

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6910
9 October - 8 November 1969

and

CalCOFI Cruise 6912
13 November - 17 December 1969

SIO Reference 79-29
15 February 1980

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9 October - 8 November 1969
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13 November - 17 December 1969

Sponsored by
Marine Research Committee

SIO Reference 79-29

Approved for distribution:

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

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INTRODUCTION

The data in this report was collected during cruises 6910* and 6912 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV David Starr Jordan, of the Bureau of Commercial Fisheries (now National Marine Fisheries Service), and the RV Alexander Agassiz, of the Scripps Institution of Oceanography. The report preceding this one in the series was SIO Ref. 79-7 which included data for July, August, and September 1969.

During the December cruise on the Agassiz, time was spent on lines 90 and 120 to test zooplankton sampling gear. Opening-closing bongo nets were deployed at selected stations both in daylight and at night to sample eight separate depth-ranges between 500m and the sea surface.

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

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts consisted of 12 to 18 Nansen bottles. At most stations the maximum sampling depth was 550 meters, bottom depth permitting. Temperature, oxygen, and nutrients were determined for all depths on each station, but samples from only five selected depths were used to determine salinity for comparison with the STD.

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

In general, paired protected reversing thermometers were used to determine temperatures which were recorded to hundredths of a Celsius degree. Surface temperatures from "bucket" thermometers and temperatures determined using unprotected (pressure) thermometers were recorded to tenths of a degree. Sample bottles used below 100 meters were equipped with unprotected thermometers for depth determination. Inattention to thermometer readings, however, resulted in extrapolation of some depth curves on all cruises due to unprotected thermometer malfunction in the deepest Nansen bottles.

The salinity samples for both Jordan cruises, 6910, and 6912, were analyzed using the same Bissett Berman (now Grundy Environmental Systems, Inc.) inductive salinometer which operated well. The Australian Autolab inductive salinometer used on the Agassiz for 6910 and for approximately half 6912 frequently showed considerable drift so that much of the data has been tabulated in hundredths. The Bissett Berman inductive salinometer also used for the Agassiz for 6912 operated satisfactorily.

The salinity values were recorded and are reported to three decimal places, provided accepted standards were met. If only one determination per sample was

*The first two digits represent the year and the second digits the month of the cruise. The CalCOFI station designations have been in use for over twenty 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.

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

obtained, or there was doubt concerning the accuracy of the analytical results, the salinities are reported to two decimal places. All STD salinities are tabulated to hundredths.

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

Phosphate, silicate, nitrite, and nitrate were determined using a first generation Technicon^R AutoAnalyzer^R and methods developed at the Bureau of Commercial Fisheries based on the methodologies of Strickland (1968). Samples frozen at sea on the Agassiz for 6912 and determined after the cruise were too erratic for tabulations in the report.

Phytoplankton pigment and production data resulting from these cruises has been reported earlier by Owen (1974).

Most of the sample bottle data could not be evaluated using standard DCPG techniques (Klein, 1973) due to the sparsity of salinity data. However, when it was apparent the STD had malfunctioned, salinity samples were determined from all sample bottles and the standard techniques carried out. All oxygen and nutrients were plotted against depth for evaluation.

In Situ Salinity/Temperature/Depth Recorder (STD) Data

A Bissett Berman Model 9006 STD was used by each ship for lowerings during all cruises. Both ships also used a digital data logger (DDL) Model 8114 for data recording but the one used during both cruises of the Jordan malfunctioned so all data has been digitized at standard depths from the analogs.

The STD temperature data agreed very closely with the calibration samples for all cruises. Similarly, the STD salinity data from the Agassiz for 6910 and the Jordan for 6912 agreed closely with the sample bottle values. However, the salinity for the Jordan 6910 and the Agassiz 6912 shifted during the cruise requiring changing corrections and causing the data to be somewhat uncertain.

TABULATED DATA

The time reported is Greenwich Mean Time. For STD lowerings it is the "start down" time and for bottle casts it is the time of messenger release. When more than one cast was lowered on a station, the messenger times for the first and last casts are given. Multiple casts, excluding the surface cast, are indicated by a footnote letter following the observed depth.

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

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

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

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

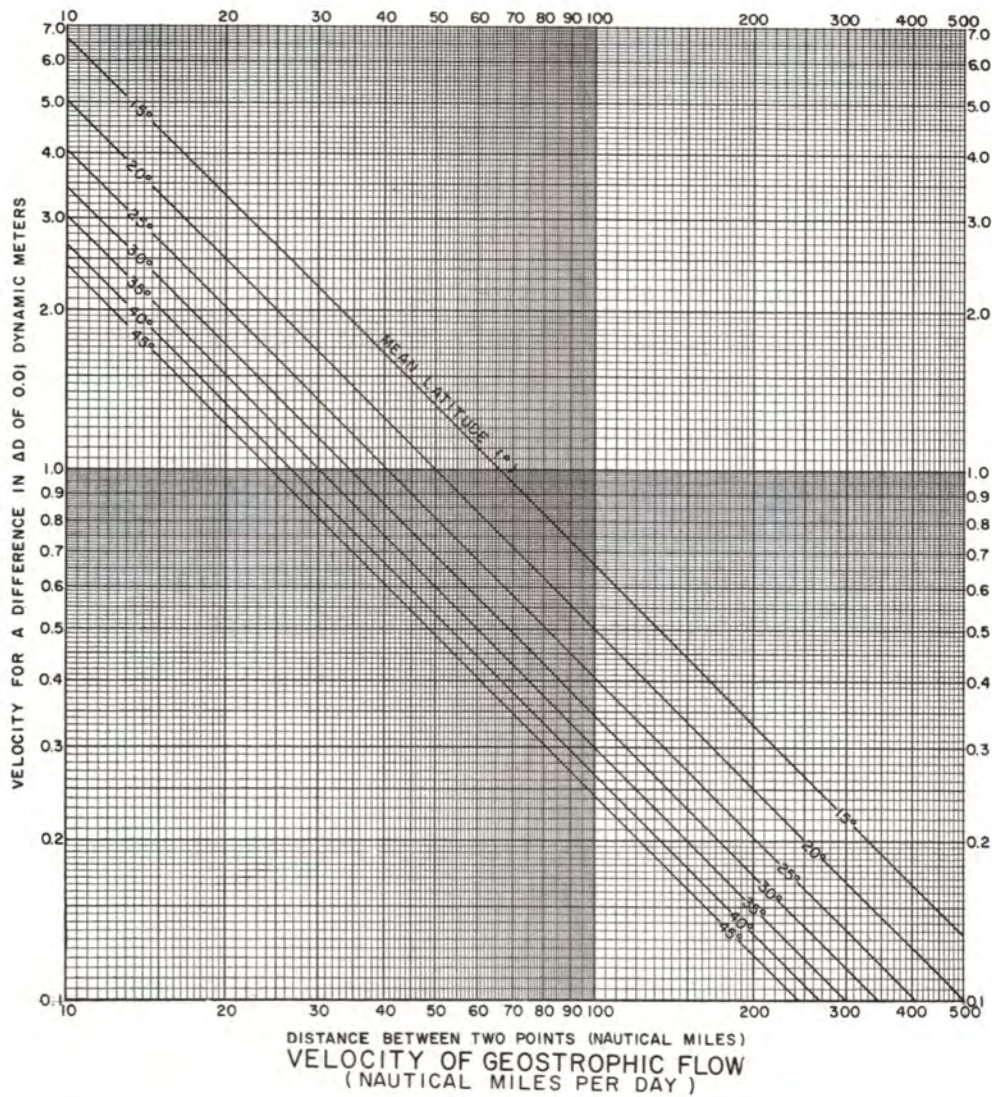
Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved oxygen	ml/L
PO4	"Reactive" inorganic phosphate-phosphorous	µg at/L
SI03	"Reactive" inorganic silicate-silicon	µg at/L
NO2	"Reactive" nitrite-nitrogen	µg at/L
NO3	"Reactive" nitrate-nitrogen	µg at/L
DT	δ_T Thermosteric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)10^3$ where $\rho_{s,t,0}$ is the density the parcel would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dyn. meters

FOOTNOTES

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

REFERENCES

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- Autolab Ind. Pty. Ltd., Sydney, 1960. Inductively Coupled Salinometer MK 111, Model 601, Operating Inst. and Ills. Parts List.
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- Matthews, D.J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, London, H.D. 282: 52pp.
- Owen, R.W. Jr., and C.K. Sanchez, 1974. Phytoplankton Pigment and Production Measurements in the California Current Region, 1969-72. U.S. Dept. of Commerce, Nov. 1974. Data Rep. 91.
- Strickland, J.D.H., and T.R. Parsons, 1968. A practical handbook of seawater analysis. Fish. Res. Board of Canada, Bull. No. 167: 311pp.
- University of Washington, 1960. Univ. of Wash. Dept. of Oceanography, Oct. 1960. Tech. Rep. UW Ref. No. 60-18.



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

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

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

FIGURES

Cruise 6912

1. CalCOFI Cruise 6912, station positions
2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
4. Horizontal distribution of temperature at 10 meters
5. Horizontal distribution of salinity at 10 meters
6. Horizontal distribution of thermosteric anomaly at 10 meters
7. Horizontal distribution of temperature at 200 meters
8. Horizontal distribution of salinity at 200 meters
9. Horizontal distribution of thermosteric anomaly at 200 meters

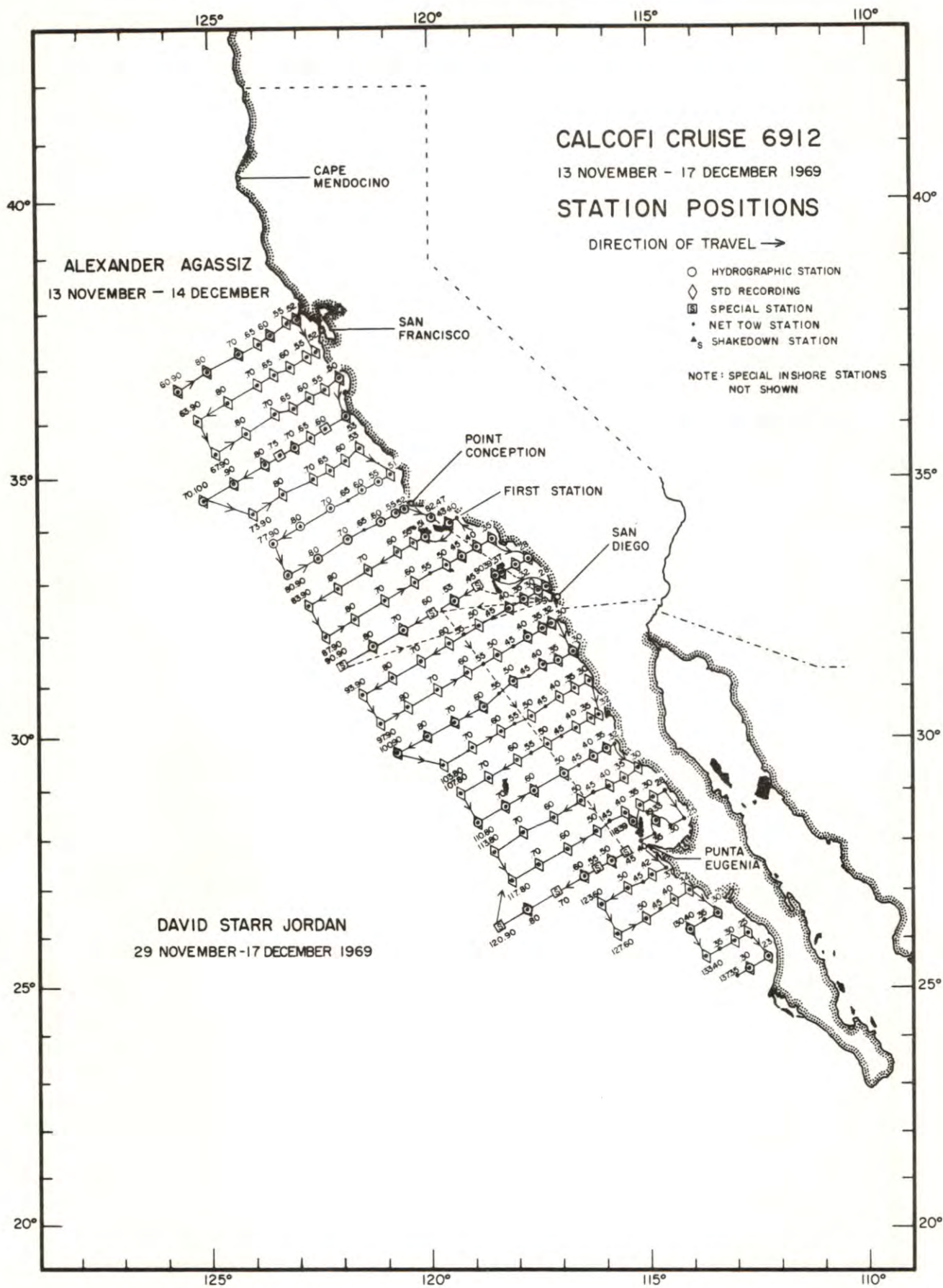


FIGURE 1

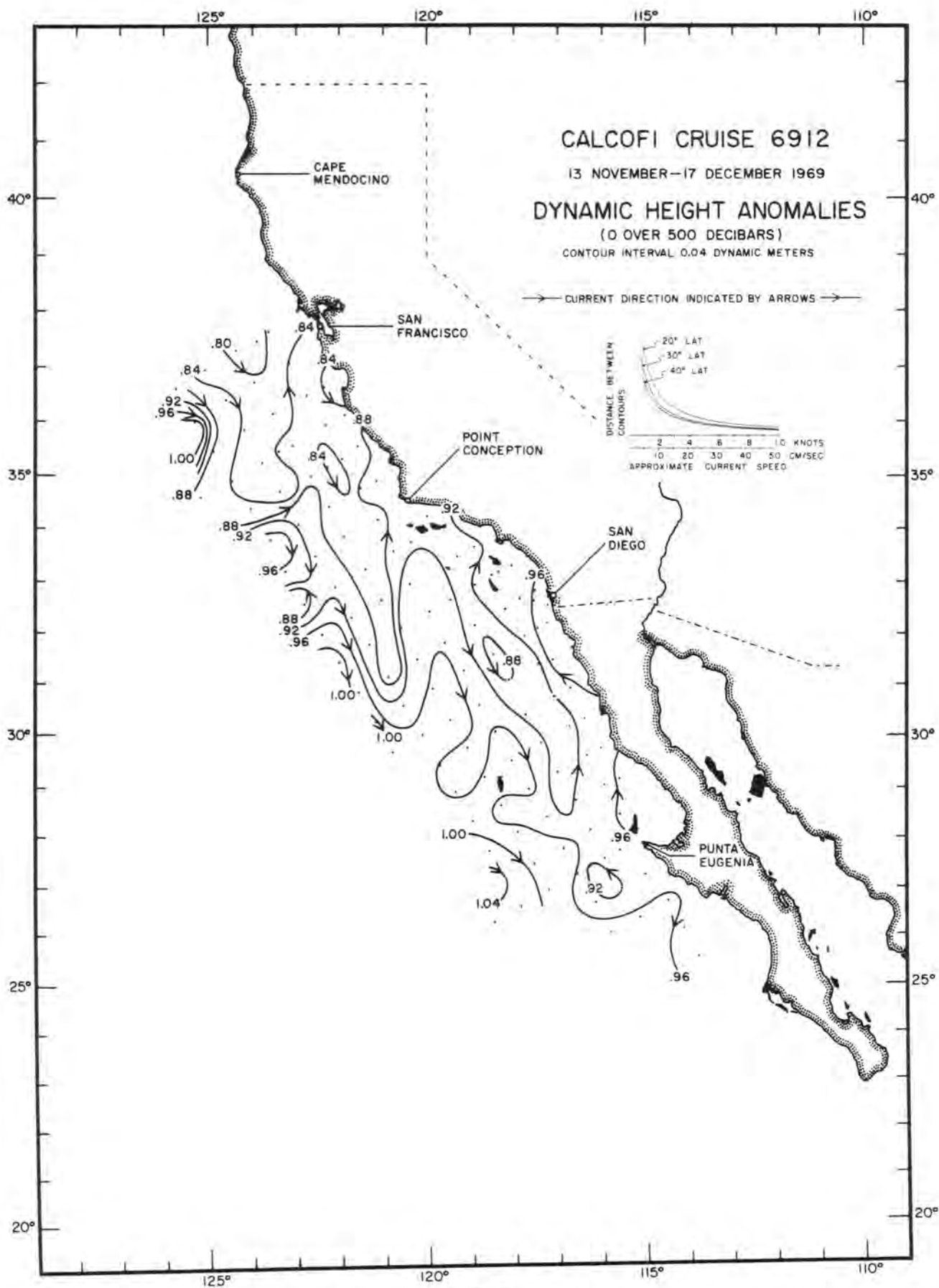


FIGURE 2

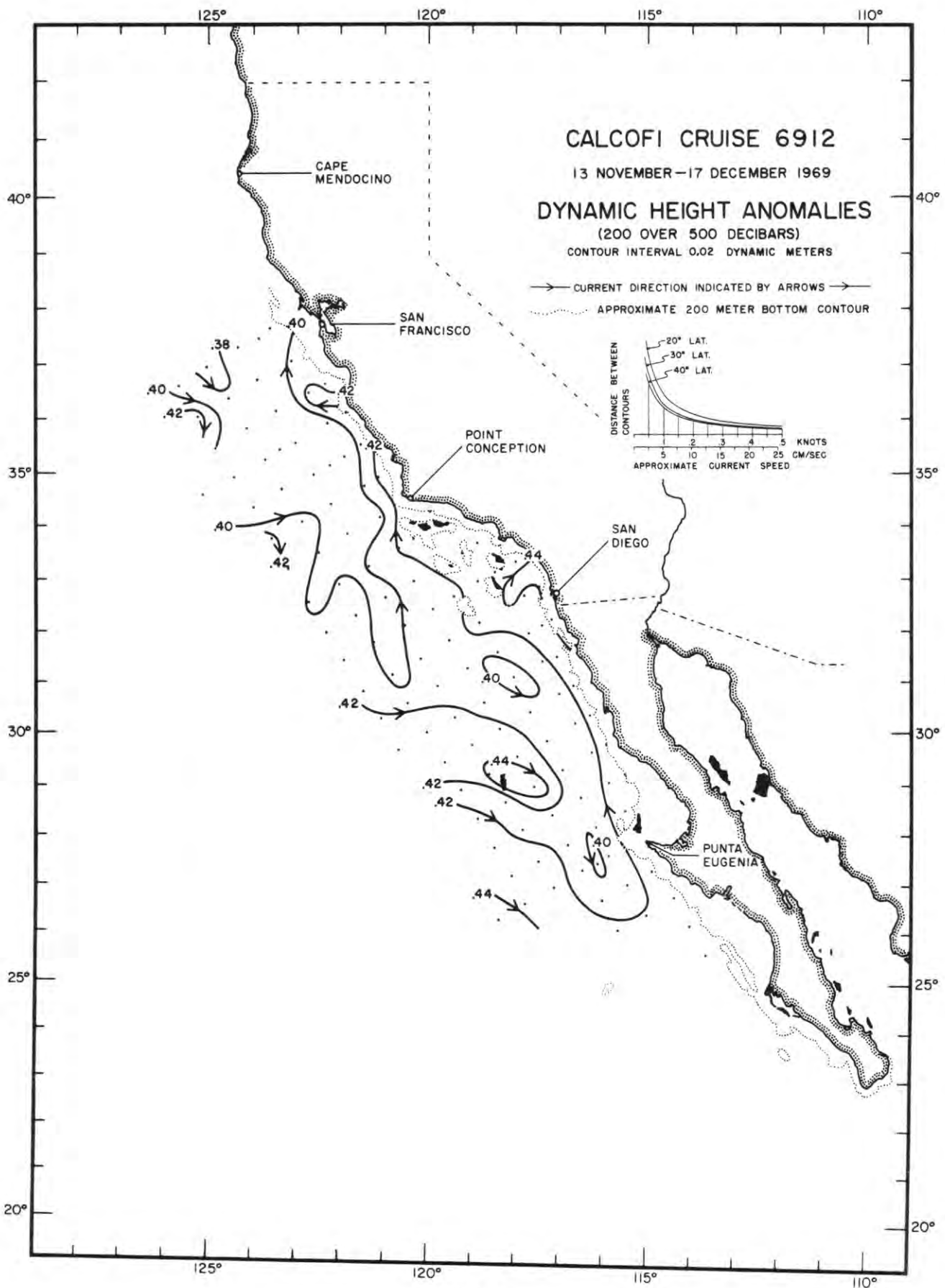


FIGURE 3

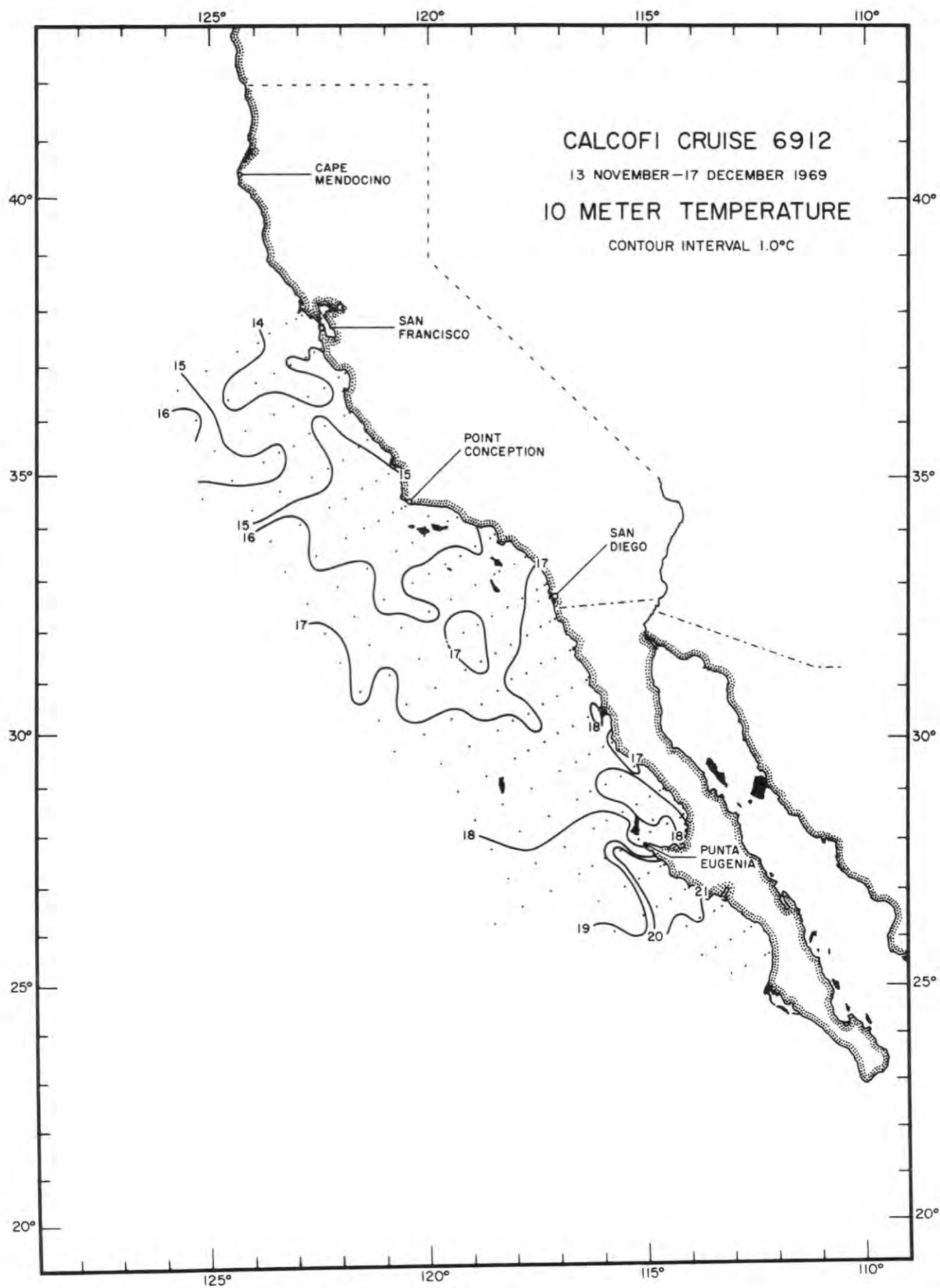


FIGURE 4

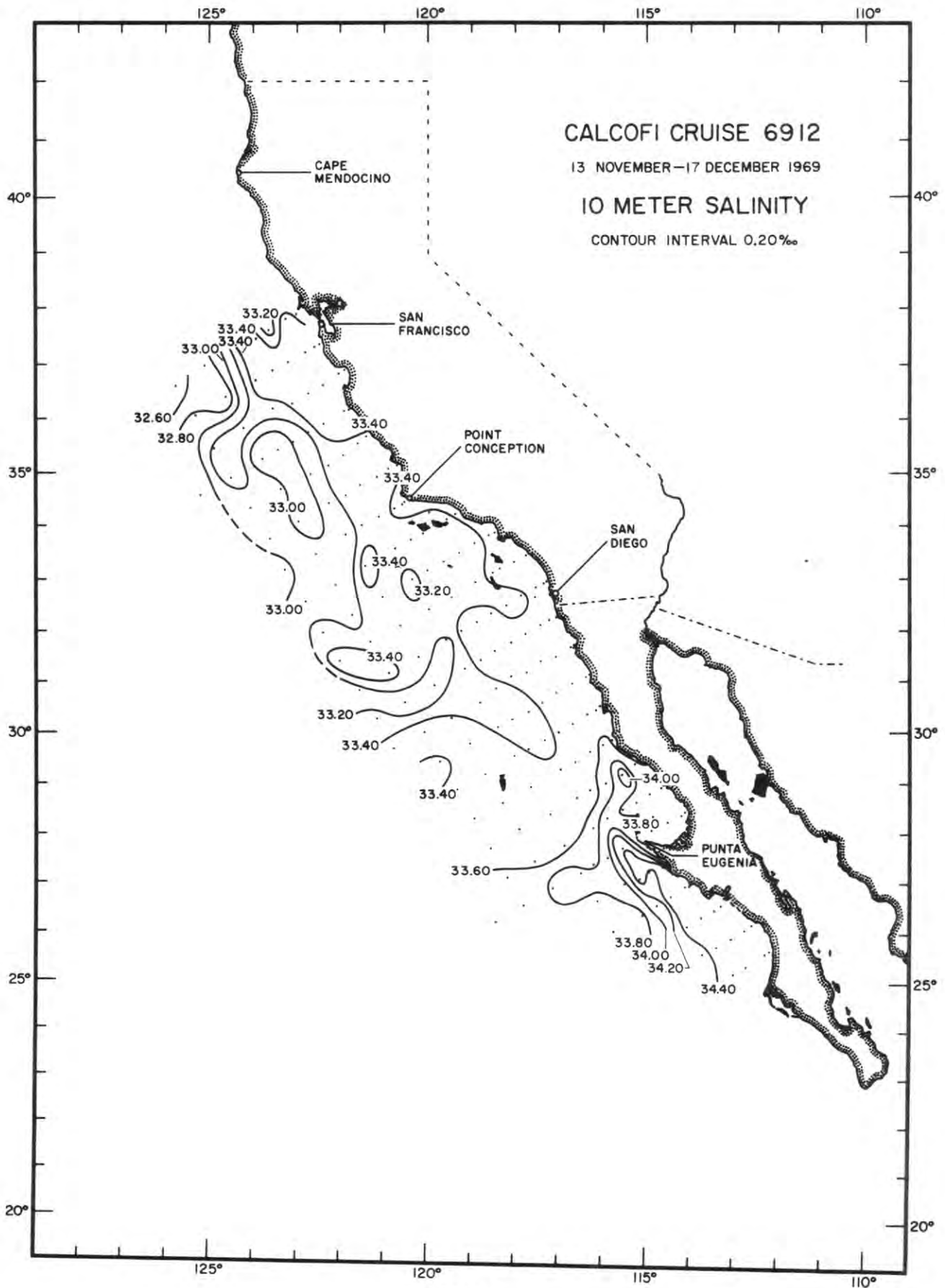


FIGURE 5

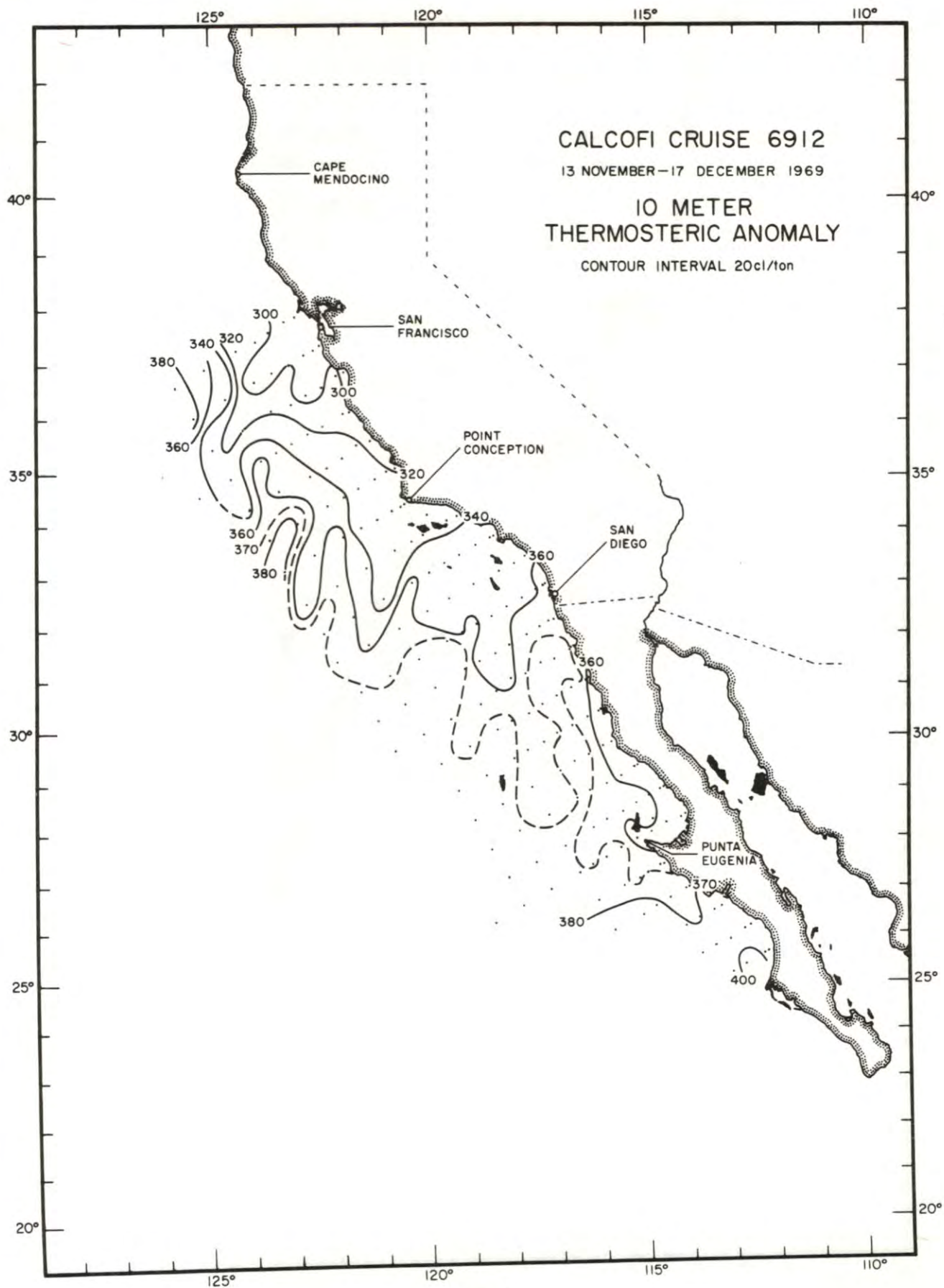


FIGURE 6

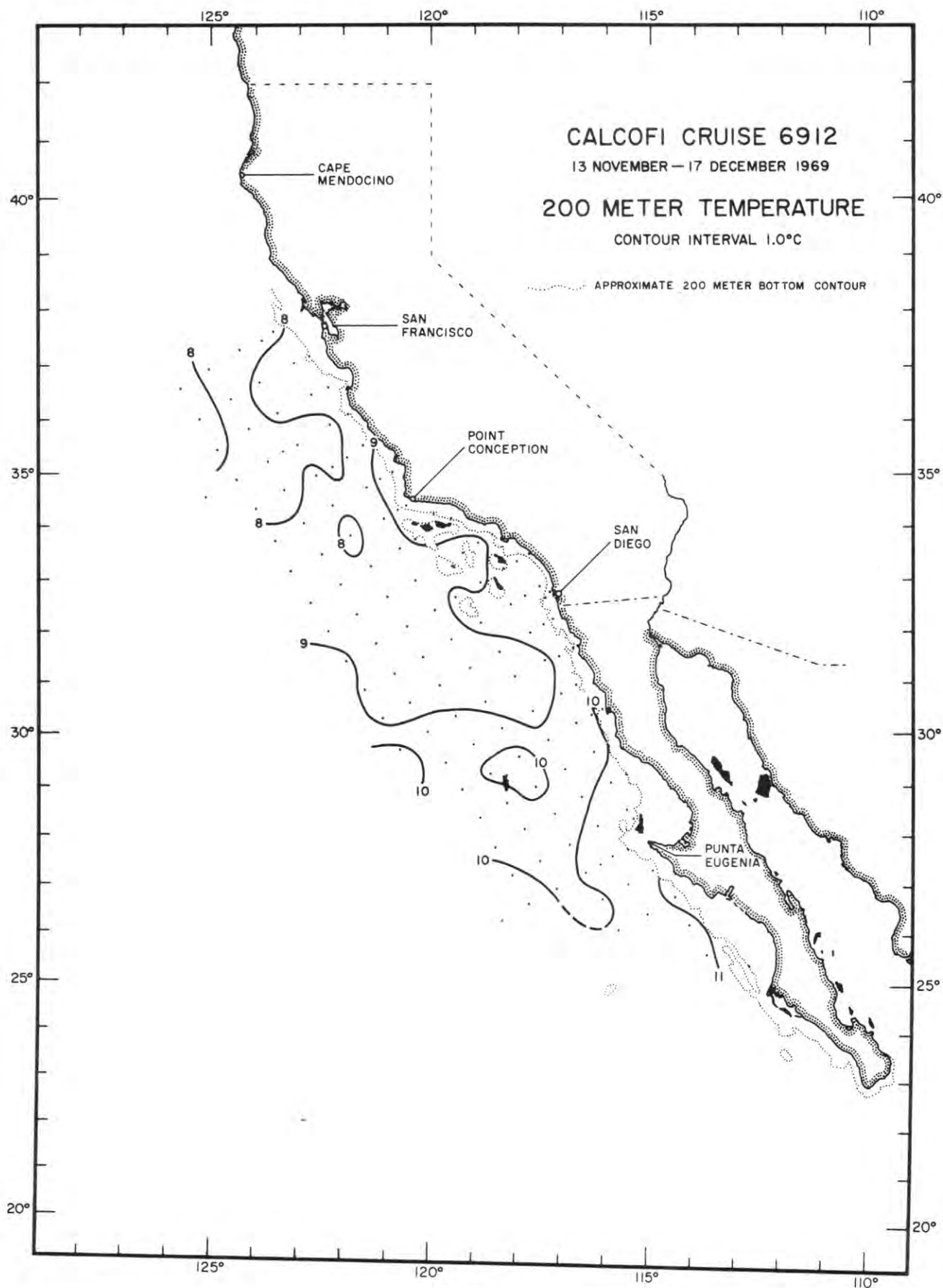


FIGURE 7

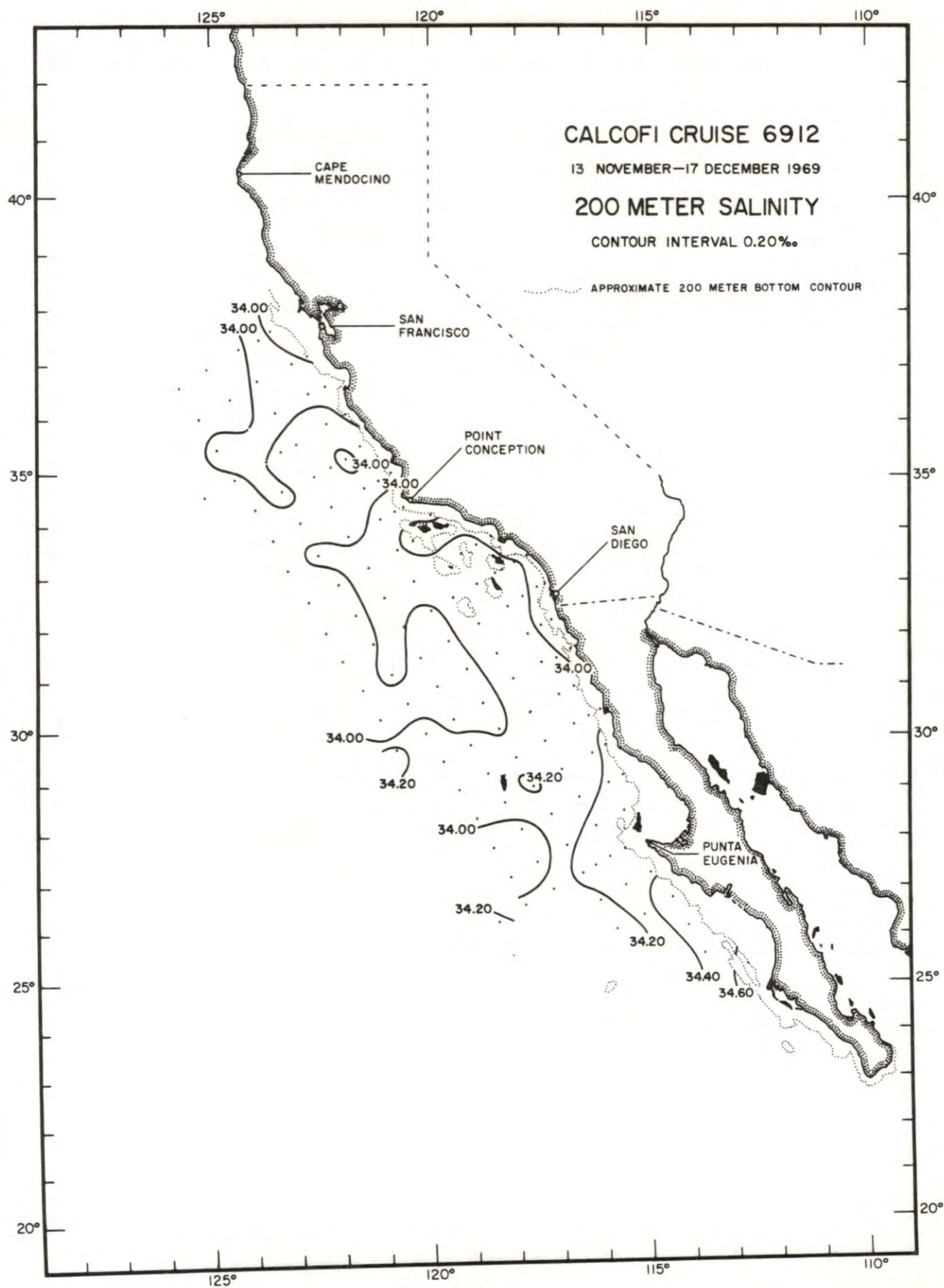


FIGURE 8

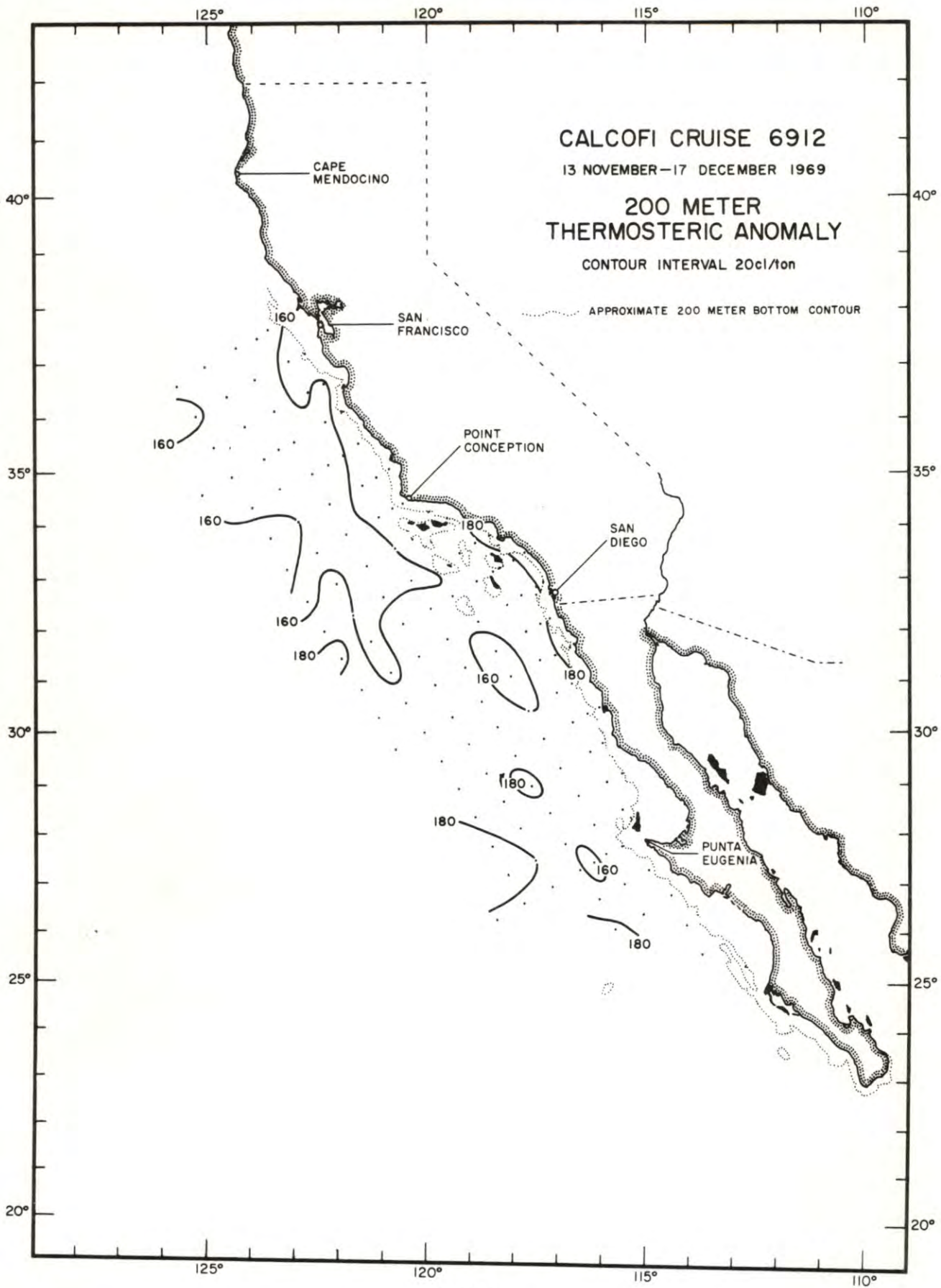


FIGURE 9

PERSONNEL

Cruise 6912

SHIP'S CAPTAINS

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

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz:

Bryan, Walter R.	Marine Technician (in charge) SIO
Ballard, Edward N.	Marine Technician SIO
Beadling, James M.	Marine Science Technician US Coast Guard
Bliss, Kenneth A.	Oceanographer BCF
Bradley, Douglas C.	Electronics Technician SIO
Counts, Robert C.	Fishery Biologist BCF*
Galli, Don R.	Biology Technician BCF*
Huffer, Robert P.	Marine Technician SIO
Jackson, Dan	Visitor
Kaye, Hugh Ross	Electronics Technician SIO
Kellogg, Durrant	Marine Technician SIO
Tont, Sargun A.	Marine Technician SIO
Wells, James A.	Marine Technician SIO

RV David Starr Jordan:

Metoyer, Jack D.	Biological Technician (in charge) BCF*
Kalin, George A.	Physical Science Technician BCF*
Mairot, Maurice F.	Engineering Aide SIO
Paloma, Pedro A.	Fishery Biologist BCF*
Shuey, Raymond E.	Electronics Technician BCF*
Sigrist, Peter H.	Marine Technician SIO
Singleton, James R.	Electronics Technician SIO
Thomas, James E.	Marine Technician SIO

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

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					60052	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
37 53.5N	123 01.5W	11/17/69	2040	GMT	84M	180	9KT	0	180	6	6					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	13.64	33.35		25.009	296.0	0.000	
									10	13.57	33.35		25.023	294.6	0.030	
									20	13.54	33.36		25.037	293.3	0.059	
									30	13.53	33.36		25.039	293.1	0.088	
									50	11.93	33.54		25.491	250.1	0.143	
									75	10.83	33.61		25.745	225.9	0.203	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					60052	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
37 53.5N	123 01.5W	11/17/69	2127	GMT	84M	180	9KT	0	180	6	6					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
2	13.61	33.364	5.80					294.4								
12	13.47	33.354	5.95					292.4								
31	13.42		5.73													
51	12.08		4.32													
71	10.87		3.62													

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					60055	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
37 49.0N	123 16.5W	11/17/69	1852	GMT	112M	010	8KT	0	280	8	6					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	13.17	33.44		25.173	280.3	0.000	
									10	13.15	33.44		25.177	279.9	0.028	
									20	13.15	33.45		25.185	279.2	0.056	
									30	13.15	33.45		25.185	279.2	0.084	
									50	12.38	33.51		25.382	260.4	0.138	
									75	11.42	33.61		25.628	247.0	0.201	
									100	10.58	33.72		25.875	213.6	0.258	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					60060	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
37 37.0N	123 40.0W	11/17/69	1412	GMT	3353M	360	26KT	1	330	12	5					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	13.72	33.18		24.861	310.0	0.000	
									10	13.72	33.18		24.861	310.0	0.031	
									20	13.72	33.18		24.861	310.0	0.062	
									30	13.70	33.18		24.865	309.6	0.093	
									50	10.15	33.10		25.467	252.4	0.149	
									75	9.50	33.38		25.795	221.4	0.209	
									100	9.14	33.63		26.046	197.3	0.262	
									125	8.58	33.79		26.259	177.1	0.309	
									150	8.28	33.91		26.398	163.8	0.352	
									200	7.76	33.99		26.538	150.6	0.432	
									250	7.16	34.03		26.655	139.5	0.507	
									300	6.65	34.05		26.740	131.4	0.576	
									400	5.80	34.13		26.913	115.0	0.704	
									500	5.50	34.26		27.052	101.8	0.819	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					60060	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
37 37.0N	123 40.0W	11/17/69	1527	GMT	3353M	360	26KT	1	330	12	5					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
1	13.72	33.225	5.90					306.7								
11	13.72	33.210	6.12					307.8								
30	13.73	33.217	6.11					307.5								
53	9.77		5.52													
88	9.38		4.37													
116	8.71		3.98													
157	8.20		3.13													
209	7.57		3.04													
263	7.14		2.34													
314	6.58	34.055	1.73					130.1								
421	5.57	34.096	1.11					114.9								
530	5.28		0.44													

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						60065	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S10T	DT	DD		
									0	14.52	33.41		24.872	309.0	0.000		
									10	14.54	33.41		24.867	309.4	0.031		
									20	14.51	33.41		24.874	308.8	0.062		
									30	13.84	33.39		24.998	296.9	0.092		
									50	9.73	33.63		25.950	206.4	0.143		
									75	9.18	33.74		26.125	189.8	0.193		
									100	8.79	33.86		26.281	175.0	0.239		
									125	8.68	33.97		26.384	165.2	0.282		
									150	8.39	33.98		26.436	160.2	0.323		
									200	7.71	34.01		26.561	148.4	0.402		
									250	7.19	34.05		26.667	138.4	0.475		
									300	6.81	34.09		26.750	130.4	0.544		
									400	5.95	34.15		26.912	115.0	0.672		
									500	5.50	34.21		27.037	103.2	0.787		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						60070	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S10T	DT	DD		
	1	14.65	33.421					310.8									
	11	14.50	33.390					310.1									
	31	11.56															
	51	9.90															
	80	9.22															
	110	8.71															
	156	8.01															
	205	7.39															
	256	6.96															
	309	6.44	34.086					126.0									
	408	5.70	34.140					113.1									
	512	5.25															

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						60070	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S10T	DT	DD		
									0	14.64	33.40		24.838	312.2	0.000		
									10	14.68	33.40		24.830	313.0	0.031		
									20	14.35	33.42		24.915	304.8	0.062		
									30	13.33	33.44		25.141	283.4	0.092		
									50	9.93	33.59		25.885	212.6	0.141		
									75	9.43	33.70		26.054	196.6	0.193		
									100	9.05	33.81		26.201	182.6	0.241		
									125	8.69	33.87		26.304	172.8	0.286		
									150	8.38	33.93		26.399	163.8	0.328		
									200	7.67	33.99		26.551	149.3	0.408		
									250	7.18	34.06		26.676	137.5	0.482		
									300	6.62	34.07		26.760	129.5	0.550		
									400	5.71	34.12		26.916	114.7	0.677		
									500	5.41	34.23		27.039	103.0	0.792		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						60080	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S10T	DT	DD		
									0	14.86	32.77		24.307	362.8	0.000		
									10	14.87	32.78		24.313	362.3	0.036		
									20	14.67	32.76		24.340	359.7	0.072		
									30	14.40	32.76		24.397	354.2	0.108		
									50	10.59	32.91		25.244	273.6	0.171		
									75	9.44	33.21		25.670	233.1	0.235		
									100	8.87	33.63		26.089	193.3	0.288		
									125	8.31	33.81		26.315	171.7	0.335		
									150	8.04	33.90		26.426	161.2	0.377		
									200	7.21	33.93		26.570	147.6	0.455		
									250	6.41	33.96		26.701	135.1	0.528		
									300	6.01	34.02		26.800	125.7	0.595		
									400	5.51	34.13		26.948	111.6	0.718		
									500	4.95	34.21		27.080	99.2	0.828		

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 60080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
36 56.5N		125 04.5W		11/15/69	2347 GMT			4398M	320	12KT	2	340 3 5			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S10T	DT	DD
1	14.87	32.787	6.08					361.7							
11	14.84	32.793	6.15					360.7							
31	14.65	32.778	6.16					357.9							
51	11.59		6.19												
82	9.35		4.98												
110	9.90		4.02												
155	7.15		3.71												
203	7.60		3.37												

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 60090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
36 37.0N		125 46.5W		11/15/69	1725 GMT			4493M	350	10KT	2	020 3 5			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S10T	DT	DD
									0	15.61	32.49		23.929	398.8	0.000
									10	15.61	32.50		23.937	398.1	0.040
									20	15.20	32.45		23.989	393.2	0.079
									30	13.89	32.56		24.349	358.8	0.117
									50	12.68	32.62		24.791	316.7	0.185
									75	11.89	33.14		25.188	278.9	0.260
									100	10.10	33.37		25.685	231.6	0.324
									125	9.20	33.63		26.036	198.2	0.378
									150	8.69	33.80		26.249	178.0	0.426
									200	8.08	33.95		26.460	158.0	0.511
									250	7.29	33.99		26.605	144.2	0.589
									300	6.56	33.99		26.705	134.7	0.661
									400	5.57	34.04		26.870	119.1	0.792
									500	5.01	34.15		27.023	104.5	0.909

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 60090

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
36 37.0N		125 46.5W		11/15/69	1807 GMT			4493M	350	10KT	2	020 3 5			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S10T	DT	DD
	0	15.61													
	10	15.59													
	30	13.54													
	50	12.35													
	80	9.87													
	110	9.03													
	155	8.33													
	203	7.80													
	253	7.15													
	307	6.51	34.021					131.8							
	407	5.37	34.021					118.2							
	512	4.85													

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 63050

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
37 23.0N		122 28.0W		11/18/69	0248 GMT			37M	350	16KT					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S10T	DT	DD
									0	13.57	33.48		25.123	285.1	0.000
									10	13.57	33.48		25.123	285.1	0.029
									20	13.55	33.48		25.127	284.7	0.057

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 63052

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
37 18.5N		122 36.5W		11/18/69	0401 GMT			84M	350	15KT					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S10T	DT	DD
									0	14.10	33.45		24.991	297.7	0.000
									10	14.11	33.46		24.996	297.1	0.030
									20	14.11	33.46		24.996	297.1	0.060
									30	14.10	33.47		25.006	296.2	0.089
									50	12.82	33.48		25.273	270.8	0.146

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					63055
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
37 12.5N	122 50.0W	11/18/69	0539	GMT		325M	360	12KT	0	230	3	6			
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S16T	DT	DD
									0	13.98	33.45		25.016	295.3	0.000
									10	13.98	33.45		25.016	295.3	0.030
									20	13.98	33.45		25.016	295.3	0.059
									30	13.96	33.45		25.020	294.9	0.089
									50	11.47	33.46		25.514	247.9	0.143
									75	10.48	33.59		25.791	221.5	0.202
									100	9.75	33.74		26.032	198.6	0.255
									125	9.49	33.78		26.106	191.6	0.304
									150	9.22	33.89		26.236	179.3	0.351
									200	8.55	33.96		26.399	163.7	0.439
									250	8.07	34.09		26.571	147.5	0.519
									300	7.47	34.10		26.666	138.4	0.592

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					63060
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
37 02.5N	123 11.5W	11/18/69	0831	GMT		2690M	010	9KT	0	270	5				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S16T	DT	DD
									0	14.08	33.42		24.972	299.5	0.000
									10	14.09	33.42		24.970	299.7	0.030
									20	14.10	33.43		24.975	299.1	0.060
									30	14.09	33.43		24.977	298.9	0.090
									50	11.45	33.50		25.552	244.2	0.144
									75	10.16	33.67		25.909	210.4	0.202
									100	9.78	33.83		26.097	192.4	0.252
									125	9.51	33.91		26.204	182.3	0.300
									150	9.21	33.95		26.284	174.7	0.345
									200	8.80	34.04		26.420	161.8	0.431
									250	8.34	34.10		26.538	150.6	0.511
									300	7.81	34.12		26.662	138.8	0.586
									400	6.80	34.18		26.849	121.0	0.721
									500	5.84	34.23		26.987	108.0	0.842

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					63065
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
36 52.5N	123 33.5W	11/18/69	1124	GMT		3730M	050	10KT	02						
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S16T	DT	DD
									0	13.54	33.44		25.098	287.4	0.000
									10	13.56	33.45		25.102	287.1	0.029
									20	13.56	33.45		25.102	287.1	0.057
									30	13.55	33.45		25.104	286.9	0.086
									50	11.51	33.48		25.522	247.1	0.140
									75	10.49	33.54		25.751	225.4	0.199
									100	10.06	33.75		25.988	202.8	0.253
									125	9.64	33.84		26.128	189.5	0.303
									150	9.27	33.94		26.267	176.3	0.349

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					63070
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
36 41.5N	123 57.0W	11/18/69	1407	GMT		3918M	070	6KT	1	310	2	4			
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	S16T	DT	DD
									0	13.95	33.43		25.006	296.2	0.000
									10	13.96	33.43		25.004	296.4	0.030
									20	13.96	33.43		25.004	296.4	0.059
									30	13.95	33.44		25.014	295.4	0.089
									50	12.05	33.52		25.452	253.7	0.144
									75	10.38	33.53		25.762	224.3	0.204
									100	9.42	33.65		26.016	200.1	0.258
									125	8.91	33.80		26.215	181.2	0.306
									150	8.64	33.87		26.312	172.0	0.351
									200	8.09	34.01		26.505	153.7	0.434
									250	7.50	34.00		26.612	143.6	0.510
									300	6.86	34.07		26.728	132.6	0.581
									400	5.86	34.11		26.890	117.2	0.711
									500	5.42	34.24		27.046	102.4	0.826

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						67080			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
35 49.0N	124 12.0W	11/19/69	0832	GMT		4014M	100	4KT							
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SI6T	DT	DD
									0	14.67	33.39		24.824	313.5	0.000
									10	14.67	33.39		24.824	313.5	0.031
									20	14.68	33.40		24.830	313.0	0.063
									30	14.60	33.41		24.855	310.6	0.094
									50	14.59	33.42		24.907	305.6	0.156
									75	10.48	33.41		25.651	234.8	0.224
									100	9.41	33.64		26.010	200.7	0.279
									125	8.99	33.78		26.187	183.9	0.327
									150	8.64	33.90		26.335	169.8	0.372
									200	7.95	34.00		26.518	152.5	0.454
									250	7.24	34.06		26.667	138.3	0.529
									300	6.85	34.11		26.761	129.4	0.598
									400	5.86	34.17		26.937	112.7	0.724
									500	5.60	34.29		27.064	100.7	0.836

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						67090			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
35 28.5N	124 54.5W	11/19/69	0340	GMT		4593M	080	9KT							
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SI6T	DT	DD
									0	15.16	33.30		24.649	330.2	0.000
									10	15.17	33.30		24.647	330.4	0.033
									20	15.06	33.30		24.671	328.1	0.066
									30	15.05	33.30		24.673	327.9	0.099
									50	14.21	33.28		24.837	312.3	0.163
									75	10.91	33.35		25.530	246.4	0.233
									100	9.61	33.59		25.938	207.5	0.291
									125	9.00	33.62		26.168	185.7	0.340
									150	8.71	33.90		26.524	170.9	0.385
									200	8.07	34.01		26.508	153.4	0.468
									250	7.55	34.07		26.631	141.7	0.544
									300	7.20	34.12		26.720	133.3	0.615
									400	6.36	34.19		26.889	117.3	0.745
									500	5.68	34.25		27.022	104.6	0.862

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						70053			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
36 06.5N	121 55.0W	11/20/69	1447	GMT		1064M	320	3KT	1						
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SI6T	DT	DD
									0	14.57	33.43		24.876	308.5	0.000
									10	14.56	33.44		24.886	307.6	0.031
									20	14.47	33.45		24.913	305.1	0.061
									30	14.27	33.45		24.955	301.0	0.092
									50	14.08	33.46		25.003	296.5	0.152
									75	12.14	33.44		25.373	261.2	0.222
									100	10.28	33.63		25.857	215.3	0.282
									125	9.70	33.77		26.064	195.6	0.334
									150	9.29	33.87		26.209	181.8	0.382
									200	8.83	34.04		26.415	162.2	0.469
									250	8.29	34.09		26.538	150.6	0.550
									300	7.71	34.14		26.663	138.7	0.624
									400	6.52	34.19		26.868	119.3	0.759
									500	5.93	34.25		26.991	107.6	0.878

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						70053			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
36 06.5N	121 55.0W	11/20/69	1546	GMT		1064M	320	3KT	1						
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SI6T	DT	DD
									1	14.57	33.454		5.69		
									11	14.57	33.457		5.81		
									31	14.19	33.458		5.49		
									50	13.48			5.13		
									80	11.44			4.56		
									109	9.87			3.86		
									153	9.23			3.13		
									203	8.84			2.50		
									251	8.22			2.16		
									305	7.66	34.139		1.60		
									402	6.59	34.163		0.95		
									503	5.90			0.55		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							70070
LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
35 32.5N		123 05.5W		11/21/69	1436 GMT		3881M	330	21KT	1	330 3 4						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD		
1	14.92	33,185	6.04					333.6									
11	14.92	33,193	6.03					333.0									
30	14.92	33,182	5.96					333.8									
49	10.84		5.57														
79	9.74		4.76														
108	8.99		3.75														
151	8.37		3.28														
201	7.77		2.77														
250	7.19		2.27														
303	6.63	34,048	1.77					131.3									
401	5.88	34,116	1.15					117.0									
504	5.42		0.59														

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							70075
LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
35 23.0N		123 27.0W		11/21/69	2323 GMT		1918M	320	14KT	2	330 8 20						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD		
									0	15.10	32.94		24.386	355.3	0.000		
									10	15.10	32.95		24.394	354.5	0.036		
									20	15.10	32.95		24.394	354.5	0.071		
									30	15.09	32.98		24.419	352.1	0.106		
									50	11.92	32.97		25.051	291.9	0.171		
									75	9.76	33.19		25.602	239.5	0.238		
									100	9.21	33.57		25.988	202.8	0.293		
									125	8.82	33.77		26.206	182.1	0.342		
									150	8.50	33.89		26.349	168.5	0.387		
									200	7.80	33.99		26.532	151.1	0.468		
									250	7.09	34.01		26.649	140.0	0.543		
									300	6.77	34.07		26.740	131.4	0.612		
									400	6.18	34.19		26.912	115.1	0.741		
									500	5.55	34.24		27.033	103.6	0.856		

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							70075
LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
35 23.0N		123 27.0W		11/22/69	0032 GMT		1918M	320	14KT	2	330 8 20						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD		
1	15.20	33,013	5.80					352.0									
11	15.21	33,006	5.97					352.7									
31	15.15	33,000	5.95					351.9									
51	10.91		5.65														
80	9.58		4.83														
110	9.00		4.17														
155	8.38		3.02														
205	7.62		2.76														
254	7.03		2.26														
308	6.64	34,087	1.46					128.5									
407	6.12	34,174	0.71					115.5									
510	5.26		0.44														

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							70080
LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
35 13.0N		123 48.0W		11/22/69	0820 GMT		4193M	340	24KT	1	330 8 10						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD		
									0	15.06	32.78		24.272	366.2	0.000		
									10	15.07	32.79		24.277	365.6	0.037		
									20	15.17	33.05		24.455	348.7	0.072		
									30	15.30	33.28		24.603	334.5	0.107		
									50	11.33	33.40		25.493	249.9	0.165		
									75	9.40	33.66		26.027	199.1	0.222		
									100	8.86	33.78		26.207	182.0	0.270		
									125	8.59	33.88		26.327	170.6	0.314		
									150	8.17	33.95		26.446	159.3	0.356		
									200	7.55	34.00		26.576	146.9	0.434		
									250	6.97	34.05		26.697	135.5	0.507		
									300	6.63	34.09		26.774	128.1	0.574		
									400	5.82	34.15		26.926	113.7	0.700		
									500	5.42	34.24		27.046	102.4	0.814		

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 700A0

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
35 13.0N	123 48.0W	11/22/69	0926 GMT	4193M	340	24KT	1	330 8 10							
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.03	32,816	U	5.86											
10	15.04	32,788		5.87				365.2							
29	15.42	33,320		5.91				334.1							
49	11.23			4.62											
79	9.08			3.77											
109	8.59			3.35											
131	8.07			2.77											
197	7.47			2.45											
242	6.91			1.91											
292	6.54	34,093		1.49				126.8							
385	5.91	34,125		0.92				116.7							

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 70090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
34 52.0N	124 30.0W	11/22/69	1953 GMT	4403M	360	22KT	1	350 8 8							
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.08	33.35							24.705	324.9	0.000				
10	15.08	33.35							24.705	324.9	0.032				
20	15.08	33.35							24.705	324.9	0.065				
30	15.07	33.36							24.715	323.9	0.098				
50	14.18	33.32							24.874	308.8	0.161				
75	10.55	33.55							25.748	225.6	0.228				
100	9.42	33.66							26.024	199.4	0.282				
125	8.96	33.79							26.199	182.7	0.330				
150	8.55	33.89							26.344	168.9	0.375				
200	7.77	33.99							26.537	150.7	0.456				
250	6.98	34.02							26.672	137.8	0.530				
300	6.42	34.05							26.771	126.5	0.599				
400	5.65	34.12							26.926	113.8	0.724				
500	5.02	34.21							27.069	100.1	0.836				

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 70090

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
34 52.0N	124 30.0W	11/22/69	2050 GMT	4403M	360	22KT	1	350 8 8							
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.08	33,369		5.90											
10	15.07	33,370		5.89				323.5							
30	15.06	33,368		5.94				323.2							
54	11.89			4.80				323.1							
89	9.47			3.89											
119	8.99			3.53											
164	8.31			3.07											
218	7.53			2.52											
271	6.59			2.03											
325	6.16	34,058		1.46				124.7							
433	5.27	34,138		0.85				108.3							
542	4.84			0.42											

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 70100

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
34 34.0N	125 11.5W	11/23/69	0150 GMT	4574M	010	23KT	1	350 12 8							
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	14.70	32.95							24.480	346.3	0.000				
10	14.71	32.97							24.493	345.1	0.035				
20	14.69	32.97							24.497	344.7	0.069				
30	14.79	33.29							24.722	323.3	0.103				
50	12.48	33.02							24.984	298.3	0.165				
75	11.27	33.40							25.504	248.8	0.234				
100	9.06	33.52							25.973	204.3	0.291				
125	8.56	33.72							26.207	182.0	0.340				
150	8.30	33.90							26.357	167.8	0.384				
200	7.83	33.97							26.512	153.0	0.466				
250	7.13	34.01							26.643	140.6	0.541				
300	6.68	34.06							26.744	131.0	0.611				
400	6.02	34.15							26.901	116.1	0.739				
500	5.59	34.24							27.050	102.0	0.854				

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 70100

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 34.0N		125 11.5W		11/23/69	0242 GMT			4574M	010	23KT	1	350 12 8			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	14.79	33.028	5.81					342.5							
11	14.79	33.029	5.78					342.4							
31	14.87	33.244	5.84					328.3							
55	11.00		5.70												
90	9.22		4.51												
120	8.69		3.74												
163	8.25		3.68												
215	7.64		2.72												
268	7.08		1.83												
320	6.56	34.068	1.54					128.9							
425	5.86	34.142	0.64					114.8							
533	5.23		0.44												

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73050

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 37.5N		121 17.5W		11/24/69	0858 GMT			103M	090	5KT	0	330 2 5			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	14.40	33.39		24.882	308.0	0.000
									10	14.41	33.39		24.880	308.2	0.031
									20	14.40	33.39		24.882	308.0	0.062
									30	14.40	33.39		24.882	308.0	0.093
									50	14.25	33.38		24.905	305.8	0.154
									75	12.67	33.48		25.302	268.0	0.226

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73053

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 31.5N		121 28.5W		11/24/69	0644 GMT			741M	310	5KT	0	310 1 3			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.13	33.32		24.671	328.1	0.000
									10	15.12	33.34		24.689	326.4	0.033
									20	15.04	33.36		24.722	323.3	0.065
									30	14.28	33.26		24.807	315.2	0.097
									50	11.10	33.29		25.449	254.0	0.154
									75	10.42	33.54		25.763	224.2	0.214
									100	9.69	33.69		26.003	201.4	0.268
									125	9.60	33.86		26.150	187.4	0.317
									150	9.21	33.93		26.269	176.1	0.363
									200	8.56	33.98		26.410	162.7	0.450
									250	8.21	34.14		26.589	145.7	0.529
									300	7.18	34.08		26.691	136.0	0.602
									400	6.49	34.19		26.872	118.9	0.734
									500	5.95	34.26		26.997	107.0	0.853

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
35 18.5N		121 58.0W		11/24/69	0335 GMT			2502M	340	15KT	0	340 5 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.09	33.29		24.657	329.4	0.000
									10	15.08	33.30		24.667	328.5	0.033
									20	15.10	33.31		24.670	328.2	0.066
									30	15.10	33.32		24.678	327.5	0.099
									50	12.29	33.13		25.105	286.8	0.160
									75	10.41	33.32		25.594	240.3	0.226
									100	9.50	33.52		25.902	211.0	0.283
									125	8.99	33.74		26.156	186.9	0.334
									150	8.71	33.93		26.348	168.6	0.379
									200	8.24	34.04		26.506	153.6	0.461
									250	7.87	34.14		26.640	140.9	0.536
									300	7.05	34.15		26.764	129.1	0.606
									400	6.24	34.20		26.912	115.0	0.733
									500	5.72	34.25		27.017	105.1	0.849

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73065

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
35 08.0N		122 18.0W		11/23/69		2156 GMT			3918M	340	15KT	1	340 5 8		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0	14.95	33.33											24.718	323.6	0.000
10	14.88	33.34											24.741	321.5	0.032
20	14.87	33.38											24.774	318.3	0.064
30	14.85	33.38											24.778	317.9	0.096
50	11.55	33.05											25.182	279.5	0.156
75	9.66	33.37											25.759	224.6	0.219
100	9.15	33.66											26.068	195.3	0.272
125	8.79	33.84											26.265	176.5	0.319
150	8.59	33.92											26.359	167.6	0.363
200	7.87	33.99											26.522	152.1	0.444
250	7.36	34.07											26.658	139.1	0.519
300	6.69	34.08											26.759	129.6	0.588
400	5.76	34.12											26.910	115.3	0.716
500	5.38	34.23											27.043	102.7	0.830

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73070

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 58.5N		122 40.5W		11/23/69		1903 GMT			4091M	340	15KT	1	340 6 8		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0	15.00	32.91											24.385	355.4	0.000
10	14.86	33.02											24.499	344.5	0.035
20	14.83	33.07											24.544	340.2	0.069
30	14.80	33.08											24.558	338.9	0.103
50	11.38	32.79											25.011	295.8	0.167
75	10.05	32.96											25.375	261.1	0.237
100	9.60	33.45											25.831	217.7	0.297
125	9.18	33.66											26.063	195.7	0.349
150	8.75	33.82											26.256	177.4	0.397
200	8.06	33.96											26.470	157.0	0.482
250	7.34	34.00											26.606	144.1	0.559
300	6.87	34.06											26.718	133.4	0.630
400	6.23	34.13											26.858	120.2	0.762
500	5.47	34.23											27.032	103.7	0.880

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73080

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 39.5N		123 22.0W		11/23/69		1411 GMT			4164M	360	15KT	1	330 7 6		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0	14.92	33.01											24.479	346.4	0.000
10	14.93	33.02											24.464	345.9	0.035
20	14.93	33.04											24.500	344.4	0.069
30	14.97	33.12											24.552	339.4	0.103
50	12.15	33.28											25.248	273.2	0.165
75	10.16	33.59											25.846	216.3	0.226
100	9.15	33.73											26.122	190.1	0.278
125	8.74	33.84											26.273	175.7	0.324
150	8.49	33.92											26.374	166.1	0.367
200	7.86	34.01											26.539	150.5	0.448
250	7.25	34.05											26.658	139.2	0.522
300	6.75	34.08											26.750	130.4	0.592
400	5.88	34.15											26.919	114.4	0.719
500	5.27	34.24											27.064	100.7	0.832

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 73090

LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES		
34 18.5N		124 04.0W		11/23/69		0910 GMT			3451M	020	20KT	1	330 12 6		
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0	14.49	33.01											24.570	337.7	0.000
10	14.48	33.01											24.573	337.5	0.034
20	14.49	33.01											24.570	337.7	0.068
30	14.49	33.01											24.570	337.7	0.101
50	12.10	32.93											24.987	298.1	0.165
75	10.15	33.10											25.467	252.4	0.234
100	9.22	33.45											25.893	211.9	0.293
125	8.88	33.67											26.118	190.4	0.344
150	8.58	33.85											26.306	172.6	0.390
200	7.98	33.98											26.498	154.4	0.473
250	7.58	34.10											26.650	139.9	0.548
300	6.71	34.08											26.756	129.9	0.618
400	5.96	34.16											26.917	114.7	0.745
500	5.44	34.24											27.044	102.6	0.859

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							80070
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 49.0N		121 52.0W		11/26/69		0645 GMT			3794M	350	9KT	1	320 1 3				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
1	15.95	33.099	5.80					361.5	0	15.95	33.099	5.80	24.320	361.5	0.000		
11	15.95	33.091	5.80					362.1	10	15.95	33.094	5.80	24.314	362.1	0.036		
31	15.92	33.093	5.82					361.3	20	15.94	33.094	5.81	24.318	361.8	0.072		
41	13.97	33.053	6.03					324.2	30	15.92	33.095	5.82	24.322	361.4	0.109		
51	12.06	32.998	6.01					292.3	50	12.25	33.004	6.01	25.018	295.1	0.175		
66	11.23	33.087	5.69					271.3	75	10.82	33.192	5.36	25.421	256.7	0.244		
81	10.57	33.265	5.14					247.2	100	9.81	33.433	4.74	25.783	222.3	0.304		
101	9.77	33.440	4.72					221.1	125	9.24	33.714	3.89	26.093	192.8	0.357		
126	9.23	33.723	3.86					191.8	150	8.90	33.860	3.56	26.263	176.7	0.403		
146	8.96	33.840	3.60					179.0	200	7.91	33.977	3.03	26.504	153.8	0.488		
175	8.44	33.945	3.34					163.5	250	7.91	34.035	2.20	26.837	141.2	0.563		
206	7.80	33.979	2.95					151.9	300	6.73	34.087	1.52	26.757	129.8	0.633		
236	7.49	34.014	2.46					145.1	400	6.06	34.175	0.86	26.914	114.9	0.760		
275	6.99	34.067	1.78					134.5	500	5.50	34.267	0.36	27.057	101.3	0.874		
334	6.45	34.107	1.28					124.6									
407	6.03	34.181	0.82					113.9									
481	5.59	34.251	0.43					103.5									
559	5.30	34.305	0.25					96.1									

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							80080
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 28.5N		122 32.0W		11/26/69		0138 GMT			4308M	350	13KT	2	320 1 2				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
1	15.93	33.182	5.80					355.0	0	15.93	33.182	5.80	24.388	355.0	0.000		
11	15.84	33.172	5.80					353.8	10	15.86	33.176	5.80	24.399	354.0	0.035		
31	15.18	33.087	5.86					346.2	20	15.53	33.131	5.82	24.437	350.4	0.071		
41	15.16	33.101	5.91					344.7	30	15.21	33.093	5.86	24.477	346.6	0.106		
50	15.42	33.387	5.65					329.2	50	15.42	33.387	5.65	24.659	329.2	0.173		
65	12.22	33.356	5.10					268.9	75	11.10	33.450	4.62	25.572	242.4	0.245		
81	10.69	33.509	4.36					231.0	100	10.01	33.602	4.12	25.880	213.0	0.303		
101	9.99	33.604	4.12					212.5	125	9.47	33.784	3.67	26.112	191.0	0.354		
125	9.47	33.784						191.0	150	8.84	33.900	3.35	26.303	172.9	0.400		
145	8.94	33.879	3.35					175.8	200	8.27	34.015	2.80	26.480	156.0	0.484		
175	8.48	33.973	3.30					162.1	250	7.53	34.032	2.41	26.603	144.4	0.561		
205	3.23	34.018	2.70					155.1	300	6.89	34.047	1.91	26.705	134.7	0.633		
235	7.77	34.032	2.53					147.6	400	6.21	34.131	1.18	26.861	119.9	0.765		
274	7.18	34.031	2.20					139.7	500	5.53	34.232	0.51	27.026	104.3	0.883		
334	6.59	34.075	1.55					128.7									
429	6.06	34.157	1.03					116.1									
484	5.63	34.216	0.55					106.6									
563	5.26	34.283	0.33					97.3									

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912							80090
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 10.0N		123 13.0W		11/25/69		1939 GMT			4308M	350	8KT	1	340 4 7				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
1	16.35	32.963	5.73					380.1	0	16.35	32.963	5.73	24.125	380.1	0.000		
11	16.33	32.958	5.72					380.0	10	16.33	32.961	5.72	24.126	380.0	0.038		
31	16.30	32.959	5.66					379.3	20	16.32	32.961	5.69	24.130	379.7	0.076		
56	13.14	32.901	6.19					319.4	30	16.30	32.961	5.66	24.133	379.4	0.114		
66	12.42	32.971	6.10					300.8	50	13.97	32.896	6.08	24.590	335.9	0.186		
76	11.88	32.980	6.10					290.5	75	11.93	32.983	6.10	25.058	291.3	0.265		
90	11.31	33.007	5.97					278.5	100	11.12	33.082	5.72	25.283	269.9	0.335		
104	11.05	33.120	5.60					265.8	125	10.23	33.454	4.78	25.727	227.6	0.398		
129	10.06	33.514	4.63					220.3	150	9.48	33.641	4.25	25.997	201.9	0.452		
148	9.53	33.623	4.31					203.8	200	8.63	33.937	3.19	26.365	167.0	0.546		
172	9.06	33.812	3.63					182.6	250	7.90	34.046	1.92	26.560	148.5	0.627		
202	8.60	33.941	3.16					166.2	300	7.38	34.122	1.51	26.696	135.5	0.700		
231	8.31	33.991	2.22					158.3	400	6.96	34.175	0.85	26.876	118.5	0.833		
257A	7.75	34.065						144.8	500	5.56	34.234	0.47	27.024	104.5	0.950		
310A	7.33	34.127	1.50					134.5									
381A	6.56	34.166	0.95					121.6									
455A	5.85	34.200	0.63					110.4									
535A	5.41	34.264	0.37					100.4									

A) THE LAST FOUR NANSEN BOTTLES OF THIS CAST PRETRIPPED CAUSING THESE DEPTHS TO BE UNCERTAIN.

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						82047
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 15.0N		119 59.5W		11/27/69		0037 GMT			584M	310	9KT	1	270	3	7	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD	
1	16.27	33.416	5.79					345.3	0	16.27	33.416	5.79	24.490	345.3	0.000	
11	15.56	33.387	5.74					332.2	10	15.63	33.391	5.75	24.614	333.5	0.034	
31	14.19	33.359	5.60					306.1	20	14.95	33.374	5.68	24.751	320.5	0.067	
46	13.09	33.342	5.50					286.0	30	14.26	33.362	5.61	24.888	307.4	0.098	
57	12.48	33.368	5.08					272.7	50	12.84	33.352	5.37	25.168	280.8	0.157	
71	12.07	33.387	4.50					263.9	75	11.98	33.401	4.52	25.372	261.3	0.225	
87	11.71	33.436	4.59					253.9	100	11.40	33.467	4.51	25.531	246.3	0.289	
102	11.35	33.471	4.50					245.0	125	10.75	33.608	3.89	25.762	224.3	0.349	
125	10.73	33.608	3.89					224.3	150	9.85	33.779	3.36	26.048	197.1	0.402	
144	9.89	33.721	3.52					202.3	200	9.29	34.064	2.06	26.360	167.5	0.495	
174	9.59	33.945	2.68					180.9	250	8.77	34.155	1.48	26.513	152.9	0.577	
204	9.24	34.075	1.98					165.9	300	8.17	34.194	1.17	26.637	141.1	0.653	
234	8.92	34.130	1.57					156.9	400	7.06	34.214	0.57	26.813	124.5	0.792	
274	8.53	34.180	1.39					147.4	500	6.51	34.248	0.20	26.914	114.9	0.918	
334	7.69	34.201	0.88					133.9								
389	7.18	34.208	0.62					126.5								
448	6.62	34.238						117.0								
508	6.49	34.248	0.17					114.6								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						83043
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 08.0N		119 34.0W		11/29/69		1448 GMT			249M		0KT	0	320	1	5	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD	
									0	15.83	33.38		24.562	338.4	0.000	
									10	15.83	33.38		24.562	338.4	0.034	
									20	15.80	33.37		24.561	338.5	0.068	
									30	15.42	33.28		24.577	337.1	0.102	
									50	12.76	33.11		24.999	296.9	0.165	
									75	11.15	33.39		25.518	247.5	0.234	
									100	10.81	33.56		25.710	229.2	0.294	
									125	10.16	33.69		25.924	208.9	0.349	
									150	9.58	33.82		26.123	190.0	0.400	
									200	9.21	33.98		26.308	172.4	0.492	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						83043
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
34 08.0N		119 34.0W		11/29/69		1530 GMT			249M		0KT	0	320	1	5	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD	
1	15.78	33.405	5.85	0.24	2.	0.03	0.2	335.6								
12	15.79	33.396	5.84	0.26	2.	0.01	0.3	336.4								
32	15.32	33.384	5.83	0.34	3.	0.10	0.6	327.4								
46	14.32		5.53	0.53	5.	0.22	2.5									
55	12.97		4.92	1.16U	8.	0.27	5.5									
69	12.03		4.81	0.97	10.	0.13	8.9									
84	11.30		4.46	1.13	13.	0.05	12.2									
104	10.44		3.88	1.52	20.	0.00	18.0									
128	10.08		3.86	1.71	24.	0.00	21.4									
148	9.61		3.04	2.37	35.	0.01	32.9									
178	9.29	33.933	2.80	2.44	37.	0.00	35.0	177.1								
202	9.17	33.995	2.74	2.63	41.	0.00	38.4	170.7								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						83051
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 52.0N		120 07.5W		11/29/69		1944 GMT			205M	070	1KT	0	49			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD	
									0	15.95	33.38		24.535	341.0	0.000	
									10	15.90	33.38		24.547	339.9	0.034	
									20	15.84	33.38		24.560	338.6	0.068	
									30	15.36	33.36		24.652	330.0	0.102	
									50	13.69	33.26		24.929	303.5	0.165	
									75	12.28	33.34		25.269	271.1	0.237	
									100	10.58	33.56		25.751	225.4	0.300	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						83051
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 52.0N		120 07.5W		11/29/69		2013 GMT			205M	070	1KT	0	49			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SI6T	DT	DD	
0	16.11	33.409	5.74	0.11	3.	0.00	0.0	342.3								
10	15.84	33.404	5.79	0.13	2.	0.00	0.0	336.9								
25	15.54		5.77	0.18	3.	0.07	0.2									
35	15.19		5.73	0.26	4.	0.07	0.9									
44	14.81	33.375	5.59	0.34	5.	0.12	1.9	317.5								
59	13.22		5.22	0.55	8.	0.17	6.1									
73	12.61	33.380	5.07	0.66	9.	0.23	8.0	274.2								
97	10.80	33.574	4.21	1.32	17.	0.15	17.3	228.0								

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 83055

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 44.0N		120 24.5W		11/29/69	2215 GMT			857M	320	5KT	0	100 2 4			
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	16.00	33.33											24.486	345.7	0.000
10	15.73	33.37											24.577	337.0	0.034
20	15.55	33.36											24.610	334.0	0.068
30	15.10	33.34											24.693	326.0	0.101
50	12.24	33.22											25.184	279.2	0.162
75	11.26	33.41											25.513	247.9	0.228
100	10.64	33.56											25.740	226.4	0.288
125	9.96	33.70											25.966	204.9	0.342
150	9.67	33.80											26.092	192.9	0.392
200	9.09	33.95											26.303	172.8	0.486
250	8.54	34.05											26.468	157.2	0.570
300	7.69	34.08											26.619	142.9	0.648
400	6.86	34.09											26.743	131.1	0.790
500	6.10	34.18											26.915	114.8	0.919

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 83060

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 34.0N		120 45.0W		11/30/69	0015 GMT			1387M	340	4KT	0	310 2			
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	15.68	33.40											24.611	333.8	0.000
10	15.44	33.39											24.657	329.4	0.033
20	15.42	33.39											24.661	329.0	0.066
30	15.32	33.38											24.676	327.7	0.099
50	13.74	33.28											24.934	303.0	0.162
75	11.49	33.40											25.464	252.7	0.232
100	10.35	33.61											25.829	217.9	0.291
125	9.65	33.77											26.072	194.8	0.344
150	9.32	33.90											26.227	180.1	0.391
200	8.90	34.08											26.435	160.3	0.478
250	8.43	34.08											26.508	153.4	0.558
300	7.78	34.15											26.661	138.9	0.634
400	6.97	34.18											26.799	125.8	0.772
500	6.14	34.22											26.941	112.3	0.897

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 83070

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
33 14.5N		121 26.0W		11/30/69	0408 GMT			3832M	100	4KT	0	310 3 5			
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	16.24	33.43											24.508	343.6	0.000
10	16.10	33.42											24.532	341.3	0.034
20	15.33	33.36											24.658	329.3	0.068
30	14.90	33.34											24.736	321.9	0.100
50	11.52	33.28											25.365	262.0	0.159
75	10.10	33.56											25.833	217.5	0.219
100	9.35	33.80											26.145	187.9	0.270
125	8.94	33.93											26.312	172.0	0.316
150	8.78	33.98											26.376	166.0	0.359
200	8.25	34.11											26.559	148.5	0.439
250	8.00	34.17											26.644	140.5	0.513
300	7.69	34.20											26.713	134.0	0.584
400	6.79	34.22											26.855	120.5	0.717
500	6.27	34.24											26.940	112.4	0.840

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 83080

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 54.0N		122 08.0W		11/30/69	0925 GMT			4309M	050	2KT	0	310 3 5			
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	16.07	33.10											24.294	364.0	0.000
10	16.06	33.11											24.304	363.1	0.036
20	16.04	33.11											24.308	362.7	0.073
30	15.85	33.12											24.359	357.9	0.109
50	12.90	32.96											24.856	310.5	0.176
75	11.40	33.10											25.248	273.2	0.249
100	10.68	33.25											25.492	249.9	0.315
125	9.60	33.54											25.901	211.1	0.373
150	9.07	33.75											26.151	187.4	0.424
200	8.22	33.93											26.423	161.5	0.512
250	7.27	33.96											26.585	146.1	0.591
300	6.67	33.99											26.690	136.1	0.664
400	6.04	34.10											26.859	120.1	0.797
500	5.51	34.20											27.004	106.4	0.916

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						87040
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 40.0N	118 58.0W	12/ 1/69	1845	GMT	898M	070	10KT	1	340	1	6					
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.39	33.364	5.81	0.37	2.	0.00	0.0	351.7								
10	15.75	33.356	5.91	0.29	3.	0.00	0.0	338.5								
30	15.01		5.85	0.29	4.	0.06	1.0									
49	12.74		5.73		4.											
79	10.89		4.92			0.00	9.6									
109	9.65	33.673	4.16	1.37	20.	0.00	17.5	202.0								
153	9.01		2.98	1.84	31.	0.00	23.0									
203	8.79		2.72	2.13	38.	0.00	25.5									
252	8.60		2.35													
306	7.98		1.83													
404	7.35	34.255 A	1.17					125.2								
509	6.51	34.296 A	0.54					111.2								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						87045
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 30.0N	119 19.0W	12/ 1/69	1530	GMT	1683M	090	1KT	1	49							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.10	33.26	24.410	353.0	0.000											
10	16.08	33.26	24.414	352.6	0.035											
20	16.08	33.26	24.414	352.6	0.071											
30	15.72	33.26	24.495	344.9	0.106											
50	13.94	33.13	24.778	318.0	0.172											
75	11.05	33.40	25.343	245.1	0.243											
100	10.11	33.64	25.894	211.8	0.300											
125	9.95	33.84	26.076	194.4	0.352											
150	9.27	33.89	26.228	180.0	0.399											
200	8.80	34.04	26.420	161.8	0.486											
250	8.55	34.13	26.529	151.4	0.567											
300	8.08	34.20	26.655	139.4	0.642											
400	7.55	34.23	26.785	127.1	0.781											
500	6.70	34.27	26.907	115.6	0.909											

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						87045
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 30.0N	119 19.0W	12/ 1/69	1512	GMT	1683M	090	1KT	1	49							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.06	33.272	5.83	0.16	2.	0.06	0.0	351.3	0	16.06	33.272	5.83	24.428	351.3	0.000	
10	16.04	33.272	5.87	0.18	2.	0.06	0.0	350.8	10	16.04	33.272	5.87	24.432	350.8	0.035	
30	15.79	33.285	5.89	0.24	2.	0.06	0.2	344.5	20	15.91	33.281	5.88	24.466	347.7	0.070	
39	15.08	33.267	5.86	0.26	2.	0.16	0.6	330.9	30	15.79	33.285	5.89	24.499	344.5	0.105	
49	13.94	33.234	5.78	0.34	4.	0.24	2.0	310.3	50	13.82	33.233	5.77	24.880	308.2	0.170	
64	12.23	33.263	5.44	0.58	7.	0.23	6.0	275.9	75	11.24	33.441	4.74	25.540	245.4	0.240	
78	11.01	33.492	4.54	1.02	14.	0.08	13.4	237.6	100	10.04	33.685	3.82	25.939	207.5	0.297	
98	10.11	33.667	3.89	1.42	21.	0.06	19.8	209.8	125	9.47	33.845	3.09	26.160	186.5	0.347	
124	9.48	33.840	3.10	1.76	28.	0.03	25.0	187.0	150	9.22	33.922	2.93	26.259	177.1	0.393	
144	9.27	33.902	2.95	1.87	30.	0.05	26.7	179.1	200	8.74	34.059	2.47	26.443	159.6	0.479	
173	9.05	33.988	2.81	2.00	33.	0.02	28.6	169.4	250	8.47	34.136	1.91	26.545	149.9	0.558	
202	8.72	34.062	2.44	2.18	38.	0.03	31.5	159.0	300	8.06	34.197	1.40	26.655	139.5	0.633	
233	8.60	34.113	2.08					153.4	400	7.52	34.252	0.90	26.807	125.0	0.771	
272	8.28	34.160	1.71					145.3	500	6.59	34.284	0.58	26.932	113.2	0.897	
331	7.83	34.229	1.10					133.7								
405	7.28	34.252	0.90					124.5								
478	6.74	34.273	0.65					115.9								
556	6.25	34.320	0.42					106.2								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						87045
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 30.0N	119 19.0W	12/ 1/69	1420	GMT	1683M	090	1KT	1	49							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.10	33.26	24.410	353.0	0.000											
10	16.10	33.26	24.410	353.0	0.035											
20	16.10	33.25	24.402	353.7	0.071											
30	15.67	33.23	24.483	346.0	0.106											
50	13.90	33.14	24.794	316.4	0.172											
75	11.55	33.29	25.404	258.3	0.244											
100	10.12	33.65	25.900	211.2	0.304											
125	9.45	33.84	26.159	186.5	0.354											
150	9.26	33.90	26.237	179.1	0.400											
200	8.79	34.03	26.413	162.4	0.487											
250	8.51	34.13	26.535	150.8	0.568											
300	8.18	34.18	26.625	142.3	0.643											
400	7.57	34.23	26.782	127.4	0.784											
500	6.73	34.25	26.887	117.5	0.913											

A) THE SALINITY SAMPLES AT 404 AND 509 METERS APPEAR TO HAVE BEEN REVERSED. THEY ARE ASSUMED TO NOW BE IN THE CORRECT ORDER.

RV DAVIU STARR JORDAN CALCOFI CRUISE 6912 87040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 20.0N	119 39.5W	12/ 1/69	1205 GMT	73M	320	4KT	0								
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0	16.22	33.18		24.321	361.4	0.000
									10	16.23	33.22		24.349	358.7	0.036
									20	16.11	33.23		24.384	355.4	0.072
									30	15.40	33.16		24.489	345.4	0.107
									50	12.56	32.99		24.945	302.0	0.172

RV DAVIU STARR JORDAN CALCOFI CRUISE 6912 87040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
33 00.0N	120 21.5W	12/ 1/69	0715 GMT	742M	040	4KT	0								
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0	16.26	33.11		24.258	367.4	0.000
									10	16.26	33.11		24.258	367.4	0.037
									20	16.22	33.11		24.268	366.6	0.073
									30	16.20	33.11		24.272	366.1	0.110
									50	15.64	33.00		24.314	362.2	0.183
									75	11.74	32.99		25.100	287.3	0.265
									100	10.40	32.24		25.533	246.1	0.332
									125	9.54	33.63		25.981	203.5	0.389
									150	9.12	33.78		26.166	185.9	0.438
									200	8.41	34.00		26.449	159.0	0.526
									250	7.87	34.07		26.585	146.1	0.604
									300	7.07	34.07		26.699	135.3	0.677
									400	6.62	34.19		26.854	120.5	0.810
									500	6.03	34.25		26.979	108.8	0.931

RV DAVIU STARR JORDAN CALCOFI CRUISE 6912 87070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 39.5N	121 02.0W	12/ 1/69	0255 GMT	3926M	070	4KT	1								
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0	15.85	33.37		24.550	339.6	0.000
									10	15.70	33.36		24.576	337.1	0.034
									20	15.46	33.36		24.630	332.1	0.067
									30	15.05	33.32		24.689	326.4	0.100
									50	12.80	33.10		24.984	298.4	0.163
									75	10.59	33.47		25.679	232.2	0.230
									100	9.76	33.62		25.937	207.7	0.285
									125	9.20	33.83		26.192	183.4	0.335
									150	8.50	33.92		26.372	166.3	0.379
									200	8.11	34.05		26.533	151.0	0.460
									250	7.43	34.03		26.617	143.1	0.535
									300	7.08	34.10		26.721	133.2	0.606
									400	6.56	34.19		26.862	119.8	0.738
									500	5.92	34.25		26.992	107.4	0.858

RV DAVIU STARR JORDAN CALCOFI CRUISE 6912 87080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 19.5N	121 43.0W	11/30/69	2220 GMT	4117M	320	8KT	1								
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0	16.60	33.11		24.181	374.9	0.000
									10	16.26	33.11		24.258	367.4	0.037
									20	16.21	33.13		24.285	364.9	0.074
									30	16.10	33.13		24.310	362.5	0.110
									50	12.75	32.85		24.800	315.8	0.178
									75	11.25	33.04		25.228	275.1	0.252
									100	10.03	33.42		25.736	226.8	0.316
									125	9.56	33.69		26.024	199.3	0.369
									150	9.00	33.80		26.201	182.6	0.418
									200	8.19	33.94		26.435	160.3	0.505
									250	7.66	34.01		26.568	147.7	0.584
									300	6.86	34.01		26.681	137.0	0.657
									400	5.97	34.11		26.876	118.5	0.790
									500	5.57	34.21		27.004	106.3	0.908

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						87090
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
31 59.0N	122 24.0W	11/30/69			1807 GMT			4117M	130	8KT	1	320	3	5		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	17.19	33.21											24.119	380.7	0.000	
10	17.16	33.21											24.126	380.0	0.038	
20	17.15	33.21											24.129	379.8	0.076	
30	17.10	33.20											24.133	379.4	0.114	
50	15.50	32.88											24.253	368.0	0.189	
75	11.55	32.95											25.104	286.9	0.271	
100	10.95	33.20											25.410	257.8	0.340	
125	10.05	33.50											25.795	221.2	0.400	
150	9.47	33.71											26.071	194.9	0.453	
200	8.51	33.90											26.555	167.9	0.545	
250	7.75	33.93											26.495	154.6	0.628	
300	6.99	33.97											26.631	141.7	0.704	
400	6.09	34.05											26.813	124.4	0.842	
500	5.66	34.19											26.978	108.9	0.965	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						90028
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 28.5N	117 46.5W	12/ 2/69			0407 GMT			353M	120	6KT	0					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.60	33.43											24.425	351.5	0.000	
10	16.50	33.44											24.456	348.6	0.035	
20	16.45	33.42											24.457	348.5	0.070	
30	15.66	33.38											24.600	334.8	0.104	
50	15.42	33.33											24.637	331.3	0.171	
75	12.24	33.32											25.262	271.9	0.247	
100	11.97	33.41											25.482	260.4	0.314	
125	11.52	33.50											25.536	245.8	0.378	
150	10.75	33.61											25.763	224.2	0.437	
200	9.60	33.94											26.213	181.4	0.540	
250	9.05	34.05											26.391	164.5	0.629	
300	8.54	34.15											26.546	149.8	0.710	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						90028
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 28.5N	117 46.5W	12/ 2/69			0526 GMT			353M	120	6KT	0					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.54	33.458		5.69	0.24	2.	0.03	348.1								
10	16.49	33.454		5.79	0.21	2.	0.03	347.3								
30	16.05			5.82	0.32	3.	0.09									
49	15.16			5.63	0.42	4.	0.27									
79	12.51	33.374		5.07	0.84	8.	0.04	272.8								
108	11.96			4.60	1.02	11.	0.03									
147	10.87			3.72	1.47	18.	0.01									
195	9.68			2.79	2.02	29.	0.00									
244	8.99	34.059		2.43				163.2								
294	8.50	34.168		1.73				147.9								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						90032
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
33 20.5N	118 03.0W	12/ 2/69			0714 GMT			741M	070	4KT	0					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.66	33.45											24.427	351.4	0.000	
10	16.52	33.46											24.467	347.6	0.035	
20	16.43	33.46											24.487	345.6	0.070	
30	15.62	33.35											24.586	336.2	0.104	
50	13.00	33.30											25.099	287.4	0.166	
75	11.54	33.37											25.431	255.7	0.235	
100	10.80	33.47											25.642	235.7	0.297	
125	10.22	33.66											25.890	212.1	0.353	
150	9.85	33.84											26.093	192.8	0.404	
200	9.35	34.03											26.324	170.9	0.497	
250	8.70	34.11											26.490	155.1	0.581	
300	8.38	34.18											26.594	145.2	0.658	
400	7.45	34.23											26.771	128.4	0.801	
500	6.50	34.27											26.933	113.0	0.929	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						90039
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
33 07.0N	118 31.0W	12/	2/69	1327	GMT		1258M	250	2KT	0						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.58	33.405	5.72	0.24	2.	0.00	0.1	352.9								
10	16.52	33.406	5.80	0.18	2.	0.00	0.1	351.5								
30	16.45		5.85	0.18	3.	0.00	0.1									
49	14.30	33.321	5.73	0.39	5.	0.00	0.9	311.1								
78	11.23		4.97	0.92	11.	0.00	8.7									
108	10.24		4.17	1.37	19.	0.00	15.4									
153	9.62		2.93	1.92	29.	0.00	23.5									
202	8.90		2.56	2.16	36.	0.00	28.0									
252	8.41		2.12													
306	8.11		1.46													
405	7.31	34.249	0.82					125.1								
507	6.42	34.290	0.45					110.6								

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						90045
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 54.5N	118 55.5W	12/	2/69	2230	GMT		1756M	320	8KT	1						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.61	33.33											24.346	359.0	0.000	
10	16.44	33.35											24.401	353.8	0.036	
20	16.41	33.35											24.408	353.2	0.071	
30	16.00	33.34											24.425	351.5	0.106	
50	14.45	33.22											24.740	321.5	0.174	
75	11.69	33.29											25.342	264.3	0.247	
100	10.67	33.51											25.696	230.6	0.310	
125	10.02	33.66											25.924	208.8	0.365	
150	9.45	33.81											26.139	188.4	0.416	
200	8.85	34.08											26.443	159.6	0.504	
250	8.51	34.17											26.566	147.9	0.583	
300	8.12	34.26											26.696	135.5	0.657	
400	7.42	34.29											26.837	122.2	0.791	
500	6.45	34.33											26.987	107.9	0.913	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						90045
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 54.5N	118 55.5W	12/	2/69	2353	GMT		1756M	320	8KT	1						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
2	16.62	33.339	5.59					358.6	0	16.62	33.339	5.59	24.351	358.6	0.000	
12	16.42	33.331	5.81					354.8	10	16.45	33.334	5.78	24.385	355.4	0.036	
31	16.35	33.336	5.78					352.9	20	16.38	33.336	5.80	24.401	353.8	0.071	
41	16.19	33.324	5.80					350.3	30	16.35	33.338	5.78	24.410	352.9	0.107	
50	15.78	33.322	5.81					341.6	50	15.78	33.322	5.81	24.529	341.6	0.176	
65	12.58	33.173	5.81					288.9	75	11.85	33.253	5.52	25.282	270.0	0.253	
79	11.71	33.296	5.38					264.2	100	10.57	33.494	4.71	25.701	230.1	0.316	
100	10.57	33.494	4.71					230.1	125	10.10	33.598	4.26	25.863	214.7	0.372	
125	10.10	33.598	4.26					214.7	150	9.34	33.805	3.49	26.150	187.4	0.423	
145	9.45	33.783	3.62					190.7	200	9.02	34.050	2.55	26.392	164.4	0.513	
175	9.00	33.884						176.4	250	8.45	34.158	2.03	26.565	148.0	0.593	
205	9.02	34.080	2.50					162.1	300	8.08	34.203	1.42	26.657	139.3	0.667	
234	8.58	34.137	2.26					151.3	400	7.30	34.265	0.80	26.819	123.9	0.805	
274	8.31	34.179	1.68					144.3	500	6.40	34.302	0.45	26.971	109.4	0.928	
334	7.78	34.229	1.16					133.0								
410	7.25	34.269	0.76					122.6								
482	6.54	34.296	0.50					111.6								
562	5.99	34.312	0.36					103.6								

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						90045
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 54.5N	118 55.5W	12/	3/69	0015	GMT		1756M	320	8KT	1						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.62	33.33											24.344	359.2	0.000	
10	16.44	33.33											24.386	355.3	0.036	
20	16.41	33.33											24.393	354.6	0.071	
30	16.30	33.33											24.418	352.2	0.107	
50	15.69	33.29											24.525	342.0	0.176	
75	12.08	33.25											25.238	274.1	0.254	
100	10.87	33.47											25.630	236.9	0.318	
125	10.14	33.63											25.881	213.0	0.375	
150	9.45	33.81											26.139	188.4	0.426	
200	9.05	34.07											26.404	163.3	0.515	
250	8.48	34.17											26.571	147.4	0.595	
300	8.17	34.25											26.681	137.0	0.669	
400	7.28	34.29											26.842	121.7	0.804	
500	6.46	34.33											26.986	108.1	0.926	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					90053	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 38.5N	119 28.5W	12/ 4/69	0000	GMT	1295M	330	26KT	1	330	8	5					
Z	T	S	U2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S10T	DT	DD	
									0	16.76	33.39		24.357	358.0	0.000	
									10	16.78	33.39		24.353	358.4	0.036	
									20	16.78	33.40		24.361	357.7	0.072	
									30	16.78	33.40		24.361	357.7	0.108	
									50	14.31	33.22		24.770	318.7	0.175	
									75	12.29	33.34		25.268	271.3	0.250	
									100	11.09	33.57		25.668	233.2	0.313	
									125	10.36	33.70		25.898	211.4	0.369	
									150	9.40	33.89		26.124	189.9	0.420	
									200	9.47	34.13		26.399	163.8	0.510	
									250	8.55	34.15		26.545	149.9	0.591	
									300	8.35	34.25		26.654	139.6	0.666	
									400	7.23	34.28		26.841	121.8	0.802	
									500	6.38	34.30		26.973	109.3	0.925	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					90053	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 38.5N	119 28.5W	12/ 4/69	0037	GMT	1295M	330	26KT	1	330	8	5					
Z	T	S	U2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S10T	DT	DD	
1	16.81	33.415	5.41													
11	16.80	33.413	5.64													
30	16.80	33.415	5.67													
50	14.09		5.69													
78	11.94		5.31													
108	10.96		4.01													
151	9.95		2.90													
198	3.40		2.39													
247	8.40		2.19													
300	8.24	34.220	1.52					140.2								
397	7.20	34.226 U	0.91													
500	6.42		0.57													

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					90060	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 25.0N	119 57.5W	12/13/69	1416	GMT	2116M	350	9KT	2	300	11	13					
Z	T	S	U2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S10T	DT	DD	
									0	15.90	33.26		24.455	348.7	0.000	
									10	15.91	33.27		24.460	348.2	0.035	
									20	15.90	33.28		24.470	347.2	0.070	
									30	15.91	33.29		24.475	346.7	0.104	
									50	15.19	33.24		24.597	335.2	0.173	
									75	11.87	33.20		25.239	274.1	0.249	
									100	11.16	33.40		25.524	247.0	0.315	
									125	10.17	33.53		25.798	220.9	0.374	
									150	9.42	33.76		26.102	192.0	0.426	
									200	8.79	33.96		26.359	167.6	0.518	
									250	8.12	34.08		26.555	148.9	0.599	
									300	7.76	34.13		26.648	140.1	0.674	
									400	6.79	34.18		26.824	123.5	0.811	
									500	6.19	34.29		26.990	107.7	0.933	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					90060	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 25.0N	119 57.5W	12/13/69	1508	GMT	2116M	350	9KT	2	300	11	13					
Z	T	S	U2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S10T	DT	DD	
2	15.89	33.227	5.44													
13	15.89	33.238	5.71													
42	15.86		5.72													
63	12.65	33.106	6.05													
82	11.79		5.71					295.1								
111	10.45		4.73													
157	9.38		3.69													
206	8.74		2.92													
254	8.14		2.37													
308	7.76	34.166	1.55					137.5								
405	6.69	34.213	0.85					119.7								
508	6.15		0.37													

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 90070

RV ALEXANDER AGASSIZ				CALCOFI CRUISE 6912				90070							
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 05.0N	120 39.0W	12/14/69	0207 GMT	3718M	340	12KT	2								
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S1GT	DT	DD
									0	16.61	33.27		24.301	363.4	0.000
									10	16.63	33.27		24.296	363.8	0.036
									20	16.64	33.28		24.301	363.3	0.073
									30	16.63	33.28		24.304	363.1	0.109
									50	16.23	33.23		24.357	358.0	0.182
									75	12.75	33.10		24.993	297.4	0.264
									100	11.22	33.29		25.427	256.1	0.334
									125	10.23	33.56		25.811	219.6	0.394
									150	9.24	33.74		26.115	190.7	0.446
									200	8.38	34.00		26.423	161.5	0.535
									250	7.90	34.09		26.596	145.1	0.614
									300	7.41	34.13		26.698	135.4	0.686
									400	6.63	34.22		26.877	118.4	0.818
									500	5.91	34.28		27.017	105.1	0.936

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 90070

RV ALEXANDER AGASSIZ				CALCOFI CRUISE 6912				90070							
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
32 05.0N	120 39.0W	12/14/69	0245 GMT	3718M	340	12KT	2								
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S1GT	DT	DD
1	16.68	33.257	5.63					365.9							
11	16.69	33.263	5.64					365.7							
31	16.71		5.63												
51	15.09	33.160	6.01					339.0							
80	12.36		5.94												
111	11.17		5.37												
155	9.31		3.83												
204	8.57		2.86												
254	7.91		2.26												
308	7.41	34.130	1.62					135.4							
405	6.67	34.232	0.74					118.0							
506	5.91		0.33												

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 90080

RV ALEXANDER AGASSIZ				CALCOFI CRUISE 6912				90080							
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
31 45.5N	121 19.0W	12/14/69	0652 GMT	3794M	340	8KT	2								
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S1GT	DT	DD
									0	16.50	33.34		24.380	355.9	0.000
									10	16.51	33.34		24.377	356.1	0.036
									20	16.51	33.35		24.385	355.4	0.071
									30	16.51	33.35		24.385	355.4	0.107
									50	16.43	33.36		24.411	352.9	0.178
									75	11.93	33.30		25.305	267.8	0.256
									100	10.90	33.49		25.640	235.9	0.319
									125	9.81	33.67		25.968	204.8	0.375
									150	9.07	33.84		26.221	180.7	0.424
									200	8.24	33.99		26.467	157.3	0.510
									250	7.42	34.04		26.626	142.2	0.587
									300	6.82	34.08		26.741	131.5	0.657
									400	6.06	34.17		26.912	115.1	0.785
									500	5.51	34.28		27.067	100.4	0.899

RV ALEXANDER AGASSIZ CALCOFI CRUISE 6912 90080

RV ALEXANDER AGASSIZ				CALCOFI CRUISE 6912				90080							
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
31 45.5N	121 19.0W	12/14/69	0744 GMT	3794M	340	8KT	2								
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S1GT	DT	DD
1	16.49	33.300	5.46					358.6							
11	16.49	33.304	5.64					358.3							
31	16.47		5.68												
51	16.38	33.295	5.69					356.5							
80	11.73		5.38												
110	10.15		4.46												
152	9.06		4.05												
200	8.26		3.17												
251	7.52		2.62												
305	6.85	34.081	1.87					131.6							
402	5.94	34.165	0.85					114.0							
508	5.47		0.37												

RV ALEXANDER AGASSIZ							CALCOFI CRUISE 6912							90090	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
31 24.0N	122 01.0W	12/14/69	225A	GMT	3926M	030	4KT	1	330	7	9				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.14	33.45		24.514	362.1	0.000
									10	17.14	33.45		24.514	362.1	0.036
									20	17.11	33.45		24.521	361.4	0.072
									30	17.11	33.46		24.529	360.7	0.109
									50	17.11	33.46		24.529	360.7	0.181
									75	15.78	33.69		24.811	314.7	0.266
									100	14.55	33.67		25.069	290.2	0.342
									125	13.15	33.68		25.566	261.9	0.412
									150	11.59	33.61		25.608	238.9	0.475
									200	9.65	33.84		26.127	189.6	0.584
									250	8.48	34.00		26.438	160.0	0.674
									300	7.48	34.08		26.649	140.0	0.751
									400	6.46	34.18		26.868	119.3	0.886
									500	5.75	34.26		27.022	104.7	1.004

RV ALEXANDER AGASSIZ							CALCOFI CRUISE 6912							90090	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
31 24.0N	122 01.0W	12/14/69	2354	GMT	3926M	030	4KT	1	330	07	9				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									1	17.11	33.406		5.57		
									11	17.12	33.401		5.56		
									40	17.11			5.57		
									60	17.14	33.436		5.58		
									80	15.70			5.87		
									110	13.90			5.77		
									154	11.18			5.22		
									202	9.52			4.62		
									250	8.56			4.44		
									303	7.51	34.041		2.55		143.3
									401	6.51	34.130		1.31		123.6
									505	5.80			0.71		

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							93027	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
32 56.0N	117 19.0W	12/ 2/69	1945	GMT	131M	100	6KT	1	040	1	5				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.65	33.47		24.208	372.2	0.000
									10	17.47	33.46		24.243	368.8	0.037
									20	17.46	33.47		24.253	367.9	0.074
									30	16.75	33.41		24.375	356.3	0.110
									50	16.08	33.33		24.468	347.5	0.181
									75	12.70	33.35		25.196	278.1	0.259
									100	12.02	33.43		25.588	259.8	0.327

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							93027	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
32 56.0N	117 19.0W	12/ 2/69	2006	GMT	131M	100	6KT	1	040	1	5				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.60	33.483		5.58	0.21	1.0
									10	17.39	33.481		5.66	0.26	1.0
									25	17.37			5.71	0.21	1.0
									35	16.45	33.449		5.57	0.26	2.0
									44	16.19			5.54	0.26	2.0
									59	13.86			5.39	0.47	4.0
									74	12.63	33.354		4.81	0.55	5.0
									99	12.10	33.464		0.84	0.84	9.0

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							93028	
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
32 54.5N	117 22.0W	12/ 3/69	0007	GMT	510M	190	8KT	2	180	2	6				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.60	33.48		24.228	370.3	0.000
									10	17.50	33.46		24.236	369.5	0.037
									20	17.50	33.48		24.252	368.1	0.074
									30	16.46	33.40		24.435	350.6	0.110
									50	14.20	33.28		24.839	312.1	0.176
									75	12.56	33.35		25.223	275.5	0.250
									100	12.17	33.40		25.337	264.7	0.318
									125	11.62	33.48		25.502	249.0	0.383
									150	10.85	33.62		25.750	225.4	0.443
									200	9.82	33.90		26.145	187.9	0.548
									250	8.99	34.08		26.421	161.7	0.638
									300	8.41	34.14		26.558	148.6	0.718
									400	7.58	34.22		26.744	131.0	0.864

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93028
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
32 54.5N		117 22.0W		12/ 3/69		0048 GMT		510M		190 8KT		2		180 2 6		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	17.53	33.488	5.51	0.21	1.	0.00	0.0	368.2								
21	17.41	33.473	5.70	0.21	2.	0.00	0.0	366.5								
39	16.0		5.72	0.32	2.	0.01	0.0									
75	12.56		5.30	0.63	6.	0.00	4.1									
104	12.05	33.422	4.96	0.84	9.	0.00	6.6	260.9								
154	10.68		3.84	1.42	18.	0.00	14.1									
203	9.70		2.95	1.92	28.	0.00	21.4									
258	8.91		1.66													
356	7.95	34.216	1.24					136.4								
459	7.07	34.265	0.66					120.8								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93030
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
32 50.5N		117 31.0W		12/ 3/69		0220 GMT		842M		230 10KT				280 4 6		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	17.11	33.50											24.360	357.8	0.000	
10	17.00	33.47											24.363	357.5	0.036	
20	16.94	33.49											24.392	354.7	0.071	
30	16.87	33.47											24.393	354.6	0.107	
50	14.11	33.16											24.765	319.1	0.175	
75	12.41	33.29											25.225	275.4	0.249	
100	11.22	33.42											25.528	246.5	0.315	
125	10.65	33.68											25.835	217.3	0.374	
150	10.15	33.74											25.965	205.0	0.427	
200	9.58	33.98											26.247	178.2	0.525	
250	9.06	34.07											26.402	163.5	0.612	
300	8.59	34.16											26.577	146.8	0.692	
400	7.47	34.24											26.776	128.0	0.836	
500	6.76	34.28											26.906	115.6	0.965	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93030
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
32 50.5N		117 31.0W		12/ 3/69		0255 GMT		842M		230 10KT				280 4 6		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
1	16.94	33.489	5.63	0.21	1.	0.00	0.0	354.8								
10	16.93	33.485	5.71	0.24	2.	0.00	0.0	354.8								
48	14.46		5.74	0.39	3.	0.10	0.5									
68	12.86		5.43	0.58	5.	0.00	2.9									
87	11.53		4.83	0.95	10.	0.00	8.0									
119	10.40	33.586	4.21	1.32	16.	0.00	12.6	220.5								
149	10.06		3.46	1.66	22.	0.00	16.3									
199	9.46		2.62	2.08	32.	0.00	21.5									
246	8.98		2.38													
300	8.27		1.78													
398	7.44	34.234	0.88					128.0								
503	6.61	34.285	0.48					113.3								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93035
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
32 40.5N		117 51.5W		12/ 3/69		0517 GMT		630M		230 6KT				280 4 6		
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.45	33.34											24.391	354.8	0.000	
10	16.41	33.35											24.408	353.2	0.035	
20	16.37	33.36											24.425	351.6	0.071	
30	15.99	33.28											24.450	349.2	0.106	
50	13.67	33.18											24.932	303.2	0.171	
75	11.50	33.33											25.408	258.0	0.242	
100	10.51	33.57											25.771	223.5	0.302	
125	9.87	33.85											26.098	192.4	0.355	
150	9.65	33.92											26.189	183.7	0.403	
200	9.07	34.01											26.354	168.1	0.492	
250	8.74	34.15											26.515	152.7	0.575	
300	8.41	34.18											26.605	144.2	0.651	
400	7.40	34.23											26.792	126.4	0.793	
500	6.55	34.27											26.929	113.4	0.919	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93035
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 40.5N		117 51.5W		12/ 3/69		0555		GMT	630M	250	6KT		280 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.42	33.363	5.90	0.24	2.	0.00	0.0	352.4								
10	16.35	33.362	6.01	0.26	2.	0.00	0.0	351.0								
49	14.57		5.85	0.37	3.	0.00	0.8									
69	12.28		5.54	0.66	6.	0.00	4.6									
89	11.05		4.80	1.02	11.	0.00	9.2									
123	10.02	33.762	3.48	1.71	23.	0.00	16.4	201.3								
152	9.57		2.96	1.97	29.	0.00	18.9									
201	8.98		2.70	2.16	35.	0.00	20.9									
250	8.66		1.90													
304	8.18		1.58													
403	7.17	34.242	0.93					123.8								
507	6.45	34.283	0.46					111.4								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93040
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 30.0N		118 11.5W		12/ 3/69		0850		GMT	1664M	330	4KT		280 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.50	33.36							0	16.50	33.36		24.395	354.4	0.000	
10	16.50	33.36							10	16.50	33.36		24.395	354.4	0.035	
20	16.45	33.36							20	16.45	33.36		24.411	352.9	0.071	
30	16.27	33.34							30	16.27	33.34		24.432	350.8	0.106	
50	13.65	33.31							50	13.65	33.31		24.980	298.7	0.171	
75	11.92	33.42							75	11.92	33.42		25.400	258.8	0.241	
100	10.82	33.70							100	10.82	33.70		25.817	219.0	0.302	
125	10.41	33.61							125	10.41	33.61		25.974	204.1	0.355	
150	10.22	33.93							150	10.22	33.93		26.101	192.1	0.405	
200	9.67	34.10							200	9.67	34.10		26.326	170.7	0.498	
250	9.35	34.21							250	9.35	34.21		26.464	157.5	0.582	
300	8.69	34.22							300	8.69	34.22		26.578	146.8	0.661	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93040
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 30.0N		118 11.5W		12/ 3/69		0920		GMT	1664M	330	4KT		280 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.45	33.375	5.91	0.24	1.	0.03	0.0	352.2	0	16.45	33.375	5.91	24.418	352.2	0.000	
10	16.43	33.369	5.82	0.26	2.	0.03	0.0	352.2	10	16.43	33.369	5.82	24.418	352.2	0.035	
30	16.28	33.391	5.83					347.3	20	16.36	33.382	5.83	24.443	349.8	0.070	
49	14.18	33.296	5.80	0.37	3.	0.29	0.8	310.5	30	16.28	33.391	5.83	24.469	347.3	0.105	
79	11.82	33.478	4.60	0.97	11.	0.09	9.5	252.7	50	14.08	33.300	5.77	24.877	308.4	0.171	
109	10.73	33.729	3.28	1.66	20.	0.05	18.2	215.4	75	12.06	33.443	4.80	25.388	259.8	0.243	
153	10.05	33.980	2.45	2.08	29.	0.05	23.4	185.6	100	10.96	33.657	3.65	25.757	224.8	0.304	
203	9.63	34.132	2.04	2.29	34.	0.05	26.7	167.7	125	10.40	33.837	2.88	25.995	202.1	0.358	
252	9.23	34.236	1.60					153.8	150	10.07	33.968	2.48	26.154	187.0	0.407	
308	8.59	34.219	1.54					148.4	200	9.65	34.127	2.06	26.349	168.5	0.498	
406	7.57	34.254	0.92					128.3	250	9.25	34.234	1.61	26.499	154.2	0.581	
510	6.52	34.281	0.51					112.5	300	8.69	34.226	1.55	26.582	146.4	0.658	
									400	7.63	34.252	0.96	26.761	129.4	0.802	
									500	6.62	34.280	0.54	26.924	113.9	0.931	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						93040
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
32 30.0N		118 11.5W		12/ 3/69		0923		GMT	1664M	330	4KT		280 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	16.50	33.37							0	16.50	33.37		24.402	353.7	0.000	
10	16.47	33.37							10	16.47	33.37		24.409	353.0	0.035	
20	16.42	33.38							20	16.42	33.38		24.428	351.2	0.071	
30	16.22	33.34							30	16.22	33.34		24.444	349.8	0.106	
50	13.72	33.24							50	13.72	33.24		24.908	305.6	0.171	
75	11.75	33.47							75	11.75	33.47		25.470	252.1	0.242	
100	10.80	33.72							100	10.80	33.72		25.836	217.2	0.301	
125	10.40	33.84							125	10.40	33.84		26.000	201.7	0.354	
150	10.16	33.96							150	10.16	33.96		26.134	188.9	0.403	
200	9.69	34.12							200	9.69	34.12		26.338	169.5	0.495	
250	9.34	34.22							250	9.34	34.22		26.474	156.7	0.578	
300	8.90	34.24							300	8.90	34.24		26.560	148.5	0.657	
400	7.74	34.23							400	7.74	34.23		26.729	132.4	0.804	
500	6.63	34.26							500	6.63	34.26		26.908	115.4	0.935	

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 93050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 10.0N	118 53.0W	12/ 3/69	1435	GMT		1295M	300	4KT	1	280 4 6					
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.15	33.47											24.527	360.8	0.000
10	17.15	33.46											24.524	361.1	0.036
20	17.10	33.47											24.539	359.7	0.072
30	15.16	33.34											24.680	327.2	0.107
50	12.96	33.24											25.060	291.0	0.169
75	11.54	33.42											25.470	252.1	0.237
100	10.52	33.58											25.777	222.9	0.297
125	10.12	33.78											26.001	201.6	0.350
150	9.96	33.98											26.184	184.2	0.399
200	9.47	34.15											26.598	163.9	0.488
250	8.84	34.18											26.523	152.0	0.569
300	8.42	34.21											26.612	143.6	0.646
400	7.57	34.22											26.746	130.8	0.789
500	6.58	34.27											26.923	114.1	0.918

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 93060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 50.0N	119 34.0W	12/ 3/69	1937	GMT		2322M	300	12KT	1	300 5 3					
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.04	33.16											24.116	381.0	0.000
10	17.00	33.18											24.141	378.6	0.038
20	16.98	33.18											24.146	378.2	0.076
30	16.97	33.18											24.148	378.0	0.114
50	14.63	33.10											24.610	333.9	0.185
75	12.77	33.18											25.051	291.9	0.264
100	11.57	33.26											25.341	264.4	0.334
125	10.28	33.47											25.733	227.1	0.396
150	9.50	33.70											26.042	197.7	0.450
200	8.74	33.98											26.382	165.4	0.542
250	8.17	34.07											26.540	150.4	0.623
300	7.79	34.13											26.643	140.6	0.698
400	6.84	34.19											26.825	123.3	0.836
500	6.13	34.25											26.966	110.0	0.959

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 93070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 30.0N	120 14.0W	12/ 4/69	0000	GMT		4022M	330	22KT	1	330 5 4					
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.00	33.23											24.179	375.0	0.000
10	16.92	33.24											24.206	372.5	0.037
20	16.95	33.24											24.203	372.7	0.075
30	17.22	33.42											24.272	366.1	0.112
50	14.15	32.98											24.619	333.1	0.182
75	11.74	33.02											25.123	285.1	0.259
100	10.81	33.28											25.493	249.9	0.327
125	10.36	33.53											25.765	224.0	0.387
150	9.72	33.68											25.990	202.6	0.441
200	8.50	33.96											26.404	163.3	0.534
250	8.08	34.05											26.538	150.6	0.614
300	7.56	34.11											26.661	138.9	0.689
400	6.57	34.20											26.869	119.2	0.823
500	5.81	34.24											26.998	106.9	0.942

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 93080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 10.0N	120 54.5W	12/ 4/69	0443	GMT		4022M	330	22KT	1	060 5 4					
Z	T	S	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.28	33.44											24.273	366.0	0.000
10	17.28	33.45											24.281	365.2	0.037
20	17.28	33.46											24.289	364.5	0.073
30	17.35	33.51											24.315	362.0	0.110
50	14.04	33.26											24.857	310.4	0.177
75	11.01	33.49											25.620	237.8	0.246
100	9.96	33.66											25.935	207.9	0.302
125	9.41	33.86											26.182	184.4	0.352
150	8.98	33.96											26.329	170.4	0.397
200	8.39	34.06											26.499	154.3	0.479
250	7.60	34.08											26.632	141.7	0.555
300	7.17	34.14											26.740	131.4	0.626
400	6.54	34.22											26.889	117.3	0.755
500	5.92	34.29											27.024	104.5	0.872

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						93090				
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES	
30 50.0N		121 34.0W		12/ 4/69		0859 GMT			4309M		330 21KT				330 6	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	16.63	33.11		24.174	375.5	0.000	
									10	16.63	33.11		24.174	375.5	0.038	
									20	16.64	33.11		24.171	375.7	0.075	
									30	16.64	33.11		24.171	375.7	0.113	
									50	15.59	33.29		24.547	339.9	0.185	
									75	13.00	33.14		24.975	299.2	0.265	
									100	12.69	33.46		25.283	269.8	0.337	
									125	11.50	33.48		25.524	246.9	0.402	
									150	10.25	33.65		25.878	213.3	0.460	
									200	8.63	33.88		26.521	171.1	0.558	
									250	7.82	33.98		26.522	152.1	0.641	
									300	7.20	34.02		26.642	140.7	0.716	
									400	6.14	34.09		26.838	122.1	0.853	
									500	5.78	34.24		27.002	106.5	0.973	

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						94032				
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES	
32 40.0N		117 35.0W		11/13/69		1947 GMT			1156M		340 10KT		1		250 1 12	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0A	17.88	33.44		24.129	379.7	0.000	
									10	17.80	33.46		24.164	376.4	0.038	
									20	17.09	33.40		24.288	364.6	0.075	
									30	16.49	33.36		24.597	354.2	0.111	
									50	13.60	33.27		24.955	301.1	0.177	
									75	11.92	33.40		25.584	260.2	0.247	
									100	11.14	33.42		25.543	245.1	0.311	
									125	10.43	33.60		25.808	219.9	0.370	
									150	10.02	33.81		26.041	197.7	0.423	
									200	9.50	34.08		26.571	166.4	0.515	
									250	8.52	34.11		26.518	152.5	0.597	
									300	8.17	34.22		26.656	139.2	0.673	
									400	7.03	34.26		26.854	120.6	0.808	
									500	6.24	34.32		27.007	106.1	0.928	

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						94032				
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES	
32 40.0N		117 35.0W		11/13/69		2044 GMT			1156M		340 10KT		1		250 1 12	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	18.17			5.79			
									10	17.72			5.75			
									20	16.90			5.96			
									30	16.40			5.93			
									50	13.29			5.68			
									75	11.89			5.05			
									100	10.87			4.64			
									125	10.52			3.97			
									150	10.11			3.39			
	1A															
	11	17.65			5.79											
	21	16.82			5.74											
	31	16.33			5.98											
	41	14.60			5.92											
	51	13.17			5.92											
	61	12.45			5.63											
	71	11.94			5.47											
	80	11.83			5.19											
	90	11.31			4.90											
	100	10.87			4.85											
	110	10.59			4.64											
	120	10.64			4.35											
	130	10.38			4.06											
	140	10.22			3.89											
	149	10.11			3.70											
	158	10.08			3.44											
	166	9.73			2.97											
					2.73											

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						94032				
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME			BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES	
32 40.0N		117 35.0W		11/28/69		2354 GMT			1184M		310 8KT		1		320 1 5	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0A	17.11	33.44		24.314	362.1	0.000	
									10	17.04	33.45		24.338	359.8	0.036	
									20	16.95	33.44		24.351	358.5	0.072	
									30	16.88	33.42		24.353	358.4	0.108	
									50	13.92	33.25		24.874	308.8	0.175	
									75	11.80	33.34		25.360	262.5	0.247	
									100	10.72	33.50		25.680	232.1	0.309	
									125	10.18	33.60		25.851	215.9	0.366	
									150	9.90	33.70		25.976	204.0	0.419	
									200	9.27	33.92		26.251	177.8	0.516	
									250	8.82	34.08		26.448	159.1	0.602	
									300	8.33	34.16		26.586	146.0	0.681	
									400	7.61	34.21		26.732	132.1	0.826	
									500	6.65	34.24		26.892	116.9	0.958	

A) A SHAKEDOWN STATION.

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							94032	
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 40.0N	117 35.0W	11/29/69		0134	GMT	1184M	310	8KT	1	320	1	5			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S1GT	DT	DD
0A	17.00	33.47	5.44					357.5	0	17.00	33.47	5.44	24.363	357.5	0.000
9	17.00	33.46	5.74					358.2	10	16.99	33.46	5.75	24.356	358.1	0.036
30	16.83	33.44	5.89					355.9	20	16.92	33.45	5.83	24.366	357.1	0.072
38	16.80	33.43	6.10					355.9	30	16.83	33.44	5.89	24.379	355.9	0.107
49	15.89	33.40	5.85					338.3	50	15.72	33.39	5.84	24.596	335.3	0.177
64	13.27	33.316	5.73					291.3	75	12.17	33.34	5.42	25.284	269.8	0.253
79	11.90	33.349	5.29					263.6	100	10.92	33.50	4.66	25.644	235.5	0.316
97	11.05	33.478	4.74					239.3	125	10.10	33.62	4.10	25.877	213.4	0.373
122	10.15	33.615	4.17					214.3	150	9.85	33.67	3.64	25.960	205.5	0.426
143	9.92	33.629	3.73					209.5	200	9.18	33.96	2.75	26.298	173.3	0.523
172	9.61	33.823	3.37					190.3	250	8.79	34.10	2.30	26.463	157.7	0.607
201	9.17	33.967	2.73					172.8	300	8.38	34.15	2.00	26.568	147.7	0.686
230	9.00	34.074	2.32					162.3	400	7.62	34.22	1.10	26.737	131.7	0.832
270	8.58	34.100	2.28					154.1	500	6.62	34.27	0.63	26.916	114.7	0.962
329	8.21	34.191	1.67					141.9							
403	7.59	34.217	1.08					131.3							
476	6.86	34.254	0.74					118.8							
555	6.08	34.304	0.37					105.3							

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							94032	
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 40.0N	117 35.0W	11/29/69		0159	GMT	1184M	310	8KT	1	320	1	5			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S1GT	DT	DD
0A	17.07	33.46											24.338	359.8	0.000
10	16.96	33.44											24.349	358.8	0.036
20	16.94	33.45											24.361	357.6	0.072
30	16.90	33.44											24.363	357.4	0.108
50	15.69	33.30											24.532	341.3	0.178
75	11.91	33.27											25.285	269.6	0.255
100	10.81	33.42											25.602	239.6	0.319
125	10.14	33.62											25.873	213.7	0.376
150	9.82	33.74											26.020	199.7	0.428
200	9.19	33.98											26.311	172.1	0.523
250	8.82	34.10											26.463	157.6	0.608
300	8.35	34.15											26.575	147.0	0.686
400	7.60	34.20											26.726	132.7	0.832
500	6.68	34.25											26.894	116.8	0.964

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							97032	
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 12.0N	117 15.0W	12/ 5/69		1945	GMT	1387M	300	2KT	2	300	3	5			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S1GT	DT	DD
0			5.61	0.21	1.	0.00	0.1		0	17.76	33.49		24.197	373.3	0.000
10			5.65	0.21	2.	0.01	0.1		10	17.58	33.49		24.240	369.2	0.037
20			5.56	0.21	2.	0.02	0.0		20	17.46	33.48		24.261	367.1	0.074
35			5.59	0.24	2.	0.00	0.0		30	17.02	33.45		24.343	359.4	0.110
50			5.65	0.26	2.	0.06	0.1		50	15.70	33.35		24.569	337.9	0.180
75			5.06	0.68	8.	0.12	4.5		75	13.48	33.42		25.095	287.7	0.259
100			4.63	0.92	10.	0.02	7.7		100	12.37	33.44		25.330	265.4	0.329
150			4.20	1.26	16.	0.01	15.6		125	11.65	33.52		25.527	246.6	0.393
200			3.51	1.68	26.	0.00	24.7		150	10.60	33.60		25.778	222.7	0.453
300			2.15						200	9.39	33.92		26.232	179.6	0.555
400			0.96						250	8.97	34.09		26.432	160.6	0.642
500			0.56						300	8.75	34.14		26.506	153.6	0.724
									400	7.41	34.22		26.769	128.7	0.871
									500	6.52	34.29		26.946	111.8	0.998

RV DAVID STARR JORDAN							CALCOFI CRUISE 6912							97035	
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
32 07.0N	117 28.0W	12/ 5/69		1730	GMT	1295M	099	KT	2	330	5	8			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	S1GT	DT	DD
0			5.70	0.26	2.	0.00	0.0		0	17.26	33.48		24.309	362.6	0.000
10			5.64	0.24	2.	0.00	0.0		10	17.21	33.47		24.313	362.2	0.036
20			5.82	0.24	2.	0.00	0.0		20	17.16	33.46		24.317	361.8	0.073
35			5.69	0.26	2.	0.00	0.0		30	16.79	33.40		24.358	357.9	0.109
75			5.34	0.58	5.	0.04	2.6		50	14.20	33.29		24.847	311.4	0.176
100			4.75	0.95	10.	0.03	7.5		75	12.50	33.33		25.219	275.9	0.250
150			4.03	1.42	19.	0.01	12.9		100	11.41	33.47		25.533	246.1	0.315
200			2.90	1.92	30.	0.01	17.8		125	10.69	33.58		25.747	225.7	0.375
400			1.18						150	9.98	33.66		25.931	208.2	0.430
500			0.57						200	9.40	33.98		26.277	175.4	0.527
									250	8.72	34.08		26.464	157.6	0.613
									300	8.54	34.21		26.593	145.3	0.691
									400	7.51	34.24		26.770	128.5	0.834
									500	6.45	34.29		26.956	110.9	0.961

A) A SHAKEDOWN STATION.

RV DAVIU STARR JORDAN										CALCOFI CRUISE 6912				97040		
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
31 56.0N	117 48.0W	12/ 5/69			1342 GMT			1332M	330	4KT	2	330 5 6				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.27	33.42		24.261	367.2	0.000	
									10	17.27	33.42		24.261	367.2	0.037	
									20	17.15	33.3A		24.258	367.4	0.074	
									30	15.90	33.26		24.455	348.7	0.109	
									50	13.00	33.19		25.014	295.5	0.174	
									75	11.29	33.34		25.454	253.6	0.243	
									100	10.56	33.56		25.754	225.0	0.303	
									125	10.35	33.74		25.930	208.3	0.358	
									150	9.84	33.86		26.110	191.2	0.409	
									200	9.34	34.08		26.365	167.0	0.500	
									250	8.91	34.18		26.512	153.1	0.562	
									300	8.25	34.21		26.638	141.1	0.658	
									400	7.21	34.24		26.813	124.5	0.797	
									500	6.44	34.28		26.949	111.5	0.922	

RV DAVIU STARR JORDAN										CALCOFI CRUISE 6912				97040				
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
31 56.0N	117 48.0W	12/ 5/69			1437 GMT			1332M	330	4KT	2	330 5 6						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD			
									0	17.43	33.474		5.64	0.24	1.0	0.03	0.0	366.9
									11	17.45	33.470		5.76	0.24	1.0	0.03	0.0	367.6
									30	17.04			5.82	0.24	1.0	0.03	0.0	
									50	14.14			6.00	0.34	2.0	0.09	0.0	
									80	11.44			5.41	0.79	7.0	0.07	5.2	
									109	10.60	33.552		4.28	1.21	15.0	0.04	9.5	226.3
									153	9.86			3.10	1.76	25.0	0.03	14.7	
									202	9.28			2.40	2.16	34.0	0.04	17.5	
									251	8.83			1.80					
									305	8.24			1.34					
									404	7.12	34.265		0.80				121.4	
									508	6.29	34.316		0.45				107.0	

RV DAVIU STARR JORDAN										CALCOFI CRUISE 6912				97040		
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
31 35.5N	118 29.0W	12/ 5/69			0804 GMT			2509M	340	10KT	1	8 6				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	16.97	33.48		24.377	356.1	0.000	
									10	16.96	33.48		24.380	355.9	0.036	
									20	16.96	33.48		24.380	355.9	0.071	
									30	14.80	33.28		24.712	324.2	0.105	
									50	12.17	33.32		25.421	266.2	0.165	
									75	11.31	33.52		25.590	240.7	0.228	
									100	10.19	33.72		25.942	207.1	0.285	
									125	9.70	33.84		26.118	190.4	0.335	
									150	9.25	34.02		26.332	170.1	0.381	
									200	8.82	34.13		26.487	155.4	0.464	
									250	8.26	34.19		26.620	142.7	0.540	
									300	7.91	34.22		26.696	135.5	0.612	
									400	6.91	34.25		26.862	119.8	0.746	
									500	6.08	34.30		27.012	105.6	0.865	

RV DAVIU STARR JORDAN										CALCOFI CRUISE 6912				97040		
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES				
31 15.5N	119 10.0W	12/ 5/69			0255 GMT			3642M	340	20KT	1	330 7 6				
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	16.95	33.23		24.196	373.4	0.000	
									10	16.95	33.23		24.196	373.4	0.037	
									20	16.95	33.24		24.203	372.7	0.075	
									30	16.95	33.30		24.249	368.3	0.112	
									50	16.61	33.22		24.262	367.0	0.186	
									75	12.09	33.28		25.259	272.1	0.266	
									100	11.25	33.31		25.438	255.1	0.332	
									125	9.95	33.52		25.831	217.8	0.392	
									150	9.46	33.72		26.064	195.6	0.444	
									200	8.78	33.97		26.368	166.7	0.537	
									250	8.10	34.05		26.519	152.3	0.618	
									300	7.59	34.08		26.633	141.5	0.694	
									400	6.96	34.24		26.848	121.2	0.831	
									500	6.32	34.29		26.973	109.3	0.953	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					97070	
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 55.0N	119 50.5W	12/ 4/69			2227 GMT		3738M	330	20KT	1	330 10 6					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	16.93	33.15		24.134	379.3	0.000	
									10	16.92	33.15		24.137	379.0	0.038	
									20	16.92	33.15		24.137	379.0	0.076	
									30	16.91	33.15		24.139	378.8	0.114	
									50	14.53	33.00		24.554	339.2	0.186	
									75	12.56	33.08		25.015	295.4	0.266	
									100	11.14	33.29		25.442	254.7	0.335	
									125	10.48	33.49		25.714	228.9	0.396	
									150	9.56	33.62		25.970	204.5	0.451	
									200	8.81	33.96		26.356	167.9	0.546	
									250	8.30	34.08		26.528	151.5	0.627	
									300	7.56	34.12		26.669	138.1	0.702	
									400	6.86	34.21		26.838	122.1	0.838	
									500	6.14	34.26		26.972	109.3	0.960	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					97080	
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 35.0N	120 31.0W	12/ 4/69			1750 GMT		3926M	020	8KT	1	350 6 5					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	16.49	33.11		24.206	372.4	0.000	
									10	16.49	33.12		24.213	371.7	0.037	
									20	16.49	33.12		24.213	371.7	0.074	
									30	16.49	33.12		24.213	371.7	0.112	
									50	15.42	33.00		24.562	357.5	0.185	
									75	12.53	33.08		25.021	294.8	0.267	
									100	11.45	33.27		25.370	261.5	0.337	
									125	10.48	33.48		25.706	229.6	0.399	
									150	9.54	33.67		26.012	200.5	0.453	
									200	8.56	33.98		26.410	162.7	0.546	
									250	8.14	34.04		26.521	152.2	0.626	
									300	7.47	34.10		26.666	138.4	0.701	
									400	6.61	34.18		26.848	121.2	0.836	
									500	6.02	34.24		26.972	109.4	0.958	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					97090	
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 15.5N	121 10.5W	12/ 4/69			1318 GMT		3926M	330	20KT	1	330 4 4					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.09	33.24		24.166	376.3	0.000	
									10	17.09	33.24		24.166	376.3	0.038	
									20	17.09	33.24		24.166	376.3	0.075	
									30	17.09	33.24		24.166	376.3	0.113	
									50	17.10	33.24		24.163	376.5	0.189	
									75	13.71	33.17		24.856	310.5	0.275	
									100	12.70	33.30		25.158	281.8	0.349	
									125	12.97	33.52		25.491	259.5	0.418	
									150	10.15	33.55		25.817	219.1	0.478	
									200	8.84	33.86		26.273	175.8	0.579	
									250	8.00	33.95		26.471	156.9	0.664	
									300	7.40	34.04		26.629	141.9	0.741	
									400	6.87	34.21		26.836	122.2	0.878	
									500	6.07	34.24		26.966	110.0	1.001	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					100030	
LATITUDE	LONGITUDE	MO/DAY/YR			MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
31 40.5N	116 46.5W	12/ 6/69			0309 GMT		427M	330	6KT	1						
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
									0	17.82	33.49		24.182	374.7	0.000	
									10	17.75	33.48		24.191	373.8	0.037	
									20	17.48	33.45		24.233	369.8	0.075	
									30	16.95	33.42		24.336	360.0	0.111	
									50	15.16	33.31		24.657	329.4	0.180	
									75	13.49	33.45		25.116	285.7	0.258	
									100	12.83	33.51		25.294	268.8	0.328	
									125	12.22	33.48		25.589	259.7	0.394	
									150	11.25	33.60		25.662	233.7	0.457	
									200	9.99	33.88		26.101	192.1	0.565	
									250	9.46	34.04		26.314	171.9	0.658	
									300	8.71	34.13		26.504	153.8	0.742	
									400	7.73	34.23		26.731	132.3	0.892	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						100050
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
31 05.0N		118 08.0W		12/ 6/69		1540		GMT	1763M	240	2KT	1	330 5 8			
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0	17.03	33,493	5.74	0.24	1.	0.01	0.0	356.5								
10	16.92	33,494	5.72	0.24	1.	0.00	0.0	353.9								
30	16.68	33,469	5.91	0.24	2.	0.00	0.1	350.4								
49	12.95		5.50	0.53	5.	0.02	3.3									
79	11.25		4.56	1.34	19.	0.01	17.3									
109	9.85		3.96	1.39	20.	0.06	18.2									
153	8.99		3.11	1.89	30.	0.01	26.4									
203	8.38		2.67	2.16	39.	0.08	30.2									
252	7.74		1.97													
306	7.31		1.45													
405	6.50	34,227	0.70					116.3								
508	5.96	34,322	0.46					102.5								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						100060
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
30 35.5N		118 47.5W		12/ 6/69		2147		GMT	2886M	310	2KT	1	300 6 8			
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.64	0.29	1.	0.00	0.0		0	16.96	33.29		24,234	369.7	0.000	
10			5.63	0.26	1.	0.00	0.0		10	16.84	33.32		24,285	364.8	0.037	
20			5.64	0.26	1.	0.00	0.0		20	16.81	33.34		24,308	362.7	0.073	
35			5.64	0.24	1.	0.00	0.0		30	16.81	33.38		24,338	359.8	0.109	
50			5.64	0.26	1.	0.00	0.0		50	15.63	33.25		24,508	343.7	0.180	
75			6.03	0.32	2.	0.10	0.3		75	12.84	33.18		25,038	293.2	0.260	
100			5.46	0.58	5.	0.01	4.6		100	11.10	33.36		25,503	248.9	0.328	
150			3.75	1.52	21.	0.00	20.1		125	10.23	33.52		25,780	222.6	0.388	
200			2.86	1.97	32.	0.00	27.0		150	9.68	33.74		26,044	197.5	0.441	
300			1.77						200	8.91	33.97		26,348	168.6	0.534	
400			1.02						250	8.36	34.09		26,527	151.6	0.616	
500			0.63						300	7.93	34.15		26,639	141.0	0.692	
									400	6.63	34.19		26,853	120.7	0.828	
									500	6.05	34.26		26,984	108.3	0.949	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						100070
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
30 18.0N		119 28.0W		12/ 7/69		0250		GMT	3738M	330	15KT					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.52	0.24	1.	0.00	0.0		0	17.83	33.52		24,203	372.7	0.000	
10			5.58	0.24	1.	0.01	0.0		10	17.83	33.52		24,203	372.7	0.037	
20			5.05	0.26	1.	0.01	0.1		20	17.83	33.52		24,203	372.7	0.075	
35			5.51	0.26	1.	0.00	0.1		30	17.83	33.52		24,203	372.7	0.112	
50			5.50	0.24	1.	0.00	0.1		50	17.83	33.52		24,203	372.7	0.187	
75			5.88	0.29	2.	0.00	0.1		75	14.16	33.34		24,894	306.9	0.272	
100			5.38	0.50	5.	0.04	3.1		100	12.39	33.35		25,256	272.4	0.345	
150			4.38	1.16	14.	0.00	13.0		125	11.26	33.47		25,560	243.5	0.410	
200			3.10	1.87	28.	0.01	22.4		150	10.45	33.66		25,851	215.8	0.468	
300			2.14						200	9.36	33.95		26,260	177.0	0.568	
400			1.17						250	8.87	34.13		26,479	156.2	0.654	
500			0.51						300	8.16	34.15		26,604	144.3	0.731	
									400	6.75	34.13		26,790	126.7	0.872	
									500	6.58	34.32		26,962	110.3	0.998	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						100080
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
30 01.0N		120 07.0W		12/ 7/69		0740		GMT	2227M	210	5KT					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.57	0.29	1.	0.01	0.0		0	17.58	33.41		24,179	375.0	0.000	
10			5.55	0.29	1.	0.00	0.0		10	17.58	33.41		24,179	375.0	0.038	
20			5.53	0.29	1.	0.00	0.0		20	17.58	33.41		24,179	375.0	0.075	
35			5.58	0.26	1.	0.00	0.0		30	17.58	33.41		24,179	375.0	0.113	
50			5.57	0.29	1.	0.00	0.0		50	17.58	33.41		24,179	375.0	0.188	
75			5.97	0.26	2.	0.00	0.0		75	14.04	33.37		24,942	302.3	0.273	
100			5.57	0.45	3.	0.11	1.3		100	12.50	33.43		25,297	268.5	0.345	
150			4.23	1.24	15.	0.02	13.4		125	11.10	33.57		25,666	233.4	0.408	
200			1.67						150	10.54	33.71		25,874	213.6	0.465	
300			0.71						200	9.62	34.03		26,280	175.1	0.564	
400			0.40						250	9.00	34.15		26,474	156.6	0.649	
500									300	8.47	34.23		26,620	142.8	0.726	
									400	7.60	34.31		26,812	124.5	0.866	
									500	6.76	34.35		26,961	110.4	0.991	

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 100090

LATITUDE 29 40.5N LONGITUDE 120 47.0W MO/DAY/YR 12/ 7/69 MESSENGER TIME 1240 GMT BOTTOM 4022M WIND 330 SPEED 14KT WEATHER DOMINANT WAVES 350 6 6

Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0			5.55	0.24	3.	0.00	0.0		0	17.45	33.41		24.210	372.0	0.000
10			5.58	0.26	2.	0.00	0.0		10	17.45	33.41		24.210	372.0	0.037
20			5.46	0.32	2.	0.00	0.0		20	17.45	33.41		24.210	372.0	0.074
35			5.56	0.26	2.	0.00	0.0		30	17.45	33.41		24.210	372.0	0.112
50			5.58	0.32	2.	0.00	0.0		50	15.85	33.22		24.435	350.6	0.184
75			5.95	0.24	3.	0.00	0.0		75	13.67	33.20		24.887	307.5	0.267
100			5.73	0.60	5.	0.04	3.2		100	12.90	33.36		25.281	270.0	0.340
150			3.59	1.50	20.	0.00	15.0		125	11.00	33.54		25.661	233.9	0.403
200			2.06	2.21	33.	0.00	20.8		150	10.39	33.87		26.025	199.3	0.458
300			0.96						200	10.25	34.24		26.337	169.7	0.552
400			0.58						250	9.83	34.33		26.476	156.2	0.636
500			0.47						300	9.27	34.37		26.602	144.5	0.714
									400	8.10	34.37		26.785	127.1	0.856
									500	7.15	34.36		26.916	114.7	0.985

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103010

LATITUDE 31 06.0N LONGITUDE 116 24.5W MO/DAY/YR 12/ 8/69 MESSENGER TIME 2020 GMT BOTTOM 67M WIND 260 SPEED 1KT WEATHER 0 DOMINANT WAVES 330 4 8

Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0									0	17.72	33.50		24.214	371.6	0.000
10									10	17.65	33.49		24.223	370.8	0.037
20									20	17.58	33.49		24.240	369.2	0.074
30									30	16.57	33.24		24.287	364.7	0.111
50									50	14.29	33.35		24.874	308.8	0.179

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103035

LATITUDE 30 56.0N LONGITUDE 116 45.0W MO/DAY/YR 12/ 8/69 MESSENGER TIME 1745 GMT BOTTOM 1664M WIND 140 SPEED 2KT WEATHER 1 DOMINANT WAVES 350 5 7

Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0									0	17.55	33.53		24.283	365.1	0.000
10									10	17.52	33.53		24.285	364.9	0.037
20									20	17.52	33.53		24.285	364.9	0.073
30									30	17.01	33.49		24.376	356.2	0.109
50									50	15.32	33.46		24.737	321.8	0.177
75									75	13.40	33.42		25.131	284.3	0.253
100									100	12.00	33.64		25.549	244.5	0.320
125									125	11.66	33.86		25.789	221.7	0.379
150									150	11.00	33.94		25.971	204.4	0.433
200									200	9.64	34.06		26.300	173.2	0.529
250									250	8.93	34.20		26.524	151.9	0.613
300									300	8.20	34.15		26.598	144.9	0.689
400									400	7.21	34.23		26.805	125.2	0.830
500									500	6.47	34.28		26.945	111.9	0.956

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103040

LATITUDE 30 46.0N LONGITUDE 117 04.5W MO/DAY/YR 12/ 8/69 MESSENGER TIME 1512 GMT BOTTOM 1856M WIND 340 SPEED 4KT WEATHER 1 DOMINANT WAVES 290 7 7

Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD
0									0	17.67	33.49		24.218	371.2	0.000
10									10	17.67	33.49		24.218	371.2	0.037
20									20	17.52	33.44		24.216	371.4	0.074
30									30	16.12	33.34		24.466	347.6	0.110
50									50	14.00	33.38		24.958	300.8	0.175
75									75	12.61	33.48		25.314	266.9	0.247
100									100	11.26	33.70		25.738	226.5	0.309
125									125	10.86	33.66		25.934	207.9	0.364
150									150	10.48	34.04		26.141	188.2	0.414
200									200	9.73	34.16		26.363	167.2	0.505
250									250	9.02	34.25		26.549	149.5	0.586
300									300	8.47	34.31		26.682	136.9	0.660
400									400	7.65	34.34		26.828	123.0	0.796
500									500	6.16	34.26		26.970	109.6	0.920

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 24.0N	117 44.0W	12/ 8/69	0939	GMT	2135M	330	4KT	1							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.92	33.33											24.274	365.9	0.000
10	16.85	33.36											24.314	362.1	0.036
20	16.72	33.36											24.344	359.3	0.073
30	16.55	33.36											24.388	355.1	0.108
50	13.61	33.20											24.899	306.4	0.175
75	12.00	33.24											25.245	273.5	0.248
100	10.55	33.43											25.658	234.2	0.311
125	9.94	33.62											25.907	210.5	0.368
150	9.55	33.83											26.171	185.4	0.418
200	8.60	34.02											26.435	160.3	0.506
250	8.10	34.07											26.551	149.4	0.585
300	7.56	34.12											26.669	138.1	0.659
400	6.66	34.17											26.833	122.5	0.795
500	6.06	34.27											26.991	107.6	0.917

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 06.0N	118 25.0W	12/ 8/69	0435	GMT	3546M	330	4KT	1							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.20	33.34											24.216	371.5	0.000
10	17.18	33.34											24.221	371.0	0.037
20	17.22	33.35											24.219	371.2	0.074
30	17.28	33.38											24.228	370.3	0.111
50	16.62	33.22											24.260	367.3	0.185
75	14.04	33.20											24.811	314.8	0.271
100	11.65	33.22											25.299	268.4	0.345
125	10.55	33.60											25.825	218.3	0.406
150	10.25	33.78											25.982	203.4	0.459
200	9.17	33.99											26.322	171.1	0.555
250	8.47	34.05											26.479	156.2	0.639
300	7.79	34.12											26.636	141.3	0.715
400	6.97	34.22											26.831	122.8	0.853
500	6.55	34.33											26.974	109.2	0.976

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103070

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
29 46.5N	119 04.5W	12/ 8/69	0005	GMT	3546M	330	14KT	2							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.60	33.57											24.296	363.8	0.000
10	17.55	33.57											24.308	362.6	0.036
20	17.55	33.57											24.313	362.2	0.073
30	17.50	33.57											24.320	361.5	0.109
50	14.04	33.23											24.834	312.6	0.177
75	12.22	33.30											25.250	273.0	0.250
100	10.97	33.51											25.643	235.6	0.314
125	10.27	33.67											25.890	212.1	0.371
150	9.97	33.91											26.128	189.5	0.422
200	9.60	34.11											26.345	168.9	0.513
250	8.92	34.16											26.494	154.7	0.596
300	7.89	34.11											26.613	143.4	0.673
400	7.46	34.29											26.831	122.8	0.812
500	6.52	34.34											26.986	108.1	0.934

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 103080

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
29 26.5N	119 43.0W	12/ 7/69	1926	GMT	3832M	350	12KT	1							
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.55	33.34											24.185	374.4	0.000
10	17.52	33.34											24.188	374.2	0.037
20	17.55	33.34											24.185	374.4	0.075
30	17.55	33.35											24.193	373.7	0.112
50	14.60	33.24											24.724	323.1	0.182
75	11.85	33.34											25.551	263.4	0.256
100	11.01	33.62											25.721	228.2	0.318
125	10.79	33.79											25.892	211.9	0.374
150	10.69	33.92											26.011	200.6	0.426
200	9.75	34.11											26.320	171.2	0.521
250	9.20	34.21											26.489	155.2	0.605
300	8.20	34.11											26.567	147.8	0.683
400	7.13	34.26											26.840	121.9	0.823
500	6.48	34.31											26.967	109.8	0.946

RV DAVID STARR JORDAN					CALCOFI CRUISE 6912					107032				
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		POTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 26.0N	116 11.0W	12/ 9/69	0152	GMT	390M	210	10KT	2	330	4	8			
Z	T	S	02	P04 S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	18.00	33.54										24.177	375.2	0.000
10	18.00	33.54										24.177	375.2	0.038
20	17.83	33.50										24.187	374.2	0.075
30	16.71	33.40										24.477	356.1	0.112
50	15.92	33.47										24.745	321.1	0.180
75	13.63	33.55										25.165	281.1	0.255
100	12.80	33.78										25.509	248.4	0.322
125	11.71	33.90										25.810	219.7	0.381
150	10.83	34.09										26.118	190.4	0.433
200	10.03	34.13										26.289	174.2	0.526
250	9.47	34.22										26.452	158.7	0.612
300	9.17	34.24										26.517	152.6	0.692

RV DAVID STARR JORDAN					CALCOFI CRUISE 6912					107035				
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		POTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 21.5N	116 22.5W	12/ 9/69	0339	GMT	1757M	300	10KT	2						
Z	T	S	02	P04 S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.61	33.54										24.271	366.2	0.000
10	17.59	33.55										24.283	365.0	0.037
20	17.49	33.52										24.284	364.9	0.073
30	16.26	33.42										24.496	344.8	0.109
50	14.95	33.48										24.833	312.7	0.175
75	12.77	33.42										25.236	274.3	0.248
100	11.95	33.59										25.525	246.8	0.314
125	10.91	33.80										25.879	213.2	0.372
150	10.81	34.04										26.083	193.8	0.424
200	9.89	34.16										26.336	169.8	0.517
250	9.19	34.19										26.475	156.6	0.600
300	8.47	34.24										26.627	142.1	0.678
400	7.44	34.23										26.772	128.3	0.819
500	6.43	34.29										26.958	110.7	0.945

RV DAVID STARR JORDAN					CALCOFI CRUISE 6912					107040				
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		POTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
30 11.0N	116 42.0W	12/ 9/69	0620	GMT	2602M	290	10KT	1						
Z	T	S	02	P04 S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.71	33.49										24.209	372.1	0.000
10	17.72	33.49										24.206	372.4	0.037
20	17.73	33.49										24.204	372.6	0.075
30	16.31	33.38										24.454	348.8	0.111
50	13.46	33.32										25.022	294.7	0.175
75	11.88	33.45										25.430	255.8	0.244
100	10.93	33.62										25.736	226.8	0.305
125	10.42	33.76										25.934	207.9	0.360
150	10.44	33.99										26.109	191.3	0.411
200	9.34	34.15										26.419	161.8	0.501
250	8.59	34.18										26.562	148.3	0.581
300	7.66	34.14										26.670	138.0	0.655
400	7.15	34.25										26.829	122.9	0.791
500	6.59	34.35										26.984	108.2	0.913

RV DAVID STARR JORDAN					CALCOFI CRUISE 6912					107050				
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		POTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
29 50.5N	117 22.0W	12/ 9/69	1110	GMT	2416M	260	12KT							
Z	T	S	02	P04 S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0	17.05	33.33										24.244	368.8	0.000
10	17.05	33.33										24.244	368.8	0.037
20	17.05	33.33										24.244	368.8	0.074
30	17.05	33.36										24.267	366.6	0.111
50	14.42	33.21										24.739	321.6	0.180
75	12.37	33.26										25.190	278.7	0.255
100	10.53	33.47										25.689	231.2	0.319
125	10.14	33.73										25.959	205.6	0.375
150	9.53	33.90										26.193	183.3	0.424
200	9.27	34.15										26.431	160.8	0.512
250	8.92	34.25										26.565	148.0	0.591
300	8.51	34.33										26.692	136.0	0.665
400	7.52	34.33										26.839	122.0	0.800
500	6.49	34.35										26.998	106.9	0.921

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				107060		
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
29 32.0N	118 01.5W	12/ 9/69	1616	GMT	3546M	330	18KT	1	330	5	6					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	17.99	33.57		24.202	372.8	0.000	
10									10	17.99	33.57		24.202	372.8	0.037	
20									20	17.99	33.58		24.209	372.1	0.075	
30									30	17.99	33.58		24.209	372.1	0.112	
50									50	16.40	33.15		24.257	367.6	0.186	
75									75	13.09	33.38		25.143	283.2	0.268	
100									100	11.90	33.56		25.512	248.1	0.335	
125									125	11.55	33.88		25.865	214.5	0.393	
150									150	10.83	34.01		26.056	196.3	0.445	
200									200	10.36	34.19		26.279	175.2	0.540	
250									250	9.59	34.28		26.479	156.1	0.625	
300									300	9.11	34.33		26.597	145.0	0.703	
400									400	7.96	34.35		26.791	126.6	0.846	
500									500	6.97	34.36		26.941	112.4	0.972	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				107070		
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
29 11.0N	118 41.0W	12/ 9/69	2041	GMT	3169M	330	12KT	1	340	5	8					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	17.81	33.46		24.162	376.6	0.000	
10									10	17.80	33.46		24.164	376.4	0.038	
20									20	17.77	33.46		24.171	375.7	0.075	
30									30	17.76	33.46		24.174	375.5	0.113	
50									50	15.75	33.29		24.511	343.3	0.185	
75									75	13.02	33.25		25.056	291.4	0.265	
100									100	11.57	33.63		25.627	237.1	0.331	
125									125	11.10	33.81		25.852	215.7	0.389	
150									150	10.47	33.94		26.065	195.5	0.441	
200									200	10.04	34.11		26.271	175.9	0.535	
250									250	9.56	34.18		26.406	163.0	0.623	
300									300	8.94	34.26		26.569	147.6	0.703	
400									400	7.87	34.28		26.749	130.5	0.848	
500									500	7.11	34.32		26.890	117.2	0.979	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				107080		
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
28 51.5N	119 20.0W	12/10/69	0054	GMT	3738M	330	12KT	1	340	5	8					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	17.71	33.46		24.186	374.3	0.000	
10									10	17.71	33.46		24.186	374.3	0.037	
20									20	17.71	33.46		24.186	374.3	0.075	
30									30	17.71	33.46		24.186	374.3	0.112	
50									50	17.68	33.46		24.193	373.6	0.187	
75									75	13.58	33.33		25.005	296.3	0.272	
100									100	11.72	33.50		25.499	249.3	0.340	
125									125	10.89	33.63		25.838	217.1	0.399	
150									150	10.01	33.87		26.090	193.1	0.451	
200									200	9.29	34.09		26.381	165.5	0.543	
250									250	9.03	34.25		26.547	149.7	0.624	
300									300	8.94	34.26		26.663	138.7	0.698	
400									400	7.29	34.28		26.833	122.6	0.835	
500									500	6.50	34.33		26.981	108.6	0.957	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				110035		
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
29 46.0N	116 00.0W	12/11/69	0631	GMT	1114M	010	6KT	1								
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.57	0.32	3.	0.04	0.0		0	17.19	33.61		24.425	351.5	0.000	
10			5.61	0.34	3.	0.02	0.0		10	17.16	33.61		24.432	350.9	0.035	
20			5.51	0.29	3.	0.05	0.0		20	16.87	33.56		24.462	348.0	0.070	
35			5.16	0.45	5.	0.40	0.8		30	16.51	33.56		24.546	340.0	0.105	
50			4.85	0.55	5.	0.20	2.9		50	15.60	33.60		24.782	317.5	0.171	
75			4.37	0.87	9.	0.02	6.7		75	12.96	33.65		25.377	260.9	0.243	
100			3.24	1.60	18.	0.01	14.4		100	12.12	33.80		25.656	234.4	0.306	
150			2.15	2.16	28.	0.00	19.7		125	11.78	33.96		25.844	216.5	0.363	
200			2.00	2.34	35.	0.00	23.1		150	11.16	34.07		26.043	197.5	0.415	
300			1.31						200	9.90	34.25		26.404	163.3	0.507	
400			0.81						250	9.49	34.29		26.504	153.8	0.569	
500			0.54						300	8.80	34.29		26.615	143.2	0.666	
									400	7.61	34.31		26.811	124.7	0.806	
									500	6.44	34.33		26.988	107.8	0.929	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					110040		
LATITUDE		LONGITUDE		MO/DA/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
29 36.5N		116 19.5W		12/11/69		0327 GMT		2509M		350		KT		1		350 5 4	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
0			5.57	0.24	2.	0.00	0.1		0	17.87	33.54		24.208	372.2	0.000		
10			5.56	0.24	2.	0.00	0.00		10	17.87	33.54		24.208	372.2	0.037		
20			5.56	0.24	2.	0.00	0.00		20	17.87	33.54		24.208	372.2	0.075		
35			5.52	0.18	2.	0.00	0.0		30	17.87	33.54		24.208	372.2	0.112		
50			5.69	0.26	2.	0.03	0.0		50	15.25	33.40		24.706	324.7	0.182		
75			5.40	0.47	4.	0.03	2.3		75	13.12	33.45		25.191	278.6	0.258		
100			3.98	1.13	12.	0.00	11.9		100	12.18	33.72		25.582	241.4	0.323		
150			3.07	1.71	23.	0.00	21.3		125	11.45	33.91		25.870	214.0	0.381		
200			2.70	2.09	32.	0.00	26.2		150	10.57	33.92		26.032	198.6	0.433		
300			1.21						200	9.22	34.03		26.345	168.9	0.527		
400			0.82						250	9.04	34.24		26.538	150.6	0.609		
500			0.44						300	8.68	34.29		26.634	141.5	0.684		
									400	7.10	34.24		26.828	123.0	0.822		
									500	6.38	34.32		26.989	107.8	0.945		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					110050		
LATITUDE		LONGITUDE		MO/DA/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
29 16.5N		116 59.0W		12/10/69		2125 GMT		3642M		340		16KT		1		340 6 8	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
0			5.67	0.26	2.	0.00	0.0		0	17.73	33.52		24.227	370.4	0.000		
10			5.55	0.21	2.	0.00	0.0		10	17.73	33.52		24.227	370.4	0.037		
20			5.49	0.21	2.	0.00	0.0		20	17.67	33.52		24.241	369.0	0.074		
35			5.50	0.24	3.	0.02	0.1		30	15.62	33.42		24.640	331.0	0.109		
50			5.45	0.45	5.	0.16	1.4		50	13.61	33.39		25.046	292.4	0.172		
75			4.72	0.82	9.	0.02	7.4		75	12.05	33.52		25.452	253.7	0.240		
100			4.28	1.10	14.	0.00	12.1		100	10.73	33.61		25.763	224.2	0.301		
150			2.61	2.00	29.	0.00	24.8		125	10.48	33.82		25.970	204.5	0.355		
200			2.56	2.05	35.	0.00	26.2		150	10.26	33.98		26.133	189.1	0.405		
300			1.16						200	9.37	34.16		26.422	161.6	0.494		
400			0.67						250	9.00	34.26		26.560	148.5	0.574		
500			0.49						300	8.38	34.28		26.672	137.8	0.648		
									400	7.46	34.34		26.856	120.4	0.783		
									500	6.46	34.33		26.986	108.1	0.904		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					110060		
LATITUDE		LONGITUDE		MO/DA/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
28 56.5N		117 39.0W		12/10/69		1604 GMT		3546M		010		10KT		1		350 6 8	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
0			5.53	0.18	2.	0.00	0.1		0	17.78	33.58		24.260	367.2	0.000		
10			5.53	0.21	2.	0.00	0.0		10	17.78	33.58		24.260	367.2	0.037		
20			5.50	0.21	2.	0.00	0.0		20	17.78	33.58		24.260	367.2	0.074		
35			5.54	0.21	2.	0.00	0.1		30	17.78	33.58		24.260	367.2	0.110		
50			5.72	0.39	4.	0.04	0.4		50	13.77	33.29		24.936	302.9	0.178		
75			4.83	0.53	8.	0.04	6.6		75	12.29	33.56		25.438	255.1	0.248		
100			3.51	1.45	18.	0.00	16.1		100	11.65	33.82		25.760	224.5	0.308		
150			1.69	2.24	31.	0.03	26.4		125	11.66	34.07		25.951	206.3	0.363		
200			1.65	2.34	34.	0.00	27.9		150	11.41	34.15		26.060	196.0	0.414		
300			1.30						200	10.84	34.20		26.202	182.5	0.510		
400			0.75						250	10.32	34.27		26.348	168.6	0.601		
500			0.68						300	9.73	34.33		26.495	154.6	0.684		
									400	8.45	34.35		26.716	133.6	0.835		
									500	7.26	34.35		26.892	116.9	0.968		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					110070		
LATITUDE		LONGITUDE		MO/DA/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
28 36.5N		118 18.0W		12/10/69		1045 GMT		3642M		330		16KT		1		340 5 8	
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD		
0									0	17.75	33.51		24.214	371.6	0.000		
10									10	17.75	33.51		24.214	371.6	0.037		
20									20	17.75	33.51		24.214	371.6	0.074		
35									30	17.75	33.51		24.214	371.6	0.112		
50									50	16.02	33.33		24.481	346.2	0.184		
75									75	13.15	33.36		25.115	285.8	0.263		
100									100	11.58	33.58		25.587	241.0	0.329		
150									125	10.71	33.74		25.868	214.2	0.387		
200									150	10.07	33.96		26.150	187.4	0.438		
300									200	9.41	34.13		26.392	164.4	0.528		
400									250	8.98	34.23		26.540	150.4	0.609		
500									300	8.66	34.29		26.637	141.2	0.684		
									400	7.59	34.32		26.822	123.7	0.823		
									500	6.53	34.33		26.977	108.9	0.946		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						110070
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
28 36.5N		118 18.0W		12/10/69		1115		GMT	3642M	330	16KT		340 5 8			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0	17.67	33.488	5.76	0.18	1.	0.00	0.1	371.4								
10	17.67	33.488	5.86	0.18	1.	0.00	0.0	371.4								
39	17.67		5.44	0.18	2.	0.00	0.1									
59	15.30	33.375	5.66	0.34	3.	0.27	0.3	327.6								
79	12.56		4.89	0.74	8.	0.03	6.7									
108	11.14		4.20	1.21	15.	0.00	14.9									
153	9.92		2.88	1.84	28.	0.03	24.3									
202	9.28	34.130	2.31	2.16	37.	0.06	30.2	162.4								
249	8.90		1.73													
304	8.53		1.31													
402	7.56		0.99													
506	6.50	34.336	0.86					108.1								

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						1100A0
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
28 16.5N		118 57.5W		12/10/69		0526		GMT	3832M	330	10KT		340 5 8			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0			5.54	0.21	2.	0.00	0.0		0	17.75	33.49		24.199	373.1	0.000	
10			5.53	0.24	2.	0.00	0.0		10	17.75	33.49		24.199	373.1	0.037	
20			5.51	0.21	2.	0.00	0.0		20	17.75	33.49		24.199	373.1	0.075	
35			5.51	0.21	2.	0.01	0.0		30	17.75	33.49		24.199	373.1	0.112	
50			5.51	0.21	2.	0.00	0.0		50	16.41	33.40		24.446	349.5	0.185	
75			5.74	0.36	3.	0.14	0.1		75	13.56	33.37		25.040	292.9	0.265	
100			5.52	0.50	5.	0.05	2.6		100	12.09	33.39		25.344	264.0	0.335	
150			4.00	1.34	19.	0.02	16.2		125	10.96	33.57		25.691	231.0	0.398	
200			2.78	1.95	31.	0.07	24.0		150	10.29	33.71		25.917	209.5	0.454	
300			1.98						200	9.66	34.03		26.273	175.7	0.552	
400			0.83						250	8.67	34.10		26.487	155.4	0.637	
500			0.61						300	8.43	34.22		26.618	143.0	0.714	
									400	7.25	34.26		26.823	123.5	0.853	
									500	6.55	34.30		26.977	108.9	0.976	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						113030
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
29 22.0N		115 18.0W		12/11/69		1430		GMT	60M	350	8KT	0	290 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	16.85	33.62		24.512	343.2	0.000	
10									10	16.80	33.61		24.516	342.8	0.034	
20									20	16.79	33.61		24.519	342.6	0.069	
30									30	16.43	33.57		24.572	337.6	0.103	
50									50	15.67	33.59		24.759	319.7	0.169	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						113035
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
29 11.5N		115 38.0W		12/11/69		1700		GMT	1295M	170	6KT	0	320 4 7			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	18.76	34.05		24.377	356.1	0.000	
10									10	18.79	34.06		24.377	356.1	0.036	
20									20	18.81	34.07		24.380	355.8	0.071	
30									30	18.81	34.07		24.380	355.8	0.107	
50									50	15.25	33.57		24.837	312.3	0.174	
75									75	14.00	33.66		25.173	280.3	0.248	
100									100	11.94	33.72		25.628	237.0	0.314	
125									125	11.84	34.04		25.895	211.7	0.370	
150									150	11.47	34.10		26.010	200.7	0.423	
200									200	10.70	34.28		26.289	174.2	0.519	
250									250	10.19	34.38		26.456	158.3	0.604	
300									300	9.47	34.40		26.609	143.8	0.683	
400									400	7.81	34.31		26.782	127.4	0.825	
500									500	6.96	34.34		26.926	113.7	0.952	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						113040
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER		TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
29 02.0N		115 57.0W		12/11/69		2005		GMT	1856M	290	10KT	0	320 4 6			
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
0									0	18.15	33.75		24.300	363.4	0.000	
10									10	18.14	33.75		24.302	363.2	0.036	
20									20	18.14	33.75		24.302	363.2	0.073	
30									30	18.13	33.76		24.312	362.2	0.109	
50									50	17.25	33.74		24.510	343.4	0.180	
75									75	14.62	33.63		25.019	294.9	0.260	
100									100	13.23	33.78		25.423	256.5	0.330	
125									125	11.54	33.97		25.896	211.5	0.389	
150									150	11.27	34.08		26.031	198.7	0.441	
200									200	10.48	34.29		26.335	169.8	0.535	
250									250	9.90	34.33		26.466	157.3	0.619	
300									300	9.21	34.37		26.612	143.5	0.697	
400									400	8.11	34.33		26.753	130.2	0.841	
500									500	7.15	34.35		26.908	115.5	0.971	

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						113050			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
28 42.0N	116 36.0W	12/12/69	0109	GMT		3738M	350	20KT	1	350 6 8					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	Q2	SIGT	DT	DD
									0	17.70	33.52		24.234	369.7	0.000
									10	17.70	33.52		24.234	369.7	0.037
									20	17.65	33.52		24.246	368.6	0.074
									30	17.65	33.52		24.251	368.1	0.111
									50	14.00	33.33		24.919	304.5	0.178
									75	12.44	33.45		25.324	266.0	0.250
									100	11.26	33.60		25.661	233.9	0.313
									125	10.40	33.75		25.930	208.4	0.369
									150	10.04	33.92		26.124	189.9	0.419
									200	9.51	34.11		26.393	164.3	0.510
									250	8.66	34.17		26.543	150.1	0.591
									300	8.49	34.30		26.671	137.9	0.665
									400	7.44	34.34		26.859	120.1	0.800
									500	6.67	34.36		26.981	108.5	0.921

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						113060			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
28 23.0N	117 16.0W	12/12/69	0535	GMT		3642M	030	15KT		350 6 8					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	Q2	SIGT	DT	DD
									0	17.67	33.53		24.249	368.3	0.000
									10	17.67	33.53		24.249	368.3	0.037
									20	17.67	33.53		24.249	368.3	0.074
									30	17.67	33.53		24.249	368.3	0.111
									50	15.15	33.31		24.659	329.2	0.181
									75	13.00	33.43		25.199	277.8	0.257
									100	11.40	33.56		25.604	239.3	0.322
									125	10.50	33.83		25.974	204.1	0.378
									150	9.99	33.96		26.163	186.2	0.428
									200	9.50	34.15		26.393	164.3	0.517
									250	9.07	34.25		26.541	150.3	0.598
									300	8.54	34.30		26.664	138.6	0.673
									400	7.65	34.35		26.836	122.2	0.809
									500	6.64	34.34		26.970	109.6	0.932

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						113070			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
28 04.0N	117 55.5W	12/12/69	1005	GMT		3452M	280	15KT		350 6 8					
Z	T	S	U2	P04	S103	N02	N03	DT	Z	T	S	Q2	SIGT	DT	DD
									0	17.86	33.54		24.211	372.0	0.000
									10	17.86	33.54		24.211	372.0	0.037
									20	17.86	33.54		24.211	372.0	0.074
									30	17.86	33.54		24.211	372.0	0.112
									50	17.87	33.54		24.208	372.2	0.186
									75	14.29	33.39		24.905	305.8	0.272
									100	13.04	33.44		25.199	277.9	0.345
									125	11.15	33.58		25.669	233.2	0.410
									150	10.27	33.78		25.975	204.0	0.465
									200	9.09	33.98		26.327	170.6	0.560
									250	8.97	34.20		26.518	152.5	0.643
									300	8.59	34.25		26.617	143.1	0.720
									400	7.90	34.30		26.847	121.2	0.858
									500	6.44	34.35		27.004	106.3	0.979

RV DAVID STARR JORDAN						CALCOFI CRUISE 6912						113080			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
27 42.0N	118 33.0W	12/12/69	1439	GMT		3926M	030	12KT	1	030 6 6					
Z	T	S	Q2	P04	S103	N02	N03	DT	Z	T	S	Q2	SIGT	DT	DD
									0	18.10	33.59		24.190	373.9	0.000
									10	18.10	33.59		24.190	373.9	0.037
									20	18.10	33.59		24.190	373.9	0.075
									30	18.10	33.59		24.190	373.9	0.112
									50	18.10	33.59		24.190	373.9	0.187
									75	16.40	33.79		24.747	320.8	0.275
									100	14.17	33.63		25.115	285.9	0.351
									125	12.52	33.57		25.401	258.6	0.420
									150	10.81	33.60		25.741	226.3	0.481
									200	9.81	33.90		26.147	187.7	0.587
									250	9.09	34.12		26.436	160.2	0.676
									300	8.25	34.13		26.575	147.1	0.755
									400	7.16	34.21		26.796	126.0	0.898
									500	6.33	34.34		27.011	105.7	1.020

117030

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND			SPEED	WEATHER	DOMINANT WAVES		
			0434	GMT			99M	310	8KT			1	SIGT	DT
28 48.0N	114 56.5W	12/14/69	NO2	NO3	DT	Z	T	S	02					
Z	T	S	02	P04	S103							24,297	363.7	0.000
						0	18.13	33.74				24,307	362.7	0.036
						10	18.12	33.75				24,312	362.3	0.073
						20	18.07	33.74				24,326	361.0	0.109
						30	17.95	33.72				24,717	323.7	0.178
						50	15.20	33.40				25,173	280.3	0.254
						75	14.00	33.66						

117035

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND			SPEED	WEATHER	DOMINANT WAVES		
			0207	GMT			205M	280	4KT			1	SIGT	DT
28 38.0N	115 16.0W	12/14/69	NO2	NO3	DT	Z	T	S	02					
Z	T	S	02	P04	S103							24,451	368.1	0.000
						0	18.47	33.79				24,278	365.5	0.037
						10	18.55	33.78				24,281	365.2	0.073
						20	18.92	33.78				24,286	364.8	0.110
						30	18.27	33.77				24,431	350.9	0.182
						50	17.00	33.56				24,980	298.6	0.263
						75	14.73	33.61				25,413	257.4	0.333
						100	12.97	33.70				25,730	227.3	0.395
						125	12.54	33.95				25,902	211.0	0.450
						150	11.72	34.02						

117040

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND			SPEED	WEATHER	DOMINANT WAVES		
			1310	GMT			1040M	030	3KT			0	SIGT	DT
28 28.0N	115 35.5W	12/13/69	NO2	NO3	DT	Z	T	S	02					
Z	T	S	02	P04	S103							24,323	361.2	0.000
						0	17.93	33.71				24,323	361.2	0.036
						10	17.93	33.71				24,323	361.2	0.072
						20	17.93	33.71				24,323	361.2	0.109
						30	17.93	33.71				24,344	359.2	0.181
						50	17.75	33.68				25,162	281.3	0.261
						75	13.85	33.60				25,662	233.8	0.326
						100	12.93	33.86				25,912	210.0	0.382
						125	11.82	34.01				26,013	200.4	0.435
						150	11.24	34.05				26,230	179.8	0.532
						200	10.77	34.22				26,439	159.9	0.619
						250	10.06	34.33				26,599	144.8	0.698
						300	9.05	34.32				26,790	126.6	0.840
						400	7.86	34.33				26,922	114.2	0.968
						500	7.05	34.35						

117050

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND			SPEED	WEATHER	DOMINANT WAVES		
			0815	GMT			4309M	030	3KT			1	SIGT	DT
28 08.0N	116 15.0W	12/13/69	NO2	NO3	DT	Z	T	S	02					
Z	T	S	02	P04	S103							24,240	369.1	0.000
						0	18.02	33.63				24,240	369.1	0.037
						10	18.02	33.63				24,271	366.2	0.074
						20	18.05	33.68				24,284	364.9	0.110
						30	18.09	33.71				24,338	359.8	0.183
						50	17.52	33.60				25,089	288.3	0.263
						75	13.47	33.41				25,596	240.1	0.331
						100	11.74	33.63				25,977	203.9	0.387
						125	10.97	33.94				26,141	188.2	0.437
						150	10.83	34.12				26,395	164.1	0.527
						200	10.27	34.32				26,571	147.5	0.607
						250	9.51	34.38				26,644	140.5	0.682
						300	9.30	34.43				26,856	120.4	0.819
						400	7.57	34.36				26,985	108.1	0.940
						500	6.76	34.38						

117060

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND			SPEED	WEATHER	DOMINANT WAVES		
			0404	GMT			3642M	020	8KT			1	SIGT	DT
27 47.0N	116 53.0W	12/13/69	NO2	NO3	DT	Z	T	S	02					
Z	T	S	02	P04	S103							24,145	378.2	0.000
						0	18.16	33.55				24,145	378.2	0.038
						10	18.16	33.55				24,145	378.2	0.076
						20	18.16	33.55				24,147	378.0	0.114
						30	18.15	33.55				24,155	377.3	0.189
						50	18.12	33.55				24,912	305.2	0.275
						75	14.22	33.38				25,368	261.8	0.347
						100	12.15	33.43				25,728	227.5	0.408
						125	10.93	33.61				26,064	195.6	0.462
						150	9.93	33.82				26,396	164.1	0.554
						200	9.04	34.12				26,512	153.0	0.635
						250	8.66	34.13				26,679	137.1	0.710
						300	8.18	34.25				26,839	122.0	0.846
						400	7.47	34.32				26,988	107.8	0.967
						500	6.62	34.36						

117070

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
27 27.0N		117 32.5W		12/12/69	2330 GMT			3926M	330	8KT	1	020	6	9	
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.19	33.55		24.138	378.9	0.000
10									10	18.15	33.56		24.155	377.2	0.038
20									20	18.15	33.56		24.155	377.2	0.076
30									30	18.15	33.56		24.160	376.8	0.113
50									50	16.15	33.45		24.348	339.8	0.185
75									75	14.65	33.45		24.875	308.7	0.267
100									100	13.36	33.49		25.173	280.3	0.341
125									125	11.68	33.54		25.537	245.7	0.407
150									150	10.84	33.66		25.783	222.3	0.467
200									200	9.56	33.95		26.227	180.1	0.569
250									250	9.00	34.12		26.451	158.9	0.656
300									300	8.22	34.17		26.611	143.6	0.734
400									400	7.10	34.23		26.820	123.8	0.874
500									500	6.62	34.34		26.972	109.3	0.997

117080

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
27 08.0N		118 10.5W		12/12/69	1910 GMT			4309M	030	9KT	2	030	6	8	
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.56	33.72		24.176	375.3	0.000
10									10	18.54	33.72		24.181	374.8	0.038
20									20	18.54	33.72		24.181	374.8	0.075
30									30	18.54	33.72		24.181	374.8	0.113
50									50	18.54	33.72		24.181	374.8	0.188
75									75	16.21	33.67		24.699	325.5	0.276
100									100	15.12	33.69		24.957	300.8	0.355
125									125	13.45	33.65		25.282	269.9	0.427
150									150	11.61	33.60		25.597	240.0	0.491
200									200	10.17	33.92		26.101	192.0	0.601
250									250	9.21	34.11		26.409	162.8	0.692
300									300	8.68	34.20		26.564	148.1	0.773
400									400	7.20	34.21		26.791	126.6	0.916
500									500	6.41	34.31		26.977	108.9	1.040

118039

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
28 18.5N		115 24.0W		12/13/69	1505 GMT			266M	020	2KT	1	320	4	11	
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.54	33.89		24.310	362.4	0.000
10									10	18.45	33.89		24.333	360.3	0.036
20									20	18.45	33.89		24.333	360.3	0.072
30									30	18.45	33.89		24.333	360.3	0.108
50									50	17.80	33.70		24.347	358.9	0.181
75									75	15.02	33.74		25.018	295.1	0.263
100									100	12.75	33.67		25.434	255.5	0.332
125									125	11.65	33.93		25.849	216.0	0.392
150									150	11.30	34.09		26.033	198.5	0.444
200									200	10.32	34.26		26.340	169.3	0.538

118039

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
28 18.5N		115 24.0W		12/13/69	1540 GMT			266M	020	2KT	1	320	4	11	
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	18.50	33.877	5.36	0.39	2.	0.02	0.2	362.4							
10	18.36	33.872	5.46	0.32	2.	0.01	0.2	359.5							
40	18.36		5.38	0.29	2.	0.03	0.1								
59	15.43	33.729	4.32	0.82	8.	0.02	6.0	304.4							
79	14.48		4.27	0.89	9.	0.05	6.8								
109	12.06		4.01	1.21	14.	0.02	12.7								
124	11.66		2.94	1.68	21.	0.01	19.6								
148	11.34		2.25	2.02	27.	0.01	24.6								
171	11.03	34.134	1.99	2.13	31.	0.09	26.0	190.6							
196	10.37	34.232	1.49	2.47	38.	0.03	29.6	172.2							

119033

RV DAVID STARR JORDAN
CALCOFI CRUISE 6912

LATITUDE		LONGITUDE		MO/DAY/YR	MESSENGER TIME			BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES			
28 19.0N		114 53.0W		12/14/69	1612 GMT			112M	320	11KT	1	320	4	6	
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0									0	18.84	33.69		24.083	384.1	0.000
10									10	18.80	33.69		24.093	383.2	0.038
20									20	18.80	33.69		24.093	383.2	0.077
30									30	18.80	33.70		24.100	382.5	0.115
50									50	17.95	33.61		24.247	368.5	0.190
75									75	14.97	33.56		24.890	307.2	0.275

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912					119033	
LATITUDE	LONGITUDE	MO/DA/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
28 19.0N	114 53.0W	12/14/69	1645	GMT	112M	320	11KT	1	320	4	6					
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
0	18.10	33.683	5.41	0.16	4.	0.14	0.1	367.1								
10	18.07	33.678	5.39	0.21	4.	0.23	0.0	366.8								
24	18.07		5.36	0.18	4.	0.22	0.0									
34	18.06		5.27	0.18	4.	0.22	0.1									
44	18.07		5.21	0.13	3.	0.33	0.4									
58	17.24	33.691	4.90	0.42	5.	0.05	2.6	346.8								
73	15.07	33.607	4.31	0.82	8.	0.01	6.6	305.8								
98	12.86	33.708	2.48	1.81	21.	0.02	17.0	254.8								

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120045	
LATITUDE	LONGITUDE	MO/DA/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 43.0N	115 53.0W	12/ 6/69	1515	GMT	2490M	060	9KT	1	010	3	4					
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
2	20.56	34.403	5.12					374.9	0	20.56	34.403	5.12	24.179	374.9	0.000	
13	20.56	34.397	5.12					375.4	10	20.56	34.399	5.12	24.175	375.3	0.038	
32	20.52	34.386	5.13					375.2	20	20.55	34.394	5.12	24.175	375.3	0.075	
42	16.09	33.618	5.56					326.6	30	20.52	34.388	5.13	24.176	375.2	0.113	
50	14.93	33.621	5.11					301.9	50	14.95	33.621	5.11	24.946	301.9	0.181	
65	14.18	33.745	4.18					277.6	75	14.15	33.987	3.00	25.392	259.5	0.251	
80	14.14	34.092	2.44					251.4	100	13.86	34.189	1.94	25.610	238.7	0.314	
100	13.86	34.189	1.94					238.7	125	12.02	34.122	2.13	25.924	208.8	0.371	
124	12.04	34.115	2.16					209.7	150	11.64	34.256	1.60	26.100	192.2	0.422	
143	11.78	34.242	1.59					195.7	200	10.44	34.318	1.41	26.363	167.1	0.514	
173	11.09	34.264	1.65					182.0	250	9.85	34.407	0.99	26.538	150.5	0.595	
202	10.40	34.322						166.1	300	9.00	34.354	0.91	26.832	141.6	0.671	
231	10.21	34.421	1.07					155.6	400	7.79	34.351	0.54	26.817	124.1	0.810	
270	9.38	34.370	0.94					146.2	500	6.80	34.366	0.36	26.968	109.7	0.934	
330	8.70	34.346	0.88					137.6								
402	7.76	34.351	0.53					123.7								
474	7.03	34.359	0.42					113.2								
548	6.41	34.361	0.23					103.6								

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120050	
LATITUDE	LONGITUDE	MO/DA/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 33.0N	115 52.5W	12/ 7/69	1356	GMT	4078M	280	10KT	1	280	3	6					
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
1	18.81	33.822	5.21					373.8	0	18.81	33.822	5.21	24.191	373.8	0.000	
11	18.81	33.812	5.41					374.6	10	18.81	33.814	5.40	24.184	374.5	0.037	
31	18.81	33.810	5.40					374.7	20	18.81	33.813	5.41	24.182	374.6	0.075	
39	18.80	33.808	5.44					374.6	30	18.81	33.812	5.40	24.182	374.7	0.113	
50	16.60	33.702	5.31					331.7	50	16.60	33.702	5.31	24.633	331.7	0.183	
65	14.05	33.557	5.07					288.4	75	13.09	33.603	4.53	25.313	267.0	0.259	
79	12.84	33.633	4.29					259.9	100	12.05	33.783	3.53	25.660	238.0	0.322	
100	12.05	33.783	3.53					238.0	125	11.57	33.969	2.72	25.927	208.6	0.378	
125	11.37	33.969	2.72					208.6	150	10.73	34.098	2.37	26.141	188.3	0.428	
144	10.76	34.045	2.51					192.5	200	10.40	34.341	1.33	26.389	164.7	0.518	
174	10.62	34.259	1.76					174.4	250	10.01	34.498	0.57	26.578	146.7	0.599	
203	10.37	34.348	1.28					163.7	300	9.34	34.490	0.41	26.684	136.6	0.672	
232	10.21	34.478	0.65					151.4	400	7.90	34.422	0.29	26.855	120.4	0.807	
272	9.72	34.493	0.48					142.4	500	6.77	34.380	0.27	26.982	108.4	0.929	
331	8.90	34.477	0.37					130.9								
405	7.85	34.417	0.29					119.8								
478	6.99	34.382	0.28					111.0								
555	6.31	34.387	0.21					101.9								

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120055	
LATITUDE	LONGITUDE	MO/DA/YR	MESSENGER	TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 23.0N	116 12.0W	12/ 7/69	2326	GMT	3832M	330	16KT	1	330	3	5					
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
0	18.17	33.72											24.272	366.1	0.000	
10	18.17	33.72											24.272	366.1	0.037	
20	18.18	33.71											24.262	367.0	0.075	
30	18.18	33.71											24.262	367.0	0.113	
50	16.92	33.61											24.488	345.5	0.182	
75	13.85	33.62											25.178	279.9	0.260	
100	11.67	33.61											25.593	240.3	0.326	
125	10.81	33.82											25.912	210.0	0.383	
150	10.60	34.19											26.237	179.2	0.432	
200	10.20	34.44											26.501	154.1	0.517	
250	9.62	34.49											26.638	141.0	0.593	
300	9.15	34.50											26.723	133.0	0.665	
400	8.26	34.53											26.886	117.5	0.797	
500	6.76	34.42											27.016	105.2	0.915	

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						120055			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 23.0N	116 12.0W	12/ 8/69	0024 GMT	3832M	330	16KT	1	330	3 5						
Z	T	S	OZ	P04	S103	NO2	NO3	DT	Z	T	S	O2	STGT	DT	DD
2	18.14	33.609	5.51					373.4							
12	18.14	33.627	5.51					372.1							
32	18.12	33.604	5.50					373.4							
42	17.01		5.36												
52	15.07		5.04												
66	13.77		5.10												
82	12.79		4.63												
101	11.26		4.26												
127	10.77		3.29												
145	10.40		2.72												
176	10.50		1.75												
206	10.27		1.05												
235	10.03														
275	9.32		0.76												
334	8.75		0.52												
408	8.18	34.497	0.22					118.8							
482	7.01	34.399	0.24					110.0							
561	6.17		0.31												

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						120640			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 13.0N	116 31.0W	12/ 8/69	1209 GMT	3869M	020	10KT	1	020	3 5						
Z	T	S	OZ	P04	S103	NO2	NO3	DT	Z	T	S	O2	STGT	DT	DD
0	18.74	33.84						24.222	370.8	0.000					
10	18.74	33.84						24.222	370.8	0.037					
20	18.76	33.84						24.217	371.3	0.074					
30	18.76	33.84						24.217	371.3	0.111					
50	15.97	32.48						24.741	321.4	0.161					
75	13.15	33.45						25.189	278.8	0.256					
100	11.86	33.75						25.666	233.4	0.321					
125	11.42	34.10						26.019	199.6	0.376					
150	10.92	34.25						26.226	180.1	0.424					
200	10.57	34.58						26.590	164.6	0.512					
250	9.82	34.40						26.335	150.9	0.594					
300	9.28	34.45						26.663	138.7	0.669					
400	7.91	34.39						26.829	122.9	0.806					
500	6.88	34.39						26.979	108.7	0.929					

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						120640			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
27 13.0N	116 31.0W	12/ 8/69	1310 GMT	3869M	020	10KT	1	020	3 5						
Z	T	S	OZ	P04	S103	NO2	NO3	DT	Z	T	S	O2	STGT	DT	DD
1	18.64	33.725	5.30					376.8							
11	18.64	33.722	5.42					377.0							
30	13.64		5.40												
40	14.02	33.653	5.48					367.5							
51	14.83		5.68												
66	13.92		5.17												
90	12.50		5.03												
100	12.29		3.39												
124	11.60		2.47												
144	11.22		2.07												
173	10.75		1.69												
202	10.46		1.29												
232	10.12		1.08												
271	9.67		0.98												
329	8.92		0.41												
402	7.94	34.405	0.46					122.2							
475	7.17	34.400	0.24					112.0							
553	6.40		0.29												

RV ALEXANDER AGASSIZ						CALCOFI CRUISE 6912						120070			
LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES							
26 53.0N	117 10.0W	12/ 8/69	2351 GMT	4078M	330	15KT	2	330	6 9						
Z	T	S	OZ	P04	S103	NO2	NO3	DT	Z	T	S	O2	STGT	DT	DD
0	18.95	33.86						24.190	373.9	0.000					
10	18.95	33.86						24.184	374.4	0.037					
20	18.92	33.86						24.192	373.7	0.075					
30	18.92	33.86						24.192	373.7	0.112					
50	19.02	33.90						24.197	373.2	0.187					
75	15.05	33.58						24.888	307.4	0.273					
100	12.41	33.56						25.415	257.3	0.344					
125	11.25	33.61						25.670	233.0	0.406					
150	10.44	33.76						25.930	208.3	0.462					
200	9.82	34.10						26.301	173.1	0.559					
250	10.20	34.47						26.524	151.8	0.643					
300	9.48	34.44						26.822	142.5	0.719					
400	7.72	34.34						26.818	124.0	0.859					
500	6.69	34.33						26.955	111.0	0.983					

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120070	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
26 53.0N		117 10.0W		12/ 9/69		0040 GMT		4078M		330 15KT		2		330 6 9		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SI6T	DT	DD	
1	18.99	33.782	5.34					381.1								
11	18.99	33.786	5.37					380.8								
32	19.01		5.39													
56	18.94	33.791	5.37					379.2								
66	15.74		5.47													
76	13.91		5.64													
91	12.55		5.16													
106	11.66		4.85													
131	10.85		4.19													
151	10.31		3.57													
176	9.95		3.00													
205	10.13		1.94													
235	10.54		0.79													
275	9.86		0.53													
334	9.07		0.42													
407	7.72	34.379	0.41					121.1								
481	6.85	34.371	0.28					109.7								
559	6.21		0.20													

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120080	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
26 33.0N		117 49.0W		12/ 9/69		1315 GMT		4021M		330 11KT		1		340 4 5		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SI6T	DT	DD	
									0	18.46	33.69		24.178	375.1	0.000	
									10	18.47	33.69		24.175	375.3	0.038	
									20	18.47	33.69		24.175	375.3	0.075	
									30	18.48	33.69		24.175	375.6	0.113	
									50	18.46	33.69		24.178	375.1	0.188	
									75	17.43	34.05		24.704	325.0	0.276	
									100	15.46	33.87		25.021	294.8	0.354	
									125	13.10	33.76		25.434	255.5	0.424	
									150	11.64	33.71		25.676	232.4	0.486	
									200	9.63	34.01		26.262	176.7	0.590	
									250	8.88	34.14		26.485	155.6	0.675	
									300	8.61	34.22		26.590	145.6	0.753	
									400	7.54	34.30		26.813	124.5	0.894	
									500	6.59	34.34		26.976	109.0	1.018	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120090	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
26 33.0N		117 49.0W		12/ 9/69		1414 GMT		4021M		330 11KT		1		340 4 5		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SI6T	DT	DD	
1	18.43	33.606	5.27					380.5								
11	18.44	33.614	5.45					380.1								
31	18.44		5.47													
56	17.62	33.790	5.83					348.2								
65	17.63		5.76													
76	17.08		5.70													
90	15.93		5.47													
105	14.94		5.44													
129	12.78		5.12													
149	11.61		4.83													
173	10.37		3.90													
203	9.65		3.20													
233	9.26		2.92													
271	8.76		2.05													
330	8.35		1.23													
404	7.54	34.319	0.58					123.0								
478	6.92	34.365	0.31					111.3								
557	6.23		0.26													

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912					120090	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND SPEED		WEATHER		DOMINANT WAVES		
26 12.0N		118 27.0W		12/10/69		1522 GMT		4021M		350 12KT		1		340 4 5		
Z	T	S	O2	PO4	SI03	NO2	NO3	DT	Z	T	S	O2	SI6T	DT	DD	
									0	18.48	33.67		24.157	377.0	0.000	
									10	18.48	33.68		24.165	376.3	0.038	
									20	18.48	33.69		24.173	375.6	0.075	
									30	18.48	33.69		24.173	375.6	0.113	
									50	18.48	33.69		24.173	375.6	0.188	
									75	16.30	33.70		24.701	325.2	0.276	
									100	14.01	33.63		25.148	282.7	0.353	
									125	12.09	33.53		25.453	253.7	0.421	
									150	10.78	33.71		25.832	217.6	0.480	
									200	10.48	34.27		26.320	171.2	0.580	
									250	10.23	34.43		26.488	155.3	0.664	
									300	9.86	34.46		26.574	147.1	0.742	
									400	8.36	34.34		26.722	133.0	0.889	
									500	7.26	34.31		26.861	119.9	1.023	

RV ALEXANDER AGASSIZ										CALCOFI CRUISE 6912						120090	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
26 12.0N		118 27.0W		12/10/69		1611 GMT		4021M		350		12KT		1		340 4 5	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
1	18.42	33.603	5.44					380.5									
11	18.42	33.601	5.43					380.6									
31	18.41		5.45														
55	18.41	33.602	5.42					380.3									
64	16.70		5.88														
74	15.84		5.83														
89	14.52		5.80														
103	13.81		5.48														
129	11.38		4.45														
147	10.74		3.73														
173	10.54		2.36														
202	10.42		1.61														
231	10.39		1.11														
271	10.16		0.66														
329	9.58		0.54														
403	9.51	34.406	0.55					130.3									
477	7.52	34.396	0.39					117.0									
556	6.53		0.27														

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						123042	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
27 14.0N		114 59.0W		12/15/69		0605 GMT		1763M		340		6KT		0			
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
									0	20.28	34.38		24.236	369.5	0.000		
									10	20.28	34.38		24.236	369.5	0.037		
									20	20.28	34.38		24.236	369.5	0.074		
									30	20.25	34.37		24.236	369.5	0.111		
									50	17.45	34.04		24.691	326.1	0.181		
									75	14.00	33.93		25.381	260.5	0.255		
									100	11.55	33.74		25.716	228.6	0.316		
									125	11.10	34.05		26.039	198.0	0.370		
									150	11.26	34.21		26.134	188.9	0.419		
									200	10.70	34.32		26.320	171.2	0.511		
									250	10.12	34.44		26.515	152.8	0.595		
									300	9.50	34.41		26.596	145.1	0.672		
									400	8.57	34.41		26.745	130.9	0.817		
									500	7.20	34.39		26.932	113.2	0.947		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						123050	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
27 14.0N		115 31.0W		12/15/69		1038 GMT		3738M		320		13KT					
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
									0	18.98	33.83		24.154	377.3	0.000		
									10	18.98	33.83		24.154	377.3	0.038		
									20	18.98	33.83		24.154	377.3	0.076		
									30	18.98	33.83		24.154	377.3	0.113		
									50	14.51	33.43		24.889	307.3	0.182		
									75	12.06	33.46		25.404	258.3	0.253		
									100	10.69	33.63		25.786	222.0	0.314		
									125	10.60	33.87		25.988	202.8	0.367		
									150	10.88	34.09		26.109	191.3	0.417		
									200	10.02	34.28		26.407	163.0	0.508		
									250	9.40	34.31		26.534	150.9	0.589		
									300	8.50	34.29		26.662	138.8	0.664		
									400	7.65	34.38		26.860	120.0	0.799		
									500	6.69	34.39		27.002	106.5	0.920		

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						123060	
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED		WEATHER		DOMINANT WAVES	
26 40.0N		116 09.0W		12/15/69		1445 GMT		3926M		310		9KT		1		310 4 9	
Z	T	S	O2	P04	S103	N02	N03	DT	Z	T	S	O2	S16T	DT	DD		
									0	18.79	33.78		24.164	376.4	0.000		
									10	18.79	33.78		24.164	376.4	0.038		
									20	18.79	33.78		24.164	376.4	0.075		
									30	18.79	33.78		24.164	376.4	0.113		
									50	14.85	33.42		24.809	315.0	0.182		
									75	12.65	33.41		25.252	272.8	0.256		
									100	11.51	33.70		25.693	230.9	0.320		
									125	10.77	33.92		25.997	202.0	0.375		
									150	10.14	34.00		26.169	185.6	0.424		
									200	9.52	34.19		26.421	161.7	0.512		
									250	8.93	34.25		26.563	148.2	0.592		
									300	8.66	34.37		26.699	135.2	0.665		
									400	7.77	34.38		26.842	121.7	0.800		
									500	6.73	34.39		26.997	107.0	0.922		

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 127034

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
26 55.0N	114 06.5W	12/16/69	0716 GMT	84M	330	4KT							
Z	T	S	02	P04 S103	NO2 NO3	DT	Z	T	S	02	SIGT	DT	DD
							0	20.83	34.47		24.157	377.0	0.000
							10	20.83	34.47		24.157	377.0	0.038
							20	20.83	34.47		24.157	377.0	0.075
							30	20.83	34.47		24.157	377.0	0.113
							50	18.43	34.04		24.452	348.9	0.186

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 127040

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
26 43.5N	114 29.0W	12/16/69	0430 GMT	2981M	320	3KT				310 4 8			
Z	T	S	02	P04 S103	NO2 NO3	DT	Z	T	S	02	SIGT	DT	DD
							0	20.79	34.45		24.153	377.4	0.000
							10	20.73	34.45		24.169	375.9	0.038
							20	20.71	34.45		24.174	375.4	0.075
							30	20.70	34.45		24.177	375.1	0.113
							50	17.75	33.92		24.527	341.8	0.185
							75	15.06	33.93		25.155	282.0	0.263
							100	13.58	34.17		25.653	234.6	0.328
							125	13.26	34.37		25.872	213.8	0.385
							150	12.80	34.48		26.049	196.9	0.438
							200	11.75	34.56		26.314	171.8	0.532
							250	10.88	34.55		26.467	157.3	0.617
							300	10.04	34.51		26.583	146.3	0.696
							400	8.26	34.40		26.785	127.1	0.839
							500	7.41	34.42		26.940	112.4	0.967

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 127050

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
26 22.5N	115 07.5W	12/15/69	2119 GMT	3169M	280	10KT	2			310 6 8			
Z	T	S	02	P04 S103	NO2 NO3	DT	Z	T	S	02	SIGT	DT	DD
							0	18.95	33.76		24.108	381.7	0.000
							10	18.92	33.76		24.116	381.0	0.038
							20	18.86	33.76		24.131	379.5	0.076
							30	18.86	33.76		24.131	379.5	0.114
							50	16.30	33.30		24.395	354.4	0.188
							75	13.61	33.36		25.022	294.6	0.269
							100	11.90	33.46		25.434	255.5	0.339
							125	10.62	33.67		25.829	217.9	0.399
							150	10.05	33.89		26.102	192.0	0.451
							200	10.28	34.33		26.401	163.5	0.541
							250	10.05	34.43		26.522	152.0	0.623
							300	9.40	34.43		26.628	142.0	0.699
							400	7.97	34.37		26.805	125.2	0.839
							500	6.85	34.37		26.965	110.1	0.964

RV DAVID STARR JORDAN CALCOFI CRUISE 6912 127060

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES					
26 03.5N	115 46.5W	12/15/69	1906 GMT	3832M	280	13KT	1			310 6 9			
Z	T	S	02	P04 S103	NO2 NO3	DT	Z	T	S	02	SIGT	DT	DD
							0	19.18	33.78		24.065	385.8	0.000
							10	19.17	33.78		24.068	385.6	0.039
							20	19.15	33.78		24.073	385.1	0.077
							30	19.14	33.78		24.075	384.8	0.116
							50	16.31	33.32		24.408	353.2	0.190
							75	14.40	33.42		24.926	303.8	0.272
							100	13.00	33.51		25.261	272.0	0.345
							125	11.47	33.59		25.615	238.3	0.409
							150	10.27	33.74		25.944	207.0	0.466
							200	10.26	34.09		26.218	180.9	0.565
							250	9.38	34.24		26.450	158.9	0.652
							300	8.90	34.29		26.599	144.7	0.731
							400	8.07	34.42		26.829	122.9	0.871
							500	7.19	34.40		26.941	112.3	0.996

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						130030
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
26 29.0N	113 29.0W	12/16/69	1311	GMT	112M	240	2KT	1		310	3	8				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
									0	21.18	34.49		24.078	384.6	0.000	
									10	21.18	34.49		24.078	384.6	0.038	
									20	21.18	34.49		24.078	384.6	0.077	
									30	21.18	34.49		24.078	384.6	0.116	
									50	19.00	34.14		24.385	355.3	0.190	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						130030
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
26 29.0N	113 29.0W	12/16/69	1348	GMT	112M	240	2KT	1		310	3	8				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
0	21.11	34.455	5.09	0.24	3.	0.00	0.1	385.3	0	21.11	34.455	5.09	24.070	385.3	0.000	
24	21.11	34.455	5.11	0.24	3.	0.00	0.1	385.3	10	21.11	34.456	5.10	24.070	385.3	0.039	
44	21.08	34.448	5.08	0.21	3.	0.00	0.1	385.0	20	21.11	34.456	5.11	24.070	385.3	0.077	
53	19.52		4.87	0.42	4.	0.16	1.1		30	21.10	34.454	5.10	24.071	385.2	0.116	
63	17.73	34.172	3.50	1.16	12.	0.08	8.7	323.0	50	19.70	34.120	4.94	24.190	373.9	0.192	
73	16.22	34.265	2.26	1.89	20.	0.03	16.4	282.3	75	16.10	34.290	2.24	25.199	277.8	0.274	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						130040
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
26 09.0N	114 07.0W	12/16/69	1925	GMT	2135M	260	2KT	1		310	3	8				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
									0	21.43	34.51		24.024	389.6	0.000	
									10	21.37	34.51		24.041	388.1	0.039	
									20	21.36	34.50		24.036	388.5	0.078	
									30	21.32	34.49		24.039	388.2	0.117	
									50	18.04	33.99		24.510	343.4	0.190	
									75	15.25	33.99		25.159	281.6	0.269	
									100	13.14	34.07		25.665	233.5	0.334	
									125	12.55	34.22		25.902	211.0	0.390	
									150	11.59	34.32		26.158	186.6	0.441	
									200	10.79	34.43		26.389	164.6	0.530	
									250	10.12	34.45		26.522	152.0	0.612	
									300	9.62	34.47		26.623	142.5	0.689	
									400	8.30	34.47		26.833	122.5	0.828	
									500	7.23	34.45		26.975	109.1	0.951	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						130040
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
26 09.0N	114 07.0W	12/16/69	1930	GMT	2135M	260	2KT	1		310	3	8				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
0	21.42	34.483	5.15	0.26	2.	0.00	0.1	391.3								
10	21.33	34.479	5.24	0.26	3.	0.00	0.1	389.3								
29	21.33		5.16	0.26	3.	0.00	0.1									
39	21.26		5.14	0.29	3.	0.00	0.1									
49	18.32	34.038	5.17	0.39	4.	0.15	0.2	346.5								
63	16.17		4.48	0.84	7.	0.21	4.6									
78	15.09		3.24	1.34	13.	0.03	12.0									
97	13.56		2.34	1.74	19.	0.02	18.5									
121	12.55		2.02	1.97	24.	0.06	21.4									
141	12.13		1.54	2.21	29.	0.03	24.6									
169	11.30		1.29	2.39	34.	0.03	26.8									
198	10.68		1.36	2.47	37.	0.03	27.4									
227	10.46		1.05	2.55	39.	0.03	27.5									
265	9.99			0.68												
322	9.30			0.45												
395	8.43	34.457		0.32				125.4								
467	7.56	34.442		0.25				114.2								
545	6.77			0.20												

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912						133025
LATITUDE	LONGITUDE	MO/DAY/YR		MESSENGER TIME		BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES						
26 04.5N	112 48.0W	12/17/69	0720	GMT	82M	300	8KT	2		300	3	9				
Z	T	S	02	P04	S103	N02	N03	DT	Z	T	S	02	SIGT	DT	DD	
									0	21.31	34.52		24.065	385.8	0.000	
									10	21.31	34.52		24.065	385.8	0.039	
									20	21.31	34.52		24.065	385.8	0.077	
									30	21.27	34.51		24.068	385.5	0.116	
									50	18.25	33.90		24.390	354.9	0.190	
									75	16.21	34.22		25.097	287.5	0.271	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				133030		
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES		
25 54.5N		113 07.5W		12/17/69		0446 GMT		205M		280		8KT	2	260 3 8		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	21.65	34.50		23.956	396.1	0.000	
									10	21.65	34.50		23.956	396.1	0.040	
									20	21.65	34.50		23.956	396.1	0.079	
									30	21.57	34.49		24.026	389.5	0.119	
									50	17.42	34.02		24.683	326.9	0.191	
									75	14.87	34.08		25.311	267.1	0.265	
									100	14.24	34.35		25.654	234.5	0.329	
									125	13.24	34.50		25.977	203.8	0.384	
									150	12.55	34.58		26.176	184.9	0.434	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				133040		
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES		
25 34.5N		113 45.5W		12/16/69		2155 GMT		3169M		110		10KT	2	260 4 8		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	21.90	34.43		23.999	392.0	0.000	
									10	21.10	34.36		24.001	391.9	0.039	
									20	20.84	34.28		24.010	391.0	0.078	
									30	20.50	34.18		24.026	389.6	0.118	
									50	16.09	33.81		24.833	312.6	0.188	
									75	13.49	33.78		25.371	261.5	0.260	
									100	12.37	33.81		25.616	238.2	0.323	
									125	11.26	34.00		25.971	204.4	0.379	
									150	11.38	34.27		26.158	186.6	0.429	
									200	10.71	34.43		26.404	163.3	0.518	
									250	10.34	34.54		26.554	149.0	0.599	
									300	9.71	34.51		26.639	141.0	0.674	
									400	6.46	34.46		26.801	125.6	0.814	
									500	7.29	34.44		26.959	110.6	0.940	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				137023		
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES		
25 34.0N		112 19.0W		12/17/69		1246 GMT		75M		320		10KT				
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	21.75	34.51		23.936	398.1	0.000	
									10	21.75	34.51		23.936	398.1	0.040	
									20	21.75	34.51		23.936	398.1	0.080	
									30	21.72	34.50		23.937	398.0	0.120	
									50	18.85	34.00		24.316	361.9	0.196	

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				137023		
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES		
25 34.0N		112 19.0W		12/17/69		1308 GMT		75M		320		10KT				
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
	0	21.71	34.489	4.46U	0.24	2.	0.01	0.7	398.5	0	21.71	34.489	4.46	23.931	398.5	0.000
	10	21.69	34.487	5.10	0.26	2.	0.01	0.7	398.1	10	21.69	34.487	5.10	23.935	398.1	0.040
	20	21.71	34.487	5.11	0.24	2.	0.00	0.6	398.7	20	21.71	34.487	5.11	23.930	398.7	0.080
	30	21.69		5.09	0.26	2.	0.00	0.7		30	21.69	34.481	5.09	23.930	398.6	0.120
	39	21.70	34.484	5.08	0.24	2.	0.00	0.7	398.6	50	19.10	34.020	4.40	24.268	366.4	0.196
	62	16.66	34.199	2.83					296.7							

RV DAVID STARR JORDAN										CALCOFI CRUISE 6912				137030		
LATITUDE		LONGITUDE		MO/DAY/YR		MESSENGER TIME		BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES		
25 20.0N		112 46.0W		12/17/69		1612 GMT		371M		300		9KT	2	300 5 6		
Z	T	S	O2	P04	S103	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD	
									0	21.96	34.51		23.878	403.6	0.000	
									10	21.96	34.51		23.878	403.6	0.040	
									20	21.96	34.51		23.878	403.6	0.081	
									30	21.96	34.51		23.878	403.6	0.121	
									50	17.47	33.99		24.648	330.2	0.195	
									75	15.47	34.09		25.187	278.9	0.272	
									100	14.85	34.18		25.393	259.4	0.339	
									125	13.37	34.36		25.842	216.6	0.400	
									150	12.76	34.43		26.019	199.8	0.453	
									200	11.53	34.62		26.402	163.4	0.546	
									250	11.09	34.62		26.483	155.7	0.628	
									300	10.82	34.62		26.532	151.1	0.708	

RV DAVID STARR JORDAN

CALCOFI CRUISE 6912

137030

Z	LATITUDE		LONGITUDE			MO/DAY/YR			MESSENGER		TIME	BOTTOM		WIND		SPEED	WEATHER	DOMINANT WAVES			DD
	25	20.0N	112	46.0W		12/17/69	1701	GMT	DT	Z		T	S	02	5			6			
0	22.05	34.50	5.07		3.	0.00	0.0	406.8													
10	21.95	34.50	5.08	0.26	4.	0.00	0.0	404.1													
29	21.97		5.04	0.26	4.	0.00	0.1														
44	21.90		5.17	0.26	4.	0.00	0.0														
58	17.59		5.10	0.53	7.	0.10	1.2														
72	16.05		4.06	0.95	12.	0.01	6.4														
87	15.06	34.09	3.19	1.45	18.	0.00	11.7	270.3													
106	14.50		2.05	1.81	17.	0.00	16.5														
130	13.27		1.07	2.37	26.	0.00	20.3														
150	12.52		0.85	2.52	30.	0.00	21.5														
194	11.53		0.29	2.87	39.	0.00	22.0														
229	11.11		0.24	2.97	42.	0.00	21.5														
263	10.91	34.60	0.18					154.1													
303	10.71	34.60	0.19					150.7													

RV ALEXANDER AGASSIZ

CALCOFI CRUISE 6912

TEN METER DATA

						Z	T	S	02	D
60.050	11/17/69	2305GMT	37 57.5N	122 53.5W		10	13.54			
		BOTTOM 47M	WIND 340 14KT	WEATHER 0						
		DOMINANT WAVES	320 03 04							
60.055	11/17/69	1835GMT	37 49.0N	123 16.5W		10	13.12			
		BOTTOM 112M	WIND 010 08KT	WEATHER 0						
		DOMINANT WAVES	280 08 06							
60.065	11/16/69	0900GMT	37 27.0N	123 57.5W		10	13.46			
		BOTTOM 3541M	WIND 330 24KT	WEATHER						
		DOMINANT WAVES								
63.050	11/18/69	0300GMT	37 23.0N	122 28.0W		10	13.50			
		BOTTOM 37M	WIND 350 18KT	WEATHER						
		DOMINANT WAVES								
63.052	11/18/69	0400GMT	37 18.5N	122 36.5W		10	14.12			
		BOTTOM 84M	WIND 350 15KT	WEATHER						
		DOMINANT WAVES								
63.055	11/18/69	0600GMT	37 12.5N	122 50.0W		10	13.96			
		BOTTOM 325M	WIND 360 12KT	WEATHER 0						
		DOMINANT WAVES	230 03 06							
63.060	11/18/69	0900GMT	37 02.5N	123 11.5W		10	14.10			
		BOTTOM 2690M	WIND 010 09KT	WEATHER 0						
		DOMINANT WAVES	270 05							
63.065	11/18/69	1145GMT	36 52.5N	123 33.5W		10	13.54			
		BOTTOM 3731M	WIND 050 10KT	WEATHER						
		DOMINANT WAVES								
63.070	11/18/69	1440GMT	36 41.5N	123 57.0W		10	13.94			
		BOTTOM 3919M	WIND 070 06KT	WEATHER 1						
		DOMINANT WAVES	310 02 04							
63.080	11/18/69	1910GMT	36 23.0N	124 37.5W		10	13.98			
		BOTTOM 4159M	WIND 070 07KT	WEATHER 1						
		DOMINANT WAVES	310 03 04							
63.090	11/18/69	2354GMT	36 01.5N	125 20.0W		10	16.48			
		BOTTOM 4594M	WIND 040 08KT	WEATHER 1						
		DOMINANT WAVES	200 02 06							
67.048	11/20/69	0250GMT	36 53.5N	121 56.5W		10	14.00	33.489		292.8
		BOTTOM 37M	WIND 060 04KT	WEATHER 1						
		DOMINANT WAVES								
67.055	11/19/69	2215GMT	36 38.5N	122 25.5W		10	13.96	33.476		293.0
		BOTTOM 2222M	WIND 060 08KT	WEATHER 1						
		DOMINANT WAVES	090 01 03							

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TEN METER DATA

					Z	T	S	02	DT
67.060	11/19/69	1930GMT	36 29.0N	122 47.5W	10	13.96	33.447		295.1
	BOTTOM	2927M	WIND 090 09KT	WEATHER 1					
	DOMINANT WAVES	060 03 03							
67.065	11/19/69	1645GMT	36 18.0N	123 08.0W	10	14.47			
	BOTTOM	3259M	WIND 040 06KT	WEATHER 1					
	DOMINANT WAVES	040 03 03							
67.070	11/19/69	1353GMT	36 10.0N	123 33.5W	10	14.70			
	BOTTOM	3636M	WIND 070 09KT	WEATHER 1					
	DOMINANT WAVES								
67.080	11/19/69	0850GMT	35 49.0N	124 12.0W	10	14.65			
	BOTTOM	4015M	WIND 100 04KT	WEATHER					
	DOMINANT WAVES								
67.090	11/19/69	0410GMT	35 28.5N	124 54.5W	10	15.08			
	BOTTOM	4514M	WIND 080 09KT	WEATHER					
	DOMINANT WAVES	100 02 05							
70.051	11/20/69	1345GMT	36 10.5N	121 46.5W	10	14.52	33.446		306.4
	BOTTOM	325M	WIND 090 03KT	WEATHER 1					
	DOMINANT WAVES								
70.065	11/21/69	1125GMT	35 43.0N	122 44.0W	10	14.91	33.207		331.8
	BOTTOM	1720M	WIND 320 20KT	WEATHER 1					
	DOMINANT WAVES	330 03 04							
73.050	11/24/69	0908GMT	35 37.5N	121 17.5W	10	14.40	33.398		307.5
	BOTTOM	103M	WIND 090 05KT	WEATHER 0					
	DOMINANT WAVES	330 02 05							
73.053	11/24/69	0725GMT	35 31.5N	121 28.5W	10	15.12	33.359		325.0
	BOTTOM	741M	WIND 310 05KT	WEATHER 0					
	DOMINANT WAVES	310 01 03							
73.060	11/24/69	0200GMT	35 18.5N	121 58.0W	10	15.10	33.336		326.3
	BOTTOM	2503M	WIND 340 15KT	WEATHER 0					
	DOMINANT WAVES	340 05 06							
73.065	11/23/69	2120GMT	35 08.0N	122 18.0W	10	14.78	33.337		319.6
	BOTTOM	3919M	WIND 340 15KT	WEATHER 1					
	DOMINANT WAVES	340 05 08							
73.070	11/23/69	1944GMT	34 58.5N	122 40.5W	10	14.84	33.060		341.1
	BOTTOM	4092M	WIND 340 15KT	WEATHER 1					
	DOMINANT WAVES	340 06 08							
73.080	11/23/69	1440GMT	34 39.5N	123 22.0W	10	14.92	33.035		341.1
	BOTTOM	4165M	WIND 360 15KT	WEATHER 1					
	DOMINANT WAVES	330 07 06							

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TEN METER DATA

					Z	T	S	02	DT
73.090	11/23/69	0943GMT	34 18.5N	124 04.0W	10	14.48	33.024		336.5
	BOTTOM	3451M	WIND 020 20KT	WEATHER 1					
			DOMINANT WAVES 330 12 06						
77.048	11/24/69	1333GMT	35 08.0N	120 43.5W	10	14.70	33.406		312.9
	BOTTOM	37M	WIND 040 04KT	WEATHER 0					
			DOMINANT WAVES 330 01 05						
77.051	11/24/69	1530GMT	35 02.0N	120 56.5W	10	15.22	33.323		329.7
	BOTTOM	288M	WIND 060 07KT	WEATHER 1					
			DOMINANT WAVES 310 03 07						
77.055	11/24/69	1750GMT	34 54.5N	121 12.5W	10	15.28	33.366		327.8
	BOTTOM	584M	WIND 050 07KT	WEATHER 1					
			DOMINANT WAVES 360 03 08						
77.065	11/25/69	0153GMT	34 33.5N	121 54.5W	10	15.56	33.245		342.6
	BOTTOM	3872M	WIND 360 10KT	WEATHER					
			DOMINANT WAVES 300 03 07						
80.051	11/26/69	2100GMT	34 26.0N	120 32.5W	10	15.58	33.390		332.4
	BOTTOM	140M	WIND 310 02KT	WEATHER 1					
			DOMINANT WAVES 340 01 08						
80.065	11/26/69	1016GMT	33 59.5N	121 30.0W	10	15.50	33.310		336.6
	BOTTOM	3494M	WIND 310 08KT	WEATHER 1					
			DOMINANT WAVES 320 01 04						

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TEN METER DATA

			Z	T	S	02	P04	S103	N02	N03	DT		
93.045	12/03/69	1215GMT	32	20.0N	118 32.0W	10	16.76	33.449	0.13	2.	0.04	0.1	353.7
	BOTTOM	1590M			WIND 320 04KT WEATHER								
					DOMINANT WAVES 280 04 06								
93.050	12/03/69	1510GMT	32	10.0N	118 53.0W	10	17.08	33.470	0.21	1.	0.03	0.1	359.5
	BOTTOM	1295M			WIND 300 04KT WEATHER 1								
					DOMINANT WAVES 280 04 06								
93.055	11/03/69	1725GMT	32	00.0N	119 13.5W	10	17.06	33.502	0.13	1.	0.04	0.2	356.5
	BOTTOM	1485M			WIND 050 02KT WEATHER 1								
					DOMINANT WAVES 310 02 06								
93.060	12/03/69	1950GMT	31	50.0N	119 34.0W	10	16.90	33.177	0.34	1.	0.05	0.1	376.6
	BOTTOM	2322M			WIND 300 12KT WEATHER 1								
					DOMINANT WAVES 300 05 03								
93.070	12/04/69	0030GMT	31	30.0N	120 14.0W	10	16.89	33.247	0.24	1.	0.01	0.2	371.5
	BOTTOM	4022M			WIND 330 22KT WEATHER 1								
					DOMINANT WAVES 330 05 04								
93.080	12/04/69	0505GMT	31	10.0N	120 54.5W	10	17.25	33.473	0.24	1.	0.03	0.3	362.9
	BOTTOM	4022M			WIND 330 22KT WEATHER 1								
					DOMINANT WAVES 060 05 04								
93.090	12/04/69	0910GMT	30	50.0N	121 34.0W	10	16.12 U	33.143	0.24	1.	0.01	0.2	
	BOTTOM	4309M			WIND 330 21KT WEATHER								
					DOMINANT WAVES 330 06								
97.029	12/05/69	2220GMT	32	17.5N	117 04.0W	10	17.25	33.479	0.26	1.	0.00	0.0	362.5
	BOTTOM	46M			WIND 270 03KT WEATHER 1								
					DOMINANT WAVES 270 04 07								
97.030	12/05/69	2145GMT	32	16.0N	117 07.0W	10	17.15	33.480	0.21	1.	0.00	0.0	360.1
	BOTTOM	58M			WIND 270 05KT WEATHER 1								
					DOMINANT WAVES 270 04 07								
97.045	12/05/69	1100GMT	31	46.0N	118 08.0W	10	16.96	33.448	0.26	1.	0.00	0.0	358.2
	BOTTOM	1572M			WIND 330 06KT WEATHER 1								
					DOMINANT WAVES 07 06								
97.050	12/05/69	0825GMT	31	35.5N	118 29.0W	10	16.88	33.472	0.26	2.	0.00	0.0	354.6
	BOTTOM	2509M			WIND 340 10KT WEATHER 1								
					DOMINANT WAVES 08 06								
97.055	12/05/69	0532GMT	31	25.5N	118 49.5W	10	17.14	33.526	0.18	2.	0.00	0.0	356.5
	BOTTOM	3983M			WIND 250 12KT WEATHER 1								
					DOMINANT WAVES 330 07 06								
97.060	12/05/69	0315GMT	31	15.5N	119 10.0W	10	16.88	33.233	0.24	2.	0.00	0.0	372.1
	BOTTOM	3642M			WIND 340 20KT WEATHER 1								
					DOMINANT WAVES 330 07 06								

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TEN METER DATA

					Z	T	S	O2	P04	SiO3	NO2	NO3	DT
103.060	12/08/69	0500GMT	30 06.0N	118 25.0W	10	17.18	33.349	0.26	2.	0.01	0.0		370.3
	BOTTOM	3546M	WIND 330 04KT	WEATHER 1									
	DOMINANT WAVES												
103.070	12/08/69	0020GMT	29 46.5N	119 04.5W	10	17.44	33.564	0.24	2.	0.05	0.0		360.6
	BOTTOM	3546M	WIND 330 14KT	WEATHER 2									
	DOMINANT WAVES 330 06 06												
103.080	12/07/69	1940GMT	29 26.5N	119 43.0W	10	17.23	33.346	0.26	2.	0.02	0.0		371.7
	BOTTOM	3832M	WIND 350 12KT	WEATHER 1									
	DOMINANT WAVES 49 07 06												
107.031	12/09/69	0115GMT	30 28.0N	116 07.0W	10	17.06	33.496	0.42	3.	0.04	0.0		356.9
	BOTTOM	41M	WIND 060 08KT	WEATHER 2									
	DOMINANT WAVES 330 04 08												
107.032	12/09/69	0212GMT	30 26.0N	116 11.0W	10	17.86	33.515	0.26	2.	0.00	0.0		373.8
	BOTTOM	390M	WIND 210 10KT	WEATHER 2									
	DOMINANT WAVES 330 04 08												
107.035	12/09/69	0400GMT	30 21.5N	116 22.5W	10	17.57	33.541	0.21	2.	0.00	0.0		365.2
	BOTTOM	1757M	WIND 300 10KT	WEATHER 2									
	DOMINANT WAVES												
107.040	12/09/69	0640GMT	30 11.0N	116 42.0W	10	17.64	33.468	0.18	1.	0.00	0.0		372.1
	BOTTOM	2602M	WIND 290 10KT	WEATHER 1									
	DOMINANT WAVES												
107.045	12/09/69	0855GMT	30 01.5N	117 02.0W	10	17.41	33.454	0.29	2.	0.00	0.0		367.9
	BOTTOM	1763M	WIND 280 08KT	WEATHER									
	DOMINANT WAVES												
107.050	12/09/69	1125GMT	29 50.5N	117 22.0W	10	17.00		0.18	1.	0.00	0.0		
	BOTTOM	2416M	WIND 260 12KT	WEATHER									
	DOMINANT WAVES												
107.055	12/09/69	1350GMT	29 41.0N	117 42.0W	10	17.02	33.338	0.26	1.	0.00	0.0		367.5
	BOTTOM	3358M	WIND 320 19KT	WEATHER									
	DOMINANT WAVES												
107.060	12/09/69	1632GMT	29 32.0N	118 01.5W	10	17.90	33.552						372.0
	BOTTOM	3546M	WIND 330 18KT	WEATHER 1									
	DOMINANT WAVES 330 05 06												
107.070	12/09/69	2100GMT	29 11.0N	118 41.0W	10	17.74	33.449	0.29	1.	0.01	0.2		375.8
	BOTTOM	3169M	WIND 330 12KT	WEATHER 1									
	DOMINANT WAVES 340 05 08												
107.080	12/10/69	0115GMT	28 51.5N	119 20.0W	10	17.62	33.450	0.32	1.	0.01	0.1		373.0
	BOTTOM	3738M	WIND 330 12KT	WEATHER 1									
	DOMINANT WAVES 340 05 08												

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TEN METER DATA

					Z	T	S	O ₂	P _{O4}	Si ₀₃	N _{O2}	N _{O3}	DT
110.032	12/11/69	0925GMT	29 51.0N	115 49.5W	10	16.25	33.531		0.42	5.	0.38	1.5	336.5
		BOTTOM	37M	WIND 050 02KT									
		DOMINANT WAVES											
110.045	12/11/69	0055GMT	29 26.5N	116 39.5W	10	17.92	33.577		0.29	1.	0.02	0.1	370.7
		BOTTOM	929M	WIND 330 17KT									
		DOMINANT WAVES 340 05 04											
113.029	12/11/69	1352GMT	29 24.0N	115 13.0W	10	17.05	33.605		0.34	3.	0.18	0.8	348.8
		BOTTOM	22M	WIND 040 05KT									
		DOMINANT WAVES 290 01											
113.030	12/11/69	1438GMT	29 22.0N	115 18.0W	10		33.609		0.37	4.	0.17	0.4	
		BOTTOM	60M	WIND 350 08KT									
		DOMINANT WAVES 290 04 06											
113.035	12/11/69	1715GMT	29 11.5N	115 38.0W	10	18.92	34.097		0.37	3.	0.02	0.0	356.5
		BOTTOM	1298M	WIND 170 08KT									
		DOMINANT WAVES 320 04 07											
113.040	12/11/69	2020GMT	29 02.0N	115 57.0W	10	18.13	33.754		0.32	2.	0.06	0.2	362.7
		BOTTOM	1856M	WIND 290 10KT									
		DOMINANT WAVES 320 04 06											
113.045	12/11/69	2300GMT	28 52.0N	116 18.0W	10	17.85	33.540		0.21	2.	0.01	0.2	371.7
		BOTTOM	2043M	WIND 340 08KT									
		DOMINANT WAVES 090 06 08											
113.050	12/12/69	0135GMT	28 42.0N	116 36.0W	10	17.59	33.503		0.18	2.	0.00	0.5	368.4
		BOTTOM	3738M	WIND 350 20KT									
		DOMINANT WAVES 350 06 08											
113.060	12/12/69	0551GMT	28 23.0N	117 16.0W	10	17.73	33.515		0.24	2.	0.02	0.2	370.8
		BOTTOM	3642M	WIND 030 15KT									
		DOMINANT WAVES 350 06 08											
113.070	12/12/69	0955GMT	28 04.0N	117 55.5W	10	17.78	33.519		0.29	2.	0.02	0.4	371.6
		BOTTOM	3452M	WIND 280 15KT									
		DOMINANT WAVES 350 06 08											
113.080	12/12/69	1450GMT	27 42.0N	118 33.0W	10	18.02	33.579		0.18	1.	0.00	0.5	372.8
		BOTTOM	3926M	WIND 030 12KT									
		DOMINANT WAVES 030 06 06											
117.025	12/14/69	0720GMT	28 58.0N	114 37.0W	10	17.39	33.684		0.26	3.	0.05	0.4	350.7
		BOTTOM	41M	WIND 350 05KT									
		DOMINANT WAVES											
117.026	12/14/69	0634GMT	28 56.0N	114 41.5W	10	17.38	33.677		0.26	3.	0.05	0.0	351.0
		BOTTOM	75M	WIND 350 05KT									
		DOMINANT WAVES											

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TEN METER DATA

			Z	T	S	O2	P04	SiO3	N02	N03	DT		
117.030	12/14/69	0450GMT	28	48.0N	114 56.5W	10	18.02	33.729	0.21	3.	0.06	0.7	361.9
	BOTTOM	99M			WIND 310 08KT WEATHER 1								
	DOMINANT WAVES												
117.035	12/14/69	0215GMT	28	38.0N	115 16.0W	10	18.23	33.764	0.21	3.	0.06	0.8	364.3
	BOTTOM	205M			WIND 280 04KT WEATHER 1								
	DOMINANT WAVES												
117.040	12/13/69	1400GMT	28	28.0N	115 35.5W	10	17.86	33.686	0.26	2.	0.05	0.2	361.3
	BOTTOM	1040M			WIND 030 03KT WEATHER 0								
	DOMINANT WAVES												
117.045	12/13/69	1039GMT	28	18.0N	115 56.0W	10	18.48	33.894	0.24	2.	0.05	0.0	360.7
	BOTTOM	3452M			WIND 040 04KT WEATHER 1								
	DOMINANT WAVES												
117.050	12/13/69	0830GMT	28	08.0N	116 15.0W	10	17.94	33.631	0.21	2.	0.05	0.0	367.2
	BOTTOM	4309M			WIND 030 03KT WEATHER 1								
	DOMINANT WAVES												
117.060	12/13/69	0430GMT	27	47.0N	116 53.0W	10	18.03	33.527	0.21	2.	0.03	0.0	376.9
	BOTTOM	3642M			WIND 020 08KT WEATHER								
	DOMINANT WAVES												
117.070	12/13/69	0000GMT	27	27.0N	117 32.5W	10	18.10	33.531	0.26	2.	0.03	0.8	378.2
	BOTTOM	3926M			WIND 330 08KT WEATHER 1								
	DOMINANT WAVES 020 06 09												
117.080	12/12/69	1928GMT	27	08.0N	118 10.5W	10	18.43	33.701	0.26	2.	0.04	0.5	373.6
	BOTTOM	4309M			WIND 030 09KT WEATHER 2								
	DOMINANT WAVES 030 06 08												
120.024	12/14/69	1115GMT	28	25.0N	114 10.5W	10	17.84	33.743	0.24	2.	0.05	0.7	356.7
	BOTTOM	34M			WIND 340 10KT WEATHER								
	DOMINANT WAVES												
120.025	12/14/69	1200GMT	28	22.5N	114 15.0W	10	18.02	33.808	0.18	2.	0.05	0.3	356.2
	BOTTOM	52M			WIND 340 10KT WEATHER								
	DOMINANT WAVES												
120.030	12/14/69	1410GMT	28	13.0N	114 34.0W	10	17.28	33.677	0.18	3.	0.04	0.1	348.7
	BOTTOM	95M			WIND 320 08KT WEATHER 1								
	DOMINANT WAVES 310 04 06												
120.035	12/14/69	1900GMT	28	03.0N	114 54.0W	10	16.98	33.654	0.24	3.	0.04	0.2	343.6
	BOTTOM	78M			WIND 300 KT WEATHER 1								
	DOMINANT WAVES 320 04 06												
120.040	12/14/69	2103GMT	27	56.5N	115 14.0W	10	17.98	33.803	0.24	3.	0.10	0.9	355.6
	BOTTOM	41M			WIND 320 13KT WEATHER 1								
	DOMINANT WAVES 320 06 06												

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TEN METER DATA

					Z	T	S	O2	P04	SiO3	NO2	NO3	DT
123.036	12/15/69	0330GMT	27 26.0N	114 36.0W	10	20.05	34.391	0.60	5.	0.06	0.8	362.9	
	BOTTOM 52M WIND 310 07KT WEATHER 0 DOMINANT WAVES												
123.037	12/15/69	0410GMT	27 24.0N	114 40.0W	10	20.14	34.415	0.60	4.	0.08	0.8	363.4	
	BOTTOM 69M WIND 310 07KT WEATHER 0 DOMINANT WAVES												
123.042	12/15/69	0620GMT	27 14.0N	114 59.0W	10	20.12	34.360	0.53	4.	0.04	0.0	366.9	
	BOTTOM 1763M WIND 340 06KT WEATHER 0 DOMINANT WAVES												
123.045	12/15/69	0810GMT	27 08.0N	115 11.5W	10	20.31	34.416	0.53	5.	0.02	0.5	367.7	
	BOTTOM 4309M WIND 220 10KT WEATHER 0 DOMINANT WAVES												
123.050	12/15/69	1049GMT	26 59.0N	115 31.0W	10	18.86	33.803	0.37	5.	0.03	0.0	376.4	
	BOTTOM 3738M WIND 320 13KT WEATHER DOMINANT WAVES												
123.060	12/15/69	1500GMT	26 40.0N	116 09.0W	10	18.70	33.766	0.08	2.	0.04	0.0	375.3	
	BOTTOM 3926M WIND 310 09KT WEATHER 1 DOMINANT WAVES 310 04 09												
127.033	12/16/69	0815GMT	26 57.5N	114 02.0W	10	20.58	34.441	0.29	4.	0.00	0.2	372.7	
	BOTTOM 65M WIND 330 04KT WEATHER DOMINANT WAVES												
127.034	12/16/69	0725GMT	26 55.0N	114 06.5W	10	20.81	34.442	0.29	3.	0.00	0.1	378.5	
	BOTTOM 84M WIND 330 04KT WEATHER DOMINANT WAVES												
127.040	12/16/69	0500GMT	26 43.5N	114 29.0W	10	20.66	34.421	0.29	3.	0.00	0.1	376.2	
	BOTTOM 2981M WIND 320 03KT WEATHER DOMINANT WAVES 310 04 08												
127.045	12/16/69	0206GMT	26 32.0N	114 48.0W	10	20.14	34.142	0.26	3.	0.00	0.2	383.2	
	BOTTOM 3358M WIND 310 10KT WEATHER DOMINANT WAVES 310 06 08												
127.050	12/15/69	2337GMT	26 22.5N	115 07.5W	10	18.86	33.729	0.26	2.	0.00	0.2	381.8	
	BOTTOM 3169M WIND 280 10KT WEATHER 2 DOMINANT WAVES 310 06 08												
127.060	12/15/69	1920GMT	26 03.5N	115 46.5W	10	18.95	33.750	0.24	3.	0.00	0.2	382.4	
	BOTTOM 3832M WIND 280 13KT WEATHER 1 DOMINANT WAVES 310 06 09												
130.028	12/16/69	1215GMT	26 33.5N	113 21.0W	10	21.20	34.457	0.26	2.	0.01	0.1	387.5	
	BOTTOM 56M WIND 270 04KT WEATHER DOMINANT WAVES												

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			Z	T	S	02	P04	SI03	N02	N03	DT		
130.035	12/16/69	1615GMT	26	19.0N	113 48.0W	10	20.76	34.456	0.26	2.	0.00	0.2	376.2
		POTOM 539M			WIND 290 07KT								
		DOMINANT WAVES			270 04 07								
133.023	12/17/69	0825GMT	26	08.5N	112 40.0W	10	21.24	34.493	0.24	3.	0.01	0.2	385.9
		BOTTOM 75M			WIND 300 10KT								
		DOMINANT WAVES			300 03 09								
133.025	12/17/69	0730GMT	26	04.5N	112 48.0W	10	21.28	34.476	0.21	2.	0.00	0.1	388.2
		BOTTOM 82M			WIND 300 08KT								
		DOMINANT WAVES			300 03 09								
133.030	12/17/69	0500GMT	25	54.5N	113 07.5W	10	21.62	34.478	0.24	2.	0.00	0.0	397.0
		BOTTOM 205M			WIND 280 08KT								
		DOMINANT WAVES			260 03 08								
133.035	12/17/69	0245GMT	25	44.5N	113 26.5W	10	21.50	34.456	0.26	2.	0.02	0.1	395.4
		BOTTOM 845M			WIND 030 12KT								
		DOMINANT WAVES			260 02 08								
133.040	12/17/69	0015GMT	25	34.5N	113 45.5W	10	21.14	34.387	0.24	2.	0.00	0.2	391.0
		BOTTOM 3169M			WIND 110 10KT								
		DOMINANT WAVES			260 04 08								
137.022	12/17/69	1210GMT	25	36.0N	112 15.0W	10	21.67	34.475	0.26	2.	0.02	0.1	398.5
		BOTTOM 52M			WIND 320 10KT								
		DOMINANT WAVES											
137.035	12/17/69	1917GMT	25	11.0N	113 02.5W	10	21.42	34.452	0.29	2.	0.00	0.2	393.6
		BOTTOM 1021M			WIND 300 15KT								
		DOMINANT WAVES			300 05 06								

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