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Global Wave Statistics for Structural Design Assessments

By
Wah T. Lee

NSWCCD-HD-1048-01 Global Wave Statistics for Structural Design Assessments

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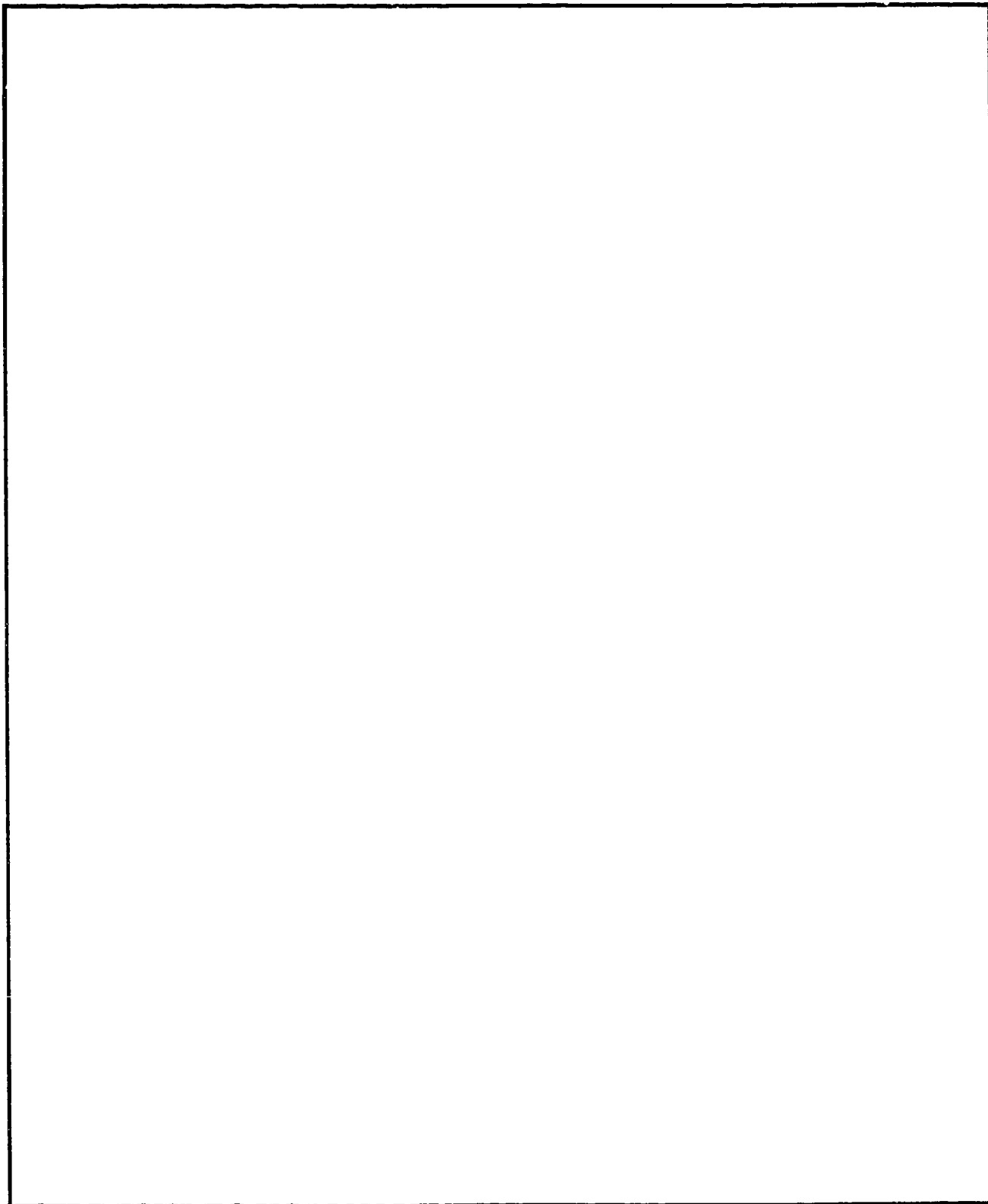
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Operational areas of interest to the U.S. Navy are dictated by the maritime strategy and have in recent years included Southern Hemisphere and littoral regions. This report is intended to aid in ship design by listing the seasonal distributions of significant wave height and modal wave period data for global open ocean and littoral regions. A short description of the 4 idealized formulations and their applications is also presented.					
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ABSTRACT

Operational areas of interest to the U.S. Navy are dictated by the maritime strategy and have in recent years included Southern Hemisphere and littoral regions. This report is intended to aid in ship design by listing the seasonal distributions of significant wave height and modal wave period data for global open ocean and littoral regions. A short description of the 4 idealized formulations and their applications is also presented.

ADMINISTRATIVE INFORMATION

The work performed herein was performed by Code 561 of the Hydromechanics Directorate with the Structures and Composites Department (Code 65) of the Survivability, Structures and Materials Directorate under the sponsorship of the Naval Sea System Command (SEA 03R11). This report is submitted in fulfillment of Milestone D2 of Subtask III.C of the Reliability Based Design Criteria for Surface Ship Structures Task under Program Element 63563N and Work Request Number N0002495WR10602. It is identified by Work Unit Number 1-6540-480 at the David Taylor Model Basin (NSWCCD).

INTRODUCTION

Improved operational performance of surface ships is a continuing goal of the U.S. Navy. Since World War II, most operational experience obtained by the Navy has been in mid-latitude environments under relatively moderate conditions. Therefore, it is not surprising that operational performance can be significantly degraded when crewmembers

are forced to operate in northern latitudes which contain higher sea states and longer wave periods. With the increased interest in the Navy's ability to conduct sustained combat operation in all regions of the world, the need has arisen to compile a global sea state probabilities data base for ship designers and operators.

The primary data source is the hindcast data base developed by the U.S. Navy. (References 1 and 2) Briefly, archived wind data are used by Fleet Numerical Oceanography Center to hindcast the wave fields for approximately 1500 locations (grid points) throughout the Northern Hemisphere, see Reference 3, using the Spectral Ocean Wave Model (SOWM). The SOWM was the GSOWM (Global Spectral Ocean Wave Model) and now is the WAM (Wave Model) predecessor. The wind fields are updated at 6-hour intervals over a period of 17 years. Thus, the resulting wave directional spectra are a hindcast time history of wave conditions throughout the Northern Hemisphere over a period of 17 years. The SOWM is best used by statistically averaging wave conditions over a period of years for a specific location and season. The hindcasts generally provide greater occurrences of higher sea states and show fewer occurrences of lower sea states than visual observations. With regard to wave periods, the hindcasts generally indicate longer wave periods for given heights than for visual observations. This is not surprising as it is difficult to observe wave periods at sea and the codes used to record observed occurrences onboard ships are confusing to some observers. Very often the naval architect uses the most probable modal or peak wave period for several varying wave heights. In this work, the modal wave periods, being longer, will cause larger responses to be calculated for the longer ships.

The buoy data are based on the National Oceanic and Atmospheric Administration Data Buoy Center climatic summaries. These summaries provided comprehensive wind and wave data collected for a long period of record from moored buoys and platforms in the near coastal areas adjacent to the US mainland and the deep ocean.

The primary data source for the Southern Hemisphere is the Global Wave Statistics by the National Maritime Institute (NMI) of the United Kingdom. The visual wave data have been processed through a suite of computer programs named "NMIMET." This includes procedures for describing wave statistics from wind statistics based on parametric modeling of their joint probability, and a method for synthesizing directional wave climate from simple wave and wind statistics. (Reference 4) This technique also allows the derivation of reliable statistics of the wave periods by analytical modeling the joint probability distribution of heights and periods, thus avoiding any use of visual observations of wave period, which are known to be very misleading. NMI wave period data in Reference 4 are intended to be equivalent to statistics of the zero crossing period. All wave period data in this report are presented in terms of the modal period, using the assumed relation $T_0 = 1.4 * T_z$ for conversion of data available in terms of the zero crossing period. T_0 is the modal wave period in seconds and T_z is the zero crossing period in seconds.

DATA PRESENTATION

The seasonal (Annual, Winter, Summer) wave height and modal wave period distributions for the 47 grid points are presented in the appendices. The darkened circles

on Figures 1 and 2 indicate the SOWM grid points included in this work for the North Atlantic and North Pacific, respectively. The open ocean locations identified on Figures 1 and 2 span both oceans from the prevailing westerlies into the polar northeasterlies and are all north of the equator. Additionally, the influences of land mass, currents, continental shelf, and local storm tracks each cause a different climatology variation with longitude. Tables 1 and 2 provide a summary of the points included in Figures 1 and 2.

Figure 3 shows the locations of the Southern Hemisphere wave data derived from the NMI. Figure 4 indicates the various coastal locations throughout the world. Tables 3 and 4 provide a summary of the points included in Figures 3 and 4.

Appendices A and B provide the data base of open ocean wave data derived from the hindcast climatology for the North Atlantic and North Pacific Oceans, respectively. Appendix C provides the Southern Hemisphere NMI wave data, and Appendix D contains the Coastal locations data. The winter season is considered in this report as the period from December through February.

The seasonal significant wave height Tables in the Appendices present the percentage frequency of occurrences for every meter interval and the associated most probable modal wave period for that wave height band. It is noted that the modal periods developed in this work are reflective of the peak of the entire (density) spectrum. Very often this coincides with the peak of the primary direction. The third column in this Table is the wave period range data. The PRANGE data are from the 5th percentile to 95th percentile with a 90 percent confidence.

The next sets of seasonal Tables in the Appendices are the modal wave period distribution data. There are 15 modal wave period bands in the SOWM hindcast data.

The modal period distributions in each wave height band are normalized to 100%. On the other hand, there are only 11 wave period bands in the NMI data. For consistency as well as convenience, it is highly desirable to have a common set of modal wave periods in this data base. Therefore, in order to use the linear interpolation method to expand the NMI data wave period bands to match those in the SOWM data base, it has been assumed that the NMI data are evenly distributed within each bandwidth. Table 5 shows the 11 NMI data and the corresponding 15 SOWM data wave period bands. To convert the first wave period band of the NMI data into the SOWM format, the percentage of occurrences in the <5.6 sec band of the NMI must evenly divide into the two corresponding SOWM wave period bands.

COMPARISON OF WAVE DATA

The primary purpose of this report is to provide the ship designer with the necessary data base to conduct rational reliability based structural design assessments. This section presents the comparison of significant wave heights and modal wave periods among the SOWM, Buoy, and NMI data. Figure 5 identifies the SOWM grid point, the Buoy station, and the NMI area off the east coast of the U.S. Figures 6 and 7 show the typical annual exceedance significant wave heights and modal wave periods from the three sources. In general, the correlation among the three sources is fairly good though the NMI data are broader than the other two. In particular, the NMI wave height distributions have higher probabilities for higher wave heights than other two sources. This is due, in part, to larger open ocean area in the NMI data base.

SPECTRAL FAMILIES

Among the various statistical tools to describe the wave field, spectral analysis is the most effective and convenient means. The SOWM and buoy spectra have no inherent biases due to spectral shape and all shapes are sampled. However, it is prohibitively expensive and time consuming to use this large set of spectra for seakeeping performance analysis. This has led to the use of empirical and mathematically derived spectra as a standard tool, even though the idealized spectra have a limited range of applications and may not be realistic in certain situations. Spectra from 4 idealized formulations have been generated for comparison with a typical buoy spectrum from the Kings Bay area. All spectra used the wave statistics in the buoy spectrum that have a significant wave height of 7.8 ft (2.4 M) and modal wave period of 7.1 sec. Figure 8 shows the comparison of idealized spectra with buoy derived point spectrum. A short description of the 4 idealized formulations is given below. Figure 9 shows a map of the Kings Bay area.

Utilizing the measured wave spectra from the North Atlantic, Bretschneider derived the well known two-parameter Bretschneider spectrum which is applicable to fully developed, as well as the usual growing and decaying seas that persist most of the time throughout the world oceans.

The JONSWAP spectrum formulation is developed for fetch-limited North Sea conditions which is fairly similar to the Gulf of Mexico area. When the peakedness parameter equals to 1, the JONSWAP spectrum reduces to the Bretschneider formulation.

Based on the conclusion of the theoretical study on the JONSWAP project and some laboratory results, the Wallops spectrum is derived with the properties of variable

bandwidth and correct energy content. One novel feature of the Wallops spectrum is the possibility of using remotely sensed data as an input directly. Wallops' spectra represent the less common fully developed as well as the usual partially developed seas that persist most of the time throughout the world oceans. When the slope parameter "m" in the Wallops spectrum decreases to the neighborhood of 5, then the Wallops model will reduce exactly to the Bretschneider spectrum.

Ochi's six-parameter spectrum, based on the statistical analysis of 800 spectra measured in the North Atlantic ocean, has been traditionally used to model the multiple peaks' spectra associated with storm seas. In the derivation of the six-parameter spectrum, the spectrum is decomposed into two parts, one representing the low frequency components and the other the high frequency components of the wave energy. When the shape limit equals to one and with only one component of the spectrum, the three-parameter spectrum will reduce exactly to the Bretschneider spectrum.

DATA FILE STRUCTURE AND DESCRIPTION

The 3.5" floppy disk included in this report contains all the data base files. There are two files for each ocean region. All files are in ASCII format. The header information included for modal wave period distributions file is the Grid Point, ocean, and season. Data are listed as from left to right and top to bottom starting with smallest wave height or wave period value to the largest. All wave period data are presented or converted to the SOWM spectral modal period bands with center periods of 3.2, 4.8, 6.3, 7.5, 8.6, 9.7, 10.9, 12.4, 13.8, 15, 16.4, 18, 20, 22.5, and 25.7 seconds. Since the SOWM data in

References 1 and 2 are rounded off to the nearest 1 percent, some arbitrary but systematic small values have been assigned to those that show occurrences but contain less than 1 percent of the total data. Furthermore, in order for the total occurrence to be exactly 100 percent, the undetermined wave period data must be distributed evenly at that wave height band. The significant wave height data are presented at 1 meter increments except at the 8-10 meter interval.

The names of the files for the 4 ocean regions are as follows:

Region	Name of File	Type of Data
North Atlantic	NATLWH.DAT	N. Atlantic Significant Wave Height Distributions
	NATLPD.DAT	N. Atlantic Modal Wave Period Distributions
North Pacific	NPACWH.DAT	N. Pacific Significant Wave Height Distributions
	NPACPD.DAT	N. Pacific Modal Wave Period Distributions
S. Hemisphere	SHEMWH.DAT	S. Hemisphere Significant Wave Height Distributions
	SHEMPD.DAT	S. Hemisphere Modal Wave Period Distributions
Coastal Area	CAWH.DAT	Coastal Area Significant Wave Height Distributions
	CAPD.DAT	Coastal Area Modal Wave Period Distributions

CONCLUDING REMARKS

This report intends to aid in ship design by listing the seasonal distributions of significant wave height and wave period data for global open ocean and littoral regions. A comparison among the SOWM, Buoy, and NMI data indicates that the correlation among the three sources is fairly good though the NMI data are broader than the other two. A short description of the 4 idealized formulations and their applications is also presented. As the Navy further refines the emerging ship performance design practice, this report will become useful in systems integration and performance analyses.

ACKNOWLEDGMENTS

The author gratefully acknowledges the continuing technical support, assistance, and consultation of Mr. Paul Hess and Mr. Jerome Sikora of the Survivability, Structures and Materials Directorate, in developing the global wave statistics data presented herein. Additionally, the comments and suggestions of Mr. Allen Engle of NAVSEA is appreciated.

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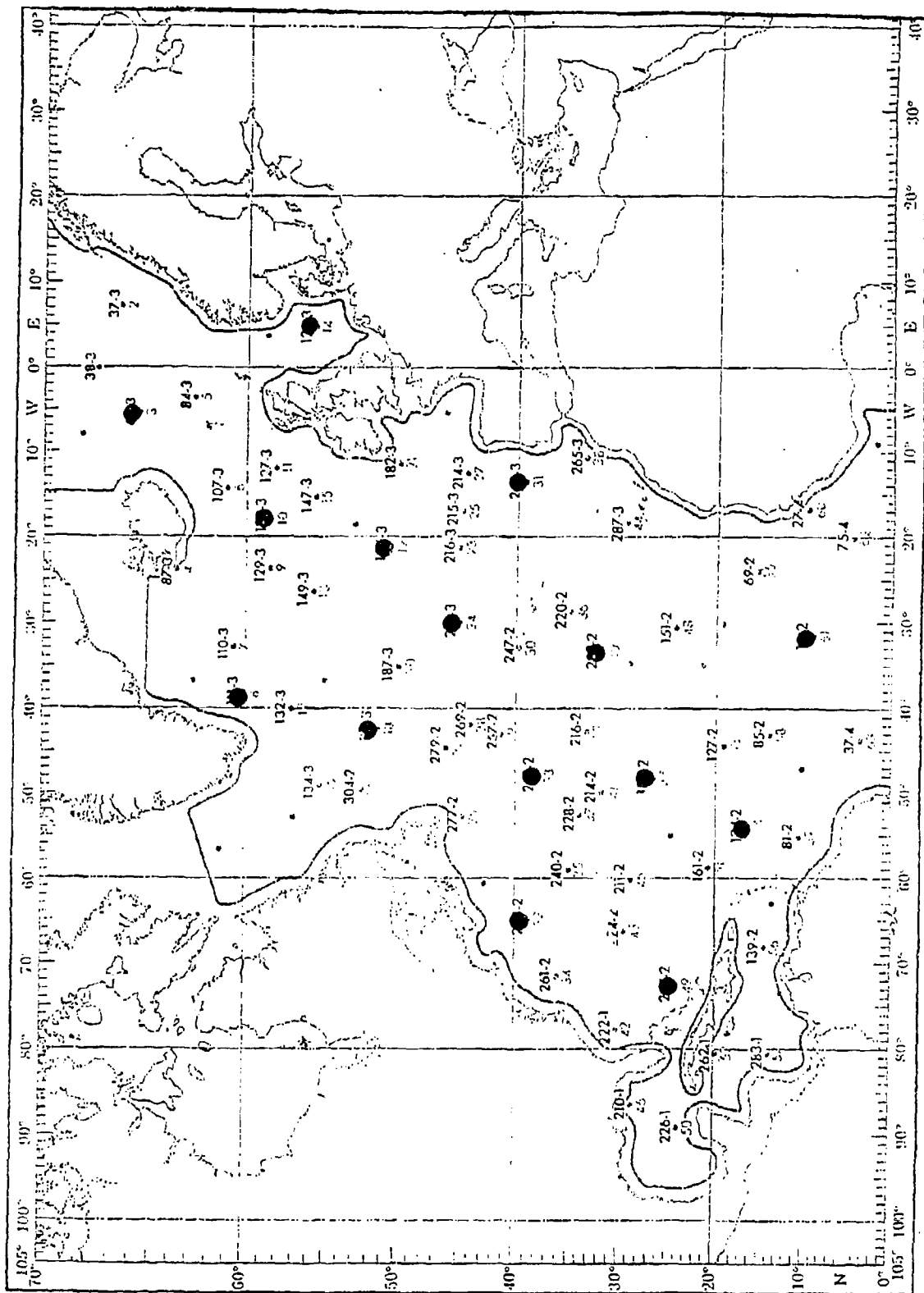


Figure 2 - Map Showing N. Pacific Region Locations.

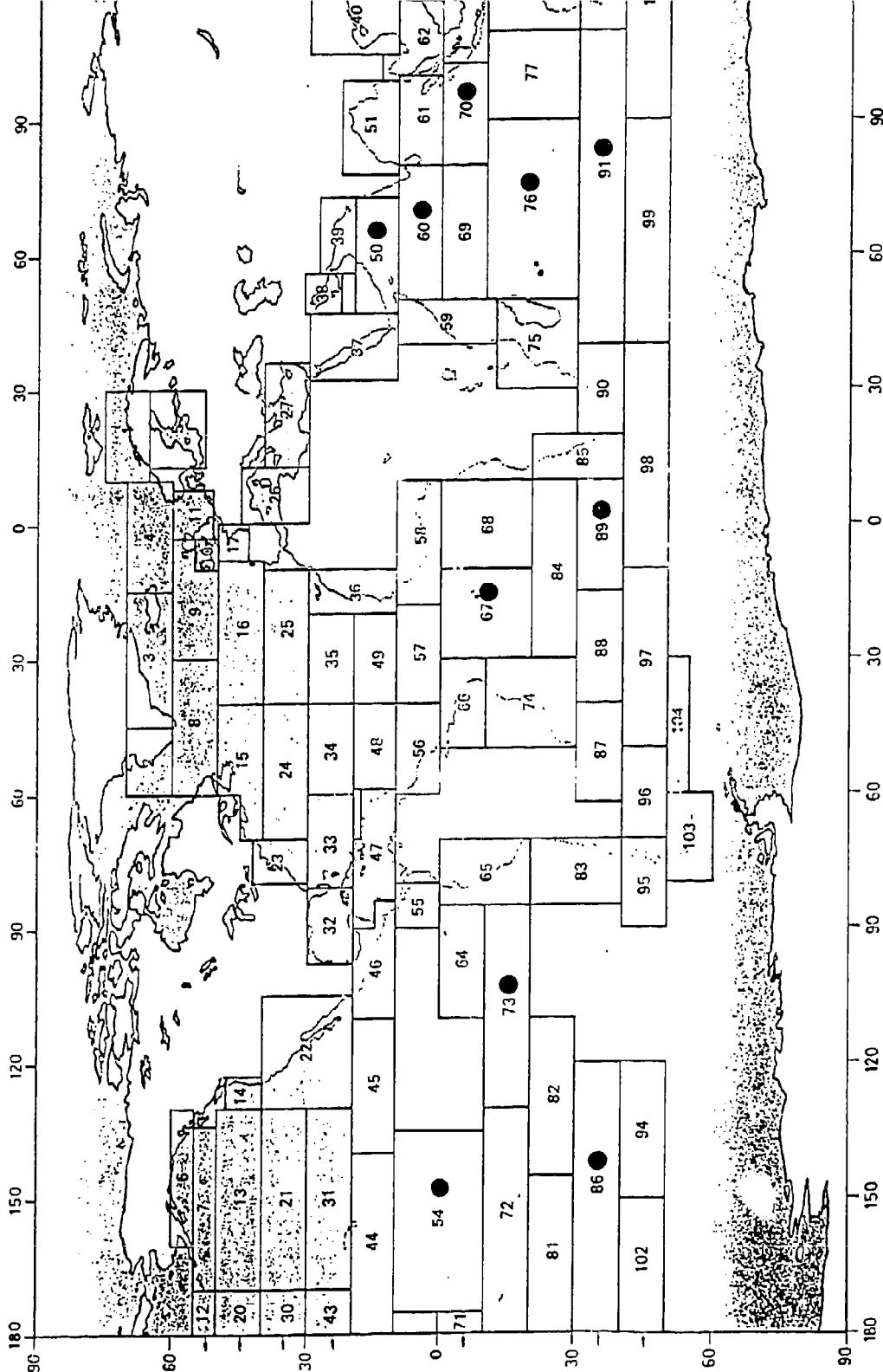


Figure 3 - Map Showing Southern Hemisphere Region Locations.

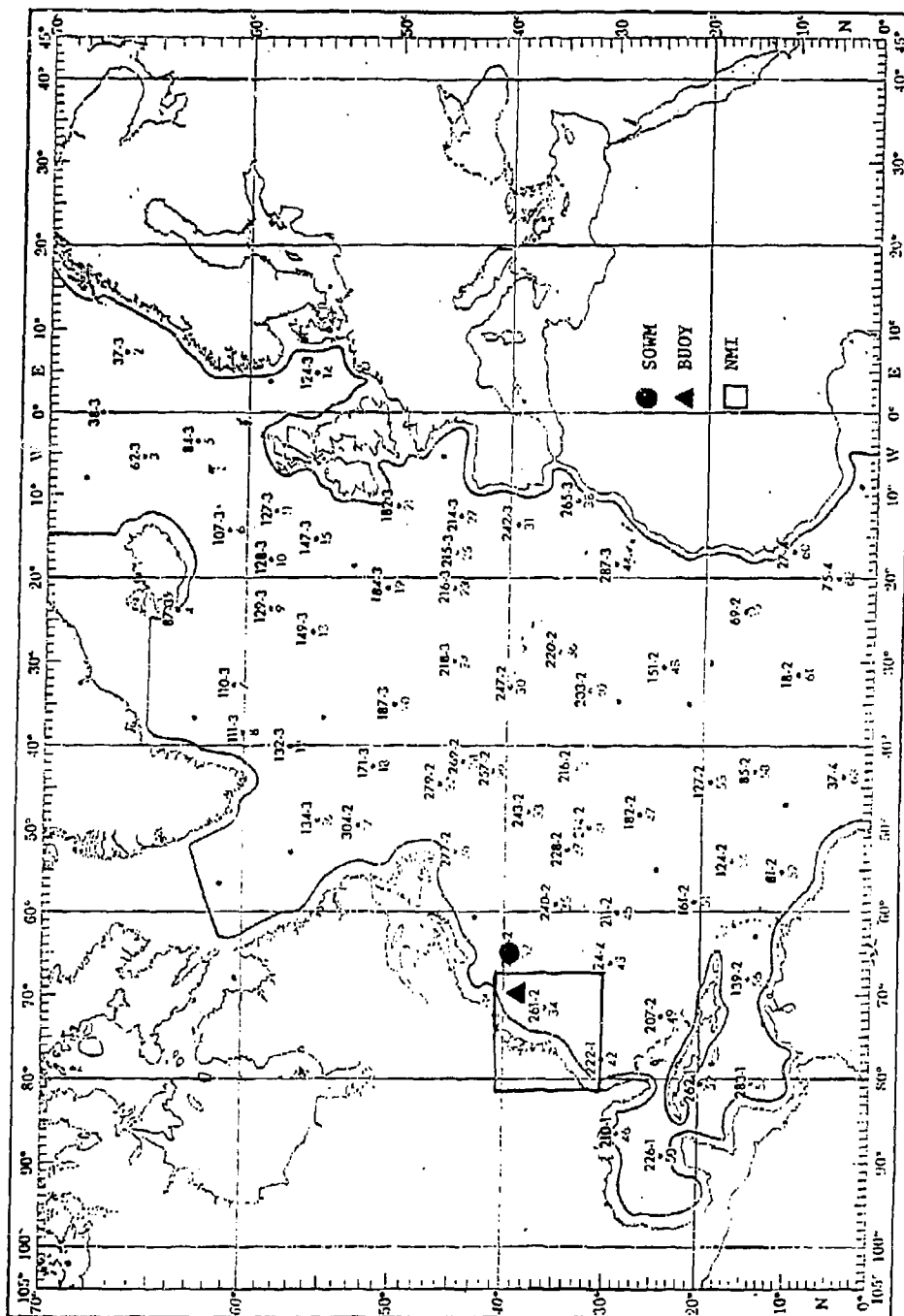


Figure 5 - Locations of the SOWM Grid Point, the Buoy Station, and the NMI Area off the East Coast of the U.S.

SIGNIFICANT WAVE HEIGHTS COMPARISON

EAST COAST - ANNUAL DISTRIBUTIONS

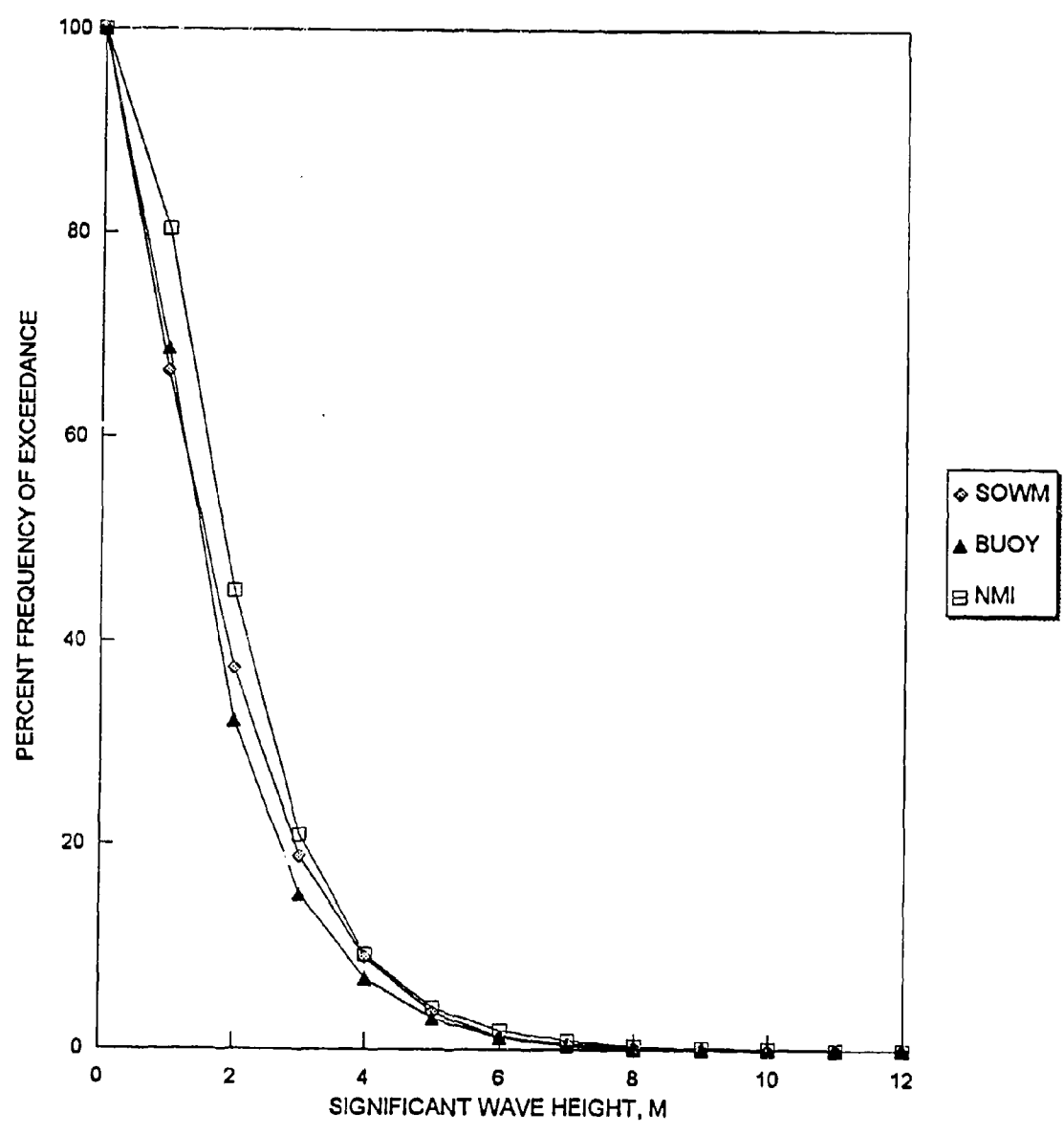


Figure 6 - Comparison of Significant Wave Heights Among SOWM, Buoy, and NMI Data.

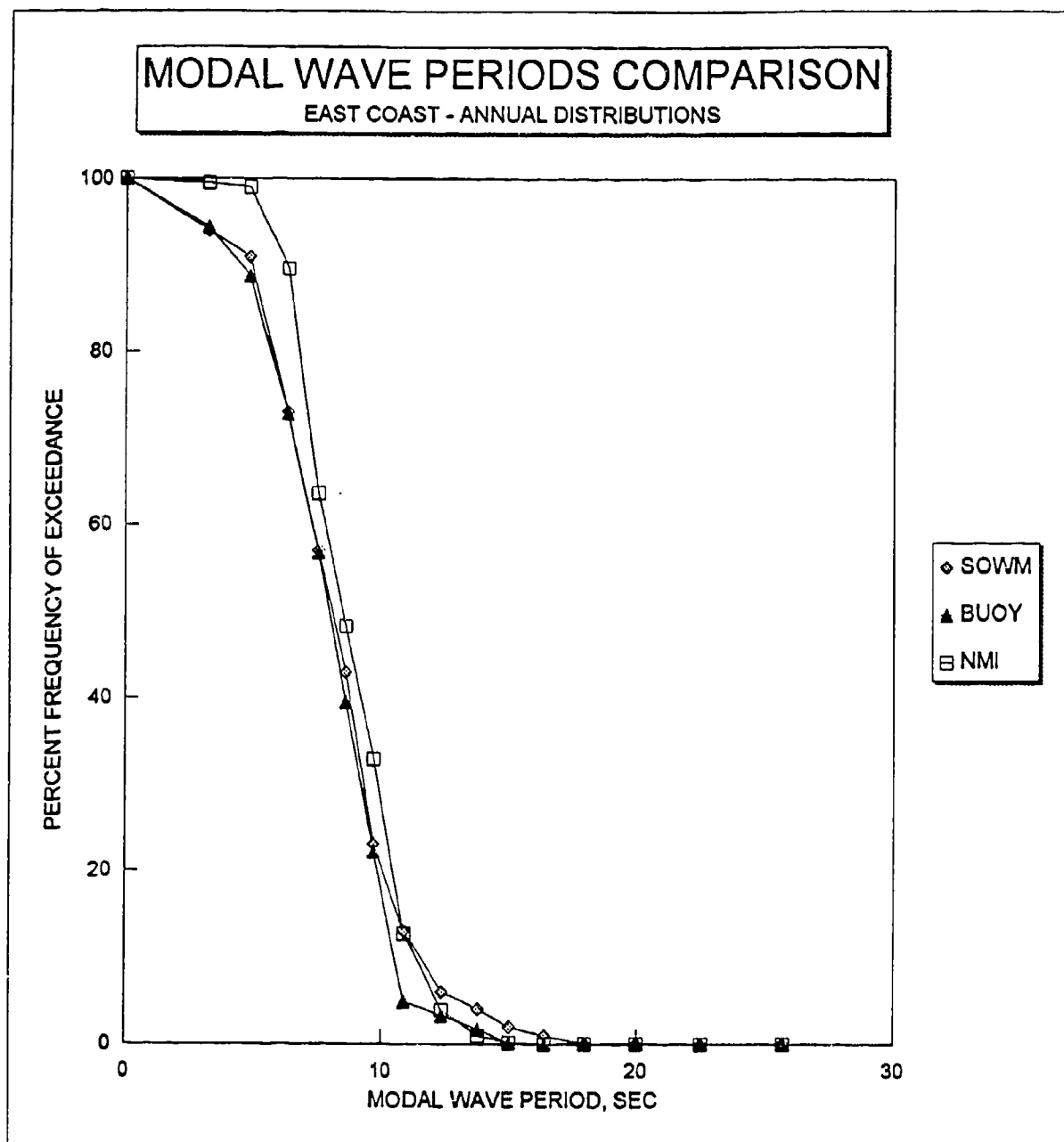


Figure 7 - Comparison of Modal Wave Periods Among SOWM, Buoy, and NMI Data.

SPECTRA COMPARISON

SIGNIFICANT HEIGHT = 7.8 FT (2.4 M), MODAL PERIOD = 7.1 SEC

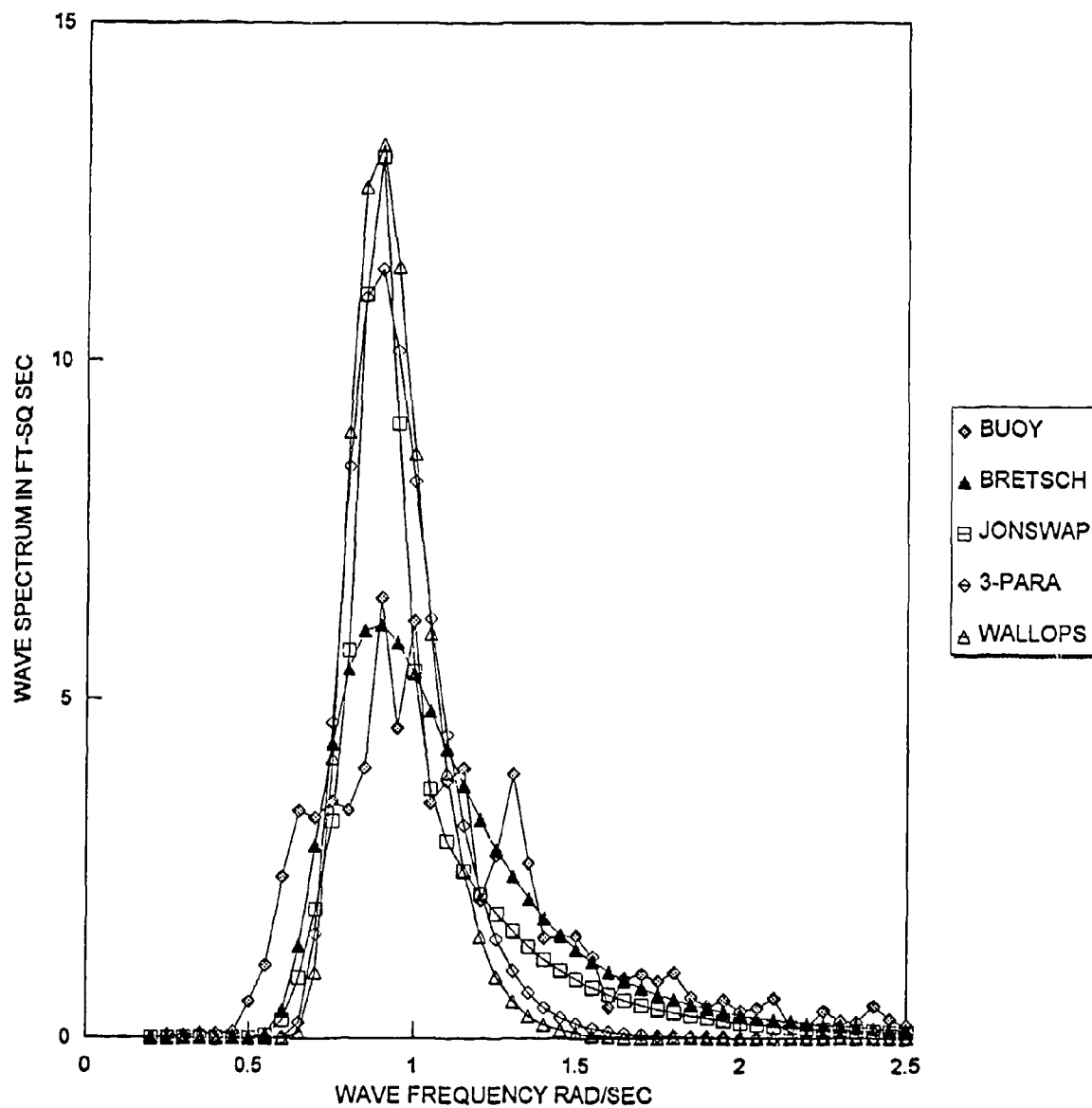


Figure 8 - Comparison of Wave Spectra Models and Measured Data.

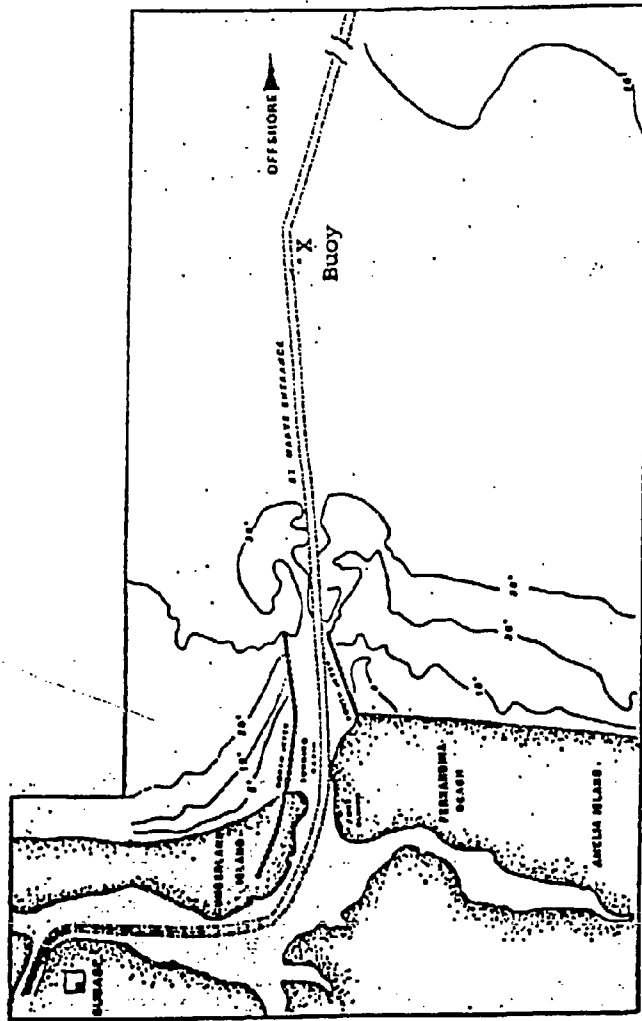
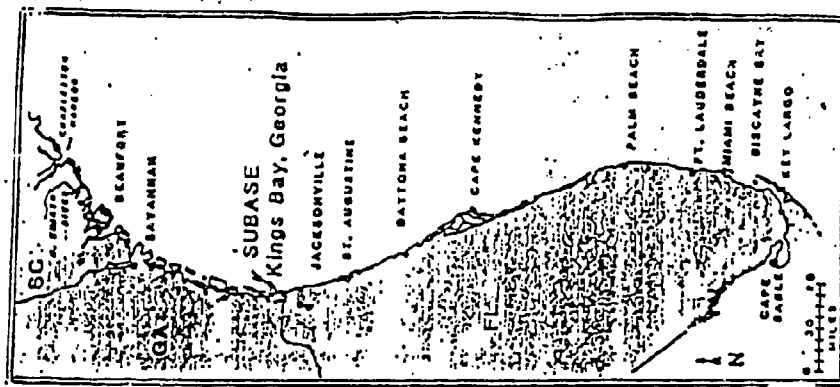


Figure 9 - Measurement Location for Data Used in Comparison of Wave Spectra Models.

TABLE 1 - N. ATLANTIC REGION LOCATIONS USED IN THE GLOBAL WAVE
STATISTICS DATA BASE.

GRID POINT	LATITUDE	LONGITUDE
3	65.7 N	5.8 W
8	60.1 N	38.7 W
10	58.6 N	18.2 W
14	55.9 N	4.4 E
18	51.5 N	42.7 W
19	50.6 N	21.5 W
24	45.1 N	30.2 W
31	39.3 N	13.9 W
32	38.8 N	65.1 W
33	37.9 N	48.2 W
40	32.0 N	33.7 W
47	26.7 N	48.5 W
49	24.2 N	72.8 W
54	16.7 N	54.2 W
61	9.2 N	31.9 W

TABLE 2 - N. PACIFIC REGION LOCATIONS USED IN THE GLOBAL WAVE
STATISTICS DATA BASE.

GRID POINT	LATITUDE	LONGITUDE
2	59.4 N	172.0 W
4	56.8 N	174.8 W
12	50.9 N	145.6 W
13	50.3 N	171.3 W
16	47.1 N	161.2 E
24	41.0 N	134.9 W
30	35.7 N	176.1 E
31	35.6 N	155.2 W
33	34.6 N	145.9 E
38	31.5 N	127.7 W
51	20.5 N	177.1 W
55	17.6 N	138.5 E

TABLE 3 - SOUTHERN HEMISPHERE REGION LOCATIONS USED IN THE
GLOBAL WAVE STATISTICS DATA BASE.

GRID POINT	LATITUDE	LONGITUDE
50	15.0 N	60.0 E
54	0.0 S	155.0 W
60	5.0 N	65.0 E
67	10.0 S	20.0 W
70	5.0 S	95.0 E
73	15.0 S	105.0 W
76	20.0 S	70.0 E
86	35.0 S	150.0 W
89	35.0 S	5.0 W
91	35.0 S	70.0 E

TABLE 4 - COASTAL REGION LOCATIONS USED IN THE GLOBAL WAVE
STATISTICS DATA BASE.

AREA	GRID POINT	LATITUDE	LONGITUDE
WESTERN MEDITERRANEAN	26	40 N	8 E
EASTERN MEDITERRANEAN	27	35 N	25 E
PERSIAN GULF	38	27 N	50 E
NORTH SEA	14	55.9 N	4.4 E
CUBA / HAITI	49	24.4 N	72.8 W
CUBA / HAITI	52	19.9 N	80.8 W
GULF OF MEXICO	46	28.8 N	86.7 W
GULF OF MEXICO	50	24 N	89.4 W
SEA OF JAPAN	25	40.2 N	131.2 E
SOUTH CHINA SEA	60	12.2 N	112.6 E

TABLE 5 - WAVE PERIOD BANDS FOR THE GLOBAL WAVE
STATISTICS DATA BASE.

Global Wave Statistics Wave Period Range (sec)	SOWM Wave Period (sec)
< 5.6	3.2 4.8
5.6-7	6.3
7-8.4	7.5
8.4-9.8	8.6 9.7
9.8-11.2	10.9
11.2-12.6	12.4
12.6-14	13.8
14-15.4	15
15.4-16.8	16.4
16.8-18.2	18
>18.2	20 22.5 25.7

REFERENCES

1. "U.S. Navy Hindcast Spectral Ocean Wave Model Climatic Atlas: North Atlantic Ocean," Publication NAVAIR 50-1C-538, Naval Oceanography Center Detachment, Asheville, N.C. (Mar 1983).
2. "U.S. Navy Hindcast Spectral Ocean Wave Model Climatic Atlas: North Pacific Ocean," Publication NAVAIR 50-1C-539, Naval Oceanography Center Detachment, Asheville, N.C. (Mar 1985).
3. Pierson, W.J., "The Spectral Ocean Wave Model (SOWM), A Northern Hemisphere Model for Specifying and Forecasting Ocean Wave Spectra," DTNSRC Report 82/011 (Jul 1982).
4. Hogben, N. et al "Global Wave Statistics" British Maritime Technology Limited (1985).

APPENDIX A

N. ATLANTIC REGION

GP 3	N. ATLANTIC ANNUAL				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	6.83	4.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.49	23.14	4.11	2.42	0.00	0.00	0.00	0.00	0.00	
7.50	7.97	15.28	27.31	3.96	0.00	0.00	0.00	0.00	0.00	
8.60	17.39	22.22	26.13	24.66	2.97	0.00	0.00	0.00	0.00	
9.70	7.97	10.19	14.37	28.25	20.42	4.65	0.00	0.00	0.00	
10.90	15.94	10.19	9.58	16.95	34.04	23.24	3.82	3.41	0.00	
12.40	6.83	4.37	4.11	4.84	17.51	39.84	43.64	14.61	4.19	
13.80	7.36	4.70	4.42	5.22	6.28	10.73	23.50	31.48	13.54	
15.00	2.21	2.35	4.42	5.22	6.28	10.73	11.75	31.48	45.14	
16.40	1.28	1.63	3.83	4.52	5.45	4.65	8.15	10.91	19.56	
18.00	0.53	1.02	0.96	1.88	4.54	3.10	5.09	4.55	9.78	
20.00	0.43	0.56	0.52	1.23	1.49	1.90	2.78	1.86	5.34	
22.50	0.00	0.00	0.24	0.85	1.02	1.16	1.27	1.70	2.45	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 3	N. ATLANTIC WINTER				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	3.94	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	19.68	8.33	2.88	1.54	0.00	0.00	0.00	0.00	0.00	
7.50	18.37	12.64	11.43	4.19	0.00	0.00	0.00	0.00	0.00	
8.60	15.03	21.21	31.55	19.57	2.25	0.00	0.00	0.00	0.00	
9.70	13.78	12.64	13.45	23.92	20.60	2.82	0.00	0.00	0.00	
10.90	9.18	9.72	13.45	17.94	32.45	26.09	4.48	0.00	0.00	
12.40	7.87	8.33	5.76	11.79	17.66	36.26	45.12	17.91	2.26	
13.80	4.24	8.97	6.21	5.52	9.51	13.02	20.68	32.79	17.01	
15.00	4.24	8.97	6.21	5.52	8.08	6.51	10.34	25.08	31.60	
16.40	3.67	3.89	5.38	4.78	4.12	7.33	8.96	16.72	27.39	
18.00	0.00	1.94	2.24	2.39	3.43	6.11	7.47	4.18	17.55	
20.00	0.00	0.00	1.10	1.63	1.12	1.15	1.83	2.28	2.87	
22.50	0.00	0.00	0.34	1.20	0.77	0.71	1.12	1.04	1.32	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 3	N. ATLANTIC SUMMER				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M					
3.20	3.14	0.00	0.00	0.00	0.00					
4.80	3.14	5.14	0.00	0.00	0.00					
6.30	22.00	23.12	3.48	0.00	0.00					
7.50	13.57	17.08	27.18	5.90	0.00					
8.60	20.00	22.89	34.08	35.42	2.78					
9.70	12.10	11.99	13.39	26.56	33.19					
10.90	13.57	11.09	6.90	16.72	33.19					
12.40	7.23	3.34	5.91	5.90	15.32					
13.80	2.37	2.77	3.74	3.63	7.07					
15.00	1.69	1.66	2.62	3.63	4.71					
16.40	1.17	0.72	1.62	1.57	2.04					
18.00	0.00	0.20	1.08	0.66	1.70					
20.00	0.00	0.00	0.00	0.00	0.00					
22.50	0.00	0.00	0.00	0.00	0.00					
25.70	0.00	0.00	0.00	0.00	0.00					

GP 8	N. ATLANTIC		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	4.13	4.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	16.54	16.52	4.06	0.00	0.00	0.00	0.00	0.00	0.00
7.50	19.29	19.28	18.93	4.02	0.00	0.00	0.00	0.00	0.00
8.60	21.05	15.77	25.81	25.04	4.44	0.00	0.00	0.00	0.00
9.70	9.65	14.46	18.93	26.97	20.35	4.65	0.00	0.00	0.00
10.90	9.65	9.64	9.46	17.22	33.91	23.24	4.50	3.41	0.00
12.40	8.27	8.26	8.11	9.84	17.44	39.84	38.61	14.61	4.19
13.80	3.56	4.45	4.37	5.30	6.26	10.73	20.79	31.48	13.54
15.00	2.67	4.45	4.37	5.30	6.26	10.73	20.79	31.48	45.14
16.40	1.54	1.54	2.65	2.30	5.43	4.65	7.21	10.91	19.56
18.00	0.64	0.96	1.58	1.91	2.71	3.10	4.50	4.55	9.78
20.00	0.53	0.53	1.03	1.25	1.85	1.90	2.46	1.86	5.34
22.50	0.00	0.00	0.71	0.86	1.36	1.16	1.13	1.70	2.45
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 8	N. ATLANTIC		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.91	4.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	15.64	7.13	4.29	1.65	0.00	0.00	0.00	0.00	0.00
7.50	22.81	11.89	13.00	4.50	0.00	0.00	0.00	0.00	0.00
8.60	14.93	12.97	14.18	16.12	1.97	0.00	0.00	0.00	0.00
9.70	13.69	15.46	10.00	16.70	13.55	2.21	0.00	0.00	0.00
10.90	9.12	11.89	10.00	16.70	23.94	20.44	3.87	0.00	0.00
12.40	7.82	10.19	17.14	18.17	24.39	37.88	41.41	14.34	1.53
13.80	4.21	10.98	9.23	9.49	12.51	15.30	17.84	30.90	16.49
15.00	4.21	10.98	9.23	5.93	11.26	10.20	17.84	30.90	32.97
16.40	3.65	2.85	8.00	5.14	7.23	8.84	10.05	13.39	28.58
18.00	0.00	1.59	3.33	2.57	3.01	3.68	6.44	7.81	11.91
20.00	0.00	0.00	1.09	1.75	1.23	0.90	1.58	1.83	5.85
22.50	0.00	0.00	0.50	1.28	0.90	0.55	0.97	0.84	2.68
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 8	N. ATLANTIC		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M				
3.20	3.00	0.00	0.00	0.00	0.00				
4.80	3.00	5.34	0.00	0.00	0.00				
6.30	21.92	21.59	3.64	0.00	0.00				
7.50	21.02	22.48	29.76	4.59	0.00				
8.60	19.11	17.72	29.22	30.04	2.82				
9.70	14.01	10.02	15.73	36.71	33.55				
10.90	8.06	10.02	8.50	11.93	25.81				
12.40	3.90	6.96	3.64	7.87	22.12				
13.80	3.23	2.50	3.92	3.39	7.15				
15.00	1.62	1.75	2.75	3.39	4.76				
16.40	1.12	1.08	1.70	1.47	2.06				
18.00	0.00	0.54	1.13	0.61	1.72				
20.00	0.00	0.00	0.00	0.00	0.00				
22.50	0.00	0.00	0.00	0.00	0.00				
25.70	0.00	0.00	0.00	0.00	0.00				

GP 10 N. ATLANTIC ANNUAL		PERCENTAGE FREQUENCY OF OCCURENC							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	3.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	5.35	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.40	20.28	4.43	0.00	0.00	0.00	0.00	0.00	0.00
7.50	12.48	17.74	22.23	3.88	0.00	0.00	0.00	0.00	0.00
8.60	13.62	12.90	22.56	24.17	4.16	0.00	0.00	0.00	0.00
9.70	12.48	17.74	15.51	27.69	25.41	4.06	0.00	0.00	0.00
10.90	12.48	11.83	10.34	16.61	31.76	20.28	3.36	2.44	0.00
12.40	10.70	5.07	8.86	9.49	16.33	43.46	43.23	27.19	3.51
13.80	3.46	5.46	4.77	5.11	5.86	9.36	15.52	22.52	11.33
15.00	2.30	2.73	4.77	5.11	5.86	9.36	15.52	22.52	37.76
16.40	1.00	1.89	2.90	3.10	5.08	8.11	13.45	19.52	32.72
18.00	0.83	1.18	1.72	2.22	2.54	2.70	4.48	3.25	8.18
20.00	0.68	0.65	1.13	1.51	1.73	1.66	2.75	1.33	4.46
22.50	0.00	0.00	0.78	1.11	1.27	1.01	1.68	1.22	2.05
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 10 N. ATLANTIC WINTER		PERCENTAGE FREQUENCY OF OCCURENC							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.91	4.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	15.64	7.13	4.17	1.18	0.00	0.00	0.00	0.00	0.00
7.50	22.81	15.46	12.65	3.44	0.00	0.00	0.00	0.00	0.00
8.60	14.93	12.97	13.80	15.03	2.25	0.00	0.00	0.00	0.00
9.70	13.69	11.89	15.57	22.73	17.01	2.60	0.00	0.00	0.00
10.90	9.12	11.89	9.73	13.77	30.93	21.48	3.52	0.00	0.00
12.40	7.82	10.19	10.84	17.71	20.77	39.06	43.03	6.74	2.03
13.80	4.21	10.98	11.68	8.26	9.52	12.02	21.95	24.69	6.55
15.00	4.21	10.98	8.98	6.36	9.52	12.02	16.26	39.21	21.82
16.40	3.65	2.85	7.78	5.51	4.12	6.77	7.05	16.36	37.83
18.00	0.00	1.59	3.24	2.75	3.44	4.34	5.87	10.49	20.49
20.00	0.00	0.00	1.06	1.88	1.41	1.07	1.44	1.72	7.74
22.50	0.00	0.00	0.49	1.38	1.03	0.65	0.88	0.79	3.55
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 10 N. ATLANTIC SUMMER		PERCENTAGE FREQUENCY OF OCCURENC			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	3.96	0.00	0.00	0.00	0.00
4.80	3.96	5.58	0.00	0.00	0.00
6.30	19.82	23.14	3.24	0.00	0.00
7.50	17.11	22.77	30.24	5.22	0.00
8.60	20.18	20.23	28.86	33.47	1.34
9.70	13.87	13.01	18.90	34.60	33.17
10.90	9.25	7.48	7.56	11.10	36.86
12.40	3.96	2.79	3.24	5.60	17.90
13.80	4.27	1.80	2.44	3.62	4.54
15.00	2.13	1.50	2.44	3.01	3.40
16.40	1.48	1.04	1.81	2.09	1.97
18.00	0.00	0.65	1.26	1.31	0.82
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 14 N. ATLANTIC		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENC					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	11.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	7.56	15.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	15.11	27.61	8.45	0.00	0.00	0.00	0.00	0.00	0.00
7.50	13.22	14.32	29.58	5.44	2.28	0.00	0.00	0.00	0.00
8.60	14.42	11.71	21.51	33.94	12.45	0.00	0.00	0.00	0.00
9.70	13.22	7.16	14.79	31.11	34.24	4.43	0.00	0.00	0.00
10.90	8.82	7.16	4.93	7.78	22.82	22.14	4.41	2.71	0.00
12.40	7.56	6.14	4.23	3.33	9.78	37.96	37.83	27.83	6.44
13.80	4.07	3.30	4.55	3.59	5.27	10.22	20.37	24.98	13.87
15.00	4.07	3.30	4.55	7.18	4.21	10.22	16.30	19.98	34.68
16.40	0.35	2.86	3.94	3.11	3.65	7.09	10.59	12.99	18.03
18.00	0.15	0.72	1.64	2.07	2.28	4.43	5.88	7.22	15.03
20.00	0.12	0.39	1.08	1.27	1.87	2.42	2.41	2.95	8.20
22.50	0.00	0.00	0.74	1.17	1.14	1.11	2.21	1.35	3.76
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 14 N. ATLANTIC		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	2.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	8.07	11.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	13.72	19.25	9.12	0.96	0.00	0.00	0.00	0.00	0.00
7.50	12.24	9.75	26.38	5.57	0.00	0.00	0.00	0.00	0.00
8.60	10.27	10.63	20.19	28.58	4.47	0.00	0.00	0.00	0.00
9.70	12.24	9.75	19.90	31.77	30.29	3.11	0.00	0.00	0.00
10.90	12.24	7.20	4.63	7.25	32.75	31.13	3.28	0.00	0.00
12.40	8.07	6.18	3.97	4.78	9.12	32.02	36.51	7.24	3.93
13.80	11.30	7.82	4.27	5.14	7.56	14.37	21.17	23.41	8.46
15.00	8.69	7.82	5.55	5.14	5.29	7.18	18.15	39.01	25.37
16.40	0.75	6.78	3.70	4.46	3.93	4.98	13.11	20.29	36.64
18.00	0.00	2.83	1.54	3.72	2.73	3.11	4.37	5.63	18.32
20.00	0.00	0.00	0.50	1.52	2.23	2.55	1.79	2.31	5.00
22.50	0.00	0.00	0.23	1.11	1.64	1.56	1.64	2.11	2.29
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 14 N. ATLANTIC		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	13.89	0.00	0.00	0.00	0.00
4.80	6.95	17.08	0.00	0.00	0.00
6.30	19.22	36.15	6.49	0.00	0.00
7.50	18.91	19.93	40.79	7.74	0.00
8.60	14.74	9.78	27.33	38.84	8.71
9.70	13.51	6.64	9.91	30.96	39.94
10.90	5.40	3.32	4.08	7.74	19.97
12.40	2.32	1.99	3.00	5.31	13.69
13.80	2.49	1.84	2.69	4.29	11.06
15.00	1.50	1.53	2.69	2.86	3.69
16.40	1.08	1.06	1.86	1.24	1.60
18.00	0.00	0.66	1.17	1.03	1.33
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 18 N. ATLANTIC ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE										
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	3.54	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	23.58	26.35	4.23	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	13.75	24.59	26.15	5.43	1.22	0.00	0.00	0.00	0.00	
8.60	15.00	13.41	26.91	23.71	2.00	0.00	0.00	0.00	0.00	
9.70	13.75	12.29	14.80	27.16	24.42	1.94	0.00	0.00	0.00	
10.90	13.75	6.15	9.87	16.30	36.64	29.09	4.96	1.30	0.00	
12.40	5.89	5.27	4.23	9.31	15.70	41.56	42.52	24.48	3.64	
13.80	5.08	2.84	4.55	5.01	5.64	8.95	15.26	23.96	7.85	
15.00	2.54	2.27	3.19	5.01	5.64	8.95	15.26	23.96	39.24	
16.40	1.10	1.97	2.37	3.04	3.42	3.88	13.23	20.77	34.01	
18.00	0.46	1.23	1.64	2.17	2.44	2.59	4.41	3.46	8.50	
20.00	0.38	1.01	1.08	1.48	1.67	1.59	2.71	1.42	4.64	
22.50	0.00	0.00	0.99	1.36	1.22	1.45	1.65	0.65	2.13	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 18 N. ATLANTIC WINTER PERCENTAGE FREQUENCY OF OCCURRENCE										
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.15	5.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	21.52	7.56	4.76	2.15	0.00	0.00	0.00	0.00	0.00	
7.50	20.08	8.82	14.44	3.13	0.00	0.00	0.00	0.00	0.00	
8.60	16.43	12.83	15.75	18.43	2.89	0.00	0.00	0.00	0.00	
9.70	10.04	14.70	14.44	18.78	15.89	1.82	0.00	0.00	0.00	
10.90	10.04	20.58	14.44	18.78	26.48	22.45	2.05	0.00	0.00	
12.40	4.30	12.60	12.37	16.09	27.24	40.04	35.18	5.71	4.19	
13.80	4.63	8.14	10.25	9.82	13.20	16.80	37.89	24.62	15.06	
15.00	4.63	5.43	5.13	4.04	4.89	7.28	12.63	28.31	30.11	
16.40	4.02	2.35	4.44	3.00	4.24	6.31	7.11	21.34	31.32	
18.00	0.00	1.96	2.22	2.50	2.12	2.43	2.28	15.11	14.14	
20.00	0.00	0.00	1.21	1.71	1.73	1.65	1.49	2.91	3.56	
22.50	0.00	0.00	0.56	1.56	1.32	1.21	1.37	2.00	1.63	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 18 N. ATLANTIC SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	4.24	0.00	0.00	0.00	0.00	
4.80	4.24	5.17	0.00	0.00	0.00	
6.30	25.43	34.41	6.58	0.00	0.00	
7.50	16.31	26.26	41.36	5.07	0.00	
8.60	14.56	14.16	27.72	45.03	3.67	
9.70	13.35	9.96	10.05	34.04	41.49	
10.90	11.37	3.92	4.14	7.24	41.49	
12.40	4.24	1.55	3.04	2.48	3.84	
13.80	2.28	1.39	2.73	2.01	3.11	
15.00	3.19	1.39	2.18	2.01	3.11	
16.40	0.79	0.97	1.42	1.16	1.79	
18.00	0.00	0.80	0.79	0.97	1.50	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 19	N. ATLANTIC		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	3.06	2.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.41	23.06	3.77	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	11.91	16.14	23.32	5.67	1.28	0.00	0.00	0.00	0.00	
8.60	12.99	11.74	24.00	24.73	2.10	0.00	0.00	0.00	0.00	
9.70	20.24	16.14	17.60	28.33	25.61	2.37	0.00	0.00	0.00	
10.90	11.91	10.76	8.80	11.33	32.02	23.65	5.31	1.52	0.00	
12.40	10.20	9.22	7.54	9.71	16.46	40.55	45.53	25.99	3.64	
13.80	4.40	4.97	4.06	5.23	5.91	10.92	16.34	30.78	7.85	
15.00	2.20	1.99	4.06	5.23	5.91	10.92	16.34	27.98	39.24	
16.40	0.95	1.72	3.52	4.53	5.12	4.73	7.08	7.28	34.01	
18.00	0.40	1.08	1.47	2.27	2.56	3.15	4.72	4.04	8.50	
20.00	0.32	0.88	0.96	1.55	1.75	1.94	2.90	1.65	4.64	
22.50	0.00	0.00	0.88	1.42	1.28	1.77	1.77	0.76	2.13	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 19	N. ATLANTIC		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.15	3.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	21.52	11.56	3.24	2.11	0.00	0.00	0.00	0.00	0.00	
7.50	20.08	13.49	15.14	3.07	1.50	0.00	0.00	0.00	0.00	
8.60	16.43	14.71	14.04	18.10	2.72	0.00	0.00	0.00	0.00	
9.70	10.04	15.73	15.90	26.43	23.44	1.95	0.00	0.00	0.00	
10.90	10.04	13.49	12.87	14.14	28.43	24.07	2.79	0.00	0.00	
12.40	4.30	9.63	12.98	14.22	14.11	37.35	45.39	14.78	5.32	
13.80	4.63	6.22	11.88	5.67	10.59	12.01	17.15	22.04	13.37	
15.00	4.63	6.22	6.99	5.67	7.83	12.01	17.15	22.04	28.65	
16.40	4.02	3.60	4.24	4.92	5.19	5.20	7.43	21.22	28.14	
18.00	0.00	1.50	1.51	2.46	3.32	4.34	6.19	15.03	17.93	
20.00	0.00	0.00	0.83	1.68	1.63	1.77	2.03	2.89	4.51	
22.50	0.00	0.00	0.38	1.54	1.25	1.30	1.86	1.99	2.07	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 19	N. ATLANTIC		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	4.27	0.00	0.00	0.00	0.00	
4.80	4.27	5.12	0.00	0.00	0.00	
6.30	25.61	25.61	3.87	0.00	0.00	
7.50	14.94	23.01	32.28	5.12	0.00	
8.60	14.67	15.32	27.64	31.92	4.86	
9.70	19.92	14.04	16.32	34.38	29.71	
10.90	8.47	8.07	9.37	12.43	40.11	
12.40	2.13	3.33	2.98	6.27	12.73	
13.80	2.30	1.65	2.24	3.38	4.11	
15.00	1.84	1.65	2.24	2.70	4.11	
16.40	1.59	1.20	1.67	2.34	2.38	
18.00	0.00	1.00	1.39	1.46	1.98	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 24 N. ATLANTIC		ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE								
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	7.45	3.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	22.36	23.90	4.09	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	17.39	18.59	28.66	5.67	1.37	0.00	0.00	0.00	0.00	
8.60	9.49	15.21	20.85	24.73	2.24	0.00	0.00	0.00	0.00	
9.70	17.39	9.30	14.33	28.33	20.52	2.50	0.00	0.00	0.00	
10.90	8.70	9.30	9.55	11.33	34.21	25.01	3.93	1.52	0.00	
12.40	7.45	7.97	8.19	9.71	17.59	32.15	33.67	28.64	4.58	
13.80	3.21	4.29	4.41	5.23	6.31	11.54	18.13	28.04	9.86	
15.00	1.61	4.29	4.41	5.23	6.31	11.54	18.13	28.04	49.30	
16.40	0.70	1.49	1.91	4.53	5.47	10.00	15.71	7.29	17.09	
18.00	0.29	0.93	1.59	2.27	2.74	3.33	5.24	4.05	10.68	
20.00	0.24	0.76	1.04	1.55	1.87	2.05	3.21	1.66	5.83	
22.50	0.00	0.00	0.96	1.42	1.37	1.88	1.96	0.76	2.67	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 24 N. ATLANTIC		WINTER PERCENTAGE FREQUENCY OF OCCURRENCE								
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.15	3.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	21.52	11.82	2.90	2.18	0.00	0.00	0.00	0.00	0.00	
7.50	20.08	13.80	13.53	3.05	1.42	0.00	0.00	0.00	0.00	
8.60	16.43	15.05	14.77	23.87	2.58	0.00	0.00	0.00	0.00	
9.70	10.04	13.80	13.53	23.92	20.31	2.03	0.00	0.00	0.00	
10.90	10.04	13.80	13.53	13.74	29.76	25.00	3.24	0.00	0.00	
12.40	4.30	9.85	13.34	11.78	16.20	33.01	43.51	19.85	5.39	
13.80	4.63	6.37	10.62	7.99	8.72	12.47	19.94	27.95	19.33	
15.00	4.63	6.37	8.12	4.70	8.72	10.60	12.96	21.38	32.87	
16.40	4.02	3.68	5.41	4.07	6.42	9.19	8.64	14.25	21.78	
18.00	0.00	1.53	3.16	2.04	3.15	4.50	7.20	11.88	13.96	
20.00	0.00	0.00	0.74	1.39	1.55	1.84	2.36	2.91	4.57	
22.50	0.00	0.00	0.34	1.27	1.18	1.35	2.16	1.78	2.09	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 24 N. ATLANTIC		SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	5.45	0.00	0.00	0.00	0.00	
4.80	3.21	5.27	0.00	0.00	0.00	
6.30	27.90	29.07	3.78	0.00	0.00	
7.50	17.58	22.17	33.95	6.71	3.32	
8.60	16.33	16.61	27.41	38.70	25.36	
9.70	13.84	11.48	16.31	31.64	33.22	
10.90	7.48	7.21	5.73	9.59	16.61	
12.40	3.21	2.29	3.78	5.75	11.39	
13.80	2.07	2.47	4.07	4.43	6.13	
15.00	1.73	1.48	2.03	1.77	1.53	
16.40	1.20	1.07	1.76	0.77	1.33	
18.00	0.00	0.89	1.18	0.64	1.11	
20.00	0.00	0.00	0.0	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 31	N. ATLANTIC			ANNUAL PERCENTAGE FREQUENCY OF OCCURRENC						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	4.08	3.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	23.33	21.77	4.06	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	13.61	18.14	21.34	5.35	1.18	0.00	0.00	0.00	0.00	
8.60	7.42	11.88	20.69	23.36	2.57	0.00	0.00	0.00	0.00	
9.70	13.61	10.89	14.23	21.41	11.76	3.91	0.00	0.00	0.00	
10.90	13.61	7.26	9.48	14.28	23.52	9.78	3.56	4.04	0.00	
12.40	11.67	9.33	8.13	12.24	20.16	18.43	30.53	13.84	6.07	
13.80	6.28	6.70	8.75	6.59	10.85	18.05	26.30	37.26	13.08	
15.00	2.51	6.70	4.38	6.59	10.85	18.05	19.73	22.35	32.71	
16.40	0.54	2.90	3.79	5.71	9.41	15.64	11.40	12.92	22.68	
18.00	0.23	0.73	3.16	3.33	7.84	13.03	4.75	5.38	14.17	
20.00	0.19	0.59	1.03	0.78	1.28	2.13	1.94	2.20	7.73	
22.50	0.00	0.00	0.95	0.36	0.59	0.98	1.78	2.02	3.54	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 31	N. ATLANTIC			WINTER PERCENTAGE FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	1.70	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	34.01	12.61	2.29	2.48	0.00	0.00	0.00	0.00	0.00	
7.50	19.84	14.71	12.30	3.48	0.66	0.00	0.00	0.00	0.00	
8.60	12.98	13.64	19.26	12.64	2.89	0.00	0.00	0.00	0.00	
9.70	7.94	12.51	12.30	17.38	15.25	3.39	0.00	0.00	0.00	
10.90	7.94	12.51	9.09	11.59	26.51	14.70	1.97	0.00	0.00	
12.40	3.40	10.72	10.55	14.90	11.36	31.99	28.66	21.44	3.40	
13.80	3.66	11.54	9.88	10.69	12.24	10.44	18.16	28.86	21.99	
15.00	3.66	8.83	11.36	10.69	12.24	17.75	18.16	23.09	36.65	
16.40	3.17	1.18	8.56	9.27	10.61	11.76	15.74	15.01	19.06	
18.00	0.00	0.49	3.57	3.86	4.42	7.54	13.11	8.34	10.59	
20.00	0.00	0.00	0.58	1.58	2.17	1.85	3.22	1.71	4.33	
22.50	0.00	0.00	0.27	1.45	1.66	0.57	0.98	1.56	3.97	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 31	N. ATLANTIC			SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	2.78	0.00	0.00	0.00	0.00	
4.80	4.17	5.32	0.00	0.00	0.00	
6.30	23.06	30.15	5.58	0.00	0.00	
7.50	18.48	19.08	30.04	11.94	5.78	
8.60	15.21	15.80	23.49	31.64	31.55	
9.70	13.94	12.19	15.02	22.18	23.14	
10.90	9.73	7.59	10.01	11.94	17.35	
12.40	4.72	3.94	5.58	8.77	9.92	
13.80	3.89	2.12	4.62	7.87	5.34	
15.00	2.99	2.12	2.31	3.15	2.67	
16.40	1.04	0.92	2.00	1.36	2.31	
18.00	0.00	0.77	1.34	1.14	1.93	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 32 N. ATLANTIC		ANNUAL			PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	9.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	6.29	6.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	25.16	29.87	4.23	0.00	0.00	0.00	0.00	0.00	0.00
7.50	14.67	19.36	29.60	5.06	1.25	0.00	0.00	0.00	0.00
8.60	12.01	12.67	26.91	23.65	2.73	0.00	0.00	0.00	0.00
9.70	14.67	15.49	19.73	36.13	25.00	3.06	0.00	0.00	0.00
10.90	7.34	3.87	4.93	14.45	37.51	30.62	10.09	4.04	0.00
12.40	3.14	3.32	4.23	6.19	10.72	26.25	43.24	13.84	4.09
13.80	3.39	3.57	2.73	3.34	5.77	14.13	18.63	37.26	17.62
15.00	3.39	1.79	2.28	3.34	5.77	11.31	13.97	22.35	44.04
16.40	0.29	1.55	1.97	2.89	4.00	7.35	8.07	12.92	22.90
18.00	0.12	1.03	1.32	1.93	3.33	4.08	3.36	5.39	6.36
20.00	0.10	0.84	1.08	1.58	2.05	1.67	1.38	2.20	2.60
22.50	0.00	0.00	0.99	1.45	1.88	1.53	1.26	2.02	2.39
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 32 N. ATLANTIC		WINTER			PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.23	3.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	18.28	18.06	3.43	2.21	0.00	0.00	0.00	0.00	0.00
7.50	16.31	15.91	23.99	3.09	0.72	0.00	0.00	0.00	0.00
8.60	9.58	14.32	23.12	20.77	3.16	0.00	0.00	0.00	0.00
9.70	17.56	29.03	26.79	41.17	28.95	4.29	0.00	0.00	0.00
10.90	16.31	6.76	9.20	15.44	38.36	32.88	9.34	0.00	0.00
12.40	5.38	3.41	3.43	4.41	14.27	36.76	45.35	16.99	3.76
13.80	4.63	3.67	2.21	2.85	3.34	6.60	14.36	30.49	24.29
15.00	4.63	2.20	2.21	2.85	3.34	6.60	14.36	24.40	40.48
16.40	3.01	1.91	1.92	2.47	2.90	4.57	9.96	15.86	21.05
18.00	0.00	1.33	1.60	2.06	1.00	3.81	4.15	8.81	5.85
20.00	0.00	0.00	1.09	1.40	1.00	2.34	1.70	1.80	2.39
22.50	0.00	0.00	1.00	1.29	1.45	2.14	0.78	1.65	2.19
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 32 N. ATLANTIC		SUMMER			PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M				
3.20	10.69	0.00	0.00	0.00	0.00				
4.80	3.56	10.91	0.00	0.00	0.00				
6.30	29.75	47.28	4.59	0.00	0.00				
7.50	16.00	25.85	45.93	10.40	5.78				
8.60	12.02	4.21	27.56	38.59	31.55				
9.70	10.39	2.70	7.66	20.81	23.14				
10.90	7.69	1.93	3.83	10.40	17.35				
12.40	4.81	1.65	2.62	7.13	9.92				
13.80	2.49	1.78	2.83	5.76	5.34				
15.00	1.92	1.42	2.12	3.84	2.67				
16.40	0.67	1.23	1.84	1.66	2.31				
18.00	0.00	1.03	1.02	1.39	1.93				
20.00	0.00	0.00	0.00	0.00	0.00				
22.50	0.00	0.00	0.00	0.00	0.00				
25.70	0.00	0.00	0.00	0.00	0.00				

GP 33	N.	ATLANTIC	ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	4.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	4.29	3.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	25.75	25.03	4.54	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	15.02	16.68	26.50	5.44	0.85	0.00	0.00	0.00	0.00	
8.60	16.39	13.65	23.13	22.24	1.84	0.00	0.00	0.00	0.00	
9.70	10.01	8.34	10.60	27.18	25.35	1.51	0.00	0.00	0.00	
10.90	10.01	12.51	10.60	13.59	33.80	30.24	6.76	4.04	0.00	
12.40	4.29	7.15	9.09	11.65	14.49	38.89	57.95	13.84	4.09	
13.80	4.62	3.85	4.89	6.27	7.80	13.96	12.48	37.26	17.62	
15.00	4.62	3.85	4.89	6.27	7.80	5.58	9.36	22.35	44.04	
16.40	0.40	3.34	2.12	2.72	2.70	3.63	5.41	12.92	22.90	
18.00	0.17	1.11	1.41	1.81	2.25	3.02	4.51	5.38	6.36	
20.00	0.14	0.91	1.16	1.48	1.84	1.65	1.84	2.20	2.60	
22.50	0.00	0.00	1.06	1.36	1.27	1.51	1.69	2.02	2.39	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 33	N.	ATLANTIC	WINTER PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	10.95	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	18.25	12.04	3.11	1.99	0.00	0.00	0.00	0.00	0.00	
7.50	17.03	14.05	17.09	3.25	0.48	0.00	0.00	0.00	0.00	
8.60	13.93	11.79	18.64	20.28	2.10	0.00	0.00	0.00	0.00	
9.70	12.77	10.80	11.91	23.24	20.72	2.53	0.00	0.00	0.00	
10.90	8.52	10.80	17.09	19.99	35.17	31.24	4.80	0.00	0.00	
12.40	7.30	12.04	11.99	13.15	16.52	38.36	54.82	19.78	3.76	
13.80	3.93	12.97	8.13	7.29	8.89	10.13	14.76	30.43	24.29	
15.00	1.97	5.98	4.78	4.29	7.56	10.13	14.76	21.30	40.48	
16.40	1.70	3.46	2.49	2.23	3.85	2.70	5.12	18.46	21.05	
18.00	0.00	1.44	2.07	1.86	1.93	2.25	3.20	6.59	5.85	
20.00	0.00	0.00	1.41	1.27	1.58	1.38	1.74	1.80	2.39	
22.50	0.00	0.00	1.29	1.16	1.20	1.27	0.80	1.65	2.19	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 33	N.	ATLANTIC	SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M		
3.20	7.53	0.00	0.00	0.00	0.00		
4.80	3.76	8.14	0.00	0.00	0.00		
6.30	28.79	39.86	6.58	0.00	0.00		
7.50	14.71	18.03	13.78	12.37	5.78		
8.60	15.09	11.39	27.65	26.99	31.55		
9.70	10.98	8.54	7.68	24.74	23.14		
10.90	8.12	5.38	3.84	12.37	17.35		
12.40	5.65	2.71	2.63	8.48	9.92		
13.80	2.63	2.92	2.84	6.85	5.34		
15.00	2.03	1.17	2.13	4.57	2.67		
16.40	0.70	1.01	1.84	1.98	2.31		
18.00	0.00	0.84	1.02	1.65	1.93		
20.00	0.00	0.00	0.00	0.00	0.00		
22.50	0.00	0.00	0.00	0.00	0.00		
25.70	0.00	0.00	0.00	0.00	0.00		

GP 40 N. ATLANTIC ANNUAL				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M
3.20	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	2.70	3.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	18.87	16.38	2.92	0.00	0.00	0.00	0.00	0.00	0.00
7.50	12.58	11.47	20.42	5.20	0.89	0.00	0.00	0.00	0.00
8.60	13.72	12.51	14.85	22.70	1.93	0.00	0.00	0.00	0.00
9.70	15.72	11.47	13.61	20.81	17.73	3.79	0.00	0.00	0.00
10.90	12.58	11.47	13.61	10.40	19.50	15.15	12.87	4.04	0.00
12.40	8.09	9.83	11.67	8.92	15.19	32.46	27.58	13.84	6.72
13.80	8.71	7.06	6.28	9.60	16.36	17.48	23.77	37.26	36.19
15.00	2.90	7.06	6.28	9.60	16.36	13.98	17.82	22.35	28.95
16.40	1.26	6.12	5.45	8.32	5.67	9.09	10.30	12.92	18.82
18.00	0.10	2.55	4.54	2.77	3.55	5.05	4.29	5.38	5.23
20.00	0.09	0.83	0.19	1.14	1.93	2.07	1.76	2.20	2.14
22.50	0.00	0.00	0.17	0.52	0.89	0.95	1.61	2.02	1.96
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 40 N. ATLANTIC WINTER				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M
3.20	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	6.17	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.59	11.16	3.56	1.42	0.00	0.00	0.00	0.00	0.00
7.50	17.99	13.02	14.55	2.77	0.84	0.00	0.00	0.00	0.00
8.60	15.70	8.95	14.97	19.92	3.65	0.00	0.00	0.00	0.00
9.70	10.80	13.02	15.39	20.48	19.21	5.20	0.00	0.00	0.00
10.90	7.20	11.10	11.23	14.94	27.57	17.35	3.51	0.00	0.00
12.40	6.17	11.16	11.76	12.81	16.47	19.33	30.09	19.78	3.48
13.80	6.64	12.02	7.68	5.11	7.71	11.21	22.68	30.43	37.45
15.00	3.32	12.02	10.36	10.22	7.71	16.02	22.68	21.30	29.96
16.40	2.88	3.86	6.65	5.76	8.69	13.88	11.23	18.46	19.47
18.00	0.00	1.61	1.66	3.69	3.34	11.57	7.02	6.59	5.41
20.00	0.00	0.00	1.13	1.51	2.73	2.84	1.91	1.80	2.21
22.50	0.00	0.00	1.04	1.38	2.09	2.60	0.88	1.65	2.03
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 40 N. ATLANTIC SUMMER				PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	5.20	0.00	0.00	0.00	0.00
4.80	2.60	8.55	0.00	0.00	0.00
6.30	20.40	25.14	7.35	0.00	0.00
7.50	16.68	15.84	20.02	11.20	5.93
8.60	17.70	17.28	18.72	30.54	32.35
9.70	15.62	11.73	17.16	22.40	23.72
10.90	9.55	7.63	14.30	16.80	17.79
12.40	5.20	6.54	9.80	9.60	10.17
13.80	3.78	3.79	7.92	5.17	5.47
15.00	2.80	2.17	2.64	2.58	2.74
16.40	0.49	0.94	1.14	1.34	1.42
18.00	0.00	0.39	0.95	0.37	0.40
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 47 N. ATLANTIC ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE									
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	2.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.51	2.32	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.05	18.57	2.92	0.00	0.00	0.00	0.00	0.00	
7.50	14.62	16.25	20.42	7.68	1.64	0.00	0.00	0.00	
8.60	12.76	14.77	14.85	16.75	1.78	0.00	0.00	0.00	
9.70	17.54	13.54	13.61	15.36	13.08	3.22	0.00	0.00	
10.90	11.70	10.83	13.61	15.36	32.71	32.19	3.56	4.04	
12.40	5.01	6.97	11.67	13.16	14.02	22.07	30.53	13.84	
13.80	5.40	5.00	6.28	14.18	12.08	17.83	26.30	37.26	
15.00	5.40	5.00	6.28	7.09	9.06	11.89	19.73	22.35	
16.40	2.34	4.33	5.45	4.91	7.85	5.15	11.40	12.92	
18.00	0.10	1.81	4.54	3.07	4.36	4.29	4.75	5.38	
20.00	0.08	0.59	0.19	1.68	1.78	1.76	1.94	2.20	
22.50	0.00	0.00	0.17	0.77	1.64	1.61	1.78	2.02	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 47 N. ATLANTIC WINTER PERCENTAGE FREQUENCY OF OCCURRENCE									
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	1.31	1.18	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	8.49	7.82	2.67	1.32	0.00	0.00	0.00	0.00	
7.50	7.62	11.05	13.36	3.84	1.54	0.00	0.00	0.00	
8.60	10.81	12.96	16.03	19.26	3.37	0.00	0.00	0.00	
9.70	20.57	15.75	16.47	23.02	15.43	4.15	0.00	0.00	
10.90	17.52	15.20	14.69	9.98	16.97	16.61	3.56	0.00	
12.40	15.02	12.55	11.45	13.16	13.23	24.91	30.53	19.78	
13.80	7.03	10.20	6.99	7.08	14.24	19.16	26.30	30.43	
15.00	7.03	7.65	6.99	7.08	14.24	15.33	19.73	21.30	
16.40	4.27	5.08	4.63	6.14	12.34	9.96	11.40	18.46	
18.00	0.00	0.55	3.86	5.12	6.17	5.54	4.75	6.59	
20.00	0.00	0.00	2.43	2.09	1.68	2.26	1.94	1.80	
22.50	0.00	0.00	0.45	1.92	0.77	2.08	1.78	1.65	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 47 N. ATLANTIC SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	
3.20	3.47	0.00	0.00	0.00	
4.80	1.96	5.22	0.00	0.00	
6.30	28.70	33.91	5.21	0.00	
7.50	19.91	24.68	26.35	11.20	
8.60	14.80	13.65	22.11	30.54	
9.70	16.39	10.14	20.27	22.40	
10.90	7.05	4.40	10.13	16.80	
12.40	2.57	2.90	6.95	9.60	
13.80	2.11	1.56	5.61	5.17	
15.00	1.63	1.56	1.87	2.58	
16.40	1.41	1.08	0.81	1.34	
18.00	0.00	0.90	0.68	0.37	
20.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	

GP 49 N. ATLANTIC ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	2.31	0.00	0.00	0.00	0.00
4.80	2.89	1.91	0.00	0.00	0.00
6.30	20.22	22.95	4.14	0.00	0.00
7.50	16.85	22.32	28.98	8.00	1.06
8.60	11.03	17.04	26.34	17.46	1.94
9.70	20.22	15.62	14.49	32.01	10.65
10.90	10.11	8.93	9.66	16.00	35.48
12.40	5.78	3.83	4.14	6.86	15.21
13.80	3.11	2.06	4.46	5.91	13.10
15.00	3.11	2.06	2.23	4.43	9.83
16.40	2.70	1.79	1.93	3.84	8.52
18.00	1.12	0.89	1.61	2.13	2.37
20.00	0.55	0.61	1.05	1.75	0.97
22.50	0.00	0.00	0.97	1.60	0.89
25.70	0.00	0.00	0.00	0.00	0.00

GP 49 N. ATLANTIC WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	1.85	0.00	0.00	0.00	0.00
4.80	1.85	1.04	0.00	0.00	0.00
6.30	17.35	16.00	2.90	4.07	0.00
7.50	17.23	24.25	27.04	6.65	1.41
8.60	15.51	15.08	25.81	17.61	3.07
9.70	18.52	12.12	12.51	35.14	19.67
10.90	14.22	11.40	9.13	12.35	28.10
12.40	4.80	6.24	6.66	5.70	12.04
13.80	2.78	4.48	6.24	5.26	10.38
15.00	2.39	4.48	3.12	4.38	10.38
16.40	2.07	3.30	2.70	3.80	6.74
18.00	1.44	1.62	1.58	2.53	3.75
20.00	0.00	0.00	1.29	1.55	3.07
22.50	0.00	0.00	1.01	0.95	1.41
25.70	0.00	0.00	0.00	0.00	0.00

GP 49 N. ATLANTIC SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M
3.20	2.16	0.00	0.00	0.00
4.80	3.09	1.88	0.00	0.00
6.30	28.76	24.97	6.49	0.00
7.50	19.12	25.25	30.28	11.44
8.60	6.69	15.98	22.30	31.20
9.70	22.73	19.70	9.84	17.16
10.90	8.30	6.23	9.84	17.16
12.40	3.09	1.88	8.44	9.81
13.80	2.33	1.55	6.99	5.28
15.00	2.00	1.09	3.49	5.28
16.40	1.73	0.81	1.82	2.29
18.00	0.00	0.67	0.50	0.38
20.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00

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GP 61 N. ATLANTIC		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	0.70	0.00	0.00	0.00	0.00	0.00
4.80	1.75	0.85	0.00	0.00	0.00	0.00
6.30	31.47	16.99	2.45	0.00	0.00	0.00
7.50	20.40	25.77	11.45	7.00	0.59	
8.60	13.35	21.63	24.99	10.19	1.93	
9.70	8.16	9.91	22.91	11.67	5.89	
10.90	4.08	5.95	17.18	23.35	11.79	
12.40	3.50	3.40	4.91	20.01	25.26	
13.80	3.77	3.66	2.64	10.78	21.77	
15.00	7.53	5.49	5.29	8.62	16.32	
16.40	3.26	3.17	2.29	5.60	9.43	
18.00	1.36	2.64	4.96	1.56	3.93	
20.00	0.67	0.54	0.62	0.64	1.61	
22.50	0.00	0.00	0.29	0.58	1.47	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 61 N. ATLANTIC		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00
4.80	4.05	0.94	0.00	0.00	0.00	0.00
6.30	27.00	22.06	1.54	2.45	0.00	
7.50	7.87	22.00	19.03	7.13	2.02	
8.60	12.03	11.28	18.41	15.57	2.20	
9.70	11.02	8.14	16.87	14.27	4.04	
10.90	7.87	5.06	13.28	24.26	16.16	
12.40	13.50	5.09	7.08	8.56	24.24	
13.80	7.27	6.70	3.31	7.90	14.92	
15.00	5.81	8.12	4.31	6.59	14.92	
16.40	2.52	4.75	2.87	5.71	9.70	
18.00	1.05	5.87	11.97	3.81	5.39	
20.00	0.00	0.00	0.98	2.33	4.41	
22.50	0.00	0.00	0.36	1.43	2.02	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 61 N. ATLANTIC		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M		
3.20	0.47	0.00	0.00	0.00		
4.80	1.18	0.77	0.00	0.00		
6.30	35.96	11.84	1.67	0.00		
7.50	25.50	34.61	4.88	5.89		
8.60	18.85	31.30	31.96	12.84		
9.70	8.23	11.30	22.46	17.66		
10.90	3.56	5.38	19.53	29.43		
12.40	1.65	1.08	8.37	15.14		
13.80	1.77	1.16	4.51	10.87		
15.00	1.52	0.99	3.61	5.43		
16.40	1.32	0.86	2.34	2.35		
18.00	0.00	0.72	0.65	0.39		
20.00	0.00	0.00	0.00	0.00		
22.50	0.00	0.00	0.00	0.00		
25.70	0.00	0.00	0.00	0.00		

COMBINED N.	ATLANTIC	ANNUAL	PERCENTAGE FREQUENCY OF OCCURRENE						
PERIOD 0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.43	3.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	23.56	21.77	3.21	0.00	0.00	0.00	0.00	0.00	0.00
7.50	13.50	18.14	21.37	6.21	1.42	0.00	0.00	0.00	0.00
8.60	8.18	11.88	23.31	19.36	3.10	0.00	0.00	0.00	0.00
9.70	13.50	10.89	14.96	23.96	9.93	2.80	0.00	0.00	0.00
10.90	13.50	7.26	9.08	15.09	28.38	13.99	2.75	4.04	0.00
12.40	11.57	9.33	7.78	12.93	18.25	23.97	28.25	13.84	3.13
13.80	6.92	6.70	8.38	6.55	10.48	18.07	25.35	37.26	13.49
15.00	2.31	6.70	3.94	6.55	10.48	18.07	20.28	22.35	33.74
16.40	0.80	2.90	3.42	4.97	9.08	11.19	13.18	12.92	23.39
18.00	0.33	0.73	2.85	2.96	6.62	7.46	7.32	5.38	14.62
20.00	0.27	0.59	1.17	0.97	1.55	3.05	1.50	2.20	7.97
22.50	0.00	0.00	0.53	0.44	0.71	1.40	1.37	2.02	3.65
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMBINED N.	ATLANTIC	WINTER	PERCENTAGE FREQUENCY OF OCCURRENCE						
PERIOD 0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.18	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.17	13.04	2.29	1.19	0.00	0.00	0.00	0.00	0.00
7.50	28.41	18.76	12.30	3.48	0.90	0.00	0.00	0.00	0.00
8.60	13.47	14.94	19.26	12.91	3.91	0.00	0.00	0.00	0.00
9.70	12.35	11.66	12.30	18.80	15.24	4.32	0.00	0.00	0.00
10.90	6.18	11.66	9.09	11.84	24.21	14.41	2.33	0.00	0.00
12.40	4.23	8.69	10.55	16.11	13.06	33.34	25.91	12.35	1.96
13.80	4.56	9.36	9.88	10.93	14.07	9.31	21.46	23.27	21.11
15.00	3.42	7.96	11.36	10.93	14.07	17.29	21.46	33.24	42.22
16.40	1.98	2.03	8.56	8.35	7.17	11.53	13.02	20.17	18.29
18.00	0.00	1.01	3.57	3.25	3.59	6.72	10.85	7.20	9.15
20.00	0.00	0.00	0.58	1.52	2.44	2.36	3.80	1.96	4.99
22.50	0.00	0.00	0.27	0.70	1.34	0.72	1.16	1.80	2.29
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMBINED N.	ATLANTIC	SUMMER	PERCENTAGE FREQUENCY OF OCCURRENCE						
PERIOD 0-1 M	1-2 M	2-3 M	3-4 M	4-5 M					
3.20	2.34	0.00	0.00	0.00	0.00				
4.80	3.97	5.71	0.00	0.00	0.00				
6.30	22.66	19.87	4.88	0.00	0.00				
7.50	18.26	24.05	30.20	8.89	3.20				
8.60	15.76	18.02	24.86	25.21	20.97				
9.70	13.63	13.62	15.38	30.22	32.04				
10.90	10.08	7.82	9.69	12.44	19.22				
12.40	4.67	4.22	4.88	9.14	10.99				
13.80	4.28	2.68	3.68	8.20	5.92				
15.00	3.27	1.87	2.63	3.28	2.96				
16.40	1.09	1.16	2.28	1.42	2.56				
18.00	0.00	0.97	1.52	1.19	2.14				
20.00	0.00	0.00	0.00	0.00	0.00				
22.50	0.00	0.00	0.00	0.00	0.00				
25.70	0.00	0.00	0.00	0.00	0.00				

[illegible][illegible]

[illegible][illegible]

N. ATLANTIC GP 49 (24.2 N, 72.8 W)

[illegible]

N. ATLANTIC GP 54 (16.7 N, 54.2 W)

[illegible]

APPENDIX B

N. PACIFIC REGION

GP 2	N. PACIFIC		ANNUAL		PERIOD FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	1.89	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.14	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	18.86	19.50	4.75	1.67	0.00	0.00	0.00	0.00	0.00
7.50	14.67	13.65	16.64	3.24	0.00	0.00	0.00	0.00	0.00
8.60	16.00	17.37	30.25	21.22	3.53	0.00	0.00	0.00	0.00
9.70	14.67	9.10	11.09	25.93	16.19	4.65	0.00	0.00	0.00
10.90	7.33	9.10	11.09	12.97	32.37	23.24	5.78	2.78	0.00
12.40	12.57	11.70	9.51	11.11	20.81	39.84	33.03	23.81	4.19
13.80	6.77	4.20	5.12	5.98	7.47	10.73	17.78	30.77	13.54
15.00	2.03	4.20	5.12	5.98	7.47	10.73	17.78	25.64	45.14
16.40	1.17	3.64	4.44	5.19	6.47	4.65	15.41	8.89	19.56
18.00	0.49	1.21	1.11	4.32	2.70	3.10	5.14	3.70	9.78
20.00	0.40	0.50	0.61	1.41	1.77	1.90	3.15	3.03	5.34
22.50	0.00	0.00	0.28	0.97	1.21	1.16	1.93	1.39	2.45
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 2	N. PACIFIC		WINTER		PERIOD FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	2.81	2.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.06	20.74	2.46	1.42	0.00	0.00	0.00	0.00	0.00
7.50	16.38	16.13	17.22	3.87	0.00	0.00	0.00	0.00	0.00
8.60	17.87	17.60	25.05	18.09	2.83	0.00	0.00	0.00	0.00
9.70	16.38	8.06	11.48	27.64	19.44	3.07	0.00	0.00	0.00
10.90	8.19	8.06	5.74	11.06	25.92	23.00	4.52	0.00	0.00
12.40	5.62	6.91	9.84	9.48	16.66	39.43	48.42	22.19	2.77
13.80	4.54	7.44	5.30	10.21	11.96	14.16	10.43	23.90	29.86
15.00	4.54	7.44	10.60	10.21	11.96	7.08	20.86	23.90	29.86
16.40	2.62	3.23	9.18	4.42	5.18	6.13	9.04	20.71	25.88
18.00	0.00	1.61	1.91	1.84	4.32	5.11	3.77	5.18	6.47
20.00	0.00	0.00	0.94	1.21	1.06	1.25	1.85	2.82	3.53
22.50	0.00	0.00	0.29	0.55	0.65	0.77	1.13	1.29	1.62
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 2	N. PACIFIC		SUMMER		PERIOD FREQUENCY OF OCCURRENCE				
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M				
3.20	1.30	1.79	0.00	0.00	0.00				
4.80	5.19	3.84	0.00	0.00	0.00				
6.30	20.76	20.46	0.79	3.86	0.00				
7.50	18.16	19.40	18.41	7.50	0.00				
8.60	16.51	19.53	30.12	16.35	4.66				
9.70	15.14	11.94	18.41	29.98	21.35				
10.90	9.08	8.95	13.81	14.99	42.70				
12.40	7.78	7.67	7.89	12.85	18.30				
13.80	2.79	2.75	4.25	5.54	5.91				
15.00	2.79	2.75	4.25	5.54	3.94				
16.40	0.48	0.72	1.47	2.40	1.71				
18.00	0.00	0.20	0.61	1.00	1.42				
20.00	0.00	0.00	0.00	0.00	0.00				
22.50	0.00	0.00	0.00	0.00	0.00				
25.70	0.00	0.00	0.00	0.00	0.00				

GP 4	N. PACIFIC		ANNUAL		PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.63	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	4.38	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	17.54	16.70	4.49	2.12	0.00	0.00	0.00	0.00	0.00	
7.50	10.23	14.61	20.96	3.09	0.00	0.00	0.00	0.00	0.00	
8.60	11.16	15.94	22.87	20.23	3.04	0.00	0.00	0.00	0.00	
9.70	15.35	14.61	20.96	30.91	20.90	4.44	0.00	0.00	0.00	
10.90	15.35	9.74	10.48	12.36	34.83	22.21	4.96	2.45	0.00	
12.40	8.77	8.35	4.49	10.60	17.91	38.07	42.52	21.01	3.51	
13.80	9.44	4.50	4.84	5.71	6.43	10.25	15.26	27.15	11.33	
15.00	2.83	4.50	4.84	5.71	6.43	10.25	15.26	22.62	37.76	
16.40	1.64	3.90	4.19	4.95	5.57	8.88	13.23	19.61	32.72	
18.00	0.68	0.65	1.05	2.06	2.32	2.96	4.41	3.27	8.18	
20.00	0.00	0.27	0.57	1.35	1.52	1.82	2.71	2.67	4.46	
22.50	0.00	0.00	0.26	0.93	1.04	1.11	1.65	1.23	2.05	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 4	N. PACIFIC		WINTER		PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	8.67	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	21.67	18.31	2.37	2.24	0.00	0.00	0.00	0.00	0.00	
7.50	20.23	14.24	4.60	3.26	0.00	0.00	0.00	0.00	0.00	
8.60	16.55	15.54	25.10	7.11	1.29	0.00	0.00	0.00	0.00	
9.70	10.11	14.24	18.40	32.61	23.63	1.48	0.00	0.00	0.00	
10.90	5.06	14.24	18.40	19.56	35.45	22.26	3.15	0.00	0.00	
12.40	4.33	6.10	7.89	11.18	20.26	31.79	40.53	11.84	1.07	
13.80	4.67	5.26	8.49	6.02	5.45	13.70	21.82	25.50	11.48	
15.00	4.67	3.94	8.49	6.02	5.45	13.70	14.55	25.50	45.92	
16.40	4.05	2.28	2.94	5.22	3.31	11.87	12.61	22.10	29.85	
18.00	0.00	0.95	1.84	4.35	2.36	2.47	5.25	9.21	5.80	
20.00	0.00	0.00	1.00	1.78	1.61	1.62	1.29	3.77	3.39	
22.50	0.00	0.00	0.46	0.65	1.18	1.11	0.79	2.07	2.49	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 4	N. PACIFIC		SUMMER		PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M					
3.20	3.37	1.66	0.00	0.00	0.00					
4.80	3.37	4.73	0.00	0.00	0.00					
6.30	20.20	26.01	7.20	1.81	0.00					
7.50	11.78	11.04	25.20	3.17	0.00					
8.60	17.14	21.07	27.49	23.03	4.66					
9.70	15.71	11.04	12.60	31.66	21.35					
10.90	15.71	13.79	12.60	21.11	42.70					
12.40	3.37	4.73	7.20	9.05	18.30					
13.80	3.63	2.55	3.88	3.90	5.91					
15.00	3.63	2.55	1.94	3.90	3.94					
16.40	1.57	0.66	1.34	1.69	1.71					
18.00	0.52	0.18	0.56	0.70	1.42					
20.00	0.00	0.00	0.00	0.00	0.00					
22.50	0.00	0.00	0.00	0.00	0.00					
25.70	0.00	0.00	0.00	0.00	0.00					

GP 12 N. PACIFIC		ANNUAL		PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	3.58	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	5.96	3.18	1.71	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	17.88	25.40	4.28	1.83	0.00	0.00	0.00	0.00	0.00	
7.50	13.91	14.82	22.48	5.35	0.00	0.00	0.00	0.00	0.00	
8.60	15.17	16.16	21.80	29.19	2.55	0.00	0.00	0.00	0.00	
9.70	13.91	14.82	14.98	21.40	17.51	3.16	0.00	0.00	0.00	
10.90	13.91	7.41	9.99	16.05	35.01	23.73	3.83	2.30	0.00	
12.40	5.96	6.35	8.56	9.17	20.01	40.68	43.80	19.76	2.55	
13.80	5.13	3.42	4.61	4.94	10.77	14.60	23.58	42.55	8.22	
15.00	2.57	2.74	4.61	4.94	5.39	7.30	11.79	21.27	54.82	
16.40	1.11	1.78	4.00	4.28	4.67	6.33	10.22	7.38	23.75	
18.00	0.93	0.99	1.66	1.43	1.95	2.11	3.41	3.07	5.94	
20.00	0.00	0.40	0.82	0.88	1.27	1.29	2.09	2.51	3.24	
22.50	0.00	0.00	0.50	0.54	0.88	0.79	1.28	1.15	1.48	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 12 N. PACIFIC		WINTER		PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	12.46	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.77	18.31	2.40	1.18	0.00	0.00	0.00	0.00	0.00	
7.50	19.39	14.24	18.68	3.44	0.00	0.00	0.00	0.00	0.00	
8.60	15.86	15.54	15.29	22.50	1.36	0.00	0.00	0.00	0.00	
9.70	9.69	14.24	14.01	13.75	12.45	1.21	0.00	0.00	0.00	
10.90	4.85	14.24	14.01	13.75	31.12	24.26	3.66	0.00	0.00	
12.40	4.15	6.10	12.01	14.73	26.67	36.39	39.23	11.34	1.41	
13.80	4.47	5.26	8.62	12.69	11.49	11.20	25.35	36.65	15.18	
15.00	4.47	3.94	8.62	6.35	5.75	11.20	16.90	30.54	45.55	
16.40	3.88	2.28	2.99	5.50	4.98	9.71	7.32	10.59	26.32	
18.00	0.00	0.95	1.87	3.21	2.90	2.83	3.66	5.29	5.48	
20.00	0.00	0.00	1.02	1.87	2.04	1.99	2.50	3.61	3.59	
22.50	0.00	0.00	0.47	1.03	1.24	1.21	1.37	1.98	2.47	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 12 N. PACIFIC		SUMMER		PERIOD FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	3.94	1.82	0.00	0.00	0.00	
4.80	3.94	3.90	0.00	0.00	0.00	
6.30	23.65	26.01	3.09	1.11	0.00	
7.50	18.40	21.24	32.42	1.95	0.00	
8.60	15.05	16.55	31.44	31.90	3.53	
9.70	13.80	15.17	14.41	29.24	24.26	
10.90	9.20	7.58	7.21	19.49	48.52	
12.40	3.94	2.60	3.09	5.57	13.86	
13.80	4.25	2.80	3.33	4.20	4.48	
15.00	2.12	1.40	2.33	3.60	2.99	
16.40	1.10	0.73	1.73	2.08	1.29	
18.00	0.61	0.20	0.96	0.87	1.08	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 13 N. PACIFIC		ANNUAL			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	3.58	2.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	5.96	2.83	2.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	17.88	20.36	2.80	1.90	0.00	0.00	0.00	0.00	0.00	
7.50	13.91	19.80	18.66	2.78	0.00	0.00	0.00	0.00	0.00	
8.60	15.17	14.40	25.44	18.18	2.52	0.00	0.00	0.00	0.00	
9.70	13.91	13.20	13.99	27.77	17.32	4.00	0.00	0.00	0.00	
10.90	13.91	13.20	13.99	22.21	34.63	29.98	4.96	2.38	0.00	
12.40	5.96	5.66	8.00	9.52	19.79	34.27	42.52	24.49	3.51	
13.80	5.13	3.05	4.31	5.13	10.66	9.23	15.26	21.98	11.33	
15.00	2.57	2.44	4.31	5.13	5.33	9.23	15.26	21.98	37.76	
16.40	1.11	1.58	3.73	4.44	4.62	8.00	13.23	19.05	32.72	
18.00	0.93	0.88	1.55	1.48	2.69	2.67	4.41	6.35	8.18	
20.00	0.00	0.36	0.76	0.91	1.57	1.64	2.71	2.60	4.46	
22.50	0.00	0.00	0.47	0.56	0.87	1.00	1.65	1.19	2.05	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 13 N. PACIFIC		WINTER			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	12.46	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.77	12.09	1.99	0.91	0.00	0.00	0.00	0.00	0.00	
7.50	19.39	21.15	7.75	2.66	0.00	0.00	0.00	0.00	0.00	
8.60	15.86	15.38	15.92	11.60	1.09	0.00	0.00	0.00	0.00	
9.70	9.69	14.10	19.39	15.95	10.01	1.34	0.00	0.00	0.00	
10.90	4.85	14.10	15.51	21.27	30.03	26.85	5.11	0.00	0.00	
12.40	4.15	6.04	13.29	13.67	17.16	28.77	32.86	20.07	2.00	
13.80	4.47	5.21	7.16	9.82	13.86	18.59	23.59	28.82	21.49	
15.00	4.47	3.90	7.16	9.82	13.86	12.39	17.69	21.61	32.24	
16.40	3.88	2.26	6.20	8.51	8.01	5.37	10.22	12.49	27.94	
18.00	0.00	0.94	2.58	3.54	3.34	3.13	5.11	10.41	7.76	
20.00	0.00	0.00	1.27	1.45	1.64	2.20	3.49	4.26	5.08	
22.50	0.00	0.00	0.78	0.80	1.00	1.34	1.92	2.34	3.49	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 13 N. PACIFIC		SUMMER			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M					
3.20	5.30	1.77	0.00	0.00	0.00					
4.80	5.30	2.53	0.00	0.00	0.00					
6.30	19.60	27.82	2.67	1.03	0.00					
7.50	18.54	23.61	31.13	6.03	0.00					
8.60	13.48	16.10	30.56	29.59	5.85					
9.70	12.36	11.80	15.56	30.14	36.20					
10.90	9.27	8.85	9.34	18.08	33.52					
12.40	5.30	2.53	2.67	5.17	11.49					
13.80	5.70	2.72	2.87	3.89	6.19					
15.00	2.85	1.36	2.87	3.34	3.71					
16.40	1.48	0.71	1.49	1.93	2.15					
18.00	0.82	0.20	0.83	0.80	0.89					
20.00	0.00	0.00	0.00	0.00	0.00					
22.50	0.00	0.00	0.00	0.00	0.00					
25.70	0.00	0.00	0.00	0.00	0.00					

GP 16 N. PACIFIC ANNUAL			PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	3.19	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	5.32	5.06	2.28	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.30	20.24	4.56	1.04	0.00	0.00	0.00	0.00	0.00
7.50	12.42	17.71	23.95	1.82	0.00	0.00	0.00	0.00	0.00
8.60	13.55	12.88	23.23	26.42	2.65	0.00	0.00	0.00	0.00
9.70	12.42	11.81	10.65	27.24	24.29	3.56	0.00	0.00	0.00
10.90	12.42	11.81	10.65	12.11	30.36	26.74	4.34	2.38	0.00
12.40	10.65	5.06	9.12	10.38	15.62	30.56	49.65	24.49	2.31
13.80	4.59	5.45	4.91	5.59	5.61	16.45	13.37	21.98	24.84
15.00	2.29	5.45	4.91	5.59	11.21	8.23	13.37	21.98	24.84
16.40	0.99	1.42	2.55	4.84	4.86	7.13	11.59	19.05	21.52
18.00	0.83	0.79	1.77	2.42	2.83	3.56	3.86	6.35	17.94
20.00	0.00	0.32	0.87	1.65	1.66	2.43	2.37	2.60	5.87
22.50	0.00	0.00	0.53	0.91	0.91	1.34	1.45	1.19	2.69
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 16 N. PACIFIC WINTER			PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	12.46	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	20.77	12.09	2.86	1.07	0.00	0.00	0.00	0.00	0.00
7.50	19.39	21.15	11.12	3.13	0.00	0.00	0.00	0.00	0.00
8.60	15.86	15.38	18.19	13.68	0.98	0.00	0.00	0.00	0.00
9.70	9.69	14.10	11.12	18.81	15.67	1.15	0.00	0.00	0.00
10.90	4.85	14.10	11.12	12.54	22.38	20.04	3.19	0.00	0.00
12.40	4.15	6.04	9.53	10.75	23.02	31.90	44.40	21.62	1.36
13.80	4.47	5.21	10.26	11.58	10.33	21.14	18.39	27.95	14.69
15.00	4.47	3.90	10.26	11.58	10.33	13.21	14.71	23.29	36.72
16.40	3.88	2.26	8.90	10.03	8.95	6.87	12.75	16.15	25.46
18.00	0.00	0.94	3.71	4.18	5.97	2.67	3.19	6.73	15.91
20.00	0.00	0.00	1.82	1.71	1.47	1.87	2.17	2.75	3.47
22.50	0.00	0.00	1.11	0.94	0.90	1.15	1.20	1.51	2.39
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 16 N. PACIFIC SUMMER			PERIOD FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	3.45	1.77	0.00	0.00	0.00
4.80	3.45	3.78	0.00	0.00	0.00
6.30	17.26	25.22	3.73	1.54	0.00
7.50	16.11	23.54	34.82	4.51	0.00
8.60	17.57	14.44	30.86	39.33	3.34
9.70	16.11	11.77	8.71	27.04	30.58
10.90	12.08	10.30	8.71	9.01	38.22
12.40	6.90	3.78	3.73	7.72	13.11
13.80	3.72	2.72	4.02	4.16	7.06
15.00	1.86	1.36	2.81	3.33	4.23
16.40	0.97	0.94	1.74	2.16	2.45
18.00	0.54	0.39	0.37	1.20	1.02
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 24 N. PACIFIC		ANNUAL			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.54	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.57	3.67	2.31	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	20.53	18.34	4.63	1.20	0.00	0.00	0.00	0.00	0.00	
7.50	17.96	17.11	21.60	2.11	0.00	0.00	0.00	0.00	0.00	
8.60	13.06	14.00	17.68	23.00	3.22	0.00	0.00	0.00	0.00	
9.70	11.97	12.84	16.20	23.19	22.15	5.38	0.00	0.00	0.00	
10.90	11.97	12.84	10.80	14.06	29.53	13.44	2.58	4.41	0.00	
12.40	10.26	7.33	9.26	12.05	18.99	34.56	44.21	37.83	11.58	
13.80	5.53	3.95	4.99	6.49	6.82	12.41	23.80	20.37	24.95	
15.00	2.76	3.95	4.99	6.49	6.82	12.41	11.90	16.30	31.18	
16.40	1.44	3.42	4.32	5.62	5.91	10.75	8.25	10.59	16.22	
18.00	0.40	0.86	1.80	2.81	3.45	5.38	5.16	5.88	9.01	
20.00	0.00	0.23	0.88	1.92	2.01	3.67	2.81	2.41	3.69	
22.50	0.00	0.00	0.54	1.05	1.11	2.02	1.29	2.21	3.38	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 24 N. PACIFIC		WINTER			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	9.79	3.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	16.31	14.66	2.11	1.00	0.00	0.00	0.00	0.00	0.00	
7.50	15.23	10.06	3.69	2.33	0.00	0.00	0.00	0.00	0.00	
8.60	12.46	10.98	18.13	15.90	0.99	0.00	0.00	0.00	0.00	
9.70	11.42	10.06	12.31	23.33	18.20	1.46	0.00	0.00	0.00	
10.90	11.42	10.06	15.39	23.33	20.47	18.30	4.64	0.00	0.00	
12.40	9.79	12.94	13.19	10.00	21.45	43.91	49.74	17.90	2.74	
13.80	7.03	13.9	14.20	5.38	14.70	13.51	16.07	28.92	17.69	
15.00	3.51	9.29	8.52	5.38	10.50	6.76	10.71	19.28	29.48	
16.40	3.05	3.22	7.38	7.00	7.28	8.78	9.28	16.71	25.55	
18.00	0.00	1.34	4.10	3.89	3.03	3.42	4.64	8.35	12.78	
20.00	0.00	0.00	0.67	1.59	2.48	2.40	3.17	5.70	6.97	
22.50	0.00	0.00	0.31	0.87	0.91	1.46	1.74	3.13	4.79	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 24 N. PACIFIC		SUMMER			PERIOD FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M					
3.20	4.37	1.91	0.00	0.00	0.00					
4.80	4.37	4.09	0.00	0.00	0.00					
6.30	24.02	29.97	5.90	1.39	0.00					
7.50	17.84	19.07	27.54	3.25	0.00					
8.60	13.90	17.34	22.54	26.60	7.42					
9.70	15.29	12.71	20.66	24.38	20.40					
10.90	10.19	6.36	6.89	16.25	34.01					
12.40	4.37	2.72	5.90	13.93	17.49					
13.80	2.35	2.93	3.81	6.00	9.42					
15.00	2.35	1.47	3.18	4.50	6.28					
16.40	0.61	1.02	2.20	2.60	2.72					
18.00	0.34	0.42	1.38	1.08	2.27					
20.00	0.00	0.00	0.00	0.00	0.00					
22.50	0.00	0.00	0.00	0.00	0.00					
25.70	0.00	0.00	0.00	0.00	0.00					

GP 30 N. PACIFIC		ANNUAL		PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.01	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	5.03	3.44	1.69	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	25.14	24.05	4.23	1.15	0.00	0.00	0.00	0.00	0.00	
7.50	17.60	12.03	24.65	2.01	0.00	0.00	0.00	0.00	0.00	
8.60	12.80	13.12	16.13	21.92	3.73	0.00	0.00	0.00	0.00	
9.70	11.73	12.03	14.79	26.80	17.11	3.68	0.00	0.00	0.00	
10.90	11.73	12.03	9.86	13.40	34.23	18.38	4.08	4.41	0.00	
12.40	5.03	10.31	12.68	11.48	14.67	31.52	34.98	37.83	11.68	
13.80	5.42	3.70	4.55	6.18	7.90	16.97	22.60	20.37	18.87	
15.00	2.71	3.70	4.55	6.18	7.90	16.97	18.84	16.30	31.44	
16.40	1.41	3.21	3.94	5.36	6.85	5.88	9.79	10.59	21.80	
18.00	0.39	0.80	1.64	2.68	3.99	3.68	5.44	5.88	9.08	
20.00	0.00	0.22	0.81	1.83	2.33	2.01	2.23	2.41	3.72	
22.50	0.00	0.00	0.49	1.00	1.28	0.92	2.04	2.21	3.41	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 30 N. PACIFIC		WINTER		PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	3.49	3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	17.45	13.66	2.21	1.18	0.00	0.00	0.00	0.00	0.00	
7.50	16.29	10.63	3.87	2.30	0.00	0.00	0.00	0.00	0.00	
8.60	13.33	11.59	18.98	16.54	2.34	0.00	0.00	0.00	0.00	
9.70	12.22	10.63	14.82	27.57	18.44	2.91	0.00	0.00	0.00	
10.90	12.22	10.63	14.82	15.16	34.31	25.45	3.53	0.00	0.00	
12.40	10.47	11.84	11.05	11.81	18.38	37.40	45.35	23.33	4.81	
13.80	7.52	12.75	11.89	12.72	9.11	13.43	16.28	25.13	20.74	
15.00	3.76	9.81	11.89	4.24	9.11	6.71	16.28	25.13	36.30	
16.40	3.26	3.40	5.15	3.68	3.43	5.82	9.88	12.44	17.98	
18.00	0.00	1.42	4.30	2.14	2.86	4.85	5.88	7.78	11.23	
20.00	0.00	0.00	0.70	1.50	1.17	1.98	1.92	4.24	6.13	
22.50	0.00	0.00	0.32	1.15	0.86	1.45	0.88	1.94	2.81	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 30 N. PACIFIC		SUMMER		PERIOD FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	6.14	1.70	0.00	0.00	0.00	
4.80	3.07	7.27	0.00	0.00	0.00	
6.30	29.66	31.51	6.04	1.33	0.00	
7.50	21.48	17.81	40.15	3.09	0.00	
8.60	15.62	11.41	20.75	33.73	3.95	
9.70	9.54	9.33	9.16	26.28	25.36	
10.90	7.16	5.65	7.04	15.46	36.23	
12.40	2.05	4.85	6.04	6.63	12.42	
13.80	2.20	5.22	3.90	5.71	10.03	
15.00	2.20	2.61	3.25	4.28	6.69	
16.40	0.57	2.26	2.25	2.47	2.90	
18.00	0.32	0.38	1.41	1.03	2.42	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 31 N. PACIFIC ANNUAL		PERIOD FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	3.15	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	5.26	3.72	1.75	0.00	0.00	0.00	0.00	0.00	0.00
6.30	21.02	18.60	4.37	1.26	0.00	0.00	0.00	0.00	0.00
7.50	12.26	13.02	20.40	2.20	0.00	0.00	0.00	0.00	0.00
8.60	13.38	9.47	16.69	23.97	3.67	0.00	0.00	0.00	0.00
9.70	12.26	8.68	10.20	21.98	16.83	2.79	0.00	0.00	0.00
10.90	12.26	13.02	10.20	14.65	33.65	27.94	2.97	3.67	0.00
12.40	10.51	11.16	8.74	12.56	14.42	23.95	50.99	31.43	3.44
13.80	5.66	8.01	9.41	6.76	7.77	12.90	16.47	20.31	14.81
15.00	2.83	8.01	9.41	6.75	7.77	12.90	13.73	20.31	37.02
16.40	0.98	3.47	4.08	5.86	6.73	11.18	7.14	11.73	25.66
18.00	0.41	0.87	3.40	2.44	5.61	4.66	3.97	4.89	10.69
20.00	0.00	0.47	0.83	1.20	2.29	2.29	3.24	4.00	4.37
25.70	0.00	0.00	0.51	0.37	1.26	1.40	1.49	3.67	4.01
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 31 N. PACIFIC WINTER		PERIOD FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	7.10	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	17.74	14.31	2.44	1.06	0.00	0.00	0.00	0.00	0.00
7.50	16.56	9.82	11.40	2.06	0.00	0.00	0.00	0.00	0.00
8.60	13.55	10.71	16.79	17.99	2.60	0.00	0.00	0.00	0.00
9.70	12.42	12.77	13.11	18.56	20.53	2.85	0.00	0.00	0.00
10.90	12.42	12.77	13.11	16.49	34.85	35.63	4.60	0.00	0.00
12.40	7.10	10.94	11.24	13.08	15.14	26.26	56.15	18.05	3.73
13.80	7.64	11.79	12.10	11.42	8.81	11.18	10.61	33.04	16.07
15.00	3.82	9.07	10.53	7.61	8.81	8.55	13.79	19.44	40.18
16.40	1.66	3.14	4.56	6.60	3.82	7.41	9.19	11.79	24.38
18.00	0.00	1.31	3.80	2.75	3.18	4.75	3.83	9.83	8.71
20.00	0.00	0.00	0.62	1.35	1.30	1.94	1.25	5.74	4.75
22.50	0.00	0.00	0.29	1.03	0.95	1.43	0.57	2.11	2.18
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 31 N. PACIFIC SUMMER		PERIOD FREQUENCY OF OCCURRENCE			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	7.52	1.89	0.00	0.00	0.00
4.80	3.76	8.09	0.00	0.00	0.00
6.30	26.89	26.15	6.28	2.05	0.00
7.50	15.36	15.72	28.28	2.39	0.00
8.60	12.69	10.29	19.43	26.11	4.00
9.70	12.51	10.38	10.47	23.93	22.01
10.90	10.31	7.23	10.47	14.36	36.69
12.40	4.33	8.09	8.98	10.26	12.58
13.80	2.03	7.84	5.80	8.84	13.55
15.00	3.44	2.90	4.83	6.63	6.77
16.40	0.88	1.01	3.35	3.83	2.93
18.00	0.29	0.42	2.09	1.60	1.47
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 33 N. PACIFIC ANNUAL PERIOD FREQUENCY OF OCCURRENCE										
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	1.71	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.56	2.75	1.50	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	21.37	24.72	3.74	1.34	0.00	0.00	0.00	0.00	0.00	
7.50	14.96	16.02	26.21	2.34	0.00	0.00	0.00	0.00	0.00	
8.60	16.32	13.98	23.83	25.58	3.35	0.00	0.00	0.00	0.00	
9.70	19.94	12.82	13.11	31.26	30.74	3.01	0.00	0.00	0.00	
10.90	9.97	6.41	8.74	7.82	30.74	30.12	3.81	3.81	0.00	
12.40	4.27	5.49	3.74	6.70	13.18	25.81	32.68	32.68	3.44	
13.80	4.60	5.92	4.03	7.21	7.09	13.90	21.12	21.12	14.81	
15.00	2.76	5.92	4.03	7.21	5.68	11.12	21.12	21.12	37.02	
16.40	1.20	3.85	6.99	6.25	3.69	7.23	12.20	12.20	25.66	
18.00	0.33	0.85	2.91	2.61	3.07	4.02	5.08	5.08	10.69	
20.00	0.00	0.17	0.71	1.28	1.68	3.29	2.08	2.08	4.37	
22.50	0.00	0.00	0.44	0.39	0.77	1.51	1.91	1.91	4.01	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 33 N. PACIFIC WINTER PERIOD FREQUENCY OF OCCURRENCE										
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.25	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	14.65	17.96	3.08	1.66	0.00	0.00	0.00	0.00	0.00	
7.50	13.15	10.48	17.98	3.23	0.00	0.00	0.00	0.00	0.00	
8.60	14.34	17.14	22.37	19.01	3.97	0.00	0.00	0.00	0.00	
9.70	13.15	13.09	15.47	30.33	29.14	3.31	0.00	0.00	0.00	
10.90	13.15	10.48	7.19	10.97	31.32	33.11	9.48	0.00	0.00	
12.40	11.27	6.73	6.17	5.53	6.24	18.45	28.45	13.65	7.09	
13.80	12.14	4.83	7.64	5.96	6.72	15.28	21.89	36.76	15.26	
15.00	4.85	9.67	7.64	5.96	6.72	15.28	17.51	22.06	38.15	
16.40	1.05	7.12	9.50	10.33	7.58	6.62	11.38	12.74	19.84	
18.00	0.00	0.70	2.40	4.30	4.86	4.41	6.32	10.62	11.02	
20.00	0.00	0.00	0.39	1.76	1.99	2.71	2.59	2.17	4.51	
22.50	0.00	0.00	0.18	0.97	1.46	0.83	2.37	1.99	4.13	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 33 N. PACIFIC SUMMER PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	2.48	1.58	0.00	0.00	0.00	
4.80	4.22	3.43	0.00	0.00	0.00	
6.30	27.31	29.04	5.21	1.29	0.00	
7.50	17.38	21.56	30.41	3.00	0.00	
8.60	14.85	16.80	26.54	16.38	2.32	
9.70	15.35	15.40	12.16	30.03	29.80	
10.90	5.79	3.08	6.08	15.01	42.58	
12.40	5.71	3.43	5.21	12.87	10.95	
13.80	2.67	2.84	5.61	13.86	7.86	
15.00	2.67	1.42	5.61	4.16	3.93	
16.40	1.16	0.99	1.95	2.40	1.70	
18.00	0.39	0.41	1.22	1.00	0.85	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 38 N. PACIFIC ANNUAL			PERIOD FREQUENCY OF OCCUR						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.88	0.50	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	1.76	2.48	0.71	0.00	0.00	0.00	0.00	0.00	
6.30	21.94	19.87	1.43	1.36	0.00	0.00	0.00	0.00	
7.50	15.36	23.18	20.82	2.39	0.00	0.00	0.00	0.00	
8.60	11.17	15.81	27.25	17.37	3.35	0.00	0.00	0.00	
9.70	10.24	11.59	16.65	23.88	15.34	3.01	0.00	0.00	
10.90	10.24	5.80	12.49	15.92	30.67	30.12	3.81	3.56	
12.40	8.78	4.97	7.14	13.65	13.15	25.81	32.68	30.53	
13.80	9.45	5.35	3.84	7.35	14.16	13.90	21.12	26.30	
15.00	4.73	5.35	3.84	7.35	14.16	11.12	21.12	19.73	
16.40	4.10	4.64	3.33	6.37	3.68	7.23	12.20	11.40	
18.00	1.37	0.39	1.39	2.65	3.07	4.02	5.08	4.75	
20.00	0.00	0.08	0.68	1.30	1.67	3.29	2.08	1.94	
22.50	0.00	0.00	0.42	0.40	0.77	1.51	1.91	1.78	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 38 N. PACIFIC WINTER			PERIOD FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	1.10	3.21	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	16.52	18.32	1.54	1.60	0.00	0.00	0.00	0.00	
7.50	8.35	13.87	19.27	3.10	0.00	0.00	0.00	0.00	
8.60	9.11	11.04	21.02	22.35	2.21	0.00	0.00	0.00	
9.70	12.85	10.12	16.58	22.97	17.24	2.72	0.00	0.00	
10.90	12.85	11.25	10.30	12.42	27.38	27.24	4.98	0.00	
12.40	11.02	8.68	10.37	14.37	14.78	16.34	29.87	7.33	
13.80	10.08	9.34	8.27	5.73	9.36	17.60	22.98	39.46	
15.00	13.64	6.92	5.38	5.73	9.36	17.60	18.38	23.67	
16.40	3.60	6.00	3.58	4.97	8.11	8.72	11.95	13.68	
18.00	0.86	1.25	2.99	4.14	6.76	5.45	6.64	11.40	
20.00	0.00	0.00	0.49	1.69	2.77	2.97	2.72	2.33	
22.50	0.00	0.00	0.22	0.93	2.03	1.36	2.49	2.14	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 38 N. PACIFIC SUMMER			PERIOD FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	1.83	1.88	0.00	0.00	0.00
4.80	3.66	3.20	0.00	0.00	0.00
6.30	30.41	22.62	0.98	1.08	0.00
7.50	18.38	31.45	27.77	2.51	0.00
8.60	15.39	18.47	34.45	23.29	3.52
9.70	11.54	12.53	20.16	25.12	25.83
10.90	8.55	2.86	7.61	25.12	32.29
12.40	3.66	1.88	2.28	10.76	16.60
13.80	2.37	2.03	2.11	5.80	11.92
15.00	1.97	1.42	2.11	3.48	5.96
16.40	1.37	1.06	1.52	2.01	2.58
18.00	0.85	0.59	1.01	0.84	1.29
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 51 N. PACIFIC ANNUAL		PERIOD FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.89	0.42	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	1.77	2.09	0.72	0.00	0.00	0.00	0.00	0.00	
6.30	35.49	25.11	3.61	1.71	0.00	0.00	0.00	0.00	
7.50	15.53	19.53	29.44	3.00	0.00	0.00	0.00	0.00	
8.60	11.29	10.65	22.94	21.81	2.72	0.00	0.00	0.00	
9.70	10.35	9.77	12.62	22.99	24.90	3.01	0.00	0.00	
10.90	5.18	7.32	8.41	10.00	32.37	30.12	3.81	3.56	
12.40	4.44	6.28	7.21	8.57	10.67	25.81	32.68	30.53	
13.80	4.78	4.51	3.88	9.23	9.19	13.90	21.12	26.30	
15.00	4.78	6.76	3.88	9.23	6.90	11.12	21.12	19.73	
16.40	4.14	5.86	3.37	8.00	5.98	7.23	12.20	11.40	
18.00	1.38	1.63	2.80	3.33	3.32	4.02	5.08	4.75	
20.00	0.00	0.07	0.69	1.64	2.72	3.29	2.08	1.94	
22.50	0.00	0.00	0.42	0.50	1.24	1.51	1.91	1.78	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 51 N. PACIFIC WINTER		PERIOD FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	2.03	2.47	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	10.14	8.15	3.00	1.38	0.00	0.00	0.00	0.00	
7.50	8.28	9.50	14.00	4.02	0.00	0.00	0.00	0.00	
8.60	12.90	11.63	13.75	17.55	2.85	0.00	0.00	0.00	
9.70	11.83	14.40	14.00	18.50	18.32	4.26	0.00	0.00	
10.90	11.83	12.38	11.55	16.09	18.32	8.51	4.53	0.00	
12.40	10.14	9.87	14.10	18.61	22.43	14.59	7.77	9.87	
13.80	10.92	8.77	8.72	5.20	14.49	19.64	16.74	10.63	
15.00	10.92	11.43	7.43	7.42	9.66	27.49	25.11	21.26	
16.40	9.46	8.53	9.24	6.43	6.28	13.62	29.02	36.86	
18.00	1.58	1.92	2.33	2.68	3.49	8.51	12.09	15.36	
20.00	0.00	0.94	1.34	1.32	2.85	2.32	2.47	3.14	
22.50	0.00	0.00	0.53	0.80	1.31	1.06	2.27	2.88	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 51 N. PACIFIC SUMMER		PERIOD FREQUENCY OF OCCURRENCE			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	
3.20	2.12	0.00	0.00	0.00	
4.80	3.18	4.37	0.00	0.00	
6.30	46.06	40.46	3.51	4.02	
7.50	14.86	25.04	59.82	4.69	
8.60	10.00	11.36	20.56	20.45	
9.70	11.64	7.31	5.74	37.50	
10.90	4.21	5.98	4.10	18.75	
12.40	2.76	1.90	2.81	8.03	
13.80	2.29	2.05	1.51	2.60	
15.00	1.60	1.02	0.76	2.60	
16.40	0.79	0.35	0.66	0.75	
18.00	0.50	0.15	0.55	0.62	
20.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	

SA	SS	N:	PERIOD	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9					
PERIOD	0-1	M	1-2	M	2-3	M	3-4	M	4-5	M	5-6	M	6-7	M	7-8	M	8-9

GP 55 N.	PACIFIC WINTER	PERIOD	FREQUENCY OF OCCURRENCE
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

GP 55 N. PACIFIC SUMMER PERIOD FREQUENCY OF OCCURRENCE[illegible]

N. PACIFIC ANNUAL PERIOD PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	2.69	1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	5.37	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	17.01	27.03	4.63	0.00	0.00	0.00	0.00	0.00	0.00
7.50	15.65	15.77	21.57	2.93	0.00	0.00	0.00	0.00	0.00
8.60	15.93	17.21	23.53	25.52	2.58	0.00	0.00	0.00	0.00
9.70	14.61	15.77	16.18	29.23	17.68	3.17	0.00	0.00	0.00
10.90	13.56	7.88	10.79	17.54	35.37	23.73	5.04	0.00	0.00
12.40	6.70	6.75	9.24	10.03	20.21	40.68	43.25	20.89	2.55
13.80	4.34	2.92	4.98	5.39	10.88	14.61	23.29	44.97	8.22
15.00	2.89	1.45	4.98	5.39	5.44	7.30	11.64	22.49	54.82
16.40	1.25	0.63	2.16	1.87	4.71	6.32	10.09	5.84	23.75
18.00	0.00	0.53	1.08	1.17	1.57	2.11	3.36	3.25	5.94
20.00	0.00	0.00	0.59	0.64	0.96	1.30	2.07	1.33	3.24
22.50	0.00	0.00	0.27	0.29	0.59	0.79	1.26	1.22	1.48
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N. PACIFIC WINTER PERIOD FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M
3.20	2.27	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	6.80	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	14.96	14.55	2.38	0.00	0.00	0.00	0.00	0.00	0.00
7.50	13.22	12.67	13.89	3.73	0.00	0.00	0.00	0.00	0.00
8.60	14.43	13.82	22.72	16.29	2.76	0.00	0.00	0.00	0.00
9.70	13.22	12.67	13.89	22.41	12.64	2.47	0.00	0.00	0.00
10.90	12.17	12.67	13.89	14.93	31.60	24.66	3.76	0.00	0.00
12.40	8.61	9.95	11.91	12.80	27.09	36.98	40.31	12.80	1.53
13.80	7.32	8.75	6.41	13.78	11.67	11.38	26.05	41.34	4.93
15.00	4.88	5.85	6.41	6.89	5.83	11.38	17.37	27.56	49.35
16.40	2.12	3.04	5.55	5.97	5.06	9.86	7.52	11.95	28.51
18.00	0.00	1.69	1.85	1.99	1.68	1.65	2.51	3.98	11.88
20.00	0.00	0.00	0.75	0.82	1.03	1.01	1.54	1.63	2.91
22.50	0.00	0.00	0.35	0.37	0.63	0.61	0.94	0.75	0.89
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N. PACIFIC SUMMER PERIOD FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	4.70	0.48	0.00	0.00	0.00
4.80	4.70	9.59	0.00	0.00	0.00
6.30	23.49	28.76	3.29	0.00	0.00
7.50	21.92	22.37	30.69	2.71	0.00
8.60	17.94	12.20	33.48	29.60	5.00
9.70	10.96	11.18	15.34	32.56	22.94
10.90	10.96	5.60	7.67	16.28	45.88
12.40	2.35	4.80	3.29	9.30	9.83
13.80	1.52	2.58	3.54	5.01	10.59
15.00	1.01	1.55	1.77	2.50	3.17
16.40	0.44	0.90	0.92	1.30	1.83
18.00	0.00	0.00	0.00	0.72	0.76
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 2 (59.4 N, 172.0 W)

[illegible]

GP 12 (50.9 N, 145.6 W)

[illegible]

GP 13 (50.3 N, 171.3 W)

[illegible]

GP 30 (35.7 N, 176.1 E)

[illegible]

SUMMER

[illegible]

APPENDIX C

SOUTHERN HEMISPHERE REGION

GP 54	S. HEMISPHERE	ANNUAL					PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	0.89	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.89	0.00	0.00	0.00	0.00	0.00	0.00
6.30	14.29	1.95	0.28	0.00	0.00	0.00	0.00
7.50	35.71	14.39	4.41	1.50	0.00	0.00	0.00
8.60	16.07	15.37	8.95	4.51	3.13	0.00	0.00
9.70	16.07	15.37	8.95	4.51	3.13	0.00	0.00
10.90	12.50	29.02	29.20	22.56	15.63	20.00	20.00
12.40	3.57	15.85	25.34	27.82	25.00	20.00	20.00
13.80	0.00	5.85	14.33	21.05	25.00	20.00	20.00
15.00	0.00	1.71	5.79	11.28	15.63	20.00	20.00
16.40	0.00	0.49	1.93	4.51	9.38	20.00	20.00
18.00	0.00	0.00	0.55	1.50	3.13	0.00	0.00
20.00	0.00	0.00	0.09	0.25	0.00	0.00	0.00
22.50	0.00	0.00	0.09	0.25	0.00	0.00	0.00
25.70	0.00	0.00	0.09	0.25	0.00	0.00	0.00

GP 54	S. HEMISPHERE	WINTER					PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	11.90	1.70	0.27	0.00	0.00	0.00	0.00
7.50	38.10	13.03	3.74	1.19	0.00	0.00	0.00
8.60	16.67	15.16	8.56	4.46	2.04	0.00	0.00
9.70	16.67	15.16	8.56	4.46	2.04	0.00	0.00
10.90	14.29	30.03	29.41	22.02	16.33	10.00	10.00
12.40	2.38	16.71	26.20	27.98	24.49	20.00	20.00
13.80	0.00	6.23	14.71	21.43	24.49	30.00	30.00
15.00	0.00	1.70	5.88	11.31	16.33	20.00	20.00
16.40	0.00	0.28	1.87	4.76	8.16	10.00	10.00
18.00	0.00	0.00	0.53	1.79	4.08	10.00	10.00
20.00	0.00	0.00	0.09	0.20	0.68	0.00	0.00
22.50	0.00	0.00	0.09	0.20	0.68	0.00	0.00
25.70	0.00	0.00	0.09	0.20	0.68	0.00	0.00

GP 54	S. HEMISPHERE	SUMMER					PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	0.94	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.94	0.00	0.00	0.00	0.00	0.00	0.00
6.30	13.21	2.17	0.27	0.00	0.00	0.00	0.00
7.50	35.85	14.46	4.36	1.53	0.00	0.00	0.00
8.60	16.04	15.30	8.86	4.58	1.72	0.00	0.00
9.70	16.04	15.30	8.86	4.58	1.72	0.00	0.00
10.90	13.21	28.92	29.16	22.14	17.24	20.00	20.00
12.40	3.77	15.90	25.34	27.48	24.14	20.00	20.00
13.80	0.00	5.78	14.44	21.37	24.14	20.00	20.00
15.00	0.00	1.69	5.99	11.45	17.24	20.00	20.00
16.40	0.00	0.48	1.91	4.58	10.34	20.00	20.00
18.00	0.00	0.00	0.54	1.53	3.45	0.00	0.00
20.00	0.00	0.00	0.09	0.25	0.00	0.00	0.00
22.50	0.00	0.00	0.09	0.25	0.00	0.00	0.00
25.70	0.00	0.00	0.09	0.25	0.00	0.00	0.00

GP 67	S. HEMISPHERE	ANNUAL					PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	0.82	0.00	0.00	0.00	0.00	0.00	
4.80	0.82	0.00	0.00	0.00	0.00	0.00	
6.30	18.03	3.18	0.56	0.00	0.00	0.00	
7.50	39.34	18.58	6.72	3.03	0.00	0.00	
8.60	14.75	16.63	11.20	6.44	3.33	0.00	
9.70	14.75	16.63	11.20	6.44	3.33	0.00	
10.90	9.84	26.89	30.81	26.52	20.00	25.00	
12.40	1.64	12.71	22.97	27.27	26.67	25.00	
13.80	0.00	4.16	11.20	18.18	23.33	25.00	
15.00	0.00	0.98	3.92	8.33	13.33	25.00	
16.40	0.00	0.24	1.12	3.03	6.67	0.00	
18.00	0.00	0.00	0.28	0.76	3.33	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	

GP 67	S. HEMISPHERE	WINTER				PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	1.53	0.10	0.00	0.00	0.00	
4.80	1.53	0.10	0.00	0.00	0.00	
6.30	22.45	5.41	1.28	0.00	0.00	
7.50	37.76	22.85	9.90	3.95	0.00	
8.60	12.76	16.53	12.62	8.55	4.55	
9.70	12.76	16.53	12.62	8.55	4.55	
10.90	9.18	23.65	29.71	27.63	27.27	
12.40	2.04	10.42	20.13	25.00	27.27	
13.80	0.00	3.41	9.27	15.79	18.18	
15.00	0.00	0.80	3.19	6.58	9.09	
16.40	0.00	0.20	0.96	2.63	9.09	
18.00	0.00	0.00	0.32	1.32	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 67	S. HEMISPHERE	SUMMER					PERCENTAGE FREQUENCY OF OCCURRENCE
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	13.51	1.59	0.26	0.00	0.00	0.00	0.00
7.50	37.84	14.01	4.20	1.56	0.00	0.00	0.00
8.60	16.22	15.92	9.19	4.69	2.50	0.00	0.00
9.70	16.22	15.92	9.19	4.69	2.50	0.00	0.00
10.90	13.51	29.94	30.45	23.44	16.67	15.38	0.00
12.40	2.70	15.61	25.98	28.65	26.67	23.08	0.00
13.80	0.00	5.41	13.65	20.83	25.00	23.08	50.00
15.00	0.00	1.27	5.25	10.42	15.00	23.08	50.00
16.40	0.00	0.32	1.57	4.17	6.67	7.69	0.00
18.00	0.00	0.00	0.26	1.04	3.33	7.69	0.00
20.00	0.00	0.00	0.00	0.17	0.56	0.00	0.00
22.50	0.00	0.00	0.00	0.17	0.56	0.00	0.00
25.70	0.00	0.00	0.00	0.17	0.56	0.00	0.00

GP 70	S. HEMISPHERE	ANNUAL			PERCENTAGE FREQUENCY OF OCCURRENCE			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	
3.20	0.49	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.49	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	11.65	1.94	0.33	0.00	0.00	0.00	0.00	
7.50	33.01	14.32	5.25	2.36	0.00	0.00	0.00	
8.60	16.50	15.29	9.84	5.91	3.95	0.00	0.00	
9.70	16.50	15.29	9.84	5.91	3.95	0.00	0.00	
10.90	15.53	28.88	29.84	24.41	21.05	12.50	0.00	
12.40	1.85	16.02	24.59	26.77	26.37	25.00	50.00	
13.80	0.97	6.07	13.11	18.90	23.68	25.00	50.00	
15.00	0.00	1.70	5.25	9.45	13.16	25.00	0.00	
16.40	0.00	0.49	1.64	3.94	5.26	12.50	0.00	
18.00	0.00	0.00	0.33	1.57	2.63	0.00	0.00	
20.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.26	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.26	0.00	0.00	0.00	

GP 70	S. HEMISPHERE	WINTER			PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	1.10	0.11	0.00	0.00	0.00	0.00	
4.80	1.10	0.11	0.00	0.00	0.00	0.00	
6.30	18.13	4.78	1.20	0.00	0.00	0.00	
7.50	35.71	21.52	10.76	5.00	5.00	0.00	
8.60	14.01	16.30	12.95	9.38	7.50	0.00	
9.70	14.01	16.30	12.95	9.38	7.50	0.00	
10.90	12.09	24.35	29.48	28.75	25.00	25.00	
12.40	3.30	11.30	19.52	23.75	25.00	25.00	
13.80	0.55	3.91	8.76	13.75	15.00	25.00	
15.00	0.00	1.09	3.19	6.25	10.00	25.00	
16.40	0.00	0.22	0.80	2.50	5.00	0.00	
18.00	0.00	0.00	0.40	1.25	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	

GP 70	S. HEMISPHERE	SUMMER			PERCENTAGE FREQUENCY OF OCCURRENCE			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	11.36	1.22	0.28	0.00	0.00	0.00	0.00	
7.50	34.09	11.93	3.38	1.08	0.00	0.00	0.00	
8.60	17.05	15.14	8.31	4.32	2.27	0.00	0.00	
9.70	17.05	15.14	8.31	4.32	2.27	0.00	0.00	
10.90	15.91	30.89	29.86	22.16	15.15	11.11	0.00	
12.40	4.55	17.13	26.76	28.65	25.76	22.22	25.00	
13.80	0.00	6.42	11.93	21.62	25.76	27.78	25.00	
15.00	0.00	1.83	5.92	11.35	16.67	22.22	25.00	
16.40	0.00	0.31	1.69	4.32	7.58	11.11	25.00	
18.00	0.00	0.00	0.56	1.62	3.03	5.56	0.00	
20.00	0.00	0.00	0.00	0.18	0.51	0.00	0.00	
22.50	0.00	0.00	0.00	0.18	0.51	0.00	0.00	
25.70	0.00	0.00	0.00	0.18	0.51	0.00	0.00	

GF 73	S. HEMISPHERE				ANNUAL	PERCENTAGE FREQUENCY OF OCCURRENCE			
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M		
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6.30	12.12	1.29	0.26	0.00	0.00	0.00	0.00		
7.50	36.36	12.54	3.37	1.03	0.00	0.00	0.00		
8.60	16.67	15.27	8.16	3.85	1.67	0.00	0.00		
9.70	16.67	15.27	8.16	3.85	1.67	0.00	0.00		
10.90	15.15	30.55	29.53	21.54	15.00	7.69	0.00		
12.40	3.03	17.04	26.94	28.72	25.00	23.08	0.00		
13.80	0.00	6.11	15.03	22.56	26.67	23.08	50.00		
15.00	0.00	1.61	5.96	11.79	16.67	23.08	50.00		
16.40	0.00	0.32	1.81	4.62	8.33	15.38	0.00		
18.00	0.00	0.00	0.52	1.54	3.33	7.69	0.00		
20.00	0.00	0.00	0.09	0.17	0.56	0.00	0.00		
22.50	0.00	0.00	0.09	0.17	0.56	0.00	0.00		
25.70	0.00	0.00	0.09	0.17	0.56	0.00	0.00		

GP 73	S. HEMISPHERE WINTER				PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	1.11	0.00	0.00	0.00	0.00	0.00	
4.80	1.11	0.00	0.00	0.00	0.00	0.00	
6.30	17.78	2.47	0.25	0.00	0.00	0.00	
7.50	37.78	16.71	5.30	1.92	0.00	0.00	
8.60	14.44	16.30	10.10	5.45	3.03	0.00	
9.70	14.44	16.30	10.10	5.45	3.03	0.00	
10.90	11.11	28.22	30.56	24.36	18.18	20.00	
12.40	2.22	13.97	24.49	27.56	27.27	20.00	
13.80	0.00	4.66	12.63	19.87	24.24	20.00	
15.00	0.00	1.10	4.80	9.62	15.15	20.00	
16.40	0.00	0.27	1.52	3.85	6.06	20.00	
18.00	0.00	0.00	0.25	1.28	3.03	0.00	
20.00	0.00	0.00	0.00	0.21	0.00	0.00	
22.50	0.00	0.00	0.00	0.21	0.00	0.00	
25.70	0.00	0.00	0.00	0.21	0.00	0.00	

GP 73 S. HEMISPHERE				SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	9.52	1.18	0.00	0.00	0.00	0.00	0.00	
7.50	38.10	10.98	2.66	0.87	0.00	0.00	0.00	
8.60	16.67	15.10	7.58	3.49	1.70	0.00	0.00	
9.70	16.67	15.10	7.58	3.49	1.70	0.00	0.00	
10.90	14.29	31.76	29.79	20.96	13.64	8.33	0.00	
12.40	4.76	17.65	28.19	29.26	25.00	20.83	20.00	
13.80	0.00	6.27	15.69	23.14	26.14	29.17	20.00	
15.00	0.00	1.57	6.12	12.23	18.18	20.83	20.00	
16.40	0.00	0.39	1.86	4.80	9.09	12.50	20.00	
18.00	0.00	0.00	0.53	1.31	3.41	4.17	20.00	
20.00	0.00	0.00	0.00	0.15	0.38	1.39	0.00	
22.50	0.00	0.00	0.00	0.15	0.38	1.39	0.00	
25.70	0.00	0.00	0.00	0.15	0.38	1.39	0.00	

GP 76	S. HEMISPHERE	ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	7.14	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	30.95	9.71	2.79	0.99	0.00	0.00	0.00	0.00	0.00
8.60	19.05	14.57	7.74	3.96	2.13	1.35	0.00	0.00	0.00
9.70	19.05	14.57	7.74	3.96	2.13	1.35	0.00	0.00	0.00
10.90	19.05	32.73	30.34	22.77	15.96	10.81	7.14	0.00	0.00
12.40	4.76	18.71	28.17	29.70	27.66	24.32	21.43	25.00	0.00
13.80	0.00	6.83	15.48	22.28	25.53	27.03	28.57	25.00	0.00
15.00	0.00	1.80	5.88	10.89	15.96	18.92	21.43	25.00	0.00
16.40	0.00	0.36	1.55	3.96	7.45	10.81	14.29	25.00	0.00
18.00	0.00	0.00	0.31	0.99	2.13	2.70	7.14	0.00	0.00
20.00	0.00	0.00	0.00	0.17	0.35	0.90	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.17	0.35	0.90	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.17	0.35	0.90	0.00	0.00	0.00

GP 76	S. HEMISPHERE	WINTER PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	8.93	0.93	0.31	0.00	0.00	0.00	0.00	0.00	0.00
7.50	30.36	11.15	3.38	1.12	0.00	0.00	0.00	0.00	0.00
8.60	17.86	14.86	8.46	4.49	2.70	1.79	0.00	0.00	0.00
9.70	17.86	14.86	8.46	4.49	2.70	1.79	0.00	0.00	0.00
10.90	17.86	31.58	30.15	23.60	17.57	10.71	10.00	0.00	0.00
12.40	5.36	17.96	27.08	29.21	27.03	25.00	20.00	25.00	0.00
13.80	1.79	6.50	14.77	20.79	24.32	25.00	30.00	25.00	0.00
15.00	0.00	1.86	5.54	10.67	14.86	17.86	20.00	25.00	0.00
16.40	0.00	0.31	1.54	3.93	6.76	10.71	10.00	25.00	0.00
18.00	0.00	0.00	0.31	1.12	2.70	3.57	10.00	0.00	0.00
20.00	0.00	0.00	0.00	0.19	0.45	1.19	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.19	0.45	1.19	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.19	0.45	1.19	0.00	0.00	0.00

GP 76	S. HEMISPHERE	SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE								
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	5.26	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	31.58	8.12	1.89	0.40	0.00	0.00	0.00	0.00	0.00	0.00
8.60	21.05	14.21	6.60	2.81	1.14	0.88	0.00	0.00	0.00	0.00
9.70	21.05	14.21	6.60	2.81	1.14	0.88	0.00	0.00	0.00	0.00
10.90	15.79	34.52	30.19	20.48	12.88	8.77	5.26	0.00	0.00	0.00
12.40	5.26	19.80	30.19	30.92	26.52	21.05	15.79	14.29	0.00	0.00
13.80	0.00	6.60	16.67	24.50	28.03	28.07	26.32	28.57	0.00	0.00
15.00	0.00	1.52	5.97	12.05	18.18	21.05	26.32	28.57	50.00	0.00
16.40	0.00	0.51	1.57	4.42	8.33	12.28	15.79	14.29	50.00	0.00
18.00	0.00	0.00	0.31	1.20	3.03	5.26	5.26	14.29	0.00	0.00
20.00	0.00	0.00	0.00	0.13	0.25	0.58	1.75	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.13	0.25	0.58	1.75	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.13	0.25	0.58	1.75	0.00	0.00	0.00

GP 86 S. HEMISPHERE		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	5.77	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	26.92	8.24	2.36	1.07	0.00	0.00	0.00	0.00	0.00	0.00	
8.60	19.23	13.98	7.43	4.01	2.06	1.04	0.00	0.00	0.00	0.00	
9.70	19.23	13.98	7.43	4.01	2.06	1.04	0.00	0.00	0.00	0.00	
10.90	21.15	33.69	30.74	23.53	17.53	12.50	8.70	10.00	0.00	0.00	
12.40	5.77	20.07	28.72	30.48	28.87	25.00	21.74	20.00	25.00	0.00	
13.80	1.92	7.17	15.54	21.93	25.77	27.08	26.09	30.00	25.00	33.33	
15.00	0.00	1.79	5.74	10.16	14.43	18.75	21.74	20.00	25.00	33.33	
16.40	0.00	0.36	1.69	3.74	6.19	8.33	13.04	10.00	25.00	33.33	
18.00	0.00	0.00	0.34	1.07	2.06	4.17	4.35	10.00	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.34	0.69	1.45	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.34	0.69	1.45	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.34	0.69	1.45	0.00	0.00	0.00	

GP 86 S. HEMISPHERE		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M			
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6.30	8.89	1.01	0.00	0.00	0.00	0.00	0.00	0.00			
7.50	31.11	10.47	3.01	1.03	0.00	0.00	0.00	0.00			
8.60	18.89	14.70	7.98	4.12	2.38	1.61	0.00	0.00			
9.70	18.89	14.70	7.98	4.12	2.38	1.61	0.00	0.00			
10.90	17.78	32.09	30.12	23.20	16.67	12.90	10.00	0.00			
12.40	4.44	18.24	27.71	29.38	27.38	22.58	20.00	25.00			
13.80	0.00	6.76	15.36	21.65	25.00	25.81	30.00	25.00			
15.00	0.00	1.69	5.72	10.82	15.48	19.35	20.00	25.00			
16.40	0.00	0.34	1.81	4.12	7.14	9.68	10.00	25.00			
18.00	0.00	0.00	0.30	1.03	2.38	3.23	10.00	0.00			
20.00	0.00	0.00	0.00	0.17	0.40	1.08	0.00	0.00			
22.50	0.00	0.00	0.00	0.17	0.40	1.08	0.00	0.00			
25.70	0.00	0.00	0.00	0.17	0.40	1.08	0.00	0.00			

GP 86 S. HEMISPHERE		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	10-11
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	24.00	4.89	1.12	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.60	20.00	12.23	5.20	2.29	1.07	0.62	0.00	0.00	0.00	0.00	0.00
9.70	20.00	12.23	5.20	2.29	1.07	0.62	0.00	0.00	0.00	0.00	0.00
10.90	24.00	36.96	29.74	20.18	12.86	8.75	4.88	4.55	0.00	16.67	0.00
12.40	8.00	23.37	32.34	32.57	28.57	23.75	19.51	13.64	9.09	16.67	0.00
13.80	0.00	8.15	18.22	25.69	29.29	30.00	29.27	27.27	27.27	16.67	33.33
15.00	0.00	1.63	6.32	11.93	17.14	21.25	24.39	27.27	27.27	16.67	33.33
16.40	0.00	0.54	1.49	3.67	7.14	10.00	14.63	13.64	18.18	16.67	33.33
18.00	0.00	0.00	0.37	0.92	2.14	3.75	4.88	9.09	9.09	16.67	0.00
20.00	0.00	0.00	0.00	0.00	0.24	0.42	0.81	1.52	3.03	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.24	0.42	0.81	1.52	3.03	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.24	0.42	0.81	1.52	3.03	0.00	0.00

GP 89 S. HEMISPHERE		ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE									
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	4.08	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	24.49	7.22	2.11	0.53	0.00	0.00	0.00	0.00	0.00	0.00	
8.60	19.39	13.50	7.02	3.74	1.94	0.91	0.00	0.00	0.00	0.00	
9.70	19.39	13.50	7.02	3.74	1.94	0.91	0.00	0.00	0.00	0.00	
10.90	24.49	34.60	30.53	23.53	17.48	12.73	7.41	7.14	0.00	0.00	
12.40	6.12	20.91	29.82	31.02	29.13	25.45	22.22	21.43	14.29	25.00	
13.80	2.04	7.60	16.14	22.46	26.21	27.27	29.63	28.57	28.57	25.00	
15.00	0.00	1.90	5.61	10.70	14.56	18.18	22.22	21.43	28.57	25.00	
16.40	0.00	0.38	1.40	3.21	5.83	9.09	11.11	14.29	14.29	25.00	
18.00	0.00	0.00	0.35	1.07	1.94	3.64	3.70	7.14	14.29	0.00	
20.00	0.00	0.00	0.00	0.00	0.32	0.61	1.23	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.32	0.61	1.23	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.32	0.61	1.23	0.00	0.00	0.00	

GP 89 S. HEMISPHERE		WINTER PERCENTAGE FREQUENCY OF OCCURRENCE									
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M			
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6.30	9.09	0.74	0.00	0.00	0.00	0.00	0.00	0.00			
7.50	31.82	9.67	2.77	0.96	0.00	0.00	0.00	0.00			
8.60	18.18	14.50	7.69	4.07	2.08	1.35	0.00	0.00			
9.70	18.18	14.50	7.69	4.07	2.08	1.35	0.00	0.00			
10.90	18.18	32.71	30.15	22.97	16.67	10.81	8.33	0.00			
12.40	4.55	18.96	28.31	29.67	27.08	24.32	16.67	25.00			
13.80	0.00	6.69	15.69	22.01	26.04	27.03	25.00	25.00			
15.00	0.00	1.86	5.85	11.00	15.63	18.92	25.00	25.00			
16.40	0.00	0.37	1.54	3.83	7.29	10.81	16.67	25.00			
18.00	0.00	0.00	0.31	0.96	2.08	2.70	8.33	0.00			
20.00	0.00	0.00	0.00	0.16	0.35	0.90	0.00	0.00			
22.50	0.00	0.00	0.00	0.16	0.35	0.90	0.00	0.00			
25.70	0.00	0.00	0.00	0.16	0.35	0.90	0.00	0.00			

GP 89 S. HEMISPHERE		SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE											
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	10-11 M		
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
6.30	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
7.50	23.81	4.85	1.11	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8.60	21.43	12.42	5.17	2.12	0.99	0.61	0.00	0.00	0.00	0.00	0.00		
9.70	21.43	12.42	5.17	2.12	0.99	0.61	0.00	0.00	0.00	0.00	0.00		
10.90	23.81	36.97	29.52	19.49	12.58	7.32	5.00	5.00	0.00	0.00	0.00		
12.40	4.76	23.03	32.47	32.63	27.81	23.17	17.50	15.00	11.11	0.00	0.00		
13.80	0.00	7.88	18.45	26.27	29.80	30.49	30.00	25.00	22.22	25.00	33.33		
15.00	0.00	1.82	6.27	12.29	17.88	21.95	25.00	25.00	33.33	25.00	33.33		
16.40	0.00	0.61	1.48	3.81	7.28	10.98	15.00	15.00	22.22	25.00	33.33		
18.00	0.00	0.00	0.37	0.85	1.99	3.66	5.00	10.00	11.11	25.00	0.00		
20.00	0.00	0.00	0.00	0.00	0.22	0.41	0.83	1.67	0.00	0.00	0.00		
22.50	0.00	0.00	0.00	0.00	0.22	0.41	0.83	1.67	0.00	0.00	0.00		
25.70	0.00	0.00	0.00	0.00	0.22	0.41	0.83	1.67	0.00	0.00	0.00		

GP 91 S. HEMISPHERE		ANNUAL				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	3.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	23.08	5.24	1.09	0.45	0.00	0.00	0.00	0.00	0.00	0.00	
8.60	21.15	12.57	5.47	2.50	1.10	0.67	0.00	0.00	0.00	0.00	
9.70	21.15	12.57	5.47	2.50	1.10	0.67	0.00	0.00	0.00	0.00	
10.90	23.08	36.65	29.93	20.45	13.24	9.33	5.41	5.26	0.00	0.00	
12.40	7.69	23.04	32.12	32.27	28.68	24.00	18.92	15.79	11.11	20.00	
13.80	0.00	7.85	17.88	25.45	29.41	29.33	29.73	26.32	22.22	20.00	
15.00	0.00	1.57	6.20	11.82	16.91	21.33	24.32	26.32	33.33	20.00	
16.40	0.00	0.52	1.46	3.64	6.62	9.33	13.51	15.79	22.22	20.00	
18.00	0.00	0.00	0.36	0.91	2.21	4.00	5.41	5.26	11.11	20.00	
20.00	0.00	0.00	0.00	0.00	0.25	0.44	0.90	1.75	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.25	0.44	0.90	1.75	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.25	0.44	0.90	1.75	0.00	0.00	

GP 91 S. HEMISPHERE		WINTER				PERCENTAGE FREQUENCY OF OCCURRENCE					
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	4.88	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	29.27	8.06	2.01	0.48	0.00	0.00	0.00	0.00	0.00	0.00	
8.60	19.51	13.71	7.02	3.59	1.83	0.96	0.00	0.00	0.00	0.00	
9.70	19.51	13.71	7.02	3.59	1.83	0.96	0.00	0.00	0.00	0.00	
10.90	21.95	33.87	30.43	22.49	16.51	11.54	9.09	11.11	0.00	0.00	
12.40	4.88	20.56	29.43	30.62	28.44	25.00	22.73	22.22	25.00	0.00	
13.80	0.00	7.26	16.05	22.97	26.61	26.92	27.27	22.22	25.00	50.00	
15.00	0.00	2.02	6.02	11.00	15.60	19.23	22.73	22.22	25.00	50.00	
16.40	0.00	0.40	1.67	3.83	6.42	9.62	13.64	11.11	25.00	0.00	
18.00	0.00	0.00	0.33	0.96	1.83	3.85	4.55	11.11	0.00	0.00	
20.00	0.00	0.00	0.00	0.16	0.31	0.64	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.16	0.31	0.64	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.16	0.31	0.64	0.00	0.00	0.00	0.00	

GP 91 S. HEMISPHERE		SUMMER				PERCENTAGE FREQUENCY OF OCCURRENCE						
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M	10-11 M	
3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	20.00	3.05	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8.60	23.33	10.31	3.63	1.32	0.60	0.50	0.00	0.00	0.00	0.00	0.00	
9.70	23.33	10.31	3.63	1.32	0.60	0.50	0.00	0.00	0.00	0.00	0.00	
10.90	26.67	38.93	28.21	17.18	10.24	6.00	3.51	3.13	0.00	0.00	0.00	
12.40	6.67	26.72	35.90	33.92	27.71	22.00	17.54	12.50	11.11	19.00	0.00	
13.80	0.00	9.16	20.51	28.63	31.93	32.00	29.82	28.13	22.22	20.00	20.00	
15.00	0.00	1.53	6.41	13.22	19.28	24.00	28.07	28.13	27.78	30.00	40.00	
16.40	0.00	0.00	1.28	3.52	7.23	11.00	14.04	18.75	22.22	20.00	20.00	
18.00	0.00	0.00	0.00	0.88	1.81	3.00	5.26	6.25	11.11	10.00	20.00	
20.00	0.00	0.00	0.00	0.00	0.20	0.33	0.58	1.04	1.85	3.33	0.00	
22.50	0.00	0.00	0.00	0.00	0.20	0.33	0.58	1.04	1.85	3.33	0.00	
25.70	0.00	0.00	0.00	0.00	0.20	0.33	0.58	1.04	1.85	3.33	0.00	

COMBINED S. HEMISPHERE ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M
3.20	1.16	0.16	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
4.80	1.16	0.16	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
6.30	14.65	4.39	2.00	1.24	0.95	0.44	1.14	0.00	0.00	0.00
7.50	32.05	16.30	8.65	5.78	3.78	3.08	2.27	3.33	0.00	0.00
8.60	15.86	14.60	9.84	6.75	4.99	3.50	3.84	3.33	6.25	0.00
9.70	15.86	14.60	9.84	6.75	4.99	3.50	3.84	3.33	6.25	0.00
10.90	14.91	27.74	27.87	23.10	19.70	17.30	10.12	15.40	12.50	0.00
12.40	3.87	15.11	23.28	25.44	24.37	21.87	21.05	25.37	12.60	15.00
13.80	0.49	5.32	12.28	18.03	21.66	21.72	29.88	18.32	18.95	26.11
15.00	0.00	1.33	4.52	8.55	12.36	17.03	17.46	15.46	21.73	26.11
16.40	0.00	0.32	1.26	3.07	5.57	8.54	6.49	10.85	15.38	26.11
18.00	0.00	0.00	0.30	0.94	2.08	2.22	2.58	3.73	6.35	6.67
20.00	0.00	0.00	0.02	0.9	0.18	0.26	0.45	0.29	0.00	0.00
22.50	0.00	0.00	0.02	0.09	0.18	0.26	0.45	0.29	0.00	0.00
25.70	0.00	0.00	0.02	0.09	0.18	0.26	0.45	0.29	0.00	0.00

COMBINED S. HEMISPHERE WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M
3.20	2.01	0.42	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	2.01	0.42	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	17.87	6.40	2.93	1.54	1.11	0.00	0.00	0.00	0.00	0.00
7.50	33.29	18.54	10.28	6.65	3.72	0.00	0.00	0.00	0.00	0.00
8.60	14.39	14.62	10.54	7.54	5.78	0.82	0.00	0.00	0.00	0.00
9.70	14.39	14.62	10.54	7.54	5.78	0.82	0.00	0.00	0.00	0.00
10.90	12.77	25.53	27.31	23.80	20.64	14.42	9.36	2.78	0.00	0.00
12.40	3.04	13.34	21.50	24.20	24.51	23.13	19.85	24.31	25.00	0.00
13.80	0.23	4.65	11.05	16.59	19.39	25.68	28.07	24.31	25.00	50.00
15.00	0.00	1.23	4.11	7.90	11.21	20.05	21.93	24.31	25.00	50.00
16.40	0.00	0.24	1.17	2.95	5.59	10.12	12.58	21.53	25.00	0.00
18.00	0.00	0.00	0.28	0.97	1.61	3.34	8.22	2.78	0.00	0.00
20.00	0.00	0.00	0.01	0.11	0.22	0.54	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.01	0.11	0.22	0.54	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.01	0.11	0.22	0.54	0.00	0.00	0.00	0.00

COMBINED S. HEMISPHERE SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M	9-10 M
3.20	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.80	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.30	8.28	1.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	31.32	10.16	3.11	1.21	0.32	0.15	0.00	0.00	0.00	0.00
8.60	18.61	14.47	7.80	4.15	2.28	1.06	0.33	0.52	0.00	0.00
9.70	18.61	14.47	7.80	4.15	2.28	1.06	0.33	0.52	0.00	0.00
10.90	17.72	32.96	30.41	22.66	16.37	13.00	6.71	8.57	3.33	10.42
12.40	4.82	18.72	28.33	30.00	27.16	23.20	19.44	17.78	12.93	12.92
13.80	0.22	6.40	15.20	22.27	25.87	26.62	29.02	25.66	21.01	21.67
15.00	0.00	1.49	5.40	10.63	15.68	19.75	25.41	23.58	31.01	24.17
16.40	0.00	0.34	1.43	3.69	6.99	10.56	12.94	14.66	22.52	15.42
18.00	0.00	0.00	0.33	1.00	2.37	3.67	4.49	6.61	6.26	12.92
20.00	0.00	0.00	0.01	0.09	0.24	0.31	0.44	0.71	0.98	0.8
22.50	0.00	0.00	0.01	0.09	0.24	0.31	0.44	0.71	0.98	0.83
25.70	0.00	0.00	0.01	0.09	0.24	0.31	0.44	0.71	0.98	0.83

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APPENDIX D

COASTAL AREA REGION

GP 26 WESTERN MEDITERRANEAN ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4	4-5 M	5-6 M	6-7 M	7-8 M
3.20	8.70	2.11	0.84	0.6	0.00	0.00	0.00	0.00
4.80	8.70	2.11	0.84	0.68	0.00	0.00	0.00	0.00
6.30	40.58	26.97	17.98	12.33	10.71	9.09	0.00	0.00
7.50	29.57	38.76	37.08	32.88	28.57	27.27	20.00	33.33
8.60	5.07	10.81	14.04	15.75	16.07	18.18	20.00	16.67
9.70	5.07	10.81	14.04	15.75	16.07	18.18	20.00	16.67
10.90	2.03	6.74	11.24	15.07	17.86	18.18	20.00	33.33
12.40	0.29	1.40	3.37	5.48	7.14	9.09	20.00	0.00
13.80	0.00	0.28	0.56	1.37	3.57	0.00	0.00	0.00
15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 26 WESTERN MEDITERRANEAN WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-9 M
3.20	4.29	0.58	0.23	0.00	0.00	0.00	0.00	0.00	0.00
4.80	4.29	0.58	0.23	0.00	0.00	0.00	0.00	0.00	0.00
6.30	35.10	16.08	8.68	5.45	4.00	4.55	0.00	0.00	0.00
7.50	36.33	37.72	30.14	24.55	20.00	18.18	10.00	25.00	0.00
8.60	7.76	14.91	17.12	17.27	17.00	15.91	15.00	12.50	16.67
9.70	7.76	14.91	17.12	17.27	17.00	15.91	15.00	12.50	16.67
10.90	3.67	11.70	18.72	22.73	26.00	27.27	30.00	25.00	33.33
12.40	0.82	2.92	5.94	9.09	12.00	13.64	20.00	25.00	33.33
13.80	0.00	0.58	1.37	2.73	4.00	4.55	10.00	0.00	0.00
15.00	0.00	0.00	0.46	0.91	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 26 WESTERN MEDITERRANEAN SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M
3.20	14.09	4.61	2.17	1.43	0.00	0.00
4.80	14.09	4.61	2.17	1.43	0.00	0.00
6.30	41.36	34.47	25.36	20.00	14.29	0.00
7.50	22.73	35.00	36.96	37.14	42.86	50.00
8.60	3.18	7.89	11.23	12.86	14.29	25.00
9.70	3.18	7.89	11.23	12.86	14.29	25.00
10.90	1.14	4.47	7.97	11.43	14.29	0.00
12.40	0.23	0.79	2.17	2.86	0.00	0.00
13.80	0.00	0.26	0.72	0.00	0.00	0.00
15.00	0.00	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00

GP 38 PERSIAN GULF ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M
3.20	23.84	11.20	7.28	5.36	6.25	0.00
4.80	23.84	11.20	7.28	5.36	6.25	0.00
6.30	36.79	42.53	38.83	35.71	25.00	50.00
7.50	12.68	25.65	31.07	35.71	37.50	50.00
8.60	1.25	3.73	5.83	7.14	6.25	0.00
9.70	1.25	3.73	5.83	7.14	6.25	0.00
10.90	0.36	1.62	2.91	3.57	12.50	0.00
12.40	0.00	0.32	0.97	0.00	0.00	0.00
13.80	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00

GP 38 PERSIAN GULF WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M
3.20	18.31	7.14	3.96	2.33	0.00	0.00
4.80	18.31	7.14	3.96	2.33	0.00	0.00
6.30	40.90	39.65	33.09	27.91	27.27	33.33
7.50	17.77	31.49	35.97	37.21	36.36	33.33
8.60	2.03	5.69	8.63	10.47	13.64	16.67
9.70	2.03	5.69	8.63	10.47	13.64	16.67
10.90	0.64	2.62	5.04	6.98	9.09	0.00
12.40	0.00	0.58	0.72	2.33	0.00	0.00
13.80	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00

GP 38 PERSIAN GULF SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	27.32	14.13	9.33	5.56	0.00
4.80	27.32	14.13	9.33	5.56	0.00
6.30	33.44	42.75	41.33	38.89	33.33
7.50	10.05	22.10	28.00	33.33	33.33
8.60	0.86	2.90	4.67	5.56	16.67
9.70	0.86	2.90	4.67	5.56	16.67
10.90	0.16	1.09	2.67	5.56	0.00
12.40	0.00	0.00	0.00	0.00	0.00
13.80	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 14 NORTH SEA ANNUAL			PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	11.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	7.56	15.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	15.11	27.61	8.45	0.00	0.00	0.00	0.00	0.00	0.00	
7.50	13.22	14.32	29.58	5.44	2.28	0.00	0.00	0.00	0.00	
8.60	14.42	11.71	21.51	33.94	12.45	0.00	0.00	0.00	0.00	
9.70	13.22	7.16	14.79	31.11	34.24	4.43	0.00	0.00	0.00	
10.90	8.82	7.16	4.93	7.78	22.82	22.14	4.41	2.71	0.00	
12.40	7.56	6.14	4.23	3.33	9.78	37.96	37.83	27.83	6.44	
13.80	4.07	3.30	4.55	3.59	5.27	10.22	20.37	24.98	13.87	
15.00	4.07	3.30	4.55	7.18	4.21	10.22	16.30	19.98	34.68	
16.40	0.35	2.86	3.94	3.11	3.65	7.09	10.59	12.99	18.03	
18.00	0.15	0.72	1.64	2.07	2.28	4.43	5.88	7.22	15.03	
20.00	0.12	0.39	1.08	1.27	1.87	2.42	2.41	2.95	8.20	
22.50	0.00	0.00	0.74	1.17	1.14	1.11	2.21	1.35	3.76	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 14 NORTH SEA WINTER			PERCENTAGE FREQUENCY OF OCCURRENCE							
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M	7-8 M	8-10 M	
3.20	2.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4.80	8.07	11.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6.30	13.72	19.25	9.12	0.96	0.00	0.00	0.00	0.00	0.00	
7.50	12.24	9.75	26.38	5.57	0.00	0.00	0.00	0.00	0.00	
8.60	10.27	10.63	20.19	28.58	4.47	0.00	0.00	0.00	0.00	
9.70	12.24	9.75	19.90	31.77	30.29	3.11	0.00	0.00	0.00	
10.90	12.24	7.20	4.63	7.25	32.75	31.13	3.28	0.00	0.00	
12.40	8.07	6.18	3.97	4.78	9.12	32.02	36.51	7.24	3.93	
13.80	11.30	7.82	4.27	5.14	7.56	14.37	21.17	23.41	8.46	
15.00	8.69	7.82	5.55	5.14	5.29	7.18	18.15	39.01	25.37	
16.40	0.75	6.78	3.70	4.46	3.93	4.98	13.11	20.29	36.64	
18.00	0.00	2.83	1.54	3.72	2.73	3.11	4.37	5.63	18.32	
20.00	0.00	0.00	0.50	1.52	2.23	2.55	1.79	2.31	5.00	
22.50	0.00	0.00	0.23	1.11	1.64	1.56	1.64	2.11	2.29	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

GP 14 NORTH SEA SUMMER			PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	13.89	0.00	0.00	0.00	0.00
4.80	6.95	17.08	0.00	0.00	0.00
6.30	19.22	36.15	6.49	0.00	0.00
7.50	18.91	19.93	40.79	7.74	0.00
8.60	14.74	9.78	27.33	38.84	8.71
9.70	13.51	6.64	9.91	30.96	39.94
10.90	5.40	3.32	4.08	7.74	19.97
12.40	2.32	1.99	3.00	5.31	13.69
13.80	2.49	1.84	2.69	4.29	11.06
15.00	1.50	1.53	2.69	2.86	3.69
16.40	1.08	1.06	1.86	1.24	1.60
18.00	0.00	0.66	1.17	1.03	1.33
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 49 CUBA/HAITI ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	2.31	0.00	0.00	0.00	0.00
4.80	2.89	1.91	0.00	0.00	0.00
6.30	20.22	22.95	4.14	0.00	0.00
7.50	16.85	22.32	28.98	8.00	1.06
8.60	11.03	17.04	26.34	17.46	1.94
9.70	20.22	15.62	14.49	32.01	10.65
10.90	10.11	8.93	9.66	16.00	35.48
12.40	5.78	3.83	4.14	6.86	15.21
13.80	3.11	2.06	4.46	5.91	13.10
15.00	3.11	2.06	2.23	4.43	9.83
16.40	2.70	1.79	1.93	3.84	8.52
18.00	1.12	0.89	1.61	2.13	2.37
20.00	0.55	0.61	1.05	1.75	0.97
22.50	0.00	0.00	0.97	1.60	0.89
25.70	0.00	0.00	0.00	0.00	0.00

GP 49 CUBA/HAITI WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	1.85	0.00	0.00	0.00	0.00
4.80	1.85	1.04	0.00	0.00	0.00
6.30	17.35	16.00	2.90	4.07	0.00
7.50	17.23	24.25	27.04	6.65	1.41
8.60	15.51	15.08	25.81	17.61	3.07
9.70	18.52	12.12	12.51	35.14	19.67
10.90	14.22	11.40	9.13	12.35	28.10
12.40	4.80	6.24	6.66	5.70	12.04
13.80	2.78	4.48	6.24	5.26	10.38
15.00	2.39	4.48	3.12	4.38	10.38
16.40	2.07	3.30	2.70	3.80	6.74
18.00	1.44	1.62	1.58	2.53	3.75
20.00	0.00	0.00	1.29	1.55	3.07
22.50	0.00	0.00	1.01	0.95	1.41
25.70	0.00	0.00	0.00	0.00	0.00

GP 49 CUBA/HAITI SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M
3.20	2.16	0.00	0.00	0.00
4.80	3.09	1.88	0.00	0.00
6.30	28.76	24.97	6.49	0.00
7.50	19.12	25.25	30.28	11.44
8.60	6.69	15.98	22.30	31.20
9.70	22.73	19.70	9.84	17.16
10.90	8.30	6.23	9.84	17.16
12.40	3.09	1.88	8.44	9.81
13.80	2.33	1.55	6.99	5.28
15.00	2.00	1.09	3.49	5.28
16.40	1.73	0.81	1.82	2.29
18.00	0.00	0.67	0.50	0.38
20.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00

GP 52	CUBA/HAITI		ANNUAL		PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	32.98	0.00	0.00	0.00	0.00	
4.80	13.19	35.19	0.00	0.00	0.00	
6.30	26.39	42.23	19.13	0.00	0.00	
7.50	10.26	12.32	44.64	6.79	7.24	
8.60	5.60	4.48	24.35	37.02	15.79	
9.70	5.13	2.05	5.58	33.93	36.18	
10.90	2.57	1.23	3.35	10.18	21.71	
12.40	0.88	0.70	1.91	5.82	12.41	
13.80	0.47	0.76	1.03	3.13	6.68	
15.00	0.47	0.38	0.00	3.13	0.00	
16.40	2.05	0.66	0.00	0.00	0.00	
18.00	0.00	0.00	0.00	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 52	CUBA/HAITI		WINTER		PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	
3.20	21.23	0.00	0.00	0.00	0.00	
4.80	9.47	26.69	0.00	0.00	0.00	
6.30	30.70	43.51	16.66	11.66	0.00	
7.50	11.04	15.57	45.36	25.26	0.00	
8.60	6.51	6.80	27.63	42.40	8.12	
9.70	8.95	3.11	5.89	9.72	14.89	
10.90	2.98	1.56	2.36	5.83	37.23	
12.40	1.28	1.07	1.01	3.33	19.14	
13.80	0.83	0.86	0.54	1.79	13.74	
15.00	0.55	0.57	0.54	0.00	6.87	
16.40	6.45	0.25	0.00	0.00	0.00	
18.00	0.00	0.00	0.00	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	

GP 52	CUBA/HAITI		SUMMER		PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M			
3.20	37.76	0.00	0.00			
4.80	14.88	46.70	0.00			
6.30	24.18	36.19	18.09			
7.50	8.68	9.08	29.55			
8.60	4.73	4.95	27.63			
9.70	4.34	1.36	12.66			
10.90	2.17	0.91	8.44			
12.40	1.86	0.39	3.62			
13.80	1.00	0.42	0.00			
15.00	0.40	0.00	0.00			
16.40	0.00	0.00	0.00			
18.00	0.00	0.00	0.00			
20.00	0.00	0.00	0.00			
22.50	0.00	0.00	0.00			
25.70	0.00	0.00	0.00			

GP 46 GULF OF MEXICO ANNUAL PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	29.68	0.00	0.00	0.00	0.00
4.80	10.79	28.52	0.00	0.00	0.00
6.30	29.68	32.59	11.32	0.00	0.00
7.50	7.87	14.26	26.41	8.17	8.12
8.60	8.58	15.56	43.22	44.58	44.30
9.70	9.44	4.75	7.92	20.43	24.37
10.90	1.57	1.43	5.28	12.26	16.24
12.40	0.54	0.81	3.40	7.01	6.96
13.80	0.29	0.88	2.44	3.77	0.00
15.00	0.29	0.44	0.00	3.77	0.00
16.40	1.26	0.76	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 46 GULF OF MEXICO WINTER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M
3.20	25.58	0.00	0.00	0.00	0.00
4.80	10.96	25.97	0.00	0.00	0.00
6.30	20.09	36.30	10.13	3.17	0.00
7.50	11.72	15.31	39.07	11.10	15.02
8.60	12.32	13.15	42.62	52.45	40.98
9.70	11.30	6.52	6.36	25.89	22.54
10.90	1.28	1.63	1.82	7.40	15.02
12.40	0.91	1.12	0.00	0.00	6.44
13.80	0.79	0.00	0.00	0.00	0.00
15.00	0.79	0.00	0.00	0.00	0.00
16.40	4.26	0.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00

GP 46 GULF OF MEXICO SUMMER PERCENTAGE FREQUENCY OF OCCURRENCE

PERIOD	0-1 M	1-2 M	2-3 M
3.20	19.93	0.00	0.00
4.80	2.79	23.26	0.00
6.30	34.29	30.23	6.05
7.50	10.75	16.28	14.12
8.60	8.18	11.84	38.50
9.70	18.25	8.14	21.17
10.90	2.50	5.43	14.12
12.40	2.14	2.33	6.05
13.80	1.15	2.50	0.00
15.00	0.00	0.00	0.00
16.40	0.00	0.00	0.00
18.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00
25.70	0.00	0.00	0.00

GP 50	GULF OF MEXICO ANNUAL					PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	4-5 M	
3.20	9.72	0.00	0.00	0.00	0.00	0.00	
4.80	2.43	5.19	0.00	0.00	0.00	0.00	
6.30	51.03	54.51	5.65	0.00	0.00	0.00	
7.50	17.01	21.20	52.76	3.69	3.10	0.00	
8.60	6.19	9.91	28.78	40.29	10.15	0.00	
9.70	5.67	6.06	6.60	36.93	31.01	16.21	
10.90	1.42	1.51	3.30	9.23	31.01	40.52	
12.40	2.43	0.78	1.70	4.75	13.29	20.84	
13.30	1.31	0.56	1.22	3.41	8.59	14.96	
15.00	0.52	0.28	0.00	1.70	2.86	7.48	
16.40	2.27	0.00	0.00	0.00	0.00	0.00	
18.00	0.00	0.00	0.00	0.00	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	

GP 50	GULF OF MEXICO WINTER					PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	
3.20	6.50	0.00	0.00	0.00	0.00	0.00	
4.80	3.25	3.61	0.00	0.00	0.00	0.00	
6.30	42.27	48.17	5.76	0.00	0.00	0.00	
7.50	21.62	25.50	53.24	2.75	0.00	0.00	
8.60	12.41	14.31	29.89	49.41	7.16	0.00	
9.70	3.79	4.95	6.72	41.18	42.68	0.00	
10.90	3.79	1.49	2.58	5.49	32.83	20.04	
12.40	3.25	1.06	1.33	1.18	11.26	42.95	
13.80	1.75	0.69	0.48	0.00	6.06	27.75	
15.00	1.05	0.23	0.00	0.00	0.00	9.25	
16.40	0.30	0.00	0.00	0.00	0.00	0.00	
18.00	0.00	0.00	0.00	0.00	0.00	0.00	
20.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.50	0.00	0.00	0.00	0.00	0.00	0.00	
25.70	0.00	0.00	0.00	0.00	0.00	0.00	

GP 50	GULF OF MEXICO SUMMER				PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M		
3.20	9.27	0.00	0.00	0.00		
4.80	2.97	10.99	0.00	0.00		
6.30	55.96	56.07	10.71	0.00		
7.50	16.93	17.10	53.53	15.02		
8.60	6.68	7.93	25.31	40.98		
9.70	5.51	4.28	5.35	22.54		
10.90	1.43	2.14	3.57	15.02		
12.40	0.87	1.10	1.53	6.44		
13.80	0.38	0.39	0.00	0.00		
15.00	0.00	0.00	0.00	0.00		
16.40	0.00	0.00	0.00	0.00		
18.00	0.00	0.00	0.00	0.00		
20.00	0.00	0.00	0.00	0.00		
22.50	0.00	0.00	0.00	0.00		
25.70	0.00	0.00	0.00	0.00		

GP 25 SEA OF JAPAN		ANNUAL			PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M
3.20	29.47	0.00	0.00	0.00	0.00	0.00
4.80	7.37	24.83	0.00	0.00	0.00	0.00
6.30	14.74	21.28	6.70	0.00	0.00	0.00
7.50	14.33	12.42	23.46	3.06	0.00	0.00
8.60	25.01	31.60	51.19	50.08	6.84	0.00
9.70	2.87	4.14	7.82	15.30	31.36	15.22
10.90	1.43	2.07	3.91	15.30	31.36	38.05
12.40	0.98	1.42	2.68	6.56	13.44	19.57
13.80	0.79	1.15	2.17	5.65	8.69	14.05
15.00	0.53	0.76	1.44	2.82	5.79	7.02
16.40	2.29	0.33	0.63	1.22	2.51	6.09
18.00	0.19	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00

GP 25 SEA OF JAPAN		WINTER			PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M
3.20	10.97	0.00	0.00	0.00	0.00	0.00
4.80	7.31	12.51	0.00	0.00	0.00	0.00
6.30	9.87	13.68	4.43	0.00	0.00	0.00
7.50	14.08	13.58	19.89	1.57	0.00	0.00
8.60	46.53	52.97	63.78	57.20	1.91	0.00
9.70	4.27	1.70	6.76	23.48	17.49	13.42
10.90	2.13	1.70	1.99	10.17	34.98	31.32
12.40	1.46	1.16	1.36	3.35	25.49	19.18
13.80	1.18	0.94	0.73	2.17	8.07	16.52
15.00	1.18	0.94	0.73	1.44	6.46	12.39
16.40	1.02	0.81	0.32	0.63	5.60	7.16
18.00	0.00	0.00	0.00	0.00	0.00	0.00
20.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00

GP 25 SEA OF JAPAN		SUMMER			PERCENTAGE FREQUENCY OF OCCURRENCE	
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M		
3.20	40.23	0.00	0.00	0.00		
4.80	8.60	30.18	0.00	0.00		
6.30	18.60	32.11	12.59	0.00		
7.50	12.75	12.74	38.18	15.02		
8.60	9.77	13.90	32.04	40.98		
9.70	4.61	7.49	8.81	22.54		
10.90	3.53	2.25	5.87	15.02		
12.40	1.16	0.64	2.52	6.44		
13.80	0.75	0.69	0.00	0.00		
15.00	0.00	0.00	0.00	0.00		
16.40	0.00	0.00	0.00	0.00		
18.00	0.00	0.00	0.00	0.00		
20.00	0.00	0.00	0.00	0.00		
22.50	0.00	0.00	0.00	0.00		
25.70	0.00	0.00	0.00	0.00		

GP 60 SOUTH CHINA SEA ANNUAL					PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M
3.20	15.23	0.00	0.00	0.00	0.00	0.00	0.00
4.80	3.05	4.26	0.00	0.00	0.00	0.00	0.00
6.30	27.41	29.85	1.89	0.00	0.00	0.00	0.00
7.50	21.32	24.88	22.07	2.06	2.55	0.00	0.00
8.60	7.75	16.28	32.11	22.51	6.96	0.00	0.00
9.70	10.66	14.93	29.43	30.96	12.76	5.08	0.00
10.90	3.55	4.98	7.36	20.64	25.52	12.70	4.45
12.40	3.05	2.13	3.15	8.84	32.82	21.77	11.43
13.80	3.28	1.38	2.04	9.52	11.78	23.45	16.41
15.00	3.28	0.92	1.36	3.81	4.71	23.45	41.04
16.40	1.42	0.40	0.59	1.65	2.04	10.16	17.78
18.00	0.00	0.00	0.00	0.00	0.85	3.39	8.89
20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 60 SOUTH CHINA SEA WINTER					PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M	4-5 M	5-6 M	6-7 M
3.20	4.91	0.00	0.00	0.00	0.00	0.00	0.00
4.80	2.94	0.97	0.00	0.00	0.00	0.00	0.00
6.30	22.57	24.35	2.47	0.00	0.00	0.00	0.00
7.50	11.45	24.43	17.72	2.74	0.00	0.00	0.00
8.60	21.23	14.25	23.83	10.18	1.38	0.00	0.00
9.70	14.88	26.70	41.21	38.42	17.08	2.88	0.00
10.90	8.01	2.84	11.13	31.28	25.30	10.08	6.36
12.40	4.91	1.95	1.41	9.41	37.95	28.39	23.62
13.80	3.17	1.57	1.14	5.07	9.93	22.60	33.27
15.00	3.17	1.57	0.76	2.03	5.84	22.60	25.44
16.40	2.75	1.36	0.33	0.88	2.53	11.52	8.48
18.00	0.00	0.00	0.00	0.00	0.00	1.92	2.83
20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GP 60 SOUTH CHINA SEA SUMMER					PERCENTAGE FREQUENCY OF OCCURRENCE		
PERIOD	0-1 M	1-2 M	2-3 M	3-4 M			
3.20	28.18	0.00	0.00	0.00			
4.80	7.90	12.78	0.00	0.00			
6.30	35.02	59.27	5.31	0.00			
7.50	17.51	16.72	59.24	5.77			
8.60	4.36	6.41	26.04	40.90			
9.70	2.15	2.26	4.42	28.84			
10.90	2.15	1.36	2.65	14.42			
12.40	1.32	0.77	1.52	7.42			
13.80	1.42	0.42	0.82	2.66			
15.00	0.00	0.00	0.00	0.00			
16.40	0.00	0.00	0.00	0.00			
18.00	0.00	0.00	0.00	0.00			
20.00	0.00	0.00	0.00	0.00			
22.50	0.00	0.00	0.00	0.00			
25.70	0.00	0.00	0.00	0.00			

GP 26

ANNUAL			WINTER			SUMMER		
SIG	HT		SIG	HT		SIG	HT	
0-1 M	34.5	6.5	24.3	7.5	3.5-10	43.8	6.5	3.5-9.5
1-2 M	35.6	7.5	34.1	7.5	6.5-11	37.9	7.5	4-11
2-3 M	17.8	7.5	21.8	7.5	6.5-12.5	13.6	7.5	6-11
3-4 M	7.3	7.5	10.8	7.5	6.5-12.5	3.6	7.5	6.5-11
4-5 M	2.8	7.5	4.9	11	7-12.5	0.8	7.5	6.5-11
5-6 M	1.2	7.5	2.2	11	7.5-13	0.2	7.5	7.5-10
6-7 M	0.5	7.5	1	11	7.5-13.5	0.1	7.5	7.5-10
7-8 M	0.2	7.5	0.5	11.5	7.5-12.5			
8-9 M	0.1	7.5	0.2	11.5	8.5-12.5			
9-10 M			0.1	11.5	8.5-12.5			
10-11M			0.1	11.5	8.5-12.5			
11-12M								
12-13M								
13-14M								
14-15M								
15-16M								
> 16 M								

GP 27

[illegible]

GP 38

[illegible]

NORTH SEA GP 14 (55.9 N, 4.4 E)

[illegible]

GP 49 (24.2 N, 72.8 W)

[illegible]

GP 52 (19.9 N, 80.8 W)

[illegible]

GP 46 (28.8 N, 86.7 W)

[illegible]

GP 50 (24.0 N, 89.4 W)

[illegible]

