345.2	0.172		
75	12.87	33.36	25.170	280.5	0.240	75	13.94	33.32	24.923	304.0	0.254		
100	11.81	33.43	25.427	256.0	0.308	100	12.20	33.32	25.269	271.1	0.326		
125	10.64	33.57	25.747	225.6	0.369	125	10.70	33.48	25.667	233.2	0.390		
150	9.69	33.71	26.018	199.8	0.423	150	9.73	33.60	25.926	208.6	0.446		
175	9.13	33.87	26.234	179.3	0.471	175	9.34	33.77	26.122	189.9	0.497		
200	8.82	33.97	26.361	167.2	0.515	200	8.99	33.89	26.272	175.7	0.543		
225	8.24	34.07	26.529	151.3	0.556	225	8.69	34.00	26.405	163.1	0.587		
250	8.00	34.09	26.580	146.4	0.594	250	8.33	34.05	26.500	154.1	0.627		
275	7.72	34.12	26.645	140.3	0.631	275	8.07	34.09	26.570	147.4	0.666		
300	7.48	34.13	26.688	136.2	0.667	300	7.65	34.10	26.640	140.8	0.704		
350	6.87	34.20	26.828	122.9	0.734	350	7.12	34.16	26.762	129.2	0.774		
400	6.60	34.24	26.896	116.5	0.797	400	6.67	34.19	26.847	121.1	0.839		
450	6.40	34.30	26.969	109.5	0.857	450	6.30	34.19	26.896	116.5	0.901		
500	6.06	34.31	27.021	104.6	0.913	500	5.77	34.24	27.003	106.4	0.960		
550	5.80	34.34	27.078	99.2	0.968	550	5.47	34.28	27.071	99.9	1.015		
600	5.58	34.38	27.137	93.7	1.020	600	5.21	34.33	27.142	93.2	1.067		
700	5.02	34.42	27.235	84.3	1.117	700	5.00	34.42	27.237	84.1	1.163		
800	4.66	34.46	27.308	77.5	1.206	800	4.59	34.44	27.299	78.2	1.252		
900	4.30	34.49	27.371	71.5	1.289	900	4.26	34.47	27.359	72.6	1.336		
1000	4.05	34.50	27.405	68.2	1.368	1000	3.91	34.49	27.411	67.6	1.415		

RV ALEXANDER AGASSIZ		CALCOFI CRUISE 7412			90100										
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 07.5N	122 39.0W	11/30/74	0309 GMT			4044M	240	5KT	1						
Z	T	S	D2	PD4	SI03	NO2	NO3	DT	Z	T	S	D2	SIGT	DT	DD
1	16.96	33.517	5.64					353.1	0	16.96	33.517	5.64	24.407	353.1	0.000
11	16.95	33.515	5.68					353.0	10	16.95	33.516	5.67	24.408	353.0	0.035
31	16.95	33.517	5.63					352.9	20	16.95	33.517	5.66	24.409	353.0	0.070
55	16.87	33.524	5.66					350.6	30	16.95	33.518	5.63	24.409	352.9	0.106
70	16.36	33.476	5.80					342.8	50	16.88	33.524	5.65	24.429	351.1	0.176
85	13.53	33.296	6.15					297.7	75	15.40	33.393	5.94	24.665	328.5	0.262
99	13.14	33.473	5.83					277.3	100	13.09	33.477	5.81	25.215	276.2	0.338
128	11.52	33.454	5.31					249.1	125	11.71	33.466	5.36	25.472	251.7	0.404
153	10.19	33.541	4.62					220.3	150	10.33	33.527	4.70	25.766	223.8	0.465
178	9.34	33.693	3.92					195.6	200	8.93	33.829	3.49	26.233	179.4	0.567
211	8.78	33.888	3.32					172.7	250	8.07	33.993	2.81	26.492	154.8	0.653
274	7.68	34.023	2.54					146.9	300	7.38	34.066	2.15	26.650	139.8	0.729
371	6.76	34.142	1.22					125.9	400	6.46	34.153	1.03	26.845	121.3	0.865
468	5.83	34.174	0.77					112.0	500	5.61	34.203	0.65	26.992	107.3	0.985
569	5.24	34.270	0.46					98.0	600	5.09	34.295	0.40	27.127	94.6	1.092
695	4.74	34.360	0.33					85.8	700	4.72	34.363	0.33	27.223	85.4	1.190
845	4.30	34.428	0.42					76.1	800	4.42	34.411	0.39	27.295	78.7	1.279
998	3.86	34.476	0.64					68.2	1000	3.85	34.480		27.410	67.8	1.443

90100

RV ALFAXANDER AGASSIZ

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
31 07.5N	122 39.0W	11/30/74	0206 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4044M	240	5KT	1		
Z	T	S	SIGMA T	DT	DD
0	16.93	33.51	24.409	353.0	0.000
10	16.91	33.51	24.414	352.5	0.035
20	16.91	33.51	24.414	352.5	0.070
30	16.89	33.51	24.418	352.0	0.105
40	16.85	33.53	24.443	349.7	0.141
50	16.86	33.52	24.433	350.7	0.176
75	15.28	33.47	24.753	320.2	0.260
100	13.17	33.46	25.188	278.8	0.336
125	11.82	33.43	25.425	256.2	0.403
150	10.23	33.53	25.787	221.8	0.464
175	8.43	33.68	26.037	198.0	0.517
200	8.97	33.84	26.236	179.1	0.565
225	8.64	33.94	26.366	166.8	0.609
250	8.25	33.99	26.465	157.4	0.651
275	7.87	34.05	26.568	147.6	0.690
300	7.47	34.06	26.634	141.3	0.727
350	6.84	34.10	26.754	130.0	0.798
400	6.54	34.15	26.833	122.5	0.864
450	6.00	34.19	26.934	112.8	0.925
500	5.63	34.23	27.012	105.5	0.983
550	5.45	34.28	27.073	99.7	1.038
600	5.12	34.31	27.136	93.7	1.089
700	4.74	34.39	27.243	83.6	1.185
800	4.43	34.43	27.309	77.3	1.273
900	4.10	34.46	27.368	71.7	1.356
1000	3.83	34.48	27.412	67.6	1.434

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91026

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

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91026

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 14.5N	117 27.5W	12/03/74	0323 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
15M	100	4KT	1		
Z	T	S	SIGMA T	DT	DD
0	14.68	33.45	24.868	309.3	0.000
7	14.68	33.45	24.868	309.3	0.021

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 14.0N	117 29.0W	12/03/74	0204 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
31M	220	5KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.20	33.46	24.763	319.3	0.000
10	14.80	33.49	24.873	308.8	0.031
20	14.52	33.48	24.925	303.8	0.062
28	14.12	33.46	24.994	297.3	0.086

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91028

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

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91029

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 11.5N	117 34.0W	12/03/74	0012 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
593M	200	6KT	1		
Z	T	S	SIGMA T	DT	DD
0	16.20	33.55	24.608	333.9	0.000
10	16.16	33.55	24.617	333.1	0.033
20	16.05	33.55	24.643	330.7	0.066
30	14.84	33.42	24.810	314.7	0.098
40	13.24	33.39	25.120	285.3	0.129
50	12.43	33.47	25.341	264.2	0.156
75	11.35	33.54	25.597	239.8	0.220
100	10.55	33.65	25.825	218.2	0.277
125	10.02	33.75	25.994	202.1	0.330
150	8.61	33.85	26.140	188.2	0.380
175	9.27	33.92	26.250	177.8	0.426
200	8.18	34.08	26.390	164.5	0.470
225	8.76	34.10	26.472	156.7	0.511
250	8.54	34.16	26.553	149.0	0.551
275	8.22	34.15	26.594	145.1	0.589
300	8.02	34.17	26.640	140.7	0.626

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
33 09.5N	117 38.0W	12/02/74	2231 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
741M	210	7KT	1	190 1 5	
Z	T	S	SIGMA T	DT	DD
0	16.58	33.58	24.544	340.1	0.000
10	16.39	33.57	24.580	336.6	0.033
20	16.25	33.56	24.605	334.3	0.067
30	16.18	33.55	24.613	333.5	0.100
40	14.54	33.33	24.805	315.2	0.133
50	13.09	33.34	25.111	286.1	0.163
75	11.27	33.46	25.550	244.4	0.230
100	10.40	33.61	25.820	218.7	0.288
125	9.89	33.69	25.969	204.5	0.342
150	9.50	33.83	26.143	188.0	0.391
175	9.26	33.91	26.244	178.3	0.438
200	9.29	34.07	26.364	166.9	0.482
225	8.63	34.13	26.516	152.5	0.523
250	8.50	34.15	26.552	149.1	0.562
275	8.32	34.17	26.595	145.0	0.600
300	7.97	34.16	26.640	140.8	0.637

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91030

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
33 07.5N	117 42.5W	12/02/74	2032 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
833M	190	2KT	1	1 4	
Z	T	S	SIGMA T	DT	DD
0	16.45	33.57	24.566	337.9	0.000
10	16.30	33.57	24.601	334.7	0.033
20	16.26	33.57	24.610	333.8	0.067
30	16.11	33.54	24.621	332.7	0.100
40	14.07	33.31	24.889	307.3	0.132
50	13.07	33.29	25.076	289.4	0.162
75	11.38	33.47	25.538	245.5	0.229
100	10.36	33.60	25.819	218.7	0.288
125	9.80	33.75	26.031	198.6	0.341
150	9.40	33.87	26.190	183.5	0.389
175	9.22	33.96	26.290	174.0	0.435
200	9.04	34.07	26.404	163.1	0.478
225	8.62	34.08	26.479	156.1	0.519
250	8.33	34.10	26.539	150.4	0.558
275	8.14	34.17	26.622	142.5	0.596
300	7.93	34.18	26.661	138.7	0.632

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93026

CALCOFI CRUISE 7412

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
32 57.0N	117 17.5W	12/03/74	0837 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
43M	090	7KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.27	33.50	24.778	317.8	0.000
10	15.04	33.47	24.805	315.2	0.031
20	13.77	33.39	25.012	295.5	0.062
30	13.01	33.37	25.150	282.4	0.091
37	12.23	33.46	25.371	261.3	0.110

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93026

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
32 57.0N	117 18.5W	12/03/74	0948 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
67M	090	9KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.36	33.50	24.758	319.7	0.000
10	15.36	33.51	24.766	318.9	0.031
20	14.79	33.40	24.806	315.2	0.063
30	13.57	33.38	25.045	292.4	0.094
40	12.76	33.39	25.215	276.2	0.127
50	12.02	33.49	25.434	255.3	0.149

CALCOFI CRUISE 7412

93028

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
32 54.5N	117 22.0W	12/03/74	1108 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
574M	090	7KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.23	33.50	24.787	317.0	0.000
10	15.23	33.50	24.787	317.0	0.031
20	14.25	33.39	24.913	305.0	0.062
30	13.14	33.39	25.140	283.4	0.092
40	12.59	33.41	25.263	271.6	0.120
50	12.21	33.46	25.375	261.0	0.146
75	11.42	33.54	25.584	241.1	0.210
100	10.89	33.66	25.773	223.1	0.268
125	10.25	33.75	25.955	205.8	0.327
150	10.04	33.80	26.029	198.8	0.374
175	9.80	33.88	26.132	189.0	0.423
200	9.49	33.99	26.269	176.0	0.469
225	9.09	34.06	26.389	164.6	0.513
250	8.76	34.11	26.482	155.8	0.554
275	8.51	34.13	26.535	150.8	0.594
300	8.30	34.16	26.590	145.5	0.632

93029

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
32 53.0N	117 26.5W	12/03/74	1332 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
574M	120	8KT	1	320 4 8	
Z	T	S	SIGMA T	DT	DD
0	15.54	33.52	24.734	322.0	0.000
10	15.54	33.52	24.741	321.4	0.032
20	14.94	33.48	24.835	312.4	0.063
30	13.27	33.42	25.137	283.6	0.093
40	12.56	33.41	25.269	271.1	0.121
50	12.30	33.45	25.350	263.3	0.148
75	11.33	33.58	25.632	236.5	0.211
100	10.79	33.75	25.861	214.8	0.268
125	10.16	33.86	26.056	196.3	0.320
150	9.80	33.90	26.148	187.5	0.368
175	9.52	33.93	26.218	180.9	0.415
200	9.28	34.04	26.342	169.0	0.460
225	8.80	34.08	26.450	158.8	0.502
250	8.60	34.11	26.505	153.6	0.542
275	8.40	34.14	26.559	148.4	0.581
300	8.24	34.17	26.607	143.9	0.619

CALCOFI CRUISE 7412

93030

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME
32 50.5N	117 31.0W	12/03/74	1516 GMT

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
621M	140	8KT	1	320 4 8	
Z	T	S	SIGMA T	DT	DD
0	15.87	33.55	24.683	326.8	0.000
10	15.86	33.55	24.685	326.8	0.032
20	15.86	33.55	24.685	326.6	0.065
30	14.42	33.44	24.915	304.7	0.097
40	12.84	33.42	25.222	275.5	0.126
50	12.06	33.51	25.442	254.6	0.152
75	11.34	33.64	25.676	232.3	0.214
100	10.64	33.77	25.903	210.8	0.269
125	10.40	33.85	26.007	200.9	0.321
150	10.02	33.92	26.126	189.6	0.371
175	9.76	34.03	26.256	177.3	0.418
200	9.23	34.09	26.390	164.5	0.461
225	8.86	34.09	26.449	158.9	0.503
250	8.75	34.14	26.505	153.6	0.543
275	8.54	34.17	26.561	148.2	0.582
300	8.21	34.19	26.627	142.0	0.620
350	7.64	34.21	26.728	132.5	0.691
400	7.26	34.22	26.789	126.6	0.759
450	6.74	34.26	26.893	116.8	0.823
500	6.29	34.29	26.976	108.9	0.883
550	5.96	34.29	27.018	104.9	0.940
600	5.70	34.33	27.083	98.8	0.994
621	5.57	34.34	27.106	96.5	1.017

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER	DOMINANT WAVES		
32 50.5N		117 31.0W		12/03/74		1559			621M	140		8KT	1	320 4 8		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
1	15.84	33.556	6.08					325.7	0	15.84	33.556	6.08	24.694	325.7	0.000	
11	15.85	33.552	6.20					326.2	10	15.84	33.553	6.19	24.689	326.2	0.032	
30	14.28	33.424	6.11					303.1	20	15.85	33.552	6.15	24.689	326.2	0.065	
39	12.82	33.408	5.46					276.0	30	14.28	33.424	6.11	24.932	303.1	0.096	
53	11.80	33.496	4.97					251.0	50	11.92	33.473	5.04	25.438	254.9	0.152	
68	11.51	33.599	4.45					238.3	75	11.26	33.646	4.19	25.694	230.6	0.213	
91	10.74	33.737	3.73					214.9	100	10.62	33.772	3.63	25.906	210.5	0.269	
110	10.55	33.799	3.57					207.2	125	10.41	33.834	3.40	25.990	202.5	0.321	
131	10.34	33.845	3.34					200.3	150	9.85	33.896	3.22	26.134	188.8	0.371	
149	9.86	33.890	3.23					189.2	200	9.45	34.072	2.66	26.339	169.3	0.462	
178	9.74	33.997	2.96					179.4	250	8.77	34.117	2.23	26.483	155.7	0.546	
212	9.27	34.102	2.52					164.3	300	8.19	34.164	1.72	26.610	143.6	0.623	
240	8.89	34.107	2.33					158.1	400	7.14	34.218	1.04	26.804	125.2	0.763	
288	8.35	34.156	1.83					146.5	500	6.32	34.265	0.52	26.952	111.2	0.888	
341	7.67	34.187	1.39					134.6								
421	6.98	34.227	0.94					122.4								
503	6.30	34.266	0.51					110.8								
587	5.76	34.315	0.39					100.6								

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RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

93050

LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			LATITUDE		LONGITUDE		MO/DAY/YR		START TIME								
32 30.0N		118 11.5W		11/26/74		0937 GMT			32 10.0N		118 52.5W		11/26/74		1740 GMT								
BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES			BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES				
1664M		260		9KT		1		320 3 7			1479M		310		14KT		1		320 3 7				
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	16.28	33.55	24.590	335.7	0.000	0	16.35	33.56	24.582	336.5	0.000	0	16.35	33.56	24.582	336.5	0.000	0	16.35	33.56	24.582	336.5	0.000
10	16.28	33.56	24.598	335.0	0.033	10	16.34	33.56	24.584	336.3	0.033	10	16.34	33.56	24.584	336.3	0.033	10	16.34	33.56	24.584	336.3	0.033
20	16.28	33.56	24.598	335.0	0.067	20	16.32	33.55	24.581	336.5	0.067	20	16.32	33.55	24.581	336.5	0.067	20	16.32	33.55	24.581	336.5	0.067
30	15.54	33.45	24.680	327.1	0.100	30	15.47	33.47	24.711	324.2	0.100	30	15.47	33.47	24.711	324.2	0.100	30	15.47	33.47	24.711	324.2	0.100
40	14.49	33.39	24.862	309.8	0.132	40	14.64	33.44	24.868	309.2	0.132	40	14.64	33.44	24.868	309.2	0.132	40	14.64	33.44	24.868	309.2	0.132
50	12.86	33.33	25.149	282.5	0.161	50	12.68	33.26	25.130	284.3	0.162	50	12.68	33.26	25.130	284.3	0.162	50	12.68	33.26	25.130	284.3	0.162
75	11.53	33.44	25.487	250.3	0.228	75	11.03	33.41	25.554	244.0	0.228	75	11.03	33.41	25.554	244.0	0.228	75	11.03	33.41	25.554	244.0	0.228
100	10.46	33.57	25.779	222.8	0.288	100	9.96	33.51	25.817	218.9	0.286	100	9.96	33.51	25.817	218.9	0.286	100	9.96	33.51	25.817	218.9	0.286
125	9.89	33.69	25.969	204.5	0.342	125	9.46	33.72	26.064	195.5	0.339	125	9.46	33.72	26.064	195.5	0.339	125	9.46	33.72	26.064	195.5	0.339
150	9.45	33.82	26.143	188.0	0.392	150	9.04	33.84	26.225	180.2	0.386	150	9.04	33.84	26.225	180.2	0.386	150	9.04	33.84	26.225	180.2	0.386
175	9.30	33.94	26.261	176.7	0.438	175	8.82	33.93	26.330	170.2	0.431	175	8.82	33.93	26.330	170.2	0.431	175	8.82	33.93	26.330	170.2	0.431
200	8.95	34.01	26.372	166.2	0.482	200	8.47	34.00	26.439	159.8	0.473	200	8.47	34.00	26.439	159.8	0.473	200	8.47	34.00	26.439	159.8	0.473
225	8.49	34.01	26.444	159.4	0.524	225	8.29	34.06	26.513	152.8	0.513	225	8.29	34.06	26.513	152.8	0.513	225	8.29	34.06	26.513	152.8	0.513
250	8.07	34.01	26.507	153.4	0.564	250	8.01	34.09	26.579	146.6	0.551	250	8.01	34.09	26.579	146.6	0.551	250	8.01	34.09	26.579	146.6	0.551
275	7.65	34.03	26.585	146.0	0.602	275	7.69	34.11	26.642	140.6	0.588	275	7.69	34.11	26.642	140.6	0.588	275	7.69	34.11	26.642	140.6	0.588
300	7.50	34.05	26.622	142.9	0.640	300	7.16	34.09	26.701	134.9	0.624	300	7.16	34.09	26.701	134.9	0.624	300	7.16	34.09	26.701	134.9	0.624
350	7.08	34.14	26.752	130.2	0.710	350	7.03	34.17	26.782	127.3	0.692	350	7.03	34.17	26.782	127.3	0.692	350	7.03	34.17	26.782	127.3	0.692
400	6.59	34.17	26.842	121.6	0.776	400	6.48	34.15	26.841	121.7	0.757	400	6.48	34.15	26.841	121.7	0.757	400	6.48	34.15	26.841	121.7	0.757
450	6.30	34.20	26.904	115.7	0.838	450	6.35	34.24	26.929	113.4	0.819	450	6.35	34.24	26.929	113.4	0.819	450	6.35	34.24	26.929	113.4	0.819
500	6.16	34.26	26.969	109.5	0.898	500	5.94	34.28	27.013	105.4	0.877	500	5.94	34.28	27.013	105.4	0.877	500	5.94	34.28	27.013	105.4	0.877
550	5.89	34.29	27.027	104.0	0.955	550	5.71	34.31	27.065	100.4	0.932	550	5.71	34.31	27.065	100.4	0.932	550	5.71	34.31	27.065	100.4	0.932
600	5.62	34.30	27.069	100.1	1.010	600	5.51	34.33	27.106	96.6	0.985	600	5.51	34.33	27.106	96.6	0.985	600	5.51	34.33	27.106	96.6	0.985
700	5.25	34.36	27.160	91.4	1.113	700	5.06	34.38	27.199	87.8	1.085	700	5.06	34.38	27.199	87.8	1.085	700	5.06	34.38	27.199	87.8	1.085
800	4.89	34.40	27.234	84.4	1.210	800	4.63	34.42	27.279	80.2	1.177	800	4.63	34.42	27.279	80.2	1.177	800	4.63	34.42	27.279	80.2	1.177
900	4.06	34.46	27.372	71.3	1.296	900	4.27	34.45	27.342	74.2	1.263	900	4.27	34.45	27.342	74.2	1.263	900	4.27	34.45	27.342	74.2	1.263
1000	3.79	34.49	27.424	66.4	1.374	1000	3.66	34.48	27.409	67.9	1.342	1000	3.66	34.48	27.409	67.9	1.342	1000	3.66	34.48	27.409	67.9	1.342

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

93060

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND		SPEED	WEATHER	DOMINANT WAVES		
31 49.0N		119 34.0W		11/27/74		1202			2697M	310		15KT	1	320 4 8		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
1	15.57	33.526	5.79					322.2	0	15.57	33.526	5.79	24.732	322.2	0.000	
11	15.57	33.524	5.84					322.3	10	15.57	33.525	5.83	24.730	322.3	0.032	
31	15.42	33.509	5.87					320.3	20	15.50	33.518	5.85	24.740	321.4	0.064	
55	12.93	33.335	5.78					283.5	30	15.42	33.511	5.86	24.751	320.4	0.096	
70	11.89	33.379	5.31					261.2	50	13.51	33.362	5.79	25.043	292.6	0.158	
85	11.00	33.443	4.92					241.0	75	11.56	33.400	5.17	25.448	254.1	0.226	
100	10.45	33.520	4.52					226.1	100	10.45	33.520	4.52	25.742	226.1	0.287	
129	9.52	33.700	3.84					197.9	125	9.63	33.674	3.92	25.998	201.7	0.341	
153	8.99	33.879	3.36					176.5	150	9.04	33.859	3.40	26.239	178.9	0.389	
178	8.81	33.987	3.27					165.8	200	8.45	34.015	3.10	26.452	158.6	0.475	
212	8.24	34.018	2.98					155.2	250	7.66	34.053	2.42	26.600	144.6	0.553	
276	7.34	34.078	2.01					138.2	300	7.15	34.108	1.71	26.717	133.5	0.625	
374	6.72	34.191	1.04					121.7	400	6.52	34.208	0.88	26.881	117.9	0.756	
472	6.00	34.249	0.60					108.4	500	5.84	34.273	0.51	27.019	104.8	0.873	
604	5.34	34.356	0.32					92.7	600	5.35	34.353	0.32	27.142	93.1	0.979	
755	4.															

93060		RV DAVID STARK JORDAN			CALCOFI CRUISE 7412			RV ALEXANDER AGASSIZ			93070	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
31 50.0N	119 34.0W	11/27/74	0221 GMT			31 29.0N	120 14.5W	11/29/74	0537 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2265M	320	20KT	1	290 10 9			3931M	300	8KT	1	340 6 4	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	15.54	33.50	24.719	323.4	0.000	0	15.11	33.43	24.759	319.6	0.000	
10	15.54	33.50	24.719	323.4	0.032	10	15.12	33.43	24.757	319.8	0.031	
20	15.52	33.50	24.723	323.0	0.064	20	15.12	33.43	24.757	319.8	0.064	
30	15.18	33.48	24.782	317.4	0.096	30	15.13	33.43	24.755	320.0	0.096	
40	14.95	33.47	24.825	313.3	0.128	40	15.09	33.43	24.764	319.2	0.128	
50	13.89	33.39	24.987	297.8	0.159	50	14.73	33.40	24.818	313.9	0.159	
75	17.19	33.32	25.270	270.9	0.230	75	12.27	33.29	25.232	274.6	0.233	
100	11.05	33.41	25.550	244.3	0.295	100	10.95	33.50	25.638	235.9	0.298	
125	10.10	33.55	25.825	218.2	0.353	125	9.84	33.66	25.954	205.9	0.354	
150	5.27	33.76	26.126	189.6	0.405	150	9.15	33.85	26.215	181.1	0.403	
175	8.84	33.90	26.303	172.7	0.451	175	8.91	33.93	26.316	171.5	0.447	
200	8.45	33.98	26.427	161.0	0.494	200	8.56	34.00	26.425	161.1	0.490	
225	8.13	34.03	26.514	152.7	0.534	225	8.43	34.03	26.469	157.0	0.531	
250	7.76	34.01	26.553	149.0	0.573	250	8.07	34.05	26.539	150.4	0.570	
275	7.78	34.09	26.613	143.3	0.610	275	7.80	34.09	26.610	143.6	0.608	
300	7.48	34.09	26.656	139.2	0.647	300	7.59	34.11	26.656	139.2	0.645	
350	7.04	34.17	26.781	127.4	0.716	350	7.14	34.16	26.759	129.5	0.714	
400	6.62	34.20	26.862	119.7	0.781	400	6.70	34.19	26.843	121.5	0.780	
450	6.28	34.24	26.938	112.5	0.842	450	6.28	34.23	26.930	113.2	0.842	
500	5.88	34.26	27.005	106.2	0.900	500	5.96	34.28	27.010	105.6	0.900	
550	5.64	34.30	27.066	100.4	0.955	550	5.66	34.31	27.072	99.8	0.954	
600	5.40	34.33	27.119	95.3	1.007	600	5.47	34.35	27.126	94.6	1.007	
700	4.98	34.37	27.200	87.7	1.106	700	5.01	34.38	27.204	87.2	1.105	
800	4.57	34.41	27.278	80.3	1.198	800	4.59	34.43	27.292	79.0	1.197	
900	4.24	34.44	27.337	74.6	1.284	900	4.22	34.46	27.355	72.9	1.281	
1000	3.85	34.48	27.410	67.8	1.364	1000	3.93	34.48	27.402	68.5	1.361	

93080		RV ALEXANDER AGASSIZ			CALCOFI CRUISE 7412			RV ALEXANDER AGASSIZ			93080				
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 10.0N	120 54.0W	11/29/74	0113 GMT			3941M	330	15KT	1	330 6 5					
Z	T	S	02	04	103	012	003	DT	Z	T	S	02	SIGT	DT	DD
2	16.92	33.559	5.50					349.2	0	16.92	33.559	5.50	24.449	349.2	0.000
11	16.92	33.556	5.190					349.4	10	16.92	33.558	5.54	24.447	349.3	0.034
30	16.94	33.556	4.840					349.8	20	16.92	33.557	5.61	24.444	349.6	0.069
56	16.91	33.553	5.030					349.4	30	16.94	33.556	5.67	24.442	349.8	0.105
71	15.81	33.473	5.99					331.2	50	16.91	33.555	5.82	24.445	349.5	0.175
86	13.97	33.398	6.12					298.8	75	15.31	33.450	6.04	24.729	322.5	0.259
101	12.96	33.360	5.89					282.2	100	13.01	33.363	5.91	25.143	283.1	0.335
131	11.19	33.420	5.27					246.0	125	11.51	33.399	5.40	25.456	253.3	0.403
155	10.03	33.535	4.72					218.2	150	10.24	33.508	4.84	25.766	223.8	0.464
180	9.21	33.710	4.00					192.4	200	8.84	33.845	3.59	26.259	176.9	0.565
214	8.66	33.924	3.36					168.3	250	8.15	34.018	2.80	26.501	154.0	0.650
277	7.81	34.043	2.45					147.3	300	7.51	34.063	2.17	26.630	141.7	0.726
375	6.68	34.104	1.43					127.7	400	6.48	34.124	1.21	26.819	123.8	0.864
472	6.01	34.181	0.73					113.6	500	5.81	34.203	0.60	26.968	109.7	0.987
573	5.35	34.261	0.40					100.0	600	5.22	34.287	0.38	27.106	96.5	1.097
699	4.85	34.376	0.31					85.8	700	4.84	34.377	0.31	27.220	85.7	1.196
850	4.46	34.441	0.39					76.8	800	4.57	34.426	0.34	27.289	79.2	1.286
1004	4.00	34.475	0.55					69.6	1000	4.01	34.474	0.54	27.389	69.8	1.453

93080		RV ALEXANDER AGASSIZ			CALCOFI CRUISE 7412			RV ALEXANDER AGASSIZ			93090	
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
31 10.0N	120 54.0W	11/29/74	0021 GMT			30 50.5N	121 33.0W	11/28/74	1907 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3941M	330	15KT	1	330 6 5			4004M	340	14KT	1	340 5 5	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	
0	16.92	33.55	24.442	349.8	0.000	0	16.98	33.54	24.420	351.9	0.000	
10	16.93	33.55	24.440	350.0	0.035	10	16.98	33.54	24.420	351.9	0.035	
20	16.93	33.55	24.440	350.0	0.070	20	16.98	33.54	24.420	351.9	0.070	
30	16.93	33.55	24.440	350.0	0.105	30	16.98	33.54	24.420	351.9	0.105	
40	16.93	33.54	24.432	350.7	0.140	40	16.98	33.54	24.420	351.9	0.141	
50	16.92	33.55	24.442	349.8	0.175	50	16.99	33.54	24.418	352.1	0.176	
75	15.09	33.40	24.741	321.4	0.259	75	14.62	33.41	24.850	311.0	0.259	
100	13.19	33.35	25.099	287.3	0.336	100	13.34	33.41	25.115	285.7	0.334	
125	11.97	33.39	25.366	261.8	0.405	125	12.47	33.49	25.348	263.5	0.404	
150	10.29	33.49	25.746	225.7	0.467	150	11.45	33.60	25.625	237.2	0.467	
175	9.35	33.65	26.027	199.0	0.521	175	9.89	33.64	25.930	208.2	0.524	
200	8.82	33.89	26.299	173.2	0.568	200	9.21	33.85	26.206	182.0	0.573	
225	8.50	33.98	26.419	161.8	0.611	225	8.92	33.98	26.353	168.0	0.618	
250	8.19	34.03	26.505	153.6	0.652	250	8.71	34.04	26.433	160.4	0.660	
275	7.83	34.05	26.574	147.0	0.690	275	8.14	34.07	26.544	149.9	0.700	
300	7.51	34.06	26.628	141.9	0.728	300	7.85	34.12	26.626	142.1	0.738	
350	6.86	34.07	26.727	132.5	0.799	350	7.00	34.14	26.763	129.1	0.808	
400	6.41	34.15	26.850	120.8	0.865	400	6.46	34.16	26.851	120.7	0.874	
450	6.07	34.19	26.926	113.7	0.926	450	6.16	34.21	26.930	113.3	0.935	
500	5.71	34.23	27.002	106.4	0.985	500	5.83	34.25	27.003	106.3	0.993	
550	5.37	34.26	27.067	100.2	1.040	550	5.47	34.28	27.071	99.9	1.048	
600	5.21	34.31	27.126	94.7	1.092	600	5.27	34.33	27.134	93.9	1.100	
700	4.85	34.40	27.239	84.0	1.188	700	4.92	34.40	27.231	84.8	1.197	
800	4.57	34.44	27.302	78.0	1.277	800	4.45	34.43	27.307	77.5	1.286	
900	4.24	34.46	27.353	73.1	1.361	900	4.19	34.47	27.366	71.9	1.369	
1000	3.98	34.47	27.389	69.8	1.442	1000	3.93	34.49	27.410	67.8	1.448	

93100		RV ALEXANDER AGASSIZ				CALCOPI CRUISE 7412				94032				
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	
30 30.0N	122 14.0W	11/28/74	1333 GMT		32 40.0N	117 35.0W	11/26/74	0244 GMT		32 40.0N	117 35.0W	11/26/74	0244 GMT	
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
4154M	360	17KT	1	360	5 6	1110M	300	10KT	0	300	2 4			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD			
0	17.10	33.56	24.407	353.1	0.000	0	16.51	33.59	24.568	337.8	0.000			
10	17.12	33.56	24.402	353.6	0.035	10	16.45	33.57	24.566	337.9	0.033			
20	17.12	33.55	24.395	354.3	0.070	20	16.35	33.58	24.597	335.0	0.067			
30	17.11	33.56	24.405	353.3	0.106	30	14.41	33.26	24.779	317.7	0.100			
40	17.12	33.55	24.395	354.3	0.141	40	13.18	33.36	25.109	286.3	0.130			
50	17.13	33.55	24.392	354.5	0.177	50	12.31	33.48	25.371	261.3	0.158			
75	14.79	33.45	24.844	311.5	0.261	75	11.26	33.60	25.660	233.9	0.220			
100	13.14	33.45	25.186	279.0	0.335	100	10.56	33.70	25.862	214.7	0.276			
125	12.12	33.50	25.423	256.4	0.403	125	9.69	33.80	26.088	193.2	0.328			
150	10.54	33.52	25.726	227.6	0.464	150	9.34	33.94	26.255	177.4	0.375			
175	9.62	33.69	26.014	200.2	0.518	175	8.96	34.03	26.386	164.9	0.419			
200	8.86	33.89	26.293	173.8	0.566	200	8.65	34.12	26.505	153.6	0.459			
225	8.61	33.94	26.371	166.4	0.609	225	8.46	34.16	26.566	147.8	0.498			
250	8.26	34.00	26.471	156.8	0.651	250	8.43	34.22	26.617	142.9	0.535			
275	7.76	34.05	26.584	146.0	0.690	275	8.35	34.25	26.653	139.5	0.572			
300	7.47	34.07	26.642	140.6	0.727	300	7.95	34.21	26.682	136.8	0.608			
350	6.86	34.10	26.751	130.3	0.797	350	7.48	34.24	26.774	128.1	0.677			
400	6.23	34.13	26.858	120.1	0.862	400	7.00	34.26	26.857	120.2	0.742			
450	5.93	34.19	26.943	112.0	0.923	450	6.67	34.30	26.934	112.9	0.803			
500	5.69	34.26	27.028	103.9	0.980	500	6.18	34.30	26.998	106.8	0.861			
550	5.39	34.29	27.088	98.2	1.034	550	5.88	34.35	27.076	99.4	0.917			
600	5.17	34.32	27.138	93.5	1.085	600	5.46	34.37	27.143	93.0	0.968			
700	4.75	34.41	27.258	82.2	1.181	700	4.99	34.42	27.238	84.0	1.065			
800	4.37	34.45	27.331	75.2	1.267	800	4.67	34.44	27.290	79.1	1.154			
900	4.04	34.48	27.390	69.6	1.348	900	4.27	34.48	27.366	71.9	1.238			
1000	3.78	34.50	27.433	65.6	1.424	1000	3.96	34.49	27.407	68.1	1.317			

93100		RV ALEXANDER AGASSIZ				CALCOPI CRUISE 7412				94032					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
32 40.0N	117 35.0W	11/26/74	0108	GMT	1110M	300	10KT	0	300	2 4					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	U2	SIGT	DT	DD
0	16.52	33.577	6.01					339.0	0	16.52	33.577	6.01	24.555	339.0	0.000
10	16.44	33.574	6.37					337.4	10	16.44	33.574	6.37	24.572	337.4	0.033
20	16.33	33.566	6.06					335.6	20	16.33	33.566	6.06	24.591	335.6	0.067
30	14.58	33.439	6.03					308.0	30	14.58	33.439	6.03	24.881	308.0	0.099
40	13.52	33.400	5.84					289.9	50	12.48	33.432	5.38	25.302	268.0	0.157
50	12.48	33.432	5.38					268.0	75	11.50	33.566	4.74	25.588	240.7	0.221
60	12.06	33.507	4.98					254.8	100	10.60	33.695	4.06	25.851	215.7	0.279
70	11.76	33.545	4.82					246.7	125	10.11	33.845	3.51	26.052	196.6	0.331
80	11.24	33.584	4.67					234.7	150	9.67	33.961	3.11	26.214	181.2	0.379
90	10.81	33.606	4.44					225.8	200	8.99	34.090	2.69	26.427	161.0	0.466
100	10.60	33.695	4.06					215.7	250	8.63	34.211	1.89	26.578	146.7	0.545
199	9.00	34.086	2.71					161.3	300	8.28	34.271	1.24	26.679	137.1	0.619
297	8.33	34.271	1.26					137.7	400	6.97	34.242	0.85	26.846	121.2	0.753
394	7.02	34.239	0.89					122.0	500	6.19	34.297	0.43	26.993	107.2	0.874
442	6.70	34.267	0.65					115.7	600	5.51	34.340		27.113	95.8	0.983
490	6.28	34.294	0.46					108.5							
538	5.90	34.309	0.37					102.7							
587	5.59	34.334	0.31					97.2							

93100		RV DAVID STARR JORDAN				CALCOPI CRUISE 7412				94032					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
32 40.0N	117 35.0W	11/26/74	0357	GMT	1110M	270	8KT	0	270	3 7					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	U2	SIGT	DT	DD
0A	16.59	33.571	5.95					341.0	0	16.59	33.571	5.95	24.535	341.0	0.000
10	16.54	33.569	6.08					340.0	10	16.54	33.569	6.08	24.545	340.0	0.034
29	14.79	33.448	6.24					311.7	20	15.75	33.507	6.16	24.674	327.7	0.067
58	12.03	33.492	5.18					255.4	30	14.67	33.447	6.21	24.865	309.6	0.099
77	11.25	33.576	4.69					237.2	50	12.69	33.459	5.53	25.280	270.0	0.157
92	10.68	33.649	4.27					220.4	75	11.40	33.568	4.73	25.608	238.8	0.221
105	10.03	33.641	4.03					210.4	100	10.26	33.646	4.11	25.871	213.8	0.278
135	9.87	33.790	3.65					196.8	125	9.92	33.748	3.76	26.008	200.8	0.331
157	9.51	33.887	3.33					183.9	150	9.63	33.858	3.43	26.142	188.0	0.380
186	9.08	33.986	2.91					170.0	200	8.83	34.014	2.89	26.394	164.2	0.470
220	8.49	34.044	2.88					158.9	250	8.19	34.096	2.46	26.556	148.8	0.550
292	7.90	34.157	1.74					140.0	300	7.82	34.165	1.65	26.664	138.5	0.624
392	6.96	34.225	0.94					122.2	400	6.88	34.230	0.88	26.849	120.9	0.759
497	6.03	34.285	0.42					106.1	500	6.00	34.287	0.41	27.009	105.7	0.879
602	5.39	34.341	0.31					94.4	600	5.39	34.340	0.31	27.127	94.6	0.986
737	4.89							77.0	700	5.00	34.376	0.36	27.201	87.5	1.085
889	4.37	34.426	0.57					77.0	800	4.67	34.408	0.45	27.265	81.5	1.178
1055	3.75	34.505	0.62					64.9	1000	3.96	34.477	0.61	27.396	69.1	1.346

A) A SHAKEDOWN STATION.

54032 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 40.0N	117 35.0W	11/26/74	0147 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1130M	270	8KT	0	270 3 7	
Z	T	S	SIGMA T	DT	DD
0	16.67	33.55	24.500	344.3	0.000
10	16.65	33.55	24.505	343.8	0.034
20	16.42	33.54	24.550	339.5	0.068
30	15.28	33.46	24.745	320.9	0.101
40	13.56	33.40	25.063	290.7	0.132
50	12.85	33.38	25.189	278.6	0.160
75	11.53	33.54	25.564	243.0	0.226
100	10.54	33.62	25.804	220.2	0.284
125	9.82	33.74	26.020	199.7	0.338
150	9.43	33.85	26.170	185.4	0.386
175	8.08	33.96	26.312	171.9	0.432
200	8.91	34.03	26.394	164.1	0.475
225	8.50	34.05	26.474	156.6	0.516
250	8.30	34.09	26.535	150.7	0.555
275	8.10	34.13	26.597	144.9	0.593
300	7.88	34.15	26.645	140.3	0.630
350	7.29	34.17	26.746	130.7	0.701
400	6.96	34.21	26.823	123.4	0.767
450	6.44	34.24	26.917	114.5	0.830
500	6.09	34.27	26.986	107.9	0.889
550	5.79	34.30	27.048	102.1	0.945
600	5.49	34.32	27.100	97.1	0.998
700	5.01	34.37	27.196	88.0	1.098
800	4.67	34.41	27.267	81.3	1.191
900	4.33	34.44	27.328	75.6	1.278
1000	3.96	34.47	27.391	69.6	1.360

CALCIFI CRUISE 7412 95028

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 37.0N	117 10.5W	12/04/74	1958 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
17M	260	12KT	2	260 6 8	
Z	T	S	SIGMA T	DT	DD
0	15.10	33.46	24.785	317.2	0.000
10	15.08	33.47	24.796	316.0	0.031
19	15.02	33.47	24.810	314.8	0.060

55029 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 35.0N	117 14.5W	12/14/74	2135 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
41M	310	17KT	1	270 7 4	
Z	T	S	SIGMA T	DT	DD
0	14.56	33.47	24.909	305.4	0.000
10	14.50	33.47	24.909	305.4	0.030
20	14.53	33.47	24.915	304.7	0.061
30	14.48	33.46	24.918	304.5	0.091
37	14.48	33.47	24.925	303.7	0.112

CALCIFI CRUISE 7412 95030

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 33.5N	117 18.5W	12/04/74	2333 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
106M	290	15KT	1	290 6 4	
Z	T	S	SIGMA T	DT	DD
0	14.88	33.44	24.817	314.1	0.000
10	14.88	33.44	24.817	314.1	0.031
20	14.63	33.44	24.871	309.0	0.062
30	14.43	33.45	24.921	304.2	0.093
40	14.24	33.48	24.984	298.2	0.123
50	13.24	33.49	25.197	277.9	0.152
56	12.77	33.50	25.298	268.3	0.168

95031 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 31.0N	117 22.5W	12/15/74	0112 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
667M	280	15KT	1	290 9 8	
Z	T	S	SIGMA T	DT	DD
0	15.27	33.43	24.724	322.9	0.000
10	15.25	33.43	24.729	322.5	0.032
20	15.22	33.45	24.751	320.4	0.064
30	14.17	33.54	25.045	292.4	0.095
40	12.69	33.52	25.329	265.4	0.123
50	12.25	33.56	25.445	254.3	0.149
75	11.82	33.62	25.572	242.2	0.211
100	11.19	33.70	25.750	225.3	0.270
125	10.77	33.77	25.880	213.0	0.326
150	10.26	33.93	26.093	192.7	0.377
175	9.77	34.05	26.270	175.9	0.424
200	9.46	34.09	26.352	168.1	0.468
225	9.00	34.12	26.450	158.8	0.510
250	8.84	34.17	26.514	152.7	0.550
275	8.48	34.19	26.586	145.9	0.588
300	8.30	34.21	26.629	141.8	0.626

CALCIFI CRUISE 7412 95032

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
32 29.0N	117 27.0W	12/05/74	0253 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1018M	290	12KT	1		
Z	T	S	SIGMA T	DT	DD
0	15.60	33.48	24.690	326.2	0.000
10	15.59	33.48	24.692	326.0	0.032
20	15.48	33.49	24.724	322.9	0.065
30	14.41	33.51	24.864	309.6	0.096
40	12.79	33.52	25.309	267.2	0.125
50	12.41	33.54	25.399	258.7	0.152
75	11.68	33.64	25.614	238.2	0.214
100	11.03	33.76	25.826	218.1	0.272
125	10.66	33.84	25.954	206.0	0.325
150	10.29	33.93	26.088	193.2	0.376
175	9.90	34.06	26.255	177.3	0.423
200	9.52	34.12	26.366	166.8	0.467
225	9.12	34.14	26.446	159.2	0.509
250	8.72	34.16	26.525	151.6	0.549
275	8.54	34.19	26.577	146.8	0.587
300	8.38	34.20	26.609	143.7	0.625

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
32 12.0N		117 15.5W		11/26/74		1147 GMT			1378M	310	11KT	0			
Z	T	S	02	04	103	02	03	DT	Z	T	S	02	SIGT	DT	DD
1	15.98	33.543	6.10					329.7	0	15.98	33.543	6.10	24.653	329.7	0.000
11	15.98	33.540	6.10					329.9	10	15.98	33.542	6.10	24.651	329.9	0.033
31	13.84	33.444	5.73					292.9	20	15.14	33.489	5.99	24.795	316.2	0.065
55	12.22	33.577	4.66					252.5	30	13.97	33.448	5.75	25.014	295.3	0.096
70	11.59	33.633	4.35					237.2	50	12.48	33.543	4.88	25.386	260.0	0.151
85	11.50	33.763	3.54					226.0	75	11.55	33.678	4.07	25.666	233.3	0.213
99	11.04	33.816	3.34					214.2	100	11.01	33.820	3.32	25.874	213.5	0.270
129	10.49	33.928	2.97					196.6	125	10.54	33.912	3.01	26.029	198.8	0.322
153	10.06	34.055	2.61					180.2	150	10.11	34.041	2.64	26.203	182.2	0.370
178	9.52	34.106	2.50					167.8	200	9.08	34.129	2.36	26.443	159.5	0.457
212	8.89	34.138	2.28					155.8	250	8.62	34.181	1.96	26.556	148.8	0.537
276	8.54	34.209	1.72					145.4	300	8.35	34.238	1.45	26.643	140.5	0.611
373	7.63	34.296	0.79					125.9	400	7.25	34.287	0.74	26.842	121.6	0.748
471	6.33	34.261	0.63					111.5	500	6.09	34.275	0.55	26.989	107.7	0.870
574	5.66	34.325	0.38					98.7	600	5.51	34.339	0.37	27.113	95.9	0.979
701	5.01	34.389	0.34					86.6	700	5.01	34.388	0.34	27.210	86.6	1.078
853	4.48	34.448	0.42					76.5	800	4.65	34.430	0.38	27.284	79.7	1.169
1005	3.91	34.492	0.54					67.4	1000	3.92	34.491	0.53	27.410	67.7	1.334

97032

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

97035

LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		
32 12.0N		117 15.5W		11/26/74		1048 GMT			32 05.5N		117 27.5W		11/26/74		1358 GMT		
BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES			BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES		
1378M		310	11KT	0					1258M		310	13KT	1		320 3 6		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	16.01	33.55	24.652	329.8	0.000	0	16.30	33.57	24.601	334.7	0.000	0	16.30	33.57	24.601	334.7	0.000
10	16.00	33.55	24.654	329.6	0.032	10	16.31	33.57	24.599	334.9	0.033	10	16.31	33.57	24.599	334.9	0.033
20	15.20	33.45	24.755	320.0	0.065	20	16.30	33.57	24.601	334.7	0.067	20	16.30	33.57	24.601	334.7	0.067
30	13.63	33.46	25.095	287.6	0.095	30	14.37	33.36	24.864	309.6	0.099	30	14.37	33.36	24.864	309.6	0.099
40	12.77	33.52	25.313	266.9	0.123	40	12.91	33.41	25.201	277.6	0.128	40	12.91	33.41	25.201	277.6	0.128
50	12.29	33.54	25.422	256.5	0.150	50	12.01	33.50	25.444	254.4	0.155	50	12.01	33.50	25.444	254.4	0.155
75	11.54	33.78	25.748	225.5	0.210	75	11.00	33.64	25.738	226.5	0.215	75	11.00	33.64	25.738	226.5	0.215
100	10.86	33.86	25.934	207.9	0.265	100	10.46	33.75	25.918	209.3	0.270	100	10.46	33.75	25.918	209.3	0.270
125	10.53	33.96	26.069	194.9	0.316	125	9.53	33.85	26.154	187.0	0.321	125	9.53	33.85	26.154	187.0	0.321
150	10.05	34.08	26.246	178.2	0.363	150	9.08	33.97	26.320	171.2	0.366	150	9.08	33.97	26.320	171.2	0.366
175	8.63	34.14	26.363	167.1	0.407	175	8.91	34.05	26.410	162.6	0.408	175	8.91	34.05	26.410	162.6	0.408
200	9.04	34.15	26.467	157.2	0.449	200	8.78	34.09	26.461	157.7	0.449	200	8.78	34.09	26.461	157.7	0.449
225	8.89	34.17	26.507	153.4	0.489	225	8.45	34.12	26.536	150.7	0.489	225	8.45	34.12	26.536	150.7	0.489
250	8.72	34.18	26.541	150.2	0.528	250	8.00	34.13	26.612	143.4	0.527	250	8.00	34.13	26.612	143.4	0.527
275	8.70	34.23	26.583	146.1	0.566	275	7.79	34.18	26.682	136.8	0.563	275	7.79	34.18	26.682	136.8	0.563
300	8.29	34.26	26.670	137.9	0.603	300	8.11	34.30	26.728	132.4	0.598	300	8.11	34.30	26.728	132.4	0.598
350	7.81	34.27	26.750	130.4	0.673	350	7.47	34.26	26.791	126.4	0.665	350	7.47	34.26	26.791	126.4	0.665
400	7.42	34.29	26.822	123.5	0.739	400	6.72	34.26	26.895	116.5	0.729	400	6.72	34.26	26.895	116.5	0.729
450	6.58	34.25	26.906	115.5	0.802	450	6.38	34.29	26.964	110.0	0.789	450	6.38	34.29	26.964	110.0	0.789
500	6.15	34.29	26.994	107.2	0.861	500	6.10	34.32	27.024	104.3	0.846	500	6.10	34.32	27.024	104.3	0.846
550	5.81	34.32	27.061	100.8	0.917	550	5.87	34.34	27.069	100.1	0.900	550	5.87	34.34	27.069	100.1	0.900
600	5.53	34.33	27.103	96.8	0.970	600	5.58	34.36	27.121	95.2	0.953	600	5.58	34.36	27.121	95.2	0.953
700	5.05	34.38	27.200	87.7	1.070	700	5.09	34.40	27.211	86.6	1.051	700	5.09	34.40	27.211	86.6	1.051
800	4.66	34.43	27.284	79.7	1.162	800	4.68	34.45	27.297	78.4	1.142	800	4.68	34.45	27.297	78.4	1.142
900	4.33	34.45	27.336	74.8	1.248	900	4.33	34.47	27.352	73.3	1.227	900	4.33	34.47	27.352	73.3	1.227
1000	3.92	34.48	27.403	68.5	1.328	1000	4.02	34.50	27.408	67.9	1.306	1000	4.02	34.50	27.408	67.9	1.306

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 7412

97040

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
31 56.0N		117 49.0W		11/26/74		1815 GMT			1476M	300	12KT	0	320 3 5		
Z	T	S	02	04	103	02	03	DT	Z	T	S	02	SIGT	DT	DD
1	16.70	33.606	5.73					340.8	0	16.70	33.606	5.73	24.536	340.8	0.000
11	16.69	33.602	5.75					340.9	10	16.69	33.603	5.74	24.535	340.9	0.034
31	16.67	33.599	5.76					340.7	20	16.68	33.602	5.75	24.536	340.8	0.068
55	12.86	33.401	5.56					277.3	30	16.67	33.600	5.75	24.538	340.7	0.102
70	11.86	33.467	5.09					254.2	50	13.71	33.424	5.60	25.049	292.0	0.165
85	11.06	33.552	4.54					234.0	75	11.55	33.492	4.90	25.521	247.1	0.233
100	10.67	33.693	4.06					217.0	100	10.67	33.693	4.06	25.837	217.0	0.292
129	9.99	33.864	3.45					193.2	125	10.05	33.845	3.52	26.060	195.8	0.344
154	9.97	34.021	2.80					181.3	150	9.97	34.000	2.88	26.196	183.0	0.392
178	9.40	34.072	2.73					168.5	200	8.92	34.089	2.63	26.437	160.0	0.479
213	8.68	34.094	2.55					155.9	250	8.22	34.138	2.06	26.583	146.1	0.558
276	7.99	34.168	1.69					140.5	300	7.69	34.182	1.45	26.697	135.4	0.631
373	6.88	34.211	0.95					122.2	400	6.65	34.225	0.80	26.876	118.3	0.763
471	6.16	34.262	0.51					109.4	500	5.97	34.279	0.43	27.007	105.9	0.882
602	5.43	34.338	0.29					95.1	600	5.43	34.337	0.29	27.120	95.3	0.989
752	4.82	34.409	0.29					83.0	700	5.01	34.387	0.29	27.209	86.8	1.088
899	4.21	34.458	0.41					74.0	800	4.64	34.427	0.32	27.283	79.8	1.179
1107	3.724	34.501	0.61					65.0	1000	4.00	34.483	0.50	27.396	69.1	1.346

97040		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				97050			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		LATITUDE	LONGITUDE	MO/DAY/YR	START TIME					
31 56.0N	117 49.0W	11/26/74	1655 GMT		31 36.0N	118 31.0W	11/27/74	0012 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
1476M	300	12KT	0	320	3 5	2410M	290	10KT	0	300	5 5		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.70	33.62	24.547	339.8	0.000	0	16.14	33.55	24.622	332.7	0.000		
10	16.69	33.62	24.549	339.6	0.033	10	16.13	33.55	24.624	332.4	0.033		
20	16.69	33.62	24.549	339.6	0.068	20	15.97	33.55	24.661	329.0	0.066		
30	16.68	33.60	24.536	340.8	0.102	30	15.92	33.55	24.672	327.9	0.099		
40	14.18	33.38	24.920	304.3	0.134	40	15.85	33.53	24.672	327.9	0.132		
50	13.11	33.39	25.146	282.8	0.163	50	13.78	33.22	24.879	308.2	0.164		
75	11.48	33.53	25.566	242.8	0.230	75	11.99	33.32	25.308	267.3	0.236		
100	10.72	33.73	25.857	215.1	0.287	100	10.61	33.45	25.659	233.9	0.299		
125	10.15	33.86	26.058	196.1	0.339	125	9.77	33.66	25.966	204.8	0.355		
150	9.97	34.07	26.252	177.6	0.387	150	9.28	33.79	26.147	187.5	0.404		
175	9.28	34.12	26.405	163.1	0.430	175	9.09	33.93	26.287	174.3	0.450		
200	8.77	34.12	26.486	155.4	0.471	200	8.64	33.99	26.405	163.1	0.493		
225	8.34	34.14	26.568	147.6	0.510	225	8.14	34.06	26.536	150.6	0.534		
250	8.28	34.19	26.617	143.0	0.547	250	7.84	34.09	26.604	144.2	0.571		
						275	7.54	34.11	26.663	138.5	0.608		
						300	7.23	34.13	26.723	132.9	0.643		
						350	6.70	34.17	26.827	123.0	0.709		
						400	6.49	34.26	26.926	113.6	0.771		
						450	6.18	34.30	26.998	106.8	0.829		
						500	5.90	34.31	27.042	102.7	0.885		
						550	5.68	34.34	27.093	97.8	0.939		
						600	5.53	34.35	27.119	95.3	0.990		
						700	5.06	34.38	27.199	87.8	1.090		
						800	4.70	34.43	27.279	80.1	1.182		
						900	4.33	34.45	27.336	74.8	1.268		
						1000	4.01	34.47	27.386	70.1	1.350		

97060		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				97060					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
31 16.5N	119 10.0W	11/27/74	0615	GMT	3642M	300	7KT	1							
Z	T	S	02	04	103	002	003	DT	Z	T	S	02	SIGT	DT	DD
1	16.52	33.553	5.68					340.7	0	16.52	33.553	5.68	24.537	340.7	0.000
11	16.48	33.549	5.70					340.1	10	16.48	33.550	5.69	24.542	340.2	0.034
31	16.26	33.538	5.75					336.1	20	16.40	33.548	5.71	24.559	338.6	0.068
61	15.60	33.458	5.94					327.8	30	16.27	33.540	5.74	24.583	336.4	0.101
80	13.53	33.333	6.07					295.0	50	15.84	33.488	5.86	24.641	330.8	0.168
95	12.54	33.384	5.76					272.6	75	14.09	33.356	6.03	24.918	304.4	0.248
110	11.65	33.402	5.35					255.3	100	12.24	33.389	5.64	25.313	266.9	0.320
139	9.60	33.656	3.98					202.4	125	10.50	33.518	4.64	25.729	227.3	0.383
164	9.24	33.814	3.36					185.1	150	9.36	33.735	3.64	26.091	192.9	0.436
193	8.83	33.920	3.19					171.1	200	8.75	33.942	3.14	26.349	168.4	0.528
228	8.47	34.012	2.91					159.0	250	8.15	34.048	2.61	26.524	151.7	0.610
296	7.47	34.098	1.96					138.5	300	7.42	34.102	1.91	26.673	137.6	0.685
403	6.52	34.182	1.00					119.8	400	6.53	34.180	1.01	26.857	120.2	0.819
510	5.96	34.276	0.49					105.9	500	6.00	34.268	0.52	26.995	107.1	0.939
645	5.10	34.370	0.34					89.0	600	5.37	34.342	0.38	27.131	94.2	1.046
800	4.55	34.429	0.43					78.6	700	4.87	34.395	0.35	27.232	84.6	1.143
965	4.09	34.476	0.56					70.4	800	4.55	34.429	0.43	27.295	78.6	1.233
1171	3.50	34.524	0.80					61.1	1000	3.99	34.485	0.59	27.399	68.8	1.398

97070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				97070					
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
30 56.0N	119 51.0W	11/27/74	1958	GMT	3674M	320	12KT	1	310	5 5					
Z	T	S	02	04	103	002	003	DT	Z	T	S	02	SIGT	DT	DD
1	16.76	33.565	5.52					345.1	0	16.76	33.565	5.52	24.491	345.1	0.000
11	16.77	33.563	5.68					345.5	10	16.76	33.564	5.66	24.487	345.5	0.034
30	16.67	33.549	5.69					344.3	20	16.73	33.559	5.68	24.491	345.1	0.069
55	16.49	33.526	5.70					342.0	30	16.67	33.549	5.69	24.499	344.3	0.103
70	15.28	33.422	6.02					323.7	50	16.52	33.532	5.69	24.519	342.5	0.172
84	14.13	33.447	6.07					298.4	75	14.86	33.431	6.03	24.812	314.6	0.255
99	13.00	33.373	5.92					282.0	100	12.93	33.373	5.89	25.165	281.0	0.330
129	11.39	33.402	5.17					250.7	125	11.57	33.391	5.28	25.439	254.9	0.397
153	10.14	33.493	4.75					223.1	150	10.27	33.479	4.80	25.738	226.5	0.458
178	9.48	33.662	4.12					200.1	200	9.03	33.823	3.61	26.212	181.4	0.562
212	8.83	33.901	3.36					172.5	250	8.32	34.022	2.76	26.478	156.2	0.648
275	8.05	34.054	2.46					149.8	300	7.73	34.079	2.16	26.611	143.5	0.726
372	6.90	34.120	1.42					129.3	400	6.64	34.151	1.14	26.819	123.7	0.865
469	6.14	34.227	0.61					111.7	500	5.98	34.254	0.48	26.986	107.9	0.987
569	5.68	34.300	0.35					100.8	600	5.44	34.289	0.33	27.081	99.0	1.097
692	4.87	34.340	0.28					88.7	700	4.85	34.360		27.207	87.0	1.198

97070		RV ALEXANDER AGASSIZ				CALCOFI CRUISE 7412				97080			
LATITUDE	LONGITUDE	MO/DA/YR	START TIME			LATITUDE	LONGITUDE	MO/DA/YR	START TIME				
30 56.0N	119 51.0W	11/27/74	1846 GMT			30 35.0N	120 31.0W	11/28/74	0125 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3674M	320	12KT	1	310	5	5	3960M	320	20KT	1	320	5	7
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.73	33.56	24.494	344.8	0.000	0	17.02	33.66	24.502	344.0	0.000		
10	16.71	33.55	24.491	345.1	0.034	10	17.03	33.66	24.500	344.3	0.034		
20	16.58	33.54	24.513	343.0	0.068	20	17.03	33.66	24.500	344.3	0.068		
30	16.58	33.54	24.513	343.0	0.103	30	17.03	33.66	24.500	344.3	0.103		
40	16.55	33.54	24.520	342.3	0.137	40	17.04	33.65	24.490	345.2	0.138		
50	16.44	33.50	24.515	342.8	0.172	50	17.02	33.65	24.495	344.8	0.172		
75	14.41	33.38	24.871	308.9	0.254	75	14.27	33.47	24.970	299.5	0.253		
100	12.69	33.35	25.198	277.9	0.327	100	12.28	33.50	25.393	259.3	0.324		
125	11.45	33.38	25.455	253.4	0.395	125	10.38	33.74	25.925	208.7	0.383		
150	9.98	33.54	25.837	217.0	0.454	150	10.03	34.04	26.218	180.8	0.432		
175	9.40	33.74	26.089	193.1	0.506	175	10.05	34.15	26.300	173.0	0.477		
200	8.88	33.91	26.305	172.6	0.553	200	10.08	34.24	26.365	166.9	0.521		
225	8.55	34.00	26.421	161.0	0.595	225	10.06	34.29	26.408	162.8	0.563		
250	8.13	34.08	26.553	149.0	0.635	250	10.02	34.30	26.422	161.4	0.605		
275	7.84	34.08	26.596	144.9	0.673	275	9.93	34.33	26.461	157.8	0.646		
300	7.54	34.10	26.656	139.3	0.710	300	9.82	34.36	26.503	153.8	0.687		
350	6.92	34.13	26.766	128.8	0.779	350	9.46	34.36	26.563	148.1	0.765		
400	6.54	34.19	26.865	119.5	0.844	400	8.87	34.36	26.658	139.0	0.841		
450	6.34	34.26	26.946	111.7	0.905	450	8.33	34.33	26.719	133.3	0.913		
500	6.04	34.28	27.000	106.6	0.963	500	7.25	34.30	26.854	120.5	0.980		
550	5.80	34.31	27.054	101.5	1.019	550	6.61	34.27	26.918	114.4	1.043		
600	5.52	34.35	27.120	95.2	1.071	600	6.13	34.31	27.012	105.4	1.102		
700	4.84	34.35	27.200	87.6	1.170	700	5.31	34.35	27.145	92.8	1.210		
800	4.56	34.41	27.279	80.2	1.262	800	4.81	34.40	27.243	83.6	1.306		
900	4.19	34.45	27.351	73.4	1.347	900	4.41	34.44	27.319	76.4	1.395		
1000	3.92	34.47	27.395	69.2	1.427	1000	4.02	34.47	27.384	70.2	1.478		

97090		RV ALEXANDER AGASSIZ				RV DAVID STARR JORDAN				100030			
LATITUDE	LONGITUDE	MO/DA/YR	START TIME			LATITUDE	LONGITUDE	MO/DA/YR	START TIME				
30 15.5N	121 13.0W	11/28/74	0641 GMT			31 40.5N	116 46.5W	12/05/74	1045 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3850M	360	13KT	1	310	5	5	477M	070	6KT	1	010	3	5
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.90	33.56	24.454	348.6	0.000	0	15.91	33.54	24.666	328.4	0.000		
10	16.91	33.56	24.452	348.9	0.034	10	15.88	33.53	24.666	328.5	0.032		
20	16.92	33.56	24.449	349.1	0.069	20	15.73	33.53	24.699	325.3	0.065		
30	16.92	33.56	24.449	349.1	0.104	30	15.52	33.49	24.715	323.8	0.098		
40	16.93	33.56	24.447	349.3	0.139	40	14.00	33.46	25.019	294.9	0.129		
50	16.93	33.56	24.447	349.3	0.174	50	13.04	33.51	25.252	272.7	0.157		
75	14.03	33.28	24.874	308.7	0.257	75	12.03	33.60	25.518	247.4	0.223		
100	13.28	33.45	25.158	281.6	0.331	100	11.33	33.69	25.717	228.4	0.283		
125	11.93	33.53	25.482	250.8	0.399	125	10.67	33.80	25.921	209.1	0.338		
150	11.04	33.60	25.700	230.1	0.460	150	10.23	33.92	26.090	192.9	0.389		
175	10.03	33.74	25.985	203.0	0.515	175	9.86	33.98	26.200	182.5	0.437		
200	9.57	33.85	26.147	187.6	0.564	200	9.66	34.05	26.288	174.2	0.482		
225	9.06	33.98	26.331	170.1	0.610	225	9.40	34.11	26.378	165.7	0.526		
250	8.66	34.01	26.418	161.9	0.653	250	9.06	34.19	26.495	154.5	0.567		
275	8.31	34.06	26.511	153.1	0.693	275	8.77	34.20	26.549	149.4	0.606		
300	8.12	34.08	26.555	148.9	0.732	300	8.59	34.23	26.600	144.5	0.644		
350	7.60	34.15	26.686	136.4	0.806	350	8.00	34.22	26.682	136.8	0.718		
400	7.24	34.17	26.753	130.0	0.876								
450	6.51	34.20	26.876	118.3	0.941								
500	6.21	34.27	26.971	109.4	1.002								
550	5.61	34.27	27.046	102.2	1.058								
600	5.50	34.35	27.123	95.0	1.111								
700	4.94	34.39	27.220	85.7	1.209								
800	4.61	34.43	27.289	79.2	1.300								
900	4.25	34.45	27.344	74.0	1.385								
1000	3.93	34.49	27.410	67.8	1.464								

100035						CALCIFI CRUISE 7412						100040					
RV DAVID STARR JORDAN						CALCIFI CRUISE 7412						100040					
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			
31 30.5N		117 07.0W		12/05/74		1521 GMT		31 21.0N		117 27.0W		12/05/74		1857 GMT			
BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES					
1110M		290	9KT	1	290 5 6		1664M		310	10KT	1	270 7 8					
Z	T	S	SIGMA T	DT	DI	Z	T	S	SIGMA T	DT	DI	Z	T	S	SIGMA T	DT	DI
0	16.76	33.59	24.510	343.3	0.000	0	16.56	33.55	24.526	341.8	0.000	0	16.56	33.55	24.526	341.8	0.000
10	16.77	33.59	24.508	343.5	0.034	10	16.56	33.57	24.541	340.4	0.034	10	16.56	33.57	24.541	340.4	0.034
20	16.76	33.59	24.510	343.3	0.068	20	16.53	33.59	24.563	338.2	0.068	20	16.53	33.59	24.563	338.2	0.068
30	16.76	33.59	24.510	343.3	0.103	30	15.87	33.54	24.675	327.6	0.103	30	15.87	33.54	24.675	327.6	0.103
40	16.00	33.56	24.661	328.9	0.136	40	14.35	33.46	24.945	301.9	0.136	40	14.35	33.46	24.945	301.9	0.136
50	13.58	33.41	25.066	290.3	0.167	50	12.95	33.45	25.224	275.4	0.167	50	12.95	33.45	25.224	275.4	0.167
75	11.15	33.59	25.672	232.7	0.233	75	11.19	33.53	25.618	237.8	0.233	75	11.19	33.53	25.618	237.8	0.233
100	10.30	33.64	25.876	213.3	0.289	100	10.56	33.66	25.831	217.6	0.289	100	10.56	33.66	25.831	217.6	0.289
125	9.74	33.74	26.033	198.4	0.342	125	9.88	33.79	26.049	196.9	0.342	125	9.88	33.79	26.049	196.9	0.342
150	9.34	33.89	26.216	181.0	0.390	150	9.51	33.89	26.188	183.7	0.390	150	9.51	33.89	26.188	183.7	0.390
175	9.46	34.02	26.298	173.3	0.435	175	9.19	33.96	26.295	173.6	0.435	175	9.19	33.96	26.295	173.6	0.435
200	9.27	34.12	26.407	162.9	0.478	200	9.00	34.03	26.380	165.5	0.478	200	9.00	34.03	26.380	165.5	0.478
225	8.71	34.12	26.496	154.5	0.518	225	8.79	34.17	26.522	151.9	0.518	225	8.79	34.17	26.522	151.9	0.518
250	8.79	34.24	26.577	146.8	0.557	250	8.05	34.13	26.604	144.2	0.557	250	8.05	34.13	26.604	144.2	0.557
275	8.54	34.26	26.632	141.6	0.594	275	7.76	34.13	26.647	140.1	0.594	275	7.76	34.13	26.647	140.1	0.594
300	8.18	34.26	26.687	136.3	0.631	300	7.23	34.10	26.700	135.1	0.631	300	7.23	34.10	26.700	135.1	0.631
350	7.72	34.26	26.755	129.9	0.700	350	6.88	34.16	26.795	126.1	0.700	350	6.88	34.16	26.795	126.1	0.700
400	7.15	34.26	26.836	122.1	0.766	400	6.48	34.19	26.872	118.7	0.766	400	6.48	34.19	26.872	118.7	0.766
450	6.67	34.26	26.902	115.9	0.829	450	6.30	34.25	26.943	112.0	0.829	450	6.30	34.25	26.943	112.0	0.829
500	6.05	34.26	26.983	108.2	0.888	500	5.88	34.27	27.013	105.4	0.888	500	5.88	34.27	27.013	105.4	0.888
550	5.80	34.29	27.038	103.0	0.944	550	5.64	34.30	27.066	100.4	0.944	550	5.64	34.30	27.066	100.4	0.944
600	5.51	34.30	27.082	98.8	0.998	600	5.37	34.33	27.122	95.0	0.998	600	5.37	34.33	27.122	95.0	0.998
700	5.03	34.37	27.194	88.2	1.100	700	4.94	34.39	27.220	85.7	1.100	700	4.94	34.39	27.220	85.7	1.100
800	4.58	34.41	27.277	80.4	1.192	800	4.49	34.42	27.295	78.7	1.192	800	4.49	34.42	27.295	78.7	1.192
900	4.22	34.45	27.337	74.7	1.278	900	4.17	34.46	27.361	72.4	1.278	900	4.17	34.46	27.361	72.4	1.278
1000	3.91	34.48	27.404	68.3	1.359	1000	3.93	34.48	27.402	68.5	1.359	1000	3.93	34.48	27.402	68.5	1.359

100050						CALCIFI CRUISE 7412						100060					
RV DAVID STARR JORDAN						CALCIFI CRUISE 7412						100060					
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			
31 00.0N		118 07.0W		12/06/74		0003 GMT		30 40.0N		118 48.0W		12/06/74		0515 GMT			
BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES		BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES					
1763M		350	12KT	1	330 6 7		2980M		330	14KT	1	330 6 7					
Z	T	S	SIGMA T	DT	DI	Z	T	S	SIGMA T	DT	DI	Z	T	S	SIGMA T	DT	DI
0	17.53	33.70	24.412	352.7	0.000	0	16.67	33.63	24.573	337.3	0.000	0	16.67	33.63	24.573	337.3	0.000
10	17.52	33.70	24.414	352.4	0.035	10	16.63	33.63	24.571	337.5	0.035	10	16.63	33.63	24.571	337.5	0.035
20	17.38	33.68	24.432	350.7	0.070	20	16.61	33.64	24.583	336.3	0.070	20	16.61	33.64	24.583	336.3	0.070
30	17.41	33.69	24.433	350.7	0.105	30	16.59	33.64	24.588	335.9	0.105	30	16.59	33.64	24.588	335.9	0.105
40	17.44	33.71	24.441	349.9	0.140	40	16.27	33.61	24.650	330.0	0.140	40	16.27	33.61	24.650	330.0	0.140
50	15.36	33.69	24.904	305.8	0.173	50	13.09	33.45	25.196	278.0	0.173	50	13.09	33.45	25.196	278.0	0.173
75	11.95	33.56	25.502	248.9	0.243	75	11.13	33.57	25.660	233.9	0.243	75	11.13	33.57	25.660	233.9	0.243
100	10.82	33.66	25.785	222.0	0.302	100	10.04	33.73	25.975	203.9	0.302	100	10.04	33.73	25.975	203.9	0.302
125	9.96	33.78	26.028	199.0	0.356	125	9.77	33.84	26.106	191.5	0.356	125	9.77	33.84	26.106	191.5	0.356
150	9.56	33.90	26.187	183.7	0.404	150	9.50	33.99	26.268	176.1	0.404	150	9.50	33.99	26.268	176.1	0.404
175	9.13	33.99	26.328	170.4	0.449	175	8.70	34.03	26.427	161.0	0.449	175	8.70	34.03	26.427	161.0	0.449
200	8.78	34.04	26.422	161.4	0.492	200	8.39	34.03	26.475	156.5	0.492	200	8.39	34.03	26.475	156.5	0.492
225	8.45	34.07	26.497	154.4	0.532	225	8.07	34.07	26.554	148.9	0.532	225	8.07	34.07	26.554	148.9	0.532
250	8.21	34.13	26.580	146.4	0.571	250	7.77	34.06	26.591	145.4	0.571	250	7.77	34.06	26.591	145.4	0.571
275	8.04	34.14	26.614	143.3	0.608	275	7.42	34.06	26.641	140.7	0.608	275	7.42	34.06	26.641	140.7	0.608
300	7.60	34.14	26.678	137.1	0.644	300	7.23	34.09	26.692	135.9	0.644	300	7.23	34.09	26.692	135.9	0.644
350	6.81	34.14	26.789	126.6	0.713	350	6.61	34.12	26.800	125.6	0.713	350	6.61	34.12	26.800	125.6	0.713
400	6.67	34.24	26.886	117.4	0.777	400	6.24	34.15	26.872	118.7	0.777	400	6.24	34.15	26.872	118.7	0.777
450	6.10	34.22	26.945	111.8	0.837	450	5.79	34.22	26.985	108.1	0.837	450	5.79	34.22	26.985	108.1	0.837
500	6.04	34.29	27.008	105.8	0.895	500	5.59	34.25	27.033	103.5	0.895	500	5.59	34.25	27.033	103.5	0.895
550	5.84	34.32	27.057	101.2	0.950	550	5.48	34.31	27.093	97.8	0.950	550	5.48	34.31	27.093	97.8	0.950
600	5.59	34.34	27.104	96.8	1.003	600	5.25	34.33	27.137	93.6	1.003	600	5.25	34.33	27.137	93.6	1.003
700	4.92	34.38	27.215	86.3	1.102	700	4.87	34.38	27.220	85.7	1.102	700	4.87	34.38	27.220	85.7	1.102
800	4.54	34.42	27.289	79.2	1.193	800	4.46	34.43	27.306	77.6	1.193	800	4.46	34.43	27.306	77.6	1.193
900	4.14	34.45	27.356	72.9	1.277	900	4.16	34.46	27.362	72.3	1.277	900	4.16	34.46	27.362	72.3	1.277
1000	3.81	34.48	27.408	68.0	1.356	1000	3.96	34.48	27.399	68.8	1.356	1000	3.96	34.48	27.399	68.8	1.356

RV DAVID STARR JORDAN										CALCIFI CRUISE 7412						100060					
RV DAVID STARR JORDAN										CALCIFI CRUISE 7412						100060					
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		START TIME		BOTTOM		WIND	SPEED	WEATHER	DOMINANT WAVES						
30 40.0N		118 48.0W		12/06/74		0621 GMT		0621 GMT		2980M		330	14KT	1	330 6 7						
Z	T	S	Q2	P04	SIG3	MU2	MU3	DT	Z	T	S	Q2	SIGT	DT	DD						
1	16.60	33.635	5.68					336.5	0	16.60	33.635	5.68	24.581	336.5	0.000						
10	16.59	33.636	5.66					336.2	10	16.59	33.636	5.66	24.585	336.2	0.033						
29	16.57	33.641	5.69					335.4	20	16.57	33.640	5.67	24.589	335.8	0.067						
58	12.32	33.466	5.19					262.5	30	16.46	33.632	5.68	24.615	333.3	0.100						
77	11.12	33.566	4.58					234.0	50	13.60	33.487	5.38	25.121	285.2	0.162						
92	10.46	33.647	4.26					216.9	75	11.20	33.554	4.64	25.633	234.4	0.228						
106	9.98	33.743	3.90					202.0	100	10.16	33.703	4.05	25.932	208.1	0.284						
135	9.60	33.893	3.46					184.9	125	9.71	33.845</										

100070 RV DAVID STARR JORDAN						CALCOFI CRUISE 7412						100080							
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME					
30 18.0N		119 28.0W		12/06/74		1102 GMT		29 57.0N		120 08.0W		12/06/74		1551 GMT					
BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
3737M		330		16KT		0		330 4 8		3926M		350		18KT		0		330 4 8	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.65	33.56	24.513	343.1	0.000	0	16.52	33.55	24.535	340.9	0.000	0	16.52	33.55	24.535	340.9	0.000		
10	16.64	33.55	24.507	343.6	0.034	10	16.52	33.55	24.535	340.9	0.034	10	16.52	33.55	24.535	340.9	0.034		
20	16.64	33.55	24.507	343.6	0.068	20	16.50	33.55	24.540	340.5	0.068	20	16.50	33.55	24.540	340.5	0.068		
30	16.59	33.54	24.511	343.2	0.103	30	16.37	33.54	24.562	338.4	0.102	30	16.37	33.54	24.562	338.4	0.102		
40	16.49	33.53	24.527	341.7	0.137	40	16.33	33.54	24.571	337.5	0.136	40	16.33	33.54	24.571	337.5	0.136		
50	16.37	33.51	24.539	340.6	0.171	50	16.20	33.53	24.593	335.4	0.169	50	16.20	33.53	24.593	335.4	0.169		
75	14.99	33.41	24.770	318.5	0.254	75	13.66	33.29	24.958	300.7	0.249	75	13.66	33.29	24.958	300.7	0.249		
100	12.52	33.37	25.246	273.2	0.329	100	12.10	33.34	25.303	267.8	0.321	100	12.10	33.34	25.303	267.8	0.321		
125	11.07	33.42	25.555	243.9	0.394	125	10.56	33.50	25.707	229.4	0.384	125	10.56	33.50	25.707	229.4	0.384		
150	9.94	33.68	25.953	206.0	0.451	150	9.78	33.73	26.019	199.8	0.438	150	9.78	33.73	26.019	199.8	0.438		
175	9.16	33.81	26.182	184.2	0.501	175	9.24	33.90	26.240	178.8	0.486	175	9.24	33.90	26.240	178.8	0.486		
200	8.82	33.95	26.345	168.7	0.546	200	9.08	34.03	26.367	166.7	0.530	200	9.08	34.03	26.367	166.7	0.530		
225	8.49	34.02	26.452	158.7	0.587	225	9.00	34.11	26.442	159.5	0.572	225	9.00	34.11	26.442	159.5	0.572		
250	8.05	34.05	26.542	150.1	0.627	250	8.52	34.11	26.517	152.4	0.612	250	8.52	34.11	26.517	152.4	0.612		
275	7.94	34.11	26.605	144.1	0.665	275	8.21	34.12	26.572	147.2	0.651	275	8.21	34.12	26.572	147.2	0.651		
300	7.70	34.14	26.664	138.5	0.702	300	8.14	34.19	26.638	141.0	0.688	300	8.14	34.19	26.638	141.0	0.688		
350	7.23	34.17	26.754	129.9	0.771	350	7.00	34.08	26.716	133.6	0.760	350	7.00	34.08	26.716	133.6	0.760		
400	6.50	34.15	26.838	122.0	0.837	400	6.39	34.10	26.813	124.3	0.827	400	6.39	34.10	26.813	124.3	0.827		
450	6.43	34.24	26.918	114.4	0.899	450	6.00	34.17	26.919	114.3	0.889	450	6.00	34.17	26.919	114.3	0.889		
500	5.98	34.20	26.994	107.1	0.958	500	5.60	34.20	26.992	107.4	0.948	500	5.60	34.20	26.992	107.4	0.948		
550	5.33	34.23	27.048	102.0	1.013	550	5.30	34.24	27.060	100.9	1.003	550	5.30	34.24	27.060	100.9	1.003		
600	5.28	34.31	27.117	95.5	1.066	600	5.01	34.29	27.133	94.0	1.055	600	5.01	34.29	27.133	94.0	1.055		
700	4.95	34.38	27.211	86.6	1.165	700	4.74	34.37	27.227	85.1	1.152	700	4.74	34.37	27.227	85.1	1.152		
800	4.50	34.42	27.293	78.8	1.255	800	4.41	34.41	27.295	78.6	1.241	800	4.41	34.41	27.295	78.6	1.241		
900	4.17	34.45	27.353	73.2	1.340	900	4.17	34.46	27.361	72.4	1.325	900	4.17	34.46	27.361	72.4	1.325		
1000	3.83	34.49	27.420	66.8	1.418	1000	3.88	34.49	27.415	67.3	1.404	1000	3.88	34.49	27.415	67.3	1.404		

RV DAVID STARR JORDAN										CALCOFI CRUISE 7412						103030					
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES					
31 06.0N		116 24.5W		12/08/74		0429 GMT		75M		320		12KT		0		330 4 8					
Z	T	S	Q2	Q4	S103	N02	N03	DT	Z	T	S	Q2	SIGT	DT	DD						
1	15.03	33.490	6.19					313.5	0	15.03	33.490	6.19	24.823	313.5	0.000						
11	14.89	33.486	6.13					310.9	10	14.90	33.488	6.13	24.848	311.2	0.031						
20	14.80	33.486	5.97					309.1	20	14.80	33.486	5.97	24.869	309.1	0.062						
30	14.34	33.485	5.45					299.8	30	14.34	33.485	5.45	24.967	299.8	0.092						
49	13.06	33.529	4.71					271.6													

103030 RV DAVID STARR JORDAN						CALCOFI CRUISE 7412						103035							
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME					
31 06.0N		116 24.5W		12/08/74		0408 GMT		30 56.0N		116 45.0W		12/07/74		2326 GMT					
BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
75M		320		12KT		0		300 5 6		1756M		300		15KT		0		300 5 6	
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	15.14	33.49	24.799	315.8	0.000	0	15.27	33.47	24.755	320.0	0.000	0	15.27	33.47	24.755	320.0	0.000		
10	15.13	33.49	24.801	315.6	0.031	10	15.26	33.47	24.757	319.8	0.032	10	15.26	33.47	24.757	319.8	0.032		
20	14.87	33.48	24.850	311.0	0.062	20	15.02	33.46	24.802	315.5	0.063	20	15.02	33.46	24.802	315.5	0.063		
30	14.56	33.48	24.916	304.6	0.093	30	14.94	33.46	24.819	313.9	0.095	30	14.94	33.46	24.819	313.9	0.095		
40	13.51	33.49	25.142	283.1	0.123	40	13.65	33.45	25.083	288.8	0.125	40	13.65	33.45	25.083	288.8	0.125		
50	12.86	33.53	25.303	267.8	0.150	50	12.86	33.53	25.303	267.8	0.153	50	12.86	33.53	25.303	267.8	0.153		
75						75	11.33	33.66	25.694	230.7	0.216	75	11.33	33.66	25.694	230.7	0.216		
100						100	10.92	33.82	25.892	211.8	0.272	100	10.92	33.82	25.892	211.8	0.272		
125						125	10.45	33.95	26.076	194.3	0.323	125	10.45	33.95	26.076	194.3	0.323		
150						150	10.31	34.02	26.154	186.9	0.371	150	10.31	34.02	26.154	186.9	0.371		
175						175	9.98	34.09	26.265	176.3	0.418	175	9.98	34.09	26.265	176.3	0.418		
200						200	9.65	34.15	26.367	166.6	0.461	200	9.65	34.15	26.367	166.6	0.461		
225						225	9.28	34.23	26.491	154.9	0.503	225	9.28	34.23	26.491	154.9	0.503		
250						250	8.75	34.22	26.568	147.6	0.542	250	8.75	34.22	26.568	147.6	0.542		
275						275	8.42	34.21	26.611	143.5	0.579	275	8.42	34.21	26.611	143.5	0.579		
300						300	7.94	34.22	26.691	135.9	0.616	300	7.94	34.22	26.691	135.9	0.616		
350						350	7.52	34.26	26.784	127.1	0.684	350	7.52	34.26	26.784	127.1	0.684		
400						400	7.40	34.30	26.832	122.5	0.750	400	7.40	34.30	26.832	122.5	0.750		
450						450	6.83	34.28	26.896	116.5	0.813	450	6.83	34.28	26.896	116.5	0.813		
500						500	6.25	34.30	26.989	107.7	0.872	500	6.25	34.30	26.989	107.7	0.872		
550						550	6.02	34.32	27.034	103.3	0.928	550	6.02	34.32	27.034	103.3	0.928		
600						600	5.54	34.33	27.102	97.0	0.982	600	5.54	34.33	27.102	97.0	0.982		
700						700	4.87	34.38	27.220	85.7	1.081	700	4.87	34.38	27.220	85.7	1.081		
800						800	4.52	34.42	27.291	79.0	1.171	800	4.52	34.42	27.291	79.0	1.171		
900						900	4.23	34.45	27.346	73.8	1.256	900	4.23	34.45	27.346	73.8	1.256		
1000						1000	4.00	34.48	27.394	69.2	1.337	1000	4.00	34.48	27.394	69.2	1.337		

103040				RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				103050					
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		
30 45.5N	117 03.5W	12/07/74	2009 GMT	30 25.5N	117 46.0W	12/07/74	1315 GMT										
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
1763M	330	14KT	1	270 3 5	2227M	350	14KT	0	320 4 4								
Z	T	S	SIGMA T	DT	DU	Z	T	S	SIGMA T	DT	DU	Z	T	S	SIGMA T	DT	DU
0	16.95	33.59	24.465	347.6	0.000	0	16.81	33.64	24.536	340.8	0.000	0	16.81	33.64	24.536	340.8	0.000
10	16.88	33.59	24.482	346.0	0.034	10	16.81	33.64	24.536	340.8	0.034	10	16.81	33.64	24.536	340.8	0.034
20	16.78	33.58	24.497	344.5	0.069	20	16.82	33.64	24.534	341.0	0.068	20	16.82	33.64	24.534	341.0	0.068
30	16.12	33.51	24.596	335.1	0.103	30	16.81	33.64	24.536	340.8	0.102	30	16.81	33.64	24.536	340.8	0.102
40	14.59	33.42	24.864	309.6	0.135	40	16.75	33.63	24.543	340.2	0.136	40	16.75	33.63	24.543	340.2	0.136
50	12.68	33.42	25.054	281.5	0.165	50	16.43	33.53	24.766	318.9	0.169	50	16.43	33.53	24.766	318.9	0.169
75	12.27	33.58	25.456	253.2	0.234	75	12.32	33.48	25.369	261.5	0.242	75	12.32	33.48	25.369	261.5	0.242
100	11.66	33.72	25.680	232.0	0.295	100	11.19	33.62	25.688	231.2	0.304	100	11.19	33.62	25.688	231.2	0.304
125	10.79	33.84	25.930	208.1	0.351	125	10.28	33.74	25.942	207.1	0.360	125	10.28	33.74	25.942	207.1	0.360
150	10.12	34.02	26.187	183.8	0.400	150	10.26	33.87	26.046	197.1	0.411	150	10.26	33.87	26.046	197.1	0.411
175	9.45	34.05	26.323	170.9	0.446	175	10.05	33.98	26.168	185.6	0.460	175	10.05	33.98	26.168	185.6	0.460
200	9.08	34.09	26.414	162.2	0.488	200	9.76	34.10	26.310	172.1	0.505	200	9.76	34.10	26.310	172.1	0.505
225	8.78	34.15	26.508	153.3	0.529	225	9.49	34.18	26.417	161.9	0.548	225	9.49	34.18	26.417	161.9	0.548
250	8.61	34.20	26.574	147.1	0.567	250	9.14	34.22	26.505	153.5	0.589	250	9.14	34.22	26.505	153.5	0.589
275	8.35	34.23	26.637	141.0	0.605	275	8.83	34.26	26.586	145.9	0.627	275	8.83	34.26	26.586	145.9	0.627
300	8.13	34.25	26.686	136.4	0.640	300	8.17	34.20	26.641	140.7	0.665	300	8.17	34.20	26.641	140.7	0.665
350	7.79	34.30	26.776	127.8	0.709	350	7.56	34.29	26.802	125.4	0.734	350	7.56	34.29	26.802	125.4	0.734
400	7.18	34.28	26.848	121.0	0.775	400	6.99	34.25	26.851	120.8	0.798	400	6.99	34.25	26.851	120.8	0.798
450	6.65	34.27	26.913	114.9	0.837	450	6.16	34.20	26.922	114.0	0.860	450	6.16	34.20	26.922	114.0	0.860
500	5.97	34.25	26.986	108.0	0.896	500	6.12	34.26	26.975	109.0	0.919	500	6.12	34.26	26.975	109.0	0.919
550	5.91	34.32	27.048	102.0	0.952	550	5.91	34.32	27.048	102.0	0.976	550	5.91	34.32	27.048	102.0	0.976
600	5.49	34.33	27.108	96.4	1.005	600	5.56	34.32	27.092	97.9	1.029	600	5.56	34.32	27.092	97.9	1.029
700	4.95	34.37	27.203	87.3	1.105	700	5.00	34.35	27.182	89.4	1.131	700	5.00	34.35	27.182	89.4	1.131
800	4.56	34.42	27.287	79.4	1.196	800	4.61	34.42	27.281	79.9	1.223	800	4.61	34.42	27.281	79.9	1.223
900	4.26	34.45	27.363	74.1	1.281	900	4.26	34.45	27.345	74.1	1.309	900	4.26	34.45	27.345	74.1	1.309
1000	3.90	34.48	27.405	68.2	1.361	1000	3.99	34.48	27.395	69.1	1.389	1000	3.99	34.48	27.395	69.1	1.389

103060				RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				103070					
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		
30 06.0N	118 25.0W	12/07/74	0755 GMT	29 46.5N	119 04.0W	12/07/74	0221 GMT										
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
3169M	340	14KT	0	330 4 1	3357M	360	21KT	0	350 6 7								
Z	T	S	SIGMA T	DT	DU	Z	T	S	SIGMA T	DT	DU	Z	T	S	SIGMA T	DT	DU
0	16.58	33.58	24.544	340.1	0.000	0	17.87	33.72	24.345	359.0	0.000	0	17.87	33.72	24.345	359.0	0.000
10	16.58	33.58	24.544	340.1	0.034	10	17.88	33.72	24.342	359.3	0.035	10	17.88	33.72	24.342	359.3	0.035
20	16.58	33.58	24.544	340.1	0.068	20	17.87	33.72	24.345	359.0	0.071	20	17.87	33.72	24.345	359.0	0.071
30	16.58	33.58	24.544	340.1	0.102	30	17.61	33.66	24.362	357.4	0.107	30	17.61	33.66	24.362	357.4	0.107
40	15.36	33.41	24.689	326.2	0.135	40	17.15	33.59	24.418	352.0	0.143	40	17.15	33.59	24.418	352.0	0.143
50	13.58	33.33	25.005	296.2	0.166	50	16.93	33.57	24.455	348.6	0.178	50	16.93	33.57	24.455	348.6	0.178
75	11.87	33.47	25.447	254.1	0.236	75	14.78	33.43	24.831	312.8	0.261	75	14.78	33.43	24.831	312.8	0.261
100	10.93	33.56	25.688	231.2	0.297	100	13.32	33.65	25.304	267.7	0.334	100	13.32	33.65	25.304	267.7	0.334
125	10.29	33.78	25.971	204.3	0.352	125	12.00	33.69	25.593	240.3	0.399	125	12.00	33.69	25.593	240.3	0.399
150	9.85	33.92	26.155	186.8	0.401	150	9.77	33.59	25.911	210.0	0.456	150	9.77	33.59	25.911	210.0	0.456
175	9.30	34.01	26.316	171.5	0.447	175	9.07	33.78	26.173	185.1	0.506	175	9.07	33.78	26.173	185.1	0.506
200	9.11	34.09	26.409	162.7	0.490	200	8.82	33.89	26.299	173.2	0.551	200	8.82	33.89	26.299	173.2	0.551
225	8.85	34.15	26.497	154.3	0.530	225	8.39	33.95	26.412	162.4	0.594	225	8.39	33.95	26.412	162.4	0.594
250	8.62	34.19	26.564	147.9	0.569	250	8.01	33.98	26.493	154.7	0.635	250	8.01	33.98	26.493	154.7	0.635
275	8.44	34.23	26.624	142.3	0.607	275	7.60	34.02	26.584	146.1	0.674	275	7.60	34.02	26.584	146.1	0.674
300	8.21	34.26	26.682	136.8	0.643	300	7.32	34.04	26.640	140.8	0.711	300	7.32	34.04	26.640	140.8	0.711
350	7.26	34.23	26.797	125.8	0.711	350	6.73	34.08	26.753	130.1	0.781	350	6.73	34.08	26.753	130.1	0.781
400	7.07	34.28	26.863	119.6	0.776	400	6.19	34.13	26.863	119.6	0.846	400	6.19	34.13	26.863	119.6	0.846
450	6.64	34.32	26.954	111.0	0.837	450	5.75	34.19	26.966	109.9	0.906	450	5.75	34.19	26.966	109.9	0.906
500	6.24	34.32	27.006	106.0	0.894	500	5.46	34.23	27.033	103.5	0.963	500	5.46	34.23	27.033	103.5	0.963
550	5.97	34.34	27.056	101.3	0.950	550	5.21	34.28	27.102	97.0	1.016	550	5.21	34.28	27.102	97.0	1.016
600	5.56	34.36	27.123	94.9	1.002	600	5.00	34.32	27.158	91.6	1.066	600	5.00	34.32	27.158	91.6	1.066
700	4.84	34.35	27.200	87.6	1.101	700	4.97	34.42	27.241	83.8	1.161	700	4.97	34.42	27.241	83.8	1.161
800	4.55	34.41	27.280	80.1	1.193	800	4.60	34.45	27.306	77.6	1.250	800	4.60	34.45	27.306	77.6	1.250
900	4.23	34.45	27.346	73.8	1.278	900	4.31	34.47	27.354	73.1	1.334	900	4.31	34.47	27.354	73.1	1.334
1000	3.95	34.48	27.400	68.7	1.359	1000	4.03	34.50	27.407	68.0	1.414	1000	4.03	34.50	27.407	68.0	1.414

RV DAVID STARR JORDAN										CALCOFI CRUISE 7412						103070			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME							BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
29 46.5N	119 04.0W	12/07/74	0327	GMT						3357M	360	21KT	0	350 6 7					
Z	T	S	U2	P04	S103	N02	N03	DT											

103080		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
29 26.5N	119 43.0W	12/06/74	2047 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
373M	240	15KT	0	350 6 7	
Z	T	S	SIGMA T	DT	DD
0	16.83	33.56	24.471	347.1	0.000
10	16.83	33.56	24.471	347.1	0.034
20	16.77	33.56	24.485	345.7	0.069
30	16.72	33.56	24.496	344.6	0.104
40	16.70	33.56	24.501	344.2	0.138
50	16.53	33.54	24.525	341.9	0.173
75	14.10	33.36	24.921	304.2	0.254
100	12.54	33.36	25.234	274.4	0.327
125	11.21	33.53	25.615	238.2	0.391
150	10.45	33.64	25.835	217.3	0.449
175	9.63	33.78	26.083	193.7	0.501
200	8.93	33.88	26.274	175.6	0.548
225	8.58	33.96	26.391	164.4	0.592
250	8.13	34.00	26.491	154.9	0.633
275	7.74	34.03	26.572	147.3	0.672
300	7.39	34.03	26.622	142.5	0.709
350	6.73	34.08	26.753	130.1	0.780
400	6.09	34.12	26.868	119.1	0.845
450	5.80	34.17	26.944	112.0	0.905
500	5.44	34.22	27.027	104.0	0.962
550	5.20	34.27	27.095	97.6	1.016
600	4.98	34.29	27.137	93.7	1.067
700	4.65	34.37	27.237	84.1	1.163
800	4.32	34.42	27.313	76.9	1.251
900	4.09	34.45	27.361	72.4	1.334
1000	3.84	34.48	27.411	67.7	1.412

CALCOFI CRUISE 7412		107032			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
30 26.0N	116 11.0W	12/08/74	1238 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
371M	340	3KT	4		
Z	T	S	SIGMA T	DT	DD
0	14.92	33.48	24.839	312.0	0.000
10	14.92	33.48	24.839	312.0	0.031
20	14.90	33.49	24.851	310.8	0.062
30	14.90	33.49	24.851	310.8	0.093
40	14.52	33.43	24.886	307.5	0.124
50	12.56	33.45	25.300	268.1	0.153
75	11.37	33.58	25.625	237.2	0.217
100	10.89	33.80	25.882	212.8	0.273
125	10.20	33.90	26.080	194.0	0.325
150	10.04	34.01	26.193	183.2	0.373
175	9.86	34.10	26.293	173.7	0.418
200	9.79	34.20	26.383	165.2	0.461
225	9.32	34.26	26.508	153.3	0.502
250	8.90	34.25	26.567	147.7	0.541
275	8.70	34.26	26.607	143.9	0.579
300	8.51	34.26	26.636	141.1	0.616

107035		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
30 21.0N	116 22.0W	12/08/74	1611 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1665M	320	5KT	4	270 2 5	
Z	T	S	SIGMA T	DT	DD
0	16.63	33.60	24.548	339.7	0.000
10	16.63	33.60	24.548	339.7	0.033
20	16.63	33.60	24.548	339.7	0.068
30	16.63	33.60	24.548	339.7	0.102
40	15.52	33.48	24.708	324.5	0.135
50	12.96	33.40	25.183	279.2	0.165
75	11.64	33.53	25.536	245.7	0.231
100	11.24	33.67	25.718	228.4	0.291
125	10.46	33.86	26.004	201.2	0.345
150	9.92	34.01	26.213	181.3	0.394
175	9.07	33.99	26.337	169.5	0.438
200	8.43	34.00	26.445	159.3	0.480
225	8.09	34.04	26.528	151.4	0.520
250	7.64	34.04	26.594	145.1	0.558
275	7.34	34.08	26.668	138.1	0.595
300	7.37	34.18	26.742	131.0	0.630
350	7.00	34.19	26.802	125.4	0.696
400	7.07	34.30	26.879	118.1	0.760
450	6.64	34.31	26.946	111.8	0.821
500	6.20	34.32	27.011	105.5	0.878
550	5.96	34.35	27.066	100.4	0.934
600	5.57	34.36	27.122	95.0	0.986
700	5.06	34.39	27.207	87.0	1.085
800	4.57	34.42	27.286	79.5	1.176
900	4.22	34.45	27.347	73.7	1.261
1000	3.92	34.50	27.418	66.9	1.341

CALCOFI CRUISE 7412		107040			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
30 11.0N	116 42.0W	12/08/74	1935 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2790M	280	9KT	0	270 8 7	
Z	T	S	SIGMA T	DT	DD
0	16.67	33.59	24.531	341.3	0.000
10	16.61	33.59	24.545	340.0	0.034
20	16.60	33.59	24.547	339.8	0.068
30	16.57	33.59	24.554	339.1	0.102
40	15.53	33.50	24.721	323.2	0.135
50	13.21	33.45	25.172	280.3	0.165
75	11.49	33.46	25.510	248.2	0.232
100	10.61	33.61	25.784	222.1	0.291
125	10.19	33.77	25.980	203.4	0.345
150	9.39	33.83	26.161	186.3	0.394
175	8.93	33.93	26.313	171.8	0.440
200	8.65	34.03	26.435	160.3	0.482
225	8.18	34.04	26.514	152.7	0.522
250	7.90	34.06	26.572	147.3	0.561
275	8.13	34.20	26.647	140.1	0.598
300	7.86	34.22	26.703	134.8	0.633
350	7.12	34.19	26.786	126.9	0.701
400	6.71	34.25	26.889	117.2	0.765
450	6.27	34.26	26.955	110.9	0.825
500	5.78	34.25	27.009	105.7	0.883
550	5.40	34.28	27.079	99.1	0.937
600	5.21	34.33	27.142	93.2	0.989
700	4.86	34.40	27.237	84.1	1.085
800	4.53	34.44	27.306	77.6	1.174
900	4.17	34.46	27.361	72.4	1.257
1000	3.93	34.48	27.402	68.5	1.336

107050					RV DAVID STARR JORDAN					CALCOFI CRUISE 7412					107060				
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			LATITUDE		LONGITUDE		MO/DAY/YR		START TIME				
29 45.5N		117 20.0W		12/09/74		0117 GMT			29 30.0N		118 01.0W		12/09/74		0620 GMT				
BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES			BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES				
2750M		360	14KT						3641M		350	11KT	0						
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	17.74	33.71	24.369	356.8	0.000	0	17.28	33.60	24.395	354.3	0.000	0	17.28	33.60	24.395	354.3	0.000		
10	17.62	33.73	24.413	352.5	0.035	10	17.28	33.60	24.395	354.3	0.035	10	17.28	33.60	24.395	354.3	0.035		
20	17.57	33.73	24.425	351.4	0.070	20	17.28	33.60	24.395	354.3	0.070	20	17.28	33.60	24.395	354.3	0.070		
30	17.55	33.73	24.430	350.9	0.105	30	17.26	33.60	24.400	353.8	0.106	30	17.26	33.60	24.400	353.8	0.106		
40	17.52	33.73	24.437	350.2	0.141	40	17.25	33.60	24.402	353.6	0.141	40	17.25	33.60	24.402	353.6	0.141		
50	16.25	33.58	24.620	332.9	0.175	50	17.10	33.60	24.438	350.2	0.177	50	17.10	33.60	24.438	350.2	0.177		
75	11.81	33.50	25.481	250.9	0.248	75	13.42	33.32	25.029	293.8	0.258	75	13.42	33.32	25.029	293.8	0.258		
100	10.82	33.65	25.778	222.7	0.308	100	11.91	33.48	25.447	254.1	0.327	100	11.91	33.48	25.447	254.1	0.327		
125	10.16	33.79	26.001	201.4	0.362	125	10.94	33.69	25.787	221.8	0.387	125	10.94	33.69	25.787	221.8	0.387		
150	9.68	33.95	26.207	181.9	0.410	150	10.08	33.84	26.054	196.4	0.440	150	10.08	33.84	26.054	196.4	0.440		
175	9.24	34.03	26.341	169.1	0.455	175	9.57	33.96	26.233	179.4	0.488	175	9.57	33.96	26.233	179.4	0.488		
200	8.83	34.07	26.438	160.0	0.497	200	9.06	34.01	26.355	167.9	0.532	200	9.06	34.01	26.355	167.9	0.532		
225	8.35	34.09	26.528	151.4	0.537	225	8.96	34.10	26.441	159.7	0.574	225	8.96	34.10	26.441	159.7	0.574		
250	8.12	34.09	26.563	148.1	0.575	250	8.37	34.07	26.509	153.2	0.614	250	8.37	34.07	26.509	153.2	0.614		
275	7.94	34.17	26.652	139.6	0.613	275	8.19	34.10	26.560	148.4	0.653	275	8.19	34.10	26.560	148.4	0.653		
300	7.47	34.16	26.713	133.9	0.648	300	7.82	34.11	26.623	142.4	0.691	300	7.82	34.11	26.623	142.4	0.691		
350	7.18	34.23	26.809	124.8	0.715	350	7.04	34.11	26.734	131.9	0.762	350	7.04	34.11	26.734	131.9	0.762		
400	7.09	34.29	26.868	119.1	0.779	400	6.69	34.17	26.829	122.9	0.828	400	6.69	34.17	26.829	122.9	0.828		
450	6.61	34.30	26.942	112.1	0.840	450	6.38	34.21	26.901	116.0	0.891	450	6.38	34.21	26.901	116.0	0.891		
500	6.36	34.33	26.998	106.8	0.898	500	5.93	34.23	26.975	109.0	0.951	500	5.93	34.23	26.975	109.0	0.951		
550	5.97	34.36	27.072	99.8	0.954	550	5.70	34.27	27.035	103.3	1.007	550	5.70	34.27	27.035	103.3	1.007		
600	5.67	34.38	27.126	94.7	1.006	600	5.48	34.31	27.093	97.8	1.061	600	5.48	34.31	27.093	97.8	1.061		
700	5.10	34.40	27.210	86.7	1.105	700	4.97	34.36	27.193	88.3	1.162	700	4.97	34.36	27.193	88.3	1.162		
800	4.58	34.41	27.277	80.4	1.196	800	4.61	34.41	27.273	80.7	1.254	800	4.61	34.41	27.273	80.7	1.254		
900	4.23	34.46	27.354	73.0	1.282	900	4.27	34.45	27.342	74.2	1.340	900	4.27	34.45	27.342	74.2	1.340		
1000	3.86	34.48	27.409	67.9	1.361	1000	3.97	34.48	27.397	68.9	1.421	1000	3.97	34.48	27.397	68.9	1.421		

RV DAVID STARR JORDAN										CALCOFI CRUISE 7412							107060						
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME						BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES					
29 30.0N		118 01.0W		12/09/74		0721 GMT						3641M		350	11KT	0							
Z	T	S	02	04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	17.27	33.604	5.54					353.8	0	17.27	33.604	5.54	24.401	353.8	0.000	0	17.27	33.604	5.54	24.401	353.8	0.000	
10	17.23	33.605	5.61					352.8	10	17.23	33.605	5.61	24.411	352.8	0.035	10	17.23	33.605	5.61	24.411	352.8	0.035	
20	17.25	33.603	5.65					353.4	20	17.24	33.605	5.62	24.407	353.1	0.070	20	17.24	33.605	5.62	24.407	353.1	0.070	
30	17.19	33.287	6.13					307.4	30	17.14	33.591	5.67	24.418	352.1	0.106	30	17.14	33.591	5.67	24.418	352.1	0.106	
40	12.95	33.340	5.78					283.5	40	14.89	33.352	6.04	24.746	320.9	0.173	40	14.89	33.352	6.04	24.746	320.9	0.173	
50	12.05	33.434	5.23					260.0	50	12.99	33.335	5.81	25.125	284.8	0.249	50	12.99	33.335	5.81	25.125	284.8	0.249	
60	11.45	33.564	4.88					239.8	60	11.62	33.522	4.98	25.531	246.1	0.316	60	11.62	33.522	4.98	25.531	246.1	0.316	
70	10.79	33.711	4.25					209.4	70	10.59	33.672	4.44	25.834	217.4	0.375	70	10.59	33.672	4.44	25.834	217.4	0.375	
80	9.73	33.895	2.41					186.8	80	9.86	33.845	3.63	26.094	192.6	0.427	80	9.86	33.845	3.63	26.094	192.6	0.427	
90	9.31	33.971	3.18					174.6	90	9.18	34.031	2.90	26.350	168.3	0.519	90	9.18	34.031	2.90	26.350	168.3	0.519	
100	4.02	34.099	2.50					160.7	100	8.56	34.105	2.21	26.507	153.4	0.601	100	8.56	34.105	2.21	26.507	153.4	0.601	
110	7.88	34.110	2.02					143.3	110	7.74	34.113	1.94	26.635	141.3	0.677	110	7.74	34.113	1.94	26.635	141.3	0.677	
120	6.67	34.155	1.14					123.7	120	6.48	34.162	1.07	26.836	122.2	0.814	120	6.48	34.162	1.07	26.836	122.2	0.814	
130	5.90	34.237	0.51					108.1	130	5.87	34.241	0.49	26.990	107.6	0.935	130	5.87	34.241	0.49	26.990	107.6	0.935	
140	5.46	34.313	0.32					97.3	140	5.46	34.313	0.32	27.097	97.4	1.045	140	5.46	34.313	0.32	27.097	97.4	1.045	
150	4.84	34.378	0.25					85.5	150	4.99	34.363	0.26	27.193	88.3	1.145	150	4.99	34.363	0.26	27.193	88.3	1.145	
160	4.33	34.448	0.40					74.9	160	4.60	34.411	0.29	27.274	80.6	1.238	160	4.60	34.411	0.29	27.274	80.6	1.238	
170	3.81	34.490	0.60					66.6	170	3.96	34.481	0.53	27.398	68.9	1.405	170	3.96	34.481	0.53	27.398	68.9	1.405	

110035					RV DAVID STARR JORDAN					CALCOFI CRUISE 7412					110040				
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			LATITUDE		LONGITUDE		MO/DAY/YR		START TIME				
29 46.0N		116 00.0W		12/10/74		0314 GMT			29 35.8N		116 19.0W		12/09/74		2333 GMT				
BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES			BOTTOM		WIND	SPEED	WEATHER		DOMINANT WAVES				
1158M		080	3KT	0					2042M		220	8KT	1		270 5 8				
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD		
0	16.56	33.57	24.541	340.4	0.000	0	17.33	33.61	24.391	354.7	0.000	0	17.33	33.61	24.391	354.7	0.000		
10	16.56	33.58	24.549	339.6	0.034	10	17.15	33.63	24.449	349.1	0.035	10	17.15	33.63	24.449	349.1	0.035		
20	16.50	33.57	24.555	339.1	0.068	20	17.12	33.63	24.456	348.5	0.070	20	17.12	33.63	24.456	348.5	0.070		
30	16.27	33.56	24.600	334.7	0.101	30	17.11	33.62	24.451	349.0	0.105	30	17.11	33.62	24.451	349.0	0.105		
40	14.74	33.46	24.862	309.8	0.134	40	17.10	33.62	24.453	348.8	0.140	40	17.10	33.62	24.453	348.8	0.140		
50	13.21	33.41	25.141	283.2	0.163	50	16.49	33.58	24.565	338.1	0.174	50	16.49	33.58	24.565	338.1	0.174		
75	11.75	33.58	25.554	243.9	0.230	75	12.40	33.44	25.226	275.2	0.251	75	12.40	33.44	25.226	275.2	0.251		
100	11.35	33.87	25.853	215.5	0.288	100	11.88	33.64	25.577	241.8	0.316	100	11.88	33.64	25.577	241.8	0.316		
125	10.74	33.94	26.017	199.9	0.340	125	11.05	33.94	25.962	205.2	0.373	125	11.05	33.94	25.962	205.2	0.373		
150	10.36	34.01	26.138	188.4	0.389	150	10.58	34.01	26.100	192.1	0.423	150	10.58	34.01	26.100	192.1	0.423		
175	10.12	34.11	26.257	177.1	0.436	175	10.23	34.10	26.230	179.6	0.471	175	10.23	34.10	26.230	179.6	0.471		
200	10.03	34.32	26.436	160.1	0.479	200	9.60	34.07	26.313	171.8	0.516	200	9.60	34.07	26.313	171.8	0.516		

110050

RV DAV ID STARR JORDAN

CALCOFI CRUISE 7412

110060

LATITUDE	LONGITUDE	MO/D/YR	START TIME		
29 16.5N	116 59.0W	12/09/74	1746 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3737M	360	16KT	1	290 4 4	
Z	T	S	SIGMA T	DT	DD
0	17.52	33.63	24.361	357.5	0.000
10	17.51	33.63	24.363	357.3	0.035
20	17.50	33.63	24.366	357.1	0.071
30	17.49	33.63	24.368	356.9	0.107
40	17.48	33.63	24.370	356.6	0.143
50	17.47	33.63	24.373	356.4	0.178
75	14.70	33.49	24.894	306.7	0.262
100	13.24	33.43	25.151	282.3	0.336
125	11.61	33.49	25.511	248.1	0.403
150	10.46	33.71	25.887	212.2	0.461
175	9.64	33.94	26.206	182.0	0.511
200	9.15	34.02	26.348	168.5	0.556
225	8.92	34.07	26.423	161.3	0.598
250	8.87	34.19	26.525	151.6	0.639
275	8.66	34.24	26.597	144.8	0.677
300	7.66	34.13	26.662	138.7	0.714
350	7.83	34.29	26.762	129.2	0.783
400	7.26	34.30	26.852	120.6	0.849
450	6.71	34.30	26.928	113.4	0.911
500	6.45	34.33	26.987	107.9	0.970
550	6.11	34.34	27.039	103.0	1.026
600	5.80	34.37	27.102	97.0	1.080
700	5.02	34.39	27.211	86.6	1.179
800	4.57	34.42	27.286	79.5	1.271
900	4.24	34.45	27.345	73.9	1.356
1000	3.91	34.49	27.411	67.6	1.435

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 56.5N	117 38.5W	12/09/74	1143 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3545M	350	5KT	0		
Z	T	S	SIGMA T	DT	DD
0	17.32	33.63	24.408	353.0	0.000
10	17.32	33.63	24.408	353.0	0.035
20	17.32	33.63	24.408	353.0	0.070
30	17.30	33.63	24.413	352.5	0.106
40	17.29	33.63	24.416	352.3	0.141
50	17.21	33.63	24.435	350.5	0.176
75	14.87	33.51	24.873	308.8	0.259
100	12.19	33.52	25.425	256.2	0.330
125	10.66	33.66	25.814	219.2	0.390
150	10.15	33.81	26.019	199.8	0.443
175	9.62	33.95	26.217	181.0	0.492
200	9.27	34.02	26.329	170.3	0.537
225	9.04	34.10	26.428	160.9	0.579
250	8.81	34.14	26.496	154.5	0.620
275	8.53	34.16	26.555	148.8	0.659
300	8.46	34.22	26.613	143.4	0.697
350	7.65	34.24	26.749	130.4	0.768
400	7.18	34.28	26.848	121.0	0.834
450	6.81	34.30	26.915	114.7	0.896
500	6.48	34.33	26.983	108.3	0.955
550	6.19	34.34	27.028	103.9	1.012
600	5.96	34.38	27.089	98.1	1.067
700	5.12	34.38	27.192	88.5	1.168
800	4.72	34.42	27.269	81.1	1.261
900	4.33	34.45	27.336	74.8	1.348
1000	4.11	34.48	27.383	70.3	1.429

RV DAV ID STARR JORDAN

CALCOFI CRUISE 7412

113030

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
29 22.0N	115 18.0W	12/10/74	1256 GMT	56M	320	10KT									
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
1	15.94	33.589	5.79					325.5	0	15.94	33.589	5.79	24.697	325.5	0.000
11	15.94	33.584	5.80					325.8	10	15.94	33.586	5.79	24.694	325.8	0.032
20	15.94	33.579	5.80					326.2	20	15.94	33.579	5.80	24.689	326.2	0.065
30	15.94	33.582	5.80					326.0	30	15.94	33.582	5.80	24.692	326.0	0.097
40	13.66	33.534	4.93					282.8							

113030

RV DAV ID STARR JORDAN

CALCOFI CRUISE 7412

113035

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
29 22.0N	115 18.0W	12/10/74	1235 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
56M	320	10KT			
Z	T	S	SIGMA T	DT	DD
0	15.95	33.58	24.688	326.4	0.000
10	15.95	33.58	24.688	326.4	0.032
20	15.95	33.58	24.688	326.4	0.065
30	15.96	33.58	24.686	326.6	0.098
40	14.31	33.50	24.985	298.1	0.129
44	13.93	33.52	25.079	289.1	0.141
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
29 13.5N	115 40.0W	12/10/74	1609 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1298M	250	6KT	2	320 3 6	
Z	T	S	SIGMA T	DT	DD
0	16.10	33.56	24.639	331.1	0.000
10	16.01	33.57	24.667	328.4	0.032
20	15.32	33.56	24.813	314.4	0.065
30	14.57	33.54	24.960	300.4	0.095
40	13.56	33.56	25.186	278.9	0.125
50	12.93	33.60	25.344	264.0	0.152
75	11.69	33.66	25.628	237.0	0.215
100	10.70	33.78	25.900	211.1	0.271
125	10.58	34.02	26.107	191.3	0.322
150	10.42	34.15	26.236	179.1	0.369
175	10.03	34.19	26.335	169.8	0.414
200	9.96	34.28	26.417	161.9	0.456
225	9.99	34.38	26.490	155.0	0.497
250	9.45	34.30	26.517	152.4	0.537
275	8.92	34.29	26.595	145.0	0.575
300	8.63	34.28	26.633	141.4	0.612
350	8.32	34.37	26.752	130.2	0.683
400	7.32	34.30	26.844	121.4	0.749
450	6.93	34.30	26.898	116.3	0.812
500	6.49	34.32	26.973	109.1	0.872
550	6.08	34.34	27.042	102.6	0.929
600	5.77	34.35	27.089	98.1	0.983
700	5.18	34.40	27.200	87.6	1.083
800	4.73	34.43	27.276	80.5	1.176
900	4.32	34.46	27.345	73.9	1.262
1000	4.08	34.49	27.394	69.3	1.343

113040						CALCOFI CRUISE 7412						113050					
RV DAVID STARR JORDAN																	
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			
29 02.0N		115 56.0W		12/10/74		1916 GMT		28 41.5N		116 37.0W		12/11/74		0104 GMT			
BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES			
1856M		310 4KT		2		270 3 3		3169M		360 9KT		1		280 8 14			
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	17.20	33.62	24.429	351.0	0.000	0	17.37	33.66	24.420	351.9	0.000	0	17.37	33.66	24.420	351.9	0.000
10	17.13	33.62	24.446	349.4	0.035	10	17.35	33.65	24.417	352.2	0.035	10	17.35	33.65	24.417	352.2	0.035
20	17.10	33.62	24.453	348.8	0.070	20	17.12	33.65	24.471	347.0	0.070	20	17.12	33.65	24.471	347.0	0.070
30	17.05	33.62	24.465	347.6	0.104	30	17.11	33.65	24.473	346.8	0.105	30	17.11	33.65	24.473	346.8	0.105
40	16.92	33.61	24.488	345.4	0.139	40	17.11	33.65	24.473	346.8	0.139	40	17.11	33.65	24.473	346.8	0.139
50	15.12	33.49	24.803	315.4	0.172	50	16.08	33.55	24.636	331.4	0.173	50	16.08	33.55	24.636	331.4	0.173
75	13.28	33.65	25.312	266.9	0.246	75	13.18	33.58	25.278	270.2	0.249	75	13.18	33.58	25.278	270.2	0.249
100	11.96	33.76	25.655	234.4	0.309	100	11.82	33.64	25.588	240.7	0.313	100	11.82	33.64	25.588	240.7	0.313
125	11.75	34.03	25.903	210.8	0.365	125	10.53	33.79	25.937	207.5	0.370	125	10.53	33.79	25.937	207.5	0.370
150	11.14	34.14	26.101	192.0	0.416	150	10.28	33.99	26.136	188.6	0.420	150	10.28	33.99	26.136	188.6	0.420
175	10.65	34.22	26.251	177.7	0.463	175	9.46	34.03	26.305	172.5	0.466	175	9.46	34.03	26.305	172.5	0.466
200	10.43	34.28	26.336	169.6	0.508	200	9.27	34.15	26.430	160.7	0.509	200	9.27	34.15	26.430	160.7	0.509
225	9.99	34.30	26.427	160.9	0.550	225	9.41	34.29	26.516	152.5	0.549	225	9.41	34.29	26.516	152.5	0.549
250	9.58	34.33	26.519	152.2	0.591	250	8.94	34.29	26.592	145.3	0.588	250	8.94	34.29	26.592	145.3	0.588
275	9.47	34.38	26.577	146.8	0.629	275	8.32	34.26	26.666	138.3	0.624	275	8.32	34.26	26.666	138.3	0.624
300	9.19	34.38	26.622	142.4	0.667	300	8.33	34.31	26.703	134.8	0.660	300	8.33	34.31	26.703	134.8	0.660
350	8.21	34.36	26.760	129.3	0.738	350	7.71	34.31	26.796	126.0	0.728	350	7.71	34.31	26.796	126.0	0.728
400	7.81	34.36	26.820	123.7	0.805	400	6.80	34.26	26.885	117.6	0.792	400	6.80	34.26	26.885	117.6	0.792
450	7.29	34.37	26.903	115.8	0.868	450	6.37	34.27	26.950	111.4	0.852	450	6.37	34.27	26.950	111.4	0.852
500	6.45	34.34	26.994	107.1	0.927	500	6.02	34.30	27.019	104.9	0.909	500	6.02	34.30	27.019	104.9	0.909
550	6.24	34.33	27.014	105.3	0.984	550	5.81	34.34	27.076	99.3	0.964	550	5.81	34.34	27.076	99.3	0.964
600	6.02	34.37	27.074	99.6	1.039	600	5.61	34.36	27.117	95.5	1.016	600	5.61	34.36	27.117	95.5	1.016
700	5.05	34.40	27.216	86.2	1.140	700	5.13	34.41	27.214	86.3	1.115	700	5.13	34.41	27.214	86.3	1.115
800	4.71	34.42	27.270	81.0	1.232	800	4.69	34.44	27.288	79.3	1.206	800	4.69	34.44	27.288	79.3	1.206
900	4.36	34.45	27.333	75.1	1.319	900	4.24	34.47	27.361	72.4	1.291	900	4.24	34.47	27.361	72.4	1.291
1000	4.07	34.48	27.387	69.9	1.401	1000	3.92	34.50	27.418	66.9	1.369	1000	3.92	34.50	27.418	66.9	1.369

113060						CALCOFI CRUISE 7412						117030					
RV DAVID STARR JORDAN																	
LATITUDE		LONGITUDE		MO/DAY/YR		START TIME		LATITUDE		LONGITUDE		MO/DAY/YR		START TIME			
28 22.0N		117 16.0W		12/11/74		0555 GMT		28 47.5N		114 56.5W		12/12/74		0925 GMT			
BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES			
3641M		340 9KT		0				93M		350 11KT							
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	17.25	33.64	24.433	350.7	0.000	0	17.21	33.66	24.457	348.3	0.000	0	17.21	33.66	24.457	348.3	0.000
10	17.26	33.65	24.438	350.2	0.035	10	17.22	33.66	24.455	348.5	0.034	10	17.22	33.66	24.455	348.5	0.034
20	17.25	33.65	24.440	349.9	0.070	20	17.23	33.66	24.453	348.8	0.069	20	17.23	33.66	24.453	348.8	0.069
30	17.20	33.64	24.445	349.5	0.105	30	17.21	33.66	24.457	348.3	0.104	30	17.21	33.66	24.457	348.3	0.104
40	17.17	33.64	24.452	348.9	0.140	40	16.98	33.64	24.497	344.6	0.139	40	16.98	33.64	24.497	344.6	0.139
50	15.65	33.46	24.663	328.7	0.174	50	14.12	33.57	25.078	289.2	0.171	50	14.12	33.57	25.078	289.2	0.171
75	13.05	33.58	25.304	267.7	0.249	75	12.13	33.69	25.568	242.6	0.238	75	12.13	33.69	25.568	242.6	0.238
100	11.20	33.63	25.694	230.6	0.312												
125	10.33	33.87	25.996	202.0	0.366												
150	9.74	33.98	26.220	180.6	0.415												
175	9.39	34.08	26.356	167.8	0.459												
200	8.99	34.15	26.475	156.4	0.501												
225	8.78	34.22	26.563	148.1	0.540												
250	8.53	34.25	26.625	142.2	0.577												
275	8.19	34.26	26.685	136.5	0.613												
300	8.04	34.28	26.723	132.8	0.648												
350	7.40	34.27	26.809	124.7	0.715												
400	6.92	34.29	26.892	116.9	0.779												
450	6.72	34.34	26.958	110.6	0.839												
500	6.28	34.33	27.009	105.8	0.896												
550	6.00	34.37	27.076	99.4	0.951												
600	5.65	34.38	27.128	94.5	1.003												
700	5.20	34.42	27.214	86.3	1.102												
800	4.79	34.45	27.285	79.6	1.193												
900	4.40	34.47	27.344	74.0	1.279												
1000	4.01	34.48	27.393	69.3	1.360												

RV DAVID STARR JORDAN										CALCOFI CRUISE 7412						117030						
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME				BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES						
28 47.5N		114 56.5W		12/12/74		1002 GMT				93M		350 11KT										
Z	T	S	U2	U4	S103	N12	N03	DT	Z	T	S	U2	SIGT	DT	DD	Z	T	S	SIGT	DT	DD	
1	17.17	33.667	5.54					346.9	0	17.17	33.667	5.54	24.472	346.9	0.000	1	17.17	33.667	5.54	24.472	346.9	0.000
11	17.16	33.665	5.53					346.8	10	17.16	33.666	5.53	24.473	346.8	0.034	11	17.16	33.665	5.53	24.473	346.8	0.034
20	17.18	33.665	5.55					347.3	20	17.18	33.665	5.55	24.468	347.3	0.069	20	17.18	33.665	5.55	24.468	347.3	0.069
30	17.19	33.667	5.52					347.3	30	17.19	33.667	5.52	24.467	347.3	0.104	30	17.19	33.667	5.52	24.467	347.3	0.104
49	14.17	33.595	4.81					288.4	50	14.05	33.598	4.77	25.112	286.0	0.167	49	14.17	33.595	4.81	25.112	286.0	0.167
73	12.64	33.718	4.02					249.9														

117035 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 38.0N	115 16.0W	12/12/74	0630 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
205M	010	12KT			
Z	T	S	SIGMA T	DT	DD
0	16.20	33.62	24.662	328.8	0.000
10	16.17	33.62	24.669	328.2	0.032
20	16.13	33.62	24.678	327.3	0.065
30	15.76	33.60	24.746	320.8	0.098
40	15.21	33.59	24.860	309.9	0.129
50	14.02	33.65	25.161	281.4	0.159
75	12.28	33.68	25.532	246.1	0.225
100	11.59	33.80	25.755	224.9	0.285
125	10.56	33.92	26.033	198.4	0.338
150	10.44	34.11	26.202	182.4	0.387
163	10.05	34.15	26.300	173.0	0.410

CALCIFI CRUISE 7412 117040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 27.0N	115 36.5W	12/11/74	2312 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1056M	320	16KT	0	320 6 13	
Z	T	S	SIGMA T	DT	DD
0	16.42	33.61	24.604	334.4	0.000
10	16.42	33.61	24.604	334.4	0.033
20	16.26	33.60	24.633	331.6	0.066
30	14.51	33.48	24.927	303.6	0.098
40	13.53	33.50	25.146	282.8	0.128
50	12.88	33.56	25.322	266.0	0.155
75	11.91	33.71	25.625	237.2	0.218
100	11.30	33.89	25.878	213.2	0.275
125	10.56	34.01	26.103	191.7	0.326
150	10.31	34.15	26.256	177.3	0.373
175	10.32	34.24	26.324	170.8	0.418
200	10.23	34.29	26.378	165.6	0.461
225	9.98	34.32	26.444	159.3	0.503
250	9.53	34.36	26.551	149.2	0.542
275	9.23	34.36	26.600	144.5	0.580
300	9.12	34.40	26.649	139.9	0.617
350	8.13	34.38	26.788	126.7	0.687
400	7.82	34.42	26.866	119.4	0.752
450	6.86	34.33	26.931	113.1	0.813
500	6.56	34.34	26.980	108.5	0.872
550	6.12	34.35	27.045	102.3	0.929
600	5.84	34.37	27.097	97.5	0.983
700	5.31	34.41	27.193	88.3	1.084
800	4.88	34.43	27.259	82.1	1.178
900	4.55	34.45	27.312	77.1	1.266
1000	4.21	34.48	27.372	71.3	1.350

117050 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 08.0N	116 15.0W	12/11/74	1733 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
4116M	340	15KT	1	320 6 13	
Z	T	S	SIGMA T	DT	DD
0	17.18	33.63	24.442	349.8	0.000
10	17.17	33.63	24.444	349.6	0.034
20	17.16	33.63	24.447	349.4	0.069
30	17.16	33.63	24.447	349.4	0.105
40	17.14	33.63	24.451	348.9	0.140
50	15.63	33.53	24.721	323.2	0.173
75	12.78	33.45	25.056	291.3	0.251
100	11.73	33.63	25.597	239.9	0.317
125	10.88	33.74	25.837	217.1	0.375
150	10.05	33.88	26.090	193.0	0.427
175	9.70	34.04	26.274	175.6	0.474
200	9.38	34.10	26.373	166.1	0.518
225	8.78	34.14	26.500	154.0	0.559
250	8.31	34.16	26.589	145.6	0.597
275	8.01	34.18	26.649	139.9	0.634
300	7.99	34.23	26.692	135.9	0.670
350	7.50	34.27	26.795	126.1	0.738
400	6.82	34.28	26.898	116.3	0.802
450	6.73	34.34	26.957	110.7	0.862
500	6.53	34.39	27.023	104.4	0.919
550	5.94	34.36	27.076	99.4	0.974
600	5.49	34.36	27.132	94.1	1.026
700	5.11	34.41	27.216	86.1	1.124
800	4.68	34.45	27.297	78.4	1.214
900	4.30	34.48	27.363	72.7	1.298
1000	3.93	34.50	27.417	67.0	1.377

CALCIFI CRUISE 7412 117060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
27 48.0N	116 53.0W	12/11/74	1045 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3641M	250	16KT			
Z	T	S	SIGMA T	DT	DD
0	17.56	33.64	24.359	357.7	0.000
10	17.56	33.64	24.359	357.7	0.035
20	17.58	33.64	24.354	358.2	0.071
30	17.58	33.64	24.354	358.2	0.107
40	17.58	33.64	24.354	358.2	0.143
50	17.34	33.61	24.388	354.9	0.179
75	15.55	33.52	24.732	322.2	0.264
100	14.26	33.50	24.995	297.1	0.342
125	12.28	33.48	25.377	260.8	0.412
150	11.75	33.65	25.609	238.7	0.476
175	10.31	33.78	25.968	204.6	0.532
200	9.56	33.91	26.195	183.0	0.581
225	9.01	33.97	26.331	170.1	0.627
250	8.67	34.03	26.439	159.8	0.669
275	8.23	34.08	26.538	150.4	0.709
300	8.34	34.18	26.600	144.6	0.747
350	7.71	34.25	26.748	130.5	0.819
400	7.48	34.30	26.821	123.6	0.885
450	6.66	34.29	26.927	113.5	0.948
500	6.25	34.31	26.997	106.9	1.006
550	5.97	34.33	27.049	102.0	1.062
600	5.68	34.34	27.093	97.8	1.116
700	5.20	34.42	27.214	86.3	1.216
800	4.77	34.45	27.287	79.4	1.307
900	4.45	34.49	27.354	73.0	1.392
1000	4.09	34.50	27.401	68.6	1.472

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME					
27 48.0N	116 53.0W	12/11/74	1205 GMT					
Z	T	S	02	014	0103	002	003	00
2	17.56	33.644	5.48					357.4
12	17.56	33.640	5.57					357.7
31	17.56	33.641	5.57					357.7
59	16.23	33.523	6.00					336.6
77	15.07	33.496	6.03					313.9
92	14.47	33.543	5.96					298.2
106	13.42	33.482	5.83					282.0
135	11.96	33.534	5.36					251.0
157	10.64	33.707	4.65					215.4
187	9.82	33.850	4.22					191.5
220	8.99	33.963	3.90					170.3
292	8.36	34.126	2.11					148.1
392	7.58	34.286	0.77					126.0
497	6.52	34.307	0.42					110.5
603	5.61	34.343	0.25					96.8
737	5.03	34.428	0.24					83.1
889	4.50	34.473	0.38					74.8
1052	3.91	34.514	0.57					65.8

CALCIFI CRUISE 7412 117060

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3641M	250	16KT				
Z	T	S	02	SIGT	DT	DD
2	17.56	33.644	5.48	24.362	357.4	0.000
10	17.56	33.642	5.55	24.359	357.7	0.035
20	17.56	33.642	5.57	24.359	357.7	0.071
30	17.56	33.642	5.57	24.359	357.7	0.107
50	16.77	33.564	5.85	24.485	345.7	0.178
75	15.19	33.497	6.02	24.791	316.5	0.261
100	13.88	33.511	5.89	25.081	289.0	0.337
125	12.42	33.494	5.56	25.359	262.5	0.407
150	11.03	33.649	4.87	25.737	226.5	0.469
200	9.46	33.899	4.10	26.201	182.4	0.573
250	8.62	34.046	3.20	26.451	158.7	0.660
300	8.29	34.153	1.96	26.584	146.1	0.739
400	7.50	34.290	0.72	26.810	124.6	0.880
500	6.49	34.308	0.41	26.964	110.1	1.005
600	5.63	34.342	0.25	27.100	97.1	1.116
700	5.15	34.413	0.24	27.213	86.4	1.215
800	4.80	34.457	0.28	27.289	79.2	1.306
1000	4.10	34.501	0.50	27.400	68.7	1.472

118039		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 18.5N	115 24.0W	12/12/74	0214 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
264M	330	9KT			
Z	T	S	SIGMA T	DT	DD
0	16.93	33.74	24.585	336.2	0.000
10	16.93	33.74	24.585	336.2	0.033
20	16.83	33.74	24.608	333.9	0.067
30	16.80	33.74	24.615	333.3	0.100
40	16.00	33.63	24.715	323.8	0.133
50	14.00	33.55	25.088	288.3	0.164
75	12.57	33.67	25.468	252.1	0.232
100	11.30	33.82	25.823	218.3	0.291
125	10.76	34.01	26.068	195.1	0.343
150	10.31	34.13	26.240	178.7	0.391
175	10.07	34.24	26.367	166.7	0.435
200	9.85	34.28	26.435	160.2	0.477
225	9.63	34.31	26.495	154.5	0.517

CALCIFI CRUISE 7412		119033			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 19.0N	114 53.0W	12/13/74	0149 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
103M	320	21KT	0	330 2 5	
Z	T	S	SIGMA T	DT	DD
0	17.53	33.64	24.366	357.0	0.000
10	17.52	33.64	24.368	356.8	0.035
20	17.52	33.64	24.368	356.8	0.071
30	17.48	33.64	24.378	355.9	0.107
40	17.48	33.64	24.378	355.9	0.142
50	17.47	33.64	24.380	355.7	0.178
75	14.25	33.54	25.028	294.0	0.260
92	12.66	33.77	25.528	246.4	0.306

120030		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 13.5N	114 34.0W	12/12/74	2321 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
103M	0	16KT	0	290 2 8	
Z	T	S	SIGMA T	DT	DD
0	16.67	33.62	24.554	339.1	0.000
10	16.54	33.61	24.565	338.1	0.033
20	16.49	33.62	24.595	335.7	0.067
30	16.48	33.62	24.598	335.0	0.100
40	16.48	33.62	24.598	335.0	0.134
50	16.47	33.62	24.600	334.7	0.168
75	12.84	33.71	25.446	254.2	0.242

CALCIFI CRUISE 7412		120035			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 03.0N	114 54.0W	12/13/74	0340 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
75M	310	11KT			
Z	T	S	SIGMA T	DT	DD
0	16.93	33.64	24.508	343.5	0.000
10	16.93	33.64	24.508	343.5	0.034
20	16.89	33.63	24.510	343.3	0.068
30	16.77	33.63	24.538	340.6	0.103
40	16.71	33.62	24.545	340.0	0.137
50	16.58	33.61	24.567	337.9	0.171
66	13.77	33.51	25.105	286.7	0.221

120045		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
27 43.0N	115 33.0W	12/13/74	0828 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2284M	350	22KT			
Z	T	S	SIGMA T	DT	DD
0	17.54	33.88	24.535	340.8	0.000
10	17.54	33.88	24.535	340.8	0.034
20	17.57	33.87	24.532	341.2	0.068
30	17.43	33.83	24.535	340.8	0.102
40	17.02	33.77	24.586	336.0	0.136
50	14.96	33.60	24.922	304.0	0.168
75	13.26	33.72	25.370	261.4	0.239
100	11.93	33.77	25.668	233.1	0.302
125	11.06	33.93	24.952	206.1	0.357
150	10.43	34.07	26.172	185.1	0.407
175	10.03	34.17	26.319	171.2	0.452
200	10.34	34.36	26.414	162.2	0.499
225	9.96	34.36	26.479	156.0	0.536
250	9.85	34.42	26.544	149.8	0.575
275	9.73	34.44	26.580	146.4	0.614
300	9.36	34.45	26.649	139.9	0.651
350	8.71	34.44	26.746	130.7	0.722
400	7.97	34.40	26.828	122.9	0.789
450	7.43	34.40	26.907	115.5	0.852
500	6.81	34.39	26.985	108.0	0.912
550	6.50	34.41	27.043	102.6	0.968
600	6.08	34.41	27.098	97.4	1.022
700	5.44	34.42	27.185	89.1	1.124
800	4.85	34.45	27.278	80.2	1.217
900	4.40	34.47	27.344	74.0	1.303
1000	4.02	34.50	27.408	67.9	1.383

CALCIFI CRUISE 7412		120050			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
27 33.0N	115 52.5W	12/13/74	1143 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
6212M	350	12KT			
Z	T	S	SIGMA T	DT	DD
0	16.79	33.65	24.549	339.6	0.000
10	16.78	33.65	24.551	339.4	0.033
20	16.80	33.66	24.554	339.1	0.067
30	16.80	33.66	24.554	339.1	0.101
40	15.78	33.50	24.665	328.6	0.135
50	15.00	33.56	24.883	307.8	0.167
75	13.40	33.71	25.232	274.6	0.240
100	12.41	33.81	25.607	238.9	0.305
125	11.89	33.95	25.815	219.1	0.363
150	10.26	33.85	26.031	198.6	0.416
175	9.60	33.99	26.251	177.7	0.464
200	9.09	34.05	26.381	165.4	0.508
225	8.82	34.11	26.471	156.9	0.549
250	8.82	34.19	26.533	150.9	0.588
275	8.91	34.30	26.605	144.1	0.627
300	8.92	34.36	26.650	139.8	0.663
350	8.10	34.32	26.746	130.7	0.734
400	7.30	34.28	26.831	122.7	0.801
450	6.92	34.32	26.915	114.6	0.863
500	6.70	34.38	26.993	107.3	0.922
550	6.12	34.34	27.037	103.1	0.979
600	5.74	34.36	27.101	97.0	1.033
700	5.18	34.42	27.216	86.1	1.132
800	4.76	34.43	27.273	80.8	1.224
900	4.39	34.45	27.329	75.4	1.311
1000	4.05	34.50	27.405	68.2	1.392

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 33.0N	115 52.5W	12/13/74	1301 GMT	4212M	350	12KT		DT	Z	T	S	02	SIGT	DT	DD
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
1	16.75	33.674	5.64					337.0	0	16.75	33.674	5.64	24.576	337.0	0.000
11	16.77	33.678	5.65					337.1	10	16.76	33.679	5.64	24.575	337.1	0.033
30	16.50	33.638	5.66					334.1	20	16.64	33.660	5.65	24.590	335.7	0.067
58	14.52	33.660	4.57					290.6	30	16.50	33.638	5.66	24.607	334.1	0.100
77	13.66	33.748	4.01					267.1	50	15.13	33.640	4.93	24.914	304.9	0.165
92	12.66	33.802	3.62					244.1	75	13.75	33.739	4.06	25.284	269.6	0.237
106	12.07	33.891	3.18					226.7	100	12.30	33.854	3.36	25.661	233.8	0.300
135	10.71	33.959	2.91					198.0	125	11.18	33.949	3.00	25.944	206.8	0.356
158	9.69	33.956	3.25					181.6	150	9.96	33.948	3.18	26.156	186.7	0.406
187	10.30	34.264	1.67					168.7	200	9.83	34.225	1.85	26.396	164.0	0.496
220	8.91	34.117	2.42					157.7	250	8.93	34.224	2.01	26.541	150.1	0.576
292	8.97	34.346	0.97					141.6	300	8.86	34.346	0.94	26.648	140.0	0.652
392	7.42	34.287	0.67					123.7	400	7.35	34.294	0.62	26.833	127.4	0.789
497	6.77	34.376	0.19					108.5	500	6.74	34.376	0.19	26.983	108.2	0.911
601	5.75	34.346	0.25					98.2	600	5.75	34.347	0.24	27.088	98.3	1.022
735	5.07	34.413	0.24					85.4	700	5.20	34.392	0.24	27.191	88.6	1.124
887	4.41	34.455	0.35					75.2	800	4.77	34.433	0.27	27.274	80.7	1.217
1050	3.86	34.498	0.59					66.5	1000	4.01	34.485	0.50	27.397	68.9	1.384

120060

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

123037

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	LATITUDE	LONGITUDE	MO/DAY/YR	START TIME				
27 13.0N	116 30.5W	12/13/74	1802 GMT	27 24.0N	114 40.0W	12/14/74	1400 GMT				
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
537M	350	21FT	1	340 6 3	69M	040	11KT	1	310 3 7		
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	17.36	33.58	24.361	357.5	1.000	0	18.28	33.94	24.412	352.6	0.000
10	17.35	33.59	24.371	356.6	0.035	10	18.29	33.94	24.410	352.8	0.035
20	17.35	33.58	24.363	357.3	0.071	20	18.25	33.94	24.420	351.9	0.070
30	17.35	33.59	24.371	356.6	0.107	30	18.14	33.92	24.432	350.8	0.105
40	17.35	33.58	24.363	357.3	0.143	40	16.90	33.76	24.607	334.1	0.140
50	17.32	33.59	24.378	355.9	0.178	50	15.79	33.62	24.755	320.0	0.173
75	14.70	33.52	24.917	304.5	0.261	67	15.11	33.80	25.044	292.5	0.225
100	13.28	33.54	25.227	275.0	0.334						
125	11.86	33.68	25.611	238.5	0.399						
150	10.69	33.80	25.917	209.4	0.456						
175	9.98	33.89	26.110	191.1	0.507						
200	9.76	34.07	26.287	174.3	0.554						
225	9.57	34.17	26.396	163.9	0.597						
250	9.88	34.36	26.493	154.7	0.638						
275	9.34	34.33	26.559	148.5	0.677						
300	8.36	34.21	26.620	142.6	0.715						
350	8.43	34.36	26.727	132.9	0.787						
400	7.58	34.30	26.807	125.0	0.855						
450	7.03	34.31	26.892	116.8	0.918						
500	6.73	34.34	26.957	110.7	0.979						
550	6.36	34.36	27.022	104.5	1.037						
600	6.13	34.38	27.068	100.2	1.092						
700	5.49	34.41	27.171	90.4	1.196						
800	4.81	34.42	27.259	82.1	1.290						
900	4.37	34.44	27.324	76.0	1.378						
1000	4.04	34.48	27.390	69.6	1.460						

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

123050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
26 58.0N	115 31.0W	12/14/74	0517 GMT	3737M	350	28KT		DT	Z	T	S	02	SIGT	DT	DD
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0	17.16	33.627	5.59					349.6	0	17.16	33.627	5.59	24.444	349.6	0.000
9	17.17	33.626	5.61					349.9	10	17.17	33.627	5.61	24.441	349.9	0.034
28	17.17	33.624	5.67					350.0	20	17.17	33.626	5.63	24.440	350.0	0.070
57	14.43	33.369	6.09					310.1	30	17.02	33.604	5.71	24.458	348.2	0.105
76	13.04	33.440	5.56					277.8	50	15.20	33.419	6.03	24.729	322.5	0.172
90	11.87	33.506	5.01					251.5	75	13.11	33.435	5.59	25.179	279.6	0.248
104	11.61	33.633	4.85					237.5	100	11.64	33.597	4.89	25.587	240.8	0.313
133	10.87	33.796	3.51					212.8	125	11.11	33.763	3.86	25.812	219.5	0.371
155	9.90	33.867	3.60					191.6	150	10.08	33.846	3.58	26.057	196.2	0.424
183	10.28	34.192	2.04					173.7	200	10.13	34.273	1.65	26.381	165.4	0.516
217	9.86	34.306	1.48					158.4	250	9.27	34.326	1.19	26.566	147.7	0.597
288	8.62	34.317	1.00					138.5	300	8.50	34.328	0.90	26.690	136.1	0.670
387	7.93	34.407	0.33					121.9	400	7.82	34.413	0.30	26.859	119.9	0.805
491	7.06	34.433	0.16					108.0	500	6.98	34.433	0.16	26.996	107.0	0.926
596	6.19	34.435	0.21					96.8	600	6.16	34.435	0.21	27.107	96.4	1.035
728	5.33	34.448	0.22					85.7	700	5.49	34.445	0.21	27.198	87.8	1.136
879	4.62	34.467	0.32					76.5	800	4.96	34.455	0.25	27.269	81.0	1.229
1040	4.03	34.507	0.51					67.5	1000	4.16	34.495	0.45	27.390	69.7	1.399

123050 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 58.0N	115 31.0W	12/14/74	0405 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
373M	350	20KT	1	340 6 6	
Z	T	S	SIGMA T	DT	DD
0	17.19	33.62	24.432	350.8	0.000
10	17.19	33.62	24.432	350.8	0.035
20	17.19	33.62	24.432	350.8	0.070
30	17.19	33.62	24.432	350.8	0.105
40	17.09	33.60	24.440	350.0	0.140
50	15.09	33.39	24.733	322.1	0.174
75	12.80	33.45	25.253	272.6	0.249
100	11.47	33.70	25.699	230.1	0.312
125	10.59	33.81	25.943	207.0	0.367
150	9.89	33.96	26.179	184.5	0.417
175	10.39	34.22	26.296	173.4	0.462
200	10.04	34.25	26.380	165.5	0.506
225	6.51	34.28	26.492	154.8	0.547
250	9.50	34.41	26.595	145.0	0.586
275	6.12	34.40	26.649	139.0	0.623
300	8.58	34.38	26.704	134.7	0.658
325	7.95	34.36	26.800	125.6	0.726
400	7.72	34.40	26.865	119.4	0.791
450	7.35	34.42	26.934	112.9	0.853
500	7.03	34.44	26.994	107.1	0.911
550	6.57	34.45	27.065	100.4	0.967
600	6.17	34.44	27.110	96.2	1.021
700	5.48	34.44	27.196	88.0	1.121
800	4.93	34.45	27.269	81.1	1.215
900	4.55	34.47	27.328	75.8	1.302
1000	4.24	34.50	27.385	70.1	1.384

CALCIFI CRUISE 7412 123060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 38.5N	116 09.0W	12/13/74	2256 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
373M	340	21KT	1	340 6 6	
Z	T	S	SIGMA T	DT	DD
0	17.34	33.63	24.404	353.4	0.000
10	17.34	33.63	24.404	353.4	0.035
20	17.32	33.63	24.408	353.0	0.070
30	17.22	33.62	24.425	351.5	0.104
40	17.21	33.62	24.427	351.2	0.141
50	17.21	33.62	24.427	351.2	0.176
75	14.88	33.39	24.778	317.8	0.260
100	12.84	33.44	25.238	274.0	0.335
125	11.25	33.64	25.693	230.7	0.398
150	11.00	33.97	25.994	202.1	0.453
175	10.61	34.16	26.211	181.5	0.502
200	10.10	34.22	26.366	168.7	0.547
225	9.69	34.22	26.415	162.1	0.589
250	9.12	34.22	26.509	153.2	0.630
275	8.77	34.25	26.588	145.7	0.669
300	8.46	34.40	26.675	137.4	0.706
325	8.10	34.36	26.777	127.8	0.775
400	7.62	34.36	26.848	121.0	0.840
450	7.23	34.38	26.919	114.3	0.903
500	6.92	34.41	26.986	107.9	0.962
550	6.59	34.44	27.055	101.4	1.018
600	6.23	34.45	27.110	96.2	1.072
700	5.55	34.46	27.203	87.3	1.172
800	4.94	34.47	27.284	79.7	1.265
900	4.50	34.49	27.349	73.5	1.350
1000	4.14	34.51	27.404	68.4	1.431

127034 RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 55.0N	114 06.0W	12/14/74	2211 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
82M	320	18KT	1	300 4 8	
Z	T	S	SIGMA T	DT	DD
0	18.73	34.14	24.452	348.8	0.000
10	18.69	34.14	24.462	347.8	0.034
20	18.50	34.14	24.510	343.3	0.069
30	18.48	34.14	24.515	342.8	0.103
40	18.47	34.14	24.518	342.6	0.138
50	18.33	34.13	24.545	340.0	0.172
61	16.01	33.96	24.966	299.9	0.207

CALCIFI CRUISE 7412 127040

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 43.0N	114 29.0W	12/15/74	0220 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3075M	340	15KT	1	350 3 4	
Z	T	S	SIGMA T	DT	DD
0	18.19	34.02	24.495	344.7	0.000
10	18.20	34.02	24.493	344.9	0.034
20	18.19	34.02	24.495	344.7	0.069
30	18.16	34.03	24.510	343.2	0.103
40	18.02	34.06	24.568	337.8	0.137
50	15.41	33.83	25.000	296.6	0.169
75	13.42	33.86	25.446	254.2	0.238
100	12.45	34.09	25.816	219.0	0.298
125	12.18	34.32	26.046	197.1	0.351
150	11.74	34.47	26.246	178.2	0.399
175	11.30	34.44	26.304	172.6	0.443
200	10.74	34.44	26.406	163.0	0.486
225	10.64	34.51	26.478	156.1	0.528
250	10.32	34.54	26.557	148.6	0.567
275	10.01	34.52	26.595	145.0	0.605
300	9.48	34.47	26.645	140.3	0.642
325	8.82	34.48	26.760	129.4	0.713
400	8.11	34.44	26.838	121.9	0.779
450	7.43	34.42	26.922	114.0	0.842
500	7.09	34.42	26.970	109.4	0.902
550	6.71	34.43	27.031	103.7	0.959
600	6.28	34.44	27.095	97.6	1.013
700	5.56	34.45	27.194	88.2	1.115
800	5.00	34.46	27.269	81.1	1.209
900	4.62	34.48	27.328	75.6	1.296
1000	4.20	34.51	27.397	68.9	1.378

RV DAVID STARR JORDAN

LATITUDE	LONGITUDE	MO/DAY/YR	MESSFNGER TIME					
26 43.0N	114 29.0W	12/15/74	0346 GMT					
Z	T	S	02	03	04	05	06	07
2	18.18	34.024	5.48					344.2
12	18.19	34.025	5.47					344.3
30	18.03	34.019	5.40					341.0
60	14.07	33.846	2.52					268.0
77	13.14	34.025	2.64					236.7
94	12.65	34.156	2.03					217.9
107	12.11	34.220	1.82					203.2
134	11.95	34.619	0.97					185.7
159	11.32	34.449	0.92					172.3
188	10.79	34.451	0.89					163.0
222	10.73	34.550	0.37					154.7
293	9.58	34.473	0.39					141.6
395	8.16	34.440	0.20					122.7
501	7.12	34.413	0.15					110.3
605	6.25	34.453	0.09					96.2
739	5.26	34.453	0.27					84.5
893	4.62	34.482	0.27					75.4
1057	4.00	34.506	0.47					67.3

CALCIFI CRUISE 7412 127040

BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
3075M	340	15KT	1	350 3 4		
Z	T	S	02	SIGT	DT	DD
0	18.18	34.024	5.48	24.501	344.2	0.000
10	18.18	34.025	5.47	24.500	344.3	0.034
20	18.11	34.023	5.43	24.515	342.8	0.068
30	18.03	34.019	5.40	24.534	341.0	0.103
40	15.48	33.863	4.24	25.010	295.7	0.167
50	13.21	34.002	2.73	25.596	239.9	0.234
75	12.39	34.186	1.92	25.902	210.9	0.291
100	12.00	34.368	1.23	26.117	190.4	0.342
125	11.56	34.448	0.93	26.262	176.7	0.388
150	10.76	34.489	0.71	26.439	159.9	0.475
200	10.35	34.539	0.37	26.551	149.2	0.554
250	9.47	34.469	0.37	26.646	140.2	0.630
300	8.10	34.438	0.19	26.837	122.0	0.768
400	7.12	34.413	0.15	26.959	110.4	0.891
500	6.28	34.451	0.09	27.103	96.9	1.003
600	5.51	34.455	0.21	27.203	87.4	1.104
700	4.97	34.463	0.27	27.275	80.6	1.197
800	4.20	34.499	0.37	27.387	69.9	1.366

127050

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

127060

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 23.6N	115 08.0W	12/15/74	0855 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
364M	360	23KT		050 5 6	
Z	T	S	SIGMA T	DT	DD
0	18.94	34.02	24.308	362.5	0.000
10	18.95	34.02	24.306	362.8	0.036
20	18.96	34.02	24.303	363.0	0.072
30	18.97	33.94	24.340	359.5	0.108
40	17.86	33.81	24.464	347.6	0.144
50	17.56	33.79	24.473	346.8	0.179
75	14.24	33.63	25.099	287.2	0.258
100	12.11	33.72	25.595	240.0	0.325
125	11.20	33.93	25.927	208.5	0.382
150	10.76	34.12	26.153	187.0	0.432
175	10.03	34.22	26.358	167.5	0.477
200	9.61	34.26	26.460	157.8	0.519
225	9.34	34.26	26.504	153.6	0.559
250	9.11	34.29	26.565	147.9	0.598
275	8.80	34.32	26.638	141.0	0.635
300	8.54	34.36	26.710	134.1	0.671
350	7.91	34.35	26.798	125.8	0.739
400	7.48	34.38	26.884	117.6	0.803
450	6.94	34.39	26.968	109.7	0.863
500	6.60	34.40	27.022	104.6	0.920
550	6.10	34.39	27.079	99.1	0.975
600	5.78	34.40	27.128	94.5	1.027
700	5.26	34.43	27.215	86.3	1.125
800	4.81	34.46	27.291	79.1	1.217
900	4.46	34.48	27.345	73.9	1.302
1000	4.07	34.50	27.403	68.4	1.382

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 02.0N	115 46.0W	12/15/74	1408 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
373M	010	17KT	0	340 5 4	
Z	T	S	SIGMA T	DT	DD
0	19.27	34.11	24.293	364.0	0.000
10	19.27	34.11	24.293	364.0	0.036
20	19.27	34.11	24.293	364.0	0.072
30	19.28	34.11	24.290	364.2	0.109
40	19.28	34.11	24.290	364.2	0.145
50	18.69	34.08	24.417	352.2	0.181
75	13.47	33.59	25.228	275.0	0.260
100	12.59	33.86	25.611	238.5	0.325
125	11.36	33.93	25.898	211.3	0.382
150	10.65	33.99	26.072	194.7	0.433
175	10.41	34.17	26.254	177.4	0.481
200	10.58	34.41	26.411	162.5	0.524
225	10.51	34.53	26.516	152.5	0.565
250	10.05	34.51	26.580	146.4	0.604
275	9.73	34.52	26.642	140.5	0.641
300	9.46	34.51	26.679	137.0	0.677
350	8.83	34.48	26.758	129.5	0.747
400	8.36	34.49	26.839	121.9	0.813
450	7.24	34.39	26.926	113.7	0.876
500	6.83	34.39	26.983	108.3	0.935
550	6.41	34.39	27.039	102.9	0.992
600	6.12	34.42	27.100	97.1	1.046
700	5.38	34.43	27.200	87.6	1.147
800	4.95	34.45	27.267	81.3	1.240
900	4.56	34.48	27.334	74.9	1.327
1000	4.27	34.51	27.395	69.2	1.409

130028

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

130030

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
28 33.0N	113 21.0W	12/16/74	1348 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
54M	020	30KT	1	040 5 6	
Z	T	S	SIGMA T	DT	DD
0	19.05	34.15	24.379	355.7	0.000
10	19.05	34.15	24.379	355.7	0.035
20	19.05	34.15	24.379	355.7	0.071
30	18.79	34.12	24.422	351.7	0.106
40	17.32	33.94	24.645	330.4	0.140
50	17.31	33.94	24.648	330.2	0.174

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 29.0N	113 29.0W	12/16/74	1148 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
76M	040	26KT			
Z	T	S	SIGMA T	DT	DD
0	18.96	34.16	24.410	352.8	0.000
10	18.95	34.16	24.412	352.6	0.035
20	18.97	34.16	24.407	353.1	0.070
30	18.95	34.16	24.412	352.6	0.106
40	18.81	34.14	24.432	350.7	0.141
50	15.79	33.86	24.939	302.5	0.174
75	14.77	34.06	25.317	266.4	0.245

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

130040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSANGER TIME					
26 09.0N	114 07.0W	12/16/74	0551 GMT					
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
2227M	340	18KT						
Z	T	S	02	04	0503	002	003	DT
1	18.42	33.986	5.45					352.6
11	18.27	33.986	5.37					351.4
29	18.12	33.966	5.36					347.0
58	15.22	33.814	4.18					293.8
77	13.97	34.035	2.66					252.1
91	13.06	34.081	2.40					231.1
105	12.61	34.165	2.07					216.5
133	12.43	34.379	1.19					197.4
157	12.02	34.484	0.83					182.7
184	11.29	34.511	0.70					167.2
219	10.64	34.482	0.75					158.2
289	9.69	34.491	0.42					142.0
389	8.26	34.452	0.23					123.2
493	7.13	34.441	0.17					108.4
597	6.08	34.428	0.20					96.0
730	5.23	34.444	0.24					84.9
882	4.49	34.483	0.36					74.0
1045	3.97	34.518	0.52					66.1

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME			
26 09.0N	114 07.0W	12/16/74	0551 GMT			
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
2227M	340	18KT				
Z	T	S	02	SIGT	DT	DD
0	18.42	33.986	5.45	24.413	352.6	0.000
10	18.37	33.987	5.37	24.423	351.6	0.035
20	18.24	33.977	5.36	24.448	349.2	0.070
30	18.03	33.957	5.34	24.485	345.7	0.105
50	16.11	33.827	4.64	24.840	311.9	0.171
75	14.08	34.011	2.80	25.424	256.3	0.242
100	12.73	34.132	2.19	25.794	221.1	0.302
125	12.44	34.320	1.43	25.994	202.1	0.356
150	12.16	34.461	0.90	26.158	186.5	0.405
200	10.96	34.501	0.71	26.413	162.3	0.495
250	10.19	34.483	0.62	26.535	150.7	0.576
300	9.52	34.487	0.38	26.651	139.7	0.651
400	8.12	34.450	0.21	26.843	121.5	0.788
500	7.05	34.440	0.17	26.991	107.5	0.910
600	6.05	34.428	0.20	27.115	95.7	1.020
700	5.38	34.438	0.22	27.206	87.1	1.120
800	4.85	34.461	0.28	27.286	79.5	1.212
1000	4.08	34.509	0.47	27.409	67.9	1.377

130040		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 09.0N	114 07.0W	12/16/74	0443 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
2227M	340	18KT	0	320 5 8	
Z	T	S	SIGMA T	DT	DD
0	18.46	33.98	24.398	354.0	0.000
10	18.46	33.98	24.398	354.0	0.035
20	18.37	33.97	24.413	352.5	0.070
30	18.27	33.97	24.437	350.2	0.106
40	18.21	33.96	24.445	349.5	0.141
50	16.50	33.78	24.716	323.7	0.174
75	13.84	33.99	25.460	252.9	0.247
100	12.77	34.16	25.807	219.8	0.307
125	12.34	34.31	26.007	200.8	0.360
150	12.13	34.46	26.164	185.9	0.409
175	11.54	34.52	26.322	170.9	0.455
200	11.18	34.53	26.396	163.9	0.498
225	10.63	34.48	26.456	158.2	0.539
250	10.09	34.45	26.527	151.5	0.579
275	9.82	34.49	26.604	144.2	0.618
300	9.64	34.49	26.634	141.3	0.655
350	8.82	34.47	26.752	130.1	0.726
400	8.20	34.45	26.832	122.5	0.793
450	7.66	34.45	26.913	114.9	0.856
500	7.13	34.44	26.980	108.5	0.915
550	6.61	34.43	27.044	102.4	0.972
600	6.17	34.43	27.102	97.0	1.026
700	5.44	34.44	27.201	87.5	1.177
800	4.82	34.46	27.289	79.2	1.219
900	4.45	34.48	27.346	73.8	1.304
1000	4.07	34.52	27.419	66.9	1.384

CALCOFI CRUISE 7412		130050			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
25 49.0N	114 46.0W	12/16/74	2351 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3545M	360	10KT	0	320 5 8	
Z	T	S	SIGMA T	DT	DD
0	19.83	34.13	24.163	376.3	0.000
10	19.83	34.14	24.171	375.6	0.037
20	19.74	34.14	24.195	373.4	0.075
30	19.72	34.15	24.207	372.1	0.112
40	19.69	34.16	24.223	370.7	0.149
50	18.49	33.96	24.375	356.1	0.186
75	13.98	33.68	25.192	278.4	0.266
100	12.44	33.85	25.632	236.5	0.330
125	11.47	34.04	25.963	205.1	0.386
150	10.57	34.08	26.156	186.7	0.436
175	10.22	34.19	26.302	172.8	0.482
200	9.96	34.26	26.401	163.4	0.525
225	9.93	34.38	26.500	154.1	0.566
250	9.60	34.39	26.563	148.1	0.605
275	9.31	34.39	26.611	143.5	0.643
300	9.12	34.43	26.673	137.6	0.679
350	8.94	34.50	26.756	129.7	0.749
400	8.17	34.49	26.868	119.1	0.815
450	7.49	34.43	26.922	114.0	0.877
500	6.97	34.43	26.995	107.1	0.936
550	6.61	34.44	27.052	101.7	0.992
600	6.32	34.45	27.098	97.3	1.046
700	5.64	34.46	27.192	88.4	1.148
800	5.14	34.47	27.260	81.9	1.242
900	4.64	34.49	27.334	75.0	1.330
1000	4.27	34.51	27.390	69.7	1.412

130060		RV DAVID STARR JORDAN			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
25 29.0N	115 23.0W	12/15/74	1858 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
3737M	040	18KT	0	330 5 6	
Z	T	S	SIGMA T	DT	DD
0	18.92	34.11	24.382	355.5	0.000
10	18.92	34.11	24.382	355.5	0.035
20	18.92	34.11	24.382	355.5	0.071
30	18.91	34.11	24.384	355.3	0.106
40	18.87	34.10	24.387	355.0	0.142
50	16.83	33.78	24.639	331.0	0.176
75	14.02	33.66	25.168	280.6	0.253
100	12.75	33.90	25.611	238.6	0.319
125	12.37	34.15	25.878	213.1	0.376
150	11.49	34.18	26.068	195.1	0.428
175	10.48	34.17	26.242	178.6	0.475
200	10.03	34.26	26.389	164.6	0.519
225	9.66	34.28	26.467	157.2	0.561
250	9.52	34.35	26.545	149.8	0.600
275	9.28	34.36	26.592	145.3	0.639
300	9.02	34.36	26.634	141.3	0.676
350	8.42	34.40	26.760	129.4	0.747
400	7.74	34.38	26.846	121.2	0.813
450	7.48	34.42	26.915	114.6	0.875
500	7.14	34.44	26.979	108.6	0.935
550	6.44	34.41	27.051	101.8	0.991
600	6.10	34.41	27.095	97.6	1.045
700	5.42	34.44	27.203	87.3	1.146
800	4.99	34.47	27.278	80.3	1.239
900	4.54	34.49	27.345	73.9	1.325
1000	4.22	34.51	27.395	69.2	1.406

CALCOFI CRUISE 7412		133025			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
26 04.5N	112 48.0W	12/17/74	0020 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
828M	240	10KT	1	310 2 5	
Z	T	S	SIGMA T	DT	DD
0	19.98	34.20	24.177	375.0	0.000
10	19.88	34.19	24.196	373.2	0.037
20	19.71	34.19	24.240	369.0	0.074
30	19.64	34.18	24.251	368.0	0.111
40	19.19	34.10	24.306	362.8	0.148
50	16.07	33.77	24.807	315.1	0.182
75	14.62	34.03	25.326	265.6	0.255

CALCOFI CRUISE 7412		133030			
LATITUDE	LONGITUDE	MO/DAY/YR	START TIME		
25 55.0N	113 07.0W	12/17/74	0255 GMT		
BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	
1876M	290	11KT	1	310 2 5	
Z	T	S	SIGMA T	DT	DD
0	19.36	34.16	24.308	362.5	0.000
10	19.33	34.15	24.308	362.5	0.036
20	19.21	34.16	24.346	358.9	0.072
30	19.17	34.16	24.356	357.9	0.108
40	19.12	34.15	24.361	357.4	0.144
50	16.44	33.85	24.778	317.7	0.178
75	13.46	33.79	25.384	260.1	0.250
100	12.51	34.10	25.812	219.4	0.311
125	11.76	34.28	26.095	192.5	0.363
150	12.17	34.62	26.280	174.9	0.410

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
25 34.5N	113 45.5W	12/17/74	0933 GMT	1856M	350	14KT									
Z	T	S	Q2	PO4	SI03	NO2	NO3	DT	Z	T	S	Q2	SIGT	DT	DD
1	19.74	34.093	5.34					376.8	0	19.74	34.093	5.34	24.159	376.8	0.000
11	19.70	34.093	5.30					375.8	10	19.70	34.093	5.30	24.168	375.8	0.037
29	19.72	34.093	5.33					376.3	20	19.70	34.093	5.31	24.166	376.0	0.075
58	15.71	33.606	5.55					319.3	30	19.61	34.075	5.33	24.177	375.0	0.112
77	13.79	33.649	4.74					276.9	50	17.00	33.723	5.48	24.555	339.1	0.184
91	12.86	33.762	4.08					250.8	75	13.96	33.636	4.84	25.162	281.3	0.262
105	11.68	33.774	4.01					228.4	100	12.08	33.771	4.02	25.639	235.8	0.327
135	11.17	34.040	2.61					199.9	125	11.34	33.973	3.11	25.935	207.8	0.383
159	10.49	34.172	2.20					178.6	150	10.73	34.129	2.31	26.164	185.9	0.433
186	10.22	34.279	1.69					166.2	200	10.08	34.308	1.53	26.417	161.9	0.522
221	9.90	34.339	1.35					156.6	250	9.75	34.403	0.99	26.547	149.5	0.603
292	9.53	34.479	0.53					140.4	300	9.44	34.482	0.50	26.660	138.8	0.678
393	8.26	34.458	0.27					122.8	400	8.17	34.456	0.26	26.841	121.7	0.814
499	7.06	34.439	0.23					107.6	500	7.05	34.439	0.22	26.991	107.5	0.937
604	6.20	34.449	0.21					95.9	600	6.22	34.448	0.21	27.109	96.3	1.047
738	5.39	34.466	0.24					85.0	700	5.59	34.461	0.23	27.198	87.8	1.147
890	4.63	34.489	0.38					75.0	800	5.05	34.475	0.28	27.273	80.7	1.241
1052	4.01	34.522	0.58					66.2	1000	4.18	34.511	0.51	27.399	68.8	1.409

133040

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

133050

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
25 34.5N	113 45.5W	12/17/74	0823 GMT	1856M	350	14KT					
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	19.68	34.07	24.157	376.9	0.000	0	20.07	34.14	24.108	381.6	0.000
10	19.68	34.07	24.157	376.9	0.037	10	20.07	34.14	24.108	381.6	0.038
20	19.68	34.07	24.157	376.9	0.075	20	20.07	34.14	24.108	381.6	0.076
30	19.69	34.07	24.154	377.2	0.113	30	20.07	34.14	24.108	381.6	0.114
40	19.69	34.07	24.154	377.2	0.151	40	20.05	34.13	24.106	381.8	0.152
50	17.16	33.70	24.500	344.3	0.187	50	19.44	34.01	24.173	375.4	0.190
75	14.55	33.58	24.995	297.1	0.267	75	15.07	33.71	24.983	298.3	0.275
100	12.97	33.75	25.451	253.7	0.337	100	12.74	33.70	25.458	253.1	0.345
125	11.51	33.86	25.816	219.0	0.397	125	12.22	34.11	25.876	213.3	0.404
150	11.07	34.11	26.090	193.0	0.449	150	11.59	34.29	26.134	188.8	0.455
175	10.41	34.22	26.293	173.7	0.496	175	11.55	34.52	26.320	171.1	0.501
200	10.16	34.32	26.414	162.2	0.539	200	11.25	34.58	26.422	161.4	0.543
225	9.99	34.36	26.474	156.5	0.580	225	10.98	34.59	26.479	156.0	0.584
250	9.65	34.38	26.547	149.6	0.619	250	10.49	34.57	26.551	149.2	0.624
275	9.70	34.46	26.601	144.5	0.657	275	10.09	34.55	26.605	144.1	0.662
300	9.48	34.48	26.653	139.5	0.694	300	9.65	34.55	26.646	140.2	0.699
350	8.87	34.46	26.736	131.6	0.765	350	9.23	34.53	26.733	131.9	0.770
400	8.28	34.46	26.828	122.9	0.833	400	8.59	34.50	26.811	124.5	0.838
450	7.75	34.44	26.892	116.9	0.896	450	7.85	34.46	26.893	116.8	0.902
500	7.15	34.44	26.978	108.7	0.957	500	7.33	34.45	26.960	110.4	0.963
550	6.72	34.45	27.045	102.4	1.013	550	6.82	34.44	27.023	104.4	1.021
600	6.25	34.45	27.107	96.4	1.067	600	6.33	34.44	27.089	98.2	1.076
700	5.66	34.46	27.190	88.6	1.169	700	5.68	34.47	27.195	88.1	1.178
800	5.10	34.47	27.265	81.5	1.263	800	5.15	34.48	27.267	81.3	1.272
900	4.67	34.49	27.330	75.3	1.351	900	4.69	34.49	27.328	75.5	1.360
1000	4.16	34.51	27.402	68.6	1.432	1000	4.32	34.51	27.384	70.2	1.442

133060

RV DAVID STARR JORDAN

CALCOFI CRUISE 7412

137023

LATITUDE	LONGITUDE	MO/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
24 54.5N	115 02.0W	12/17/74	1922 GMT	3926M	330	6KT					
Z	T	S	SIGMA T	DT	DD	Z	T	S	SIGMA T	DT	DD
0	19.98	34.15	24.139	378.6	0.000	0	20.48	34.32	24.137	378.9	0.000
10	19.96	34.15	24.145	378.1	0.037	10	20.46	34.32	24.142	378.4	0.037
20	19.90	34.15	24.160	376.6	0.075	20	20.41	34.32	24.155	377.1	0.075
30	19.87	34.14	24.161	376.6	0.113	30	20.33	34.30	24.161	376.5	0.113
40	19.06	33.99	24.255	367.6	0.150	40	19.19	34.15	24.343	359.1	0.150
50	16.77	33.75	24.630	331.9	0.185	50	18.60	34.14	24.485	345.7	0.185
75	14.08	33.70	25.187	278.9	0.262	64	17.67	34.06	24.653	329.7	0.233
100	12.80	33.90	25.589	240.6	0.328						
125	12.15	34.06	25.851	215.7	0.385						
150	11.38	34.22	26.119	190.2	0.437						
175	11.05	34.36	26.288	174.2	0.484						
200	11.34	34.58	26.406	163.0	0.527						
225	10.84	34.55	26.473	156.6	0.568						
250	10.59	34.58	26.541	150.1	0.608						
275	10.13	34.52	26.574	147.0	0.646						
300	9.60	34.48	26.633	141.4	0.684						
350	8.88	34.47	26.742	131.0	0.755						
400	8.14	34.44	26.834	122.4	0.822						
450	7.70	34.44	26.899	116.2	0.885						
500	7.15	34.44	26.976	108.9	0.946						
550	6.63	34.43	27.041	102.7	1.003						
600	6.30	34.44	27.093	97.8	1.057						
700	5.48	34.46	27.212	86.5	1.158						
800	4.93	34.47	27.285	79.6	1.250						
900	4.46	34.49	27.353	73.1	1.335						
1000	4.14	34.51	27.404	68.4	1.415						

127030		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				137040		
LATITUDE	LONGITUDE	MU/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	LATITUDE	LONGITUDE	MU/DAY/YR	START TIME
25 20.0N	112 46.0W	12/18/74	1746 GMT	2042M	1N0	10KT	2	310 2 4	25 01.0N	113 24.0W	12/18/74	1029 GMT
Z	T	S	SIGMA T	DT	TH	Z	T	S	SIGMA T	DT	DD	
0	19.73	34.17	24.220	370.9	0.000	0	20.07	34.19	24.146	378.0	0.000	
10	19.74	34.17	24.217	371.2	0.037	10	20.07	34.19	24.146	378.0	0.037	
20	19.75	34.17	24.215	371.4	0.074	20	20.08	34.19	24.144	378.2	0.075	
30	19.73	34.17	24.220	370.9	0.111	30	20.08	34.19	24.144	378.2	0.113	
40	18.88	34.05	24.346	358.9	0.148	40	20.08	34.19	24.144	378.2	0.151	
50	16.47	33.64	24.615	333.3	0.182	50	17.53	33.75	24.450	349.0	0.188	
75	14.11	33.73	25.204	277.3	0.259	75	15.06	33.62	24.916	304.6	0.270	
100	13.03	34.01	25.640	235.7	0.324	100	12.65	33.65	25.398	258.8	0.341	
125	12.86	34.38	25.959	205.3	0.380	125	11.61	33.87	25.805	220.1	0.401	
150	11.76	34.44	26.219	180.7	0.429	150	11.34	34.02	25.971	204.3	0.455	
175	11.45	34.57	26.378	165.7	0.473	175	10.73	34.15	26.182	184.2	0.505	
200	11.24	34.58	26.424	161.2	0.515	200	10.50	34.31	26.347	168.6	0.550	
225	11.18	34.62	26.466	157.3	0.556	225	10.63	34.46	26.441	159.7	0.592	
250	10.80	34.61	26.527	151.5	0.596	250	10.48	34.53	26.521	152.0	0.632	
275	10.67	34.61	26.550	149.3	0.635	275	10.28	34.55	26.572	147.2	0.671	
300	10.58	34.60	26.558	148.5	0.674	300	9.76	34.50	26.624	142.3	0.709	
344	10.44	34.59	26.575	146.9	0.742	350	8.97	34.47	26.778	132.4	0.781	
						400	8.17	34.43	26.821	123.6	0.848	
						450	7.53	34.43	26.916	114.6	0.912	
						500	7.06	34.43	26.982	108.3	0.971	
						550	6.69	34.44	27.041	102.7	1.028	
						600	6.38	34.44	27.082	98.8	1.083	
						700	5.67	34.45	27.181	89.5	1.186	
						800	5.08	34.47	27.268	81.3	1.280	
						900	4.62	34.49	27.336	74.8	1.367	
						1000	4.28	34.51	27.389	69.8	1.449	

RV DAVID STARR JORDAN		CALCOFI CRUISE 7412				137040									
LATITUDE	LONGITUDE	MU/DAY/YR	MESSANGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
25 01.0N	113 24.0W	12/18/74	1139 GMT	2042M	290	11KT									
Z	T	S	D2	PD4	S103	NO2	NO3	DT	Z	T	S	D2	SIGT	DT	DD
1	20.05	34.195	5.30					377.1	0	20.05	34.195	5.30	24.155	377.1	0.000
10	20.05	34.196	5.26					377.0	10	20.05	34.196	5.26	24.156	377.0	0.037
29	20.05	34.196	5.30					377.0	20	20.05	34.196	5.28	24.156	377.0	0.075
57	16.51	33.632	5.77					334.7	30	19.94	34.175	5.32	24.166	376.0	0.113
76	14.88	33.642	5.25					299.3	50	17.52	33.762	5.69	24.458	348.2	0.185
91	13.21	33.686	4.76					262.9	75	14.96	33.638	5.28	24.950	301.4	0.267
106	12.15	33.722	4.33					240.6	100	12.50	33.706	4.51	25.507	248.4	0.336
134	11.42	33.949	2.94					210.9	125	11.58	33.874	3.36	25.813	219.3	0.396
158	10.58	34.043	2.70					189.6	150	10.82	34.010	2.76	26.057	196.2	0.448
186	10.72	34.305	1.59					172.6	200	10.69	34.400	1.16	26.383	165.2	0.541
219	10.58	34.482	0.73					157.2	250	10.29	34.495	0.57	26.527	151.4	0.622
291	9.78	34.513	0.38					141.8	300	9.64	34.508	0.35	26.647	140.0	0.698
391	8.28	34.439	0.26					124.5	400	8.16	34.437	0.25	26.827	123.0	0.836
497	7.13	34.434	0.17					108.9	500	7.10	34.434	0.16	26.980	108.5	0.960
602	6.32	34.444	0.15					97.8	600	6.33	34.444	0.15	27.092	97.9	1.071
736	5.39	34.453	0.22					86.0	700	5.62	34.450	0.19	27.186	88.9	1.173
889	4.63	34.493	0.29					74.7	800	5.04	34.469	0.24	27.271	80.9	1.267
1053	4.04	34.513	0.51					67.1	1000	4.20	34.509	0.42	27.396	69.1	1.436

127050		RV DAVID STARR JORDAN				CALCOFI CRUISE 7412				137060		
LATITUDE	LONGITUDE	MU/DAY/YR	START TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES	LATITUDE	LONGITUDE	MU/DAY/YR	START TIME
24 40.0N	114 02.0W	12/18/74	0544 GMT	3737M	290	16KT	2	340 3 4	24 20.0N	114 39.5W	12/18/74	0013 GMT
Z	T	S	SIGMA T	DT	TH	Z	T	S	SIGMA T	DT	DD	
0	14.99	34.11	24.106	381.7	0.000	0	21.41	34.50	24.022	389.8	0.000	
10	14.99	34.11	24.106	381.7	0.038	10	21.41	34.50	24.022	389.8	0.039	
20	14.99	34.10	24.099	382.5	0.076	20	21.38	34.50	24.030	389.0	0.078	
30	19.92	34.10	24.117	380.7	0.114	30	21.37	34.50	24.033	388.8	0.114	
40	14.92	34.11	24.125	380.0	0.152	40	21.34	34.49	24.033	388.7	0.155	
50	19.99	34.15	24.137	378.8	0.190	50	20.73	34.40	24.130	379.5	0.194	
75	15.86	33.65	24.762	319.3	0.278	75	14.10	33.70	25.182	279.3	0.277	
100	14.06	33.94	26.376	260.9	0.351	100	12.86	33.99	25.658	234.0	0.342	
125	12.71	34.08	26.758	224.6	0.413	125	13.11	34.37	25.902	210.8	0.398	
150	11.44	34.07	26.991	202.3	0.467	150	11.79	34.38	26.167	185.7	0.448	
175	11.16	34.28	26.206	182.0	0.516	175	11.68	34.52	26.296	173.4	0.494	
200	11.03	34.43	26.346	168.7	0.561	200	11.34	34.57	26.398	163.7	0.538	
225	10.63	34.47	26.448	158.9	0.603	225	10.87	34.58	26.491	154.9	0.579	
250	10.38	34.50	26.516	152.5	0.643	250	10.44	34.56	26.552	149.1	0.618	
275	10.20	34.54	26.578	146.6	0.682	275	10.04	34.54	26.605	144.0	0.656	
300	9.91	34.54	26.628	141.9	0.720	300	9.59	34.51	26.658	139.0	0.693	
350	9.41	34.55	26.719	133.2	0.792	350	9.00	34.50	26.747	130.6	0.764	
400	8.70	34.51	26.802	125.4	0.860	400	8.29	34.48	26.842	121.6	0.830	
450	8.10	34.47	26.863	119.6	0.926	450	7.85	34.49	26.916	114.6	0.893	
500	7.39	34.46	26.959	110.4	0.987	500	7.32	34.48	26.985	108.0	0.953	
550	6.83	34.44	27.022	104.5	1.045	550	6.66	34.45	27.053	101.6	1.009	
600	6.36	34.45	27.093	97.8	1.100	600	6.33	34.45	27.097	97.4	1.063	
700	5.65	34.45	27.183	89.2	1.202	700	5.62	34.46	27.195	88.1	1.165	
800	5.08	34.47	27.268	81.3	1.297	800	5.13	34.48	27.269	81.1	1.259	
900	4.60	34.49	27.338	74.6	1.384	900	4.64	34.49	27.334	75.0	1.346	
1000	4.23	34.51	27.394	69.3	1.465	1000	4.24	34.51	27.393	69.4	1.428	

					2	T	10 METER	DATA	DT
							5	02	
60.050	12/09/74	0746GMT	37 57.5M	122 53.0W	10	12.16	33.496		257.4
		BOTTOM	41M	WIND 110					
				DOMINANT WAVES					
60.052	12/09/74	0621GMT	37 53.5M	123 02.0W	10	12.05	33.485		256.2
		BOTTOM	76M	WIND 020					
				DOMINANT WAVES					
60.055	12/09/74	0415GMT	37 47.5M	123 15.0W	10	12.60	33.464		267.8
		BOTTOM	116M	WIND 010					
				DOMINANT WAVES					
60.060	12/09/74	0047GMT	37 37.0M	123 36.5W	10	12.89	33.408		277.3
		BOTTOM	3344M	WIND 350					
				DOMINANT WAVES 330 5 5					
60.065	12/08/74	2135GMT	37 26.5M	123 58.5W	10	12.52	33.495		264.1
		BOTTOM	3787M	WIND 350					
				DOMINANT WAVES 330 3 4					
60.070	12/08/74	1852GMT	37 17.5M	124 18.5W	10	12.30	33.367		269.5
		BOTTOM	3970M	WIND 350					
				DOMINANT WAVES 340 3 3					
63.050	12/07/74	2336GMT	37 23.5M	122 28.0W	10	12.09	33.475		257.7
		BOTTOM	26M	WIND 320					
				DOMINANT WAVES 300 3 5					
63.052	12/08/74	0058GMT	37 19.0M	122 36.0W	10	12.32	33.523		258.3
		BOTTOM	82M	WIND 340					
				DOMINANT WAVES 300 3 5					
63.055	12/08/74	0305GMT	37 12.5M	122 50.0W	10	13.06	33.483		275.0
		BOTTOM	308M	WIND 330					
				DOMINANT WAVES					
63.060	12/08/74	0613GMT	37 03.0M	123 12.0W	10	13.04	33.425		278.9
		BOTTOM	2539M	WIND 330					
				DOMINANT WAVES					
63.065	12/08/74	0926GMT	36 53.0M	123 32.0W	10	12.96	33.254		290.0
		BOTTOM	3627M	WIND 330					
				DOMINANT WAVES					
67.049	12/07/74	1901GMT	36 51.0M	122 00.5W	10	12.51	33.503		263.3
		BOTTOM	78M	WIND 050					
				DOMINANT WAVES 280 3 5					
67.050	12/07/74	1809GMT	36 49.0M	122 04.5W	10	13.10	33.451		278.1
		BOTTOM	97M	WIND 050					
				DOMINANT WAVES 280 3 5					
67.060	12/07/74	1019GMT	36 28.0M	122 47.0W	10	13.14	33.430		280.4
		BOTTOM	3083M	WIND 340					
				DOMINANT WAVES					
67.065	12/07/74	0723GMT	36 18.5M	123 08.0W	10	13.24	33.348		288.4
		BOTTOM	3353M	WIND 360					
				DOMINANT WAVES					
67.070	12/07/74	0406GMT	36 07.5M	123 29.0W	10	13.68	33.086		316.0
		BOTTOM	3656M	WIND 020					
				DOMINANT WAVES					
67.080	12/06/74	2320GMT	35 48.0M	124 12.0W	10	13.40	33.097		309.8
		BOTTOM	3965M	WIND 320					
				DOMINANT WAVES 280 3 5					
70.051	12/05/74	2356GMT	36 11.0M	121 46.0W	10	13.17	33.459		278.9
		BOTTOM	353M	WIND 310					
				DOMINANT WAVES 280 4 5					
70.053	12/06/74	0128GMT	36 07.0M	121 53.0W	10	13.90	33.424		295.6
		BOTTOM	973M	WIND 310					
				DOMINANT WAVES 320 4 5					
70.060	12/06/74	0520GMT	35 52.5M	122 23.0W	10	13.18	33.484		277.2
		BOTTOM	3099M	WIND 340					
				DOMINANT WAVES					
70.065	12/06/74	0840GMT	35 45.0M	122 45.0W	10	13.07	33.374		283.2
		BOTTOM	3505M	WIND 99					
				DOMINANT WAVES					
70.080	12/06/74	1751GMT	35 13.5M	123 48.0W	10	14.14	33.427		300.1
		BOTTOM	4078M	WIND 220					
				DOMINANT WAVES 280 3 4					
73.050	12/05/74	1935GMT	35 37.5M	121 17.0W	10	13.16	33.491		276.3
		BOTTOM	84M	WIND 310					
				DOMINANT WAVES 280 5 6					
73.053	12/05/74	1723GMT	35 31.5M	121 28.5W	10	13.12	33.462		277.7
		BOTTOM	726M	WIND					
				DOMINANT WAVES 280 4 4					
73.060	12/05/74	1310GMT	35 19.0M	121 58.0W	10	13.50	33.467		284.6
		BOTTOM	2728M	WIND 340					
				DOMINANT WAVES					
73.065	12/05/74	1013GMT	35 09.0M	122 19.0W	10	13.36	33.485		280.6
		BOTTOM	3849M	WIND 360					
				DOMINANT WAVES					

						2	T	10 METER DATA	DT
								S	02
73.080	12/05/74	0040GMT	34 37.0N	123 21.0W		10	14.43	33.373	309.8
		BOTTOM	4124M	WIND 350 14KT	WEATHER 1				
		DOMINANT WAVES	310	6	5				
77.048	12/03/74	1743GMT	35 08.5N	120 43.5W		10	12.87	33.543	267.0
		BOTTOM	22M	WIND 150 24KT	WEATHER 6				
		DOMINANT WAVES	150	5	3				
77.065	12/04/74	1030GMT	34 34.0N	121 55.0W		10	14.30	33.416	304.1
		BOTTOM	3881M	WIND 280 9KT	WEATHER 1				
		DOMINANT WAVES	49						
79.050 ^{8 4}	12/03/74	0839GMT	34 26.0N	120 33.5W		10	14.35	33.573	293.6
		BOTTOM	104M	WIND 140 22KT	WEATHER				
		DOMINANT WAVES							
79.053 ^{9 9}	12/02/74	1451GMT	34 22.0N	120 44.0W		10	14.49	33.591	295.1
		BOTTOM	604M	WIND 150 11KT	WEATHER 2				
		DOMINANT WAVES	180	2	4				
79.053 ^{9 9}	12/11/74	0323GMT	34 22.0N	120 44.0W		10	14.26	33.501	297.1
		BOTTOM	610M	WIND 340 12KT	WEATHER				
		DOMINANT WAVES							
80.050 ¹	12/03/74	0918GMT	34 28.0N	120 30.5W		10	14.36	33.580	293.3
		BOTTOM	41M	WIND 140 22KT	WEATHER 5				
		DOMINANT WAVES							
80.051	12/03/74	1006GMT	34 26.0N	120 32.5W		10	14.44	33.560	296.4
		BOTTOM	93M	WIND 140 24KT	WEATHER 2				
		DOMINANT WAVES							
80.051 ²	12/11/74	0703GMT	34 26.0N	120 33.5W		10	14.70	33.468	308.4
		BOTTOM	101M	WIND 330 7KT	WEATHER				
		DOMINANT WAVES							
80.051 ⁹	12/03/74	0742GMT	34 25.0N	120 35.5W		10	14.20	33.573	290.6
		BOTTOM	394M	WIND 140 24KT	WEATHER				
		DOMINANT WAVES							
80.051 ⁹	12/11/74	0745GMT	34 25.0N	120 35.5W		10	14.52	33.478	304.0
		BOTTOM	205M	WIND 340 17KT	WEATHER				
		DOMINANT WAVES							
80.052	12/03/74	1110GMT	34 25.0N	120 36.0W		10	14.12	33.551	290.6
		BOTTOM	253M	WIND 140 22KT	WEATHER				
		DOMINANT WAVES							
A) ALTERNATE VALUE 14.54 DEGREES.									
80.052 ²	12/02/74	1803GMT	34 24.5N	120 36.5W		10	14.24	33.481	298.1
		BOTTOM	305M	WIND 150 15KT	WEATHER 1				
		DOMINANT WAVES	99	2					
80.052 ²	12/11/74	0610GMT	34 24.5N	120 36.5W		10	14.68	33.583	299.5
		BOTTOM	288M	WIND 330 24KT	WEATHER				
		DOMINANT WAVES							
80.052 ⁷	12/02/74	1709GMT	34 23.5N	120 39.0W		10	14.39	33.579	293.9
		BOTTOM	406M	WIND 150 14KT	WEATHER 1				
		DOMINANT WAVES	99	2					
80.052 ⁷	12/11/74	0523GMT	34 23.5N	120 39.0W		10	14.48	33.490	302.3
		BOTTOM	406M	WIND 330 11KT	WEATHER				
		DOMINANT WAVES							
80.053	12/03/74	1243GMT	34 23.5N	120 40.5W		10	14.72	33.573	301.1
		BOTTOM	467M	WIND 140 24KT	WEATHER				
		DOMINANT WAVES							
80.053 ²	12/11/74	0429GMT	34 22.5N	120 41.0W		10	14.40	33.490	300.7
		BOTTOM	502M	WIND 330 11KT	WEATHER				
		DOMINANT WAVES							
80.053 ²	12/02/74	1605GMT	34 22.5N	120 41.0W		10	14.34	33.584	292.6
		BOTTOM	504M	WIND 150 11KT	WEATHER 2				
		DOMINANT WAVES	180	2	4				
80.054	12/02/74	1327GMT	34 21.5N	120 44.5W		10	14.57	33.588	296.9
		BOTTOM	619M	WIND 120 10KT	WEATHER				
		DOMINANT WAVES							
80.055	12/02/74	1136GMT	34 18.5N	120 48.5W		10	14.59	33.605	296.1
		BOTTOM	763M	WIND 130 9KT	WEATHER				
		DOMINANT WAVES							
80.070	12/02/74	0241GMT	33 48.5N	121 51.0W		10	14.20	33.423	301.6
		BOTTOM	3618M	WIND 180 10KT	WEATHER				
		DOMINANT WAVES							
80.080	12/01/74	2154GMT	33 29.0N	122 32.0W		10	14.26	33.409	303.8
		BOTTOM	3962M	WIND 180 9KT	WEATHER 1				
		DOMINANT WAVES	180	1	4				
80.090	12/01/74	1659GMT	33 09.5N	123 10.5W		10	14.88	33.389	317.8
		BOTTOM	4231M	WIND 170 9KT	WEATHER 1				
		DOMINANT WAVES	320	3	8				

Z	T	10 METER DATA		DT
		S	02	
5	5			
81.043	11/30/74	0807GMT	34 24.0N	119 48.0W
	BOTTOM	22M	WIND 020	6KT WEATHER
			DOMINANT WAVES	
10	15.02	33.564		307.9
5	5			
81.044	11/30/74	0647GMT	34 23.0N	119 50.0W
	BOTTOM	52M	WIND 360	6KT WEATHER 2
			DOMINANT WAVES	
10	15.09	33.546		310.7
5	5			
81.044	11/30/74	0518GMT	34 22.0N	119 52.0W
	BOTTOM	78M	WIND 010	5KT WEATHER 2
			DOMINANT WAVES	
10	15.55	33.565		318.9
5	5			
81.045	11/30/74	0343GMT	34 21.0N	119 54.0W
	BOTTOM	325M	WIND 220	9KT WEATHER
			DOMINANT WAVES	
10	15.52	33.569		318.0
5	5			
81.046	11/30/74	0146GMT	34 19.5N	119 58.0W
	BOTTOM	482M	WIND 280	4KT WEATHER 1
			DOMINANT WAVES	
10	14.88	33.577		304.1
4	4			
83.039	11/30/74	2251GMT	34 14.5N	119 19.5W
	BOTTOM	19M	WIND 320	7KT WEATHER 2
			DOMINANT WAVES 290 4 11	
10	15.47	33.555		318.0
6	6			
83.040	11/30/74	2117GMT	34 12.0N	119 24.5W
	BOTTOM	34M	WIND 270	4KT WEATHER 2
			DOMINANT WAVES 270 6 11	
10	15.84	33.551		326.1
5	5			
83.041	11/30/74	2005GMT	34 11.5N	119 26.0W
	BOTTOM	65M	WIND 280	5KT WEATHER 2
			DOMINANT WAVES 290 6 11	
10	15.88	33.546		327.3
5	5			
83.042	11/30/74	1804GMT	34 09.5N	119 30.0W
	BOTTOM	223M	WIND 090	4KT WEATHER 1
			DOMINANT WAVES 300 7 11	
10	15.32	33.555		314.8
5	5			
83.043	11/30/74	1604GMT	34 08.0N	119 34.0W
	BOTTOM	279M	WIND 060	4KT WEATHER 1
			DOMINANT WAVES 49 1	
10	15.78	33.570		323.4
5	5			
83.044	11/30/74	1423GMT	34 05.5N	119 38.0W
	BOTTOM	168M	WIND 340	4KT WEATHER 1
			DOMINANT WAVES	
10	15.43	33.544		317.9
7	7			
83.044	11/30/74	1259GMT	34 04.0N	119 41.0W
	BOTTOM	75M	WIND 160	7KT WEATHER
			DOMINANT WAVES	
10	15.25	33.569		312.3
5	5			
83.045	11/30/74	1131GMT	34 04.0N	119 42.5W
	BOTTOM	86M	WIND 310	4KT WEATHER
			DOMINANT WAVES	
10	15.22	33.567		311.8
5	5			
83.048	11/29/74	2050GMT	33 58.0N	119 55.0W
	BOTTOM	157M	WIND	WEATHER
			DOMINANT WAVES	
10	15.72	33.556		323.2
5	5			
83.049	11/29/74	1900GMT	33 55.5N	119 59.0W
	BOTTOM	24M	WIND	WEATHER
			DOMINANT WAVES	
10	15.92	33.589		325.0
5	5			
83.050	11/29/74	1812GMT	33 53.5N	120 03.5W
	BOTTOM	26M	WIND	WEATHER
			DOMINANT WAVES	
10	15.90	33.591		324.5
5	5			
83.051	11/29/74	1713GMT	33 52.0N	120 08.5W
	BOTTOM	108M	WIND 140	7KT WEATHER 1
			DOMINANT WAVES 270 3 7	
10	16.11	33.580	5.78	329.8
5	5			
83.055	11/29/74	1420GMT	33 44.5N	120 24.5W
	BOTTOM	984M	WIND 110	1KT WEATHER 1
			DOMINANT WAVES 300 4 7	
10	14.49	33.570	5.65	296.6
5	5			
83.060	11/29/74	1007GMT	33 34.0N	120 45.0W
	BOTTOM	1479M	WIND 220	5KT WEATHER
			DOMINANT WAVES	
10	13.88	33.529	6.01	287.4

Z	T	10 METER DATA		DT
		S	02	
5	5			
83.070	12/01/74	0046GMT	33 14.5N	121 26.0W
	BOTTOM	3790M	WIND 360	6KT WEATHER 2
			DOMINANT WAVES 360 3 7	
10	14.16	33.418		301.1
5	5			
83.090	12/01/74	1200GMT	32 35.0N	122 48.0W
	BOTTOM	4116M	WIND 190	4KT WEATHER 1
			DOMINANT WAVES	
10	15.86	33.373		339.6

RV DAVID STARR JORDAN

CALCUFFI CRUISE 7412

	Z	T	10 METER DATA		DT
			S	02	
85.037 ²	12/01/74	0830GMT	34 02.5M	118 58.5W	
	BOTTOM	34M	WIND 060	7KT WEATHER 1	
	DOMINANT WAVES				
85.037 ⁵	12/01/74	0713GMT	34 02.0M	118 59.5W	
	BOTTOM	60M	WIND 330	8KT WEATHER 2	
	DOMINANT WAVES				
85.038	12/01/74	0551GMT	34 01.0M	119 02.5W	
	BOTTOM	84M	WIND 020	14KT WEATHER 2	
	DOMINANT WAVES 330 2 4				
85.039	12/01/74	0401GMT	33 59.0M	119 06.5W	
	BOTTOM	648M	WIND 320	12KT WEATHER 2	
	DOMINANT WAVES 290 8 12				
85.040	12/01/74	0148GMT	33 57.0M	119 10.5W	
	BOTTOM	722M	WIND 280	9KT WEATHER 2	
	DOMINANT WAVES 290 8 12				
87.032 ⁵	12/01/74	1926GMT	33 55.0M	118 27.0W	
	BOTTOM	17M	WIND 210	8KT WEATHER 1	
	DOMINANT WAVES 49				
87.032 ⁷	12/01/74	1831GMT	33 54.5M	118 28.0W	
	BOTTOM	26M	WIND 110	7KT WEATHER 1	
	DOMINANT WAVES 49				
87.033	12/01/74	1713GMT	33 54.0M	118 29.0W	
	BOTTOM	47M	WIND 090	8KT WEATHER 1	
	DOMINANT WAVES 49 1				
87.034	12/01/74	1547GMT	33 52.0M	118 33.5W	
	BOTTOM	65M	WIND 020	8KT WEATHER 1	
	DOMINANT WAVES				
87.035	12/01/74	1357GMT	33 50.5M	118 38.0W	
	BOTTOM	187M	WIND 280	9KT WEATHER 1	
	DOMINANT WAVES				
87.036	12/01/74	1149GMT	33 48.0M	118 41.5W	
	BOTTOM	833M	WIND 200	8KT WEATHER 1	
	DOMINANT WAVES				
87.040	11/28/74	1133GMT	33 40.0M	118 58.0W	
	BOTTOM	833M	WIND 110	11KT WEATHER	
	DOMINANT WAVES				
87.045	11/28/74	1607GMT	33 30.0M	119 19.0W	
	BOTTOM	1695M	WIND 100	7KT WEATHER 1	
	DOMINANT WAVES 240 4 5				
87.050	11/28/74	1916GMT	33 20.0M	119 39.5W	
	BOTTOM	75M	WIND 140	8KT WEATHER 0	
	DOMINANT WAVES 250 7 7				
87.055	11/28/74	2240GMT	33 10.0M	119 59.5W	
	BOTTOM	1202M	WIND 310	8KT WEATHER 1	
	DOMINANT WAVES 310 4 7				

RV ALEXANDER AGASSIZ

CALCUFFI CRUISE 7412

	Z	T	10 METER DATA		DT
			S	02	
87.070	11/30/74	1953GMT	32 41.0M	121 02.5W	
	BOTTOM	3622M	WIND 310	9KT WEATHER 2	
	DOMINANT WAVES 330 3 7				
87.080	11/30/74	1500GMT	32 20.0M	121 43.5W	
	BOTTOM	4047M	WIND 160	3KT WEATHER 2	
	DOMINANT WAVES 320 2 7				
87.090	11/30/74	0941GMT	32 00.0M	122 25.0W	
	BOTTOM	4091M	WIND 99	8KT WEATHER 2	
	DOMINANT WAVES				

RV DAVID STARK JORDAN

CALCULI CRUISE 7412

Z	T	10 METER S	DATA 02	DT
5 ⁴ 88.030	12/02/74 0519GMT 33 41.5N 118 07.0W BOTTOM 17M WIND 060 4KT WEATHER 1 DOMINANT WAVES	10	15.38 33.451	323.7
5 ⁵ 88.031	12/02/74 0409GMT 33 40.5N 118 09.5W BOTTOM 21M WIND 280 7KT WEATHER 1 DOMINANT WAVES	10	14.96 33.478	313.0
5 ⁵ 88.032	12/02/74 0252GMT 33 38.5N 118 13.5W BOTTOM 37M WIND 280 10KT WEATHER 1 DOMINANT WAVES	10	14.94 33.466	313.4
5 ⁵ 88.033	12/02/74 0120GMT 33 36.5N 118 17.5W BOTTOM 168M WIND 270 12KT WEATHER 1 DOMINANT WAVES	10	16.00 33.560	328.9
5 ⁵ 88.034	12/01/74 2320GMT 33 34.5N 118 22.0W BOTTOM 833M WIND 270 12KT WEATHER 1 DOMINANT WAVES 260	10	15.92 33.550	327.9
6 ⁵ 90.027	12/02/74 0825GMT 33 29.0N 117 45.5W BOTTOM 43M WIND 070 7KT WEATHER 1 DOMINANT WAVES	10	15.46 33.497	322.0
90.028	12/02/74 0940GMT 33 28.5N 117 46.5W BOTTOM 187M WIND 020 4KT WEATHER 1 DOMINANT WAVES	10	15.54 33.503	323.2
90.029	12/02/74 1115GMT 33 27.0N 117 49.5W BOTTOM 611M WIND 050 7KT WEATHER 1 DOMINANT WAVES	10	16.18 33.561	332.7
90.030	12/02/74 1315GMT 33 25.0N 117 53.5W BOTTOM 621M WIND 110 9KT WEATHER 1 DOMINANT WAVES	10	16.43 33.577	337.0
90.031	12/02/74 1505GMT 33 23.0N 117 57.5W BOTTOM 445M WIND 090 4KT WEATHER 1 DOMINANT WAVES	10	16.30 33.568	334.8
90.032	12/02/74 1706GMT 33 20.5N 118 03.0W BOTTOM 704M WIND 110 4KT WEATHER 1 DOMINANT WAVES 110 1 4	10	16.27 33.564	334.4
90.037	11/28/74 0521GMT 33 11.0N 118 22.5W BOTTOM 1178M WIND 200 4KT WEATHER DOMINANT WAVES	10	16.48 33.580 5.81	337.9
90.045	11/27/74 2339GMT 32 54.5N 119 55.5W BOTTOM 1664M WIND 300 11KT WEATHER 2 DOMINANT WAVES 290 5 7	10	16.38 33.572 5.77	336.3
90.053	11/27/74 1802GMT 32 39.0N 119 28.5W BOTTOM 1295M WIND 280 4KT WEATHER 2 DOMINANT WAVES 280 R 7	10	14.36 33.447 6.09	303.0
90.060	11/27/74 1245GMT 32 25.0N 119 57.5W BOTTOM 929M WIND 350 17KT WEATHER 1 DOMINANT WAVES 300 R 7	10	14.30 33.444 6.56	302.0

RV ALEXANDER AGASSIZ

CALCULI CRUISE 7412

Z	T	10 METER S	DATA 02	DT
90.070	11/29/74 1144GMT 32 05.5N 120 39.0W BOTTOM 3517M WIND 330 4KT WEATHER 1 DOMINANT WAVES 340 R 4	10	15.74 33.510	327.0
90.080	11/29/74 1638GMT 31 44.0N 121 21.5W BOTTOM 3952M WIND 350 7KT WEATHER 1 DOMINANT WAVES 340 4 5	10	16.44 33.528	340.8
90.090	11/29/74 2146GMT 31 25.0N 122 01.0W BOTTOM 3805M WIND 230 4KT WEATHER 1 DOMINANT WAVES 340 3 5	10	16.84 33.580	345.8

RV DAVID STARR JORDAN		CALCOPFI CRUISE 7412		Z	T	10 METER S	DATA N2	DT
5	91.026	12/03/74 0335GMT BOTTOM 15M WIND 100 KKT WEATHER 1 DOMINANT WAVES	33 14.5M 117 27.5W	10	14.52	33.494		302.8
5	91.028	12/03/74 0218GMT BOTTOM 37M WIND 220 KKT WEATHER 1 DOMINANT WAVES	33 14.0M 117 29.0W	10	14.79	33.501		307.8
5	91.028	12/03/74 0030GMT BOTTOM 593M WIND 200 KKT WEATHER 1 DOMINANT WAVES	33 11.5M 117 34.0W	10	16.15	33.554		332.6
5	91.029	12/02/74 2255GMT BOTTOM 741M WIND 210 KKT WEATHER 1 DOMINANT WAVES 190 1 5	33 09.5M 117 38.0W	10	16.24	33.582		332.5
5	91.030	12/02/74 2059GMT BOTTOM 833M WIND 190 2KT WEATHER 1 DOMINANT WAVES 1 4	33 07.5M 117 42.5W	10	16.24	33.576		332.9
7	93.026	12/03/74 0850GMT BOTTOM 43M WIND 090 7KT WEATHER 1 DOMINANT WAVES	32 57.0M 117 17.5W	10	14.82	33.510		307.7
9	93.026	12/03/74 1005GMT BOTTOM 67M WIND 090 KKT WEATHER 1 DOMINANT WAVES	32 57.0M 117 18.5W	10	14.70	33.464		308.7
	93.028	12/03/74 1135GMT BOTTOM 574M WIND 090 7KT WEATHER 1 DOMINANT WAVES	32 54.5M 117 22.0W	10	14.82	33.476		310.2
	93.029	12/03/74 1349GMT BOTTOM 574M WIND 120 KKT WEATHER 1 DOMINANT WAVES 320 4 8	32 53.0M 117 26.5W	10	15.55	33.529		321.5
	93.035	11/26/74 0610GMT BOTTOM 648M WIND 350 KKT WEATHER 1 DOMINANT WAVES	32 40.5M 117 51.5W	10	16.47	33.584		337.4
	93.040	11/26/74 0945GMT BOTTOM 1664M WIND 260 KKT WEATHER 1 DOMINANT WAVES	32 30.0M 118 11.5W	10	16.27	33.573	5.56	333.8
	93.045	11/26/74 1515GMT BOTTOM 1184M WIND 010 1KKT WEATHER 1 DOMINANT WAVES 270 3 7	32 20.0M 118 32.0W	10	16.36	33.573		335.8
	93.050	11/26/74 1807GMT BOTTOM 1479M WIND 310 1KKT WEATHER 1 DOMINANT WAVES 320 3 7	32 10.0M 118 52.5W	10	16.40	33.572	5.80	336.7
	93.055	11/26/74 2335GMT BOTTOM 1485M WIND 040 17KT WEATHER 1 DOMINANT WAVES 290 10 9	31 59.5M 119 13.5W	10	15.74	33.520		326.2
	93.060	11/27/74 0257GMT BOTTOM 2265M WIND 320 2KKT WEATHER 1 DOMINANT WAVES 290 10 9	31 50.0M 119 34.0W	10	15.55	33.517	5.88	322.4

RV ALF XANDER AGASSIZ		CALCOPFI CRUISE 7412		Z	T	10 METER S	DATA N2	DT
	93.070	11/29/74 0555GMT BOTTOM 3931M WIND 300 KKT WEATHER DOMINANT WAVES 340 6 4	31 29.0M 120 14.5W	10	15.14	33.441		319.4
	93.090	11/28/74 1933GMT BOTTOM 4004M WIND 340 1KKT WEATHER 1 DOMINANT WAVES 340 5 5	30 50.5M 121 33.0W	10	17.00	33.537		352.5
	93.100	11/28/74 1347GMT BOTTOM 4154M WIND 360 17KT WEATHER 1 DOMINANT WAVES 360 5 6	30 30.0M 122 14.0W	10	17.12	33.550		354.3

RV DAVID STARR JORDAN		CALCOPFI CRUISE 7412		Z	T	10 METER S	DATA N2	DT
	94.032	11/26/74 0225GMT BOTTOM 1110M WIND 270 KKT WEATHER 0 DOMINANT WAVES 270 3 7	32 40.0M 117 35.0W	10	16.53	33.573	6.01	339.5

RV DAVID STARR JORDAN		CALCOFI CRUISE 7412		Z	T	10 METER DATA S	DATA 02	DT
95.028	12/04/74 2015GMT 32 37.0N 117 10.5W BOTTOM 17M WIND 260 12KT WEATHER 2 DOMINANT WAVES 260 6 8	10	15.00	33.481				313.6
95.029	12/04/74 2156GMT 32 35.0N 117 14.5W BOTTOM 41M WIND 310 17KT WEATHER 1 DOMINANT WAVES 270 7 4	10	14.62	33.470				306.6
95.030	12/04/74 2353GMT 32 33.5N 117 18.5W BOTTOM 108M WIND 290 14KT WEATHER 1 DOMINANT WAVES 290 6 4	10	14.68	33.456				308.8
95.031	12/05/74 0130GMT 32 31.0N 117 22.5W BOTTOM 667M WIND 280 14KT WEATHER 1 DOMINANT WAVES 290 9 8	10	15.23	33.430				322.1
95.032	12/05/74 0312GMT 32 29.0N 117 27.0W BOTTOM 1018M WIND 290 12KT WEATHER 1 DOMINANT WAVES	10	15.54	33.487				324.4

RV ALEXANDER AGASSIZ		CALCOFI CRUISE 7412		Z	T	10 METER DATA S	DATA 02	DT
97.028 ^B	11/26/74 0720GMT 32 18.0N 117 04.0W BOTTOM 41M WIND 270 14KT WEATHER 0 DOMINANT WAVES	10	15.11	33.487				315.4
97.029	11/26/74 0800GMT 32 17.0N 117 05.0W BOTTOM 48M WIND 080 14KT WEATHER 0 DOMINANT WAVES	10	15.07	33.483				314.9

A) ALTERNATE VALUE 14.90 DEGREES.

97.030	11/26/74 0843GMT 32 16.0N 117 07.0W BOTTOM 52M WIND 360 14KT WEATHER 0 DOMINANT WAVES	10	15.54	33.491				324.1
97.031	11/26/74 0944GMT 32 13.5N 117 13.5W BOTTOM 1285M WIND 360 14KT WEATHER 0 DOMINANT WAVES	10	15.92	33.532				329.2
97.035	11/26/74 1414GMT 32 05.5N 117 27.5W BOTTOM 1258M WIND 310 13KT WEATHER 1 DOMINANT WAVES 320 3 6	10	16.21	33.560				333.4
97.045	11/26/74 2125GMT 31 47.5N 118 09.0W BOTTOM 1682M WIND 290 11KT WEATHER 0 DOMINANT WAVES 300 5 5	10	16.77	33.550				346.5
97.050	11/27/74 0022GMT 31 36.0N 118 31.0W BOTTOM 2410M WIND 290 11KT WEATHER 0 DOMINANT WAVES 300 5 5	10	16.14	33.535				333.7
97.055	11/27/74 0323GMT 31 25.5N 118 52.0W BOTTOM 2821M WIND 280 14KT WEATHER 1 DOMINANT WAVES	10	16.36	33.537				338.4
97.080	11/28/74 0146GMT 30 35.0N 120 31.0W BOTTOM 3960M WIND 320 21KT WEATHER 1 DOMINANT WAVES 320 5 7	10	17.03	33.656				344.5

RV DAVID STARR JORDAN		CALCOFI CRUISE 7412		Z	T	10 METER DATA S	DATA 02	DT
100.029	12/05/74 1005GMT 31 42.0N 116 43.5W BOTTOM 114M WIND 050 14KT WEATHER 1 DOMINANT WAVES 49 3 5	10	15.20	33.507				315.8
100.030	12/05/74 1119GMT 31 40.5N 116 46.5W BOTTOM 427M WIND 070 14KT WEATHER 1 DOMINANT WAVES 010 3 5	10	15.66	33.529	5.47			323.9
100.031	12/05/74 1238GMT 31 38.5N 116 51.0W BOTTOM 162M WIND 330 14KT WEATHER 1 DOMINANT WAVES	10	16.44	33.574				337.4
100.032	12/05/74 1341GMT 31 37.0N 116 55.0W BOTTOM 1110M WIND 120 17KT WEATHER 1 DOMINANT WAVES	10	16.64	33.588				340.8
100.035	12/05/74 1610GMT 31 30.5N 117 07.0W BOTTOM 1110M WIND 290 14KT WEATHER 1 DOMINANT WAVES 290 5 6	10	16.76	33.594	4.79			343.0
100.040	12/05/74 1912GMT 31 21.0N 117 27.0W BOTTOM 1684M WIND 310 11KT WEATHER 1 DOMINANT WAVES 270 7 8	10	16.59	33.594	5.57			339.3
100.050	12/06/74 0015GMT 31 00.0N 118 07.0W BOTTOM 1763M WIND 350 12KT WEATHER 1 DOMINANT WAVES 330 6 7	10	17.48	33.689	5.60			352.3
100.070	12/06/74 1125GMT 30 18.0N 119 28.0W BOTTOM 3737M WIND 330 14KT WEATHER 1 DOMINANT WAVES	10	16.67	33.559	5.63			343.6

						Z	T	10 METER DATA		DT
								S	02	
100.080	12/06/74	1608GMT	29 57.0N	120 08.0W	BOTTOM 3926M WIND 350 1KT WEATHER 0	10	16.56	33.557	5.57	341.3
					DOMINANT WAVES 330 4 8					
103.028 ⁸	12/08/74	0614GMT	31 07.5N	116 20.0W	BOTTOM 19M WIND 180 4KT WEATHER 4	10	15.27	33.496		318.1
					DOMINANT WAVES					
103.029	12/08/74	0534GMT	31 07.0N	116 21.0W	BOTTOM 30M WIND 140 4KT WEATHER 4	10	15.10	33.484		315.4
					DOMINANT WAVES					
103.031	12/08/74	0310GMT	31 03.0N	116 29.0W	BOTTOM 104M WIND 320 1KT WEATHER	10		33.551		
					DOMINANT WAVES					
103.032	12/08/74	0200GMT	31 02.0N	116 32.5W	BOTTOM 537M WIND 340 14KT WEATHER 0	10	16.32	33.556		336.1
					DOMINANT WAVES 300 5 6					
103.035	12/07/74	2350GMT	30 56.0N	116 45.0W	BOTTOM 1756M WIND 300 15KT WEATHER 0	10	15.08	33.468	5.93	316.2
					DOMINANT WAVES 300 5 6					
103.040	12/07/74	2033GMT	30 45.5N	117 03.5W	BOTTOM 1763M WIND 330 14KT WEATHER 1	10	16.91	33.586	5.68	347.0
					DOMINANT WAVES 270 3 5					
103.045	12/07/74	1713GMT	30 36.0N	117 24.0W	BOTTOM 2042M WIND 120 11KT WEATHER 0	10	16.99	33.601	5.69	347.7
					DOMINANT WAVES 320 3 4					
103.050	12/07/74	1330GMT	30 25.5N	117 46.0W	BOTTOM 2227M WIND 350 14KT WEATHER 0	10	16.88	33.642	5.68	342.2
					DOMINANT WAVES 320 4 4					
103.060	12/07/74	0823GMT	30 06.0N	116 25.0W	BOTTOM 3169M WIND 340 14KT WEATHER 0	10	16.60	33.587	5.70	340.0
					DOMINANT WAVES 330 4 7					
103.080	12/06/74	2105GMT	29 26.5N	119 43.0W	BOTTOM 3737M WIND 240 15KT WEATHER 0	10	16.82	33.571	5.60	346.1
					DOMINANT WAVES 350 6 7					
107.030 ³	12/08/74	1040GMT	30 29.5N	116 04.0W	BOTTOM 21M WIND 240 4KT WEATHER 4	10	15.05	33.492	5.80	313.8
					DOMINANT WAVES					
107.030	12/08/74	1117GMT	30 28.5N	116 05.5W	BOTTOM 24M WIND 240 4KT WEATHER 4	10	15.12	33.497		314.9
					DOMINANT WAVES					
107.031	12/08/74	1156GMT	30 28.0N	116 07.0W	BOTTOM 52M WIND 240 4KT WEATHER 4	10	14.72			
					DOMINANT WAVES					
107.032	12/08/74	1250GMT	30 28.0N	116 11.0W	BOTTOM 571M WIND 340 3KT WEATHER 4	10	15.97 A	33.483	5.94	333.9
					DOMINANT WAVES					
107.033	12/08/74	1412GMT	30 24.0N	116 15.0W	BOTTOM 1387M WIND 330 4KT WEATHER 4	10	16.53	33.568		339.9
					DOMINANT WAVES 290 2 3					
107.034	12/08/74	1516GMT	30 22.0N	116 19.0W	BOTTOM 1669M WIND 250 7KT WEATHER 4	10	16.69	33.600		341.1
					DOMINANT WAVES 300 2 3					
107.035	12/08/74	1633GMT	30 21.0N	116 22.0W	BOTTOM 1669M WIND 320 4KT WEATHER 4	10	16.74	33.600	5.55	342.2
					DOMINANT WAVES 270 2 5					
107.040	12/08/74	2001GMT	30 11.0N	116 42.0W	BOTTOM 2790M WIND 280 4KT WEATHER 0	10	16.66	33.599	5.73	340.5
					DOMINANT WAVES 270 4 7					
107.050	12/09/74	0132GMT	29 45.5N	117 20.0W	BOTTOM 2790M WIND 360 14KT WEATHER	10	17.54	33.715	5.53	351.8
					DOMINANT WAVES					
110.032 ⁴	12/10/74	0643GMT	29 51.5N	115 50.0W	BOTTOM 37M WIND 180 4KT WEATHER	10	15.30	33.509		317.8
					DOMINANT WAVES					
110.033	12/10/74	0553GMT	29 50.0N	115 52.0W	BOTTOM 86M WIND 200 11KT WEATHER	10	15.41	33.521		319.2
					DOMINANT WAVES					
110.034	12/10/74	0459GMT	29 48.5N	115 55.5W	BOTTOM 632M WIND 230 4KT WEATHER 0	10	15.84	33.516		328.7
					DOMINANT WAVES					
110.035	12/10/74	0332GMT	29 46.0N	116 00.0W	BOTTOM 1158M WIND 080 3KT WEATHER 0	10	16.52	33.573	5.77	339.3
					DOMINANT WAVES					
110.040	12/09/74	2350GMT	29 35.8N	116 19.0W	BOTTOM 2042M WIND 220 4KT WEATHER 1	10		33.627	5.64	
					DOMINANT WAVES 270 5 8					

A) ALTERNATE VALUE 15.53 DEGRFFS.

						Z	T	10 MFETER S	DATA N2	DT
110.045	12/09/74	2105GMT	29 27.5M	116 40.5W		10	17.26	33.583	5.68	355.0
		BOTTOM	3737M	WIND 020	4KT WEATHER 1					
		DOMINANT WAVES	330	3 4						
110.050	12/09/74	1808GMT	29 16.5M	116 59.0W		10	17.50	33.627	5.61	357.3
		BOTTOM	3737M	WIND 360	14KT WEATHER 1					
		DOMINANT WAVES	290	4 4						
110.055	12/09/74	1509GMT	29 06.5M	117 19.0W		10	17.52	33.649		356.2
		BOTTOM	3545M	WIND 360	7KT WEATHER 0					
		DOMINANT WAVES	320	4 8						
110.060	12/09/74	1209GMT	28 56.5M	117 38.5W		10	17.36	33.640	5.57	353.2
		BOTTOM	3545M	WIND 350	5KT WEATHER 0					
		DOMINANT WAVES								
113.028 ⁸	12/10/74	1119GMT	29 25.0M	115 12.5W		10	15.56	33.594		317.0
		BOTTOM	21M	WIND 040	4KT WEATHER					
		DOMINANT WAVES								
113.029	12/10/74	1148GMT	29 24.5M	115 13.5W		10	15.72	33.585		321.1
		BOTTOM	22M	WIND 320	8KT WEATHER					
		DOMINANT WAVES								
113.031	12/10/74	1343GMT	29 20.5M	115 21.5W		10	19.58	33.546		320.9
		BOTTOM	15M	WIND 340	10KT WEATHER					
		DOMINANT WAVES								
113.032	12/10/74	1427GMT	29 18.0M	115 25.5W		10	15.41	33.554		316.8
		BOTTOM	93M	WIND 350	4KT WEATHER 1					
		DOMINANT WAVES	310	2 7						
113.035	12/10/74	1633GMT	29 13.5M	115 40.0W		10	16.18	33.566	5.79	332.4
		BOTTOM	1298M	WIND 250	8KT WEATHER 2					
		DOMINANT WAVES	320	3 6						
113.040	12/10/74	1943GMT	29 02.0M	115 56.0W		10	17.16	33.622	5.66	350.0
		BOTTOM	1856M	WIND 310	4KT WEATHER 2					
		DOMINANT WAVES	270	3 3						
113.045	12/10/74	2234GMT	28 52.5M	116 18.5W		10	17.02	33.618		347.1
		BOTTOM	2042M	WIND 360	8KT WEATHER 2					
		DOMINANT WAVES	280	10 13						
113.050	12/11/74	0122GMT	28 41.5M	116 37.0W		10	17.28	33.650	5.70	350.6
		BOTTOM	3169M	WIND 360	4KT WEATHER 1					
		DOMINANT WAVES	280	8 14						
113.060	12/11/74	0618GMT	28 22.0M	117 16.0W		10	17.24	33.642	5.72	350.3
		BOTTOM	3641M	WIND 340	4KT WEATHER 0					
		DOMINANT WAVES								
117.025	12/12/74	1334GMT	28 58.0M	114 37.0W		10	15.50	33.565		317.9
		BOTTOM	50M	WIND 140	4KT WEATHER					
		DOMINANT WAVES								
117.026	12/12/74	1248GMT	28 56.0M	114 41.5W		10	16.06	33.582		328.6
		BOTTOM	69M	WIND 060	4KT WEATHER					
		DOMINANT WAVES								
117.027	12/12/74	1206GMT	28 54.0M	114 45.0W		10	16.10	33.588		329.0
		BOTTOM	78M	WIND 080	4KT WEATHER					
		DOMINANT WAVES								
117.028	12/12/74	1119GMT	28 52.5M	114 49.0W		10	16.17	33.586		330.7
		BOTTOM	75M	WIND 350	7KT WEATHER					
		DOMINANT WAVES								
117.035	12/12/74	0642GMT	28 38.0M	115 16.0W		10	16.19	33.615	5.74	329.0
		BOTTOM	205M	WIND 010	12KT WEATHER					
		DOMINANT WAVES								
117.040	12/11/74	2340GMT	28 27.0M	115 36.5W		10	15.30	33.606	5.81	310.6
		BOTTOM	1058M	WIND 320	14KT WEATHER 0					
		DOMINANT WAVES	320	6 13						
117.045	12/11/74	2050GMT	28 18.5M	115 56.5W		10	17.26	33.646		350.4
		BOTTOM	223M	WIND 330	14KT WEATHER 1					
		DOMINANT WAVES	310	6 12						
117.050	12/11/74	1802GMT	28 08.0M	116 15.0W		10	17.18	33.630		349.8
		BOTTOM	4116M	WIND 340	15KT WEATHER 1					
		DOMINANT WAVES	320	6 13						
118.039	12/12/74	0234GMT	28 18.5M	115 24.0W		10	16.86	33.742		334.5
		BOTTOM	264M	WIND 330	5KT WEATHER					
		DOMINANT WAVES								
119.033	12/13/74	0205GMT	28 19.0M	114 53.0W		10	17.54	33.646	5.51	356.8
		BOTTOM	103M	WIND 320	21KT WEATHER 0					
		DOMINANT WAVES	330	2 5						
120.022 ⁴	12/12/74	1804GMT	28 28.0M	114 04.5W		10	14.73	33.673		294.0
		BOTTOM	19M	WIND 290	4KT WEATHER 0					
		DOMINANT WAVES	260	2 4						
120.022 ⁷	12/12/74	1837GMT	28 27.5M	114 05.5W		10	15.43	33.580		315.3
		BOTTOM	21M	WIND 290	4KT WEATHER 0					
		DOMINANT WAVES	260	2 4						
120.023	12/12/74	1902GMT	28 27.0M	114 07.0W		10	15.38	33.581		314.2
		BOTTOM	24M	WIND 290	4KT WEATHER 0					
		DOMINANT WAVES	260	2 4						

		10 METER DATA							
	Z	T	S	DT	DT				
120.024	12/12/74	1945GMT	28 25.0N	114 10.5W	10	15.68	33.588		320.0
		BOTTOM	30M	WIND 240 7KT					
		DOMINANT WAVES	300	2 4					
120.025	12/12/74	2030GMT	28 22.5N	114 15.0W	10	16.02	33.604	5.74	326.1
		BOTTOM	52M	WIND 030 4KT					
		DOMINANT WAVES	300	2 4					
120.026	12/12/74	2110GMT	28 20.5N	114 18.0W	10	16.48	33.612		335.5
		BOTTOM	71M	WIND 080 11KT					
		DOMINANT WAVES	270	2 6					
120.030	12/12/74	2330GMT	28 13.5N	114 34.0W	10	16.70	33.623	5.65	339.6
		BOTTOM	103M	WIND 290 14KT					
		DOMINANT WAVES	290	2 6					
120.035	12/13/74	0350GMT	28 03.0N	114 54.0W	10	16.91	33.633	5.64	343.5
		BOTTOM	75M	WIND 310 11KT					
		DOMINANT WAVES							
120.040	12/13/74	0604GMT	27 56.5N	115 14.0W	10	16.82	33.851		325.6
		BOTTOM	37M	WIND 310 14KT					
		DOMINANT WAVES							
120.045	12/13/74	0858GMT	27 43.0N	115 33.0W	10	17.60	33.882	5.73	341.0
		BOTTOM	2284M	WIND 350 24KT					
		DOMINANT WAVES							
120.060	12/13/74	1826GMT	27 13.0N	116 30.5W	10	17.39	33.595	5.62	357.1
		BOTTOM	3737M	WIND 350 21KT					
		DOMINANT WAVES	340	6 3					
123.035 ⁷	12/14/74	1545GMT	27 26.5N	114 35.0W	10	17.66	33.923		339.4
		BOTTOM	0	WIND 010 13KT					
		DOMINANT WAVES	300	3 6					
123.036	12/14/74	1510GMT	27 26.5N	114 36.5W	10	17.66	33.931		338.8
		BOTTOM	50M	WIND 050 20KT					
		DOMINANT WAVES	310	6 8					
123.037	12/14/74	1409GMT	27 24.0N	114 40.0W	10	18.16	33.942	5.49	349.7
		BOTTOM	69M	WIND 040 11KT					
		DOMINANT WAVES	310	3 7					
123.038	12/14/74	1317GMT	27 22.0N	114 44.5W	10	18.14	33.934		349.7
		BOTTOM	75M	WIND 060 11KT					
		DOMINANT WAVES							
123.039	12/14/74	1221GMT	27 21.0N	114 49.0W	10	18.24	33.952		350.8
		BOTTOM	103M	WIND 010 24KT					
		DOMINANT WAVES							
123.042	12/14/74	1019GMT	27 13.5N	115 00.5W	10	18.27	33.952		351.5
		BOTTOM	1160M	WIND 090 14KT					
		DOMINANT WAVES							
123.045	12/14/74	0828GMT	27 08.0N	115 11.5W	10	17.88	33.923		344.5
		BOTTOM	3737M	WIND 350 24KT					
		DOMINANT WAVES							
123.060	12/13/74	2319GMT	26 38.5N	116 09.0W	10	17.36	33.636	5.77	353.5
		BOTTOM	3737M	WIND 340 24KT					
		DOMINANT WAVES	340	6 6					
127.032 ⁶	12/14/74	2016GMT	26 58.0N	114 03.5W	10	18.20	34.142		336.0
		BOTTOM	37M	WIND 180 14KT					
		DOMINANT WAVES	130	3 9					
127.033	12/14/74	2111GMT	26 57.5N	114 02.0W	10	18.57	34.159		343.5
		BOTTOM	65M	WIND 110 4KT					
		DOMINANT WAVES	130	3 9					
127.034	12/14/74	2225GMT	26 55.0N	114 06.0W	10	18.52	34.144		343.5
		BOTTOM	82M	WIND 320 14KT					
		DOMINANT WAVES	300	4 6					
127.035	12/14/74	2330GMT	26 53.5N	114 11.0W	10	18.58	34.163		343.5
		BOTTOM	93M	WIND 290 11KT					
		DOMINANT WAVES	310	4 4					
127.036	12/15/74	0022GMT	26 51.0N	114 14.0W	10	18.60	34.166		343.7
		BOTTOM	789M	WIND 330 14KT					
		DOMINANT WAVES	310	4 4					
127.045	12/15/74	0629GMT	26 33.0N	114 49.0W	10	19.02	34.081		360.0
		BOTTOM	3357M	WIND 340 21KT					
		DOMINANT WAVES	320	5 6					
127.050	12/15/74	0924GMT	26 23.5N	115 08.0W	10	18.96	34.020	5.37	363.0
		BOTTOM	3641M	WIND 360 24KT					
		DOMINANT WAVES	050	5 6					
127.060	12/15/74	1435GMT	26 02.0N	115 46.0W	10	19.26	34.109	5.36	363.8
		BOTTOM	3737M	WIND 010 17KT					
		DOMINANT WAVES	340	5 4					
130.025 ⁶	12/16/74	1634GMT	26 37.5N	113 11.5W	10	18.62	34.220		340.3
		BOTTOM	19M	WIND 040 17KT					
		DOMINANT WAVES	150	2 4					
130.026	12/16/74	1604GMT	26 37.0N	113 13.0W	10	18.70	34.218		342.4
		BOTTOM	28M	WIND 040 17KT					
		DOMINANT WAVES	150	2 4					

						2	T	10 METER	DATA	DT
								S	02	
130.027	12/16/74	1518GMT	26 35.0N	113 17.0W	BOTTOM 45M WIND 030 3KT WEATHER 1	10	19.05	34.168		354.4
					DOMINANT WAVES 220 4 4					
130.028	12/16/74	1356GMT	26 33.0N	113 21.0W	BOTTOM 54M WIND 020 3KT WEATHER 1	10	19.02	34.151	5.27	354.9
					DOMINANT WAVES 040 5 6					
130.029	12/16/74	1255GMT	26 31.0N	113 25.0W	BOTTOM 65M WIND 020 2KT WEATHER	10	18.99	34.158		353.7
					DOMINANT WAVES					
130.030	12/16/74	1159GMT	26 29.0N	113 29.0W	BOTTOM 76M WIND 040 2KT WEATHER	10	18.90	34.158	5.28	351.5
					DOMINANT WAVES					
130.035	12/16/74	0923GMT	26 19.5N	113 48.5W	BOTTOM 483M WIND 040 4KT WEATHER	10	18.96	34.133		354.8
					DOMINANT WAVES					
130.050	12/16/74	0014GMT	25 49.0N	114 46.0W	BOTTOM 3545M WIND 360 10KT WEATHER 0	10	19.84	34.127	5.05	376.8
					DOMINANT WAVES 320 5 8					
130.060	12/15/74	1919GMT	25 29.0N	115 23.0W	BOTTOM 3737M WIND 040 1KT WEATHER 0	10	18.92	34.109	5.13	355.6
					DOMINANT WAVES 330 5 6					
133.020	12/16/74	2103GMT	26 13.5N	112 31.0W	BOTTOM 35M WIND 130 4KT WEATHER 1	10	19.66	34.207		366.5
					DOMINANT WAVES 270 2 3					
133.021	12/16/74	2130GMT	26 12.5N	112 32.5W	BOTTOM 50M WIND 270 14KT WEATHER 1	10	19.70	34.195		368.4
					DOMINANT WAVES 270 2 3					
133.022	12/16/74	2212GMT	26 10.5N	112 36.5W	BOTTOM 63M WIND 020 20KT WEATHER 1	10	19.94	34.198		374.1
					DOMINANT WAVES 270 2 3					
133.023	12/16/74	2258GMT	26 08.5N	112 40.5W	BOTTOM 67M WIND 240 12KT WEATHER 1	10	20.00	34.192		376.0
					DOMINANT WAVES 230 5 12					
133.024	12/16/74	2344GMT	26 06.5N	112 44.5W	BOTTOM 76M WIND 230 12KT WEATHER 1	10	19.84	34.189		372.3
					DOMINANT WAVES 270 3 6					
133.025	12/17/74	0033GMT	26 04.5N	112 48.0W	BOTTOM 82M WIND 240 11KT WEATHER 1	10	19.76	34.194	5.34	369.9
					DOMINANT WAVES 310 2 5					
133.030	12/17/74	0315GMT	25 55.0N	113 07.0W	BOTTOM 187M WIND 290 11KT WEATHER	10	19.22	34.159	5.36	359.2
					DOMINANT WAVES					
133.035	12/17/74	0550GMT	25 45.0N	113 27.0W	BOTTOM 691M WIND 310 14KT WEATHER	10	19.37	34.107		366.6
					DOMINANT WAVES					
133.050	12/17/74	1432GMT	25 13.5N	114 24.0W	BOTTOM 3737M WIND 350 11KT WEATHER 1	10	20.02	34.116	5.30	382.1
					DOMINANT WAVES 280 6 7					
133.060	12/17/74	1947GMT	24 54.5N	115 02.0W	BOTTOM 3926M WIND 330 4KT WEATHER 2	10	19.94	34.149	5.28	377.7
					DOMINANT WAVES 360 3 6					
137.020	12/18/74	2347GMT	25 38.5N	112 10.0W	BOTTOM 19M WIND 080 4KT WEATHER 2	10	19.92	34.259		369.2
					DOMINANT WAVES					
137.022	12/18/74	2255GMT	25 35.5N	112 15.0W	BOTTOM 45M WIND 120 3KT WEATHER 2	10	20.16	34.310		371.5
					DOMINANT WAVES					
137.023	12/18/74	2213GMT	25 34.5N	112 19.0W	BOTTOM 65M WIND 120 3KT WEATHER 2	10	20.77	34.330	5.27	385.5
					DOMINANT WAVES 310 2 4					
137.024	12/18/74	2123GMT	25 32.0N	112 23.0W	BOTTOM 80M WIND 120 4KT WEATHER 2	10	20.74	34.393		380.2
					DOMINANT WAVES 300 2 4					
137.030	12/18/74	1756GMT	25 20.0N	112 46.0W	BOTTOM 408M WIND 180 10KT WEATHER 2	10	19.76	34.174	5.33	371.4
					DOMINANT WAVES 310 2 4					
137.035	12/18/74	1521GMT	25 10.0N	113 04.5W	BOTTOM 1391M WIND 340 15KT WEATHER 6	10		34.174		
					DOMINANT WAVES 350 2 4					
137.050	12/18/74	0604GMT	24 40.0N	114 02.0W	BOTTOM 3737M WIND 290 14KT WEATHER	10	19.94	34.102	5.24	381.1
					DOMINANT WAVES					
137.060	12/18/74	0036GMT	24 20.0N	114 39.5W	BOTTOM 3737M WIND 310 12KT WEATHER 2	10	21.41	34.49	5.15	390.3
					DOMINANT WAVES 340 3 4					