data report

PHYSICAL AND CHEMICAL DATA

CalCOFI Cruise 6907 10-29 July 1969

CalCOFI Cruise 6908 6 August-8 September 1969

and

CalCOFI Cruise 6909 11 September-7 October 1969

SIO Reference 79-7 15 May 1979

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

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Sponsored by

Marine Research Committee

SIO Reference 79-7

Approved for distribution:

W. A. Nierenberg, Director

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INTRODUCTION

The data in this report was collected during cruises 6907*, 6908 and 6909 of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) program aboard the RV <u>David Starr Jordan</u>, of the Bureau of Commercial Fisheries (now National Marine Fisheries Service), and the RV <u>Alexander Agassiz</u>, of the Scripps Institution of Oceanography. The report preceeding this one in the series was SIO Ref. 77-22 which included data for April, May and June 1969.

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

STANDARD PROCEDURES

Hydrographic Cast Data

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

On STD lowerings where hydrographic casts were not made, a Nansen bottle was usually placed on the wire a few meters above the STD and another bottle was lowered to a depth of approximately 10 meters. Temperature, salinity, and nutrients were determined for most of the 10 meter samples. On the RV <u>David Starr Jordan</u> 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.



^{*}The first two digits represent the year and the second two 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 (Cal-COFI 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)

All salinity samples for Cruise 6907 were analyzed using Bissett Berman (now Grundy Environmental Systems Inc.) inductive salinometers. Both an Australian Autolab inductive salinometer and a Washington conductive bridge were used on the Agassiz during 6908. Problems were encountered with both salinometers and all salinities were tabulated in hundredths. The Autolab was used again for 6909 without the difficulties of the northern half of the cruise.

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

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

Phosphate, silicate, nitrite and nitrate were determined using a first generation $\operatorname{Technicon}^R$ AutoAnalyzer R and methods developed at the Bureau of Commercial Fisheries based on the methodologies of Strickland (1968).

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 three cruises. Both ships also used a digital data logger (DDL) Model 8114 for data recording.

The STD and DDL used on the <u>Jordan</u> during 6907 worked well except for extensive "spiking" through the thermocline. No temperature correction and only a slight off-set correction to salinity were determined from comparison with sample bottle data. On the <u>Agassiz</u> one STD and one DDL were used during all three cruises included in this report. The DDL malfunctioned intermittently on the three cruises but when no data could be recovered from the tape, the analogs were digitized at standard levels of depth. Comparison of DDL and analog data with sample bottle observations resulted in average corrections for each cruise, the largest for temperature being -0.05° and for salinity, -0.06°/oo.

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:

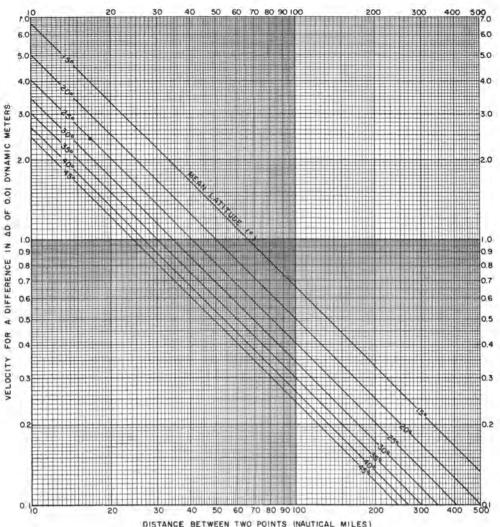
Z	Depth	Meters
T	Temperature	°C
S	Salinity	0/00
02	Dissolved oxygen	m1/L
P04	"Reactive" inorganic phosphate-phosphorus	ug at/L
S103	"Reactive" inorganic silicate-silicon	μg at/L
NO2	"Reactive" inorganic nitrite-nitrogen	μg at/L
NO3	"Reactive" inorganic nitrate-nitrogen	μg at/L
DT	δ_T Thermosteric anomaly	c1/ton
SIGT	$\sigma_t = (\rho_{s,t,0}^{-1})10^3$ where $\rho_{s,t,0}$ is the	g/L
	density the parcel would have if moved isothermally to the sea surface.	
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 porcessing.

REFERENCES

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- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for Winkler dissolved oxygen method. Limnol. and Oceanogr., 10: 141-143.
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- Matthews, D.J., 1939. Tables of the velocity of sound in pure water and seawater for use in echo-sounding and sound-ranging. Second Edition. Hydrographic Department, Admiralty, London, H.D. 282: 52pp.
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- University of Washington, 1960. Univ. of Wash. Dept. of Oceanography, Oct. 1960. Tech. Rep. UW Ref. No. 60-18.



VELOCITY OF GEOSTROPHIC FLOW (NAUTICAL MILES)

om/éec	0	1	2	3	4	5	6	7	8	9
0	N.M/DAY	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.17
10	0.19	0.21	0.23	025	0.27	0.29	0.31	0.33	0.35	0.37
20	039	0.41	0.43	0.45	0.47	0.49	0.51	0.52	0.54	0.56
30	0.58	0,60	062	0.64	066	0.68	0.70	072	0.74	0.76
40	0.78	0.80	0.82	0.84	0.85	0.87	0.89	0.91	0.93	0.95
50	0.97	0.99	1.01 24.24	1.03	1.05	1.07	1.09	26.57	1.13	1.15
60	27.98	1.18	120 28 90	1.22	1.24	126 30.30	1.28	1.30	1.32	1.34
70	1.36	1.38	1.40	1.42	34.50	1.46	1.48	1.50	1.52	1.53
80	155 3730	1.57	1.59 38.23	1.61	163	1.65	1.67	1.69	1.71	1.73
90	1.75	177 42.42	1.79	43.36	43,82	1,85	1.86	1.88	1.90	1.92
100	194	1.96	1.98	200	2.02	2.04	2.06	2.08	2.10	2.12

CONVERSION TABLE

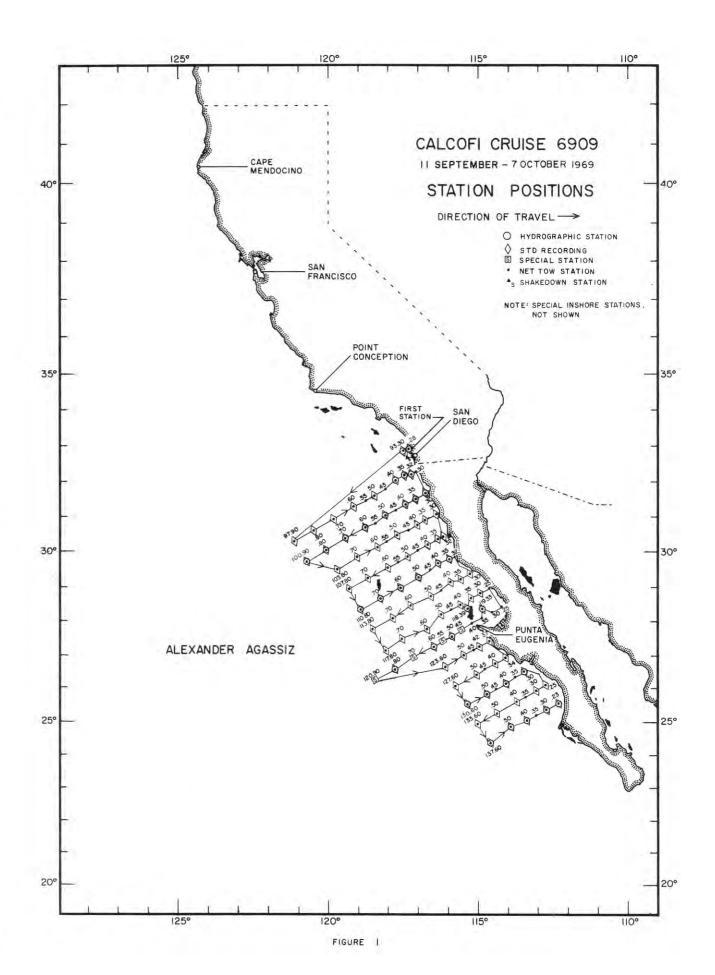
(CENTIMETERS / SECOND - KNOTS - NAUTICAL MILES / DAY)

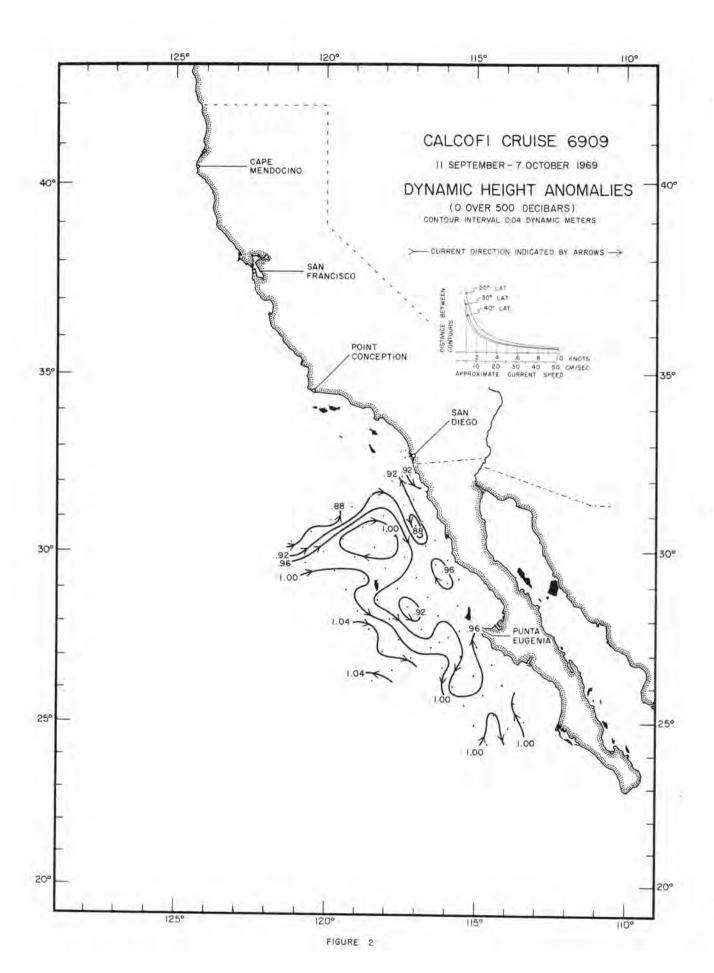
icm/sec=0.019 kts = 0.466 NAUTICAL MILES / DAY
ikt = 24 NAUTICAL MILES / DAY = 51.48 cm/sec
iNAUTICAL MILE / DAY=0,042 kts = 2.14 cm/sec

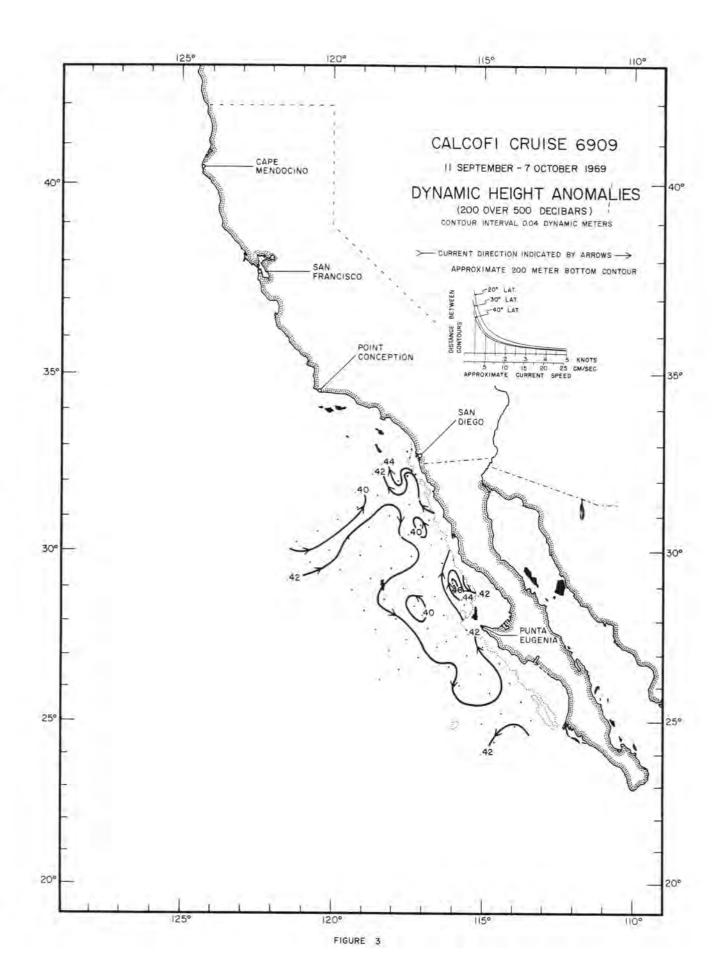
FIGURES

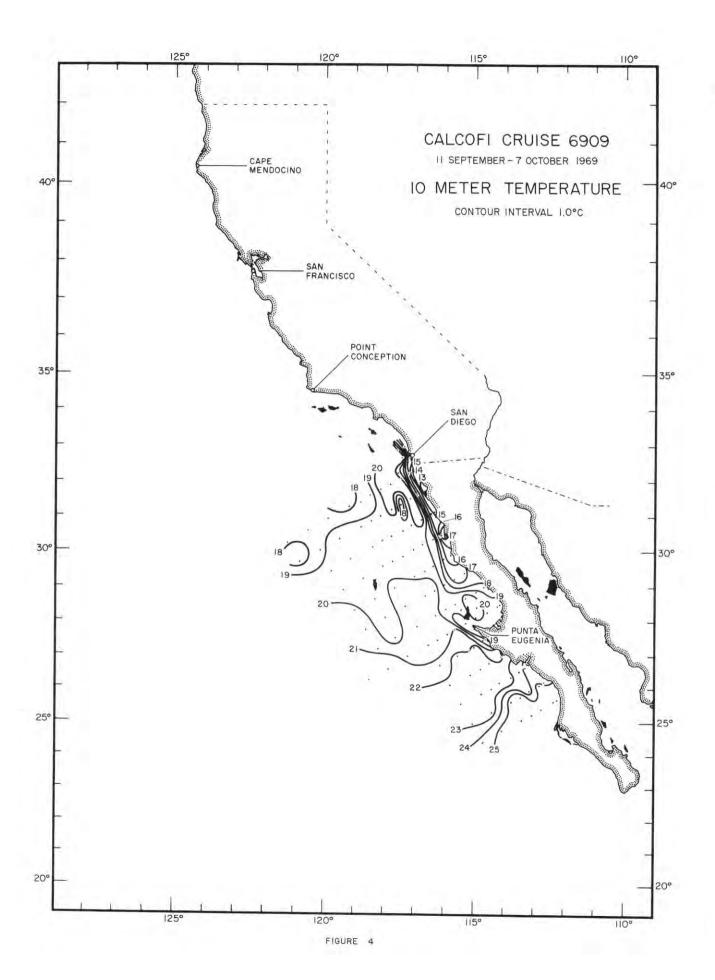
Cruise 6909

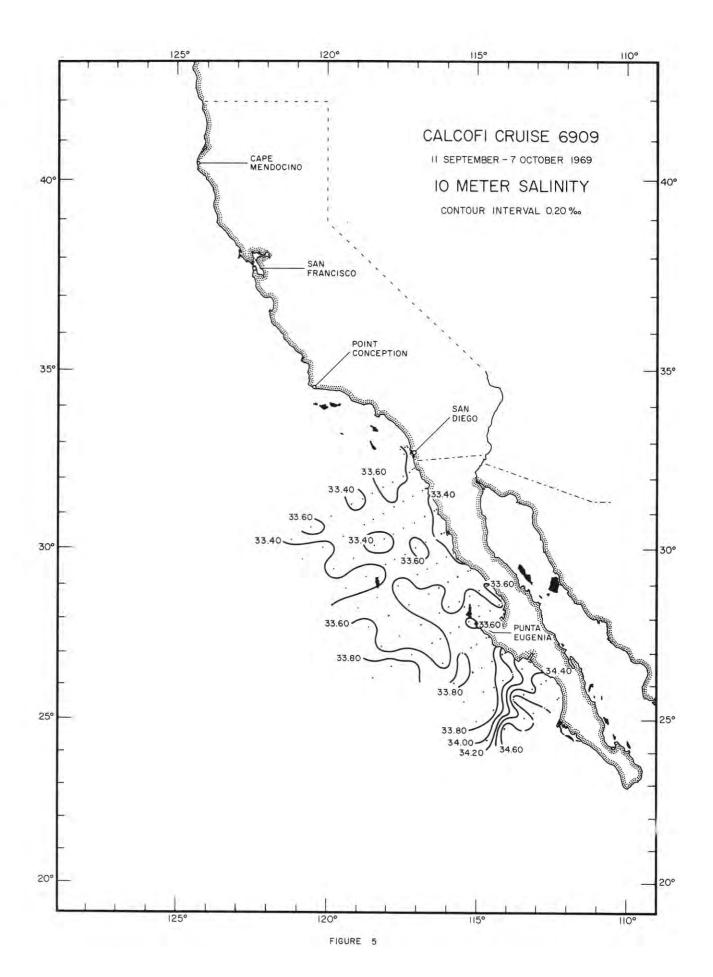
- 1. CalCOFI Cruise 6909, station positions
- 2. Horizontal distribution of dynamic height anomaly (0 over 500 d-bar)
- 3. Horizontal distribution of dynamic height anomaly (200 over 500 d-bar)
- 4. Horizontal distribution of temperature at 10 meters
- 5. Horizontal distribution of salinity at 10 meters
- 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

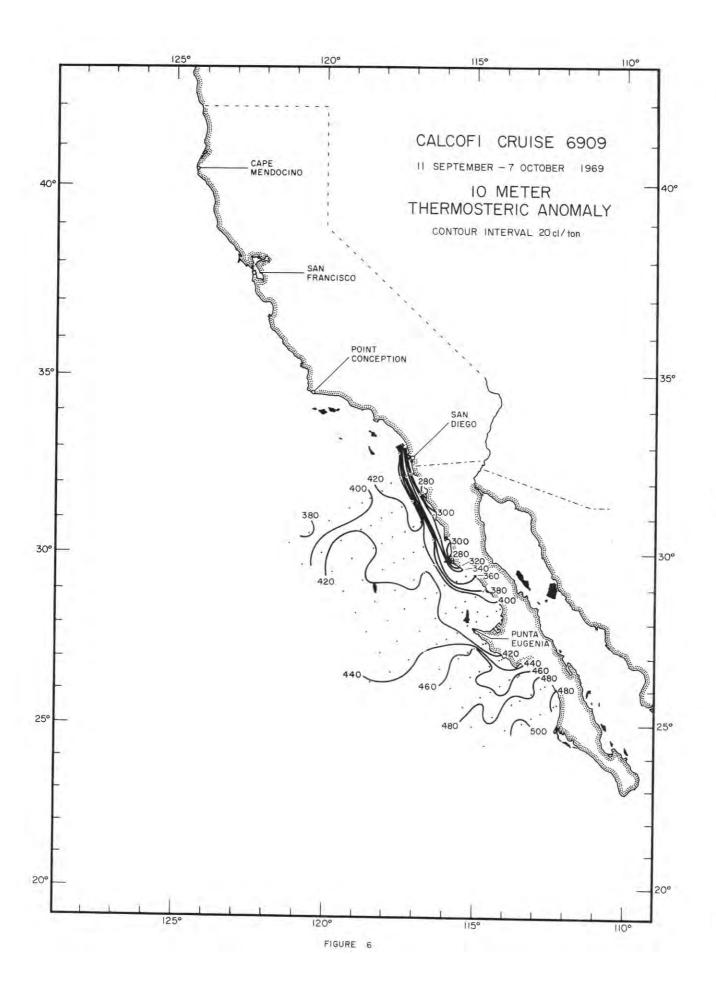


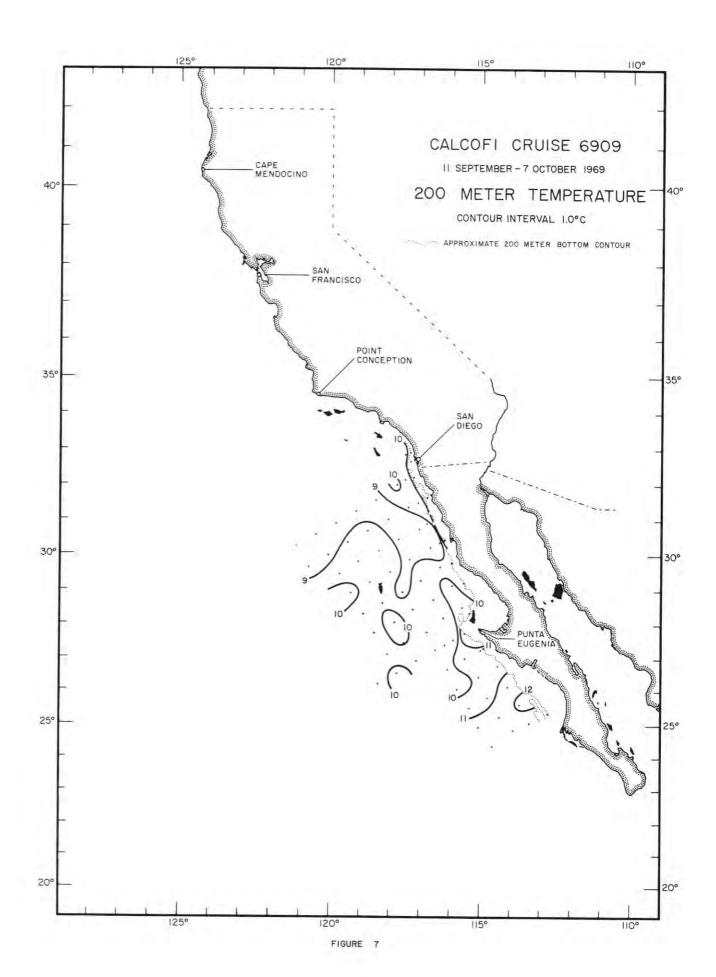


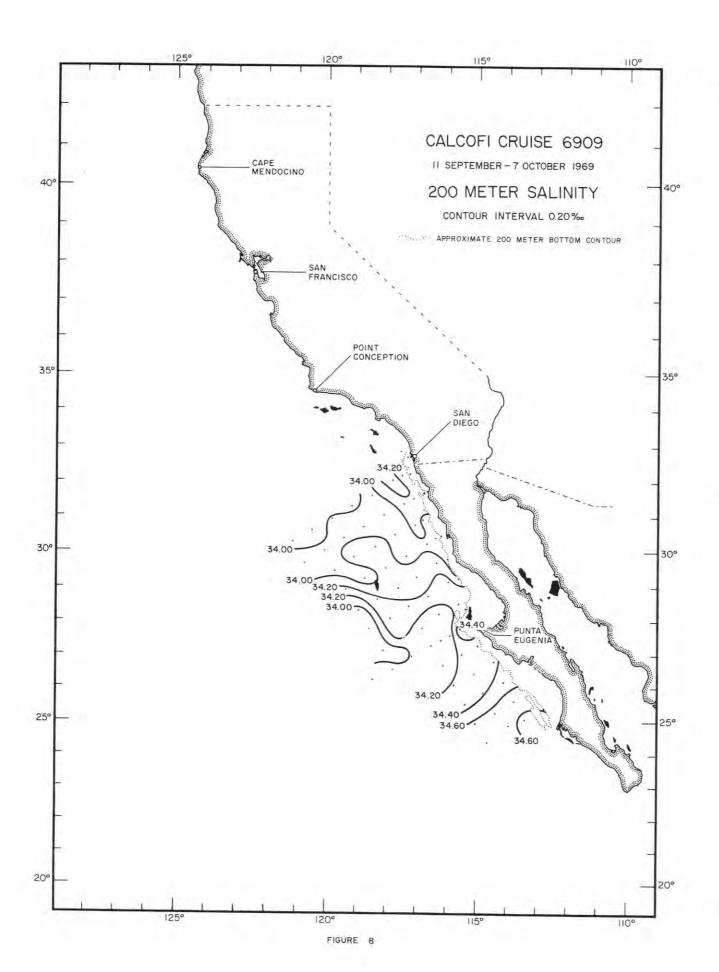












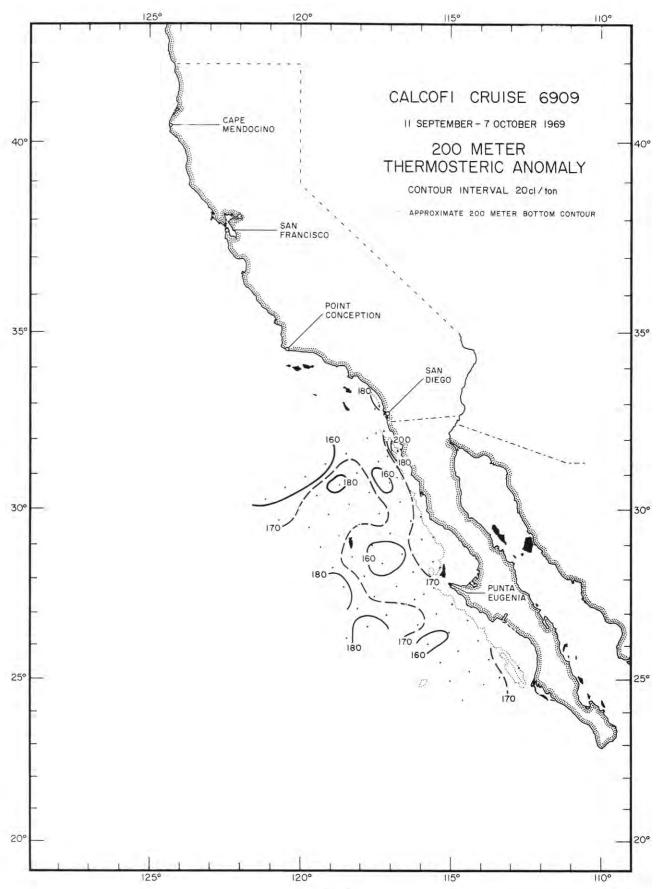


FIGURE 9

PERSONNEL

Cruise 6909 (South)

SHIP'S CAPTAIN

Davis, Laurence E., RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz:

Bryan, Walter R., Marine Technician (in charge) SIO Brehm, Peter F., Biological Technician BCF* Kimura, Makoto, Fishery Biologist BCF* Mairot, Maurice F., Engineering Aid SIO McMaster, Michael F., Biological Technician BCF* Robertson, Scott B., Marine Technician SIO Sigrist, Peter H., Marine Technician SIO Singleton, James S., Electronic Technician SIO Thomas, James E., Marine Technician SIO

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

RV	ALEXAND	ER AGASSI	12				1.3	CALCOPI	CRUISE 6	909					93027
	1ATITU 32 56.	DE 1.01	NGITUDE 7 19.0W		/DAY/YR 9/11/69		SSENGE 225 G		BOTTOM 140 M	WIND 280	SPEED 04KT	WEATHER		NANT WAV	ES
Z	T	s	02	204	5103	NO2	NO3	DT	z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100	20.37 14.02 13.14 12.01 11.33 10.97 10.87	33.59 33.47 33.46 33.49 33.57 33.63 33.67		23.612 25.023 25.194 25.437 25.625 25.736 25.785	428.9 294.5 278.2 255.1 237.2 226.7 222.0	0 .036 .065 .092 .141 .199
RV	ALEXAND	ER AGASS	IZ					CALCOFI	CRUISE 6	909					93027
	LATITU	DE LON	GITODE		/DAY/YR 9/11/69		SSENGE 1302 G	R TIME	BOTTOM 140M	WIND 280	SPEED 04KT	WEATHER		NANT WAVE	
Z	T	Ś	02	PQ4	5103	NO2	NO3	DT	2	т	S	02	SIGT	DT	DD
10 25 35	20.41 15.31 13.23 12.14 11.39 11.24 10.93 10.79	33.557 33.451 33.416 33.602 33.817 U	3.91	.33 .39 .54 1.18 1.50 1.50 1.50	1. 2. 3. 10. 15. 17. 19. 21.	.00 .00 .28 .39 .35 .16	.0 .0 5.7 12.6 13.9 15.8 17.4	432.3 322.2 283.1							
RV	ALEXAND	ER AGASSI	Z)	CALCOFI	CRUISE 69	909					93028
	LATITU 32 55,		GITUDE 7 22.0W		/DAY/YR 9/12/69		SSENGE 001 G		BOTTOM 501H	WIND 300	SPEED 06KT	WEATHER 1		NANT WAVE	BS
Z	T	s	02	P04	S 103	NO2	NO 3	DT	2	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	19.30 15.54 13.55 12.73 11.45 10.91 10.72 10.71 10.48 10.20 9.24 9.02 7.75	33.48 33.39 33.38 33.49 33.66 33.76 33.80 33.82 34.02 34.03 34.24		23.806 24.688 25.058 25.213 25.541 25.770 25.881 25.970 26.174 26.389 26.541 26.751	410.4 326.3 291.2 276.4 245.2 223.4 212.8 209.7 204.4 185.1 164.7 150.2	0 .037 .068 .096 .149 .207 .262 .316 .468 .557 .639
pw	AI PYAND	ER AGASSI						CALCORT	CRUISE 69	000					93028
n v	LATITU 32 55.	DE LC	NGITUDE 7 22.0W		/CAY/YR 9/12/69		SSENGE	R TIME	BOTTOM	WIND 300	SPEED 06KT	WEATHER	DONI	NANT WAVE	
Z	32 33. T	5	02		SI03		NO3	DT	5018 Z	T	5	02	SIGT	DT	DD
1 11 31 50 79 108	19,26 14,55 12,73 11,45 10,89 10,75 10,43 10,20 9,23 8,58 7,56	33.515 A 33.367 33.859 II 34.210 34.245	5.75 6.34 5.80 4.52 3.27 2.93 2.89	.37 .44 .65 1.09 1.64 1.81 1.90 2.16	1. 0. 3. 12. 22. 24. 26. 32.	.00 .00 .10 .31 .03	.0 .0 3.5 11.1	406.9 312.7		•			3191		

A) THE SALINITY SAMPLES APPEAR TO HAVE BEEN LISTED IN REVERSE ORDER ON THE ORIGINAL DATA SHEET. THEY ARE ASSUMED TO NOW HE IN THE CORRECT ORDER.

II V	ALEXAN	DEB I	GASS	12					CALCOFI	CRUISE 6	909					93030
	32 50			NGITUDE		0/DAY/YE		ESSENGE 0230 C	ER TIME	BOTTOM B33M	WIND 300	SPEED 10KT	WEATHER 1		NANT WAY 190 02 05	
z	T	5	3	0.2	PO4	SIO3	NG2	NO3	DT	2	T	S	02	SIGT	DT	aa
										0 10 20 30 50 75 100 125 150 200 250 300	21.02 20.61 17.03 14.60 12.73 11.03 10.53 10.68 10.29 9.85 9.14 7.84 6.71	33.68 33.40 33.35 33.38 33.57 34.02 34.02 34.08 34.20 34.28		23.484 23.617 24.302 24.808 25.213 25.681 26.000 26.158 26.288 26.424 26.553 26.746 26.913	441.2 428.5 363.2 314.9 276.4 231.9 201.6 193.0 186.5 174.2 161.4 149.1 130.8	0 -044 -083 -117 -176 -240 -295 -345 -393 -485 -571 -652 -798 -928
RV	ALEXAN	DER A	GASS	ız					CALCOPI	CRUISE 6	909					93030
	LATIT 32 50			NGITUDE 7 31.0W)/DAY/YR 19/12/69	ME		H TIME	SOTTOM 833M	WIND 300	SPEED	WEATHER 1		NANT WAV	
2	T	s		02	P04	5103	NOZ	NO3	DT	z	7	s	02	SIGT	DT	DD
0 10 30 50 79	20.89 20.37 14.73 12.74 10.65	33.		5.32 5.50 6.29 5.98	.33 .22 .41	1. c. 1. 3.	.00	.0 .0 .0 3.2	436.7 422.1					227770	2.1	
109 155 205 255 309	10.49 10.18 9.70 9.41	33,	946	3.86 2.41 2.30 2.40 1.87	1.44 1.98 2.11 2.20	19. 30. 32. 35.	.03	16.8 22.6 23.7 24.9	195.3							
409	9.08 7.58 6.57	34.		1.40 1.05 .56					128.1							
8 A	ALEXAN	DER A	3ASS)	12					CALCOFI	CRUISE 65	109					94030
	1ATIT			NGITUDE 7 27.0W		/DAY/YR 9/12/69		SSENGE 510 G	R TIME	BOTTOR	WIND	SPEED	WEATHER	DOMI	NANT WAVE	
Z	T	S		02	PQ4	S103	NO2	NO3	DT	2	T	s	02	SIGT	DT	DD
										0 A 10 20 30 50 75 100 125 150 200 250 300 400 500	20.93 20.50 17.61 14.71 11.66 10.98 10.64 10.59 10.03 9.29 8.90 8.01 7.01	33.63 33.52 33.44 33.43 33.50 34.02 34.03 34.04 34.11 34.19 34.25		23.493 23.608 24.256 24.854 25.227 25.510 25.789 26.097 26.114 26.219 26.396 26.521 26.705 26.872	440.3 429.3 367.6 310.6 275.1 248.2 221.7 192.3 190.7 180.8 164.0 152.1 134.7 118.8	0 .043 .083 .117 .176 .242 .301 .354 .402 .497 .585 .667 .817
RV	ALEXAND	ER AG	ASSI	Z				je je	ALCOPT	CRUISE 69	09					97032
	LATITU 32 12.			GITUDE 15.5W	MO,	DAY/YR		SSENGER 134 GB		BOTTOM 1350M	WIND 310	SPEED D6KT	WEATHER 2	DONIA 29	ANT WAVE	S
Z	T	5		02	P04	\$103	NO2	EON	DT	2	T	S	02	SIGT	DT	DD
										0 10 20 30 50 75 100 125 150 200 256 300 400 500	18.51 16.40 13.60 12.57 12.00 10.66 11.15 10.25 10.12 9.59 8.67 7.92	33.49 33.45 33.46 33.56 33.79 33.91 33.91 34.16 34.20 34.27 34.27		24.013 24.487 25.055 25.275 25.275 25.737 25.828 25.985 26.072 26.97 26.401 26.565 26.97	390.7 345.6 291.4 270.5 257.1 226.6 217.9 203.0 194.7 173.4 163.5 147.9 131.9	0 .037 .069 .097 .150 .211 .267 .320 .370 .464 .551 .631 .777

A) A SHAKEDOWN STATION.

R	/ ALEXAN	DER AGA	5512					CALCOPI	CHDISE 6	5909					97032
	LATET 32 12	UDE .ON	LCNGITHDE		0/DAY/YR		SSENGI 1522	ER TIME	BOTTOM 1350 M	WIND 310	SPEED 06KT	WEATHER 2		NANT WAV	
7.	T	5	02		5103		NO 3	DT	Z	T	S	02	SIGT	DT	DD
0 10 30 50 80 109 154 204 253 308	18.43 18.25 12.70 12.07 10.81 10.99 10.18 10.01 9.41 8.48	33.465 33.455 33.39	5.95	.11 .04 .41 .68 1.18 1.68 1.66	1. 2. 6. 10. 18. 26. 28.	.00 .00 .10 .25 .02 .05 .01	.0 1.4 7.5 15.3 20.4 21.3 24.6	390.7 387.4 274.8							
408 512	7.74 6.64	34.263						129.9 113.7							
RV	ALEXAN	DER AGAS	SSIZ					CALCOFI	CRUISE 6	909					97035
	LATIT 32 11		CNGITUDE 17 30.5W		/DAY/YR 9/14/69		SSENGE 127 G	R TIME	UOTTON 925M	WIND 280	SPEED 06KT	WEATHER		NANT WAV	es.
2	T	S	02	PO4	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 500	20.20 20.19 19.86 17.08 13.33 11.42 10.19 9.70 9.44 9.13 8.49 8.51 7.2? 6.13	33.64 33.61 33.41 33.31 33.55 33.76 33.86 34.05 34.13		23.687 23.697 23.761 24.298 25.041 25.445 25.810 26.056 26.177 26.375 26.538 26.629 26.827 26.950	421.8 420.8 414.7 363.5 292.8 254.3 219.6 196.3 184.8 166.0 150.5 141.9 123.1	0 .042 .084 .123 .189 .258 .317 .370 .418 .508 .589 .664 .803 .927
RV	ALEXANI	ER AGAS	512					CALCOPI	CRUISE 6	909					97035
	12 11.		ONGITUDE 17 30.5W	80, 09	/DAY/YR 9/14/69		SSENGE 219 G	R TIME	BOTTOM 925M	WIND 280	SPEED 06KT	WEATHER		NANT WAVE	s
Z	T	S	02		S103	NO2	NO3	DT	Z	r	S	02	SIGT	DT	DD
1 10 28 45 72 100 141 189 236 289 386 490	20.22 20.09 18.01 13.39 11.17 10.13 9.55 9.52 9.09 8.36 7.51 6.50	33.654 33.627 33.571 34.266 34.311	5.32 5.74 6.24 4.94 4.23 3.31 1.87 1.83	.15 .20 .22 .33 .85 1.16 1.57 2.03	1. 1. 3. 10. 17. 27. 37.	.00 .00 .01 .09 .02 .02	.0 .0 .0 8.5 14.2 19.7 24.6	420.5 419.2 217.1							
		3 15 5 5 1						109.9							
B V	ALEXAND	ER AGAS	SIZ					CALCOFI	CRUISE 69	909					97040
	LATITU		ONGITUDE 17 49.5W		DAY/YR 9/14/69		SENGE:	R TIME	BOTTOM 833m	WIND 280	SPEED 06KT			NANT WAVE	S
2	T	S	02	204	SI03	NO2	NO3	DT		T				DT	
									10	20.84 17.20 14.08 11.52 10.38 10.00 10.25 10.29 10.18 9.50 9.28 8.12	33.44 33.49 33.69 33.90 34.08 34.17 34.25 34.23 34.31 34.27		23.540 23.548 24.292 24.956 25.528 25.528 26.115 26.212 26.275 26.275 26.455 26.554 26.704 26.913	435.1 364.1 300.8 246.4 212.4 190.7 181.4 175.4 167.7 158.4 149.0 134.7	0 0 44 0 84 1 17 1 72 2 30 2 80 3 27 3 73 4 60 5 44 6 24 2 772

RV	ALEXAN							CALCOPI	CRUISE 6	909					97040
	LATIT		ONGITUDE 17 49.58		/DAY/YH 9/14/69		SSENGE 1838 3		BOTTOM 833M	WIND 280	SPEED	WEATHER		INANT WAY	
Z	T	S	02	PO4	3103	NO2	EDM	DT	Z	T	5	02	SIGT	DI	DD
1 11 30 49	20.83 14.25 11.64	33.668 33.660	5.10 6.51 4.84	.22 .22 .33 1.02	1.		.0 .0 .0	435.6 435.6							
78 107 151 200 249	10.32 10.25 10.27 10.13 9.65	34.030	3.51 2.37 1.73 1.59 1.60	1.66 2.20 2.40 2.51	22. 32. 36. 38.	.05	19, 2 24, 2 26, 5 27, 5	185.1							
304 403 509	9.28 7.94 6.52	34.264 34.295	1.19					132.6							
RV	ALEXAND	ER AGAS	SIZ					CALCOPI	CRUISE 6	909					47050
	LATITO		ONGITUDE	HO,	/DAY/YR	ME	SSENGE		BOTTOM	WIND	SPEED	WEATHER	DOMI	NAUM 040	97050
			18 30.0W	0	9/14/69	0	150 GR		2042M	300	DARI	1	DONI	NANT WAV	6.5
2	T	S	02	P04	SIO3	NO2	коз	DT	Z	T	5	02	SIGT	DT	DO
									0 10 20 30 50 75 100 125 150 200 250 300 500	19.24 18.68 18.41 13.76 11.53 10.73 9.76 9.35 8.38 7.65 7.20	33.44 33.51 33.48 33.20 33.49 33.59 33.73 33.94 34.01		23.784 23.932 24.053 24.128 24.868 25.472 25.670 25.914 26.090 26.413 26.570 26.696 26.865 26.979	412.6 398.4 386.9 379.7 309.2 251.8 232.9 209.8 193.0 162.4 147.5 135.5 119.5	0 .041 .080 .118 .187 .258 .319 .375 .426 .516 .596 .669 .801
RV	ALEXAND		512				C	ALCOFI	CRUISE 65	909					97060
	SI 15.		NGITUDE 19 10.0W		DAY/YR	#25 20	SENGER 009 GM	TIME	BOTTOM 3545M	WIND 270	SPEED	WEATHER 2		NANT WAV	
2	T	S	02	P04	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	17.98 17.96 18.09 16.68 12.91 11.78 10.13 9.62 9.13 8.48 7.49 7.03 6.39 5.82	33.34 33.34 33.38 33.38 33.46 33.76 33.91 34.04 34.02 34.09		24.059 24.072 24.101 24.338 25.024 25.395 25.750 26.069 26.266 26.469 26.601 26.720 26.877 26.997	386.3 385.1 382.3 359.7 294.4 259.1 195.0 176.3 157.0 144.6 133.2 118.3	0 .039 .077 .114 .180 .249 .310 .363 .411 .496 .573 .644 .775
8.4	ALEXAND	ER AGASS	12				C	ALCOPI C	RUISE 69	09					97070
	LATITUD		NGITUDE 9 50.0W		DAY/YR /13/69		SENGER 27 GH	TIME	BOTTOM 3737M	WIND 300	SPEED 06KT	WEATHER 2		NANT WAVE	
z	Ť	S	02		5103	NO2	NO3	DT	Z	T	5	02		DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	18.33 18.32 18.32 14.35 12.73 11.31 10.17 9.46 8.93 8.07 7.75 7.23 6.25	33.53 33.54 33.54 33.17 33.25 33.39 33.50 33.79 33.88 33.99 34.08 34.12		24.088 24.098 24.098 24.723 25.113 25.775 26.119 26.274 26.492 26.610 26.716 26.895	383.6 382.6 382.6 323.0 285.9 250.2 223.0 190.3 175.5 154.8 143.7 133.6 116.6	0 .038 .077 .112 .173 .240 .300 .352 .399 .483 .559 .631

ALEXANDER	AGASS	IZ					CALCOPI	CRUISE 6	909					97080
			MO O	/DAY/YH 9/13/69	ME			3926M	WIND 320	SPEED 04KT	WEATHER			
T	S	02	P04	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
								0 10 20 30 50 75 100 125 150 200 250 300 400	17.81 12.27 10.65 9.57 9.15 8.95 8.35 7.62 7.03 6.14	33.72 33.62 33.66 33.77 33.91 33.98 34.10 34.13 34.14		24.143 24.146 24.151 24.284 25.441 25.816 26.085 26.349 26.536 26.668 26.6759 26.925 27.051	378.3 378.1 377.6 364.9 254.7 219.1 193.5 176.6 168.4 150.7 138.2 129.5 113.8 101.9	0 .038 .076 .113 .175 .235 .287 .333 .377 .459 .533 .602 .728 .842
ALEXANDER	AGAS 5	ΙZ					CALCOFI	CRUISE 6	909					97090
LATITUDE							ER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMI	NANT WAV	
2.00													0.3	
1	5	02	PU4	5103	802	NO3	DT							DD
								10 20 30 50 75 100 125 150 200 250 300 400	18.30 18.27 18.22 13.06 11.63 10.16 9.45 8.98 8.37 7.68 7.39 6.18	33.56 33.55 33.55 33.35 33.40 33.58 33.78 33.90 34.02 34.02		24.118 24.118 24.130 25.125 25.438 25.838 26.113 26.282 26.471 26.620 26.732 26.904 27.022	380.7 380.7 379.5 284.7 255.0 216.9 190.9 156.9 142.7 132.0 115.8	0 .038 .076 .114 .181 .249 .360 .406 .491 .568 .638 .768
ALEXANDER	AGASSI	12					CALCOFI	CRUISE 6	909					100030
LATITUDE 31 40.5N								BOTTON 412M	WIND 340	SPEED 08KT	WEATHER 2			ES
T	S	02	204	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
								0 10 20 30 50 75 100 125 150 200 250 300 400	12.31 11.75 11.59 11.36 11.28 10.77 10.00 8.99	33.53 33.62 33.68 33.74 33.79 33.92 34.10 34.21		26.522	152.0	0 .034 .065 .093 .146 .269 .327 .383 .491 .587 .672 .821
ALEXANDER	AGASSI	z					CALCOFI	CRUISE 6	909					100030
LATITUDE 31 40.5N	110 116	NGITUDE 5 46.5%	HO	/DAY/YR 9/15/69	H E	SSENGE 016	ER TIME	BOTTOM 412M			WEATHER 2		NANT WAV	
T	s	02	PO4	5103	NO2	NO3	DT						DT	DD
13.68 33 12.73 12.24 33 11.66 11.51 11.32 10.71 9.78 8.82 34	3.395 3.573	4.80 3.76 3.11 3.09 2.78	1.44	6. 6. 12. 15. 19. 20. 23. 31.	.02 .02 .02	5.8 11.9 14.4 15.7 16.9	293.3 253.2							
	ALEXANDER LATITUDE 30 34.5N T ALEXANDER LATITUDE 30 15.5N T ALEXANDER LATITUDE 31 40.5N T 16.72 3: 12.73 12.73 12.73 12.73 13.68 3: 12.74 3: 11.66 11.51 13.2 10.71 9.78 6.82 3:	ALEXANDER AGASS: LATITUDE LOI 30 34.5N 12 T S ALEXANDER AGASS: LATITUDE LOI 30 15.5N 12 T S ALEXANDER AGASS: LATITUDE LOI 31 40.5N 116 T S 16.72 33.434 11.66 11.51 11.32 10.71 9.78 6.82 34.225	ALEXANDER AGASSIZ LATITUDE LONGITUDE 30 15.5N 121 10.0W T 5 02 ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5N 116 46.5W T S 02 ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5N 16 46.5W T S 02 ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5N 16 46.5W T S 02 16.72 33.434 6.43 13.68 33.395 5.92 12.73 8.80 13.68 13.395 5.92 12.73 12.73 12.79 17.	ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 30 34.5N 120 31.0N 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 30 15.5N 121 10.0W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ LATITUDE LONGITUDE MO 31 40.5N 116 46.5W 0 T S 02 P04 ALEXANDER AGASSIZ	ALEXANDER AGASSIZ LATITUDE LONGITUDE MO/DAY/YR 30 34.5N 120 31.0N 09/13/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/13/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5N 116 46.5W 09/14/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/14/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/14/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 T S 02 P04 SI03	ALEXANDER AGASSIZ LATITUDE LONGITUDE MO/DAY/YR ME 30 34.5N 120 31.0N 09/13/69 0 T S 02 P04 SI03 NO2 ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/13/69 0 T S 02 P04 SI03 NO2 ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5N 116 46.5W 09/15/69 0 T S 02 P04 SI03 NO2 ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/15/69 0 T S 02 P04 SI03 NO2 ALEXANDER AGASSIZ LATITUDE 16 46.5W 09/15/69 0 T S 02 P04 SI03 NO2 16.72 33.434 6.43 .17 6. 00 13.63 33.395 5.92 .37 6. 02 12.24 33.573 3.76 1.04 0.02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.51 3.09 1.53 20. 02 11.52 3.78 1.88 23. 02 1.78 8.82 34.225 1.65	ALEXANDER AGASSIZ LATITUDE LONGITUDE MO/DAY/YR MESSENG: 0952 0 0	ALEXANDER AGASSIZ LATITUDE LONGITUDE 30 10.0 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 30 15.5 N 121 10.0 N 09/13/69 0445 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5 N 116 46.5 N 09/14/69 0445 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 31 40.5 N 16 46.5 N 09/14/69 2306 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ CALCOFI ALEXANDER AGASSIZ CALCOFI T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ LATITUDE LONGITUDE 10/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16 GNT T S 02 PO4 SI03 NO2 NO3 DT ALEXANDER AGASSIZ 09/15/69 NO16	LATITUDE 10NGITUDE 120 31.0% MO/DAY/YM 0952 GMT 3926M T S 02 PO4 SIO3 NO2 NO3 DT 2 ALEXANDER AGASSIZ CALCOFI CRUISE 6 LATITUDE 10NGITUDE 09/13/69 MESSENGER TIRE 05070M 200 250 250 250 250 250 250 250 250 250	LATITUDE LONGITUDE 09/13/69 RESSENGENTIME BOTTON NIND 120 34.58 120 31.0N 09/13/69 RESSENGENTIME 320 NIND 12 T	LATITUDE LONGITUDE OF 120 31.09 OF 117.69 OF 120 31.09 OF	LATITUDE LONGITUDE MOPALYES DESENGESTIRE BOTTON WIRD SPEED WEATHER BOT	LATITUDE LONGITUDE MOCHANIES MESSENCERTINE BOTTON WIND SPEED WEATHER DORI 10 340,58 1 120 310.0 09/13/69 09/32 ORT 8 37208 320 08 10 0 16.69 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 18.66 33.72 2 24.193 20 25.20 18.66 33.72 2 24.193 20 25.20 18.66 33.72 2 24.193 20 25.20 18.66 33.72 2 24.193 20 25.20 18.66 33.72 2 24.193 25.20 25.20 18.66 33.72 2 24.193 25.20 25.	LIVETUDE LONGITUDE MOVINGE MOVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 10 34 58 120 31.00 POVINGE MOVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 20 11.00 POVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 30 10 15.58 POVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 30 10 15.58 POVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 30 10 15.58 POVINGE MESSINGER TIME BOTTON WISH SPEED WEATHER DORINARY NAT 30 10 10.59 31.00 POVINGE PROPRIES 10.00 POVINGE PROPRIES

106.8

513

6.23

34.308

.56

RV	ALEXAN	DER AGASS	17					CALCOFI	CRUISE 6	909				.1	100050
	LATIT 31 01		NGITUDE 8 07.0W)/DAY/YR 19/15/69			R TIME	1669M	330	SPEED 07KT	WEATHER 2		NANT WAV 1	
Z	T	S	02	PO4	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	19.29 19.29 19.27 18.14 15.83 14.12 10.89 10.05 8.74 6.59 6.06	33.47 33.46 33.50 33.42 33.43 33.49 33.60 33.87 33.43 34.03		23.794 23.801 23.799 24.112 24.593 24.971 25.381 25.642 25.873 26.296 26.476 26.591 26.975	411.6 410.9 411.1 381.3 335.4 290.5 235.6 213.7 173.4 156.4 145.5 123.8 109.1	0 .041 .082 .122 .194 .274 .407 .464 .562 .647 .724 .864
RV	ALEXAN	DER AGASS	IZ					CALCOFI	CRUISE 6	909				,	100050
	LATIT 31 01		NGITUDE 8 07.0W		/DAY/YR 9/15/69		SSENGE 424 G		BOTTOM 1669M	WIND 330	SPEED 07KT	WEATHER 2		NANT WAVE 30 01 06	rs.
Z	T	5	02	P04	5103	NO2	NO3	DT	z	T	5	02	SIGT	DT	DD
11	19.30	33.456 33.460	5.38	.24	2.	.02	.0	411.9							
30 48 77 105 148 196	17.36 15.63 13.66 11.48 10.09 8.85	33.444	5.72 5.97 5.73 4.93 4.48 3.62	.22 .26 .37 .78	3. 9. 16.	.03	.0 .0 5.8 10.0	329.4							
243	8.26		3.14	1.70	30.	.06	10.3								
393 495	6.71	34.161 34.270	1.08					123.8 108.8							
RV	ALEXANI	DER AGASS	ız					CALCOPI	CRUISE 6	909				1	00060
	LATETT 30 41		NGITUDE 8 48.0W	0	/DAY/YR 9/15/69	M E 2	SSENGER 003 GI	TIME	BOTTOM 2980M		SPEED 07KT	WEATHER 2		NANT WAVE 20 02 07	RS
Z	T	S	02	PO4	S103	NO2	NO 3	DT	z	T	s	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	19.72 19.50 19.41 19.32 16.44 14.81 13.39 10.94 9.45 8.55 6.71 6.07	33.40 33.41 33.45 33.50 33.55 33.87 34.03 34.11 34.15		23.653 23.717 23.725 23.748 24.439 24.810 25.136 25.448 25.679 26.183 26.451 26.589 26.811 26.958	425.1 418.9 418.2 416.0 350.1 314.8 283.7 254.0 232.0 184.2 158.8 145.6 110.7	0 .042 .084 .126 .203 .286 .362 .491 .597 .685 .763 .904
RV	ALEXANI	DEB AGASS	12					CALCOPI	CBUISE 6	909				1	00060
	LATITU	DE LON	NGITUDE 48.CW	0	/DAY/YR 9/15/69	MB 2	SSFNGE: 113 G	TIME	BOTTOM 2980M	WIND 310	SPEED 07KT	WEATHER 2		NANT WAVE 20 02 07	S
z	T	S	02	204	SIO3	NOZ	NO3	DT	z	T	S	02	SIGT	DT	DD
10 30 50 78 108 153 203 253	19.38 16.57 14.54 12.53 10.55 9.20 8.53	33.411 33.410 33.387	5.17 5.37 5.39 6.05 5.89 5.31 4.03 3.59 2.97		1. 2. 1. 2. 5.	.00 .00 .00 .00 .00 .08 .01	.0 .0 .0 .0 .0 2.6 11.4 16.4	424.7 420.4 419.1							
308 407 512	7.86 6.64 6.06	34.170 34.256	2.05 1.06 .47					122.2 108.6							

K V	ALEXAN	DER AGASS	SIZ					CALCOFI	CRUISE 6	909				-	100070
	30 20		NGITUDE 19 27.5W		0/DAY/YR 09/16/69	MI	SSENGE 212 G	R TIME	BOTTOM 3737m	WIND 310	SPEED 11KT	WEATHER 2		NANT WAV	ES
Z	T	5	02	204	S 10 3	NO2	NO 3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	19.87 19.85 19.60 18.42 17.55 13.91 12.93 11.42 10.26 9.17 8.41 7.55 6.95	33.48 33.45 33.46 33.32 33.44 33.52 33.63 33.95 34.06 34.21		23.652 23.665 23.707 24.012 24.217 24.930 25.569 25.860 26.291 26.488 26.623 26.825 26.979	425.1 423.9 419.9 390.8 371.3 303.3 275.7 242.5 214.9 155.2 142.4 123.2 108.6	0 .042 .085 .125 .202 .287 .359 .425 .483 .582 .666 .6643 .881
RV	ALEXAN	DER AGASS	IZ					CALCOFI	CRUISE 6	909				,	00070
	LATIT 30 20		NGITUDE 9 27.5W)/DAY/YR		SSENGE 255 G	R TIME	BOTTOM 37378	WIND 310	SPEED 11KT	WEATHER 2		NANT WAVE	
Z	т	s	02	P04	S 103	NO2	NO3	DT	z	T	s	02	SIGT	DT	DD
1 11 30 48 78 107 150 199 248 302	19.87 19.85 17.81 15.79 13.06 12.22 10.25 9.28 8.53 7.61	33.459 33.458 33.287	5.32 5.33 5.60 5.95 5.88 5.29 4.30 3.30 2.87 2.64	.33 .35 .33 .28 .33 .57 1.18	2. 2. 1. 1. 2. 5. 15. 28.	.00	.0 .0 .0 .0 .0 2.3 10.7 18.3	425.9 425.5 389.1						36	-
400 504	6.99	34.202 34.303	1.16					124.4 108.5							
RV	ALEXAN	DER AGASS	12					CALCOFT	CRUISE 6	909				1	00080
	LATET 30 01		NGITULE 0 07.0W	MO	/DAY/YR 9/16/69		33 EN G E	TIME	BOTTOM 4116M	WIND 340	SPEED 11KT	WEATHER	DONIE	NANT WAVE	2,2,6,2,2,0
Z	т	s	02		5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	18.56 18.45 18.04 17.47 14.98 13.61 12.37 10.80 9.71 8.81 8.40 7.53 6.38 5.76	33.35 33.23 33.27 33.14 33.27 33.31 33.42 33.60 33.95 34.08 34.12 34.14 34.23		23,894 23,906 23,946 24,053 24,566 24,953 25,229 25,603 25,930 26,348 26,673 26,673 26,847 26,997	402.1 400.9 397.1 386.9 338.0 301.1 274.9 239.3 208.3 168.6 152.9 137.7 121.2	0 .040 .080 .119 .192 .272 .345 .410 .467 .562 .645 .720 .854 .975
RV	ALEXANI	DER AGASSI	Z				c	ALCOFI	CRUISE 69	909				1	00080
	LATITU		GITUDE 07.0W		/DAY/YR 9/16/69		SENGER 921 GM		BOTTOM 4116M	WIND 340	SPEED 11KT	WEATHER	DOMIN	ANT WAVE	S
Z	r	5	02	PO 4	5103	NO2	NO3	DT	z	T	S	02	SIGT	DT	DD
10 29 49 77 108 152 201 251 305	18.50 18.50 17.49 14.86 13.01 11.47 9.75 8.83 7.93	33.346 33.352 33.192	1.99	.26 .24 .26 .24 .28 .54 .98	1. 2. 6. 19.	.00 .00 .00 .01 .01 .07 .01	.0 .0 .0 .0 .0 3.4 8.5	400.9 400.5 331.8							
510	5.73	34.170 34.227	.63					119.0 106.9							

RV	ALEXAND	ER AGAS	SIZ				Ç	ALCOFI	CRUISE 69	103					00090
	LATITU 29 39.	DE L 5N 1	CNGITUDE 20 44.5W	MO,	/E4Y/YR 9/16/69	MES 14	SENGER 07 GM	TIME	BOTTOM 4021M	WIND 310	SPEED 09KT	WEATHER 2		ANT WAVE:	5
Z	T	S	C2	604	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	17.66 17.66 17.66 17.60 16.41 14.15 12.12 10.76 9.76 8.73 8.03 7.54 6.43 5.84	33,28 33,27 33,21 33,27 33,26 33,41 33,58 33,94 34,03 34,09 34,15		24.053 24.060 24.060 24.067 24.301 24.842 25.238 25.603 25.906 26.352 26.530 26.648 26.848 27.010	386.2 385.5 363.3 311.7 274.0 239.4 210.5 168.1 151.3 140.0 121.1	0 .039 .077 .116 .191 .276 .350 .414 .471 .568 .650 .725 .861
RV	ALEXAND	EH AGAS	SIZ				0	CALCOFI	CRUISE 6	909				-1	00090
	LATITU 29 39.		ONGITUDE 20 44.5W	80	/DAY/YR 9/16/69	M E			B01T0M 4021M	WIND 310	SPEED 09KT	WEATHER 2	DOMIN 30	NANT WAVE	s
Z	T	S	0.2	P04	5103	NO2	E ON	DT	Z	T	S	02	SIGT	DT	DD
11	17.68 17.66 17.66 16.46 13.22 11.63 9.48 8.79 8.08	33.266 33.266 33.265	5.57	.22 .24 .22 .22 .24 .63 1.31 1.70		.00 .00 .00 .00 .00 .02 .01		387.7 387.7 387.3							
299 399 503	7.70 6.43 5.88	34.157 34.258						120.6 106.3							
RV	ALEXANI	ER AGAS	SIZ					CALCOFI	CRUISE 6	909				1	03030
	LATITU		ONGITUDE		DAY/YR		SSENGER 438 GI		80TTON 65M	WIND 290	SPEED 10KT	WEATHER 1	DOMI	NANT WAVE	s
2	T	S	02	PO4	S103	NO2	NO3	DT	z	T	S	02	SIGT	DT	DD
									10 20 30 50	20.57 15.34 13.52 12.81 12.22	33.36 34.41 33.44		23.369 24.656 25.079 25.244 25.451	452.1 329.4 289.1 273.4 253.8	0 .039 .070 .098 .151
8 4	ALEXAN	DER AGAS	SIZ				- 1.3	CALCOFI	CRUISE 6	909					10 30 35
	LATIT 30 54		LONGITUDE	E (0/DAY/YE		SSENGE 121 G		BOTTOM 1849H	WIND 330	SPEED 13KT	WEATHER 1		NANT WAVE	S
z	T	S	02	204	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	20.46 20.41 20.09 18.82 14.51 12.05 10.87 9.51 8.41 8.25 7.85 6.26	33.59 33.53 33.37 33.33 33.34 33.43 33.68 23.85 33.94 33.94 33.94 33.94 33.94	9 3 7 7 3 3 3 3 3 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5	23.588 23.602 23.640 23.844 24.812 25.290 25.607 26.025 26.221 26.402 26.551 26.835 26.988	431.2 430.0 426.3 406.8 314.6 269.1 238.9 199.2 180.6 163.4 149.2 139.8 122.4	0 .043 .086 .128 .200 .273 .337 .441 .528 .609 .683 .820 .942

	ну	ALEXA									C	ALCUF	I CRUISE	6909						103040
		30 45		1	ONGITU 117 04.	5 W	M	0/DAY/Y 09/17/6	9	MESSE 1834			BOTTO 1763			EED	WEATH:	ER DO	MINANT WA	
2		T		3	02		P04	SI03	NO	2 N	03	DT	Z	7	r	s	02	SIGT	DT	DD
													11 23 33 55 77 100 122 150 250 300 400 500	0 18. 0 16. 0 12. 5 10. 0 9. 5 9. 9 8. 0 8. 0 7.	.97 .90 .31 .75 .61 .88 .43 .04 .57 .09 .38 .33	33.54 33.46 33.46 33.33 33.72 33.72 33.86 33.96 34.07 34.18 34.27		23.64 23.67 23.89 24.41 25.17 25.64 25.99 26.17 26.63 26.72 26.72 26.72 26.72 27.013	9 422.5 3 402.2 5 352.3 279.7 4 235.4 5 202.1 184.6 9 171.3 156.1 141.0 6 132.7 115.9	. 042 .084 .122 .185 .250 .305 .354 .399 .482 .559 .629
	RV J	LEXAN	DER	AGASS	SIZ						CA	LOOPT								
		LATITE		L	ONGITUD	E	MO,	/DAY/Y	м	ESSEN			CRUISE				F14 0 T 0 T			103050
z		30 29. T		s	02		04	9/17/69 SIO3	NO2	1248 NO.	GMT	DT	2743M		0 13		WEATHE.		INANT WAY 310 04 04	•
												2.5	0	19.3		3.46	02	SIGT	DT	DD
													10 20 30 50 75 100 125 150 200 250 300 400	19.3 19.3 19.2 16.6 13.3 10.9 10.2 8.8 8.2 7.4 6.8	31 3 32 3 325 3 38 3 31 3 31 3 31 3 31 3 31 3 31 3 31	3.46 3.46 3.49 3.47 3.45 3.41 3.40 3.59 3.88 4.03 4.05 4.20		23.789 23.789 23.786 23.827 24.391 24.665 25.561 25.561 25.826 26.282 26.501 26.631 26.833 26.991	412.1 412.3 408.5 354.7 328.5 286.6 243.3 218.1 174.8 154.0 141.7 122.6	0 .041 .082 .124 .200 .286 .364 .430 .489 .589 .673 .749 .887
R	V A	LEXAND	ER A	GASS	12						CAL	COFI	CRUISE 6	909						121111
		ATITU			NGITUDE 3 24.0W		MO/	DAY/YR /17/69	WE	SSENG 713	ER T		BOTTOM 2790M	WIND 300			EATHER		NANT WAVE	103060 Es
Z		T	S		02	PO	14	5103	NO2	NO3		DT	2	T	S		02	SIGT	DT	DD
													0 10 20 30 50 75 100 125 150 200 250 300 400	19.55 19.55 19.55 19.55 19.55 10.55 11.49 10.40 9.99 9.60 7.92 6.56	2 33 2 33 3 33 7 33 7 33 1 33 9 33 4 33 9 34 2 34 2 34	. 35 . 35 . 35 . 22 . 20 . 31 . 40 . 66 . 13 . 26 . 30 . 31 . 28		23.651 23.651 23.651 24.202 24.763 25.144 25.464 25.465 26.295 26.459 26.765 26.933	425.2 425.2 425.2 425.5 372.7 319.3 283.0 252.6 215.6 173.5 158.0 146.1 128.9	0 .043 .085 .128 .295 .371 .438 .497 .597 .682 .761 .904
RV	AL	EXANDE	R AG	ASSI	Z						CALC	OPT C	RUISE 69	ina						
		ATITUD		1 19	GITUDE 05.0W	٢	10/0	AY/YR 17/69	MES 02	SENGE 23 G	R TI		BOTTOM 3167M	WIND 310	SPEED 10KT		EATHER	DOMIN	ANT WAVE:	03070 s
2	2	r	S		02	PO4	5	103	102	NO3		DT	Z	T			02	Jakeyola	0 04 06	-
													0 10 20 30 50 75 100 125 150 200 250 300 400 500	19.85 19.86 19.79 18.99 16.10 13.88 11.92 10.33 9.71 9.28 8.81 8.01 6.94	33. 33. 33. 33. 33.	46 47 45 42 26 39 35 54 76 10 25 30		23.650 23.655 23.658 23.839 24.410 25.949 25.621 25.949 26.319 26.507 26.507 26.791	425.4 424.9 424.6 407.3 352.9 297.6 263.8 237.6 206.4 171.3 153.5 142.6 126.5 112.7	00 .043 .085 .127 .203 .285 .355 .419 .475 .571 .655 .731 .872 .999

KA	ALEXANDER	AGA	SSIL				C	ALCOFI	CRUISE 6	30 a					103080
	LATITUDE 29 27.5N		LONGITUDE 119 43,00		71.AY/YR 9/16/69		SSENCER 124 GM		BOTTOM 3737M	340	SPEED 12KT	WEATHER 2		NANT NAVI 20 04 04	es.
E	T	5	0.2	PD4	SIC3	NCZ	EON	DT	Z	T	s	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	20.00 19.94 19.89 19.77 16.46 10.99 13.80 9.50 8.78 8.57 7.68 6.61	33.48 33.40 33.25 33.45 33.53		23.611 23.634 23.686 24.435 24.648 25.053 25.490 25.817 26.237 26.477 26.612 26.793 26.950	429.1 426.9 425.6 421.9 350.5 330.2 291.6 250.0 219.0 179.1 156.2 143.5 126.3 111.4	0 .043 .085 .128 .205 .291 .369 .438 .497 .598 .684 .762 .762
BV	ALEXANDER	AGA	SSIZ				ÇA	LCOFI	CROISE 6	909				,	107032
	LATITUDE 30 26.0N		LONGITUDE 116 11.0%		/DAY/YR 9/19/69		SSENGER 956 GMT		BOTTO# 408#	WIND 100	SPEED 03KT	WEATHER	DOMI	NANT WAVE	
2	T	5	02	₽¢4	SIOJ	NO2	NO3	DT	z	T	S	0.2	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300	16.85 15.00 14.37 13.47 12.12 11.98 11.70 11.57 11.48 9.75 9.18	33,44 33,28 33,25 33,30 33,37 13,69 33,86 33,93 34,12 34,30 34,35		24.375 24.669 24.780 25.005 25.323 25.597 25.766 25.805 25.889 26.138 26.460 26.601	356.2 328.2 317.6 296.2 265.9 239.9 223.8 220.1 212.6 188.5 157.1	0 0 3 4 0 6 7 0 9 7 1 5 4 2 1 7 2 7 6 3 3 2 3 8 7 4 8 9 5 7 8 6 5 6
RV	ALEXANDER	ÄGA	SSIZ				CA	LCOPI	CRUISE 6	909				1	07035
	LATITUDE 30 21.5N		LONGITUDE 116 22.5W		/DAY/YR 9/19/69		SSENGER 138 GMT		BOTTOM 1664M	WINB 350	SPEED 15KT	WEATHER	DOMI	NANT WAVE	
8	1	S	02	P04	SIQ3	NO2	903	DT	Z	T	S	02	SIGT	DT	pp
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	18.01 18.02 17.93 16.05 13.94 12.43 11.10 9.45 8.68 8.03 7.87 7.03 6.41	33, 39 33, 40 33, 28 33, 18 33, 22 33, 37 33, 62 33, 76 33, 97 34, 06 34, 18 34, 21 34, 31		24.060 24.065 24.087 24.4816 25.148 25.511 25.903 26.097 26.384 26.553 26.671 26.814 26.977	386.3 385.8 383.7 350.4 314.2 282.6 248.0 210.8 192.4 165.1 149.1 137.9 124.3 108.9	0 .039 .077 .114 .181 .256 .322 .380 .431 .522 .603 .677 .814
R A	ALEXANDER	AGA	5512				CA	LCOFI	CRUISE 69	909				,	07040
	1.ATITUDE 30 11.0N		LONGITUDE	BO,	DAY/Y8 9/19/69		SSENGER 438 GMT	TIME	BOTTOM 2602M	WIND 320	SPEED 11KT	WEATHER 2		ANT WAVE	0.0000
2.		5	0.2	PO4	SIOI	NO2	NO3	DT	Z	T	S	02		DT	DD
									0 10 20 30 50 75 100 125 200 250 300 400 500	19.66 19.66 18.67 15.37 13.83 12.40 10.81 10.15 9.38 8.67 7.63 6.72 6.12	33.58 33.23 33.23 33.23 33.33 33.41 33.60 33.80 33.97 34.05 34.20 34.28		23.798 23.798 23.950 24.550 24.877 25.239 25.594 25.856 26.140 26.385 26.573 26.682 26.849 26.991	412.0 411.2 396.7 339.6 308.4 274.0 240.2 215.3 165.0 147.1 136.8 121.0 107.6	0 .041 .082 .119 .184 .257 .321 .379 .430 .520 .600 .673 .808 .928

RV	ALEXANDER	AGASSIZ		CALCOF	CRUISE 6	909				1	07050
-	LATITUDE 29 51.0N	LONGITUDE 117 24.0W	MO/DAY/YR 09/19/69	MESSENGER TIME	BOTTOM 2227M	WIND 310	SPEED 12KT	WEATHER 2		NANT WAVE	
z	T	s 02	PO4 SIO3	NO2 NO3 DT	2	7	5	02	SIGT	DT.	DD
					10 20 30 50 75 100 125 150 200 250 300 400	19.30 19.29 19.28 19.28 15.62 13.65 12.04 11.07 9.99 8.92 8.74 8.24 7.10 6.29	33.48 13.49 33.49 33.34 33.24 33.28 33.62 33.62 33.86 34.10 34.19 34.24 34.27		23.806 23.817 23.819 24.579 24.579 24.922 25.269 25.641 25.898 26.260 26.476 26.623 26.828 26.962	410.4 409.4 409.2 409.2 336.8 300.1 271.1 235.7 2111.2 176.9 156.4 142.4 123.0 110.3	0 .041 .082 .123 .198 .278 .351 .415 .471 .570 .656 .733 .871
RV	ALEXANDER	AGASSIZ		CALCOF	I CRUISE 6	909					107060
	LATITUDE 29 31.0N	LONGITUDE	MO/DAY/YR 09/20/69	MESSENGER TIME	BOTTOM 334M	WIND 330	SPEED 19KT	WEATHER 2		NANT WAVI 20 06 06	
z	т	s 02	PO4 SI03		Z	т	S	02	SIGT	DT	DD
					0 10 20 30 50 75 100 125 150 200 250 300 400	19.33 19.34 19.35 15.27 13.76 12.31 10.88 9.97 9.61 9.16 8.86 7.69 6.66	33.42 33.42 33.18 33.39 33.57 33.79 34.09 34.23 34.32		23.745 23.751 23.751 23.773 24.544 24.853 25.302 25.706 26.034 26.328 26.511 26.629 26.815 26.967	416.2 415.7 415.7 413.5 340.1 310.7 267.9 229.6 198.3 170.4 153.1 141.2 109.8	0 .042 .083 .125 .200 .282 .355 .418 .472 .566 .665 .726
RV	ALEXANDER	AGASSIZ		CALCOF	I CPUISE 6	909				1	107070
	LATITUDE 29 12.5N		MO/DAY/YR 09/20/69		BOTTOM 2885M	WIND 340	SPEED 14KT	WEATHER		NANT WAVE 20 06 06	ES
z	T	s 02	PO4 SIO3	NO2 NO3 DT	7.	т	S	02	SIGT	DT	DD
					0 10 20 30 50 75 100 125 150 200 250 300 400 500	19.26 19.26 19.26 19.09 15.62 13.71 12.79 11.40 10.46 9.31 8.50 8.42 7.15 6.36	33.32 33.44 33.49 33.68 33.94 34.03		23.695 23.695 23.695 23.746 24.579 25.248 25.550 26.260 26.458 26.588 26.790 26.936	421.0 421.0 416.2 336.8 299.4 273.1 244.4 176.9 158.0 145.7 126.6 112.7	0 .042 .084 .126 .202 .282 .354 .419 .477 .577 .663 .741 .883
RV	ALEXANDER	AGASSIZ		CALCOP	I CRUISE 6	909					107080
	LATITUDE 28 52.0N		MO/DAY/YR 09/20/69		BOTTOM 3641M	WIND 330	SPEED 16KT	WEATHER	DOMI	NANT WAV	ES
Z	T	s 02	PO4 SIO3	NO2 NO3 DT	Z	T	S	02	SIGT	DT	DD
					0 10 20 30 50 75 100 125 150 200 250 400 500	19.33 19.34 17.88 15.65 14.27 12.41 11.02 10.48 10.17 9.82 9.32 8.13 7.00	33, 32 33, 32 33, 26 33, 26 33, 38 33, 54 33, 87 34, 21 34, 33 34, 38		23.677 23.675 23.984 24.511 24.809 25.275 25.657 26.009 26.327 26.480 26.610 26.789 26.944	422.7 423.0 393.4 343.3 314.9 270.5 234.1 200.7 170.5 156.0 143.7 126.7	0 .0 42 .0 85 .126 .199 .282 .356 .420 .475 .569 .653 .731 .873

10. V	ALPXEND	PP AGASS	7.7				- (ALCOPT	CHUISE 6	909				1	10035
	LATITU 29 46.	IDE LON	NGITUDE 6 00.0W		/DAY/YH 9/22/69		SSENGEI 000 (B	TIME	DOTTOM 1298N	WIND 320	SPEED 14KT	WEATHER 1		ANT WAVE	
3.	1	5	ñ2		SIOI		NO3	OT	2	7	S	02	SIGT	DT	DD
									10 20 30 50 75 100 125 150 200 250 400 500	16.79 16.66 15.37 14.55 13.01 11.93 10.71 10.17 9.66 9.03 7.81 6.83	33.43 33.37 33.33 33.23 33.31 33.51 33.72 33.95 34.23 34.33 34.33		24.381 24.411 24.657 24.804 25.014 25.251 25.534 25.782 26.031 26.308 26.499 26.610 26.813 26.960	355.6 352.7 329.3 315.4 295.4 272.8 245.9 222.3 154.7 124.4 110.5	0 .035 .070 .102 .163 .235 .300 .359 .412 .507 .591 .668 .808
BV	ALEXANI	ER AGASS	IZ					CALCOFI	CHUISE 6	909				1	10035
	LATITE 29 46		NGITUDE 6 00.0W		/DAY/YR 9/22/69		SSENGEI 106 GE		807708 12988	WIND 320	SPEED 14KT	WEATHER		NANT WAVE	5
Z	т	5	02	204	S103	No2	NO3	DT	2	1	5	02	SIGT	DT	DD
0 10 30 50 79 109 154 205 254 309 409 512	17.44 16.22 14.70 13.13 11.45 10.18 9.54 8.97 9.12 8.79 7.52 6.75	33.414 33.426 33.34a 34.363 34.355	5.92 5.05 5.77 5.97 5.13 4.83 3.78 3.78 3.08 1.85 1.30	.24 .28 .31 .28 .81 .89 1.40	4. 2. 6. 12. 25. 33.	.00 .01 .16 .04 .11 .02 .02	.0 .2 .2 5.8 10.7 17.7 21.7	371.4 343.4 317.1							
RV	ALEXANI	ER AGASS	12					CALCOPI	CRUISE 6	909				1	10040
	LATITO 29 39.		NGITUDE 6 22.5W		/DAY/YR 9/21/69		SSENGER 956 GN		BOTTON 2321M	WIND 310	SPEED 14KT	WEATHER 1		NANT WAVE	S
2	T	S	02	204	5103	NO2	NO3	DT	2	T	S	02	SIGT	DT	DD
									0 100 20 30 50 75 100 125 150 200 250 300 400 500	19.77 19.72 19.67 17.73 14.26 13.24 11.77 10.64 10.01 9.83 9.37 8.84 7.08	33.84 34.19 34.29 34.35 34.23		23.739 23.752 23.765 24.219 24.734 25.005 25.358 25.740 26.066 26.359 26.656 26.823 26.948	416.9 415.6 414.4 371.1 322.0 296.2 262.6 326.3 195.3 167.5 151.9 139.3 123.4 111.6	0 .042 .083 .123 .192 .270 .340 .455 .548 .630 .705 .843
RY	ALEXAMI	DER AGASS.	12					CALCOFI	CRUISE 6	909				3	10040
	LATET! 29 39.	DE LC.	WGITUDE 6 22.5W		/DXY/YH 9/21/69	# E	SSENGER 103 GI	TIME MT	BOTTOM 2321M	WIND 310	SPEED 14KT	WEATHER		NANT WAVE	ts.
z	T	s	0.2	PO4	5103	NO2	ND3	DT	Z	т	S	02	SIGT	DT	ĎΩ
10 30 50 78 108 151 203 253	15,40	33,536 33,532 33,174 34,231 34,231	3.09 2.22 1.55 .86	.15 .22 .24 .46 .97 1.59			.0 .0 .0 .0 2.3 10.1 20.7 24.9	419.1 417.7 317.6							

RV	ALEXA	IDER AGASS	IZ					CALCOFI	CRUISE 6	909				- 1	10050
	LATI1 29 15		NGITUDE 7 02.0W		D/DAY/YR		SSENGE	R TIME	BOTTOM 3169M	WIND 340	SPEED 16KT	WEATHER 2		NANT WAVE	s
Z	r	S	02	204	SIO3	NO2	поз	DT	Z	T	s		SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	19.59 19.59 19.59 19.58 15.33 12.46 10.92 10.36 9.81 9.23 8.77 7.37 6.44	33.51 33.52 33.38 33.50 33.65 33.81 33.96 34.13 34.28 34.38		23.755 23.755 23.755 23.765 24.673 25.359 25.761 26.193 26.421 26.579 26.690 26.869 27.012	415.3 415.3 415.3 414.4 327.8 262.6 224.3 203.2 183.2 161.6 146.6 136.1 119.1	0 .042 .083 .125 .199 .273 .335 .389 .438 .526 .605 .678 .812
RV	ALBXAN	DER AGASS	12					CALCOFI	CRUISE 6	909				1	10050
	LATIT 29 15		NGITUDE 7 02.0W)/DAY/YR	ME	SSENGE 315 G	R TIME	BOTTOM 3169M	WIND 340	SPEED 16KT	WEATHER 2		NANT WAVE 20 08 06	s
2	T	S	02	PO 4	S103	NO2	NO 3	DT	Z	T	S	02	SIGT	DT	DD
10	19.58	33.498 33.494	5.40	.17	2.	.01	.0	416.0							
29 51	19.57	33.374	5. 39	.15	2.	.01	.0	317.4							
83 111	10.59		3.37	1.29	13.	. 14	12.6								
153 204 255	9.78 9.20 9.07		2.75 2.34 1.23	1.79	36.	.07	25.3								
307 412 521	8.69 7.23 6.30	34.321 34.357	.78 .71 .44					118.7 104.0							
8 4	ALEXAN	DER AGASS	IZ				(CALCOPI	CRUISE 6	909				- 1	10060
	LATIT 28 56		NGITUDE 7 38.0W	0	/DAY/YR 9/21/69	ME	SSENGE: 533 GI	R TIME	BOTTOM 3545M	WIND 330	SPEED 18KT	WEATHER		NANT WAVE 20 08 08	S
Z	T	S	02	PO4	SIO3	NO2	NO3	DT	z	T	5	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	20.83 20.82 20.83 15.41 11.67 10.50	33.64 33.64 33.65 33.39 33.38 33.70 34.04 34.03 34.36 34.36		23.528 23.530 23.528 23.535 24.663 25.415 26.873 26.048 26.213 26.437 26.597 26.692 26.857 26.998	437.0 436.8 437.0 436.3 328.7 257.2 213.6 197.0 181.4 160.1 144.9 135.9 120.2 106.9	0 .044 .087 .131 .208 .282 .341 .393 .441 .528 .606 .679 .813
RV	ALEXAN	DER AGASS	I Z				(CALCOFI	CRUISE 6	909				1	10060
		UDE LON			/DAY/YR 9/21/69		SSENGER 645 GR		BOTTOM 3545M		SPEED 18KT	WEATHER		NANT WAVE	S
z	T	s	02	PO4	5103	NO2		DT	Z	T	S	02	SIGT	do la solom	DD
11 31 50	20.82 20.81 20.82 15.22 11.51 10.34 9.41 8.71 9.21	33.640 33.636 33.632		.17 .15 .17 .22 .83 1.29 1.57	2. 3. 11. 20. 28.		.0 .0 .0 .0 10.4 17.8 22.0 25.6	436.8 436.8 437.3							
309 409 514	8.52 7.56 6.46	34.362 34.350	.84 .39 .29					120.1 106.5							

RV	ALEXAN	DEB AGASS	SIZ					CALCOFI	CRUISE 6	909				-	110070
	LATIT 28 36	UDE LO	ONGITUDE	MC)/DAY/YR 19/20/69	H E	SSENGE 338 G	R TIME	BOTTOM 3737M	WIND 330	SPEED 17KT	WEATHER 1		NANT WAVE 30 80 08	
Z	T	S	02	PO4	SI03	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	19.93 19.90 19.09 15.38 12.92 11.48 10.33 10.00	33.42 33.26 33.30 33.45 33.69 33.90 34.24 34.36 34.36		23.621 23.629 23.637 23.814 24.570 25.114 25.895 26.115 26.396 26.571 26.685 26.847 26.982	427.4 426.6 409.7 337.6 285.8 248.7 211.6 190.7 163.9 147.4 136.5	.086 .127 .202 .281 .348 .406 .457 .548 .628 .701
RV	ALEXAN	DER AGASS	SIZ					CALCOFI	CRUISE 6	909				1	10070
		UDE LO	NGITUDE	BC C	/DAY/YR	ME	SSENGE 037 G	R TIME	BOTTOM 3737m	WIND 330	SPEED 17KT	WEATHER		NANT WAVE	
Z		s						DT				02	SIGT	DT	DD
		33.442 33.438	5.34 5.38 5.68	.22	1:	.00		427.9 428.2					7707		
56 - 90 120 165 220	14.66 11.62 10.42 10.21 9.80	33.297	6.04 4.74 4.07 2.42 1.64	.22 .78 1.13 1.79 2.16	1.	.02		320.0							
329 439 548	8.33 6.98 5.98	34.331 34.342	.78 .42 .30					114.6 101.2							
RV	ALEXAN	DEB AGASS	IZ					CALCOFI	CRUISE 69	909				1	10080
	LATITE 28 16.		NGITUDE 8 56.5W		/DAY/YR 9/20/69			R TIME	BOTTOM 3832M	WIND 360	SPEED 12KT	WEATHER 2	DOMI	NANT WAVE	5
Z	T	s	02	P04	SIO3	NO2	NO3	DT		T			SIGT		DD
									0 10 20 30 50 75 100 125 150 200 250 300 400	20.41 20.40 20.38 18.68 16.04 15.05 14.48 11.97 10.39 9.47 8.85 8.08 7.34 6.32	33.56 33.55 33.41 33.35 33.43 33.69 33.56 33.61		23.579 23.581 23.579 23.910 24.492 24.773 25.095 25.498 25.822 26.250 26.459 26.616 26.834 26.981	432.1 431.9 432.1 400.6 345.0 318.3 267.6 249.3 218.5 177.9 158.0 143.1 122.4 108.5	0 043 -086 -128 -203 -286 -363 -431 -490 -591 -677 -754 -893
RV	ALEXANI	DER AGASS	12					CALCOFI	CRUISE 69	909				1	10080
LATITUDE 28 16.5N			NGITUDE 8 56.5W		/DAY/YB 9/20/69	MESSENGER TIM		R TIME				WEATHER 2		NANT WAVE	S
z	T	5	02	P04	SIO3	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
11 30 49 77 106 149 198 246	20.40 20.39 18.70 15.84 15.04 13.34 10.20 9.48 8.95	33.553 33.535 33.437	5.43 5.45 5.69 6.23 6.07 5.61 4.21 3.62 3.06	.26 .24 .24 .33 .46 1.24	4.	.00 .00 .00 .00 .12 .01	.0 .0 .0 .0 1.0 8.8 12.8	432.4 433.4 399.1							
299 397 499	8.23 7.36 6.32	34.287 34.294	2.08 .88 .62					122.9							

	o v	ALEXANDER																
		LABITUDE			TUDE		O/DAY/Y		SSENGI			CRUISE 6						113030
		29 22.5N		115	18.0W		09/22/69		910	GMT	n.c.	588	300	SPEED	WEATHER 1	DOMI	00 03 06	ES
Z		T	5		02	P04	ST03	NO2	NO3		DT	Z	T	S	02	SIGT	DT	DD
												0 10 20 30	16.98 16.97 15.92 13.79	33.55 33.50		24.421 24.431 24.634 25.055	351.8 350.9 331.5 291.4	.035 .069
												5.0		33,51		25.247	273.2	.157
	v	ALEXANDER	AG	SASSIZ						CALC	OFI	CHUISE 6	909				4	13035
		LATITUDE 29 11.5N		115			0/DAY/YE		SSENGE 153 G		нв	BOTTOM 12988	WIND 350	SPEED 09KT	WEATHER	DOMI	NANT WAV	ES.
2		T	S		02	PO4	5103	NO 2	NO3		DT	2	T	S	02	SIGT	DT	DD
												0 10 20 30 75 100 125 150 200 250 300 400 500	16.55 16.26 16.13 15.84 13.47 12.43 11.01 10.04 9.94 9.42 8.37 7.28 6.37	33.42 33.43 33.44 33.17		24.496 24.533 24.606 24.904 25.202 25.496 26.055 26.289 26.491 26.639 26.842 26.982	351.0 344.7 341.1 334.2 305.8 277.4 249.5 212.8 196.1 174.1 155.0 140.9 121.6 108.4	0 .035 .069 .103 .167 .240 .307 .365 .417 .511 .596 .672 .809
R		TEXYNDER	AG								1	CRUISE 6	909					13040
		9 06.0N	ď	LONGI II5 5			/DAY/YR		SSENGE 435 G		M E	BOTTOM 1856#	WIND 340	SPEED 09KT	WEATHER		NANT WAVE 40 03 06	
2		7	S		02	204	S103	NO2	NO3		T	Z	T	S	02	SIGT	DT	DD
												0 10 20 30 50 75 100 125 150 200 250 300 400 500	19.05 18.73 18.41 16.66 13.81 11.64 11.97 10.66 10.50 10.01 8.75 7.14	33, 46 33, 42 33, 48 33, 58 33, 50 34, 14 34, 18 34, 21 34, 25 34, 33 34, 35		23.855 23.905 24.000 24.450 25.151 25.591 26.050 26.129 26.242 26.309 26.488 26.685 26.917	405.8 401.0 392.0 349.1 282.3 240.4 266.6 196.9 189.3 178.6 172.3 159.1 136.5 114.6	0 .040 .080 .117 .181 .246 .303 .354 .497 .587 .673 .828 .961
R	V A	LEXANDER	AG.	ISST2						****	DT	contra co						
	12	LATITUDE 28 41.0N		LONGI:	TUDE		/DAY,/YR 9/22/69		SENGER	R TIM		BOTTON 3545M		SPEED 10KT	WEATHER 1		NANT WAVE	13050 S
Z		T	5		02	204	S103	NO2	NO3	r	T	z	т	s	02	SIGT	DT	ממ
												0 10 20 30 50 75 100 125 150 200 250 300 400 500	20.93 20.75 20.75 20.79 15.06 12.35 10.45 10.45 9.81 9.34 8.97 8.81 7.47	33.61 33.61 33.61 33.42 33.49 33.72 33.97 34.20 34.31 34.41 34.33		23.478 23.524 23.526 23.529 24.663 25.318 25.719 25.971 26.201 26.458 26.604 26.707 26.847 26.979	441.8 437.4 437.1 436.9 328.7 228.3 204.3 182.5 144.3 134.4 121.2	0 -044 -088 -132 -208 -283 -345 -400 -449 -536 -614 -686 -820 -942

2.0	ha and drug	2700000		1011101	ANDESCE A.	. 22					
RV	LATITUDE		E MO/DAY/YR		CRUISE 69	909 WIND	SPEED	WEATHER	DONT	NANT WAVI	13060
	28 24.5N	117 17.	09/23/69	0055 GMT	3498M	330	13KT	1	3	30 04 06	
Z	T	S 02	P04 SI03	NO2 NO3 DT	2 0 10 20 30 50 75 100 125 150 250 300 400	20.83 20.77 20.73 20.70 13.57 11.74 10.15 9.63 9.56 8.97 8.33 4.44 6.28	\$ 33.64 33.64 33.63 33.27 33.43 33.40 13.83 34.01 34.28 34.35 34.34 34.35	02	23.528 23.544 23.555 24.961 25.449 25.856 26.100 26.262 26.484 26.635 26.727 27.017	DT 437.0 435.5 434.5 434.4 300.4 254.0 176.7 155.6 141.3 132.6 119.3 105.0	00 .044 .087 .131 .204 .274 .333 .385 .516 .593 .664 .796
RV	ALEXANDER	AGASSIZ		CALCOFI	CRUISE 69	909				1	13070
	LATITUDE 28 02.5N				BOTTOM 3169M	WIND 300	SPEED	WEATHER		NANT WAVE	s
z	T	s 02	P04 SI03	NO2 NO3 DT	z	T	S	02	SIGT	DT	DD
					0 10 20 30 50 75 100 125 150 200 250 300 400 500	19.77 19.78 19.78 18.15 16.16 14.22 12.14 10.83 10.49 10.28 9.86 9.34 8.25 7.12	33.46 33.47 33.47 33.51 33.47 33.39 33.37 33.66 33.90 34.26 34.38 34.41 34.39 34.38		23.670 23.675 23.675 24.117 24.557 24.919 25.319 25.784 26.030 26.347 26.512 26.622 26.778 26.935	423.4 422.9 422.9 380.8 338.9 304.3 266.3 222.1 198.7 168.6 153.0 142.5 127.7 112.8	0 .042 .085 .125 .197 .278 .350 .412 .465 .559 .641 .718 .860
RV	ALEXANDER	AGASSIZ		CALCOFI	CRUISE 69	909				1	13080
	LATITUDE 27 42.0N				BOTTOM 3926M	WIND 330	SPEED 09KT	WEATHER		NANT WAVE	es.
z	T	s 02	PO4 SI03	NO2 NO3 DT	z	T	s	02	SIGT	DT	DD
					0 10 20 30 50 75 100 125 150 200 250 300 400	20.70 20.70 20.71 20.70 17.18 15.18 14.06 12.65 11.17 9.54 9.21 8.86 7.61 6.67	33.64 33.64 33.64 33.52 33.52 33.54 33.54 33.61 33.89 34.28 34.29 34.33		23.555 23.562 23.562 23.562 24.358 24.737 25.068 25.353 25.685 26.184 26.464 26.598 26.795 26.958	434.4 433.7 434.0 433.7 357.8 321.7 290.2 263.1 231.5 184.1 157.6 144.8 126.1 110.7	0 .043 .087 .130 .210 .295 .372 .442 .505 .610 .698 .776 .918
	11 BY A M D B D	*areets		C11 C077	CURTOR CO	100					17010
ич	LATITUDE 28 48.0N	LONGITU	E MO/DAY/YR		BOTTOM 103M	WIND	SPEED 14KT	WEATHER		NANT WAVE	17030 s
2		s 02			Z	7 T	S	02	SIGT	DT	DD
					0 10 20 30 50 75	19.24 19.24 17.42 15.54 14.43 13.41	33.52 33.53 33.55 33.51 33.46 33.67		23.852 23.860 24.324 24.727 24.929 25.302	406.0 405.3 361.0 322.7 303.4 267.9	0 .041 .079 .113 .176 .248

RV	ALEXANDER	A	GASSIZ					CALC	OFI	CRUISE 6	909					17035
	LATITUDE 28 38.0N		LONGITUDE 115 15.5W		09/24/69		SSENG!		ME	BOTTOM 214M	WIND 290	SPEED 14KT	WEATHER 1		NANT WAVE	ES
Z	T	s	02	PO	4 5103	NO2	NO3		DT	Z	T	s	02	SIGT	DT	DD
										0 10 20 30 50 75 100 125	20.98 20.66 19.07 18.03 14.27 12.45 11.63 11.23	33.72 33.62 33.58 33.38 33.57 33.75		23.525 23.634 23.971 24.200 24.901 25.415 25.709 25.852 26.055	437.3 426.9 394.7 372.9 306.1 257.2 229.2 215.6 196.4	0 .043 .084 .123 .191 .262 .323 .379 .432
RV	ALEXANDER	AG	ASSIZ					CALC	OFI	CRUISE 6	909				1	17040
	LATITUDE 28 28.0N		LONGITUDE	1	10/DAY/YR 09/24/69		SSENGE 219 G	RTI		BOTTOM 994M	WIND 290	SPEED 06KT	WEATHER		NANT WAVE	0.7.7
z	T	S	02	PO	5103	NO2	NO3		DT	Z	T	S	02	SIGT	40 04 05 DT	DD
										0 10 20 30 50 75 100 125 150 200 250 300 400	19.26 19.27 18.18 16.66 13.62 12.45 11.70 11.50 10.85 10.18 9.16 7.84 6.82	33.46 33.39 33.30		23.794 23.799 24.018 24.312 25.097 25.507 25.758 25.950 26.317 26.502 26.628 26.824 26.977	411.6 411.1 390.2 362.2 287.4 248.4 224.6 206.3 192.2 171.4 153.9 142.0 123.4 108.9	0 .041 .081 .119 .184 .252 .311 .366 .416 .509 .593 .670 .809 .932
BA	ALEXANDER	AG	ASSIZ					CALCO	FI	CRUISE 69	909				- 3	17050
	LATITUDE 28 09.0N		LONGITUDE 116 16.5W		0/DAY/YR 09/24/69		SSENGE 618 G		E	BOTTOM 3888M	WIND 350	SPEED 16KT	WEATHER 2		NANT WAVE	s
Z	T	S	02	P04	5103	NO2	NO3	1	T	Z	T	S	02	SIGT	DT	DD
										0 10 20 30 50 75 100 125 150 200 250 300 400 500	20.52 20.52 20.48 19.81 14.47 12.96 11.26 10.77 10.11 9.53 8.43 8.51 7.51 6.65	33.69 33.69 33.71 33.28 33.31 33.46 33.64 33.89 34.16 34.14 34.30 34.34		23.648 23.659 23.859 24.782 25.114 25.552 25.779 26.088 26.396 26.555 26.668 26.849 26.992	425.5 425.5 426.3 317.4 285.8 244.1 222.5 193.2 164.9 138.2 121.0	0 043 085 127 199 275 342 401 454 545 625 699 835
RV	ALEXANDER	AG			20220 40					CRUISE 69						17060
	LATITUDE 27 44.0N		116 50.0W		0/DAY/YR 09/24/69		SENGE 120 G		E	3451M		12KT	WEATHER 2		NANT WAVE:	S
Z	T	S	02	PO4	SI03	NO2	поз	D	T	z	T	S	02	SIGT	DT	DD
										0 10 20 30 50 75 100 125 150 200 250 300 400 500	20.53 20.53 20.46 19.79 15.58 12.89 10.83 10.14 9.53 8.49 8.41 7.53	33.53 33.54 33.58 33.46 33.39 33.37 33.68 33.88 34.19 34.20 34.34 34.35		23.524 23.532 23.581 23.665 24.626 25.174 25.637 25.920 26.116 26.419 26.593 26.715 26.854 26.996	437.3 436.6 431.9 423.9 332.3 280.1 209.2 190.6 161.8 145.3 133.7 120.6 107.0	0 044 087 130 206 283 348 404 455 624 696 829

H.A	ALEXAN					11.12.10				CRULSE 6		92.222		75.5		117070
	27 28			NGLTUDE 17 32.0W		9/23/69		2030 G	R TIME	DOTTON 1717d	290	DSKT	WEATHER 2		90 04 06	85
2	T		S.	0.5	PQ4	5193	NO2	NO3	DŢ	20 30 30 50 75 100 125 150 200 250 300	T 19.97 19.90 19.88 19.78 18.72 14.18 12.30 10.69 10.69 10.69	33.43 33.44 33.38 33.31 33.23 33.33 33.52 33.86 34.20		23.588 23.614 23.627 23.710 23.823 24.805 25.258 25.647 26.503 26.503 26.786	0T 431.2 428.8 427.6 419.6 408.8 315.3 272.1 235.1 208.7 153.8 141.9	00 -043 -086 -128 -211 -302 -376 -496 -591 -674
										500	6,99			26.953	111.1	1.01
RV	ALEXAN	DER	AG AS S	17					CALCOFI	CRUISE 6	909					17080
	LATIT 27 05			NGITUDE 8 07.0W		/DAY/Y8 9/23/69	#2	SSENGE 539 G	R TIME	HOTTOR 4612H	WIND 350	SPEED	WEATHER 2		NANT WAVE 30 06 07	s
z	T			02		5103	NO2		DT	Ż	Ť	S	02	SIGT	DT	DD
										10 20 30 50 75 100 125 150 200 250 300 400 500	20.65 20.65 20.66 20.66 20.66 17.29 15.50 14.36 12.51 9.05 8.70 7.58	33.62		23.538 23.535 23.535 24.355 24.759 25.052 25.366 25.714 26.243 26.466 26.592 26.815 26.986	436.0 436.3 436.3 436.3 358.1 319.6 291.8 228.8 178.5 157.3 145.4 124.2 108.0	00 .044 .087 .131 .211 .296 .373 .443 .505 .609 .699 .773 .914
RV	ALEXAN			IZ NGITUDE	40	\DVA\AR	Ho		CALCOFI R TIME	CRUISE 6		CDEED	NEW SORRO			118039
	28 18	.5 N	11	5 24.0%		9/24/69		443 G		251%	DOLE	SPEED	WEATHER 2		90 04 06	S
2	T		5	0.2	P04	5103	NO2	EON	Dr	2	T	5	02	SIGT	DT	DD
										50 75 100 125	21, 14 19,74 17,96 15,88 13,84 12,38 11,91 11,63 11,23 10,45	33.61 33.43 33.31 33.45 33.42 33.70 34.00 34.06		23.512 23.792 24.102 24.498 25.045 25.312 25.618 25.903 26.023 26.286	438.5 411.8 382.2 344.5 292.4 267.0 237.9 210.8 199.4 174.4	0 -043 -082 -119 -183 -253 -317 -373 -425 -521
8.4	ALEXAN	DER	AGASS	12					CALCOPI	CRUISE 6	909					18039
	LATITE ZH 1H.			WGITUDE 5 24.0%		/DAY/YH 9/24/69		SSENGE 530 G	R TIME	BOTTON 2518	WIND 330	SPEED	WEATHER 2		NANT WAVE	s
.2	T		S	02	P04	SI03	NO2	NOS	DT	2.	т	s	02	SIGT	DT	DD
10 29 49 78	19.91 15.34 19.72 12.43 11.93	33	.717 .631 .690		.28 .24 .31 .57 .65 1.00 1.92	5. 9. 9. 14. 20.	.03 .02 .01 .04 .03 .13	.0 .0 .9 6.2 10.7 20.3	439.2 414.5 279.1							
200	10.18	34	.266	1,32		40.		22.0	166.6							
	LATIT	nne	7.0	NOT THE P	80	/DAY/YR	MP	CEPUCP	D WIND	CRUISE 6		COFER	UDAMEN	-		19033
	28 19.	. O N	11	4 53.0W	0	9/25/69	1	445 31	HT		330 MIND	OSKT	WEATHER 1		NANT WAVE	
T	T		S	02	F04	5103	NG2	NO3	DT	0		33,68		SIGT 23.539	DT 435.9	DD 0
										10 20 30 50 75	20.91 20.91 20.91 19.70 15.19	33.70 33.70 33.70 33.63		23.552 23.552 23.552 23.818 24.842	434.7 434.7 434.7 409.3	.044 .087 .131 .215

RV	ALEXAN	DER AGASS	SIZ					CALCOFI	CRUISE 6	909					19033
	LATIT 28 19		NGITUDE 14 53.0W		D/DAY/YR 09/25/69		SSENGE 518 G	R TIME	BOTTOM 1128	WIND 330	SPEED 08KT	WEATHER 1		NANT WAVE 30 03 05	is.
Z	T	S	02	PO4	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
0 10 20 29 49 74	20.92 20.92 20.92 20.92 19.70 15.14	33.680 33.679 33.683 33.625 33.566	5.00 5.01 4.39 5.00 4.68 4.59	.17 .15 .13 .13 .33	6. 6. 6. 6. 7.	.05 .06 .06 .06 1.02 .67	.0 .0 .0 .0 1.0 5.7	436.4 436.5 436.2 409.7 310.2	0 10 20 30 50	20.92 20.92 20.92 20.90 19.58	33.679	5.01	23.534 23.533 23.535 23.541 23.841	436.4 436.5 436.4 435.8 407.1	0 .044 .087 -131 .216
RV	ALEXAN	DER AGASS	IZ					CALCOFI	CRUISE 6	909					20045
	LATIT 27 43		NGITUDE 5 33.0W	MO	/DAY/YR 9/26/69	M 2		B TIME	BOTTOM 1949M	WIND 330	SPEED 06KT	WEATHER 2	DOMI 3	NANT WAVE	s
Z	T	S	02	PO 4	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	21.02 21.00 20.11 19.85 14.50 12.93 10.95 11.03 10.70 11.36 9.74 8.74 7.63 6.59	33.78 33.71 33.67 33.55 33.74 33.65 33.92 34.15 34.57 34.37 34.37 34.33 34.36		23.583 23.596 23.772 23.8809 24.983 25.452 25.755 26.188 26.395 26.524 26.624 26.624 26.823 26.992	431.8 430.5 413.7 410.1 298.2 253.7 224.8 206.3 183.7 164.1 151.8 142.3 123.4 107.4	0 .043 .085 .127 .198 .267 .382 .432 .520 .602 .678 .817
RV	ALEXAN	DER AGASS	IZ				3	CALCOFI	CRUISE 6	909				1	20045
	LATIT		NGITUDE 5 33.0W		/DAY/YR 9/26/69		SSENGE 534 G		BOTTOM 1949M	WIND 330	SPEED 06KT	WEATHER 2		NANT WAVE	s
z	T	s	02	PO 4	S103	NO2	NO3	DT	Z	T	s	02	SIGT	DT	DD
1 11 30 40 54 70 94 113 132 151 180	20.99 20.95 19.79 17.81 14.12 13.18 11.05 11.00 10.80 11.48	33.780 31.775 33.545	5.27 5.26 5.47 5.79 5.26 3.80 4.07 3.69 2.15			.11 .09 .18 .08 .39 .12 .17 .40	.0 .0 .0 .0 .0 .0 .0 .0 .1 .3 .11.3	431.0 430.3 291.0							
215 242 291 343 425 505 589	10.93 10.24 8.88 8.31 7.40 6.58 6.04	34,372 34,387	.74 1.07 .77 .48 .26			. 14	18.6	106.4 98.6							
RV	ALEXANI	DER AGASS	12					CALCOFT	CRUISE 69	20.9				1	20050
	LATIT		NGITUDE			ME	SSENGE	RTIME		WIND 320		WEATHER 2		ANT WAVE	
Z		S			5103		иоз	DT	2	T				DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300 400 500	21.41 20.85 20.59 19.61 15.84 13.42 12.93 10.40 10.03 9.50 9.50 9.50 9.50	33.81 33.75 33.70 33.62 33.45 33.44 33.74 33.60 33.82 34.13 34.29 34.31 34.31		23.499 23.606 23.651 23.833 24.614 25.123 25.452 26.047 26.377 26.536 26.656 26.828 26.982		0 -043 -086 -128 -202 -280 -348 -408 -461 -553 -634 -709 -847

-	V ALEXAN	NDER AGAS	SIZ					CALCOPI	CRUISE 6	6909					120050
	LATET 27 3		CNGITULE 15 51.5		0/PAT/YE 09/27/69		ESSENGE 0159 G	R TIME	BOTTOM 4212m	WIND 320	SPEED 12KT	WEATHER 2		NANT WAV	
2	Т	3	02	P0 9	S103	802	N5 1	DT	Z	T	S	02	SIGT	DT	DD
1 11 31	21.44 21.21 18.24	33.801	5.24 5.25 5.71			.09 .08 .16	.0	441.1							
55	17.03	33.410	5.97			. 10		322.6							
71 96 115	13.66 12.71 10.67		5.54 4.07 4.64			.45	6.0								
136 156	10.07		3.96			. 12	9.8								
186 220 250	9.98 9.58 9.05		1.82			. 13	15.0								
300 354	9.34 7.97		1.30												
437 521 604	6.98 6.50 6.01	34.365 34,397	.29					105.9 97.5							
0 4	*******	ICEG AGASS							Total L	44.7					
	LATIT	UDE LO	NGITUDE	. 60	O/UAY/YR	M.F	SSENGE		CHUISE &	MIND	SPEED	WEATHER	DONT	NANT WAV	120055
Z	27 23 T	.5N 11	02 02		\$103		NO3	MT	3737H	350	07KT	2	3	50 03 07	7.7
		3	02	E04	3103	#Q4.	003	DT	2	Z0.70			SIGT 23.502	DT 439.5	DD
									10 20 30	20.69	33.57		23.504 23.512 23.697	439.2 438.5 420.9	.04
									50 75	15,99	33.26 33.37		24.434	350.5 299.1	.20
									100 125 150	10.97	33.56		25.318 25.682 25.947	266.4 231.8 206.6	.42
									200 250	9.16	34.07		26.386	164.9	.57
									300 400 500	8.41 7.43 6.39	34,33		26.676 26.852 27.011	137.4 120.7 105.7	.72 .86
									5,44	-			211011	103.1	. 20
RV	ALEXAN	DER AGASS	12				(CALCOPI	CRDISE 6	909				-	20055
	27 23.		NGITUDE 6 12.0%		/DAY/18 9/27/69		SSENGER 530 GR		BOTTOR 3737H	WIND 350	SPEED 07KT	WEATHER 2	DOMI:	NANT WAVE 50 03 07	s
2	T	5	02		S103	NO2	EON	DT	2.	τ	S	0.2	SIGT	DT	DD
11	20.68 20.68 19.72	33.557	5.23 5.21 5.48	.13	2.	.00	.0	439.2							
55	17,30	33.294	5.96	.15	3.	.00	.0	330.7							
70 94 15	14.05 12.51 11.39		5.42 4.91	.17	7. 5. 9.	.00	3.7 10.9								
34 54 83	10.68		3.54	1, 26	17.	.01	20.9								
17 48	9.50 9.14 8.90			1.94	31.	,01	31.8								
97 50 33	7.83 7.05		1.25 .72 .40												
18	6.13 5.77	34.364 34.382	.29					103.9							
	ALEXARI	DEF AGASS	IZ				c	ALCOFI	CRUISE 69	909				i	20060
RV	LATITO		NGITUDE 6 30.5W		/DAY/YR 9/27/69	#E:	SSENGER 336 ON	TIME	80TTOM 3737M	WIND 330	SPEED 188T	WEATHER		NANT WAVE	
RV	27 11.	5	02		sini	NO2	NO3	DT	z	T	S	02	SIGT	DT	DD
	27 11. T								10	20.89	33.57 33.57		23.458 23.509	443.6 438.8	.044
									20	20.60	33.58		23.543	435.5	-086
									30	20.40	33.52		23.551	434.B	. 132
									50 75	16.65	33.28		24.299	363.4	.132 .212 .296
									50 75 100 125 150	16.65 14.22 12.68 11.12 10.05	33.28 33.13 33.42 33.55 33.73		24.299	363.4	.132 .212 .296 .369
R V									50 75 100 125	16.65 14.22 12.68 11.12	33.28 33.33 33.42 33.55		24.299 24.873 25.254 25.647	363.4 308.7 272.5 235.1	.132 .212 .296 .369 .433 .469 .584

	V ALEXA	NDER AGA	5912					CALCOFI	CRUISE	6909					120060
	27 1	TOUE	CNGITUDE	n	0/DAY/Y	8 M	ESSENG 0012	ER TIME	30TTOM 3737M			WEATHE		MINANT WA	
Z	T	S	0.2	124	5103	NO2	NO3	DT	z	T	S	02	SIGT	72. 44.4	DD
11 30 40 54 69 93 113 132 151 180 214 244 292	20.30 17.66 15.52 14.29 12.84 11.58	33.546	5.26 5.34 5.69 6.10 6.10 5.64 4.94 4.40 3.84	.17 .20 .20 .20 .22 .24 .37 .78 1.00 1.35 1.72 1.90	1. 1. 1. 2. 4. 9. 14. 20. 29.	.00 .00 .00 .00 .00 .00 .00 .00		441.3 441.2 336.2							
345 428 511 595	8.05 7.13 6.46	34.361	.73 .42 .29					105.7 96.0							
R	/ ALEXA	NDER AGAS	SIZ					CALCOPI	CHUISE 6	909					120070
	LATI 26 5	TODE L	ONGETUDE 17 10.0W		/DAY/18 9/28/69		SSENGE	R TIME	80TTON 3737H	WIND 340	SPEED	WEATHER 1		INANT WAS	ES
Z	T	5	02	P04	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 400 500	20.74 20.75 20.75 20.75 17.47 15.64 13.62 12.26 10.83 9.73 9.22 8.51 7.67 6.86	33.69 33.69 33.46 33.46 33.47 33.54		23.587 23.587 23.587 24.243 24.243 24.666 25.105 25.428 26.238 26.238 26.613 26.841 26.963	431.4 431.4 431.4 368.7 328.5 286.7 256.0 219.9 179.0 157.7 143.3	0 .043 .086 .130 .210 .298 .375 .444 .504 .605 .692 .770 .908
RV	ALEXAN	DER AGASS	12					CALCOFI (CRUISE 6	909					120070
	26 53		NGITUDE 7 10.0%		/DAY/YR	M.E.	SSENGER 515 G	TIME	BOTTOM 3737M	WIND 340	SPEED 10KT	WEATHER 1	DOM	NANT WAV	RS
Z	T	S	02	Pn4	5103	NO2	NO3	DT	z	T	5	0.2	SIGT	DT	
95 115 135 154 184 219 248 299 353 437 522	20.75 20.75 18.49 17.19 16.08 13.97 12.58 11.57 10.51 9.60 9.19 8.50 7.41 6.65	33.665 33.664 33.492	4.54 4.06 3.22 2.50 1 2.10 1.45 .99 .29	.04 .09 .09 .17 .09 .07 .17 .28 .61 .83	1. 1. 2. 4. 9. 14. 14. 0	.00 .00 .00 .00 .00 .00 .00 .01 .03	.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	433.2 433.2 360.1							
605	6.02	34.412	, 19					96.5							
84	ALEXAND	ER AGASS	IZ				C	ALCOFI C	HUISE 69	0.9					20080
	LATITU 26 30.		GITODE 48.5%		29/69	MES 00	SENGER	TIME !	BOTTOM 3832M	WIND 5	SPEED 10KT	WEATHER		NANT WAVE	s
Z	T	5	02	PO4 :	\$103	NOZ	EON.	DT	z	т	s	02	SIGT		DD
									10 20 30 50 75 100 125	21.71 21.71 21.68 21.66 19.16 17.19 15.47 12.77	33.94 33.98 33.98 33.71 33.79 33.72 33.53 33.62		23.500 23.515 23.554 23.560 24.017 24.562 24.903 25.321 25.651	439.6 438.2 434.5 434.0 390.3 338.4 305.9 266.7	0 .044 .088 .131 .214 .305 .387

RV		DER AGASS							CHUISE 6	909					120080
	LATIT 26 30	.5N 11	NGITUDE 7 48.5W)/DAY/YR 19/29/69		SSENGER 114 GM		BOTTOM 3832M	WIND 320	SPEED 10KT	WEATHER		NANT WAVE 30 03 06	ES
0 10 29 58 68 83 97 1136 136 156 184 213 242 290	T 21.74 21.72 21.61 18.15 17.21 16.15 15.38 13.67 11.37 10.75 10.19 9.70 9.33 8.73	S 33.931 33.938 33.754	2.42 2.09 1.36	204 .07 .02 .20 .04 .09 .04 .07 .59 .33	\$103 1. 0. 1. 1. 1. 1. 2. 10. 12. 22. 32.	NO2	NO3	DT 439.6 438.6	Z	T	5	02	SIGT	DT	DD
343 424 507 592	8.30 7.49 6.60 6.07	34.355 34.401	. 77 . 46 . 27 . 21					107.9 97.9							
RV		DER AGASS							CRUISE 6		Julius I				20090
	26 12.	.5N 118	NGITUDE 8 28.0W		/DAY/YR 9/29/69		SSENGER 432 GM		BOTTOM 4021M	WIND 340	12KT	WEATHER 1		NANT WAVE 30 03 06	S
Z	T	S	02	P04	SIO3	NO2	NO3	DT	2.	T 21.94	S	02	SIGT		DD
									10 20 30 50 75 100 125 150 200 250 300 400 500	21.94 21.95 21.99 17.32 15.63 11.45 10.72 9.30 8.86 7.99 6.87	33.87 33.89 33.51 33.51 33.51 33.63 33.78 34.22 34.30 34.36		23.399 23.408 23.411 23.414 24.317 25.333 25.649 25.897 26.273 26.480 26.613 26.794 26.946	449.3 448.4 448.1 447.9 361.7 317.7 265.0 234.9 211.4 175.7 156.0 143.4 126.2	00 045 090 135 216 301 375 438 494 756 897
RV	ALEXANI	DER AGASSI	ΙZ				C	ALCOFI	CRUISE 6	909				1	20090
	LATITU 26 12.		NGITUDE B 28.0W		/DAY/YB 9/29/69		SSENGER 516 GM		BOTTOM 4021M	WIND 340	SPEED 12KT	WEATHER 1		NANT WAVE	s
Z	T	S	02	P04	S103	NO2	NO3	DT	z	T	s	02	SIGT	DT	DD
11 30 40 54 69	21.92 21.87 18.27 17.20 16.39 13.88 12.20 10.80 10.23 9.76 9.72 9.00 8.59 6.87 6.26	33.842 33.837 33.510 34.361 34.406	5.09 5.09 5.10 5.94 6.05 5.94 5.63 4.77 4.15 3.58 2.99 2.46 2.14 1.23 .83 .29 .20	.00 .02 .17 .11 .13 .37 .28 .35 .20	1. 1. 1. 1. 3. 8. 16. 16. 24. 13.	.00		450.8 450.4 359.0							
RV	ALEXAND	ER AGASSI	ız.				C	LCOFI	CRUISE 69	909				1	23037
	LATITU 27 24.		GITUDE 40.0%		/DAY/YR 9/30/69		SSENGER 251 GM1		BOTTOR 75M	WIND 320	SPEED	WEATHER 0		NANT WAVE	s
z			0.2			NO2	NO3	DT	Z	T		02	SIGT	DT	DD
									0 10 20 30 50	20.40 19.60 17.60 16.57 14.30	33.63 33.65 33.55 33.56 33.46		23.635 23.859 24.281 24.541 24.937	426.8 405.4 365.2 340.4 302.6	.042 .080 .116

R	V ALEXANDE	AC	ASSIZ				CALCOF	CRUISE (909					123042
	27 14.00		LENGITUDE			MESSENGS 1958		BOTTOM 1577M	WI ND 320	SPEED 12KT	WEATHER	non:	NANT WAY 320 03 05	ES
Z	I	5	02	P04 S103	N	02 103	DI	2	T	S	02	SIGT	DT	da
								0 10 20 30 50 75 100 125 150 200 250 300 400	22.49 22.22 22.20 19.31 15.54 13.13 11.75 11.69 10.63 10.48 10.39 9.82 8.46 6.97	33.78 33.78 33.54 33.57 33.68 33.95 33.98 34.35 34.35		23.169 23.258 23.258 24.773 25.258 25.633 25.853 26.068 26.382 26.546 26.643 26.817 26.940	471.2 463.3 462.7 406.3 318.3 272.1 236.5 215.6 195.1 149.8 140.5 124.1	047 .093 .137 .209 .284 .348 .405 .457 .549 .630 .706 .971
RV	ALEXANDER	AG	ASSIZ				CALCOFI	CRUISE 6	909					123050
	LATITUDE 26 58.0N		LCMGITUDE	MO/DAY/1		MESSENGE	R TIME	BOTTOM	WI ND	SPEED	WEATHER		NANT WAV	
z	T	3	02	PO4 SIO3		1501 G	DT	32828	330	08KT	0		30 05 04	
7		2	02	200 2103	N	72 803	DT	0 10 20 30	22.38 22.38 22.38 21.41	33.80 33.80 33.80 33.77	02	51GT 23.223 23.223 23.223 23.469	DT 466.1 466.1 466.1 442.6	00 .047 .093
								50 75 100 125 150 200 250 300 400 500	16.68 13.36 11.78 10.68 10.36 10.35 9.84 9.41 7.85 6.90	33.56 33.56 33.83 33.97 34.10 34.36 34.47 34.48 34.39		24.506 25.227 25.743 26.052 26.209 26.413 26.586 26.665 26.838 26.989	343.7 275.0 226.0 196.7 181.6 162.4 146.0 138.4 122.0 107.7	. 739 . 218 . 295 . 359 . 412 . 460 . 548 . 628 . 702 . 838 . 960
RV	ALEXANDER LATITUDE	AGA		e de la constanta				CRUISE 6	909				-	23060
	26 38.0N		116 07.0W	09/30/6		MESSENGER 1033 G		BOTTOM 4021M	DI ND	SPEED 16KT	WEATHER		NANT WAVE	2S
Z	T	S	02	P04 S103	NO	2 NO.3	DT	Z	τ	5	02	SIGT	pr.	DD
								0 10 20 30 50 75 100 125 150 200 250 300 400 500	21.12 21.10 20.91 16.14 14.98 11.42 10.48 9.76 9.76 9.10 8.52 7.76 6.74	33.56 33.58 33.58 33.58 33.50 33.55 33.74 34.07 34.20 34.23 34.36		23. 389 23. 404 23. 409 23. 461 24. 408 24. 842 25. 315 25. 585 25. 5908 26. 287 26. 497 26. 612 26. 828 26. 964	450.3 448.8 448.3 4353.0 311.7 266-7 241.0 210-3 174.3 154.4 143.5 123.0 110.1	0 .045 .090 .135 .214 .298 .371 .435 .590 .675 .752 .891
RV	ALEXANDER	AGA	5312			c	ALCOFI	CRUISE 69	09					27034
	LATITUDE 26 55.5N		LONGITUDE	MO/DAY/Y 10/01/6		ESSENGER 0528 GM		BOTTOM 93M	WIND 340	SPEED 0	EATHER 0	DOMIN 32	ANT WAVE	
Z.	T	S	02	PO4 5103	NO	2 103	DT	Z	T	s	02	SIGT	DT	DD
								0 10 20 30 50 75	21.94 21.85 21.20 19.28 17.05 16.74	34.12 34.12 34.07 34.03 34.14 34.13		23.588 23.613 23.754 24.230 24.863 24.928	431.2 428.9 415.4 370.0 309.7 303.5	0 .043 .085 .125 .193 .270

										Name of						and West
RV	ALEXAN				9.0	/CAY/YH	4.5			CRUISE 6			NA AMERICA POR			27040
	26 43			WGITUDE 4 29.5×		0/01/60		ell G	R TIME	BOTTOM 3169M	350	SPEED	WEATHER		NANT WAVE 20 03 06	S
z	T	S		02	PQ4-	\$103	802	NO 3	PT	20 10 20 30 50 75 100 125 150 200 250 300 500	T 22.06 22.07 21.68 17.77 14.98 13.59 12.47 11.79 10.62 9.87 9.39 8.14 7.17	33,87 34.03 34.36 34.42 34.39 34.39		23.229 23.234 23.342 24.164 24.688 25.196 25.465 25.782 26.025 26.365 26.542 26.606 26.795 26.952	DT 465.5 465.1 454.7 376.3 326.3 278.0 252.4 222.3 199.2 146.9 150.2 144.0 126.1	00 047 093 -134 -205 -241 -348 -408 -461 -536 -713 -854 -980
RV	ALEXANI	DER A	GASSI	12					CALCOFI	CHUISE 6	909				1	27050
	LATITU 26 22:			NGITUDE 5 03.0*		/UAY/YR		SSENGE 331 G	R TIME	BOTTON 3470M	WI ND	SPEED	WEATHER		NANT WAVE 20 04 07	s
2	5	5		n2		5103	ND2	NO3	DT	Z	T	s	02	SIGT	DT	DD
										10 20 30 50 75	22.15 22.15 22.14 22.03 15.03 12.56 10.37 10.51 10.17 9.24 8.61 7.80 6.79	33.79 33.79 33.79 33.49 33.85 34.14 34.36 34.35 34.35		23.280 23.280 23.283 23.313 24.823 25.424 25.779 26.012 26.214 26.444 26.591 26.692 26.861 27.004	460.7 460.7 460.4 457.5 313.5 256.3 220.4 181.3 159.5 145.4 135.9 119.8 106.3	0 -046 -092 -138 -216 -2348 -401 -449 -537 -615 -688 -822 -942
RV	ALEXANI					12100000	1,4			CRUISE 6		Cara and	and China	44.2		27060
	26 03			GITUDE 46.5%		0/01/69		SSENGE BO4 G	R TIME	3832M	DAE	12KT	WEATHER		NANT WAVE 20 03 07	S
Z	T	S		02	204	\$103	NO2	NO3	DT	2	T	S	02	SIGT	DT	DD
										0 20 30 50 75 100 125 150 200 250 300 400	22.48 22.41 22.41 22.36 15.03 13.26 10.96 10.19 9.93 9.60 9.68 8.97 7.69 6.61	33.81 33.88 33.88 33.55 33.66 33.55 33.76 34.24 34.41 34.39 34.37		23. 202 23. 230 23. 275 23. 289 24. 869 25. 324 25. 676 25. 973 26. 134 26. 566 26. 666 26. 846 26. 997	468.1 465.5 461.1 459.8 309.1 265.8 232.4 204.1 188.8 159.2 147.9 138.3 121.3	0 .047 .093 .139 .216 .289 .351 .407 .456 .545 .624 .699 .835
RV	ALEXANI	PR A	GASSI	7.					CALCOFT	CROISE 65	909					30030
	LATITE 26 23.	IDE	LCN			/DAY/YR 0/02/69			R TIME	BOTTON		SPEED 07KT	WEATHER 2		NANT WAVE	22.0
Z				02		5103	NO2	NO3	DT	2	7 T	S	02	SIGT	DT	DD
										0 10 20 30 50 75	23.91 23.31 22.84 19.75	34.24		23.124 23.138 23.290 23.425 24.192 24.855	475.5 474.3 459.7 446.8 373.6 310.5	0 .048 .094 .140 .222 .308
BV	ALEXANI	DER A	GASS1	12					CALCOPI	CRUISE 6	909					10030
	LATITE 26 29.			GITUDE 1 24.00		/DAY/YR 0/02/69		SSENGE 805 G	R TIME	BOTTOM 80M	WIND 200	SPEED 07KT	WEATHER 2		NANT WAVE	5
2	T	5		02	204	5103	NOZ	No3	nπ	z	Ť	5	02	SIGT	DT	DD
	23.95 23.65 23.27 22.66 19.46	34. 34. 34.	237 221 198		.17 .22 .22 .15	1.	.00	.0	476.7 469.4 460.0 444.9 369.3	10 20 30	23,68	34,223	5.02 5.02 5.04	23.112 23.180 23.276 23.424 24.182	476.7 470.2 461.1 446.9 374.6	.047 .094 .139

P	ALPYAN	DER AGASS	1.2					allanni	ADVEST A	640					
.,	LATET	upe Lo	NGITUDE		/TAY/YR	nı		TIME	CRUISE 6	MIND	SPEED	WEATHER	DOMI	NANT WAVE	130040
2	26 OH	.58 11	4 07.0¥		3/02/69		1118 6		1763h	340	10KT	2444454	3	00 04 06	
n.			0.2	504	3,103	NOZ	NO3	OT.	0 10 20 30 50 75 100 125 150 200 400 500	7 22.34 22.35 22.24 20.92 17.88 16.07 14.94 13.40 11.86 10.63 9.85 8.59 7.13	33.97 33.98 34.04 33.90 34.14 34.17 34.37 34.42 34.30 34.52 34.52		23, 363 23, 367 23, 444 23, 701 24, 663 25, 519 25, 519 25, 882 26, 148 26, 368 26, 511 26, 623 26, 812 26, 965	452.8 452.0 420.5 328.7 247.3 212.7 166.6 153.0 124.5 110.0	0 .045 .090 .134 .206 .353 .412 .463 .553 .636 .713 .853
10.10	ALEYANI	DER AGASS	17					CITCORT	CAUTOR 4	000					200. 1
	LATIT	DE LO	NGITUDE		/DAY/YB	ME		R TIME	CRUISE 6	WIND	SPEED	WEATHER	DONT	NANT WAVE	30040
z	26 08.	.5N 11	07.04		0/02/69		221 G		17638	340	TOKT		3	00 04 06	
1	22.33	33,973	5. 12	.17	1.	NG2	. O	DT 452.3	Z	4	5	02	SIGT	DT	DD
31	22.32 20.96 18.30	33.999	5.14 5.15 5.69	.20	2.	.00	.0	450.1							
50 65 80 99 124 145 174 204 233 273 332 407	17.83 16.33 15.49 14.43 13.02 11.67 12.10 11.36 11.02 10.14 9.39 8.57	34.136	4.04 2.98 2.30 1.41 1.51 .43 .42 .36 .38 .22	.74 1.22 1.53 1.94 2.07 2.16	2. 12. 16. 23. 27. 31. 37.	.33 .13 .04 .08	5. 9 12. 7 16. 8 23. 1 24. 4 25. 7 28. 0 28. 2	327.8							
481 560	7.43 6.73	34.441	.18					105.0							
RV	LATITU	ER AGASS	IZ NGITODE	Was	/DAY/YR				CRUISE 69			New years			30050
.D.	25 49.	ON 11	46.5W	1	0/02/69		SSENGE 443 G		BOTTOM 3451M	330	SPEED	WEATHER 0		NANT WAVE 30 05 07	S
Z	T	S	02	PO4	5103	NO.2	NO 3	DT	z 0	T 22.68	5 70	02	SIGT	DT	DD
									10 20 30 50 75 100 125 150 200 250 300 400	22.69 22.45 21.09 16.98 15.11 12.60 11.65 11.07 10.72 10.42 9.31 7.05	33.74 33.75 33.84 33.65 33.64 33.70 34.07 34.21 34.40 34.53 34.46 34.41		23,093 23,097 23,158 23,609 24,505 24,921 25,486 25,953 26,168 26,379 26,533 26,653 26,815 26,984	478.5 478.1 472.3 429.2 343.8 304.2 250.4 206.0 185.6 151.0 139.6 124.2 108.2	0 .048 .095 .141 .218 .300 .370 .427 .477 .567 .648 .724 .863
DV	RIPVAND	ER AGASSI												- 6	
	LATITU 25 49.	DE LON	GITUDE 46.5W		/DAY/Y8		SSENGE 532 G	H TIME	BOTTOM 3451M	WIND 330	SPEED 11KT	WEATHER O		1 WANT WAVE:	30050 s
z		S	02	P04		NO2	NO3	DT	2	T	5	02	SIGT	10.00	DD
50 65 81 101 125 145 175 205 235 275 335 409	22.64 22.59 18.93 16.87 17.18 15.32 14.58 12.67 11.71 10.54 10.60 9.72 6.77 7.95	33.581u 33.728 33.755	1, 12 ,63 ,60 ,52	.17 .17 .20 .20 .26 .35 .89 1.64 1.96 2.11 2.35	2. 1. 1. 2. 3. 11. 23. 33. 33.	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	.0 .0 .0 .0 .0 .1 9.4 20.3 24.3 26.6 28,4	477.0 340.7							
483 561	6.60	34.439	.25					109.6							

	RV	ALEXAND	ER AGAS	SIZ					*****							
									ALCOPI	CRUISE 6	969				1	30060
		25 29.		CNGITUEE 15 23.0W		/DAY/YR 0/01/69		SENGER 32 GM		BOTTOM 38328	WI ND 350	SPEED 08KT	WEATHER 1		NANT WAVE 30 05 07	
	Z	T	S	02	PO 4	S103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
										0 10 20 30 50 75 100 125 150 200 250 300 400 500	23.25 22.62 22.22 19.48 16.20 14.13 12.18 11.04 10.68 9.33 8.13 7.19	33.72 33.56 33.43 33.44 33.49 34.05 34.05 34.42 34.44		22.930 23.110 23.207 23.821 24.517 24.977 25.404 25.791 26.050 26.355 26.528 26.647 26.828 26.972	494.1 476.9 467.6 409.0 342.7 258.9 258.2 221.4 196.9 157.9 151.4 140.2 123.0 109.3	0 .049 .096 .140 .215 .296 .366 .427 .480 .573 .655 .731 .869
	RV	ALEXAND	ER AGAS	SIZ					ALCOFI	CRUISE 6	909				- 1	30060
		LATITU 25 29.		CNGITUDE 15 23.0W		/DAY/YR		SENGER		BOTTOM 3832M	WIND 350	SPEED 08KT	WEATHER 1		NANT WAVE	S
	Z	T	5	02	P04	5103	NO2	NO3	DT	Z	T	S	02	SIGT	DT	DD
	10 30 40	22.61 19.05 17.12	33.727 33.726	5.02 5.88 6.15	.20 .20 .20	2. 1. 1.	.00	.0	488.2 477.7							
S. Aughbrah	175 205 235 275	16.11 15.26 13.58 12.11 11.69 11.21 10.96 10.49 10.05 9.62	33.446	6.04 5.84 5.50 4.73 3.59 2.49 1.68 1.31	.35 .28 .37 .72	2. 2. 4. 8. 19. 32. 36. 40.	.00 .00 .01 .01 .03 .00	.0 .0 .0 7.6	339,5							
19	335 409 482 560	9.03 8.03 7.29 6.50	34.452 34.432						109.7							
	RV	ALEXAND	EH AGAS	SIZ				C	ALCOFI	CRUISE 69	909				1	33025
		LATITUD 26 04.		ONGITUDE 12 48.0W		/DAY/YR 0/03/69		SENGER 33 GM		BOTTOM 848	WIND 290	SPEED OGKT	WEATHER		NANT WAVE	S
	Z	T	S	02	P04	S103	NO Z	ио 3	DT	2	T	S	02	SIGT	DT	DD
										0 10 20 30 50 75	25.47 25.47 24.80 21.67 18.16 16.67	34.58 34.58 34.53 34.32 34.29 34.36		22.918 22.915 23.041 23.825 24.709 25.130	495.3 495.6 483.5 408.6 324.3 284.3	.050 .099 .143 .217 .293
	RV	ALEXAND	ER AGAS	SIZ				C	ALCOFI	CHUISE 69	909				1	33030
		25 54.5	DE L	CNGITUDE 13 07.0%	MO.	/DAY/YR 0/03/69	MES 11	SENGER 09 GM	TIME T	BOTTOM 205M	WIND 330	SPEED 08KT	WEATHER		NANT WAVE	S
	Z	T	S	02	PO4	S 103	NO2	NO 3	DT	2	т			SIGT	DT	DD
										0 10 20 30 50 75 100 125 150	23.27 22.67 18.33 16.00 15.31 14.78	34.29 33.97 34.16 34.49		23.136 23.143 23.317 23.511 24.423 25.122 25.530 25.677 25.848	473.7	0 .047 .094 .139 .218 .298 .365 .426

R	A VEKKY	NDER A	GASSI?	z.					CALCOP	I CHUISE	6909					133040
		TUDE 5.0N		STUDE		10/03/6			ER TIME	BOTTOM 27908	WIND 320	SPEED	WEATHER		NANT WAV	
2	T	S		02	204	6018	NOZ	2003	DT	z	T	S	02	SIGT	DT	DD
										0 10 20 30 30 75 100 125 150 200 250 300 400 500	17.96 15.01 13.38 12.77	34,62 34,52 34,46 34,05 34,05 34,05 34,05 34,05 34,67 34,67 34,67 34,67 34,60 34,60 34,60		22,920 22,920 23,073 23,302 24,514 25,632 25,632 25,839 26,103 26,476 26,568 26,796 26,964	495.0 480.4 458.9 272.1 236.6 9191.8 168.9 147.7 126.0 110.1	0 .050 .098 .145 .226 .303 .367 .425 .477 .569 .653 .732 .876
R	A TEXY	NDER A	SISSIE						CALCOPI	CRUISE (6909					133050
	LATI 25 1		LONG 114	LTUDE		/DAY/YE		SSENGE	R TIME	BOTTOM	WIND	SPEED	WEATHER		NANT WAV	ES
z	T	5		02		5103	NO2	NO3	DT	3737# 2	320 T	11KT S	02	SIGT	20 05 07 DT	DD
										0 10 20 30 50 75 100 125 150 200 250 300 400 500	22.98 22.71 22.47 22.06 16.57 12.50 12.91 11.57 10.74 10.15 8.48 7.15	33.77 33.78 33.77 33.47 33.47 33.49 34.28 34.28 34.61 34.58 34.58		23.030 23.107 23.182 23.244 24.523 24.933 25.482 25.863 26.087 26.515 26.618 26.782 26.947	984.5 477.0 464.1 342.1 303.0 250.8 214.6 193.3 164.9 152.7 142.9 127.3 111.7	00 -048 -096 -142 -223 -304 -374 -433 -485 -577 -659 -735 -878
R	V ALEXA)							7	CALCOPI	CRUISE 6	909				5	133060
	1 ATIT			ITUDE 02.5W		/DAY/YR 0/04/69		SSENGE 120 G		BOTTOM 3926M	#IND 270	SPEED 07KT	WEATHER 2		NANT WAVE	s
2	T	S		02	204	5103	NO2	NO3	DT	2	T	s	02	SIGT	DT	DD.
										0 10 20 30 50 75 100 125 150 200 250 300 400 500	22.99 22.95 22.57 16.83 17.39 14.29 13.54 12.32 11.44 11.67 11.67 10.43 8.73 7.58			23.012 23.016 23.139 24.024 24.492 25.676 26.043 26.124 26.368 26.498 26.601 26.790 26.948	486.3 485.9 474.1 389.6 345.1 280.1 232.3 197.5 189.8 166.6 154.3 144.5 126.6 111.6	0 .049 .097 .140 .214 .292 .357 .411 .552 .635 .713 .855 .982
RV	ALEXAS	DEB AG	ASSIZ					C	ALCOPI	CRUISE 6	909				1	37023
	LATIT 25 34		LONGI 112 1			DAY/YR		SENGER 520 GM		BOTTOM 84M	WIND 300	SPEED	WEATHER	DOMI	ANT NAVE	7
ż	T	s		02	P04	\$103	NO2	NO3	DT	z	т	5	02	SIGT	DT	DD
										10 20 30 50 75	25.25 25.17 24.63 22.15 20.00 18.23	34.47 34.46 34.40 34.35 34.40 34.44		22.867 22.904 23.022 23.704 24.325 24.806	498.2 496.6 485.3 420.2 361.0 315.1	.050 .099 .144 .223 .308
RV	ALEXANI	DER AGE	SSIZ					r	ALCOPT	CRUISE 69	909					37027
	LATITI 25 14	DDE	LCNGI 112 1			DAY/YR		SENGER	TIME	BOTTOM	WIND		WEATHER	DOMIN	ANT WAVE	37023
Z	T T	S			PO4	/05/69 SIO3	NO2	00 GH	DT	84M Z	300 T	09KT	02	SIGT	DT	DD
0 10 20 40 65	25.18 25,18 24.92 21.35 18.39	34.43 34.43 34.43 34.33	37 4 21 4 12 4	.80 .80	.15 .17 .13 .35	0.	.00	.0	498.6 498.6 492.2 359.7	0 10 20 10	25.18 25.18 24.92 23.32	14, 437 74, 437 74, 421 74, 371	4.80 4.80 4.85 4.91	22.883 22.883 22.950	498.6 498.6 492.2 450.6	.050 .050 .099

2	LATITE 25 20.		NGITUDE 2 45,5W		/DAY/YH	ME	OCCUPIN	CALCOFI CRUISE 6909 MESSENGER TIME HOTTOM WIND SPEED WEATHER DOMINANT WA							9
1	Т	S			0/05/69		122 G		BOTTOM 3345	Z70	DEKT	WEATHER 2		70 04 08	
			0.2	104	5103	NO2	NO3	DT	2	T	S	02	SIGT	DT	DD
									0 10 20 30 50 75 100 125 150 200 250 300	25.46 25.47 25.36 22.85 16.25 14.70 14.26 13.33 11.92 11.15 10.89			22.913 22.910 22.928 23,468 24.570 25.210 25.633 25.750 25.951 26.313 26.472 26.519	495.7 496.0 494.2 442.7 337.6 276.7 236.5 225.3 206.3 171.8 156.8 152.3	.050 .099 .146 .224 .302 .366 .429 .480 .577 .662
RV	ALEXANI	DER AGASS	12					CALCOFI	CRUISE 6	909				- 4	37030
	LATITE 25 20		NGITUDE 2 45.5W		/ DAY/YR 0/05/69			H TIME	BOTTON	WIND 270	SPEED 06KT	REATHER 2		NANT WAVE	s
2	T	5	02		5103	NOZ	NO 3	DT	2	T	S	02	SIGT	DT	DD
11 31 46 60 74 89 109 134 164 198 233 268 308	LATITE 25 ED.		4.78 5.22 4.64 3.55 1.77 1.21 .65 .13 .06 .08 .08	1	0. 0. 1. 3. 8. 16. 23. 24. 30. 38. VDAY/YR		.0 .0 .0 1.8 9.3 17.5 22.4 23.5 22.8 22.4 SSENGE B16 G	8 TIME	CRUISE & BOTTON 2696M 2 0 10 20 30 50 75	909 WIND 270 T 25.24 25.23 23.95 18.55	SPEED 09 KT 5 34.42 34.42 34.31 34.18	WEATHER 2		NANT WAVE 00 03 06 DT 501.5 500.5 498.6 472.5 341.6 272.8	
RV		DER AGASS.	īz						100 125 150 266 250 300 400 500	12.96 12.77 12.00 11.35 10.96 10.11 9.02 7.43	34.14 34.34 34.44 34.54		25.755 25.947 26.174 26.373 26.491 26.602 26.760 26.915	224.9 206.6 185.1 166.1 155.0 144.4 129.5 114.7	.371 .425 .475 .565 .648 .726 .870 1.000
	25 00.		NGITUDE 3 24.0W		/BAY/YR 0/04/69		SSENGE 922 G	R TIME MT	80110H 2696H	WIND 270	SPEED	WEATHER 2		NANT WAVE	S
2	Ŧ	3	02		5103	NO2			Z	T	s	02	SIGT	DT	DD
11 31 41 49 64 79 99 124 144 174 203 223 274 334	25.26 24.55 20.21 17.44 14.50 13.40 13.36 12.08 12.07 11.54 11.08 10.56 9.75 8.80	34.442	.89	.31 .24 .26 .33 .46 .41 .46 1.44 1.33 2.05 2.07 2.49	2. 1. 1. 6. 7. 24. 26. 32. 34.	. 08 . 26 . 10		505, 4 503.3 319.1							

RV	ALEXAN	DER A	GASS	12				C	ALCOFI	CRUISE 6	909				- 1	37050	
	LATET 24 39			NGITUDE 3 57.5%		/DAY/YR 0/04/69		SSENGER 319 GM		BOTTON 3926M	WIND 270	SPEED TOKT	WEATHER		NT WAVE	s	
2	T	S		02	PO4	S103	NO2	NO3	DT	Z	T	5	02	SIGT	DT	DD	
1	25.41	34.	595	4.74	.13	0.	.00	.0	493.9								
11	25.42	34.	595	4.76	.13	0.	.00	. 0	494.2								
31	21.02			5.49	.24	2.	.00	. 0	10000								
41	17.91			5.57	.41	2.	.00	. 0									
49	17.00	33.	986	4.91	.41	4.	.01	. 0	319.8								
64	15.12			3.64	.63	9.	.03	3. 2	2000								
77	13.52			2.69	1.05	16.	.03	9.8									
98	13.25			1.70	1.57	23.	.02	18.7									
123	12.72			. 91	2.05	30.	.02	23.0									
143	12.60			.43	2.25	35.	. 12	23. 2									
173	11.92				2.33	38.	.05	24.6									
202	11.55			.23	2.44	40.	.05	25, 1									
232	11.02			-20													
272	10.43			. 20													
333	9.40			. 16													
407	B.16			. 20													
480	7.55	34.	431	- 22					114.8								
561	6.64	34.	434	. 17					102.5								

RV	ALEXANDER	AGASSIZ		137060									
	LATITUDE 24 20.0N				SSENGER 600 GMT		BOTTON 4021M	WIND 300	SPEED 13KT	WEATHER		NANT WAVE	15
Z	T	5 02	PO4 SI03	NOZ	103	DT	Z	T	s	02	SIGT	DT	DD
							0 10 20 30 50 75 10 125 150 200 250 300 400	24.09 24.10 24.05 21.85 17.89 16.09 12.89 11.77 11.66 11.72 10.82 9.86 8.29 7.29	34.00 34.01 34.08 33.90 33.77 33.76 33.90 34.63 34.64 34.64 34.56 34.46		22.881 22.885 22.953 23.477 24.414 24.814 25.485 25.799 26.060 26.374 26.547 26.652 26.835 26.974	498.8 498.4 491.9 352.5 314.4 250.5 220.7 195.9 166.1 149.6 139.7 122.3	0 .050 .099 .146 .226 .310 .381 .441 .493 .586 .668 .743 .881 .1.004

RV	ALEXAN	DER AGASS	12				0	CALCOPI	CRUISE 6	909				1	37060
	LATIT 24 20		NGITUDE 4 37.0%	MO	/DAY/YR 0/04/69		SSENGER 713 GM		BOTTOM 4021H	WIND 300	SPEED 13KT	WEATHER		ANT WAVE 0 05 06	is
Z	Ť	S	02	204	5103	NO2	NO3	DT	2	T	s	02	SIGT	DT	DD
1	24.08	33.979	4.87	.15	1.	.00	.0	500.0							
11	24.08	33,982		.17	1.	.00	.0	499.8							
31	20.56		5.55	. 17	1.	.00	.0								
41	18.08		5.87	. 15	1.	.00	.0								
50	17.49	33.736	5.84	.13	0.	.00	.0	349.1							
65	16.37		5.73	. 15	1.	.00	.0								
81	14.19		5.27	.37	3.	.00	. 5								
100	12.79		3.48	1.09	12.	.17	12.9								
125	11.84		3.08	1.35	18.	. 17	17.3								
1.45	11.37		2.33	1.83	26.	. 05	22,6								
174	11.54		1.37	2.01	29.	.01	24.1								
205	11.69		.43		37.	.04	28.2								
235	11.15		. 37												
274	10.60		. 27												
334	9.20		. 19												
408	8.16		.27												
481	7.42	34.478	. 12					109.5							
560	6.64	34.470	.11					99.9							
560	6.64	34.470	. 11					99.9							

RV AL	EXANDER AGASSIZ	CALCOFI CRUISE 6909 TEN METER DATA									
97.029	09/14/69 1805GMT 32 17.5N 117 04.5W BOTTOM 37M WIND 240 04KT WEATHER 2 DOMINANT WAVES 280 03 06		z 10	T 13,96	S 33.428	02	.50	SI03 8.	NO2	.0	DT 296.5
97.030	09/14/69 1718GMT 32 16.0N 117 07.0W BOTTOM 62M WIND 270 05KT WEATHER 2 DOMINANT WAVES 290 03 06		10	13.96	33.386		. 28	3.	.00	.0	299.6
97.045	09/14/69 0515GMT 31 46.0N 118 08.0W BOTTOM 1797M WIND 330 07KT WEATHER DOMINANT WAVES 300 05 05		10	20.20	33.626						422.2
97.050	09/14/69 0231GMT 31 35.0N 118 3G.0W BOTTOM 2042M WIND 300 09KT WEATHER 1 DOMINANT WAVES 300 06 06		10	18.48 U	33.486						390.4
97.055	09/13/69 2325GMT 31 26.0N 118 48.0W BOTTOM 1298M WIND 290 08KT WEATHER 1 DOMINANT WAVES 300 05 06		10	18.03	33.388						387.0
100.029	09/14/69 2211GMT 31 42.5N 116 44.0W BOTTOM 88M WIND 300 04KT WEATHER 2 DOMINANT WAVES 300 01 03		10	12.88	33.438		.31	10.	. 14	1.6	275.0
100.045	09/15/69 2120GMT 31 11.0N 117 46.0W BOTTOM 1466M WIND 330 07KT WEATHER DOMINANT WAVES		10	20,38	33.590		.13	2.	.00	.0	429.3
10.0.055	09/15/69 1740GMT 30 48.0N 118 27.5W BOTTOM 2595M WIND 330 06KT WEATHER 2 DOMINANT WAVES 300 02 06		10	19.38	33.437		. 35	2.	.05	.0	415.6
103.029	09/19/69 0600GMT 31 07.0N 116 22.0W BOTTOM 52M WIND 300 10KT WEATHER DOMINANT WAYES 300 03 07		10	14,99	33, 374		.22	6.	.00	.0	321.2
103.045	09/17/69 1505GNT 30 36.5N 117 23.0W BOTTOM 1949M WIND 330 U9KT WEATHER 2 DOMINANT WAVES 310 04 04		10	19.46	33.522		.13	2.	.00	.0	411.4
103.055	09/17/69 1015GMT 30 16.0N 118 05.0W BOTTOM 2227M WIND 300 11KT WEATHER DOMINANT WAYES 29C 04 06		10	19.18	33, 367		. 33	3.	.00	.0	415.8
107.031	10/07/69 0405GMT 30 27.5N 116 06.5W BOTTOM 47M WIND 320 09KT WEATHER O DOMINANT WAVES		10	17.68							
107.035	09/19/69 1212GMT 30 21.5N 116 22.5W BOTTOM 1664M WIND 350 15KT WEATHER DOMINANT WAVES		10	18.01	33, 392		. 17	4.	.00	.0	386.2

107,040	09/19/69 1517GMT 30 11.0N 116 42.0W BOTTOM 2602M WIND 320 11KT WEATHER 2 DOMINANT WAVES 330 03 05	z 10	T	S 33,564	02	P04	s103 2.	NO2	NO3	DΤ
107.045	09/19/69 1740GMT 30 01.5N 117 01.5W BOTTOM 1485M WIND 310 12KT WEATHER 2 DOMINANT WAVES 330 03 06	10	19.57	33.617		. 24	1,	.00	.0	407.2
107.050	09/19/69 2050GMT 29 51.0N 117 24.0W BOTTOM 2227M WIND 310 12KT WEATHER 2 DOMINANT WAVES 330 05 07	10	19.28	33.492		.28	2.	.00	.0	409.1
107.055	09/19/69 2330gMT 29 41.0N 117 42.5W BOTTOM 3169M WIND 320 14KT WEATHER 2 DOMINANT WAVES 330 06 07	10	19.20	33.432		.26	2.	.00	.0	411.6
110.032	09/22/69 040.0gMT 29 52.0N 115 47.5W BOTTOM 26M WIND 340 10KT WEATHER DOMINANT WAVES 310 03 06	10	14.04	33. 275						309.3
110.045	09/21/69 1652GMT 29 28.5N 116 39.0W BOTTOM 1003M WIND 330 12KT WEATHER 2 DOMINANT WAVES 330 06 06	10	19.86	33.537		. 17	1.	.00	.0	420.1
113.029	09/22/69 0835GMT 29 24.5N 115 14.0W BOTTOM 35M WIND 300 11KT WEATHER 1 DOMINANT WAVES 300 03 06	10	17.04	33,544		. 24	4.	.00	.0	353.0
113.045	09/22/69 1800GMT 28 51.0N 116 17.5W BOTTOM 2602M WIND 330 06KT WEATHER 2 DOMINANT WAVES 330 03 06	10	20.75	33.664		.07	0.	.00	.0	433.3
113.080	09/23/69 1130GMT 27 42.0N 118 32.5W BOTTOM 3926M WIND 330 09KT WEATHER DOMINANT WAVES 330 03 05	10	20.31 U	33.637		. 20	0.	.00	.0	424.1
117.025	09/25/69 0515GMT 28 58.0N 114 37.5W BOTTOM 60M WIND 300 13KT WEATHER 1 DOMINANT WAVES 300 03 06	10	18.29	33.605						377.3
117.026	09/25/69 0430GMT 28 55.5N 114 41.0W BOTTOM 75M WIND 300 14KT WEATHER 1 DOMINANT WAVES 300 03 06	10	18.56	33.610		. 26	4.	.00	.0	383.3
117.045	09/24/69 0937GMT 28 18.0N 115 56.0W BOTTOM 3642M WIND 340 09KT WEATHER 2 DOMINANT WAVES	10	19.12	33.488						405.6
120.024	09/25/69 0926GMT 28 26.0N 114 12.0W BOTTOM 37M WIND 330 10KT WEATHER 2 DOMINANT WAVES 330 03 06	10	19.78	33.604		.11	2.	.00	.0	413.3

CALCOFI CRUISE	6909	TEN	METER	DATA
CURCOLL CHOTOR	0 - 0 -	3.50		A 11 - 0

		Z	т	S	02	P04	S103	NO2	NO3	DT
120.025	09/25/69 1010GMT 28 23.0N 114 15.0W BOTTOM 65M WIND 330 10KT WEATHER 2 DOMINANT WAVES 330 03 06		19.89	33.599		.11	0.	.00	.0	416.4
120.030	09/25/69 1230GMT 28 13.0N 114 34.0W BOTTOM 103M WIND 340 09KT WEATHER DOMINANT WAVES 330 02 05	10	19.80	33.614		.04	3.	.00	.0	413.1
120.035	09/25/69 1815GMT 28 03.0N 114 54.0W BOTTOM 88M WIND 330 06KT WEATHER 1 DOMINANT WAVES 330 03 05	10	20.84	33.671						435.1
120.040	09/26/69 0250GMT 27 56.5N 115 14.0W BOTTOM 45M WIND 300 13KT WEATHER 1 DOMINANT WAVES 310 04 06	10	18.86	33.585		. 13	7.	.09	1.2	392.2
123.036	09/30/69 2340GMT 27 26.0N 114 36.0W BOTTOM 65M WIND 310 08KT WEATHER 0 DOMINANT WAVES 320 03 06	10	18.02	33,553		. 13	1.	.00	.0	374.7
123.045	09/30/69 1810GMT 27 08.0N 115 10.5W BOTTOM 3926M WIND 330 14KT WEATHER 0 DOMINANT WAVES 320 05 04	10	21,92	33.752						457.4
123.060	09/30/69 1107GMT 26 38.0N 116 07.0W BOTTOM 4021M WIND 330 16KT WEATHER DOMINANT WAVES 330 03 07	10	21.16	33,553		.07	4.	.00	.0	451.9
127.033	10/01/69 0445gMT 26 57.5N 114 02.5W BOTTOM 75M WIND 340 01KT WEATHER 0 DOMINANT WAVES 320 03 06	10	22.16	34.161		. 24	0.	.00	.0	434.2
127.034	10/01/69 0542GMT 26 55.5N 114 06.0W BOTTOM 93M WIND 340 04KT WEATHER 0 DOMINANT WAVES 320 03 06	10	21.84	34.095		. 20	0.	.00	.0	430.5
127.045	10/01/69 1106GMT 26 33.5N 114 49.5W BOTTOM 3546M WIND 330 11KT WEATHER O DOMINANT WAVES	10	22.10	33.723		.07	0.	.00	.0	464.3
130.028	10/02/69 1945GMT 26 33.5N 113 21.5W BOTTOM 48M WIND 050 06KT WEATHER 1 DOMINANT WAVES 150 04 07	10	24.03			. 24	0.	.00	.0	
130.035	10/02/69 1500GMT 26 19.0N 113 48.5W BOTTOM 733N WIND 320 07KT WEATHER 1 DOMINANT WAVES 300 03 06	10	22.48	34.000		.13	0.	.00	.0	454.4
130.045	09/02/69 0837GMT 25 59.0N 114 26.5W BOTTOM 3738M WIND 300 10KT WEATHER DOMINANT WAVES 260 03 04	10	22.34	33,731		.04	0.	. 00	.0	470.1

133.023	10/03/69 0727GMT 26 08.5N 112 40.5W BOTTOM 75M WIND 300 05KT WEATHER DOMINANT WAVES 300 04 07	z 10	T 24.99	S 34.448	02	P04	SI03 0.	NO2	.0	DT 492.3
133.025	10/03/69 0842GMT 26 04.5N 112 48.0W BOTTOM 84M WIND 290 06KT WEATHER DOMINANT WAVES 300 04 07	10	25.42	34.550		.09	0.	.00	.0	497.5
133.035	10/03/69 1343GMT 25 44.0N 113 26.0W BOTTOM 789M WIND 330 10KT WEATHER 1 DOMINANT WAVES 300 04 07	10	25.46	34.562		-11	0.	.00	.0	497.8
137.022	09/05/69 0705GMT 25 36.0N 112 15.0W BOTTOM 56M WIND 300 09KT WEATHER DOMINANT WAVES 00	10	25.12	34.886		.22	0.	.00	.0	464.5
137.035	10/04/69 2305GMT 25 10.0N 113 05.0W BOTTOM 984M WIND 300 09KT WEATHER 1 DOMINANT WAVES 300 06 07	10	25.72	34.690		.09	0.	.00	.0	496.2

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