PHYSICAL AND CHEMICAL DATA REPORT

GULF CRUISES 7303 & 7305

UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

GULF CRUISE 7303
6–23 March 1973

GULF CRUISE 7305
23–26 May 1973

SIO Reference 88-5
15 March 1988

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

GULF CRUISE 7303
6–23 March 1973

and

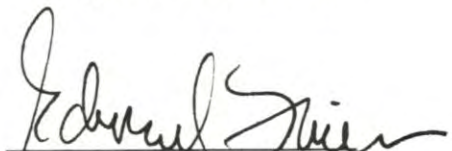
GULF CRUISE 7305
23–26 May 1973

Sponsored by

Marine Research Committee

SIO Reference 88-5
15 March 1988

Approved for distribution:



Edward A. Frieman, Director

CONTENTS

GULF CRUISE 7303

INTRODUCTION

The data in this report were collected during Cruise 7303* aboard the RV *Alexander Agassiz*, of the Scripps Institution of Oceanography, University of California, San Diego.

The purpose of the cruise was to examine and survey biological, chemical, physical and bathymetric parameters in the northern Gulf of California, in a cooperative expedition of the Instituto de Investigaciones Oceanologicas and the Escuela Superior de Ciencias Marinas of the Universidad Autonoma de Baja California (Mexico)**; the Instituto Nacional de Pesca (Mexico); and the Scripps Institution of Oceanography, University of California, San Diego (United States).

Earlier data collected in the Gulf of California appears in SIO Reference 65-1, El Golfo I, November 1963, and SIO Reference 67-16, El Golfo II, May 1965.

The data were collected by personnel from all agencies supporting the cruise and processed by the Data Collection and Processing Group (DCPG***, MLRG), Scripps Institution of Oceanography, and by Escuela Superior de Ciencias Marinas, Universidad Autonoma de Baja California.

STANDARD PROCEDURES

Hydrographic Cast Data

The hydrographic casts consisted of 12 Nansen bottles lowered to 500 meters, bottom depth permitting. Temperature and dissolved oxygen were determined for all depths on each station, but samples for salinity analysis were collected from very few stations. Nutrient samples were frozen and stored for later analysis.

Chlorophyll casts consisting of 11 Nansen bottles at 5-meter intervals were lowered to 50 meters with samples filtered and the filters frozen for later analysis at Escuela Superior de Ciencias Marinas.

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

STD lowerings were made on almost all stations. Temperature and salinity determinations were made from Nansen bottles placed on the wire at 10 meters, mid-cast and near the bottom of the cast.

On the few stations where salinity samples were collected, analysis was done at sea on inductive-type salinometers. They are reported to three decimal places.

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

Frozen phosphate, silicate and nitrate nutrients were determined using a standard Beckman DU spectrophotometer at ESCM. Reactive phosphate was analyzed using the method of Murphy and Riley (1962) with the specific procedure outlined by Anderson (1971), reactive silicate by the method of Strickland and Parsons (1968), and nitrate by the method of Wood *et al.* (1967). Some of the phosphate and silicate samples were analyzed shortly after the completion of the cruise and are tabulated in the report. All the nitrate samples and the remaining phosphate and silicate samples were not processed until early 1974. The nitrate data for these stations are tabulated but the phosphate and silicate values were omitted.

The filtered chlorophyll samples were treated to different storage methods in order to determine optimal conditions for preservation and later analysis ashore. Questions concerning the methods and analysis of these data should be directed to the authors of published papers listed in this report.

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

** Now the Facultad de Ciencias Marinas.

*** Now the Oceanographic Data Facility (ODF).

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

A Bissett Berman Model 9040 STD was used on this cruise. The digital data logger seemed to operate well except for a few stations where there was only a partial recording or no recording at all. In these cases, the data were digitized from the analog. The hydrographic and STD temperatures agreed well but the salinity for the STD required a correction of 0.23‰ for all depths.

Macrozooplankton Data

Macrozooplankton was sampled with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. Volumes filtered were determined from flowmeter readings and the mouth area of the net. The biomass, as wet displacement volume, after removal of large (>5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

TABULATED DATA

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the 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. Weather conditions have been coded using WMO code 4051.

Data tabulations are presented in the following three forms:

1) Data from the sample bottle casts are tabulated with the observed levels of depth on the left of the page. Since salinity samples were collected from only a few casts, interpolated values of temperature and oxygen at standard levels of depth appear on the right of the page on most stations. On those few bottle casts for which salinity samples were analyzed, computed values of thermosteric anomaly (DT) are included with the observed levels and computed values of sigma-t (SIGT), thermosteric anomaly (DT) and geopotential anomaly (DD) are included with the interpolated levels.

2) Data at standard levels of depth from the STD lowerings appear on the right of a page with computed values of sigma-t, thermosteric anomaly and geopotential anomaly included.

3) Chlorophyll and phaeophytin appear as a separate section in the report.

Except for the addition of the chlorophyll and phaeophytin data, the parameters tabulated are the same as those tabulated in CalCOFI reports. The column headings are interpreted as follows:

Z	Depth	Meters
T	Temperature	°C
S	Salinity	‰
O2	Dissolved Oxygen	ml/L
PO4	"Reactive" inorganic phosphate-phosphorous	µg at/L
SiO3	"Reactive" inorganic silicate-silicon	µg at/L
NO3	"Reactive" nitrate-nitrogen	µg at/L
DT	δ_T Thermosteric anomaly	cl/ton
SIGT	$\sigma_t = (\rho_{s,t,0} - 1)\ 10^3$ where $\rho_{s,t,0}$ is the density the parcel of sea water would have if moved isothermally to the sea surface.	g/L
DD	Geopotential anomaly, referred to the sea surface.	dyn. meters
CHL.A	Chlorophyll-a	mg/m^3
PHAEO	Phaeophytin	mg/m^3

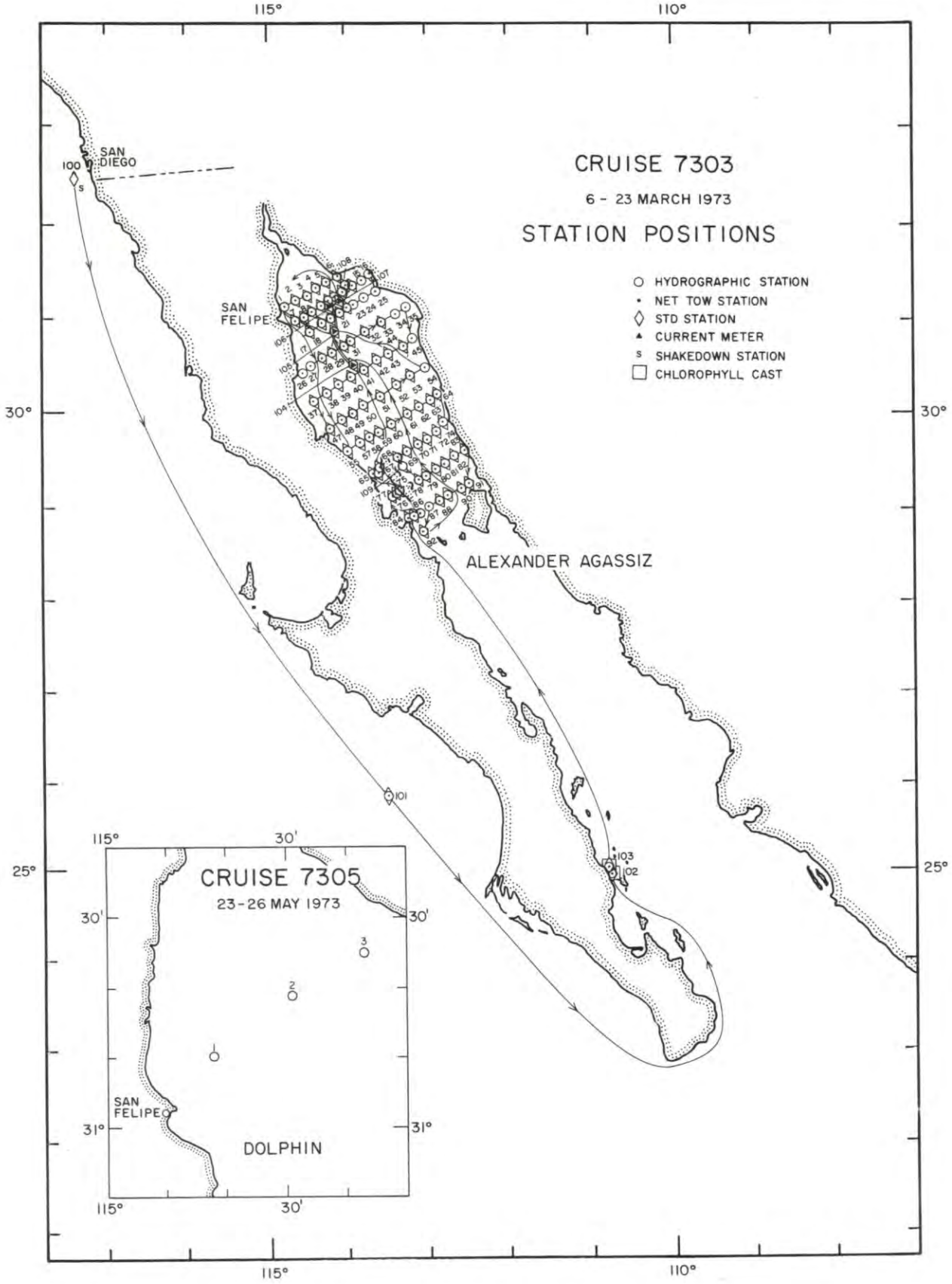
FOOTNOTES

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

P: After depth value indicates the Nansen bottles posttripped.

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

V: Because of time differences, overlapping casts show some differences. Values not used in interpolation.


115°
110°
SAN DIEGO
100
S
CRUISE 7303
6 - 23 MARCH 1973
STATION POSITIONS
HYDROGRAPHIC STATION
NET TOW STATION
STD STATION
CURRENT METER
S SHAKEDOWN STATION
CHLOROPHYLL CAST
SAN FELIPE
30°
ALEXANDER AGASSIZ
101
103
102
25°
CRUISE 7305
23-26 MAY 1973
30'
SAN FELIPE
31°
DOLPHIN

PERSONNEL

GULF CRUISE 7303

Schwartzlose, Richard A. (Chief Scientist)	Academic Administrator	SIO
Alvarez, Saul B.	Professor, Chemical Oceanography	ESCM, UABC
Brown, Daniel M.	Development Engineer	SIO
Cabrera, Homero	Investigator	IIO, UABC
Dameron, Ben B.	Sea Grant Student	CSUSD
Gendrop, Victor F.	Student	ESCM, UABC
Hemingway, George T.	Staff Research Associate	SIO
	Adjunct Lecturer, Practical Oceanography	CSUSD
Larkin, Thomas M.	Sea Grant Student	CSUSD
Martinez, Luz	Student	ESCM, UABC
Mead, Richard V.	Marine Technician	SIO
Nishikawa, Amelia G.	Student	ESCM, UABC
Nishikawa, Katsuo A.	Director	IIO, UABC
	Professor, Chemical Oceanography	ESCM, UABC
Robles, Jose M.	Oceanographer	INP
Singleton, James R.	Electronics Technician	SIO
Sitko, Shari E.	Sea Grant Student	CSUSD
Villaseñor, Amado	Oceanographer	INP

ABBREVIATIONS USED:

CSUSD	California State University, San Diego, California, USA
ESCM	Escuela Superior de Ciencias Marinas, Ensenada, Baja California, Mexico
IIO	Instituto de Investigaciones Oceanologicos, Ensenada, Baja California, Mexico
INP	Instituto Nacional de Pesca, Mexico DF, Mexico
SIO	Scripps Institution of Oceanography, La Jolla, California, USA
UABC	Universidad Autonoma de Baja California,

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 101

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 51.0 N	113 30.0 W	03/08/73	2005 GMT	817 M	330	12 KT	1	310 03 06

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	19.23	34.491	5.46				1.3	335.4	0	19.23	34.491	5.46	24.593	335.4	0.000
10	19.22	34.492	5.46				1.9	335.1	10	19.22	34.492	5.46	24.597	335.1	0.034
31	19.15	34.481	5.47				0.0	334.2	20	19.18	34.486	5.47	24.601	334.7	0.067
41	19.15	34.488	5.46				0.1	333.7	30	19.15	34.481	5.47	24.606	334.2	0.101
51	19.13	34.484	5.46				0.0	333.4	50	19.13	34.484	5.46	24.614	333.5	0.168
67	18.41	34.367	5.17				1.4	324.7	75	17.33	34.239	4.58	24.872	308.8	0.248
82	16.17	34.119	4.03				8.7	291.8	100	13.01	33.855	3.49	25.526	246.7	0.318
102	12.70	33.839	3.46				15.2	242.1	125	11.82	33.985	2.93	25.856	215.3	0.377
127	11.74	33.985	2.89				18.9	213.9	150	11.22	34.116	2.33	26.067	195.2	0.429
148	11.25	34.104	2.38				22.6	196.5	200	11.02	34.444	1.03	26.359	167.5	0.522
179	11.01	34.293	1.64				23.1	178.4	250	10.58	34.518	0.69	26.495	154.6	0.605
207	11.02	34.486	0.86				20.5	164.4	300	9.87	34.494	0.61	26.599	144.7	0.683
238	10.72	34.516	0.69				23.8	157.1	400	7.96	34.399	0.44	26.828	122.9	0.823
278	10.21	34.511	0.68				22.2	149.0	500	6.42	34.358	0.35	27.013	105.4	0.944
338	9.21	34.456	0.49				24.2	137.1							
411	7.74	34.390	0.44				20.3	120.5							
483	6.57	34.351	0.37				27.3	107.8							
561	5.86	34.385	0.29				16.2	96.6							

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 102

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 1.6 N	110 45.0 W	03/10/73	1715 GMT	233 M	330	07 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	20.83	34.877	5.20		2.			347.5	0	20.83	34.877	5.20	24.466	347.5	0.000
10	20.16	34.911	4.74		6.			328.0	10	20.16	34.911	4.74	24.671	328.0	0.034
30	19.37	34.943	4.12		10.			306.0	20	19.74	34.931	4.44	24.797	316.0	0.066
46	18.53	34.967	3.27		15.			283.9	30	19.37	34.943	4.12	24.902	306.0	0.097
56	17.99	34.976	3.03		20.			270.5	50	18.33	34.972	3.18	25.188	278.8	0.156
71	16.73	34.948	2.20		28.			243.7	75	16.47	34.944	2.08	25.614	238.3	0.221
86	15.88	34.942	1.85		32.			225.5	100	15.30	34.966	1.54	25.897	211.4	0.278
107	15.06	34.976	1.41		36.			205.5	125	14.43	34.944	1.20	26.071	194.8	0.330
132	14.23	34.928	1.14		39.			192.0	150	13.92	34.915	0.99	26.157	186.7	0.378
151	13.91	34.916	0.98		40.			186.4	200	12.87	34.863	0.70	26.331	170.2	0.470
180	13.50	34.895	0.93		41.			179.9							
204	12.75	34.858	0.66		43.			168.2							

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 103

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 5.6 N	110 47.0 W	03/10/73	1916 GMT	576 M	310	04 KT	2	350 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	21.43	34.882	5.34					362.7	0	21.43	34.882	5.34	24.306	362.7	0.000
9	20.99	34.872	5.42					352.0	10	20.98	34.871	5.40	24.421	351.8	0.036
29	20.62	34.891	5.12					341.1	20	20.85	34.876	5.25	24.461	348.0	0.071
49	18.41	34.976	3.27					280.5	30	20.52	34.894	5.04	24.562	338.3	0.105
80	16.48		1.88						50	18.32	34.975	3.20	25.191	278.5	0.167
110	15.05	34.942	1.29					207.8	75	16.71	34.950	2.02	25.563	243.1	0.233
155	13.87	34.913	1.06					185.8	100	15.50	34.958	1.44	25.846	216.2	0.291
204	12.74	34.862	0.69					167.7	125	14.58	34.934	1.18	26.030	198.7	0.344
255	11.76	34.798	0.50					154.4	150	13.97	34.916	1.07	26.148	187.5	0.393
310	10.35	34.732	0.38					135.0	200	12.83	34.866	0.72	26.343	169.0	0.484
411	8.09	34.601	0.12					109.7	250	11.86	34.804	0.51	26.483	155.7	0.568
517	7.03	34.564	0.11					97.9	300	10.62	34.744	0.40	26.664	138.5	0.645
									400	8.30	34.613	0.14	26.946	111.8	0.778
									500	7.20	34.570	0.11	27.072	99.8	0.891

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 84

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 51.4 N	113 15.5 W	03/11/73	2314 GMT	233 M	120	15 KT	1	120 01 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.04		3.53	1.12	14.				0	17.04		3.53			
10	16.60		3.62	1.46	21.				10	16.60		3.62			
32	15.90		3.89	1.86	31.				20	16.22		3.74			
46	15.76		4.66	2.04	36.				30	15.94		3.87			
56	15.63		5.05	2.06	37.				50	15.71		4.82			
72	15.44		2.68	2.10	39.				75	15.38		2.76			
87	15.13		3.06	2.05	37.				100	15.06		3.30			
107	15.03		3.40	1.48	25.				125	14.67		3.48			
132	14.53		3.51	2.05	39.				150	14.44		3.53			
152	14.44		3.53	1.60	25.				200	14.14		2.74			
183	14.23		2.82	2.25	45.										
207	14.11		2.71	1.56	29.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 85

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 52.7 N	113 11.5 W	03/12/73	0216 GMT	1191 M	130	10 KT	1	120 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.64		5.54					
10	16.93		5.32					
20	16.73		4.82					
30	16.74		4.76					
49	16.36		4.37					
74	15.77		3.89					
98	15.30		3.42					
148	14.85		3.19					
198	14.04		2.44					
399	12.69		1.52					
601	12.20		1.25					
999	11.70		1.43					

Z	T	S	O2	SIGT	DT	DD
0	17.64		5.54			
10	16.93		5.32			
20	16.73		4.82			
30	16.74		4.76			
50	16.34		4.35			
75	15.75		3.87			
100	15.28		3.41			
125	15.03		3.27			
150	14.82		3.16			
200	14.02		2.43			
250	13.50		2.20			
300	13.11		1.97			
400	12.69		1.52			
500	12.38		1.33			
600	12.20		1.25			
700	12.08		1.29			
800	11.95		1.34			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 86

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 54.8 N	113 8.0 W	03/12/73	0453 GMT	338 M	130	04 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.19		5.64	0.20	17.			
10	17.06		5.46	0.19	15.			
30	16.08		4.41	0.27	31.			
45	16.03		4.35	0.26	29.			
55	15.91		4.23	0.19	19.			
70	15.84		4.15	0.19	26.			
84	15.76		4.07	0.28	32.			

Z	T	S	O2	SIGT	DT	DD
0	17.19		5.64			
10	17.06		5.46			
20	16.56		4.92			
30	16.08		4.41			
50	15.97		4.29			
75	15.81		4.12			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 77

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 5.0 N	113 28.5 W	03/12/73	0855 GMT	371 M	270	16 KT	5	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.73		5.03	0.26	24.			
10	16.65		4.91	0.26	25.			
29	15.94		4.17	0.27	29.			
44	15.83		4.03	0.24	26.			
59	15.72		3.97	0.30	34.			
73	15.67		3.83	0.27	31.			
88	15.57		3.81	0.30	36.			
107	15.20		3.44	0.32	39.			
132	14.67		3.17	0.31	37.			
161	14.45		2.94	0.33	42.			
269	13.71		2.24	0.38	52.			
353	13.35		2.01	0.40	55.			

Z	T	S	O2	SIGT	DT	DD
0	16.73		5.03			
10	16.65		4.91			
20	16.28		4.52			
30	15.93		4.15			
50	15.78		4.01			
75	15.66		3.83			
100	15.35		3.59			
125	14.80		3.23			
150	14.51		3.02			
200	14.16		2.65			
250	13.82		2.34			
300	13.58		2.16			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 76

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 7.0 N	113 25.0 W	03/12/73	1205 GMT	635 M	270	19 KT	6	270 01 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
1	16.82		5.26				11.7	
11	16.75		5.20				13.5	
42	16.28		4.74				11.5	
68	15.98		3.92				18.4	
93	15.56		3.66				19.1	
124	14.80		3.03				22.4	
171	14.34		2.68				24.0	
227	13.74		2.30				24.7	
283	13.17		2.10				25.6	
337	13.13		1.87				24.7	
447	12.72		1.57				26.4	
554	12.21		1.28				27.1	

Z	T	S	O2	SIGT	DT	DD
10	16.76		5.21			
20	16.63		5.12			
30	16.48		4.98			
50	16.19		4.48			
75	15.88		3.83			
100	15.38		3.52			
125	14.79		3.02			
150	14.50		2.79			
200	14.03		2.47			
250	13.47		2.21			
300	13.16		2.03			
400	12.93		1.68			
500	12.47		1.43			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 9.3 N	113 22.0 W	03/12/73	1440 GMT	613 M	300	11 KT	1	310 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.45		5.00	0.24	26.			
10	16.44		5.03	0.23	25.			
31	16.26		4.65	0.22	26.			
52	16.05		4.35	0.23	26.			
83	15.94		4.16	0.23	28.			
113	15.59		3.77	0.29	36.			
159	15.09		3.29	0.31	41.			
210	13.83		2.41	0.35	51.			
260	13.32		2.03	0.31	45.			
315	13.19		1.90	0.38	57.			
414	12.49		1.37	0.40	62.			
518	12.06		1.17	0.36	55.			

Z	T	S	O2	SIGT	DT	DD
0	16.45		5.00			
10	16.44		5.03			
20	16.37		4.88			
30	16.27		4.67			
50	16.07		4.37			
75	15.97		4.20			
100	15.76		3.95			
125	15.49		3.65			
150	15.21		3.39			
200	14.08		2.58			
250	13.38		2.08			
300	13.21		1.93			
400	12.60		1.45			
500	12.13		1.20			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 20.5 N	113 42.0 W	03/12/73	1809 GMT	530 M	230	06 KT	2	180 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.08		4.68	1.84	30.			
9	16.00		4.64	1.83	31.			
30	15.84		4.50	1.91	30.			
50	15.74		4.45	1.79	27.			
80	15.44		4.03	1.84	30.			
110	15.12		3.73	1.86	17.			
154	14.63		3.23	2.07	38.			
203	14.18		2.74	2.31	45.			
254	13.56		2.28	1.96	36.			
308	13.27		2.03	2.44	50.			
409	12.56		1.53	2.80	60.			
512	12.40		1.43	2.05	37.			

Z	T	S	O2	SIGT	DT	DD
0	16.08		4.68			
10	15.99		4.63			
20	15.91		4.57			
30	15.84		4.50			
50	15.74		4.45			
75	15.50		4.11			
100	15.23		3.83			
125	14.95		3.56			
150	14.67		3.28			
200	14.21		2.77			
250	13.61		2.31			
300	13.30		2.06			
400	12.62		1.57			
500	12.42		1.44			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 66

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 21.5 N	113 39.0 W	03/12/73	2040 GMT	371 M	230	12 KT	1	230 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.32		4.75				13.5	
10	16.16		4.69				15.4	
31	16.03		4.35				14.9	
45	15.86		4.16				16.4	
61	15.71		3.97				14.4	
75	15.60		3.86				17.1	
90	15.37		3.59				16.2	
113	15.10		3.30				18.6	
164	14.59		3.05				18.5	
212	14.27		2.84				27.1	
311	13.22		2.02				21.5	
357	12.81		1.71				24.4	

Z	T	S	O2	SIGT	DT	DD
0	16.32		4.75			
10	16.16		4.69			
20	16.09		4.54			
30	16.03		4.37			
50	15.81		4.10			
75	15.60		3.86			
100	15.24		3.45			
125	14.97		3.22			
150	14.72		3.09			
200	14.35		2.90			
250	13.88		2.54			
300	13.34		2.12			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 67

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 24.0 N	113 37.0 W	03/12/73	2329 GMT	325 M	250	18 KT	6	250 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.38		4.98	0.24	23.			
10	16.39		4.99	0.26	25.			
31	16.35		4.93	0.24	23.			
46	16.35		4.82	0.24	24.			
57	16.33		4.84	0.27	27.			
72	15.73		4.02	0.30	34.			
88	15.62		3.85	0.26	30.			
103	15.42		3.65	0.31	37.			
134	15.25		3.40	0.31	36.			
159	15.01		3.19	0.31	36.			
210	14.67		3.01	0.35	44.			
260	13.50		2.18	0.35	46.			

Z	T	S	O2	SIGT	DT	DD
0	16.38		4.98			
10	16.39		4.99			
20	16.37		4.98			
30	16.35		4.94			
50	16.34		4.83			
75	15.71		3.99			
100	15.46		3.69			
125	15.29		3.46			
150	15.10		3.26			
200	14.76		3.06			
250	13.73		2.35			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 104

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 32.5 N	113 58.0 W	03/13/73	0918 GMT	173 M	320	10 KT	0	320 03 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.53		5.50	2.00	15.				0	16.53		5.50			
9	16.56		5.51	2.06	16.				10	16.56		5.51			
29	16.57		5.51	2.04	15.				20	16.57		5.51			
40	16.61		5.48	2.03	17.				30	16.57		5.51			
55	16.60		5.48	2.05	15.				50	16.60		5.48			
71	16.46		4.93	2.24	22.				75	16.43		4.86			
86	16.35		4.75	2.24	25.				100	16.30		4.76			
107			4.77	2.21	24.				125	16.21		4.69			
132	16.19		4.66	2.34	25.				150	15.69		3.98			
156	15.52		3.75	2.73	39.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 105

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 52.9 N	114 11.9 W	03/13/73	1259 GMT	131 M	330	08 KT	0	330 02 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.78		5.39	0.19	14.				0	16.78		5.39			
10	16.80		5.41	0.17	13.				10	16.80		5.41			
26	16.81		5.42	0.20	15.				20	16.81		5.42			
37	16.80		5.37	0.21	16.				30	16.81		5.40			
47	16.80		5.40	0.21	15.				50	16.80		5.40			
63	16.82		5.41	0.20	15.				75	16.82		5.38			
77	16.82		5.38	0.20	16.				100	16.70		5.03			
101	16.69		5.01	0.23	21.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 106

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 6.6 N	114 14.5 W	03/13/73	1606 GMT	164 M	150	06 KT	0	240 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.76		5.46	0.18	19.				0	16.76		5.46			
9	16.76		5.47	0.15	14.				10	16.76		5.47			
30	16.75		5.42	0.16	18.				20	16.75		5.45			
40	16.77		5.39	0.15	15.				30	16.75		5.42			
55	16.76		5.35	0.15	16.				50	16.77		5.36			
70	16.76		5.33	0.15	14.				75	16.74		5.18			
85	16.70		4.87	0.16	15.				100	16.61		4.76			
103	16.59		4.74	0.17	18.				125	16.44		4.87			
128	16.42		4.90	0.18	16.				150	16.37		4.89			
157	16.35		4.89	0.18	17.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 107

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 12.5 N	114 10.5 W	03/13/73	1747 GMT	93 M	280	13 KT	0	150 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.70		5.48	0.18	12.				0	16.70		5.48			
19	16.69		5.47	0.23	21.				10	16.69		5.47			
29	16.70		5.44	0.19	17.				20	16.69		5.47			
50	16.75		5.42	0.21	18.				30	16.70		5.44			
71	16.76		5.13	0.21	21.				50	16.75		5.42			
87	16.75		5.34	0.22	21.				75	16.76		5.18			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 6

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 28.0 N	114 10.3 W	03/14/73	0643 GMT	22 M	280	25 KT	0	270 08 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.30	35.596	5.76				0.1	209.5	0	17.30	35.596	5.76	25.917	209.5	0.000
4	17.32	35.597	5.80				0.4	209.9	10	17.32	35.596	5.80	25.912	210.0	0.021
9	17.32	35.597	5.80				0.1	209.9							
14	17.33	35.594	5.80					210.3							
19	17.33	35.596	5.83				0.1	210.2							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 23.6 N	114 18.5 W	03/14/73	0848 GMT	43 M	290	26 KT	1	290 08 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.13	35.537	5.74	1.26	21.		0.1	209.9	0	17.13	35.537	5.74	25.912	209.9	0.000
5	17.12	35.537	5.73	1.26	21.		0.2	209.7	10	17.12	35.538	5.73	25.916	209.6	0.021
10	17.12	35.538	5.73	1.23	21.			209.6	20	17.13	35.531	5.73	25.907	210.4	0.042
25	17.14	35.528	5.73	1.10	21.			210.8	30	17.13	35.529	5.89	25.906	210.5	0.063
35	17.13	35.532	6.06	1.10	20.			210.3							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 19.0 N	114 26.5 W	03/14/73	1108 GMT	30 M	310	25 KT	6	300 06 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.93	35.690	5.46				0.2	194.2							
15	16.94	35.686	5.47				0.1	194.8							
25	16.94	35.687	5.49				0.1	194.7							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 14.2 N	114 32.5 W	03/14/73	1333 GMT	28 M	330	28 KT	2	320 04 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.79		5.41	1.14	15.		0.7								
11	16.79		5.42	1.20	17.		0.4								
25	16.79		5.43	1.78	18.		0.3								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 2

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 10.5 N	114 41.0 W	03/14/73	1531 GMT	20 M	330	18 KT	0	330 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.64		5.48												
9	16.64		5.47												
19	16.64		5.46												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 1

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 6.7 N	114 48.0 W	03/14/73	1706 GMT	17 M	330	14 KT	0	330 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.71		5.71	1.17	9.										
5	16.70		5.70	1.34	12.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 7

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 58.0 N	114 41.0 W	03/15/73	0511 GMT	30 M	190	06 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.76		5.46				0.7		0	16.76		5.46			
4	16.75		5.47				0.8		10	16.77		5.35			
9	16.76		5.38				0.3		20	16.82					
14	16.81		5.27				0.1								
19	16.81		5.36												
24	16.85						7.2								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 8

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 1.5 N	114 35.5 W	03/15/73	0705 GMT	22 M	310	12 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.76		5.46	1.08	9.				0	16.76		5.46			
4	16.75		5.49	1.25	12.				10	16.75		5.51			
9	16.75		5.52	1.02	9.										
14	16.77		5.48	0.96	9.										
19	16.76		5.49	1.36	12.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 4.2 N	114 28.6 W	03/15/73	0912 GMT	39 M	310	11 KT	0	330 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.95		5.78				0.2		0	16.95		5.78			
10	16.95		5.79				0.3		10	16.95		5.79			
20	16.94		5.78				0.2		20	16.94		5.78			
35	16.91		5.72				0.2		30	16.92		5.74			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 8.5 N	114 22.5 W	03/15/73	1106 GMT	30 M	330	18 KT	0	320 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.94		5.55	1.17	20.										
10	16.96		5.56	1.24	20.										
25	16.96		5.59	1.30	20.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 11

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 11.5 N	114 17.7 W	03/15/73	1247 GMT	48 M	340	19 KT	0	350 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.01		5.53				2.4		0	17.01		5.53			
10	17.01		5.53				0.5		10	17.01		5.53			
20	17.02		5.56				0.4		20	17.02		5.56			
30	17.03		5.57				0.5		30	17.03		5.57			
40	17.03		5.56				0.5								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 12

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 14.7 N	114 12.0 W	03/15/73	1433 GMT	67 M	010	13 KT	0	310 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.96		5.60	1.05	20.				0	16.96		5.60			
10	16.97		5.63	1.17	22.				10	16.97		5.63			
20	16.97		5.60	0.96	17.				20	16.97		5.60			
40	16.97		5.60	1.16	22.				30	16.97		5.60			
67	16.94		5.55	1.25	22.				50	16.96		5.58			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 13

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 17.5 N	114 6.5 W	03/15/73	1616 GMT	37 M	020	07 KT	0	350 02 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.12		5.61				0.1		0	17.12		5.61			
4	17.12		5.65				0.2		10	17.11		5.61			
9	17.11		5.63				0.1		20	17.10		5.59			
14	17.11		5.56						30	17.12		$3200			
19	17.10		5.59												
24	17.11		5.61												
29	17.12		5.62												
34	17.11														

RV ALEXANDER AGASSIZ GULF CRUISE 7303 14

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 22.0 N	113 59.0 W	03/15/73	1803 GMT	19 M	360	06 KT	0	360 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.21	35.577	5.42	1.25	23.			208.8	0	17.21	35.577	5.42	25.924	208.8	0.000
4	17.09	35.573	5.43	1.30	22.			206.4	10	17.05	35.576	5.43	25.961	205.3	0.021
9	17.05	35.577	5.44	1.36	23.			205.2							
14	17.07	35.577	5.39	1.25	22.			205.6							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 15

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 25.5 N	113 53.0 W	03/15/73	1920 GMT	11 M	330	07 KT	0	320 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.47	35.691	5.29				1.1	206.5							
4	17.20	35.687	5.29				1.4	200.6							
9	17.14	35.687	5.27				1.8	199.2							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 16

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 29.1 N	113 47.5 W	03/15/73	2059 GMT	7 M	280	12 KT	1	270 01 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.42	35.809	5.53	0.92	9.			196.8							
4	17.29		5.54	0.98	9.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 25

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 18.5 N	113 41.2 W	03/15/73	2307 GMT	15 M	280	16 KT	1	290 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.45		5.35												
5	17.44		5.40												
10	17.42		5.39												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 24

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 13.7 N	113 51.2 W	03/16/73	0051 GMT	26 M	290	14 KT	0	300 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.77		5.76	1.58	26.			223.9	0	17.77	35.547	5.76	25.765	223.9	0.000
5	17.77	35.547	5.78	1.52	26.			223.9	10	17.63	35.540	5.70	25.794	221.2	0.022
10	17.63	35.540	5.70	1.39	26.			221.2	20	17.36	35.546	5.36	25.864	214.5	0.044
15	17.37	35.546	5.41	1.06	23.			214.7							
20	17.36	35.546	5.36	1.15	26.			214.5							
25	17.38	35.549	5.33	1.09	26.			214.7							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 23

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 9.7 N	113 59.0 W	03/16/73	0215 GMT	45 M	280	11 KT	0	270 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.51	35.482	6.23	1.26	17.			222.6	0	17.51		6.23			
10	17.07		5.95	1.19	19.				10	17.07		5.95			
20	17.02		5.64	1.19	18.				20	17.02		5.64			
30	17.02		5.59	1.21	20.				30	17.02		5.59			
40	17.00	35.482	5.59	1.19	20.			210.9							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 22

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 7.0 N	114 3.0 W	03/16/73	0330 GMT	60 M	270	07 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.17		5.55				5.7		0	17.17		5.55			
10	16.83		5.47				6.6		10	16.83		5.47			
19	16.77		5.43				9.1		20	16.77		5.42			
29	16.77		5.35				8.0		30	16.77		5.35			
50	16.75		5.34				8.8		50	16.75		5.34			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 21

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 3.6 N	114 9.3 W	03/16/73	0525 GMT	168 M	220	10 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.83		5.44	1.26	14.				0	16.83		5.44			
9	16.67		5.46	1.51	20.				10	16.66		5.45			
19	16.57		5.33	1.42	19.				20	16.57		5.33			
29	16.59		5.31	1.57	22.				30	16.59		5.31			
39	16.61		5.30	1.63	24.				50	16.69		5.17			
49	16.69		5.17	1.53	21.										
65	16.72		5.12	1.63	24.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 20

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 0.0 N	114 15.5 W	03/16/73	0723 GMT	131 M	320	07 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.86		5.43				6.1		0	16.86		5.43			
9	16.87		5.48				3.8		10	16.86		5.48			
29	16.74		5.40				4.8		20	16.80		5.44			
40	16.72		5.27				4.8		30	16.74		5.39			
55	16.71		5.25				4.2		50	16.71		5.26			
71	16.68		4.87				4.1		75	16.66		4.84			
87	16.60		4.77				6.2		100	16.53		4.80			
107	16.49		4.83				6.2		125	15.51		4.90			
127	15.40		4.91				4.8								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 19

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 57.0 N	114 21.0 W	03/16/73	0922 GMT	52 M	340	09 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.89		5.41	1.36	22.				0	16.89		5.41			
10	16.92		5.36	1.21	19.				10	16.92		5.36			
25	16.97		5.34	1.11	20.				20	16.95		5.34			
45	16.99		5.30	1.03	19.				30	16.97		5.33			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 18

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 51.4 N	114 30.3 W	03/16/73	1515 GMT	32 M	360	11 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.85		5.50				4.5		0	16.85		5.50			
10	16.87		5.48				3.9		10	16.87		5.48			
25	16.84		5.47				1.4		20	16.85		5.47			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 17

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 46.5 N	114 38.9 W	03/16/73	1258 GMT	19 M	310	08 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.88		5.45	1.48	9.										
15	16.88		5.45	1.60	9.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 26

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 25.5 N	114 36.5 W	03/16/73	1504 GMT	16 M	280	08 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.99	35.723	5.47					193.2							
5	17.00														
10	17.00	35.735	5.42					192.5							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 27

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 29.7 N	114 29.2 W	03/16/73	1621 GMT	0 M	060	08 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.80	35.593	6.19	0.17	3.			198.4	0	16.80	35.593	6.19	26.034	198.4	0.000
14	16.87	35.713	5.53	0.17	4.			191.2	10	16.85	35.678	5.72	26.088	193.2	0.020
24	16.96	35.868	5.19	0.18	7.			182.0	20	16.93	35.811	5.30	26.171	185.3	0.039
34	16.96	35.870	5.19	0.25	6.			181.8	30	16.96	35.869	5.19	26.207	181.9	0.057

RV ALEXANDER AGASSIZ GULF CRUISE 7303 28

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 35.0 N	114 21.0 W	03/16/73	1805 GMT	76 M	340	14 KT	0	330 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.74		5.37				5.7		0	16.74		5.37			
9	16.67		5.31				6.3		10	16.66		5.31			
19	16.63		5.34				4.5		20	16.63		5.35			
29	16.64		5.40				7.2		30	16.64		5.40			
50	16.58		5.37				5.3		50	16.58		5.37			
75	16.57		4.91				7.0		75	16.57		4.91			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 38.9 N	114 13.5 W	03/16/73	2019 GMT	125 M	340	11 KT	0	340 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.87		5.36						0	16.87		5.36			
10	16.60		5.33						10	16.60		5.33			
25	16.53		5.24						20	16.55		5.27			
34	16.53		5.41						30	16.53		5.35			
44	16.54		5.14						50	16.52		4.99			
58	16.47		4.80						75	16.37		4.50			
71	16.36		4.46												
95	16.42		4.70												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 43.4 N	114 5.4 W	03/16/73	2235 GMT	187 M	350	11 KT	0	350 02 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.01		5.34						0	17.01		5.34			
10	16.64		5.31						10	16.64		5.31			
20	16.58		5.32						20	16.58		5.32			
40	16.58		5.26						30	16.58		5.29			
50	16.58		5.27						50	16.58		5.27			
65	16.56		5.21						75	16.55		5.14			
80	16.54		5.10						100	16.23		4.34			
95	16.26		4.35						125	16.23		4.52			
115	16.15		4.32						150	16.14		4.59			
139	16.31		4.76												
164	15.93		4.37												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 31

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 46.2 N	114 0.3 W	03/17/73	0042 GMT	112 M	300	13 KT	0	310 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.09		5.26	1.71	24.				0	17.09		5.26			
10	16.69		5.24	1.79	24.				10	16.69		5.24			
25	16.63		5.19	1.71	24.				20	16.65		5.21			
35	16.58		5.11	1.69	23.				30	16.60		5.15			
45	16.56		5.00	1.51	22.				50	16.54		4.87			
61	16.50		4.55	1.64	26.				75			4.25			
76A			4.23	1.80	30.				100			4.24			
101A			4.24	1.85	34.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 52.2 N	113 50.0 W	03/17/73	0257 GMT	75 M	290	15 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.16		5.56						0	17.16		5.56			
10	17.06		5.54						10	17.06		5.54			
19	16.85		5.36						20	16.85		5.37			
29	16.83		5.42						30	16.83		5.43			
50	16.81		5.53						50	16.81		5.53			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 33

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 59.3 N	113 38.2 W	03/17/73	0600 GMT	65 M	260	11 KT	0	290 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.07		5.54	0.22	17.				0	17.07		5.54			
9	17.06		5.55	0.23	19.				10	17.04		5.53			
19	16.90		5.34	0.23	19.				20	16.90		5.33			
29	16.90		5.26	0.23	19.				30	16.90		5.26			
39	16.89		5.26	0.24	19.				50	16.90		5.25			
59	16.90		5.25	0.24	19.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 34

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 4.8 N	113 28.5 W	03/17/73	0751 GMT	37 M	300	07 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.34	35.451	5.81				2.7	221.0	0	17.34	35.451	5.81	25.796	221.0	0.000
10	17.34	35.451	5.85				2.8	221.0	10	17.34	35.451	5.85	25.796	221.0	0.022
20	17.22	35.445	5.71				2.8	218.6	20	17.22	35.445	5.71	25.820	218.6	0.044
30	17.23	35.445	5.66				3.2	218.9	30	17.23	35.445	5.66	25.818	218.9	0.066

RV ALEXANDER AGASSIZ GULF CRUISE 7303 35

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 9.0 N	113 21.3 W	03/17/73	0935 GMT	19 M	010	05 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.39	35.481	5.21	0.96	19.			219.9	0	17.39	35.48	5.21	25.807	219.9	0.000
5	17.40	35.483	5.21	0.98	18.			220.0	10	17.41	35.48	5.21	25.804	220.2	0.022
15	17.41	35.480	5.21	0.92	18.			220.4							

A) THE PROTECTED THERMOMETERS IN THE LAST TWO NANSEN BOTTLES WERE OFF-SCALE. DEPTHS HAVE BEEN DETERMINED FROM AN EXTRAPOLATED DEPTH CURVE.

RV ALEXANDER AGASSIZ GULF CRUISE 7303 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 48.5 N	113 15.7 W	03/17/73	1222 GMT	34 M	120	03 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.39		5.62						0	17.39		5.62			
5	17.40	35.411						225.2	10	17.40		5.67			
10	17.40		5.67						20	17.40		5.64			
15	17.40								30	17.40		5.68			
20	17.40		5.64												
25	17.41	35.417						225.0							
30	17.40		5.68												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 44

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 44.5 N	113 21.4 W	03/17/73	1404 GMT	75 M	250	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.22		5.62						0	17.22		5.62			
5	17.20								10	17.18		5.60			
10	17.18		5.60						20	17.15		5.51			
15	17.16								30	17.16		5.47			
20	17.15		5.51						50	17.08		5.30			
25	17.16														
30	17.16		5.47												
35	17.13														
40	17.11														
45	17.10														
51	17.08		5.29												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 43

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 38.7 N	113 32.0 W	03/17/73	1618 GMT	90 M	160	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.18		5.33				7.2		0	17.18		5.33			
9	17.02		5.35				8.5		10	17.00		5.34			
19	16.90		5.22				9.5		20	16.90		5.21			
29	16.89		5.12				6.9		30	16.89		5.12			
49	16.89		5.13				8.0		50	16.89		5.13			
65	16.90		5.15				8.4		75	16.90		5.17			
85	16.90		5.19				6.9								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 42

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 34.0 N	113 40.5 W	03/17/73	1811 GMT	97 M	150	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.43		5.76	0.19	11.				0	17.43		5.76			
9	17.15		5.80	0.14	7.				10	17.14		5.79			
19	17.09		5.65	0.15	7.				20	17.09		5.63			
29	17.06		5.37	0.15	9.				30	17.05		5.34			
50	16.85		4.74	0.20	13.				50	16.85		4.74			
71	16.71		4.31	0.21	17.				75	16.68		4.35			
91	16.56		4.49	0.22	19.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 41

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 28.5 N	113 50.0 W	03/17/73	2038 GMT	187 M	350	05 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.98		5.44	1.53	21.				0	16.98		5.44			
10	16.74		5.44	1.41	17.				10	16.74		5.44			
30	16.43		5.14	1.61	21.				20	16.56		5.36			
41	16.32		4.64	1.76	26.				30	16.43		5.14			
56	16.19		4.46	1.76	29.				50	16.23		4.53			
72	16.16		4.43	1.69	27.				75	16.13		4.41			
87	16.02		4.33	1.79	31.				100	15.96		4.28			
107	15.91		4.23	1.80	30.				125	15.61		3.80			
137	15.33		3.42	2.10	42.				150	14.97		3.00			
153	14.90		2.91	2.08	44.										
173	14.73		2.65	2.39	53.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 23.5 N	113 58.9 W	03/17/73	2331 GMT	297 M	130	06 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.25		5.92				9.0		0	17.25		5.92			
9	16.36		5.15				9.2		10	16.36		5.14			
29	16.34		5.03				10.8		20	16.35		5.08			
44	16.34		4.94				10.7		30	16.34		5.02			
55	16.31		4.92				12.8		50	16.32		4.93			
85	16.25		4.68				11.4		75	16.27		4.80			
105	16.05		4.26				12.0		100	16.11		4.37			
129	15.78		3.93				11.4		125	15.82		3.98			
149	15.62		3.72				13.0		150	15.60		3.69			
185	14.78		2.78				21.6		200	14.64		2.61			
215	14.55		2.49				15.0		250	14.15		2.10			
255	14.09		2.05				20.1								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 39

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 18.5 N	114 7.9 W	03/18/73	0207 GMT	297 M	140	10 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.27		6.32	0.26	23.				0	17.27		6.32			
9	16.35		5.03	0.24	23.				10	16.35		5.02			
30	16.26		4.84	0.24	24.				20	16.30		4.93			
45	16.27		4.79	0.25	26.				30	16.26		4.84			
55	16.25		4.78	0.26	27.				50	16.26		4.78			
70	16.26		4.78	0.23	24.				75	16.26		4.77			
85	16.25		4.76	0.23	24.				100	16.16		4.49			
105	16.11		4.35	0.25	26.				125	15.70		3.62			
130	15.60		3.45	0.32	40.				150	15.43		3.29			
150	15.43		3.29	0.27	35.				200	14.83		2.84			
186	14.96		2.98	0.34	47.				250	14.44		2.44			
217	14.70		2.67	0.38	52.										
258	14.38		2.38	0.37	57.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 38

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 13.2 N	114 16.5 W	03/18/73	0431 GMT	168 M	220	17 KT	2	180 01 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.01		5.50				9.5		0	17.01		5.50			
9	16.97		5.53				7.2		10	16.95		5.52			
24	16.61		5.38				7.7		20	16.71		5.43			
34	16.58		5.29				9.8		30	16.59		5.33			
49	16.52		5.14				7.3		50	16.52		5.13			
64	16.47		4.97				6.0		75	16.37		4.75			
79	16.34		4.67				8.2		100	16.32		4.54			
99	16.32		4.54				10.1		125	16.26		4.44			
124	16.27		4.45				9.2		150	16.12		4.28			
151	16.11		4.27				6.5								
162	15.71		3.68				14.7								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 7.6 N	114 26.0 W	03/18/73	0655 GMT	73 M	220	23 KT	1	220 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.59		5.42		17.				0	16.59		5.42			
10	16.58		5.41		16.				10	16.58		5.41			
20	16.49		5.32		16.				20	16.49		5.32			
30	16.41		5.08		20.				30	16.41		5.08			
40	16.40		5.07		17.				50	16.41		5.07			
61	16.42		5.06		18.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 47

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 50.7 N	114 13.7 W	03/18/73	1013 GMT	103 M	260	26 KT	1	260 04 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.90		5.42				11.0		0	16.90		5.42			
10	16.86		5.41				12.5		10	16.86		5.41			
20	16.73		5.32				12.5		20	16.73		5.32			
30	16.52						11.6		30	16.52		5.36			
45	16.42		5.42				11.2		50	16.42		5.29			
65	16.41		4.79				12.8		75	16.29		4.51			
90	16.12		4.08				14.8								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 55.8 N	114 5.8 W	03/18/73	1235 GMT	390 M	230	30 KT	0	250 04 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.45		5.18	0.24	23.				0	16.45		5.18			
9	16.46		5.19	0.22	21.				10	16.45		5.18			
28	16.30		4.95	0.23	22.				20	16.37		5.06			
43	16.28		4.88	0.24	23.				30	16.30		4.94			
58	16.27		4.89	0.23	22.				50	16.27		4.88			
74	16.28		4.90	0.23	22.				75	16.28		4.90			
89	16.23		4.85	0.22	21.				100	16.18		4.75			
110	16.08		4.55	0.25	26.				125	15.66		3.81			
136	15.35		3.29	0.33	41.				150	15.32		3.34			
167	15.28		3.40	0.30	45.				200	14.19		2.45			
204	14.05		2.32	0.37	50.				250	13.65		2.02			
240	13.68		2.05	0.37	52.				300	13.50		1.94			
279	13.59		1.98	0.40	57.										
322	13.35		1.88	0.41	59.										
361	12.82		1.67	0.38	52.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 49

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 59.6 N	113 58.2 W	03/18/73	1529 GMT	455 M	230	18 KT	0	200 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	16.46		5.26						10	16.48		5.30			
11	16.48		5.30						20	16.46		5.24			
32	16.40		5.08						30	16.41		5.11			
48	16.29		4.86						50	16.29		4.86			
58	16.28		4.87						75	16.29		4.89			
74	16.29		4.88						100	16.24		4.88			
89	16.27		4.96						125	15.85		3.98			
104	16.23		4.81						150	15.56		3.55			
129	15.77		3.81						200	14.95		2.88			
149	15.57		3.56						250	14.20		2.23			
179	15.26		3.30						300	13.32		1.75			
208	14.82		2.71						400	12.64		1.53			
242	14.35		2.33												
297	13.35		1.75												
352	12.95		1.68												
412	12.56		1.49												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 5.0 N	113 50.0 W	03/18/73	1805 GMT	372 M	340	06 KT	2	250 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.33		5.03	0.20	17.				0	16.33		5.03			
10	16.21		5.03	0.27	23.				10	16.21		5.03			
30	16.17		4.95	0.20	17.				20	16.19		5.00			
45	16.18		4.88	0.26	23.				30	16.17		4.95			
60	16.19		4.86	0.19	25.				50	16.18		4.87			
75	16.20		4.85	0.22	19.				75	16.20		4.85			
90	16.19		4.83	0.19	14.				100	16.19		4.83			
111	16.18		4.83	0.19	17.				125	16.12		4.72			
136	16.07		4.51	0.22	21.				150	15.64		3.81			
166	15.13		3.02	0.27	32.				200	14.90		2.94			
201	14.90		2.94	0.29	37.				250	14.26		2.30			
236	14.52		2.51	0.27	32.				300	13.42		1.90			
275	13.78		1.97	0.38	52.										
317	13.25		1.86	0.38	54.										
358	13.14		1.80	0.39	52.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 11.5 N	113 38.1 W	03/18/73	2105 GMT	149 M	010	10 KT	0	010 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.62		5.32				13.4		0	16.62		5.32			
10	16.50		5.44				11.8		10	16.50		5.44			
20	16.39		5.37				7.4		20	16.39		5.37			
35	16.28		5.03				15.1		30	16.31		5.15			
51	16.27		4.89				15.0		50	16.27		4.90			
67	16.17		4.53				16.0		75	16.08		4.32			
86	15.98		4.11				17.5		100	16.01		4.24			
109	16.05		4.36				16.0		125	15.98		4.25			
134	15.94		4.19				16.1								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 52

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 19.0 N	113 26.0 W	03/18/73	2359 GMT	147 M	360	10 KT	0	350 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.98		5.37A	1.50	17.				0	16.98		5.37			
10	16.88		5.39	1.52	19.				10	16.88		5.39			
40	16.56		5.00	1.43	17.				20	16.76		5.28			
81	16.55		4.94	1.58	20.				30	16.65		5.15			
101	16.46		4.64	1.53	21.				50	16.56		4.99			
119	16.29		4.06	1.90	36.				75	16.55		4.96			
129	16.18		4.18	1.56	29.				100	16.47		4.66			
137	16.11		3.99	1.79	31.				125	16.22		4.14			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 24.5 N	113 16.0 W	03/19/73	0252 GMT	140 M	340	09 KT	0	330 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.33		6.00				8.2		0	17.33		6.00			
10	17.30		6.11				7.5		10	17.30		6.11			
30	17.20		5.71				7.7		20	17.25		5.95			
40	17.18		5.59				8.4		30	17.20		5.71			
56	17.06		5.08				10.7		50	17.12		5.29			
71	16.78		4.73				12.0		75	16.71		4.56			
86	16.55		4.07				11.5		100	16.36		3.58			
106	16.30		3.43				12.1		125	16.20		3.32			
126	16.20		3.31				20.6								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 54

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 30.3 N	113 5.5 W	03/19/73	0506 GMT	30 M	050	04 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.46	35.389	5.83	0.17	14.			228.2							
9	17.46	35.388	5.87	0.17	14.			228.3							
24	17.46	35.382	5.82	0.17	14.			228.7							

RV ALEXANDER AGASSIZ GULF CRUISE 7303 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 36.5 N	113 57.0 W	03/20/73	0528 GMT	705 M	270	09 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.47		5.61	0.18	11.				0	17.47		5.61			
9	17.14		5.69	0.22	18.				10	17.11		5.68			
28	16.74		5.45	0.17	12.				20	16.87		5.59			
47	16.61		5.20	0.21	17.				30	16.72		5.43			
77	16.04		4.10	0.22	18.				50	16.56		5.09			
116	15.63		3.83	0.23	23.				75	16.08		4.17			
152	15.40		3.59	0.25	23.				100	15.77		3.94			
201	14.59		2.75	0.26	32.				125	15.58		3.78			
250	13.96		2.25	0.30	36.				150	15.41		3.61			
303	13.72		2.03	0.34	47.				200	14.61		2.77			
402	12.51		1.45	0.33	38.				250	13.96		2.25			
507	12.15		1.41	0.32	42.				300	13.73		2.04			
658	11.94		1.40	0.29	31.				400	12.54		1.46			
									500	12.16		1.41			
									600	12.02		1.40			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 57

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 40.2 N	113 51.3 W	03/20/73	0823 GMT	687 M	250	06 KT	0	290 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.54		5.35				14.8		0	16.54		5.35			
10	16.40		5.28				15.9		10	16.40		5.28			
30	15.85		4.49				17.2		20	16.12		4.90			
50	15.75		4.31				17.8		30	15.85		4.49			
80	15.45		3.81				19.8		50	15.75		4.31			
119	15.57		3.74				20.0		75	15.49		3.89			
154	15.21		3.51				20.0		100	15.51		3.77			
204	14.16		2.50				25.0		125	15.53		3.72			
254	13.77		2.16				26.1		150	15.27		3.55			
309	13.62		2.04				26.3		200	14.24		2.58			
408	12.67		1.46				26.3		250	13.78		2.17			
512	12.22		1.36				23.3		300	13.64		2.06			
660	11.81		1.37				25.4		400	12.75		1.51			
									500	12.25		1.37			
									600	11.98		1.37			

A) TWO SETS OF O2 SAMPLES WERE DRAWN AND TITRATED BY DIFFERENT OPERATORS. THE ALTERNATE VALUES ARE 5.41, 5.39, 5.03, 5.02, 4.81, 4.67, 4.03, AND 3.99.

RV ALEXANDER AGASSIZ GULF CRUISE 7303 58

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 44.0 N	113 45.0 W	03/20/73	1242 GMT	548 M	190	10 KT	0	210 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.12		4.88	0.26	25.			
9	16.11		4.85	0.23	24.			
30	15.73		4.39	0.24	25.			
50	15.63		4.22	0.26	28.			
80	14.81		3.22	0.31	37.			
110	14.81		3.20	0.29	37.			
155	14.26		2.62	0.30	39.			
205	13.87		2.30	0.33	46.			
255	13.53		1.98	0.40	57.			
309	13.49			0.40	58.			
409	12.99		1.75	0.40	57.			
514	12.33		1.71	0.42	61.			

Z	T	S	O2	SIGT	DT	DD
0	16.12		4.88			
10	16.09		4.83			
20	15.92		4.63			
30	15.73		4.39			
50	15.63		4.22			
75	14.95		3.38			
100	14.81		3.21			
125	14.65		3.03			
150	14.33		2.69			
200	13.90		2.32			
250	13.56		2.01			
300	13.50		1.91			
400	13.05		1.76			
500	12.42		1.72			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 59

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 47.4 N	113 38.7 W	03/20/73	1511 GMT	316 M	220	09 KT	1	280 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.23		4.90					
10	16.24		4.95					
30	16.25		4.92					
45	16.21		4.79					
56	16.15		4.68					
71	16.18		4.63					
86	16.17		4.65					
106	15.84		3.96					
131	14.72		3.25					
152	14.47		2.91					
187	14.03		2.63					
258	13.46		2.10					

Z	T	S	O2	SIGT	DT	DD
0	16.23		4.90			
10	16.24		4.95			
20	16.24		4.93			
30	16.25		4.92			
50	16.18		4.74			
75	16.18		4.64			
100	15.98		4.20			
125	14.98		3.40			
150	14.48		2.93			
200	13.93		2.53			
250	13.52		2.16			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 53.5 N	113 29.5 W	03/20/73	1730 GMT	187 M	260	18 KT	1	270 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.02		5.41	1.17	13.			
10	16.95		5.41	1.17	13.			
29	16.82		5.25	1.44	17.			
43	16.68		4.99	1.20	15.			
58	16.51		4.71	1.26	19.			
72	16.38		4.16	1.55	26.			
86	16.06		3.42	1.56	28.			
100	16.01		3.56	1.97	39.			
118	15.90		3.83	1.43	26.			
143	15.11		3.24	1.65	32.			
167	14.54		2.86	1.85	35.			

Z	T	S	O2	SIGT	DT	DD
0	17.02		5.41			
10	16.95		5.41			
20	16.89		5.35			
30	16.81		5.23			
50	16.60		4.88			
75	16.31		3.97			
100	16.01		3.56			
125	15.71		3.71			
150	14.94		3.13			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 61

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 1.0 N	113 16.5 W	03/20/73	2141 GMT	150 M	220	10 KT	0	240 05 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.02	35.336	5.55				10.2	222.0
10	16.86	35.325	5.47				10.9	219.2
30	16.80	35.318	5.35				13.2	218.4
40	16.75	35.312	5.22				11.2	217.7
56	16.63	35.323	4.97				15.6	214.2
71	16.53	35.327	4.70				11.8	211.7
86	16.37	35.328	4.45				13.8	208.0
105	16.24	35.320	4.46				15.3	205.8
125	15.67	35.395	3.77				19.6	187.9
140	15.69	35.404	3.81				19.4	187.7

Z	T	S	O2	SIGT	DT	DD
0	17.02	35.336	5.55	25.785	222.0	0.000
10	16.86	35.325	5.47	25.815	219.2	0.022
20	16.83	35.321	5.42	25.819	218.8	0.044
30	16.80	35.318	5.35	25.823	218.4	0.066
50	16.68	35.317	5.07	25.852	215.6	0.110
75	16.49	35.327	4.62	25.904	210.7	0.163
100	16.29	35.327	4.46	25.950	206.4	0.216
125	15.67	35.395	3.77	26.144	187.9	0.266

RV ALEXANDER AGASSIZ GULF CRUISE 7303 62

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 4.1 N	113 9.7 W	03/20/73	2351 GMT	112 M	170	10 KT	1	230 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.77		5.94	0.20	13.			
10	17.38		6.00	0.21	13.			
25	17.18		5.45	0.21	13.			
35	17.12		5.28	0.20	16.			
45	17.05		4.90	0.22	16.			
60	16.96		4.80	0.25	21.			
75	16.76		4.22	0.24	25.			
99	16.09		3.16	0.29	40.			

Z	T	S	O2	SIGT	DT	DD
0	17.77		5.94			
10	17.38		6.00			
20	17.21		5.66			
30	17.15		5.37			
50	17.03		4.86			
75	16.76		4.22			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 63

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 9.2 N	113 1.1 W	03/21/73	0155 GMT	112 M	190	14 KT	1	190 05 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.54		6.01	1.45	15.				0	17.54		6.01			
9	17.54		6.06	1.02	11.				10	17.53		6.08			
19	17.44		6.16	1.21	13.				20	17.44		6.15			
29	17.39		5.92	0.99	9.				30	17.37		5.89			
50	17.02		5.17	1.69	20.				50	17.02		5.17			
76	16.82		4.45	1.55	22.				75	16.83		4.48			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 64

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 13.3 N	112 55.7 W	03/21/73	0354 GMT	75 M	190	11 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.79		6.18				2.4		0	17.79		6.18			
10	17.80		6.19				3.2		10	17.80		6.19			
20	17.47		5.72				0.6		20	17.47		5.72			
30	17.38		5.34				5.0		30	17.38		5.34			
51	17.26		4.89				9.5		50	17.27		4.91			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 74

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 53.5 N	112 47.5 W	03/21/73	0649 GMT	75 M	230	12 KT	1	270 05 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.58		5.96	1.11	15.				0	17.58		5.96			
10	17.53		6.04	0.98	10.				10	17.53		6.04			
20	17.38		5.36	1.19	15.				20	17.38		5.36			
30	17.37		5.34	1.18	16.				30	17.37		5.34			
51	17.04		4.10	1.37	20.				50	17.06		4.17			
71	16.92		3.81	1.85	30.										

RV ALEXANDER AGASSIZ GULF CRUISE 7303 72

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 49.3 N	112 55.7 W	03/21/73	0847 GMT	93 M	260	14 KT	1	260 05 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.48		5.76				6.3		0	17.48		5.76			
9	17.48		5.76				4.8		10	17.48		5.76			
19	17.48		5.76				5.9		20	17.48		5.75			
29	17.41		5.66				6.8		30	17.39		5.61			
50	17.00		4.40				14.4		50	17.00		4.40			
71	16.65		3.84				16.9		75	16.46		3.65			
87	15.90		3.08				12.0								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 71

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 43.5 N	113 3.5 W	03/21/73	1055 GMT	168 M	270	16 KT	1	270 05 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.28		5.61A	0.22	15.				0	17.28		5.61			
10	17.28		5.61	0.22	15.				10	17.28		5.61			
20	17.27		5.62	0.23	15.				20	17.27		5.62			
52	17.12		5.28	0.24	18.				30	17.22		5.51			
82	16.57		4.12	0.30	31.				50	17.13		5.30			
112	15.78		3.16	0.35	46.				75	16.73		4.42			
137	14.55		2.39	0.39	58.				100	16.16		3.53			
160	13.41		1.98	0.41	59.				125	15.17		2.74			
									150	13.91		2.16			

A) TWO SETS OF O2 SAMPLES WERE DRAWN AND TITRATED BY DIFFERENT OPERATORS. THE ALTERNATE VALUES ARE 5.61, 5.63, 5.64, 5.30, 4.13, 3.14, 2.38, AND 2.01.

RV ALEXANDER AGASSIZ GULF CRUISE 7303 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 40.4 N	113 10.0 W	03/21/73	1300 GMT	257 M	250	20 KT	1	260 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.53		5.51						0	16.53		5.51			
10	16.55		5.53						10	16.55		5.53			
30	16.50		5.35						20	16.52		5.44			
45	16.01		4.50						30	16.50		5.35			
55	15.81		4.28						50	15.90		4.36			
71	15.75		4.19						75	15.69		4.15			
86	15.54		4.04						100	15.54		4.05			
106	15.54		4.06						125	15.11		3.50			
131	14.96		3.31						150	14.83		3.13			
152	14.81		3.12						200	12.99		2.01			
182	13.75		2.44												
207	12.69		1.84												

RV ALEXANDER AGASSIZ GULF CRUISE 7303 69

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 35.1 N	113 18.2 W	03/21/73	1534 GMT	347 M	280	23 KT	1	270 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	16.12		4.94		27.				0	16.12		4.94			
10	16.11		4.94		27.				10	16.11		4.94			
30	16.04		4.78		25.				20	16.07		4.86			
45	15.62		4.25		28.				30	16.04		4.78			
61	15.49		4.06		32.				50	15.55		4.16			
76	15.50		4.02		37.				75	15.50		4.02			
91	15.21		3.74		33.				100	15.17		3.68			
111	15.12		3.64		31.				125	15.09		3.57			
136	15.06		3.51		40.				150	15.00		3.47			
167	14.88		3.39		42.				200	14.40		2.93			
202	14.36		2.90		47.				250	12.44		2.12			
314	9.89		1.07		72.				300	10.45		1.30			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 68

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 31.5 N	113 25.0 W	03/21/73	1724 GMT	80 M	300	16 KT	1	330 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
1	15.88		4.66				10.4		10	15.83		4.59			
11	15.83		4.58				16.0		20	15.65		4.30			
20	15.65		4.30				10.0		30	15.41		3.93			
30	15.41		3.93				10.1		50	15.31		3.80			
49	15.34		3.83				16.5								
71	14.71		3.20				14.0								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 109

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 28.5 N	113 23.5 W	03/21/73	1846 GMT	62 M	330	14 KT	1	340 04 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	15.71		4.28				14.8		0	15.71		4.28			
10	15.65		4.23				13.1		10	15.65		4.23			
20	15.60		4.17				12.0		20	15.60		4.17			
30	15.58		4.13				9.2		30	15.58		4.13			
40	15.56		4.11				15.7		50	15.54		4.08			
51	15.54		4.08				10.7								

RV ALEXANDER AGASSIZ GULF CRUISE 7303 78

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 17.0 N	113 8.8 W	03/21/73	2149 GMT	371 M	360	14 KT	1	360 04 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
0	17.03		5.50				11.0		0	17.03		5.50			
10	16.68		5.37				12.7		10	16.68		5.37			
100	15.29		3.59				13.5		20	16.42		5.16			
119	15.14		3.40				18.6		30	16.19		4.96			
138	15.08		3.35				16.6		50	15.80		4.56			
158	14.73		3.03				22.3		75	15.46		4.07			
178	14.45		2.84				19.0		100	15.29		3.59			
198	14.39		2.79				23.1		125	15.13		3.39			
228	13.45		2.41				22.2		150	14.88		3.17			
268	11.82		1.76				22.4		200	14.35		2.77			
308	11.07		1.47				23.4		250	12.53		2.04			
358	10.32		1.20				23.8		300	11.18		1.51			

RV ALEXANDER AGASSIZ GULF CRUISE 7303 79

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 19.5 N	113 4.3 W	03/22/73	0013 GMT	427 M	040	03 KT	1	360 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.24		5.29	1.43	18.			
10	16.96		5.27	1.60	20.			
39	16.82		5.32	1.46	18.			
69	16.55		4.60	1.74	25.			
99	16.18		4.58	1.90	30.			
149	14.91		3.22	2.27	45.			
174	14.14		2.77	2.48	50.			
199	13.47		2.41	2.46	52.			
250	12.20		1.82	2.74	60.			
300	11.24		1.44	2.71	62.			
351	10.54		1.32	2.47	56.			
401	9.71		1.13	3.19	71.			

Z	T	S	O2
0	17.24		5.29
10	16.96		5.27
20	16.91		5.29
30	16.86		5.30
50	16.73		5.06
75	16.49		4.60
100	16.16		4.56
125	15.59		3.94
150	14.88		3.20
200	13.44		2.40
250	12.20		1.82
300	11.24		1.44
400	9.73		1.13

SIGT	DT	DD

RV ALEXANDER AGASSIZ GULF CRUISE 7303 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 24.1 N	112 56.5 W	03/22/73	0254 GMT	312 M	360	11 KT	0	290 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.05		5.17				12.2	
10	16.67		5.31				10.6	
31	16.56		5.14				9.6	
46	16.58		4.95				11.7	
56	16.48		4.90				10.3	
71	16.50		4.81				8.4	
87	16.31		4.52				12.8	
107	16.01		4.02				12.2	
132	15.50		3.28				21.3	
152	14.47		2.69				19.6	
188	13.55		2.24				27.4	
258	11.19		1.32				31.4	

Z	T	S	O2
0	17.05		5.17
10	16.67		5.31
20	16.62		5.23
30	16.57		5.15
50	16.54		4.93
75	16.46		4.75
100	16.12		4.21
125	15.69		3.49
150	14.58		2.74
200	13.15		2.08
250	11.46		1.43

SIGT	DT	DD

RV ALEXANDER AGASSIZ GULF CRUISE 7303 81

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 28.2 N	112 50.0 W	03/22/73	0503 GMT	138 M	360	05 KT	0	01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.15		5.63	0.15	9.			
10	17.15		5.63	0.18	12.			
30	16.99		5.20	0.21	13.			
55	16.83		4.79	0.26	24.			
75	16.59		4.76	0.22	21.			
95	16.45		4.33	0.28	31.			
111	15.67		3.26	0.34	44.			
121	15.28		3.00	0.33	44.			
131	14.95		2.85	0.36	50.			

Z	T	S	O2
0	17.15		5.63
10	17.15		5.63
20	17.08		5.45
30	16.99		5.20
50	16.87		4.85
75	16.59		4.76
100	16.23		3.99
125	15.15		2.94

SIGT	DT	DD

RV ALEXANDER AGASSIZ GULF CRUISE 7303 82

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 33.2 N	112 44.0 W	03/22/73	0614 GMT	86 M	320	09 KT	0	320 02 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.98		5.48				8.2	
9	16.99		5.49				8.0	
24	16.95		5.39				6.8	
39	16.91		5.31				8.2	
55	16.87		5.19				6.6	
65	16.71		4.92				7.7	
80	16.21		4.31				9.4	

Z	T	S	O2
0	16.98		5.48
10	16.99		5.49
20	16.96		5.42
30	16.93		5.36
50	16.88		5.25
75	16.38		4.51

SIGT	DT	DD

RV ALEXANDER AGASSIZ GULF CRUISE 7303 83

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 37.0 N	112 35.0 W	03/22/73	0927 GMT	73 M	040	05 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.34		5.62	0.19	15.			
10	17.36		5.60	0.19	14.			
20	17.34		5.56	0.24	19.			
30	17.12		4.69	0.21	17.			
51	16.69		3.77	0.26	29.			
71	16.48		3.49	0.29	33.			

Z	T	S	O2
0	17.34		5.62
10	17.36		5.60
20	17.34		5.56
30	17.12		4.69
50	16.71		3.79

SIGT	DT	DD

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 91

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 15.0 N	112 32.0 W	03/22/73	1234 GMT	93 M	320	02 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.46		5.68				3.8	
10	17.46		5.69				3.1	
20	17.45		5.69				3.3	
30	17.36		5.37				7.0	
51	16.89		4.19				15.1	
76	15.77		3.32				19.5	

Z	T	S	O2	SIGT	DT	DD
0	17.46		5.68			
10	17.46		5.69			
20	17.45		5.69			
30	17.36		5.37			
50	16.92		4.25			
75	15.81		3.35			

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 12.5 N	112 37.5 W	03/22/73	1417 GMT	205 M	190	03 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.37		5.84	0.20	19.			
9	17.38		5.86	0.21	19.			
28	17.06		5.40	0.22	20.			
38	16.82		4.89	0.25	23.			
54	16.35		4.19	0.30	30.			
69	16.15		3.96	0.30	32.			
84	15.71		3.43	0.33	38.			
105	14.97		2.92	0.35	45.			
130	14.59		2.65	0.34	44.			
155	13.88		2.44	0.34	44.			

Z	T	S	O2	SIGT	DT	DD
0	17.37		5.84			
10	17.37		5.85			
20	17.23		5.68			
30	17.02		5.30			
50	16.46		4.34			
75	15.99		3.76			
100	15.14		3.02			
125	14.66		2.69			
150	14.02		2.48			

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 89

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 7.5 N	112 47.5 W	03/22/73	1641 GMT	362 M	240	06 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.40		5.79				7.9	
9	17.24						7.9	
30	16.99						8.2	
61	16.76		4.74				10.1	
91	16.18		4.57				12.7	
111	16.07		3.76				11.0	
166	14.45		2.67				11.4	
200	13.07		2.01				14.6	
235	12.23		1.75				18.6	
274	11.40		1.82				21.7	
319	10.59		1.58				16.2	
359	10.31		1.54				15.7	

Z	T	S	O2	SIGT	DT	DD
0	17.40		5.79			
10	17.23		5.62			
20	17.09		5.45			
30	16.99		5.27			
50	16.85		4.93			
75	16.48		4.66			
100	16.13		4.23			
125	15.79		3.40			
150	15.06		2.90			
200	13.07		2.01			
250	11.90		1.77			
300	10.89		1.69			

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 88

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 3.2 N	112 53.5 W	03/22/73	1853 GMT	403 M	240	09 KT	1	220 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.30		5.69	0.18	13.			
9	17.14		5.76	0.20	14.			
41	16.59		5.11	0.19	13.			
83	15.88		3.80	0.23	24.			
113	15.43		3.69	0.24	25.			
149	15.22		3.52	0.23	23.			
179	15.06		3.34	0.28	32.			
189	14.82		3.16	0.32	37.			
199	14.72		3.01	0.27	32.			
209	14.50		2.79	0.29	38.			
218	13.44		2.28	0.37	49.			
238	12.68		1.88	0.35	48.			
272	11.86		1.78	0.39	55.			
297	11.16		1.60	0.39	55.			
350	10.03		1.26	0.31	39.			
380	9.47		1.03	0.35	54.			

Z	T	S	O2	SIGT	DT	DD
0	17.30		5.69			
10	17.12		5.75			
20	16.95		5.63			
30	16.78		5.43			
50	16.43		4.79			
75	16.01		4.02			
100	15.61		3.74			
125	15.34		3.64			
150	15.21		3.52			
200	14.70		3.00			
250	12.37		1.84			
300	11.09		1.58			

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — 87

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 58.8 N	113 1.1 W	03/22/73	2119 GMT	279 M	230	07 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	17.33		5.39				9.2	
9	17.15		5.36				7.9	
34	16.48		4.95				11.9	
49	16.42		4.79				11.3	
80	16.42		4.37				13.8	
110	16.33		4.73				15.4	
161	15.53		3.95				18.4	
211	15.17		3.60				14.2	
230	14.65		3.31				21.5	
240	14.26		3.08				22.5	
250	13.67		2.78				24.4	
261	13.41		2.67				21.1	

Z	T	S	O2	SIGT	DT	DD
0	17.33		5.39			
10	17.12		5.35			
20	16.83		5.20			
30	16.57		5.03			
50	16.42		4.77			
75	16.42		4.41			
100	16.36		4.60			
125	16.11		4.57			
150	15.72		4.17			
200	15.29		3.69			
250	13.67		2.78			

GULF CRUISE 7303

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 43.1 N	113 5.3 W	03/23/73	0235 0358 GMT	1518 M	120	05 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT
0	16.60		5.04					
9	16.57		5.05					
19	16.50		4.99					
49	16.40		4.79					
75	14.86		3.15					
89A	14.50		2.84					
109A	14.40		2.97					
127A	14.25		2.87					
153A	14.19		2.83					
178A	13.73		2.32					
227A	13.54		2.20					
327A	12.78		1.74					
426A	12.47		1.55					
526A	12.09		1.44					
775A	11.86		1.58					
1024A	11.46		1.51					
1222A	11.38		1.50					
1419A	11.36		1.46					
1443A	11.34		1.47					
1467A	11.35		1.54					
1477A	11.35		1.49					
1487A			1.48					
1497A			1.48					
1507A	11.36		1.47					
1516A	11.35		1.46					

Z	T	S	O2	SIGT	DT	DD
0	16.60		5.04			
10	16.56		5.05			
20	16.50		4.98			
30	16.46		4.92			
50	16.34		4.73			
75	14.86		3.15			
100	14.44		2.89			
125	14.27		2.88			
150	14.20		2.83			
200	13.64		2.27			
250	13.37		2.10			
300	12.99		1.87			
400	12.53		1.58			
500	12.18		1.46			
600	11.98		1.46			
700	11.88		1.52			
800	11.82		1.58			
1000	11.49		1.52			
1200	11.38		1.50			
1500	11.36		1.48			

STD101

GULF CRUISE 7303

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 51.0 N	113 30.0 W	03/08/73	1855 GMT	817 M	330	12 KT	1	310 03 06

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	19.20	34.47		24.585	336.2	0.000
10	19.18	34.47		24.590	335.7	0.034
20	19.16	34.47		24.595	335.2	0.067
30	19.16	34.47		24.595	335.2	0.101
50	19.15	34.48		24.606	334.2	0.168
75	16.72	34.12		24.925	303.8	0.248
100	12.79	33.82		25.541	245.2	0.318
125	11.75	33.98		25.865	214.4	0.376
150	11.24	34.14		26.083	193.7	0.427
200	11.04	34.54		26.430	160.8	0.518
250	10.48	34.57		26.553	149.1	0.598
300	9.62	34.51		26.654	139.5	0.673
400	7.93	34.42		26.850	120.9	0.810
500	6.55	34.42		27.045	102.4	0.929
600	5.49	34.42		27.180	89.6	1.032

STD102

GULF CRUISE 7303

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 1.6 N	110 45.0 W	03/10/73	1740 GMT	233 M	330	07 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	21.10	34.84		24.365	357.2	0.000
10	20.98	34.84		24.397	354.1	0.036
20	20.93	34.86		24.426	351.3	0.071
30	19.92	34.89		24.718	323.5	0.105
50	18.09	34.95		25.230	274.8	0.165
75	16.50	34.95		25.612	238.5	0.229
100	15.37	34.96		25.877	213.2	0.287
125	14.33	34.92		26.074	194.6	0.338
150	13.95	34.91		26.146	187.7	0.387
200	12.99	34.85		26.297	173.3	0.480

STD103

GULF CRUISE 7303

RV ALEXANDER AGASSIZ

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
25 5.6 N	110 47.0 W	03/10/73	1936 GMT	576 M	310	04 KT	2	350 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	21.28	34.89		24.354	358.2	0.000
10	21.00	34.88		24.422	351.7	0.036
20	20.93	34.89		24.449	349.1	0.071
30	20.31	34.89		24.615	333.3	0.105
50	18.20	34.97		25.218	275.9	0.166
75	16.87	34.95		25.525	246.7	0.232
100	15.35	34.94		25.867	214.3	0.290
125	14.70	34.95		26.017	200.0	0.343
150	13.92	34.92		26.160	186.3	0.392
200	12.83	34.87		26.345	168.8	0.483
250	11.76	34.80		26.498	154.3	0.567
300	10.72	34.73		26.635	141.3	0.644
400	8.30	34.62		26.951	111.4	0.777
500	7.07	34.58		27.099	97.2	0.889

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RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — STD 84

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 51.4 N	113 15.5 W	03/11/73	2150 GMT	233 M	120	15 KT	1	120 01 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.03	35.35		25.793	221.2	0.000
									10	17.04	35.36		25.798	220.7	0.022
									20	16.07	35.21		25.911	210.1	0.044
									30	15.96	35.22		25.944	206.9	0.065
									50	15.79	35.20		25.967	204.7	0.106
									75	15.29	35.16		26.049	196.9	0.157
									100	15.13	35.17		26.092	192.8	0.206
									125	14.81	35.13		26.132	189.1	0.255
									150	14.53	35.09		26.162	186.2	0.303

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — STD 85

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 52.7 N	113 11.5 W	03/12/73	0025 GMT	1191 M	130	10 KT	1	120 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.59	35.21		25.551	244.2	0.000
									10	17.02	35.17		25.658	234.1	0.024
									20	16.85	35.15		25.683	231.7	0.047
									30	16.64	35.20		25.771	223.4	0.070
									50	16.50	35.23		25.826	218.1	0.115
									75	15.83	35.19		25.950	206.3	0.168
									100	15.36	35.16		26.033	198.4	0.219
									125	15.10	35.16		26.091	192.9	0.269
									150	14.72	35.11		26.136	188.7	0.318
									200	13.98	35.06		26.256	177.3	0.412
									250	13.39	35.01		26.340	169.3	0.502
									300	13.27	35.00		26.357	167.7	0.590
									400	12.69	34.96		26.442	159.6	0.763
									500	12.32	34.92		26.484	155.6	0.932
									600	12.18	34.90		26.496	154.5	1.101
									700	11.98	34.89		26.526	151.6	1.270
									800	11.85	34.90		26.559	148.5	1.439
									1000	11.70	34.88		26.572	147.3	1.778

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — STD 77

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 5.0 N	113 28.5 W	03/12/73	0740 GMT	371 M	270	16 KT	5	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.71	35.22		25.770	223.5	0.000
									10	16.70	35.22		25.772	223.2	0.022
									20	16.64	35.21		25.778	222.6	0.045
									30	15.96	35.17		25.905	210.6	0.066
									50	15.61	35.16		25.977	203.7	0.108
									75	15.45	35.14		25.998	201.8	0.159
									100	14.93	35.12		26.098	192.3	0.209
									125	14.50	35.08		26.160	186.3	0.257
									150	14.39	35.09		26.192	183.4	0.305
									200	14.10	35.07		26.238	179.0	0.398
									250	13.82	35.05		26.282	174.8	0.489
									300	13.51	35.03		26.331	170.2	0.579

RV ALEXANDER AGASSIZ — GULF CRUISE 7303 — STD 76

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 7.0 N	113 25.0 W	03/12/73	1032 GMT	635 M	270	19 KT	6	270 01 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.03	35.22		25.694	230.7	0.000
									10	17.00	35.22		25.701	230.0	0.023
									20	16.99	35.22		25.703	229.8	0.046
									30	16.81	35.22		25.746	225.7	0.069
									50	16.35	35.20		25.838	216.9	0.113
									75	15.98	35.19		25.916	209.6	0.167
									100	15.97	35.22		25.941	207.1	0.220
									125	15.43	35.17		26.025	199.2	0.272
									150	15.00	35.13		26.090	193.0	0.322
									200	14.27	35.08		26.210	181.7	0.418
									250	13.57	35.01		26.303	172.8	0.510
									300	13.29	35.00		26.353	168.1	0.599
									400	12.77	34.95		26.418	161.8	0.773
									500	12.22	34.91		26.496	154.5	0.943

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 75

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 9.3 N	113 22.0 W	03/12/73	1337 GMT	613 M	300	11 KT	1	310 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.47	35.20		25.811	219.6	0.000
									10	16.47	35.20		25.811	219.6	0.022
									20	16.47	35.20		25.811	219.6	0.044
									30	16.33	35.19		25.835	217.2	0.066
									50	16.17	35.19		25.872	213.7	0.109
									75	16.04	35.19		25.902	210.9	0.163
									100	15.91	35.18		25.924	208.8	0.216
									125	15.54	35.17		26.001	201.5	0.268
									150	15.24	35.14		26.045	197.3	0.319
									200	14.64	35.14		26.176	184.8	0.417
									250	13.32	35.01		26.354	168.0	0.509
									300	13.20	34.99		26.363	167.1	0.596
									400	12.61	34.94		26.443	159.5	0.769
									500	12.17	34.91		26.505	153.6	0.937

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 65

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 20.5 N	113 42.0 W	03/12/73	1708 GMT	530 M	230	06 KT	2	180 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.10	35.20		25.896	211.4	0.000
									10	16.10	35.20		25.896	211.4	0.021
									20	15.89	35.20		25.944	206.9	0.042
									30	15.89	35.20		25.944	206.9	0.063
									50	15.64	35.19		25.993	202.2	0.104
									75	15.40	35.16		26.024	199.3	0.155
									100	15.12	35.14		26.071	194.8	0.205
									125	14.90	35.12		26.104	191.7	0.254
									150	14.64	35.10		26.145	187.8	0.302
									200	13.86	35.05		26.273	175.6	0.396
									250	13.61	35.03		26.310	172.2	0.486
									300	13.34	35.01		26.350	168.3	0.575
									400	12.73	34.96		26.434	160.3	0.748

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 66

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 21.5 N	113 39.0 W	03/12/73	1920 GMT	371 M	230	12 KT	1	230 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.43	35.21		25.828	218.0	0.000
									10	16.35	35.21		25.846	216.2	0.022
									20	16.17	35.23		25.903	210.8	0.043
									30	16.04	35.19		25.902	210.9	0.064
									50	15.91	35.18		25.924	208.8	0.106
									75	15.74	35.18		25.963	205.1	0.159
									100	15.54	35.17		26.001	201.5	0.210
									125	14.95	35.14		26.109	191.3	0.260
									150	14.47	35.11		26.190	183.5	0.308
									200	14.09	35.05		26.225	180.2	0.401
									250	13.82	35.03		26.266	176.3	0.494
									300	13.27	34.99		26.349	168.5	0.584

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 67

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 24.0 N	113 37.0 W	03/12/73	2218 GMT	325 M	250	18 KT	6	250 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.50	35.23		25.826	218.1	0.000
									10	16.50	35.23		25.826	218.1	0.022
									20	16.50	35.23		25.826	218.1	0.044
									30	16.42	35.21		25.830	217.7	0.066
									50	16.37	35.20		25.834	217.4	0.109
									75	16.15	35.18		25.869	214.0	0.164
									100	15.63	35.17		25.980	203.4	0.217
									125	15.26	35.16		26.056	196.3	0.267
									150	15.07	35.13		26.074	194.5	0.317
									200	14.15	35.07		26.228	180.0	0.413
									250	13.70	35.03		26.291	173.9	0.505

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD104

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 32.5 N	113 58.0 W	03/13/73	0831 GMT	173 M	320	10 KT	0	320 03 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.55	35.38		25.930	208.2	0.000
10	16.55	35.38		25.930	208.2	0.021
20	16.57	35.39		25.933	208.0	0.042
30	16.58	35.40		25.938	207.5	0.063
50	16.59	35.41		25.943	207.0	0.104
75	16.43	35.48		26.034	198.3	0.155
100	16.35	35.54		26.099	192.2	0.205
125	16.23	35.54		26.127	189.5	0.254
150	15.71	35.49		26.208	181.8	0.301

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD105

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 52.9 N	114 11.9 W	03/13/73	1215 GMT	131 M	330	08 KT	0	330 02 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.83	35.51		25.963	205.1	0.000
10	16.84	35.51		25.961	205.3	0.021
20	16.84	35.51		25.961	205.3	0.041
30	16.84	35.51		25.961	205.3	0.062
50	16.84	35.51		25.961	205.3	0.103
75	16.81	35.51		25.968	204.6	0.155
100	16.67	35.49		25.986	202.9	0.206

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD106

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 6.6 N	114 14.5 W	03/13/73	1527 GMT	164 M	150	06 KT	0	240 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.77	35.50		25.970	204.4	0.000
10	16.77	35.50		25.970	204.4	0.020
20	16.78	35.50		25.967	204.7	0.041
30	16.78	35.50		25.967	204.7	0.062
50	16.78	35.50		25.967	204.7	0.103
75	16.75	35.50		25.975	204.0	0.154
100	16.64	35.51		26.008	200.8	0.206
125	16.47	35.56		26.086	193.4	0.256
150	16.39	35.58		26.120	190.2	0.305

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD107

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 12.5 N	114 10.5 W	03/13/73	1722 GMT	93 M	280	13 KT	0	150 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.75	35.46		25.944	206.9	0.000
10	16.74	35.47		25.954	206.0	0.021
20	16.77	35.48		25.955	205.9	0.041
30	16.77	35.48		25.955	205.9	0.062
50	16.78	35.49		25.960	205.4	0.103
75	16.78	35.49		25.960	205.4	0.155

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 6

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 28.0 N	114 10.3 W	03/14/73	0628 GMT	22 M	280	25 KT	0	270 08 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.33	35.59		25.905	210.6	0.000
10	17.34	35.60		25.910	210.1	0.021
20	17.33	35.60		25.913	209.9	0.042

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 5

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 23.6 N	114 18.5 W	03/14/73	0810 GMT	43 M	290	26 KT	1	290 08 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.14	35.55		25.920	209.2	0.000
10	17.15	35.54		25.910	210.1	0.021
20	17.14	35.54		25.912	209.9	0.042
30	17.14	35.55		25.920	209.2	0.063

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 19.0 N	114 26.5 W	03/14/73	1044 GMT	30 M	310	25 KT	6	300 06 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.77	35.70		26.123	189.9	0.000
10	16.77	35.70		26.123	189.9	0.019
20	16.78	35.70		26.121	190.1	0.038

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 14.2 N	114 32.5 W	03/14/73	1300 GMT	28 M	330	28 KT		320 04 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.98	35.68		26.058	196.1	0.000
10	17.00	35.69		26.061	195.8	0.020
20	17.00	35.69		26.061	195.8	0.039

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 2

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 10.5 N	114 41.0 W	03/14/73	1510 GMT	19 M	330	18 KT	0	330 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.64	35.81		26.238	179.0	0.000
10	16.65	35.82		26.243	178.5	0.018
20	16.66	35.82		26.241	178.7	0.036

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 7

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 58.0 N	114 41.0 W	03/15/73	0456 GMT	30 M	190	06 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.78	35.72		26.136	188.7	0.000
10	16.79	35.73		26.141	188.2	0.019
20	16.84	35.81		26.191	183.5	0.037

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 8

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 1.5 N	114 35.5 W	03/15/73	0648 GMT	22 M	310	12 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.75	35.67		26.105	191.6	0.000
10	16.77	35.67		26.100	192.1	0.019
20	16.77	35.68		26.108	191.4	0.038

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 9

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 4.2 N	114 28.6 W	03/15/73	0837 GMT	39 M	310	11 KT	0	330 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.93	35.58		25.993	202.2	0.000
10	16.95	35.58		25.988	202.7	0.020
20	16.96	35.58		25.986	202.9	0.041
30	16.94	35.59		25.998	201.7	0.061

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 10

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 8.5 N	114 22.5 W	03/15/73	1032 GMT	30 M	330	18 KT	0	320 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.95	35.61		26.011	200.5	0.000
10	16.97	35.62		26.014	200.2	0.020
20	16.97	35.63		26.022	199.5	0.040

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 11

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 11.5 N	114 17.7 W	03/15/73	1211 GMT	48 M	340	19 KT	0	350 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.02	35.56		25.956	205.7	0.000
10	17.02	35.56		25.956	205.7	0.021
20	17.03	35.55		25.946	206.7	0.041
30	17.03	39.54		25.939	207.4	0.062

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 12

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 14.7 N	114 12.0 W	03/15/73	1405 GMT	67 M	010	13 KT	0	310 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.97	35.50		25.922	209.0	0.000
10	16.98	35.51		25.928	208.4	0.021
20	16.98	35.51		25.928	208.4	0.042
30	16.96	35.51		25.932	208.0	0.063
50	16.95	35.51		25.935	207.8	0.105

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 13

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 17.5 N	114 6.5 W	03/15/73	1556 GMT	37 M	020	07 KT	0	350 02 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.12	35.54		25.917	209.5	0.000
10	17.12	35.54		25.917	209.5	0.021
20	17.12	35.54		25.917	209.5	0.042
30	17.12	35.54		25.917	209.5	0.063

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 22

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 7.0 N	114 3.0 W	03/16/73	0302 GMT	60 M	270	07 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.26	35.46		25.822	218.5	0.000
10	16.84	35.46		25.923	208.9	0.021
20	16.78	35.46		25.937	207.6	0.042
30	16.77	35.46		25.939	207.4	0.063
50	16.77	35.47		25.947	206.6	0.105

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 21

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 3.6 N	114 9.3 W	03/16/73	0450 GMT	168 M	220	10 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.80	35.39		25.878	213.1	0.000
10	16.61	35.41		25.939	207.4	0.021
20	16.57	35.40		25.940	207.2	0.042
30	16.60	35.44		25.964	205.0	0.063
50	16.71	35.47		25.961	205.3	0.104
75	16.73	35.49		25.972	204.3	0.156
100	16.62	35.49		25.998	201.8	0.207
125	16.48	35.54		26.069	195.0	0.257

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 20

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
31 0.0 N	114 15.5 W	03/16/73	0644 GMT	131 M	320	07 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.82	35.43		25.905	210.6	0.000
10	16.83	35.44		25.910	210.2	0.021
20	16.78	35.46		25.937	207.6	0.042
30	16.74	35.47		25.954	206.0	0.063
50	16.70	35.48		25.971	204.3	0.104
75	16.68	35.52		26.006	201.0	0.155
100	16.58	35.53		26.038	198.0	0.206

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 19

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 57.0 N	114 21.0 W	03/16/73	0837 GMT	52 M	340	09 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.84	35.47		25.930	208.2	0.000
10	16.91	35.51		25.944	206.9	0.021
20	16.92	35.52		25.950	206.4	0.041
30	16.93	35.52		25.947	206.6	0.062
50	16.95	35.54		25.958	205.6	0.104

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 18

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 51.4 N	114 30.3 W	03/16/73	1040 GMT	32 M	360	11 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.86	35.50		25.949	206.5	0.000
10	16.88	35.51		25.951	206.2	0.021
20	16.87	35.62		26.038	198.0	0.041

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 28

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 35.0 N	114 21.0 W	03/16/73	1733 GMT	76 M	340	14 KT	0	330 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.69	35.40		25.912	209.9	0.000
10	16.67	35.39		25.909	210.2	0.021
20	16.64	35.40		25.924	208.8	0.042
30	16.64	35.41		25.931	208.1	0.063
50	16.61	35.44		25.961	205.2	0.105
75	16.58	35.49		26.007	200.9	0.156

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 29

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 38.9 N	114 13.5 W	03/16/73	1925 GMT	125 M	340	11 KT	0	340 02 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.78	35.35		25.852	215.6	0.000
10	16.59	35.33		25.882	212.8	0.021
20	16.55	35.34		25.899	211.2	0.043
30	16.54	35.35		25.909	210.2	0.064
50	16.56	35.38		25.927	208.5	0.106
75	16.35	35.44		26.022	199.5	0.157
100	16.47	35.52		26.056	196.3	0.208

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 30

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 43.4 N	114 5.4 W	03/16/73	2135 GMT	187 M	350	11 KT	0	350 02 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.70	35.34		25.864	214.5	0.000
10	16.70	35.34		25.864	214.5	0.021
20	16.67	35.38		25.901	210.9	0.043
30	16.64	35.38		25.909	210.3	0.064
50	16.60	35.38		25.918	209.4	0.106
75	16.59	35.39		25.928	208.4	0.159
100	16.27	35.51		26.095	192.6	0.210
125	16.31	35.56		26.124	189.8	0.258
150	16.14	35.53		26.140	188.3	0.307

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 31

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 46.2 N	114 0.3 W	03/17/73	0008 GMT	112 M	300	13 KT	0	310 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.11	35.37		25.789	221.6	0.000
10	16.70	35.34		25.864	214.5	0.022
20	16.65	35.35		25.883	212.7	0.043
30	16.60	35.42		25.949	206.5	0.064
50	16.55	35.40		25.945	206.8	0.106
75	16.30	35.57		26.134	188.9	0.156
100	16.33	35.50		26.073	194.6	0.204

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 32

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 52.2 N	113 50.0 W	03/17/73	0230 GMT	75 M	290	15 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.17	35.41		25.806	220.0	0.000
10	16.99	35.37		25.818	218.8	0.022
20	16.85	35.42		25.890	212.0	0.044
30	16.83	35.43		25.902	210.9	0.065
50	16.83	35.43		25.902	210.9	0.107

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 33

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 59.3 N	113 38.2 W	03/17/73	0527 GMT	65 M	260	11 KT	0	290 01 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.09	35.43		25.840	216.8	0.000
10	17.10	35.42		25.830	217.7	0.022
20	16.91	35.42		25.875	213.4	0.043
30	16.90	35.42		25.878	213.2	0.065
50	16.91	35.42		25.875	213.4	0.108

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 44

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 44.5 N	113 21.4 W	03/17/73	1331 GMT	75 M	250	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.22	35.41		25.794	221.2	0.000
									10	17.21	35.41		25.796	221.0	0.022
									20	17.19	35.41		25.801	220.5	0.044
									30	17.17	35.41		25.806	220.0	0.066
									50	17.09	35.41		25.825	218.2	0.110

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 43

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 38.7 N	113 32.0 W	03/17/73	1540 GMT	90 M	160	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.10	35.38		25.799	220.6	0.000
									10	17.09	35.38		25.802	220.4	0.022
									20	16.96	35.37		25.825	218.2	0.044
									30	16.89	35.38		25.849	215.9	0.066
									50	16.89	35.38		25.849	215.9	0.109
									75	16.90	35.38		25.847	216.1	0.164

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 42

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 34.0 N	113 40.5 W	03/17/73	1740 GMT	97 M	150	02 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.45	35.36		25.700	230.1	0.000
									10	17.15	35.37		25.780	222.5	0.023
									20	17.13	35.38		25.792	221.3	0.045
									30	17.07	35.37		25.799	220.7	0.067
									50	16.90	35.36		25.832	217.6	0.111
									75	16.69	35.39		25.905	210.6	0.165

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 41

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 28.5 N	113 50.0 W	03/17/73	1942 GMT	187 M	350	05 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.05	35.40		25.827	218.0	0.000
									10	16.80	35.37		25.863	214.6	0.022
									20	16.66	35.39		25.911	210.0	0.043
									30	16.62	35.39		25.921	209.1	0.064
									50	16.32	35.43		26.022	199.5	0.105
									75	16.19	35.49		26.098	192.3	0.155
									100	16.16	35.54		26.143	188.0	0.203
									125	15.72	35.43		26.160	186.4	0.250
									150	14.99	35.31		26.231	179.7	0.297

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 40

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 23.5 N	113 58.9 W	03/17/73	2225 GMT	297 M	130	06 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.31	35.42		25.780	222.5	0.000
									10	16.77	35.39		25.886	212.4	0.022
									20	16.40	35.43		26.003	201.3	0.042
									30	16.37	35.47		26.041	197.7	0.063
									50	16.34	35.46		26.040	197.8	0.102
									75	16.33	35.46		26.042	197.6	0.152
									100	16.12	35.45		26.083	193.7	0.202
									125	15.99	35.43		26.098	192.3	0.251
									150	15.68	35.42		26.161	186.3	0.299
									200	15.11	35.32		26.212	181.5	0.394
									250	14.27	35.17		26.279	175.1	0.486

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 39

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 18.5 N	114 7.9 W	03/18/73	0112 GMT	297 M	140	10 KT	2	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.10	35.42		25.830	217.7	0.000
									10	16.37	35.41		25.995	202.1	0.021
									20	16.29	35.40		26.006	201.0	0.041
									30	16.28	35.40		26.008	200.8	0.061
									50	16.26	35.40		26.012	200.4	0.102
									75	16.25	35.40		26.015	200.2	0.152
									100	16.22	35.40		26.022	199.5	0.203
									125	15.83	35.35		26.073	194.6	0.253
									150	15.29	35.30		26.157	186.7	0.302
									200	14.67	35.31		26.301	173.0	0.394
									250	14.31	35.26		26.340	169.3	0.483

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 38

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 13.2 N	114 16.5 W	03/18/73	0353 GMT	168 M	220	17 KT	2	180 01 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.13	35.32		25.746	225.7	0.000
									10	17.09	35.30		25.741	226.2	0.023
									20	16.71	35.32		25.846	216.2	0.045
									30	16.61	35.32		25.870	214.0	0.066
									50	16.51	35.32		25.893	211.7	0.109
									75	16.35	35.32		25.931	208.2	0.162
									100	16.31	35.36		25.970	204.4	0.214
									125	16.27	35.43		26.033	198.4	0.266
									150	16.00	35.40		26.073	194.7	0.316

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 7.6 N	114 26.0 W	03/18/73	0625 GMT	73 M	220	23 KT	1	220 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.62	35.46		25.975	204.0	0.000
									10	16.64	35.46		25.970	204.4	0.020
									20	16.47	35.48		26.025	199.2	0.041
									30	16.47	35.49		26.033	198.5	0.061
									50	16.46	35.50		26.043	197.5	0.100

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 47

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 50.7 N	114 13.7 W	03/18/73	0922 GMT	103 M	260	26 KT	1	260 04 01

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.97	35.33		25.792	221.3	0.000
									10	16.96	35.34		25.802	220.4	0.022
									20	16.91	35.33		25.806	220.0	0.044
									30	16.53	35.37		25.927	208.5	0.066
									50	16.41	35.41		25.985	203.0	0.107
									75	16.33	35.41		26.004	201.2	0.158

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 48

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 55.8 N	114 5.8 W	03/18/73	1130 GMT	390 M	230	30 KT	0	250 04 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.50	35.36		25.926	208.6	0.000
									10	16.50	35.36		25.926	208.6	0.021
									20	16.50	35.36		25.926	208.6	0.042
									30	16.50	35.36		25.926	208.6	0.063
									50	16.31	35.38		25.986	202.9	0.104
									75	16.28	35.39		26.000	201.5	0.155
									100	16.22	35.38		26.007	201.0	0.206
									125	15.61	35.32		26.100	192.1	0.256
									150	15.32	35.35		26.188	183.7	0.304
									200	14.73	35.23		26.226	180.1	0.398
									250	13.97	35.12		26.304	172.7	0.489
									300	13.57	35.09		26.364	167.0	0.578

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 49

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 59.6 N	113 58.2 W	03/18/73	1427 GMT	455 M	230	18 KT	0	200 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.51	35.37		25.931	208.1	0.000
									10	16.51	35.37		25.931	208.1	0.021
									20	16.47	35.37		25.941	207.2	0.042
									30	16.32	35.38		25.983	203.2	0.062
									50	16.31	35.39		25.993	202.2	0.103
									75	16.29	35.39		25.998	201.8	0.154
									100	16.26	35.39		26.005	201.1	0.205
									125	15.69	35.33		26.090	193.1	0.255
									150	15.54	35.34		26.131	189.1	0.304
									200	14.73	35.24		26.234	179.4	0.399
									250	13.89	35.10		26.306	172.6	0.490
									300	13.29	35.04		26.383	165.2	0.578
									400	12.60	34.97		26.468	157.2	0.749

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 50

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 5.0 N	113 50.0 W	03/18/73	1715 GMT	372 M	340	06 KT	2	250 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.26	35.34		25.967	204.7	0.000
									10	16.25	35.34		25.969	204.5	0.020
									20	16.24	35.34		25.971	204.3	0.041
									30	16.22	35.34		25.976	203.9	0.061
									50	16.23	35.37		25.997	201.9	0.102
									75	16.20	35.37		26.003	201.2	0.153
									100	16.22	35.38		26.007	201.0	0.204
									125	16.23	35.39		26.012	200.5	0.255
									150	15.82	35.29		26.029	198.8	0.306
									200	14.99	35.29		26.215	181.1	0.404
									250	14.08	35.13		26.289	174.2	0.496
									300	13.34	35.05		26.381	165.4	0.585

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 11.5 N	113 38.1 W	03/18/73	2007 GMT	149 M	010	10 KT	0	010 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.81	35.36		25.853	215.5	0.000
									10	16.66	35.35		25.881	212.9	0.021
									20	16.53	35.35		25.911	210.0	0.043
									30	16.48	35.36		25.931	208.2	0.064
									50	16.31	35.36		25.970	204.4	0.105
									75	16.03	35.39		26.058	196.1	0.156
									100	16.03	35.46		26.112	191.0	0.205
									125	15.96	35.47		26.136	188.7	0.253

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 52

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 19.0 N	113 26.0 W	03/18/73	2230 GMT	147 M	360	10 KT	0	350 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.84	35.32		25.815	219.1	0.000
									10	16.73	35.34		25.857	215.2	0.022
									20	16.67	35.35		25.878	213.1	0.043
									30	16.62	35.35		25.890	212.0	0.065
									50	16.53	35.34		25.904	210.7	0.107
									75	16.54	35.38		25.932	208.0	0.160
									100	16.47	35.38		25.948	206.5	0.212
									125	15.86	35.43		26.128	189.4	0.263

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 53

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 24.5 N	113 16.0 W	03/19/73	0147 GMT	140 M	340	09 KT	0	330 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.36	35.37		25.729	227.3	0.000
									10	17.33	35.37		25.737	226.6	0.023
									20	17.21	35.37		25.766	223.9	0.045
									30	17.20	35.37		25.768	223.6	0.068
									50	17.17	35.37		25.775	222.9	0.113
									75	16.68	35.32		25.853	215.5	0.168
									100	16.44	35.34		25.925	208.7	0.222
									125	16.23	35.33		25.966	204.8	0.274

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 55

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 36.5 N	113 57.0 W	03/20/73	0415 GMT	705 M	270	09 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.53	35.33		25.657	234.1	0.000
									10	17.00	35.27		25.739	226.4	0.023
									20	16.82	35.31		25.812	219.4	0.045
									30	16.76	35.32		25.834	217.3	0.067
									50	16.66	35.30		25.842	216.5	0.111
									75	16.31	35.30		25.924	208.8	0.165
									100	15.75	35.34		26.083	193.6	0.216
									125	15.51	35.33		26.130	189.2	0.264
									150	15.18	35.29		26.173	185.1	0.312
									200	14.52	35.21		26.256	177.3	0.405
									250	13.98	35.13		26.310	172.2	0.496
									300	13.63	35.07		26.336	169.6	0.585
									400	12.55	34.96		26.470	157.0	0.758
									500	12.24	34.93		26.507	153.4	0.925
									600	12.06	34.92		26.534	150.9	1.091

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 57

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 40.2 N	113 51.3 W	03/20/73	0920 GMT	687 M	250	06 KT	0	290 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.50	35.27		25.857	215.2	0.000
10	16.47	35.30		25.887	212.3	0.021
20	16.44	35.35		25.932	208.0	0.042
30	16.11	35.32		25.986	202.9	0.063
50	15.88	35.31		26.031	198.6	0.103
75	15.70	35.30		26.064	195.5	0.153
100	15.50	35.31		26.117	190.4	0.202
125	15.46	35.41		26.203	182.3	0.250
150	15.09	35.33		26.224	180.3	0.296
200	13.89	35.12		26.321	171.1	0.386
250	13.68	35.09		26.341	169.1	0.475
300	13.26	35.04		26.389	164.6	0.562
400	12.68	34.99		26.467	157.2	0.732
500	12.28	34.96		26.523	151.9	0.898
600	11.97	34.93		26.559	148.5	1.062

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 58

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 44.0 N	113 45.0 W	03/20/73	1132 GMT	548 M	190	10 KT	0	210 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.08	35.23		25.924	208.8	0.000
10	16.10	35.24		25.927	208.5	0.021
20	15.84	35.22		25.971	204.3	0.042
30	15.79	35.21		25.975	204.0	0.062
50	15.74	35.22		25.994	202.2	0.103
75	15.55	35.22		26.037	198.1	0.153
100	14.85	35.17		26.154	187.0	0.202
125	14.60	35.17		26.208	181.8	0.249
150	14.67	35.21		26.224	180.3	0.295
200	14.29	35.16		26.267	176.2	0.387
250	13.85	35.09		26.306	172.5	0.478
300	13.50	35.14		26.417	161.9	0.565
400	12.97	35.08		26.479	156.1	0.733
500	12.30	34.96		26.519	152.3	0.899

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 59

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 47.4 N	113 38.7 W	03/20/73	1424 GMT	316 M	220	09 KT	1	280 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.45	35.34		25.922	209.0	0.000
10	16.45	35.34		25.922	209.0	0.021
20	16.38	35.32		25.923	208.9	0.042
30	16.36	35.33		25.936	207.7	0.063
50	16.20	35.34		25.981	203.4	0.104
75	16.20	35.34		25.981	203.4	0.155
100	15.99	35.33		26.021	199.6	0.207
125	15.23	35.26		26.139	188.4	0.256
150	14.30	35.09		26.211	181.5	0.303
200	14.02	35.07		26.255	177.4	0.395
250	13.51	35.04		26.338	169.5	0.485
300	12.99	35.00		26.413	162.3	0.572

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 60

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 53.5 N	113 29.5 W	03/20/73	1656 GMT	187 M	260	18 KT	1	270 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.00	35.35		25.800	220.5	0.000
10	16.99	35.34		25.795	221.0	0.022
20	16.94	35.34		25.807	219.9	0.044
30	16.86	35.33		25.818	218.8	0.066
50	16.66	35.34		25.873	213.6	0.110
75	16.46	35.35		25.928	208.4	0.163
100	16.29	35.36		25.975	203.9	0.215
125	15.99	35.41		26.083	193.7	0.266
150	15.58	35.43		26.191	183.4	0.314

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 61

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 1.0 N	113 16.5 W	03/20/73	1943 GMT	150 M	220	10 KT	0	240 05 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.07	35.35		25.784	222.1	0.000
									10	16.85	35.31		25.805	220.1	0.022
									20	16.79	35.34		25.842	216.5	0.044
									30	16.66	35.34		25.873	213.6	0.066
									50	16.60	35.32		25.872	213.7	0.109
									75	16.47	35.33		25.910	210.1	0.162
									100	16.36	35.50		26.066	195.3	0.213
									125	15.72	35.51		26.221	180.6	0.261
									150	15.74	35.52		26.224	180.3	0.308

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 62

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 4.1 N	113 9.7 W	03/20/73	2305 GMT	112 M	170	10 KT	1	230 05 05

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.55	35.37		25.683	231.7	0.000
									10	17.26	35.36		25.746	225.7	0.023
									20	17.18	35.37		25.773	223.2	0.045
									30	17.18	35.36		25.765	223.9	0.068
									50	16.95	35.36		25.820	218.7	0.112
									75	16.64	35.33		25.870	213.9	0.167

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 63

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 9.2 N	113 1.1 W	03/21/73	0116 GMT	112 M	190	14 KT	1	190 05 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.58	35.38		25.684	231.6	0.000
									10	17.58	35.38		25.684	231.6	0.023
									20	17.48	35.38		25.708	229.3	0.046
									30	17.43	35.39		25.728	227.4	0.069
									50	17.11	35.36		25.782	222.3	0.114
									75	16.86	35.37		25.849	215.9	0.170
									100	16.47	35.35		25.925	208.7	0.224

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 64

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
30 13.3 N	112 55.7 W	03/21/73	0320 GMT	75 M	190	11 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.81	35.41		25.650	234.8	0.000
									10	17.82	35.41		25.648	235.0	0.024
									20	17.62	35.39		25.682	231.8	0.047
									30	17.45	35.38		25.715	228.6	0.070
									50	17.29	35.39		25.761	224.2	0.116

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 74

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 53.5 N	112 47.5 W	03/21/73	0615 GMT	75 M	230	12 KT	1	270 05 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.58	35.37		25.676	232.4	0.000
									10	17.58	35.37		25.676	232.4	0.023
									20	17.57	35.37		25.678	232.1	0.047
									30	17.44	35.36		25.702	229.9	0.070
									50	17.08	35.36		25.789	221.6	0.115

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 72

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 49.3 N	112 55.7 W	03/21/73	0807 GMT	93 M	260	14 KT	1	260 05 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.49	35.39		25.713	228.8	0.000
									10	17.49	35.41		25.729	227.4	0.023
									20	17.50	35.41		25.726	227.6	0.046
									30	17.50	35.41		25.726	227.6	0.068
									50	17.01	35.38		25.821	218.6	0.113
									75	16.23	35.29		25.935	207.7	0.167

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 71

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 43.5 N	113 3.5 W	03/21/73	1010 GMT	168 M	270	16 KT	1	270 05 02

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.31	35.38		25.749	225.4	0.000
									10	17.31	35.38		25.749	225.4	0.023
									20	17.31	35.38		25.749	225.4	0.045
									30	17.32	35.38		25.747	225.7	0.068
									50	17.11	35.36		25.782	222.3	0.113
									75	16.70	35.29		25.826	218.1	0.168
									100	15.74	35.24		26.009	200.7	0.221
									125	15.38	35.26		26.105	191.6	0.271
									150	14.31	35.15		26.255	177.4	0.318

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 70

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 40.4 N	113 10.0 W	03/21/73	1205 GMT	257 M	250	20 KT	1	260 02 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.57	35.28		25.848	216.0	0.000
									10	16.57	35.28		25.848	216.0	0.022
									20	16.28	35.23		25.878	213.2	0.043
									30	15.83	35.19		25.950	206.3	0.064
									50	15.74	35.19		25.971	204.3	0.105
									75	15.67	35.18		25.979	203.6	0.157
									100	15.54	35.18		26.008	200.8	0.208
									125	15.23	35.16		26.062	195.7	0.259
									150	14.73	35.14		26.157	186.7	0.307
									200	13.22	35.03		26.390	164.5	0.398

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 69

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 35.1 N	113 18.2 W	03/21/73	1445 GMT	347 M	280	23 KT	1	270 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.23	35.23		25.889	212.1	0.000
									10	16.23	35.23		25.889	212.1	0.021
									20	16.20	35.23		25.896	211.4	0.042
									30	16.21	35.23		25.894	211.7	0.064
									50	15.59	35.17		25.989	202.6	0.105
									75	15.48	35.17		26.014	200.2	0.156
									100	15.29	35.19		26.072	194.8	0.206
									125	15.04	35.13		26.081	193.9	0.256
									150	14.92	35.13		26.108	191.4	0.305
									200	14.30	35.08		26.203	182.3	0.401
									250	13.92	35.07		26.276	175.4	0.493

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 68

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 31.5 N	113 25.0 W	03/21/73	1653 GMT	80 M	300	16 KT	1	330 03 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	15.90	35.20		25.942	207.1	0.000
									10	15.88	35.20		25.947	206.6	0.021
									20	15.55	35.11		25.952	206.1	0.041
									30	15.33	35.15		26.032	198.5	0.062
									50	15.25	35.14		26.042	197.6	0.102
									75	14.66	35.10		26.141	188.2	0.150

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 78

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 17.0 N	113 8.8 W	03/21/73	2052 GMT	371 M	360	14 KT	1	360 04 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	16.68	35.28		25.822	218.4	0.000
									10	16.59	35.27		25.836	217.2	0.022
									20	16.48	35.26		25.854	215.4	0.043
									30	16.43	35.27		25.874	213.6	0.065
									50	16.27	35.26		25.903	210.8	0.108
									75	15.78	35.21		25.977	203.8	0.160
									100	15.49	35.18		26.019	199.7	0.211
									125	15.28	35.17		26.059	196.0	0.261
									150	15.17	35.19		26.099	192.2	0.311
									200	14.95	35.20		26.155	186.9	0.408
									250	14.27	35.13		26.248	178.0	0.503
									300	13.48	35.06		26.360	167.4	0.593

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 79

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 19.5 N	113 4.3 W	03/21/73	2315 GMT	427 M	040	03 KT	1	360 04 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.22	35.33		25.732	227.0	0.000
									10	16.96	35.29		25.764	224.0	0.023
									20	16.91	35.33		25.806	220.0	0.045
									30	16.84	35.33		25.823	218.4	0.067
									50	16.75	35.32		25.837	217.1	0.111
									75	16.36	35.26		25.882	212.8	0.165
									100	15.94	35.19		25.925	208.7	0.218
									125	15.31	35.20		26.075	194.4	0.269
									150	14.51	35.12		26.189	183.6	0.318
									200	13.51	35.10		26.384	165.1	0.407
									250	12.16	34.93		26.523	151.9	0.490
									300	11.25	34.88		26.655	139.3	0.566
									400	9.65	34.78		26.859	120.0	0.703

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 80

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 24.1 N	112 56.5 W	03/22/73	0200 GMT	312 M	360	11 KT	0	290 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.15	35.29		25.719	228.3	0.000
									10	16.66	35.29		25.835	217.3	0.022
									20	16.62	35.29		25.844	216.4	0.044
									30	16.60	35.29		25.849	215.9	0.066
									50	16.57	35.32		25.879	213.1	0.109
									75	16.47	35.29		25.879	213.0	0.163
									100	16.03	35.25		25.950	206.3	0.216
									125	15.72	35.22		25.998	201.7	0.268
									150	14.64	35.18		26.207	181.9	0.317
									200	12.25	34.90		26.482	155.8	0.403
									250	11.44	34.87		26.613	143.4	0.481

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 81

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 28.2 N	112 50.0 W	03/22/73	0425 GMT	138 M	360	05 KT	0	01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.18	35.31		25.727	227.5	0.000
									10	17.16	35.31		25.732	227.1	0.023
									20	17.04	35.31		25.760	224.4	0.045
									30	17.00	35.32		25.777	222.7	0.068
									50	16.93	35.33		25.802	220.4	0.112
									75	16.77	35.32		25.832	217.5	0.168
									100	16.56	35.31		25.874	213.6	0.222
									125	15.39	35.19		26.050	196.9	0.274

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 82

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 33.2 N	112 44.0 W	03/22/73	0634 GMT	86 M	320	09 KT	0	320 02 04

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.02	35.30		25.757	224.6	0.000
									10	17.02	35.30		25.757	224.6	0.022
									20	16.95	35.29		25.766	223.8	0.045
									30	16.92	35.29		25.773	223.1	0.067
									50	16.87	35.28		25.778	222.7	0.112
									75	16.24	35.26		25.910	210.1	0.167

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 83

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 37.0 N	112 35.0 W	03/22/73	0845 GMT	73 M	040	05 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT	Z	T	S	O2	SIGT	DT	DD
									0	17.35	35.31		25.686	231.4	0.000
									10	17.37	35.33		25.696	230.4	0.023
									20	17.38	35.32		25.686	231.4	0.046
									30	17.17	35.28		25.706	229.5	0.069
									50	16.77	35.30		25.817	219.0	0.114

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 91

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 15.0 N	112 32.0 W	03/22/73	1158 GMT	93 M	320	02 KT	0	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.49	35.29		25.637	236.1	0.000
10	17.50	35.29		25.634	236.3	0.024
20	17.50	35.29		25.634	236.3	0.047
30	17.32	35.28		25.670	232.9	0.071
50	16.84	35.25		25.762	224.2	0.117
75	15.90	35.21		25.950	206.3	0.171

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 90

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 12.5 N	112 37.5 W	03/22/73	1332 GMT	205 M	190	03 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.35	35.29		25.671	232.9	0.000
10	17.35	35.29		25.671	232.9	0.023
20	17.18	35.29		25.711	229.0	0.046
30	16.92	35.29		25.773	223.1	0.069
50	16.19	35.25		25.914	209.8	0.113
75	15.33	35.17		26.048	197.1	0.164
100	14.26	35.11		26.235	179.3	0.212
125	13.54	35.06		26.347	168.6	0.256
150	13.02	35.01		26.415	162.2	0.298
200	12.49	34.97		26.489	155.1	0.380

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 89

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 7.5 N	112 45.5 W	03/22/73	1550 GMT	362 M	240	06 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.29	35.27		25.670	233.0	0.000
10	17.23	35.25		25.669	233.0	0.023
20	16.99	35.24		25.719	228.3	0.046
30	16.94	35.25		25.738	226.5	0.069
50	16.86	35.24		25.749	225.4	0.115
75	16.32	35.25		25.884	212.6	0.170
100	15.82	35.27		26.014	200.2	0.222
125	14.74	35.21		26.208	181.8	0.271
150	13.95	35.15		26.332	170.1	0.316
200	12.18	34.94		26.526	151.6	0.399
250	11.36	34.95		26.689	136.1	0.473
300	10.53	34.90		26.801	125.6	0.542

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 88

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
29 3.2 N	112 53.5 W	03/22/73	1758 GMT	403 M	240	09 KT	1	220 01 03

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	17.30	35.33		25.713	228.8	0.000
10	17.15	35.32		25.742	226.1	0.023
20	16.85	35.33		25.821	218.6	0.045
30	16.78	35.33		25.837	217.0	0.067
50	16.46	35.28		25.874	213.5	0.110
75	16.12	35.26		25.938	207.5	0.163
100	15.60	35.17		25.987	202.8	0.215
125	15.37	35.17		26.039	197.9	0.266
150	15.16	35.18		26.093	192.7	0.316
200	14.22	35.09		26.228	179.9	0.412
250	12.11	34.94		26.540	150.3	0.497
300	11.14	34.87		26.668	138.2	0.573

RV ALEXANDER AGASSIZ GULF CRUISE 7303 STD 92

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER TIME	BOTTOM	WIND	SPEED	WEATHER	DOMINANT WAVES
28 43.1 N	113 5.0 W	03/23/73	0005 0358 GMT	1518 M	120	05 KT	1	

Z	T	S	O2	PO4	SIO3	NO2	NO3	DT

Z	T	S	O2	SIGT	DT	DD
0	16.80	35.18		25.717	228.4	0.000
10	16.80	35.18		25.717	228.4	0.023
20	16.35	35.18		25.823	218.4	0.045
30	16.25	35.17		25.839	216.9	0.067
50	15.65	35.15		25.960	205.3	0.110
75	15.05	35.13		26.079	194.1	0.160
100	14.65	35.10		26.143	188.0	0.208
125	14.50	35.10		26.176	184.9	0.256
150	14.33	35.10		26.212	181.4	0.303
200	13.72	35.07		26.318	171.4	0.393
250	13.49	35.07		26.365	166.9	0.481
300	13.08	35.01		26.403	163.3	0.567
400	12.51	34.95		26.470	156.9	0.737
500	12.15	34.92		26.517	152.5	0.903
600	12.01	34.91		26.536	150.7	1.068
700	11.90	34.90		26.549	149.4	1.234
800	11.87	34.90		26.555	148.9	1.402
1000	11.61	34.88		26.589	145.7	1.740
1200	11.41	34.86		26.610	143.6	2.082

RV ALEXANDER AGASSIZ — CHLOROPHYLL-A AND PHAEOPHYTIN — GULF CRUISE 7303

		DEPTH	CHL A	PHAEO
STATION	101	0	0.64	0.47
03/08/73		5	0.66	0.29
2005 GMT		10	0.66	0.38
		15	0.71	0.33
25 51.0N		20	0.73	0.40
113 30.0W		25	0.75	0.44
		30	0.71	0.36
		35	0.82	0.41
		40	0.64	0.92
		45	0.89	0.35

		DEPTH	CHL A	PHAEO
STATION	102	0	2.73	0.96
03/10/73		5	3.16	1.00
1715 GMT		10	3.34	1.39
		15	2.79	1.35
25 01.6N		20	1.64	1.24
110 45.0W		25	1.33	1.02
		30	1.38	0.96
		35	1.09	1.10
		40	0.73	1.75
		45	0.73	0.71
		50	0.36	0.67

		DEPTH	CHL A	PHAEO
STATION	103	0	0.24	3.33
03/10/73		5	3.34	2.20
1916 GMT		10	3.88	1.65
		15	3.76	1.66
25 05.6N		20	3.87	2.09
110 47.0W		25	3.38	2.40
		30	2.20	2.30
		35	2.55	1.72
		40	1.40	1.14
		45	0.67	0.54
		50	0.42	0.56

		DEPTH	CHL A	PHAEO
STATION	84	0	4.40	2.36
03/11/73		5	4.13	2.12
2314 GMT		10	4.73	2.88
		20	3.52	2.84
28 51.4N		25	1.58	2.69
113 15.5W		30	1.33	2.60
		35	1.21	2.48
		40	1.21	2.60
		45	1.09	1.67
		50	1.05	2.59

		DEPTH	CHL A	PHAEO
STATION	85	0	8.80	2.78
03/12/73		5	7.45	2.20
0216 GMT		10	5.08	2.25
		15	5.76	0.68
28 52.7N		20	4.40	1.71
113 11.5W		25	6.43	4.18
		30	4.40	3.32
		35	5.76	3.27
		40	5.76	3.27
		45	4.06	2.37
		50	3.05	2.10

		DEPTH	CHL A	PHAEO
STATION	86	0	6.75	4.10
03/12/73		5	5.87	3.74
0453 GMT		10	6.31	4.41
		15	7.40	1.49
28 54.0N		20	4.73	2.97
113 08.0W		25	4.25	2.30
		30	4.98	3.79
		35	2.91	2.85
		40	2.43	2.60
		45	2.67	2.20
		50	2.43	1.72

		DEPTH	CHL A	PHAEO
STATION	77	0	5.34	2.50
03/12/73		5	4.73	2.41
0855 GMT		10	5.70	2.83
		15	5.58	4.10
29 05.0N		20	4.19	3.23
113 28.5W		25	4.61	3.80
		30	7.04	4.95
		35	4.73	3.12
		40	3.52	2.71
		45	2.55	2.41
		50	2.85	2.18

		DEPTH	CHL A	PHAEO
STATION	76	0	6.31	2.91
03/12/73		5	6.41	4.38
1205 GMT		10	4.61	2.10
		15	7.87	2.94
29 07.0N		20	6.19	3.50
113 25.0W		25	7.25	2.97
		30	6.43	3.14
		35	5.70	2.71
		40	4.37	3.70
		45	4.37	3.12
		50	3.64	3.16

		DEPTH	CHL A	PHAEO
STATION	75	0	7.45	2.20
03/12/73		5	8.29	1.88
1440 GMT		10	6.77	2.23
		15	8.12	2.17
29 09.3N		20	5.45	2.20
113 22.0W		25	5.76	1.96
		30	3.72	3.03
		35	4.06	1.73
		40	3.05	3.06
		45	3.56	1.85
		50	2.37	2.45

		DEPTH	CHL A	PHAEO
STATION	66	0	4.13	3.60
03/12/73		10	4.84	2.18
2040 GMT		15	6.55	3.71
		20	5.37	3.41
29 21.5N		25	5.22	4.24
113 39.0W		30	4.00	3.03
		35	4.49	3.00
		40	4.31	2.83
		45	4.00	2.80
		50	3.20	2.66

		DEPTH	CHL A	PHAEO
STATION	67	0	8.79	4.89
03/12/73		5	7.16	3.68
2329 GMT		10	7.01	3.76
		15	7.06	3.53
29 24.0N		20	6.67	3.36
113 37.0W		25	7.48	3.47
		30	4.98	2.75
		35	4.37	2.12
		40	4.37	4.74
		45	4.40	2.89
		50	4.73	2.76

		DEPTH	CHL A	PHAEO
STATION	6	0	8.46	3.11
03/14/73		5	8.80	1.81
0643 GMT		10	9.76	4.33
		15	8.46	3.11
31 28.0N		20	8.46	3.11
114 10.3W				

		DEPTH	CHL A	PHAEO
STATION	5	0	14.05	1.87
03/14/73		5	10.66	2.52
0848 GMT		10	9.82	2.08
		15	11.85	2.62
31 23.6N		20	9.65	1.45
114 18.5W		25	9.48	2.58
		30	10.16	2.96
		35	8.63	2.46

		DEPTH	CHL A	PHAEO
STATION	4	0	10.66	2.36
03/14/73		5	11.34	1.85
1108 GMT		10	9.31	2.55
		15	8.46	2.15
31 19.0N		20	10.50	2.53
114 26.5W		25	11.00	2.34

		DEPTH	CHL A	PHAEO
STATION	3	0	8.86	3.53
03/14/73		5	9.10	4.85
1333 GMT		15	9.59	3.60
		20	8.86	3.36
31 14.2N		25	5.88	4.89
114 32.5W				

		DEPTH	CHL A	PHAEO
STATION	2	0	8.80	3.10
03/14/73		5	9.82	3.37
1531 GMT		10	9.95	5.92
		15	9.14	3.72
31 10.5N		20	8.13	4.42
114 41.0W				

		DEPTH	CHL A	PHAEO
STATION	1	0	13.54	3.18
03/14/73		5	11.51	4.57
1706 GMT				
31 06.7N				
114 48.0W				

		DEPTH	CHL A	PHAEO
STATION	7	0	4.40	1.71
03/15/73		5	6.39	3.13
0511 GMT		10	4.40	4.12
		15	4.06	2.85
30 58.0N				
114 41.0W				

		DEPTH	CHL A	PHAEO
STATION	8	0	8.13	3.45
03/15/73		5	8.94	3.80
0705 GMT		10	7.79	5.08
		15	8.80	4.38
31 01.5N		20	6.77	5.77
114 35.5W				

		DEPTH	CHL A	PHAEO
STATION	9	0	22.01	1.79
03/15/73		5	19.30	1.93
0912 GMT		10	15.91	1.78
		15	13.54	3.18
31 04.2N		20	16.93	2.69
114 28.6W		25	10.50	1.73
		30	17.27	2.35
		35	10.83	1.39

		DEPTH	CHL A	PHAEO
STATION	10	0	29.12	6.91
03/15/73		5	9.14	2.12
1106 GMT		10	23.02	
		15	5.42	2.30
31 08.5N		20	20.65	1.12
114 22.5W		25	19.64	2.23

		DEPTH	CHL A	PHAEO
STATION	11	0	10.83	1.39
03/15/73		5	6.50	2.46
1247 GMT		10	13.20	3.52
		15	6.68	2.67
31 11.5N		20	15.24	2.23
114 17.7W		25	5.88	2.28
		30	11.40	2.38
		35	7.16	1.72
		40	11.17	1.37

		DEPTH	CHL A	PHAEO
STATION	12	0	6.92	2.77
03/15/73		5	6.31	3.26
1433 GMT		10	9.10	2.08
		15	7.77	2.72
31 14.7N		20	9.14	2.76
114 12.0W		25	8.86	3.13
		30	6.94	3.46
		35	5.56	2.49
		40	9.10	3.00
		45	4.75	4.27
		50	3.36	4.56
		55	4.00	3.01

		DEPTH	CHL A	PHAEO
STATION	16	0	4.85	1.73
03/15/73		5	4.88	1.72
2059 GMT				
31 29.1N				
113 47.5W				

RV ALEXANDER AGASSIZ — CHLOROPHYLL-A AND PHAEOPHYTIN — GULF CRUISE 7303

		DEPTH	CHL A	PHAEO
STATION	25	0	6.31	3.37
03/15/73		5	7.04	3.22
2307 GMT		10	7.04	3.57
31 18.5N				
113 41.2W				

		DEPTH	CHL A	PHAEO
STATION	24	0	18.62	1.32
03/16/73		5	22.35	2.10
0051 GMT		10	14.90	1.83
		15	11.85	1.34
31 13.7N		20	8.44	2.15
113 51.2W		25	8.46	0.86

		DEPTH	CHL A	PHAEO
STATION	23	0	28.78	4.67
03/16/73		5	17.78	7.96
0215 GMT		10	10.91	0.47
		15	9.14	3.08
31 09.7N		20	7.08	2.48
113 59.0W		25	5.08	2.96
		30	5.55	2.26
		35	5.42	1.98
		40	5.76	2.29

		DEPTH	CHL A	PHAEO
STATION	22	0	4.25	1.63
03/16/73		5	3.76	1.43
0330 GMT		10	3.22	1.57
		15	4.00	1.99
31 07.0N		20	8.62	2.22
114 03.0W		25	5.69	3.32
		30	4.15	2.56
		35	3.40	2.14
		40	3.40	1.91
		45	3.64	1.89
		50	3.49	2.80

		DEPTH	CHL A	PHAEO
STATION	21	0	2.42	1.70
03/16/73		5	1.87	3.77
0525 GMT		10	3.64	2.58
		15	11.85	2.95
31 03.6N		20	6.77	1.59
114 09.3W		25	4.06	2.03
		30	5.42	1.98
		35	4.40	2.16
		40	5.76	1.96
		45	3.39	1.76
		50	1.58	1.54

		DEPTH	CHL A	PHAEO
STATION	20	0	6.12	2.78
03/16/73		5	3.03	1.69
0723 GMT		15	7.52	2.04
		20	7.90	2.75
31 00.0N		25	6.07	2.92
114 15.5W		30	4.61	3.11
		35	3.52	2.01
		40	3.40	2.01
		45	2.43	1.49
		50	2.79	1.94

		DEPTH	CHL A	PHAEO
STATION	19	0	3.16	2.15
03/16/73		5	3.52	2.25
0922 GMT		10	3.88	2.11
		15	3.03	2.96
30 57.0N		20	3.88	2.00
114 21.0W		25	3.52	1.67
		30	4.85	1.49
		35	4.49	2.31
		40	5.46	1.69
		45	5.34	2.04

		DEPTH	CHL A	PHAEO
STATION	18	0	10.07	0.88
03/16/73		5	10.07	1.46
1515 GMT		10	8.68	1.75
		15	11.85	2.96
30 51.4N		25	12.19	5.82
114 30.3W				

		DEPTH	CHL A	PHAEO
STATION	17	0	21.67	8.89
03/16/73		5	9.82	4.01
1258 GMT		15	19.64	4.49
30 46.5N				
114 38.9W				

		DEPTH	CHL A	PHAEO
STATION	26	0	42.25	1.49
03/16/73		5	22.01	5.33
1504 GMT		10	26.41	4.79
30 25.5N				
114 36.5W				

		DEPTH	CHL A	PHAEO
STATION	27	0	22.85	2.45
03/16/73		5	26.41	7.68
1621 GMT		10	17.94	4.44
		15	22.35	3.71
30 29.7N		20	13.88	3.49
114 29.2W		25	14.90	4.72
		30	13.20	4.16
		35	14.90	8.26

		DEPTH	CHL A	PHAEO
STATION	28	0	2.43	1.26
03/16/73		5	1.69	1.00
1805 GMT		10	2.68	1.36
		15	2.63	1.42
30 35.0N		20	1.92	1.28
114 21.0W		25	2.24	1.81

		DEPTH	CHL A	PHAEO
STATION	29	0	1.90	1.18
03/16/73		5	1.70	1.13
2019 GMT		10	1.91	1.42
		15	1.70	1.47
30 38.9N		20	2.18	2.02
114 13.5W		25	1.58	1.42
		30	1.94	1.69
		35	1.82	1.64
		40	2.06	1.86
		45	1.16	1.44
		50	1.02	1.45

		DEPTH	CHL A	PHAEO
STATION	30	0	1.58	0.79
03/16/73		5	1.27	0.80
2235 GMT		10	1.52	0.85
		15	1.79	1.17
30 43.4N		20	2.00	3.32
114 05.4W		25	2.25	2.20
		30	2.67	2.17
		35	2.55	1.89
		40	2.43	2.18
		45	2.67	2.17
		50	1.09	0.86

		DEPTH	CHL A	PHAEO
STATION	31	0	1.77	1.41
03/17/73		5	1.39	1.43
0042 GMT		10	1.92	1.54
		15	1.96	2.64
30 46.2N		20	2.69	1.91
114 00.3W		25	2.61	2.69
		30	1.64	1.83
		35	2.28	2.04
		40	1.83	1.62
		45	1.88	1.77
		50	1.32	2.06

		DEPTH	CHL A	PHAEO
STATION	32	0	4.75	2.08
03/17/73		5	4.49	2.31
0257 GMT		10	4.85	2.43
		15	4.96	3.00
30 52.2N		20	4.42	1.94
113 50.0W		25	3.16	2.60
		30	2.37	2.25
		35	2.91	2.74
		40	2.41	2.19
		45	2.06	1.92
		50	2.58	2.72

		DEPTH	CHL A	PHAEO
STATION	33	0	6.09	2.59
03/17/73		5	5.08	2.16
0600 GMT		10	5.76	2.77
		15	6.09	3.23
30 59.3N		20	5.93	2.12
113 38.2W		25	4.57	2.02
		30	4.06	2.21
		35	3.40	2.37
		40	2.85	2.16
		45	2.99	2.51
		50	2.97	2.39

		DEPTH	CHL A	PHAEO
STATION	34	0	7.11	3.83
03/17/73		5	8.46	3.44
0751 GMT		10	5.76	3.09
		15	9.99	3.20
31 04.8N		20	7.93	3.99
113 28.5W		25	6.77	3.84
		30	3.38	7.52

		DEPTH	CHL A	PHAEO
STATION	35	0	5.59	1.33
03/17/73		5	6.94	2.07
0935 GMT		10	5.76	1.32
		15	6.26	1.46
31 09.0N				
113 21.3W				

		DEPTH	CHL A	PHAEO
STATION	45	0	4.84	4.14
03/17/73		5	4.40	4.27
1222 GMT		10	4.32	3.24
		15	4.64	4.15
30 48.5N		20	5.40	5.26
113 15.7W		25	3.92	3.95
		30	3.84	4.70

		DEPTH	CHL A	PHAEO
STATION	44	0	8.18	2.29
03/17/73		5	8.13	2.81
1404 GMT		10	7.11	2.54
		15	8.13	2.17
30 44.5N		20	5.47	2.33
113 21.4W		25	5.76	2.29
		30	5.87	2.00
		35	5.42	1.66
		40	4.40	0.74
		45	4.06	1.41
		51	3.05	1.46

		DEPTH	CHL A	PHAEO
STATION	43	0	1.82	1.06
03/17/73		5	2.00	1.05
1618 GMT		10	2.06	1.02
		15	2.43	1.09
30 38.7N		20	2.67	1.42
113 32.0W		25	2.12	1.80
		30	1.87	1.81
		35	1.70	1.47
		40	1.76	2.04
		45	1.70	1.41
		50	1.40	1.79

		DEPTH	CHL A	PHAEO
STATION	42	0	4.06	2.21
03/17/73		5	5.42	2.14
1811 GMT		10	3.39	3.37
		15	6.60	2.40
30 34.0N		20	6.77	2.40
113 40.5W		25	6.60	2.89
		30	6.09	2.75
		35	3.02	1.61
		40	2.50	1.48
		45	2.37	1.17
		50	2.00	1.19

		DEPTH	CHL A	PHAEO
STATION	41	0	1.72	1.00
03/17/73		5	2.60	1.75
2038 GMT		10	1.81	1.81
		15	1.58	4.13
30 28.5N		20	3.03	2.04
113 50.0W		25	2.25	4.50

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		DEPTH	CHL A	PHAEO
STATION	40	0	8.97	4.38
03/17/73		5	5.59	2.94
2331 GMT		10	5.59	2.94
		15	4.06	2.53
30 23.5N		20	2.43	2.53
113 58.9W		25	2.18	2.60
		30	2.00	2.49
		35	2.21	2.20
		40	2.43	2.59
		45	1.72	2.45
		50	1.42	2.01

		DEPTH	CHL A	PHAEO
STATION	39	0	15.24	4.79
03/18/73		5	15.24	4.78
0207 GMT		10	21.03	4.42
		15	3.22	1.93
30 18.5N		20	3.39	1.44
114 07.9W		25	3.34	2.02
		30	3.16	2.03
		35	2.85	2.05
		40	3.34	1.99
		45	2.56	1.81
		50	3.16	1.86

		DEPTH	CHL A	PHAEO
STATION	38	0	4.23	1.40
03/18/73		5	4.01	1.29
0431 GMT		10	4.23	1.40
		15	5.93	2.76
30 13.2N		20	4.19	2.44
114 16.5W		25	4.07	2.52
		30	2.74	2.22
		35	2.87	2.22
		40	2.42	2.12
		45	1.76	1.99
		50	1.58	2.05

		DEPTH	CHL A	PHAEO
STATION	37	0	8.30	2.80
03/18/73		5	9.82	3.84
0655 GMT		10	9.99	2.40
		15	8.97	2.45
30 07.6N		20	8.80	2.94
114 26.0W		25	3.20	1.93
		30	1.84	1.85
		35	1.82	2.68
		40	1.73	1.79
		45	1.64	1.99
		50	1.64	1.99

		DEPTH	CHL A	PHAEO
STATION	47	0	2.73	1.54
03/18/73		5	2.61	1.31
1013 GMT		10	3.28	1.85
		15	2.67	2.69
29 50.7N		20	2.31	3.06
114 13.7W		25	3.21	3.94
		30	2.79	1.71
		35	2.43	2.18
		40	2.79	2.22
		45	2.42	2.18
		50	1.82	2.21

		DEPTH	CHL A	PHAEO
STATION	48	0	5.59	2.13
03/18/73		5	5.42	1.34
1235 GMT		10	4.57	1.50
		15	3.39	0.96
29 55.8N		20	4.40	1.39
114 05.8W		25	0.37	0.00
		30	2.18	1.68
		35	1.40	1.49
		40	1.40	1.49
		45	1.35	1.45
		50	1.37	1.47

		DEPTH	CHL A	PHAEO
STATION	49	0	4.91	2.17
03/18/73		5	5.71	2.00
1529 GMT		10	7.15	1.63
		15	5.76	1.64
29 59.6N		20	5.42	1.82
113 58.2W		25	3.56	1.59
		30	3.22	2.57
		35	2.67	1.37
		40	1.76	1.58
		45	1.40	1.66
		50	1.33	1.66

		DEPTH	CHL A	PHAEO
STATION	50	0	4.06	1.57
03/18/73		5	4.40	2.03
1805 GMT		10	4.57	1.86
		15	4.70	2.01
30 05.0N		20	4.57	1.70
113 50.0W		25	4.23	2.20
		30	3.39	1.76
		35	3.05	2.10
		40	2.03	1.83
		45	1.94	1.98
		50	1.82	2.68

		DEPTH	CHL A	PHAEO
STATION	51	0	5.42	2.30
03/18/73		5	5.51	1.75
2105 GMT		10	6.40	2.55
		15	6.09	2.59
30 11.5N		20	5.96	2.71
113 38.1W		25	4.62	2.98
		30	3.87	2.38
		35	2.37	1.78
		40	1.40	1.77
		45	1.02	1.70
		50	1.15	1.67

		DEPTH	CHL A	PHAEO
STATION	52	0	2.67	1.65
03/18/73		5	2.79	1.71
2359 GMT		10	2.32	2.13
		15	3.19	2.57
30 19.0N		20	3.34	3.24
113 26.0W		25	2.01	2.41
		30	2.16	2.31
		35	1.94	2.32
		40	2.31	2.31
		45	1.01	1.68
		50	0.99	1.71

		DEPTH	CHL A	PHAEO
STATION	53	0	12.70	6.28
03/19/73		5	12.19	5.18
0252 GMT		10	11.17	4.99
		15	13.20	5.61
30 24.5N		20	12.95	5.14
113 16.0W		25	12.44	5.17
		30	12.53	5.64

		DEPTH	CHL A	PHAEO
STATION	54	0	7.62	2.84
03/19/73		5	8.30	2.48
0506 GMT		10	10.67	3.17
		15	6.87	2.67
30 30.3N		20	10.50	2.05
113 05.5W		25	8.72	2.88

		DEPTH	CHL A	PHAEO
STATION	55	0	3.06	1.79
03/20/73		5	4.88	2.01
0528 GMT		10	3.75	1.83
		15	3.40	1.56
29 36.5N		20	4.43	1.80
113 57.0W		25	4.00	1.70
		30	4.25	2.32
		35	1.04	1.69
		40	4.43	1.45
		45	4.00	4.70
		50	3.46	1.61

		DEPTH	CHL A	PHAEO
STATION	57	0	4.40	4.28
03/20/73		5	3.22	2.57
0823 GMT		10	4.67	3.46
		15	4.74	3.46
29 40.2N		20	4.57	2.99
113 51.3W		25	3.20	2.10
		30	1.63	1.23
		35	1.09	0.98
		40	1.09	1.21
		45	1.05	1.12
		50	0.96	1.47

		DEPTH	CHL A	PHAEO
STATION	59	0	2.85	1.99
03/20/73		5	2.91	2.39
1511 GMT		10	2.31	1.84
		15	2.60	1.63
29 47.4N		20	0.97	1.62
113 38.7W		25	0.67	1.35
		30	0.73	1.46
		35	0.67	1.29
		40	0.61	1.47
		45	0.49	1.36
		50	0.49	1.47

		DEPTH	CHL A	PHAEO
STATION	60	0	2.06	2.78
03/20/73		5	1.58	2.46
1730 GMT		15	1.76	2.22
		20	1.72	2.07
29 53.5N		25	1.76	2.62
113 29.5W		30	1.59	2.19
		35	1.52	1.60
		40	1.46	1.66
		45	1.31	1.80
		50	0.85	1.40

		DEPTH	CHL A	PHAEO
STATION	61	0	2.91	2.22
03/20/73		5	3.80	2.08
2141 GMT		10	3.09	2.15
		15	2.06	2.38
30 01.0N		20	2.62	2.73
113 16.5W		25	2.06	2.20
		30	1.58	1.82
		35	1.15	1.61
		40	1.03	1.68
		45	0.79	2.09
		50	0.48	1.36

		DEPTH	CHL A	PHAEO
STATION	62	0	4.25	1.80
03/20/73		5	4.23	1.88
2351 GMT		10	4.91	2.01
		15	5.08	2.96
30 04.1N		20	5.25	2.63
113 09.7W		25	4.74	2.67
		30	2.88	1.46
		35	3.05	0.81
		40	3.56	2.19
		45	2.20	1.66
		50	1.72	2.01

		DEPTH	CHL A	PHAEO
STATION	63	0	5.42	1.12
03/21/73		5	6.94	3.03
0155 GMT		10	6.09	2.75
		15	10.66	3.86
30 09.2N		20	12.02	3.90
113 01.1W		25	12.70	4.99
		30	12.02	4.87
		35	7.79	3.79
		40	3.72	2.71
		45	2.48	2.60
		50	2.29	2.30

		DEPTH	CHL A	PHAEO
STATION	64	0	12.60	4.11
03/21/73		5	13.99	3.24
0354 GMT		10	12.61	3.77
		15	12.70	3.71
30 13.3N		20	9.48	4.35
112 55.7W		25	3.89	2.54
		30	3.94	2.80
		35	2.20	2.30
		40	1.27	2.05
		45	1.25	2.01
		50	2.37	0.28

		DEPTH	CHL A	PHAEO
STATION	74	0	12.19	2.28
03/21/73		5	11.85	2.62
0649 GMT		10	9.48	3.06
		15	11.34	3.39
29 53.5N		20	11.57	2.37
112 47.5W		25	12.01	2.56
		30	6.26	2.10
		35	3.56	2.23
		40	1.86	1.84
		45	1.52	2.01
		50	0.67	2.39

		DEPTH	CHL A	PHAEO
STATION	72	0	3.89	2.38
03/21/73		5	4.27	2.15
0847 GMT		10	4.40	2.03
		15	4.40	1.55
29 49.3N		20	4.56	1.86
112 55.7W		25	4.23	2.52
		30	5.42	1.98
		35	3.72	2.39
		40	3.05	1.78
		45	5.08	1.88
		50	1.52	5.87

		DEPTH	CHL A	PHAEO
STATION	71	0	3.38	3.69
03/21/73		5	3.89	3.82
1055 GMT		10	4.23	3.33
		15	5.42	2.94
29 43.5N		20	4.58	2.61
113 03.5W		25	5.08	2.80
		30	4.57	2.18
		35	4.40	2.84
		40	4.74	2.34
		45	4.06	2.21
		50	4.23	2.04

		DEPTH	CHL A	PHAEO
STATION	70	0	4.27	2.83
03/21/73		5	4.74	2.98
1300 GMT		10	4.57	3.47
		15	4.06	2.69
29 40.4N		20	3.05	4.83
113 10.0W		25	2.03	3.76
		30	1.52	2.82
		35	1.69	2.49
		40	1.69	2.81
		45	1.52	2.82
		50	2.13	3.61

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		DEPTH	CHL A	PHAEO
STATION	68	0	4.06	1.40
03/21/73		5	4.57	1.70
1724 GMT		10	4.81	1.71
		15	4.40	2.03
29 31.5N		20	3.22	1.48
113 25.0W		25	2.62	1.69
		30	2.37	2.13
		35	2.20	2.30
		40	2.37	2.29
		45	1.69	2.81
		50	1.69	2.17

		DEPTH	CHL A	PHAEO
STATION	109	0	3.94	2.22
03/21/73		5	3.87	2.06
1846 GMT		10	3.38	2.40
		15	2.96	2.17
29 85.5N		20	3.64	3.28
113 23.5W		25	3.52	3.74
		30	3.22	3.01
		35	3.88	3.38
		40	4.13	3.90
		45	3.82	3.50
		50	3.42	3.23

		DEPTH	CHL A	PHAEO
STATION	78	0	4.58	2.04
03/21/73		5	3.66	0.42
2149 GMT		10	5.08	1.52
		15	6.09	2.59
29 17.0N		20	7.11	2.94
113 08.8W		25	4.91	2.81
		30	3.72	1.43
		35	1.69	1.52
		40	1.14	1.60
		45	0.61	1.47
		50	0.44	1.98

		DEPTH	CHL A	PHAEO
STATION	79	0	1.88	1.12
03/22/73		5	2.18	1.39
[illegible]		[illegible]	[illegible]	.84
		15	2.85	2.20
29 19.5N		20	3.16	2.03
113 04.3W		25	3.34	2.12
		30	3.34	2.12
		40	2.79	2.17
		45	2.24	2.48
		50	1.68	1.70

		DEPTH	CHL A	PHAEO
STATION	80	0	2.55	3.50
03/22/73		5	2.43	1.72
0254 GMT		10	3.52	2.13
		15	4.06	3.66
29 24.1N		20	4.06	3.01
112 56.5W		25	2.94	2.97
		30	3.42	3.56
		35	2.88	2.11
		40	2.44	2.36
		45	1.86	1.48
		50	1.86	2.48

		DEPTH	CHL A	PHAEO
STATION	81	0	6.04	2.98
03/22/73		5	7.28	3.17
0503 GMT		10	5.08	2.48
		15	7.62	3.16
29 28.2N		20	6.43	4.66
112 50.0W		25	4.40	3.96
		30	5.08	3.60
		35	4.57	2.47
		40	2.71	3.08
		45	4.09	3.68
		50	2.71	3.56

		DEPTH	CHL A	PHAEO
STATION	82	0	3.70	2.06
03/22/73		5	4.06	1.99
0614 GMT		10	3.76	2.06
		15	3.34	2.14
29 33.2N		20	4.09	1.80
112 44.0W		25	3.94	2.12
		30	3.16	2.20
		35	3.06	3.01
		40	3.16	2.38
		45	2.49	2.47

		DEPTH	CHL A	PHAEO
STATION	83	0	11.68	3.28
03/22/73		5	13.47	3.19
0927 GMT		10	12.44	3.00
		15	12.87	4.82
29 37.0N		20	2.36	3.24
112 35.0W		25	5.25	2.47
		30	1.86	1.68
		35	0.85	2.16
		40	0.55	2.34
		45	0.48	2.34
		50	0.43	2.34

		DEPTH	CHL A	PHAEO
STATION	91	0	10.33	6.56
03/22/73		5	9.14	5.98
1234 GMT		10	8.63	4.88
		15	8.63	5.35
29 15.0N		20	9.31	7.90
112 32.0W		25	7.79	7.33
		30	6.26	6.60
		35	3.05	7.89
		40	5.42	5.04

		DEPTH	CHL A	PHAEO
STATION	90	0	8.12	4.74
03/22/73		5	9.82	6.26
1417 GMT		10	9.48	3.71
		15	6.77	2.88
29 12.5N		20	4.74	4.27
112 37.5W		25	2.67	2.63
		30	2.18	1.74
		35	0.75	2.34
		40	0.41	1.50
		45	0.23	2.76
		50	0.18	1.68

		DEPTH	CHL A	PHAEO
STATION	89	0	6.60	3.85
03/22/73		5	6.60	3.53
1641 GMT		10	7.52	4.61
		15	4.91	3.29
29 07.5N		20	2.88	3.56
112 45.5W		25	2.88	2.91
		30	2.88	2.11
		35	2.88	1.96
		40	2.54	1.96
		45	2.42	2.83
		50	1.94	2.24

		DEPTH	CHL A	PHAEO
STATION	88	0	3.14	1.58
03/22/73		5	3.64	1.89
1853 GMT		10	4.06	2.05
		15	3.22	1.45
29 03.2N		20	2.73	2.00
112 53.5W		25	2.55	2.12
		30	1.76	2.04
		35	1.94	2.27
		40	1.70	2.16
		45	1.27	2.18
		50	1.03	2.72

		DEPTH	CHL A	PHAEO
STATION	87	0	2.00	1.17
03/22/73		5	2.18	1.91
2119 GMT		10	3.03	1.22
		15	2.37	1.34
28 58.8N		20	2.00	1.63
113 01.1W		25	3.16	2.15
		30	3.34	1.86
		35	2.74	1.76
		45	2.46	1.93
		50	2.29	2.20

		DEPTH	CHL A	PHAEO
STATION	92	0	5.82	5.40
03/23/73		5	7.04	3.22
0235 GMT		10	6.12	3.57
		15	6.55	3.36
28 43.1N		20	5.95	3.16
113 05.0W		25	5.58	2.60
		30	5.82	3.05
		35	6.44	2.37
		40	6.44	2.93
		45	6.48	3.13
		50	5.46	2.72

GULF Cruise 7303

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Station Number	Position		Date Mo/Day	Time (GMT) Start	End	Meters Wire Out	Raw Volume	Volume/ 1000 m^3
1	31 07N	114 48W	3/14	0915	0925	10	13.3	32.8
3	31 14N	114 32W	3/14	0542	0545	30	20.0	168.8
4	31 19N	114 26W	3/14	0315	0318	40	7.3*	47.7
5	31 24N	114 18W	3/14	0100	0103	40	5.3*	28.1
6	31 28N	114 10W	3/13	2250	2300	20	60.7	182.3
7	30 58N	114 41W	3/14	2115	2125	30	222.0**	655.3
8	31 01N	114 35W	3/14	2315	2325	25	39.3	102.5
9	31 04N	114 29W	3/15	0121	0124	40	8.0	47.9
10	31 08N	114 22W	3/15	0315	0318	30	3.3	31.0
11	31 11N	114 18W	3/15	0455	0500	60	18.7	83.9
12	31 15N	114 12W	3/15	0641	0648	90	16.0	52.7
13	31 17N	114 06W	3/15	0825	0835	50	16.0	36.8
14	31 22N	113 59W	3/15	1010	1020	10	47.3	113.2
15	31 25N	113 53W	3/15	1125	1135	10	10.7	28.5
16	31 29N	113 47W	3/15	1310	1320	10	3.3	8.5
17	30 46N	114 39W	3/16	0503	0505	20	10.7	118.8
18	30 51N	114 30W	3/16	0335	0345	10	10.0	26.4
19	30 57N	114 21W	3/16	0127	0131	50	27.3	163.4
20	31 00N	114 15W	3/15	2335	2350	170	118.7	285.1
21	31 04N	114 09W	3/15	2140	2150	300	213.3	323.0
22	31 07N	114 03W	3/15	1938	1945	80	782.6	3059.4
23	31 10N	113 59W	3/15	1822	1827	60	2.0	-
24	31 14N	113 51W	3/15	1654	1658	30	21.3	182.8
25	31 18N	113 41W	3/15	1518	1528	15	12.0	31.2
26	30 25N	114 36W	3/16	0710	0713	10	126.7**	1029.2
27	30 30N	114 29W	3/16	0820	0825	10	140.0**	1122.7
28	30 35N	114 21W	3/16	1008	1015	100	266.7	1054.2
29	30 39N	114 13W	3/16	1232	1243	120	494.7	1416.3
30	30 43N	114 05W	3/16	1447	1501	180	359.3	743.0
31	30 46N	114 00W	3/16	1649	1659	150	520.0	-
32	30 52N	113 50W	3/16	1906	1914	100	514.0	1835.1
33	30 59N	113 38W	3/16	2110	2117	75	50.7	217.0
34	31 04N	113 28W	3/16	2358	0002	50	47.3**	168.9
35	31 09N	113 21W	3/17	-	-	-	17.3	-
37	30 08N	114 26W	3/17	2305	2311	90	93.3	313.6
38	30 13N	114 16W	3/17	2045	2100	220	453.3	810.8
39	30 18N	114 08W	3/17	1817	1837	300	128.0**	175.4
40	30 23N	113 59W	3/17	1544	1600	300	395.3	641.1
41	30 28N	113 50W	3/17	1250	1303	250	994.7	2140.1
42	30 34N	113 40W	3/17	1020	1025	120	80.7	226.2
43	30 39N	113 32W	3/17	0825	0830	110	206.7	709.6
44	30 44N	113 21W	3/17	0611	0618	100	47.3	148.9
45	30 48N	113 16W	3/17	0426	0430	40	10.0	60.5
47	29 51N	114 14W	3/18	0222	0230	100	74.7	241.0
48	29 56N	114 06W	3/18	0452	0515	300	90.7	118.6
49	30 00N	113 58W	3/18	0747	0810	300	56.0	71.3
50	30 05N	113 50W	3/18	1017	1035	300	40.7	54.1
51	30 11N	113 38W	3/18	1316	1327	150	33.3	80.4
52	30 19N	113 26W	3/18	1607	1617	150	442.0	1083.9
53	30 24N	113 17W	3/18	1905	1916	170	167.3**	568.9
54	30 30N	113 05W	3/18	2115	2120	10	110.7**	513.7
55	29 36N	113 57W	3/19	2150	2210	300	297.3	204.2
57	29 40N	113 51W	3/20	0213	0235	300	63.3	71.4
58	29 44N	113 45W	3/20	0454	0520	300	44.7*	57.8
59	29 47N	113 39W	3/20	0723	0748	300	43.3	58.0
60	29 53N	113 29W	3/20	0940	0956	240	172.0	278.9
61	30 01N	113 16W	3/20	1350	1404	150	1016.7	2666.4

GULF Cruise 7303

MACROZOOPLANKTON BIOMASS
Net Mesh Size: 0.505 mm

Station Number	Position		Date Mo/Day	Time (GMT) Start	End	Meters Wire Out	Raw Volume	Volume/ 1000 m^3
62	30 04N	113 10W	3/20	1558	1609	150	321.3	761.4
63	30 09N	113 01W	3/20	1805	1819	150	377.3	1068.8
64	30 13N	112 56W	3/20	2000	2006	100	115.3	458.1
65	29 20N	113 42W	3/12	-	-	300	96.0	174.1
66	29 21N	113 39W	3/12	1253	1315	300	82.7	119.0
67	29 24N	113 37W	3/12	1545	1607	300	80.3	102.5
68	29 31N	113 25W	3/21	0930	0936	105	97.3	325.7
69	29 35N	113 18W	3/21	0750	0811	300	62.7	82.4
70	29 40N	113 10W	3/21	0511	0532	300	114.0	169.2
71	29 43N	113 03W	3/21	0305	0319	180	311.4	639.3
72	29 49N	112 56W	3/21	0056	0104	100	980.7	3281.0
74	29 53N	112 47W	3/20	2255	2305	100	166.7	629.8
75	29 09N	113 22W	3/12	0658	0720	300	73.3**	116.2
76	29 07N	113 25W	3/12	0422	0444	300	85.3	129.8
77	29 05N	113 28W	3/12	0118	0138	300	94.7	139.9
78	29 17N	113 09W	3/21	1405	1426	300	78.7*	109.2
79	29 19N	113 04W	3/21	1630	1649	300	178.7	268.2
80	29 24N	112 56W	3/21	1906	1927	300	181.3	225.7
81	29 28N	112 50W	3/21	2112	2125	170	111.3	251.1
84	28 51N	113 15W	3/11	1541	1601	300	94.7	127.7
85	28 53N	113 11W	3/11	1802	1818	300	68.0*	110.7
86	28 54N	113 08W	3/11	2100	2130	300	228.7	307.1
87	28 59N	113 01W	3/22	1335	1350	180	34.0	-
88	29 03N	112 53W	3/22	1110	1130	300	102.7	128.0
89	29 07N	112 47W	3/22	0854	0915	300	120.0	160.4
90	29 12N	112 37W	3/22	0626	0647	300	142.0	185.6
91	29 15N	112 32W	3/22	0445	0454	120	114.7	333.1
92	28 43N	113 05W	3/22	1912	1932	300	60.0	78.4
109	29 28N	113 23W	3/21	1053	1100	80	36.7	138.6

* Unusually large organism removed from one of the half-samples, after the displacement volume was taken.

** Did not drain well, usually due to large amounts of phytoplankton.

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