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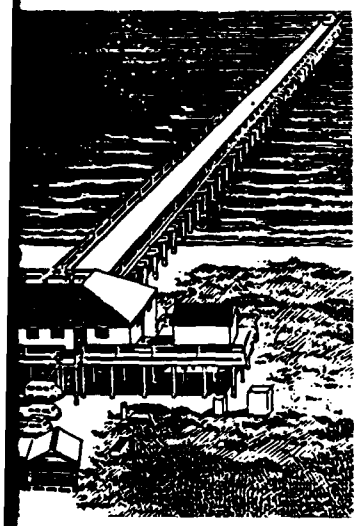
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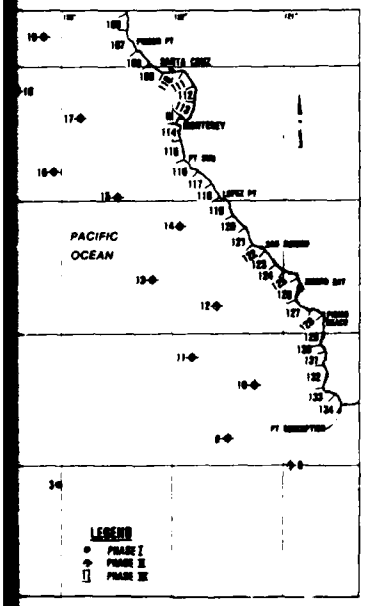
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OF US COASTLINES

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PACIFIC COAST HINDCAST PHASE III NORTH WAVE INFORMATION





by

R. E. Jensen, J. M. Hubertz, Jane B. Payne

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DEPARTMENT OF THE ARMY
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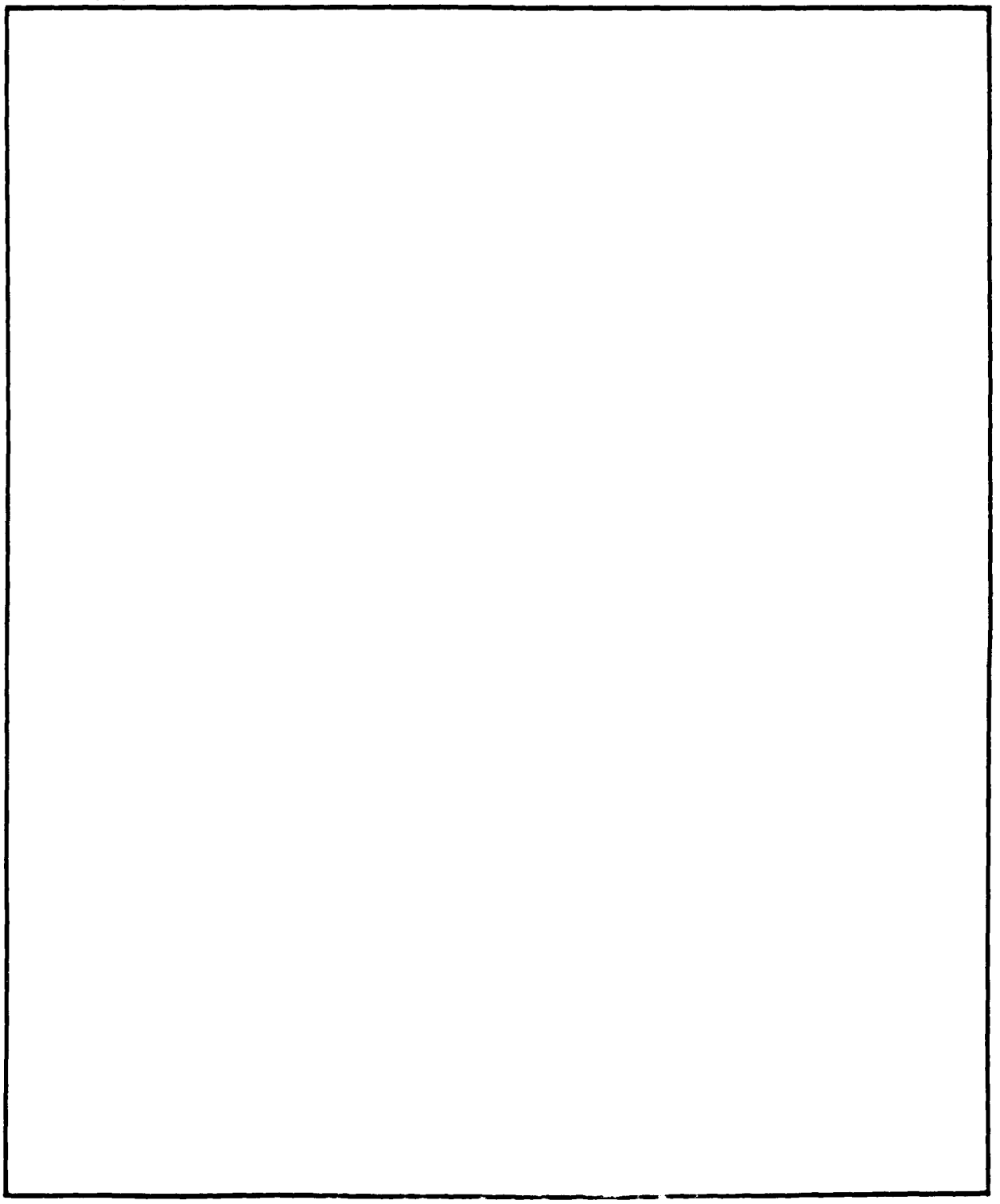
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Twenty years of hindcast significant height, peak period, and mean direction wave information is summarized for 134 Pacific locations in four data products: (a) percent occurrence tables; (b) wave rose diagrams; (c) mean and largest H_s and 20-year statistics tables; and (d) return period tables. Brief descriptions and examples for each data product are provided.

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Preface

In late 1976 a study to produce a wave climate for US coastal waters was initiated at the US Army Engineer Waterways Experiment Station (WES). The Wave Information Study (WIS) was authorized by the US Army Corps of Engineers (USACE) as part of the Coastal Field Data Collection Program which was managed by the WES Coastal Engineering Research Center (CERC). Messrs. John Housley, James E. Crews, Charles W. Hummer, and John H. Lockhart, Jr., USACE, are Technical Monitors for the Coastal Field Data Collection Program; Mr. J. Michael Hemsley is Program Manager; and Dr. Jon M. Hubertz is WIS Project Manager.

This report, the seventeenth in a series, presents hindcast shallow-water wave data for the US Pacific coasts of Washington, Oregon, and California north of Point Conception. This report was prepared by Drs. Robert E. Jensen and Jon M. Hubertz and Ms. Jane B. Payne. Dr. C. E. Abel (deceased), Ms. Barbara A. Tracy, and Dr. Paul D. Farrar contributed mainly to the technical modeling aspects of the study; Mr. William D. Corson, and Mses. Dani S. McAneny and Rebecca M. Brooks to the production of numerical results; and Mses. Payne and Benita Jo Groves to the production of tabular output. The final draft was prepared by Ms. Victoria L. Edwards. All of the above were or are members of the WIS staff in the Coastal Oceanography Branch (CR-O), Research Division (CR), CERC, and are responsible for completion of this study along with the authors of this report.

The study was conducted under direct supervision of Dr. Edward F. Thompson, former Chief, CR-O, and Mr. H. Lee Butler, Chief, CR; and under general supervision of Dr. James R. Houston, and Mr. Charles C. Calhoun, Jr., Chief, and Assistant Chief, CERC. This report was edited by Ms. Shirley A. J. Hanshaw, Information Technology Laboratory, Information Products Division, WES.

During report publication COL Dwayne G. Lee, EN, was Commander and Director of WES. Dr. Robert W. Whalin was Technical Director.

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PACIFIC COAST HINDCAST PHASE III NORTH WAVE INFORMATION

Introduction

1. The wave climatology along the US Pacific coast was calculated in three phases:

a. Phase I - Numerical hindcast of deepwater wave data from historical surface atmospheric pressure and wind velocity data on a 120 nautical-mile (222-km) grid.

b. Phase II - Numerical hindcast on a 30-nautical-mile (55-km) grid to better resolve the sheltering effects of continental geometry. Phase I data serve as the boundary conditions at the seaward edge of the Phase II grid.

c. Phase III - Transformation of Phase II wave data into shallow water, with simplifying assumptions.

Figure 1 presents a schematic of the three phases.

2. Phase III wave estimates have been computed for 134 shoreline segments 10 miles (16 km) in length along the Pacific coast from the United States-Canadian border to Point Conception, California (Appendixes A-E).* The beginning and ending latitude and longitude of each shoreline segment, the angle of the segment, and a description of location are given in Table 1. Significant wave height, dominant spectral period, and mean direction at a depth of 10 m have been calculated every 3 hr for 1956-1975. Coastal regions which could not be represented by straight line 10-mile- (16-km) long segments were omitted and are denoted by "N" for null points (pages A2, B2, C2, D2, and E2). Any differences in the wave characteristics caused by fluctuations in the water depth (due to tides and surges) were neglected. Waves generated from tropical storms and Southern Hemisphere swell (waves originating in the Southern Hemisphere) were excluded in the analysis and will be the subject of future reports. Wave conditions for the 20-year period have been stored on the Wave Information Study (WIS) Sea State Engineering Analysis System (SEAS) for the 134 numbered stations shown on pages A2, B2, C2, D2, and E2. SEAS is

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* The Southern California Bight area (south of Point Conception to the US-Mexican border) will be treated as an independent wind and wave hindcasting effort, and a separate report documenting the wave climatology will be published.

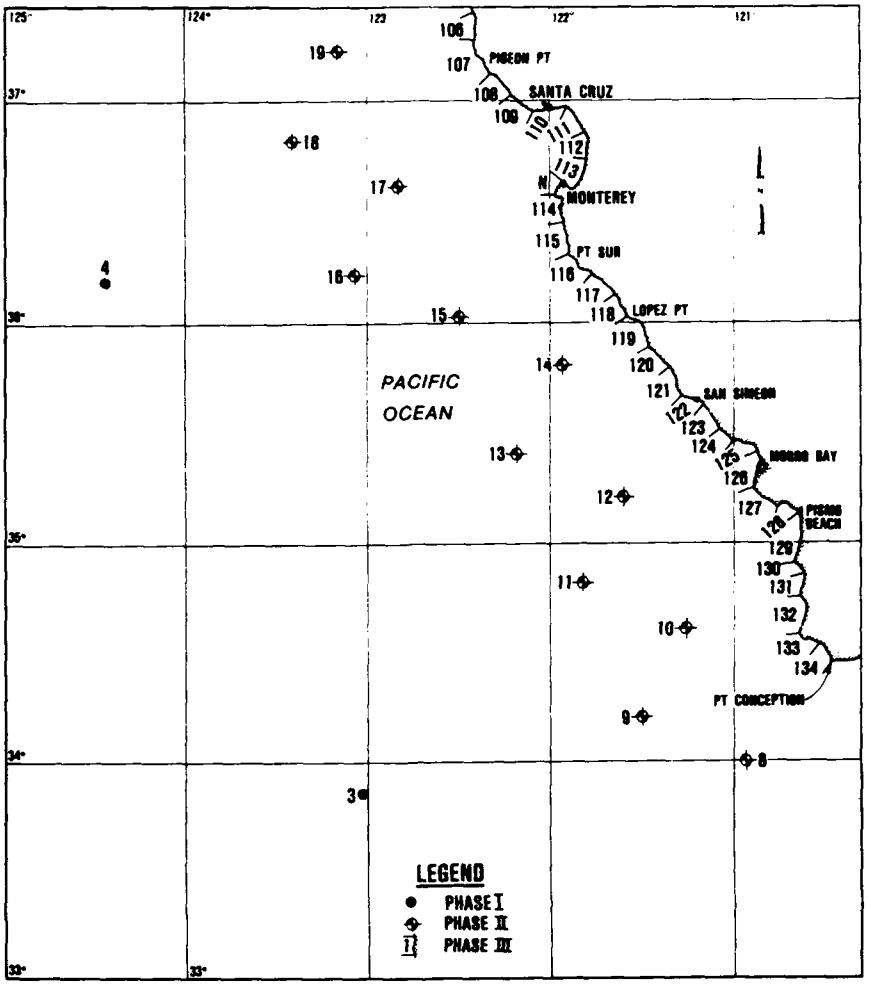


Figure 1. Schematic diagram illustrating the three phases of the study

an on-line computerized database system which allows users to produce reports and statistical analyses of WIS data tailored to their specific needs (McAneny 1986).

3. This report presents various analyses of the Phase III hindcast wave data and is similar in format to the Phase II data report (Corson et al. 1986, 1987). The products in this report are intended to serve only as a general indication of wave characteristics such as height, period, and direction since the methodology is limited by simplifying assumptions. The qualifications of this wave information are discussed in more detail in the section titled "Gage Data Comparisons." Separate reports describing technical aspects of the effort involved in these wave calculations have been published previously (Corson, Resio, and Vincent 1980; Corson and Resio 1981; Resio 1982; Jensen 1983; Tracy 1982; Resio and Tracy 1983).

4. The Phase III wave information was generated using a different procedure from that in Phase I and II. Phase I and II wave information was generated from a numerical wave model which simultaneously generated, propagated, and transformed waves over a discrete grid. This approach was not employed for the nearshore wave case because of computational costs. The Phase III wave data were generated assuming straight and parallel bottom contours with a uniform slope offshore. Sheltering of waves by large-scale coastal features was subjectively determined (see Table 2). Smaller-scale coastal features were ignored. No additional energy sources were added between existing Phase II wave conditions and the 10-m depth. Water level variations due to storm surge and tide are not included. The assumed water level is mean lower low water. Waves generated from hurricanes and Southern Hemisphere storms are not included. A single wave period is reported which is the period associated with the peak of the sea or swell part of the two-dimensional spectrum containing the largest amount of energy, that is, the dominant part of the spectrum. This period is not necessarily the same as the peak spectral period associated with the frequency band with the highest energy (see Figure 2). The sea part of the spectrum in Figure 2 contains more total energy than the swell part. Thus, the dominant period is T_{p1} , while the period band with the highest energy contains the peak of the swell with peak period T_{p2} . The direction reported is the mean direction associated with the dominant portion of the spectrum. The information in this report is

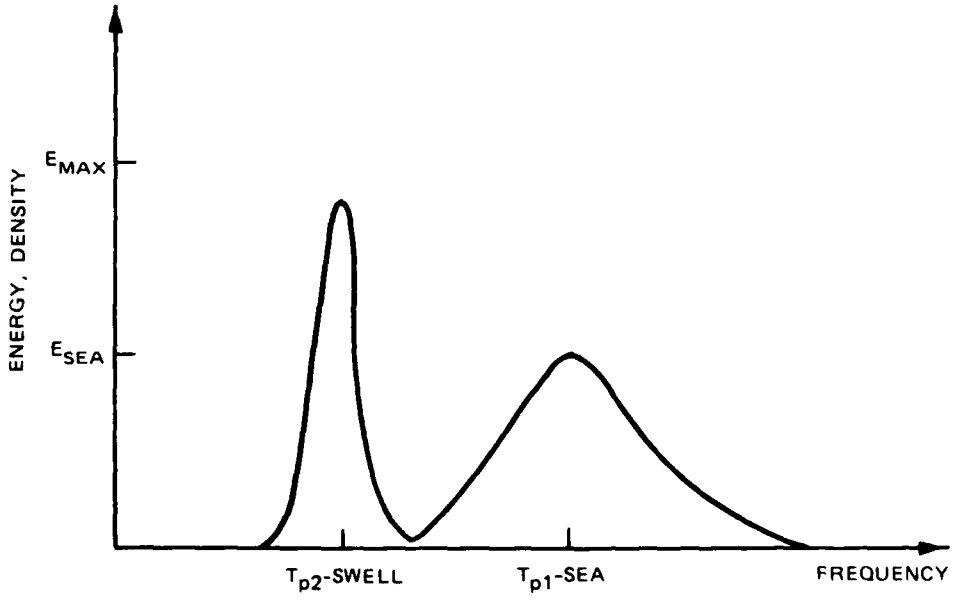


Figure 2. Comparison of sea and swell sections of spectrum

qualified by the above factors and should only be used to provide a general indication of the wave climate at this depth under the above restrictions. On the majority of west coast sites, a more detailed transformation should be done for project studies.

5. There were two steps in the calculation of the shallow-water wave climate. First, the Phase II sea wave parameters, significant height, peak period, and mean direction (H_s , T_p , and D_m) were used to calculate parametrically a two-dimensional (frequency and wave direction) discrete spectrum. Only the wave energy in direction bands ±90 deg to shore normal for a given Phase III station were retained. Swell was assumed to be unidirectional and monochromatic. If the deepwater swell mean direction was not within ±90 deg to shore normal, swell was ignored. The second step assumed that the two wave populations, sea and swell, were independent; thus, the analysis of the sea and swell transformation into 10 m could be carried out separately. The transformation mechanisms common to both populations were refraction, shoaling, wave breaking, and wave sheltering (when applicable). One additional mechanism involved in the sea wave transformation was wave-wave interaction, which allowed transfer of wave energy across frequency bands due to nonlinear interactions.

6. In certain cases along the coast, the assumption of straight and parallel offshore contours does not apply. Sheltering effects associated with the geometry of the coastline introduce significant deviations from results derived for a straight coastline approximation. The amount of wave sheltering depends upon the location of the input Phase II station (relative to the given Phase III segment being considered) and the location of the Phase II land boundary points relative to the actual shoreline. Angles with respect to the Phase III coastal segments were subjectively determined. These angles defined a window for wave energy to arrive at the coast. Wave energy outside this window was ignored. The shoreline orientation for each Phase III station was measured clockwise in degrees from true north (0 deg) (Figure 3). Table 2 displays the values of sheltering angles used in the analysis of the shallow-water wave climate. This report is intended only to serve as a general indication of wave characteristics such as height, period, and direction. The wave data represent generalized conditions along each 10-mile (16-km) shoreline segment. Any man-made structures, or bottom topographic features smaller than the 10-mile (16-km) shoreline segments, were ignored. Details concerning

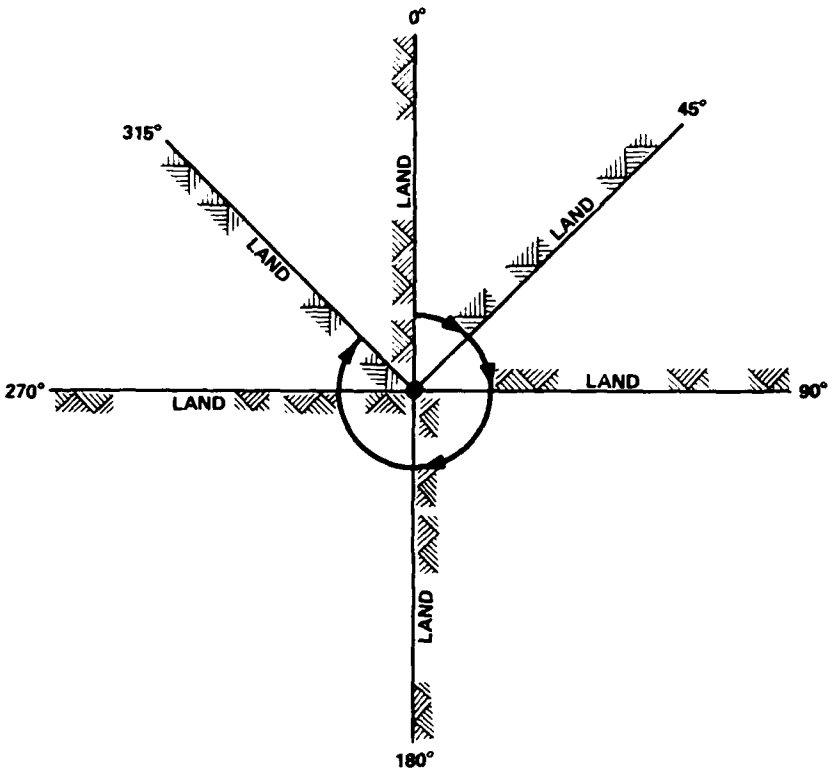


Figure 3. Schematic representation of the shoreline orientation

the Phase III wave calculations are given in WIS Report 8 (Jensen 1983).

7. The significant wave height H_s represents the combined sea and swell, that is, the square root of the sum of the squares of the sea and swell significant wave heights $H_s = (H^2_{swell} + H^2_{sea})^{1/2}$. The wave period T_p and mean direction D_m represent the dominant wave (i.e., if the sea H_s is larger than the swell H_s, then the sea T_p and D_m are given). The value of the wave direction is the mean direction from which the waves are coming relative to the shoreline orientation (Figure 4).

8. All products presented in this report are valid under the assumptions governing the Phase III method. For detailed studies on time dependent or steady state problems, it is recommended that the Corps offices utilize the more generalized models of WIS. Sea and swell wave parameters from this study are available to non-Corps users through the National Climatic Data Center as are those for Atlantic coast WIS data (Brooks and Corson 1984).

9. Four products are presented in this report:

a. Twenty-year percent occurrence tables.

b. Wave rose diagrams.

c. Mean and maximum H_s tables.

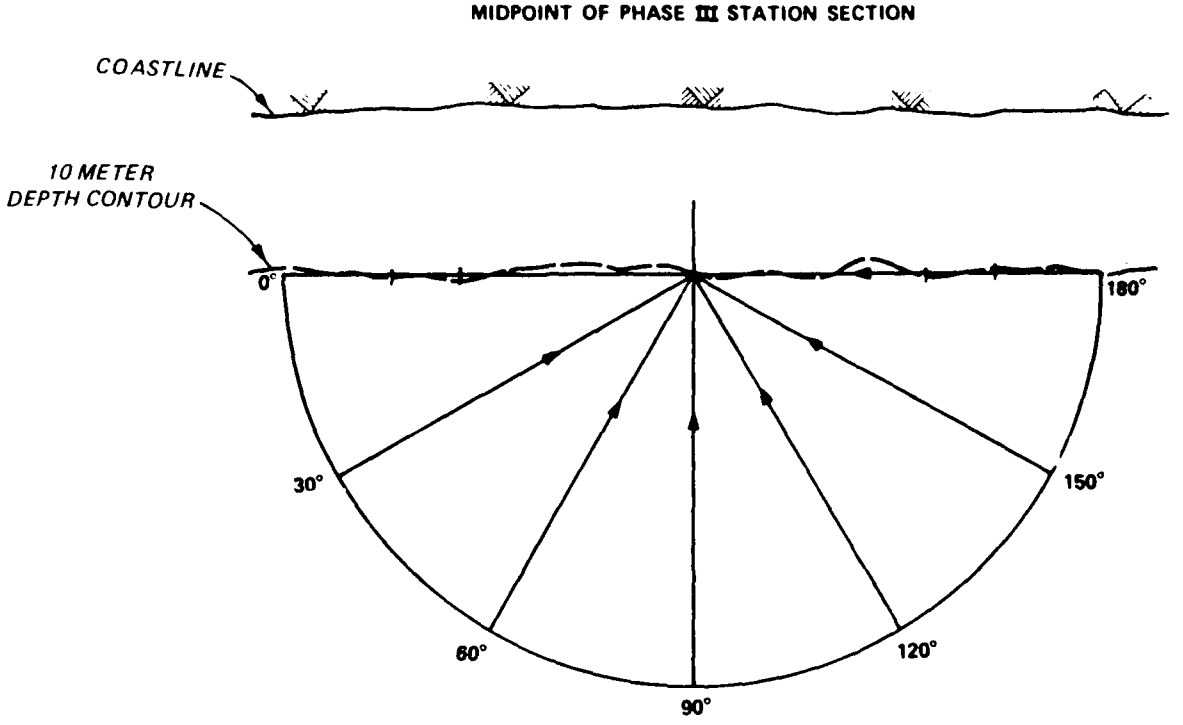


Figure 4. Coordinate system defining the direction of wave propagation D_m

d. Return period tables, including the mean and standard deviation of H_s, the mean T_p, and the mean D.

A brief description of each product is given, and additional sections are provided on use of the products, including examples. The percent occurrence tables, the wave rose diagrams, and the mean and largest H_s tables are provided for each individual station in Appendixes A-E. These appendixes are arranged by geographical regions (pages A2, B2, C2, D2, and E2). The return period table provides information for all stations and is presented in Appendix F (Table F1).

20-Year Percent Occurrence Tables

10. Two types of tables are printed, 20-year azimuth tables and 20-year all direction tables. These data are based on the full 20-year Phase III hindcast record. The azimuth tables give the percent occurrence of waves in height and period ranges for different direction bands at all Phase III stations. The title to each table identifies the station, wave approach direction range, latitude and longitude of the two end points of the coastal

segment, shoreline angle (relative to true north), and water depth. The wave period ranges are based on the discrete frequency bands used in the deepwater wave hindcast. The height ranges are in half-meter increments. The direction ranges span ±15 deg from a central direction and are referenced to the shoreline orientation (Figure 4). Values in the direction tables which have been multiplied by 1,000 represent the percent of the 20 years that waves occur from the specified direction bands for the indicated height and period ranges. Totals are provided by height and period range in the last column and row of each table, respectively. The last line in each direction table contains the following information for the specified direction range:

a. Mean wave height.

b. Largest wave height.

c. Mean dominant period.

d. Total number of occurrences in the specified direction range.

11. The all-directions table is printed after the 165- to 180-deg direction table. The all-direction table gives the percent occurrence of significant waves within specified height and period ranges coming from all directions for 20 years for the indicated station. Values in the all-directions table are derived from all preceding directional tables for the full 20 years. There are always 58,440 cases analyzed, but not all cases result in finite wave conditions. By definition, a "calm" condition exists in the Phase III data set if both sea and swell significant wave heights are zero. A two-dimensional spectrum in frequency and direction is generated from the Phase II sea wave characteristics (H_s , T_p , D_m). The energy density distribution over the discrete direction bands is assumed to be symmetric about the mean direction D_m and distributed ±90 deg from D_m . If the mean direction in the Phase II data is directed offshore, the sea significant wave height found for Phase III data is equal to zero. If the swell mean direction of wave propagation in Phase II is directed offshore, a zero swell significant wave height results for Phase III. Wave sheltering could also limit propagation from an offshore region to the shore. Therefore, the total sum for all occurrences at a given station may not be 100 percent, the difference being due to calm wave conditions.

Use of tables

12. The 20-year percent occurrence tables have been developed to produce estimates of wave conditions under the aforementioned assumptions and

constraints. An example is provided below.

Example

13. To find the number of hours that waves between 3.0 and 3.5 m and 9.6 to 10.5 sec are expected to occur from 45 to 74.9 deg relative to the shoreline at sta 1 for the 20-year interval, the value read in the table for specified station, direction of wave propagation, height, and period should first be divided by 1,000, which, for this example, yields 0.090 percent (Appendix A, page A3). Then 0.090 is divided by 100 to give the probability and multiplied by the number of hours for the 20-year period (approximately 8,766 hr per year) to yield the number of hours that the specified wave is expected to occur. The simple process is:

a. Locate the appropriate direction range table (for this case 45-74.9 deg).

b. Locate the percent occurrence for specified height and period range.

c. Divide percent occurrence found in step b by 1,000.

d. Divide result of step c by 100.

e. Multiply the result of step d by specified number of hours.

For this example:

$$\frac{\text{value read in table}}{1{,}000} \div 100 \times \text{number of hours in time interval} = \text{number of hours specified wave is expected to occur}$$

$$\frac{90}{1{,}000} \div 100 \times 175{,}320 = 158 \text{ hr}$$

14. The all-directions tables can be used in a similar fashion. To find the number of hours waves between 3.0 and 3.5 m are expected to occur within a year for sta 1 for all directions and periods, one must use the following procedure:

a. Divide the value in the total column for the specified H_s range by 100, yielding a percentage of 9.42 (page A5).

b. Divide 9.42 by 100 to get the probability.

c. Multiply by the number of hours in 1 year, i.e.,

$$\frac{942}{100} \div 100 \times 8{,}766 = 826 \text{ hr}$$

15. To find the percentage of calms for the 20-year hindcast record at sta 1 (page A5), one must

a. Sum the total column for all height ranges and divide by 100, yielding a percentage of 99.63.

b. Subtract 99.63 from 100. This results in 0.37 percent of the wave conditions that are considered calm at sta 1, or approximately 216 calm wave conditions (0.37/100) × 58,440.

Wave Rose Diagrams

Description

16. The wave rose diagrams use H_s and D_m for the 20 years of hindcast data to show the percentage of waves occurring from the separate directions. Similar to most wave rose diagrams, the width of each bar segment indicates the H_s range, and the length of the bar segment indicates the percent occurrence of waves from a specified direction. The distance between each circle in the diagram is 10 percent. Each leg of the diagram represents 22.5 deg to either side of the primary direction of the leg (except for 0 and 180 deg). For example, in Appendix A (page A5) the leg identified as 90 (or shore normal wave propagation) represents waves coming from 67.5 to 112.5 deg relative to the shoreline. The legs identified as 0 and 180 represent waves coming from 0 to 22.5 and 157.5 to 180 deg, respectively. The total percent in each angle class (found in the triangle at the end of each leg) is truncated at the nearest whole percent. When a <1 appears in the triangle, and the wave height class is represented by only one class, that total percent of wave conditions coming from the range of angle bands is considered to be equal to zero. For example, sta 1 displays a <1 in the legs identified as 0 and 180. The percent occurrences from these direction classes are equal to zero, with no waves coming from the above angles.

Use of the diagrams

17. The diagrams are intended as visual aids for quick qualitative interpretation of wave conditions. An example is provided below.

Example

18. The wave rose diagram for sta 1 indicates that in the 20-year hindcast 6 percent of the waves were propagating from 22.5 to 67.5 deg relative to the shoreline (or coming from a northeasterly direction relative to the shoreline). Of the 6 percent, approximately 2 percent were less than 0.5 m,

approximately 23 percent were between 0.5 and 1.0 m, approximately 37 percent were between 1.0 and 1.5, approximately 26 percent were between 1.0 and 1.5 m, approximately 26 percent were between 1.5 and 2.0 m, approximately 10 percent were between 2.0 and 2.5 m, and approximately 2 percent were between 2.5 and 3.0 m (page A5).

Mean H_s , Largest H_s , and 20-year Statistics Tables

Description

19. Two tables that summarize the mean and largest H_s for each month and year are provided for each station. The mean table also provides a mean monthly value and mean yearly value of H_s . The largest H_s table provides the largest H_s hindcast for each month in each year, as well as the largest H_s hindcast for the specified station. The 20-year statistics table provides the following:

a. Mean H_s .
b. Mean T_p .
c. Most frequent direction band.
d. Standard deviation of H_s .
e. Standard deviation of T_p .
f. Largest H_s .
g. T_p of largest H_s .
h. Mean direction of largest H_s .
i. Date and time (Greenwich mean time) of largest H_s .

Use of the tables

20. The tables can be used as a quick reference in determining gross estimates of the wave climate of an area. Due to extreme variations in wave heights, the mean H_s value is of little use beyond gross estimates. The largest H_s value provides an idea of what extreme significant wave heights might occur. Appendix F can assist in determining how often to expect extreme values.

Example

21. To determine the mean H_s at sta 1 for January 1956, simply read the value in the specified column and row (page A6). The mean H_s for 1956 is given in the MEAN column opposite 1956. The mean H_s for all Januaries is given in the MEAN row under JAN as indicated below:

a. The mean H_s for JAN 1956 = 3.5 m.

b. The mean H_s for 1956 = 2.3 m.

c. The mean H_s for all JAN's = 3.6 m.

The largest H_s table can be read in a similar fashion, and by scanning the columns and rows, additional information can be determined:

a. The largest H_s for JAN 1956 = 6.1 m.

b. The largest H_s for 1956 = 6.1 m.

c. The largest H_s for all JAN's = 7.0 m.

Return Period for H_s Table

Description

22. Since extreme wave conditions are important in most coastal design procedures, a careful analysis of extreme wave heights was performed. To obtain a reasonably homogeneous, independent sample of wave heights for the analysis of wave extremes along the west coast, wave heights are first separated into events associated with particular meteorological conditions. Basically, the concept here is to obtain representative groupings of storm conditions before proceeding with the usual kind of statistical analysis of extremes. It should be noted that the extremal analysis for Phase III depends significantly on the water depth and that a constant depth of 10 m was used in this analysis. An upper limit on the maximum H_s will result, assuming no changes in water depth. A conservative approximation to this would be to assume $H_{s_{max}}$ = 7.8 m (or $H_{s_{max}}$ = 0.78 × depth, via solitary wave theory).

For more detailed analyses, one would need to consider the changes in the water depth caused by storm surges and tides.

Use of Tables

23. One type of error that could affect the results of extremal analysis would be a bias between the hindcast waves for a station and waves occurring at that site. The assumption of constant water depth within the Phase III analysis will bias those storm conditions producing significant changes in the water depth (caused by surge effects), thus resulting in the capability of producing even larger H_s results (because of the depth dependence of the maximum H_s). Additionally, bias in the results can be expected in the extremal distribution if the random error in the transformation technique

employed in the Phase III analysis is larger compared with the expected natural variation in wave height. It is expected that the hindcast extremes presented in the tables (Appendix F) provide a valid representation of shallow-water extremes produced by extra-tropical storms along the US Pacific coast.

Gage Data Comparisons

24. A logical question to ask of any model study is: "How well do the model results represent what actually took place or might take place in nature?" Usually the answer can be found in discussions of calibration and verification for a particular study. How well the question can be answered depends on the number of measurements under prototype conditions that are available for comparison. In addition, the measurements should reflect the same quantity that the model calculates and at the same time and place as simulated by the model. The necessary prototype measurements, unfortunately, are not available to satisfactorily answer the question in this study. However, some information is available which can be used, although it does not represent exactly what was calculated by the wave model in this case; nor is it at the same time or place that model results are available.

25. The wave information transformed to the Phase III stations in this report was generated from the Phase I and II studies of the Pacific Ocean WIS Reports 14 and 16, respectively. The geographical areas covered by the numerical wave model grid in those studies is shown in Figure 2 of WIS Reports 14 and 16. Tropical storms and hurricanes were excluded from the wind field representations on these grids. Also, since the Phase I grid ended at the equator, any waves generated south of the equator which propagated to the north are not represented. Wave gages at the coast measure all incident waves regardless of origin. Thus, there is inconsistency in what was measured and what was calculated which will affect any comparisons between the two.

26. In addition, measurements in the Phase III region are available in the period from 1979 to the present, while the hindcast covers 1956 to 1975. Thus, it is not possible to plot calculated against measured variables as a function of time. That comparisons of mean values can be made if mean conditions do not change over time may or may not be a valid assumption. There is not enough information available to determine, for example, if the mean

wave height at a given location is the same for 1956-1975 as for 1975-1988. Even if the calculated and observed mean values were in agreement, this would not be conclusive because there is no assurance that the means were equal for the two periods.

27. Finally, the locations of measurements and calculated results are not the same. In the deep ocean location is not as much of a concern as it is close to the coast. Wave conditions are more homogeneous in the deep ocean where depth effects are absent. However, close to the coast, the depth at a gage site and the closest model grid point may vary by 100 percent or more. Local conditions near a gage such as complex bathymetry, shoals, reefs, currents from river discharges or sheltering from small-scale coastal features will all affect the local waves measured by a gage. These features, however, are not included in the wave calculations and thus would make any comparisons invalid.

28. There are a number of wave gages along the Pacific coast which can be used with the above qualifications to help answer the question of model validity. Some are National Oceanographic and Atmospheric Administration (NOAA) buoys, and others are Corps of Engineers (CE) gages. Since the gage data are not coincident in time with the model data, the best comparisons are of the distributions of variables such as wave height and period and comparisons of mean values. Percent occurrence graphs of wave height and period and monthly mean wave height at points along the coast where gage data are available are shown below. Cases where a gage was present but conditions were such that local effects clearly violated model assumptions are not shown.

29. There is a NOAA buoy (46010) and a CE wave gage near the border of Washington and Oregon. Their locations are shown in Figure 5. The gage is a pressure gage in 11 m of water with a period of record from 1983-1986 with 4,351 observations. The buoy is in 18 m of water with a period of record from 1979-1984 and 34,600 observations. These observations are compared, respectively, to WIS Phase III Stations 21 and 22 in Plates 1-6. (Station locations are shown on the second page of each appendix.) The distribution of heights at Ocean Park and WIS sta 21 are similar in character. The distribution of periods is similar, with WIS underrepresenting low and high periods. Monthly mean heights are similar, with the exception of the winter months when differences are as great as 1 m. This difference could in part be due to the much longer model time series (20 years) over which more extreme events could

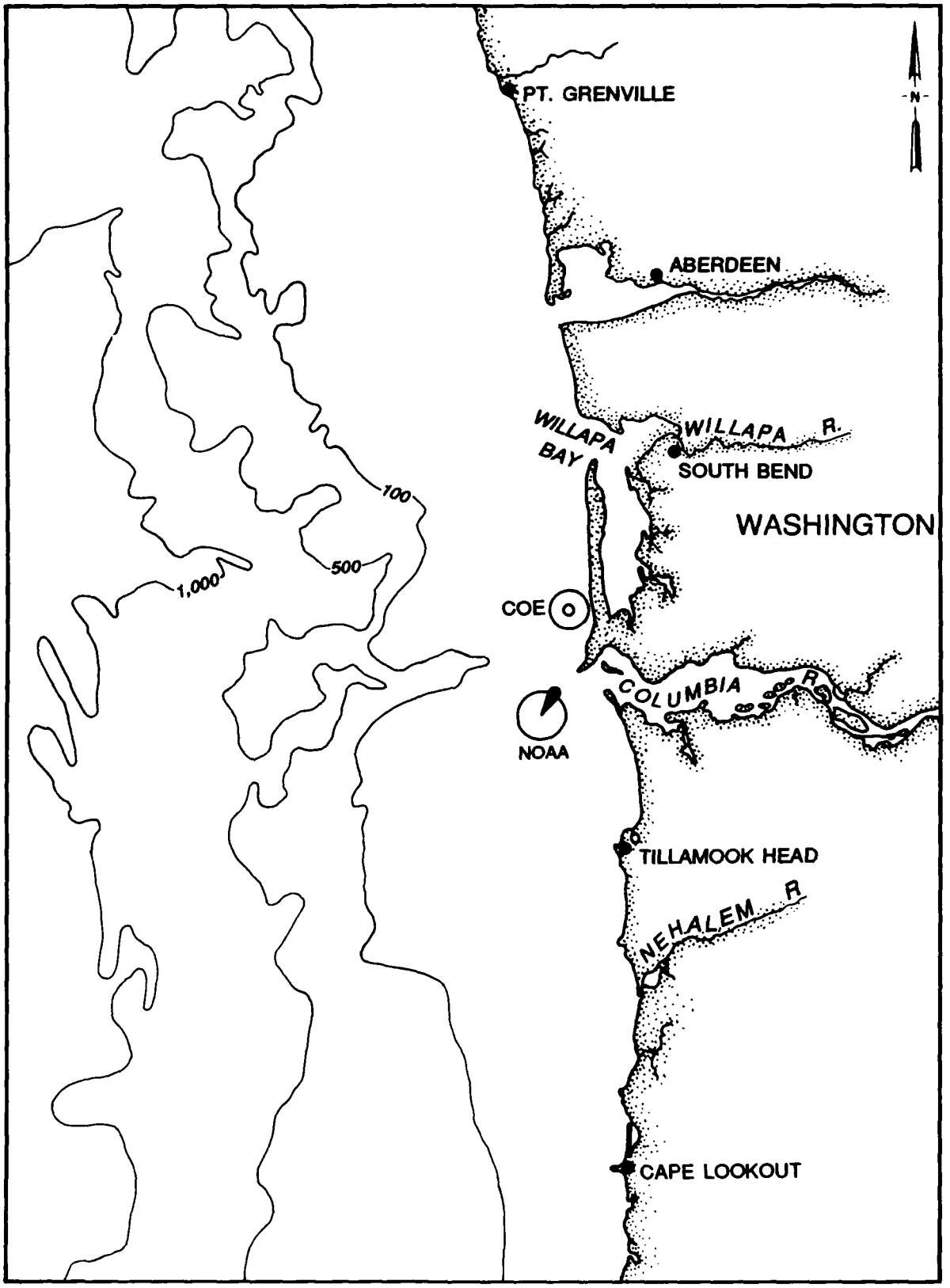


Figure 5. Locations of NOAA buoy 46010 and CE wave gage near the border of Washington and Oregon

occur and increase the mean. Comparisons between the NOAA buoy and WIS 22 are similar for heights and periods. The mean monthly WIS height is again somewhat larger in the winter months than indicated by the buoy.

30. Data (4,467 observations) are available from a CE pressure gage in 16 m of water off the mouth of the Coquille River in Oregon which coincides with WIS sta 48 (Figure 6). The percent distributions of height and period and monthly mean wave heights are shown, respectively, in Plates 7-9. The percent distribution of heights differ with the gage, indicating more occurrences of lower waves and less of higher waves with respect to WIS. The monthly means are smaller for all months for the gage at this location compared to WIS. This difference may be due to the many shoals and rocks in this area which could cause wave breaking and would thus result in a lower mean wave height than if they were absent, as is the case in the model representation region near mouth of Coquille River in Oregon. Bottom contours are hardly straight and parallel as assumed by the WIS Phase III computations. Low and high periods are underestimated by WIS compared to the gage data.

31. NOAA buoy 46022 is offshore of WIS sta 70 in 315 m of water with a period of record from 1982-1984 with 25,500 observations. The location is shown in Figure 7. The percent occurrence of wave height (Plate 10) is skewed slightly to higher waves for WIS than the buoy. Period distributions (Plate 11) are similar, and monthly mean heights (Plate 12) show about a half meter higher for WIS in the winter months. This slight bias toward higher waves for the WIS results may again be due to the longer period of record compared to the buoy.

32. NOAA buoy 46014 is offshore of WIS sta 84 in 285 m of water with a period of record from 1981-1984 with 32,400 observations. The location is shown in Figure 8. Comparisons of the distributions of wave height and period (Plates 13-15) are similar to those of the previous case.

33. NOAA buoy 46012 is offshore of WIS sta 105 in 73 m of water with a period of record from 1980-1984 with 32,500 observations. The location is shown in Figure 9. Comparisons of the distributions of wave height and period (Plates 16-18) are again similar to those of the two previous cases.

34. The final comparison is for NOAA buoy 46011 offshore of WIS sta 130 in 183 m of water with a period of record from 1980-1984 and 31,800 observations. The location is shown in Figure 10. The percent occurrences for height and period (Plates 19 and 20) favor lower heights and periods compared

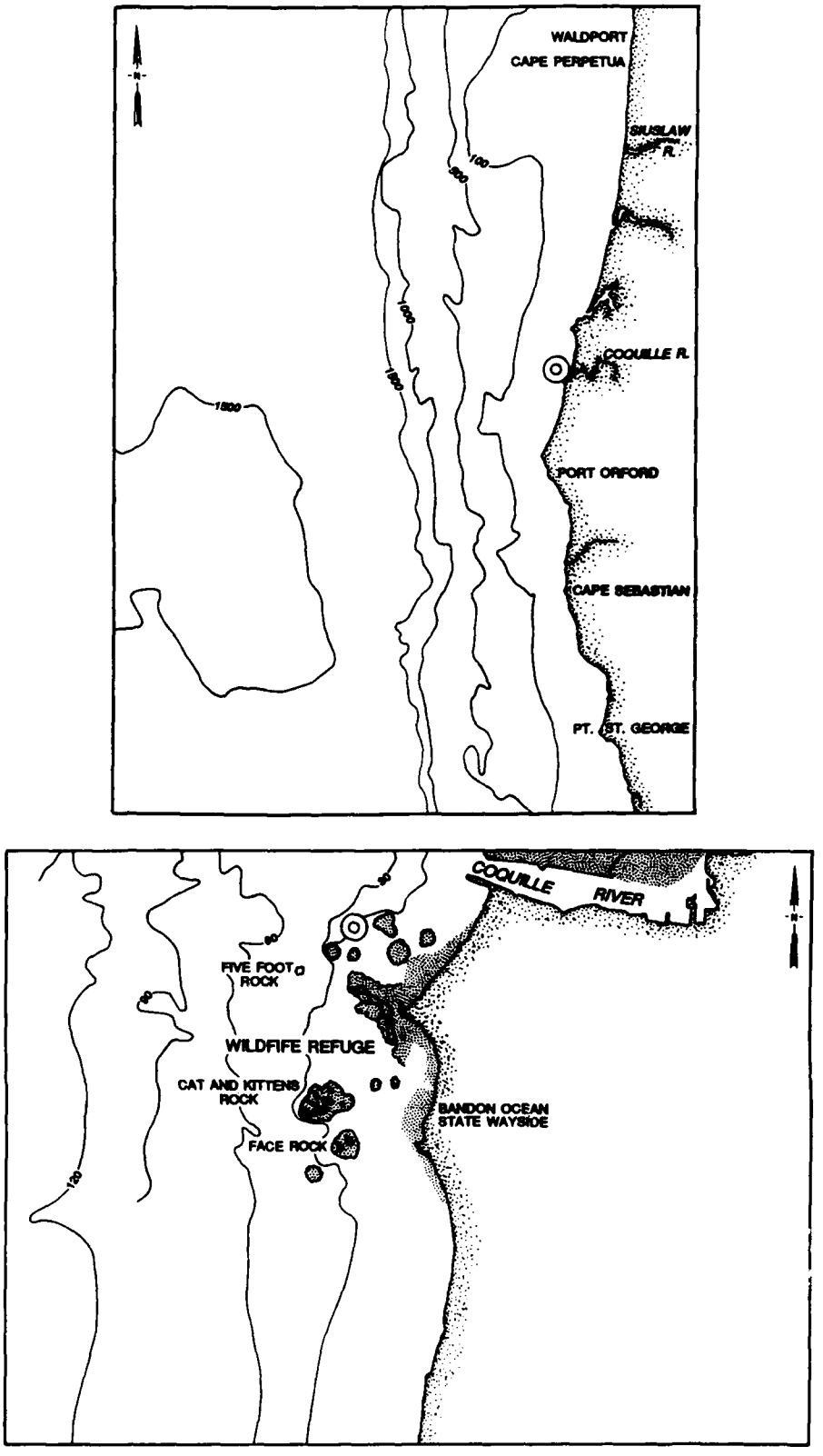


Figure 6. Data from CE pressure gage, 16 m of water, mouth of Coquille River, Oregon, sta 48

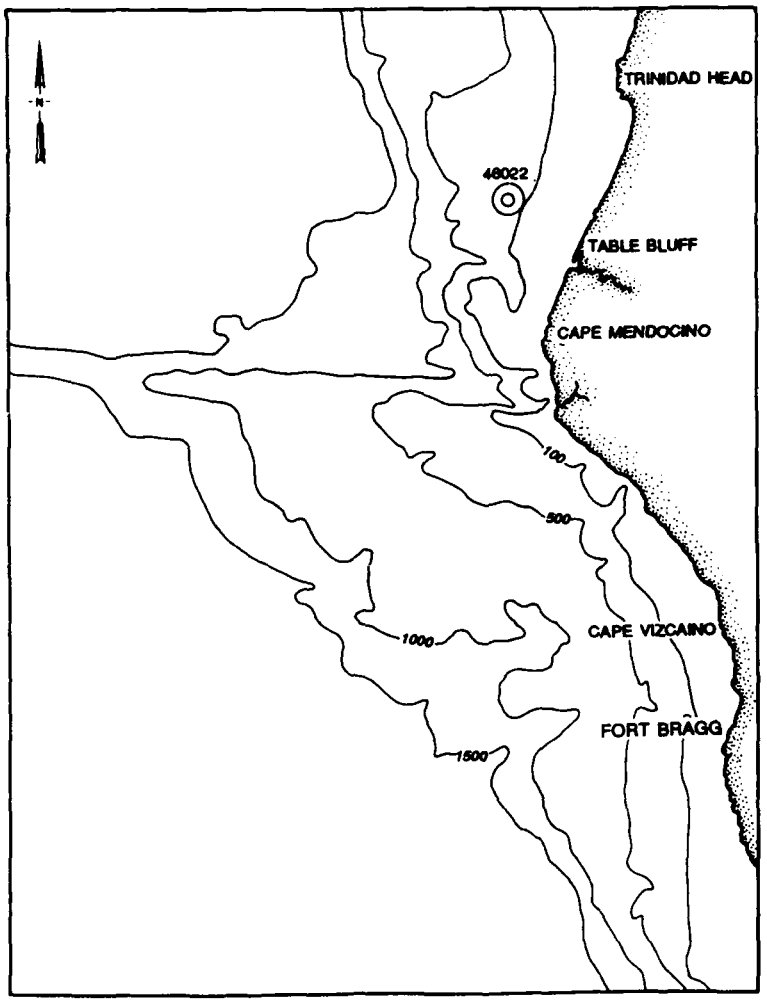


Figure 7. Location of NOAA buoy 46022, 315 m of water, sta 70, 1982-1984, 25,500 observations

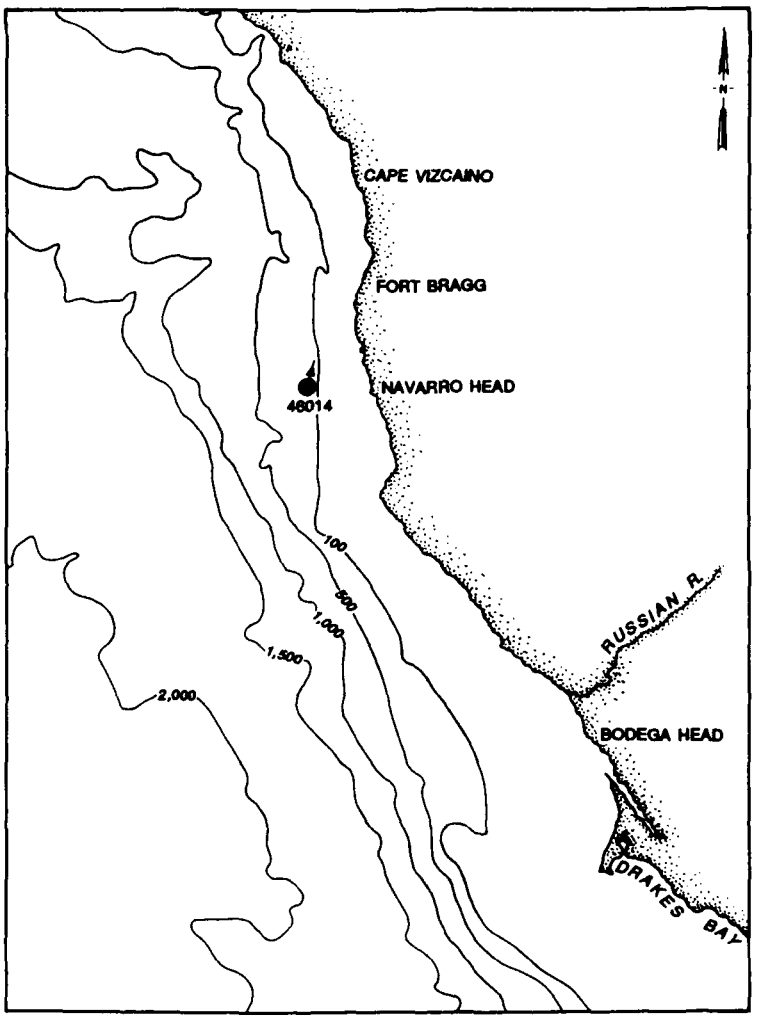


Figure 8. Location of NOAA buoy 46014, 285 m of water, sta 84, 1981-1984, 32,400 observations

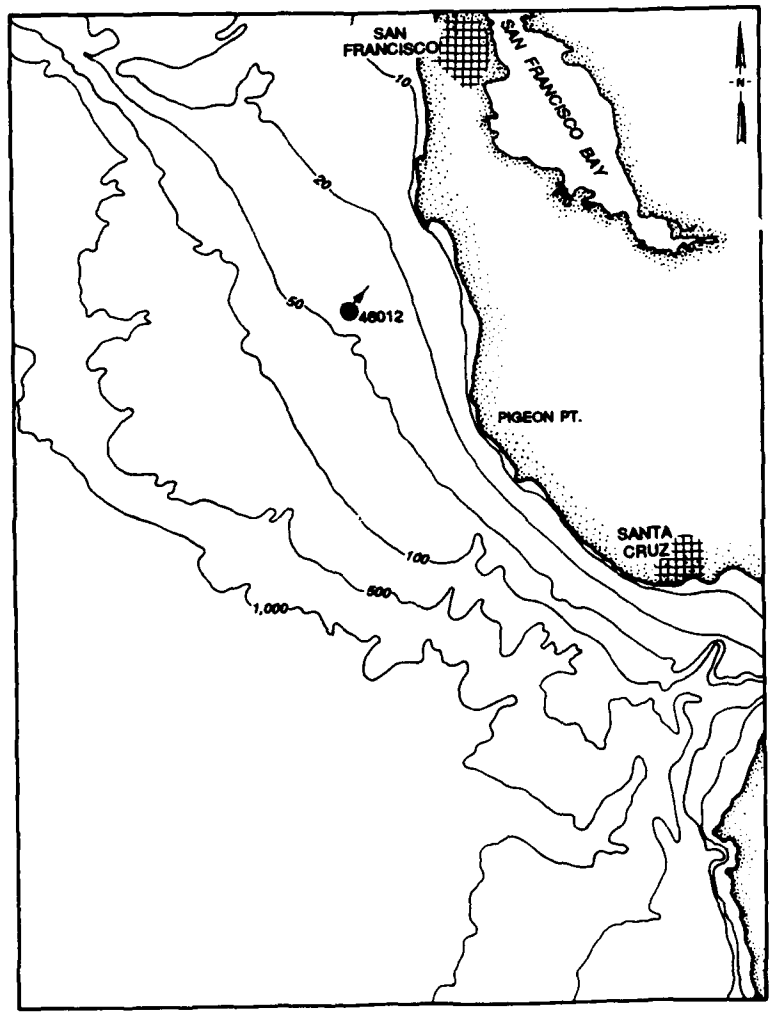


Figure 9. Location of NOAA buoy 46012, 73 m of water, sta 105, 1980-1984, 32,500 observations

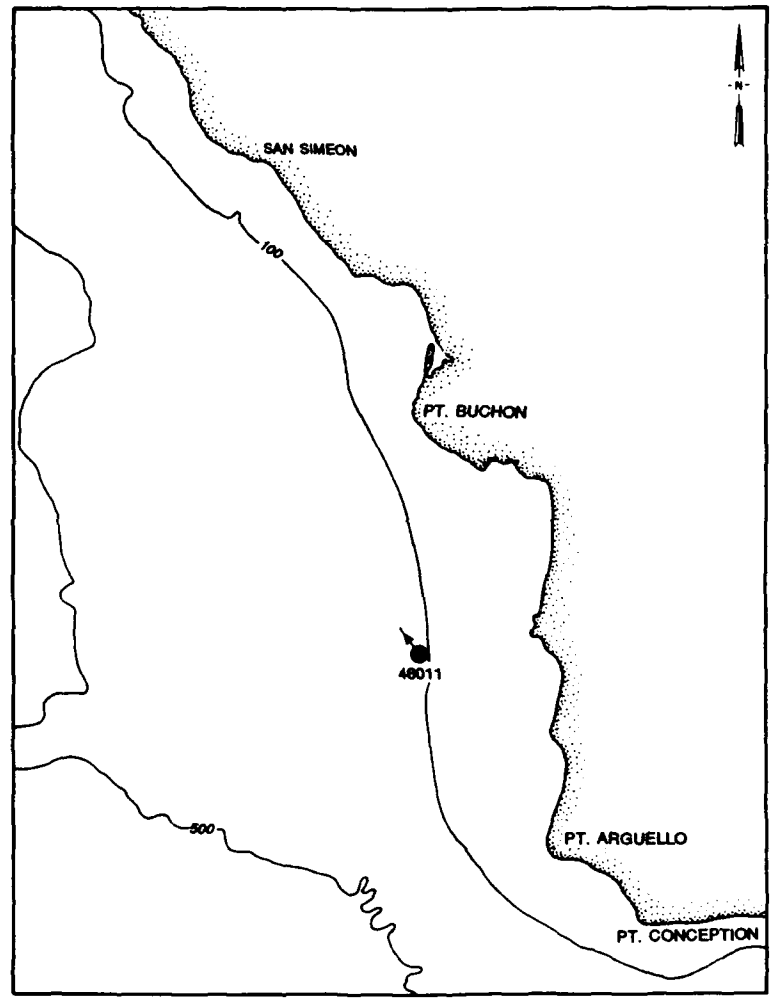


Figure 10. Location of NOAA buoy 46011, 183 m of water, sta 130, 1980-1984, 31,800 observations

to the gage, and in this case the monthly mean height (Plate 21) from the buoy is consistently above the estimate from WIS by about a half meter. This could be due to the sheltering imposed in the model versus the buoy's measuring waves from all directions since it is away from the sheltering effects of the coast.

35. The comparisons above are good enough to ensure that the hindcast results are distributed generally in the same shape as measured results despite the differences discussed above between the two data sets. There is some tendency for the hindcast to estimate fewer waves below 1.0 m than the gage data. Also, the hindcast estimates fewer waves with periods longer than 15.0 sec compared to the gages. In most cases, the hindcast overestimates the monthly mean for the winter months compared to the gage data. Hypotheses can be offered based on the differences in the quantities being compared to explain these tendencies, but more exact comparisons need to be done to completely verify the hindcast. These are planned as part of a WIS verification study where exact comparisons will be made.

36. Until more information is available, the present Phase III results should be used with caution. Phase III locations near reefs, river mouths, or with complex bathymetry such as offshore canyons or shoals or sheltered by land forms such as bays probably are not well represented by the simple Phase III model. Phase II wave information or gage data near such a site should be used to characterize wave conditions offshore, and a site-specific model should be used to transform wave conditions to the site of interest.

37. The present Phase III data are most useful to characterize the wave height, period, and direction at Phase III stations characterized by the model assumptions of straight, unsheltered coastlines with simple offshore bathymetry and the absence of reefs, shoals, and rivers which might affect local wave conditions. Reference to a coastal chart and some coastal engineering common sense should be sufficient to determine if the Phase III station data accurately represent wave climatology at the site. For example, sta 89-93 should be representative, but stations 94-105 should be used with caution.

38. This will be the final use of the Phase III methodology in WIS hindcasts. The present philosophy is to provide nearshore wave climatology at sites as needed using models which represent site-specific conditions. This approach will preclude cautionary guidance, as above, on use of the data.

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Table 1

Shoreline Points for Pacific Coast Phase III Wave Information Study

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
1	48.37N/124.75W	48.30N/124.70W	160.	CAPE FLATTERY, WA
2	48.30N/124.70W	48.17N/124.75W	192.	PORTAGE HEAD,WA
3	48.17N/124.75W	48.06N/124.70W	166.	CAPE ALAVA, WA
4	48.06N/124.70W	47.96N/124.68W	168.	ABOUT 8 NAUTICAL MILES NORTH OF CAPE JOHNSON, WA
5	47.96N/124.68W	47.86N/124.61W	155.	CAPE JOHNSON, WA
6	47.86N/124.61W	47.83N/124.55W	125.	ABOUT 6 NAUTICAL MILES NORTH OF TOLEAK POINT, WA
7	47.83N/124.55W	47.76N/124.48W	148.	TOLEAK POINT,WA
8	47.76N/124.48W	47.70N/124.43W	149.	HOH HEAD, WA
9	47.70N/124.43W	47.60N/124.40W	166.	ABOUT 7 NAUTICAL MILES SOUTH OF HOH HEAD, WA
10	47.60N/124.40W	47.48N/124.35W	171.	ABOUT 22 NAUTICAL MILES NORTH OF CAPE ELIZABETH, WA
11	47.48N/124.35W	47.35N/124.33W	171.	ABOUT 12 NAUTICAL MILES NORTH OF CAPE ELIZABETH, WA
12	47.35N/124.33W	47.30N/124.28W	148.	CAPE ELIZABETH, WA
13	47.30N/124.28W	47.23N/124.23W	148.	POINT GRENVILLE, WA
14	47.23N/124.23W	47.13N/124.20W	167.	MOCLIPS RIVER, WA
15	47.13N/124.20W	47.01N/124.18W	173.	COPALIS HEAD, WA
16	47.01N/124.18W	46.93N/124.18W	174.	ABOUT 10 NAUTICAL MILES SOUTH OF COPALIS HEAD, WA
17	46.90N/124.15W	46.78N/124.11W	166.	POINT CHEHALIS, WA
18	46.78N/124.11W	46.71N/124.10W	174.	ABOUT 6 NAUTICAL MILES NORTH OF CAPE SHOALWATER, WA
19	46.61N/124.10W	46.50N/124.08W	176.	LEADBETTER POINT, WA
20	46.50N/124.08W	46.40N/124.08W	178.	OCEAN PARK, WA
21	46.40N/124.08W	46.26N/124.10W	190.	ABOUT 9 NAUTICAL MILES SOUTH OF OCEAN PARK,WA
22	46.21N/124.01W	46.10N/123.95W	158.	ABOUT 20 NAUTICAL MILES NORTH OF SEASIDE, WA
23	46.10N/123.95W	46.00N/123.93W	173.	ABOUT 10 NAUTICAL MILES NORTH OF SEASIDE, WA
24	46.00N/123.93W	45.95N/124.00W	192.	SEASIDE, WA
25	45.95N/124.00W	45.88N/123.96W	190.	TILLAMOOK HEAD, WA
26	45.88N/123.96W	45.76N/124.00W	184.	ABOUT 5 NAUTICAL MILES SOUTH OF TILLAMOOK HEAD, WA
27	45.76N/124.00W	45.65N/123.95W	168.	CAPE FALCON,WA
28	45.65N/123.95W	45.53N/123.96W	187.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE FALCON, WA
29	45.53N/123.96W	45.41N/123.96W	180.	CAPE MEARES, OR
30	45.41N/123.96W	45.30N/123.96W	180.	ABOUT 6 NAUTICAL MILES NORTH OF CAPE LOOKOUT, OR
31	45.30N/123.96W	45.18N/123.98W	180.	ABOUT 4 NAUTICAL MILES SOUTH OF CAPE LOOKOUT, OR
32	45.18N/123.98W	45.06N/124.01W	192.	ABOUT 10 NAUTICAL MILES NORTH OF CASCADE HEAD, OR
33	45.06N/124.01W	44.93N/124.03W	183.	CASCADE HEAD, OR
34	44.93N/124.03W	44.83N/124.08W	194.	ABOUT 10 NAUTICAL MILES SOUTH OF CASCADE HEAD, OR
35	44.83N/124.08W	44.70N/124.08W	180.	ABOUT 4 NAUTICAL MILES NORTH OF CAPE FOULWEATHER, OR
36	44.70N/124.08W	44.58N/124.08W	181.	NORTH OF YAQUINA HEAD, OR
37	44.58N/124.08W	44.46N/124.08W	184.	ABOUT 7 NAUTICAL MILES SOUTH OF YAQUINA HEAD, OR
38	44.46N/124.08W	44.35N/124.10W	185.	ABOUT 17 NAUTICAL MILES SOUTH OF YAQUINA HEAD, OR
39	44.35N/124.10W	44.21N/124.11W	182.	ABOUT 17 NAUTICAL MILES NORTH OF HECETA HEAD, OR
40	44.21N/124.11W	44.10N/124.13W	181.	ABOUT 7 MILES NORTH OF HECETA HEAD, OR

(Continued)

Table 1 (Continued)

BT #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
41	44.10N/124.13W	43.98N/124.15W	184.	SOUTH OF HECETA HEAD, OR
42	43.98N/124.15W	43.86N/124.16W	185.	SOUTH OF FLORENCE, OR
43	43.86N/124.16W	43.75N/124.20W	187.	ABOUT 10 NAUTICAL MILES SOUTH OF FLORENCE, OR
44	43.75N/124.20W	43.61N/124.23W	191.	ABOUT 4 NAUTICAL MILES NORTH OF REEDSPORT, OR
45	43.61N/124.23W	43.50N/124.26W	194.	ABOUT 6 NAUTICAL MILES SOUTH OF REEDSPORT, OR
46	43.50N/124.26W	43.31N/124.38W	207.	ABOUT 16 NAUTICAL MILES NORTH OF CAPE ARAGO, OR
47	43.31N/124.38W	43.20N/124.40W	182.	CAPE ARAGO, OR
48	43.20N/124.40W	43.08N/124.45W	190.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE ARAGO, OR
49	43.08N/124.45W	42.96N/124.48W	194.	COQUILLE POINT, OR
50	42.96N/124.48W	42.83N/124.56W	205.	ABOUT 11 NAUTICAL MILES NORTH OF CAPE BLANCO, OR
51	42.83N/124.56W	42.73N/124.51W	162.	CAPE BLANCO, OR
52	42.73N/124.51W	42.61N/124.40W	148.	PORT ORFORD, OR
53	42.61N/124.40W	42.46N/124.43W	184.	COLEBROOKE, OR
54	42.46N/124.43W	42.46N/124.43W	180.	ABOUT 10 NAUTICAL MILES NORTH OF CAPE SEBASTIAN, OR
55	42.35N/124.43W	42.25N/124.45W	176.	CAPE SEBASTIAN, OR
56	42.25N/124.45W	42.10N/124.35W	163.	ABOUT 12 NAUTICAL MILES NORTH OF CAPE FERRELO, OR
57	42.10N/124.35W	42.00N/124.21W	134.	CAPE FERRELO, OR
58	42.00N/124.21W	41.86N/124.21W	179.	ABOUT 4 NAUTICAL MILES NORTH OF PYRAMID POINT, CA
59	41.86N/124.21W	41.78N/124.26W	195.	ABOUT 6 NAUTICAL MILES SOUTH OF PYRAMID POINT, CA
60	41.78N/124.26W	41.71N/124.15W	128.	POINT ST. GEORGE, CA
61	41.71N/124.15W	41.58N/124.11W	163.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
62	41.58N/124.11W	41.48N/124.08W	173.	ABOUT 19 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
63	41.48N/124.08W	41.35N/124.08W	179.	ABOUT 28 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
64	41.35N/124.08W	41.23N/124.11W	192.	ABOUT 16 NAUTICAL MILES NORTH OF RODGERS PEAK, CA
65	41.23N/124.11W	41.13N/124.16W	198.	ABOUT 7 NAUTICAL MILES NORTH OF RODGERS PEAK, CA
66	41.13N/124.16W	41.05N/124.15W	174.	SOUTH OF RODGERS PEAK, CA
67	41.05N/124.15W	40.98N/124.11W	163.	TRINIDAD HEAD, CA
68	40.98N/124.11W	40.86N/124.16W	196.	ABOUT 7 NAUTICAL MILES SOUTH OF TRINIDAD HEAD, CA
69	40.86N/124.16W	40.75N/124.25W	205.	ABOUT 9 NAUTICAL MILES NORTH OF EUREKA, CA
70	40.75N/124.25W	40.65N/124.31W	206.	EUREKA, CA
71	40.65N/124.31W	40.53N/124.36W	201.	ABOUT 10 NAUTICAL MILES SOUTH OF EUREKA, CA
72	40.53N/124.36W	40.43N/124.40W	196.	NORTH OF FALSE CAPE, CA
73	40.43N/124.40W	40.33N/124.35W	161.	CAPE MENDOCINO, CA
74	40.33N/124.35W	40.01N/124.35W	180.	ABOUT 6 NAUTICAL MILES NORTH OF PUNTA GORDA, CA
75	40.01N/124.35W	40.16N/124.25W	137.	PUNTA GORDA, CA
76	40.16N/124.25W	40.10N/124.13W	128.	ABOUT 10 NAUTICAL MILES SOUTH OF PUNTA GORDA, CA
77	40.10N/124.13W	40.01N/124.08W	153.	KING PEAK, CA
78	40.01N/124.08W	39.91N/123.91W	136.	POINT DELGADA, CA
79	39.91N/123.91W	39.83N/123.86W	140.	ABOUT 10 NAUTICAL MILES SOUTH OF POINT DELGADA, CA
80	39.83N/123.86W	39.71N/123.85W	169.	ABOUT 9 NAUTICAL MILES NORTH OF CAPE VIZCAINO, CA

(Continued)

Table 1 (Continued)

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
81	39.71N/123.85W	39.60N/123.80W	167.	CAPE VIZCAINO, CA
82	39.60N/123.80W	39.48N/123.80W	183.	ABOUT 9 NAUTICAL MILES NORTH OF LAGUNA POINT, CA
83	39.48N/123.80W	39.35N/123.81W	185.	FORT BRAGG, CA
84	39.35N/123.81W	39.21N/123.78W	165.	POINT CABRILLO, CA
85	39.21N/123.78W	39.10N/123.70W	156.	NORTH OF NAVARRO HEAD, CA
86	39.10N/123.70W	39.01N/123.70W	168.	ABOUT 10 NAUTICAL MILES SOUTH OF NAVARRO HEAD, CA
87	39.01N/123.70W	38.95N/123.73W	200.	ABOUT 6 NAUTICAL MILES NORTH OF POINT ARENA, CA
88	38.95N/123.73W	38.83N/123.63W	146.	POINT ARENA, CA
89	38.83N/123.63W	38.73N/123.51W	135.	NORTH OF GUALALA MOUNTAIN, CA
90	38.73N/123.51W	38.63N/123.41W	137.	SOUTH OF GUALALA MOUNTAIN, CA
91	38.63N/123.41W	38.53N/123.30W	138.	ABOUT 30 NAUTICAL MILES SOUTH OF POINT ARENA, CA
92	38.53N/123.30W	38.43N/123.16W	127.	ABOUT 24 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
93	38.43N/123.16W	38.36N/123.08W	146.	ABOUT 14 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
94	38.36N/123.08W	38.31N/123.08W	180.	ABOUT 4 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
95	38.31N/123.08W	38.20N/122.96W	143.	BODEGA HEAD, CA
96	38.20N/122.96W	38.08N/122.96W	180.	ABOUT 10 NAUTICAL MILES SOUTH OF BODEGA HEAD, CA
97	38.08N/122.96W	38.00N/123.01W	200.	ABOUT 7 NAUTICAL MILES NORTH OF POINT REYES, CA
98	38.00N/123.01W	38.00N/122.83W	90.	POINT REYES, CA
99	38.00N/122.83W	37.88N/122.71W	137.	ABOUT 11 NAUTICAL MILES SOUTH OF POINT REYES, CA
100	37.88N/122.71W	37.88N/122.63W	90.	SOUTH OF BOLINAS POINT, CA
101	37.88N/122.63W	37.81N/122.53W	132.	NORTH OF POINT BONITA, CA
102	37.81N/122.53W	37.66N/122.50W	171.	NORTH OF SAN FRANCISCO, CA
103	37.66N/122.50W	37.58N/122.51W	190.	SOUTH OF SAN FRANCISCO, CA
104	37.58N/122.51W	37.50N/122.48W	177.	POINT SAN PEDRO, CA
105	37.50N/122.48W	37.38N/122.41W	152.	SOUTH OF POINT MONTARA, CA
106	37.38N/122.41W	37.26N/122.41W	180.	ABOUT 11 NAUTICAL MILES SOUTH OF POINT MONTARA, CA
107	37.26N/122.41W	37.11N/122.31W	154.	NORTH OF PESCADERO POINT, CA
108	37.11N/122.31W	37.01N/122.21W	135.	POINT ANO NUEVO, CA
109	37.01N/122.21W	36.95N/122.08W	129.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ANO NUEVO, CA
110	36.95N/122.08W	36.96N/121.90W	80.	SANTA CRUZ, CA
111	36.96N/121.90W	36.85N/121.81W	144.	EAST OF SANTA CRUZ, CA
112	36.85N/121.81W	36.73N/121.81W	180.	ABOUT 13 NAUTICAL MILES SOUTHEAST OF SANTA CRUZ, CA
113	36.73N/121.81W	36.63N/121.93W	225.	ABOUT 10 NAUTICAL MILES NORTH OF POINT PINOS, CA
114	36.58N/121.96W	36.45N/121.93W	163.	MONTEREY, CA
115	36.45N/121.93W	36.28N/121.91W	172.	ABOUT 11 NAUTICAL MILES NORTH OF POINT SUR, CA
116	36.28N/121.91W	36.16N/121.75W	128.	POINT SUR, CA
117	36.16N/121.75W	36.11N/121.68W	132.	ABOUT 10 NAUTICAL MILES SOUTH OF POINT SUR, CA
118	36.11N/121.68W	36.03N/121.63W	151.	ABOUT 9 NAUTICAL MILES NORTH OF LOPEZ POINT, CA
119	36.03N/121.63W	35.86N/121.53W	146.	LOPEZ POINT, CA
120	35.86N/121.53W	35.76N/121.41W	135.	CAPE SAN MARTIN, CA

(Continued)

Table 1 (Concluded)

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
121	35.76N/121.41W	35.63N/121.35W	158.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE SAN MARTIN, CA
122	35.63N/121.35W	35.56N/121.26W	110.	POINT PIEDRAS BLANCAS, CA
123	35.56N/121.26W	35.46N/121.20W	147.	SAN SIMEON, CA, CA
124	35.46N/121.20W	35.45N/121.01W	133.	ABOUT 9 NAUTICAL MILES SOUTH OF SAN SIMEON
125	35.45N/121.01W	35.41N/120.91W	110.	POINT ESTERO, CA, CA
126	35.41N/120.91W	35.23N/120.88W	186.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ESTERO
127	35.23N/120.88W	35.16N/120.91W	126.	POINT BUCHON, CA
128	35.16N/120.81W	35.10N/120.65W	98.	AVILA BEACH, CA
129	35.10N/120.65W	34.85N/120.75W	182.	PISMO BEACH, CA
130	34.85N/120.75W	34.81N/120.68W	134.	POINT SAL, CA
131	34.81N/120.68W	34.73N/120.61W	190.	ABOUT 5 NAUTICAL MILES SOUTH OF POINT SAL, CA
132	34.73N/120.61W	34.60N/120.71W	183.	PURISIMA POINT, CA
133	34.60N/120.71W	34.53N/120.60W	118.	POINT ARGUELLO, CA
134	34.53N/120.60W	34.43N/120.46W	148.	POINT CONCEPTION, CA

Table 2

Sheltered Pacific Coast Phase III Stations

Station No.	Sheltered Angle, deg	Station No.	Sheltered Angle, deg
1	0-30;150-180	77	0-30
2	0-40	78	150-180
6	150-180	79	140-180
7	0-10; 160-180	80	0-30; 170-180
8	0-10; 160-180	81	0-20; 170-180
9	0-20	82	0-30
10	0-20	83	0-30
11	0-10	84	170-180
12	160-180	85	160-180
13	160-180	86	0-10; 160-180
14	0-10	87	0-30
15	0-10	92	160-180
16	0-10	93	0-10; 150-180
16 to 17	NULL	94	0-40
18 to 19	NULL	95	140-180
20	170-180	96	0-30;170-180
21	0-10	97	0-40
22	0-10; 160-180	98	130-180
21 to 22	NULL	99	0-40; 160-180
23	0-20; 160-180	100	110-180
24	0-30	101	0-20; 140-180
25	0-60	102	0-50; 170-180
26	0-10	103	0-60
27	170-180	104	0-30
28	0-10	105	160-180
29	170-180	106	0-20
31	0-20	108	160-180
32	0-10	109	150-180
43	170-180	110	90-180
44	170-180	111	0-40; 130-180
45	170-180	112	0-50; 150-180
46	1-10	113	0-70
47	170-180	113 to 114	NULL
48	170-180	114	0-10
49	170-180	115	0-20
50	0-10	116	170-180
52	160-180	117	0-20; 170-180
53	0-40	118	0-20
57	140-180	119	0-10
58	0-40; 160-180	120	170-180
59	0-20	121	0-20
60	150-180	122	140-180
61	0-30	123	0-20
62	170-180	124	160-180
63	0-10; 170-180	125	120-180
64	0-10	126	0-50
67	150-180	127	150-180
68	0-30; 170-180	128	110-180
69	0-20	129	0-40
70	0-10	130	140-180
71	0-10	131	0-40
73	170-180	132	0-20
74	0-20	133	140-180
76	160-180	134	150-180

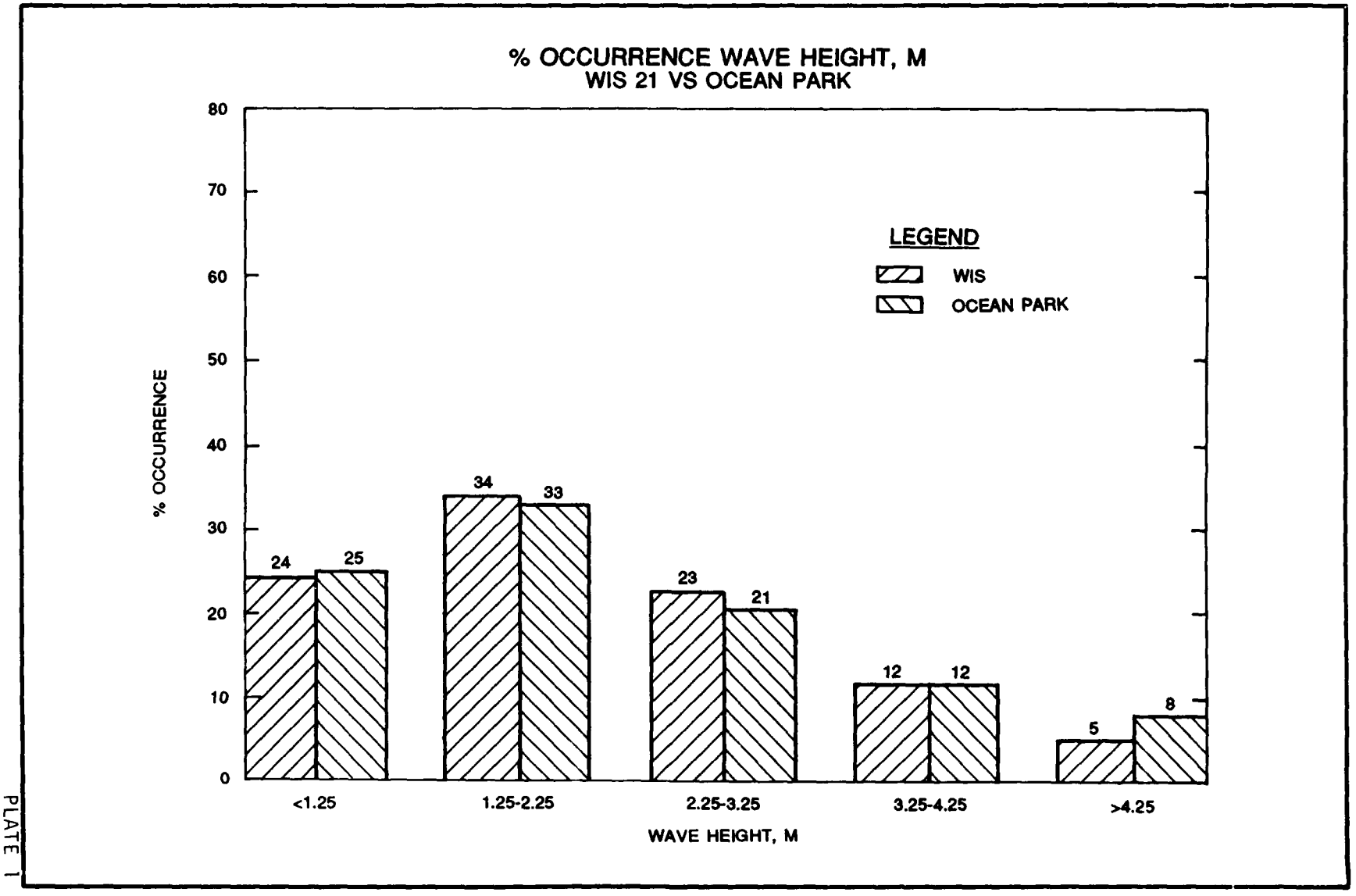
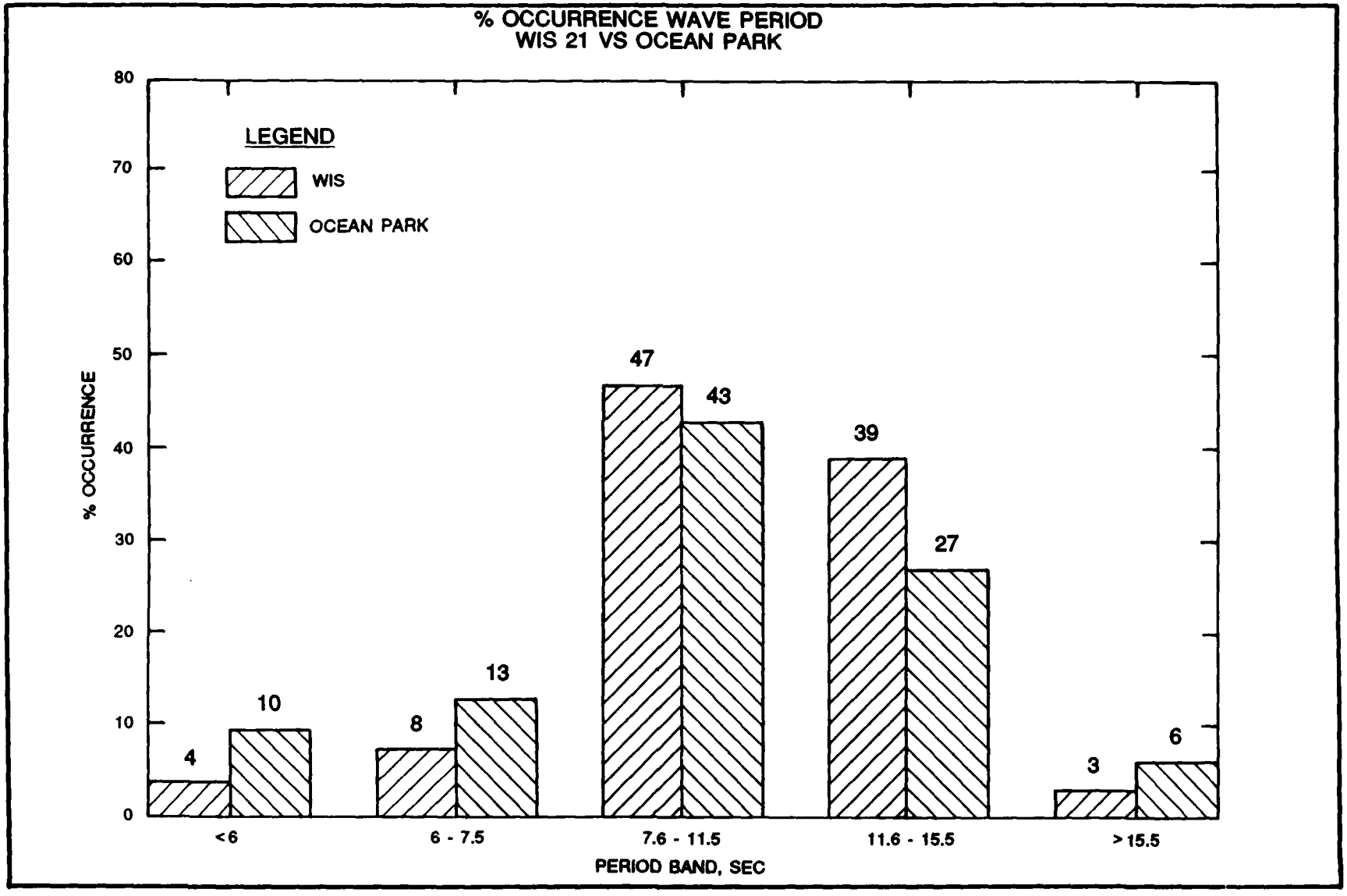

% OCCURRENCE WAVE HEIGHT, M
WIS 21 VS OCEAN PARK
LEGEND
WIS
OCEAN PARK
% OCCURRENCE
80
70
60
50
40
30
20
10
0
24
25
34
33
23
21
12
12
5
8
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 1

PLATE 2


% OCCURRENCE WAVE PERIOD
WIS 21 VS OCEAN PARK
LEGEND
WIS
OCEAN PARK
% OCCURRENCE
80
70
60
50
40
30
20
10
0
4
10
8
13
47
43
39
27
3
6
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

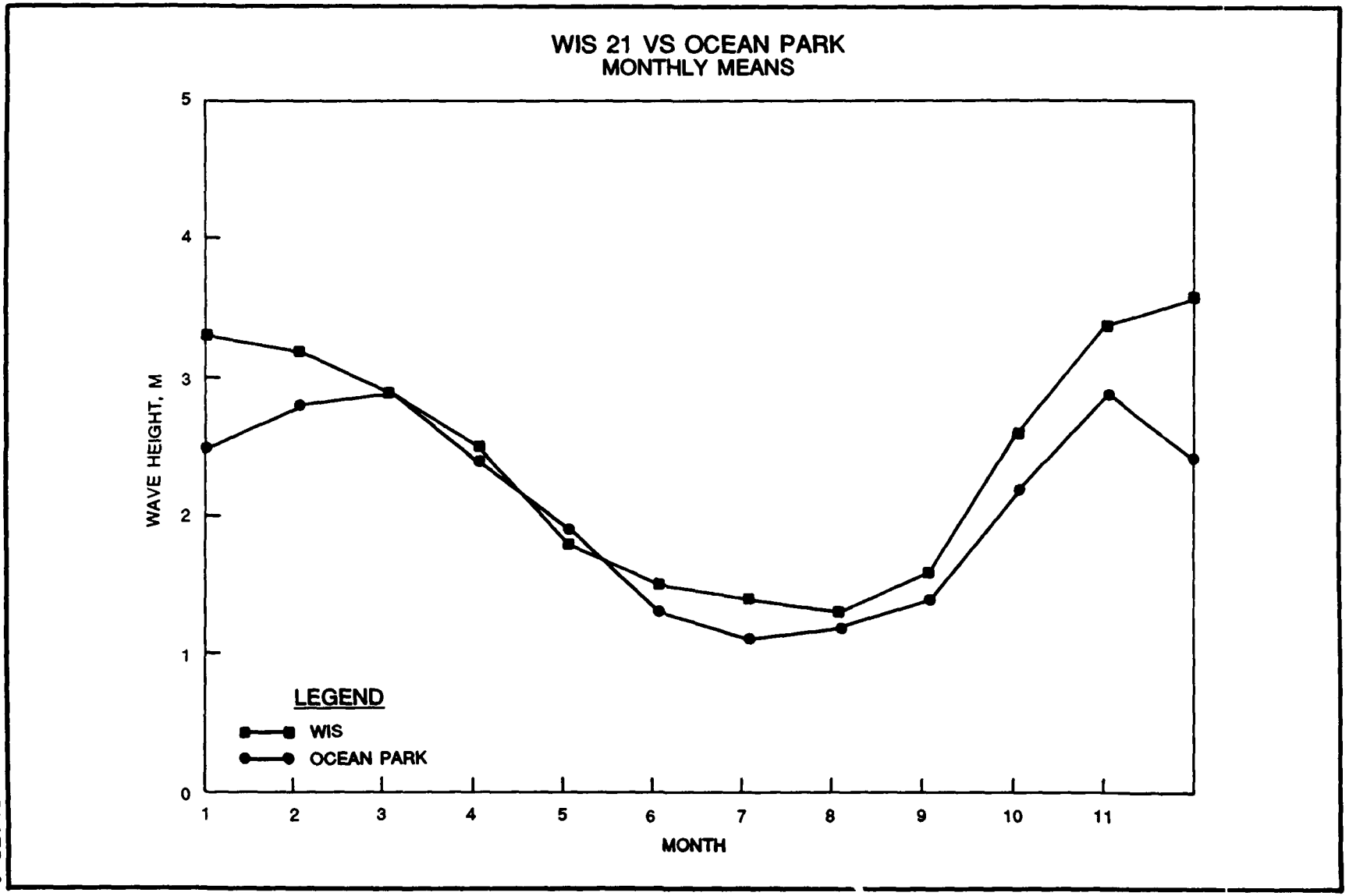

WIS 21 VS OCEAN PARK
MONTHLY MEANS
WAVE HEIGHT, M
0
1
2
3
4
5
1
2
3
4
5
6
7
8
9
10
11
MONTH
LEGEND
WIS
OCEAN PARK

PLATE 3

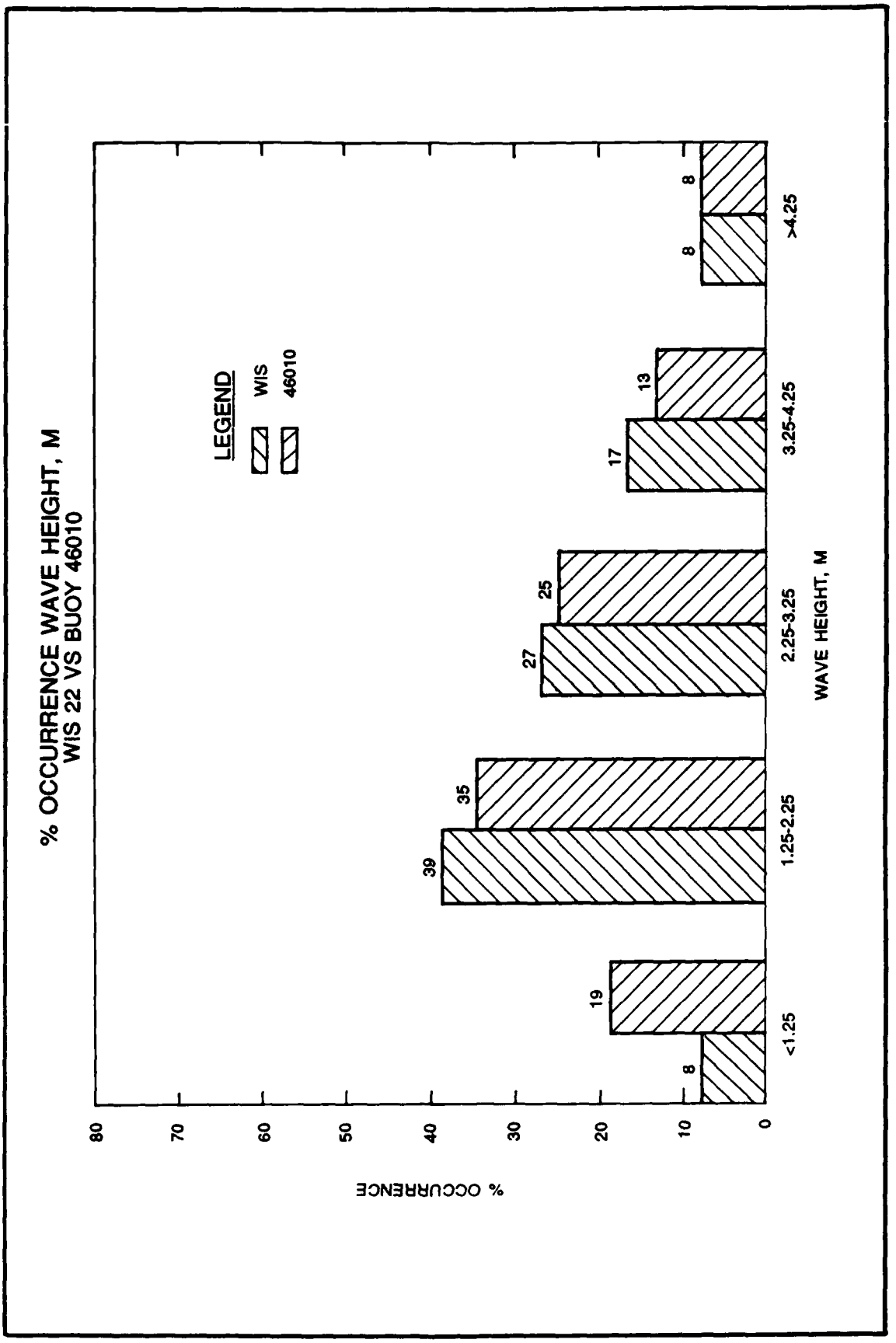

% OCCURRENCE WAVE HEIGHT, M
WIS 22 VS BUOY 46010
LEGEND
WIS
46010
% OCCURRENCE
0
10
20
30
40
50
60
70
80
8
19
39
35
27
25
17
13
8
8
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 4

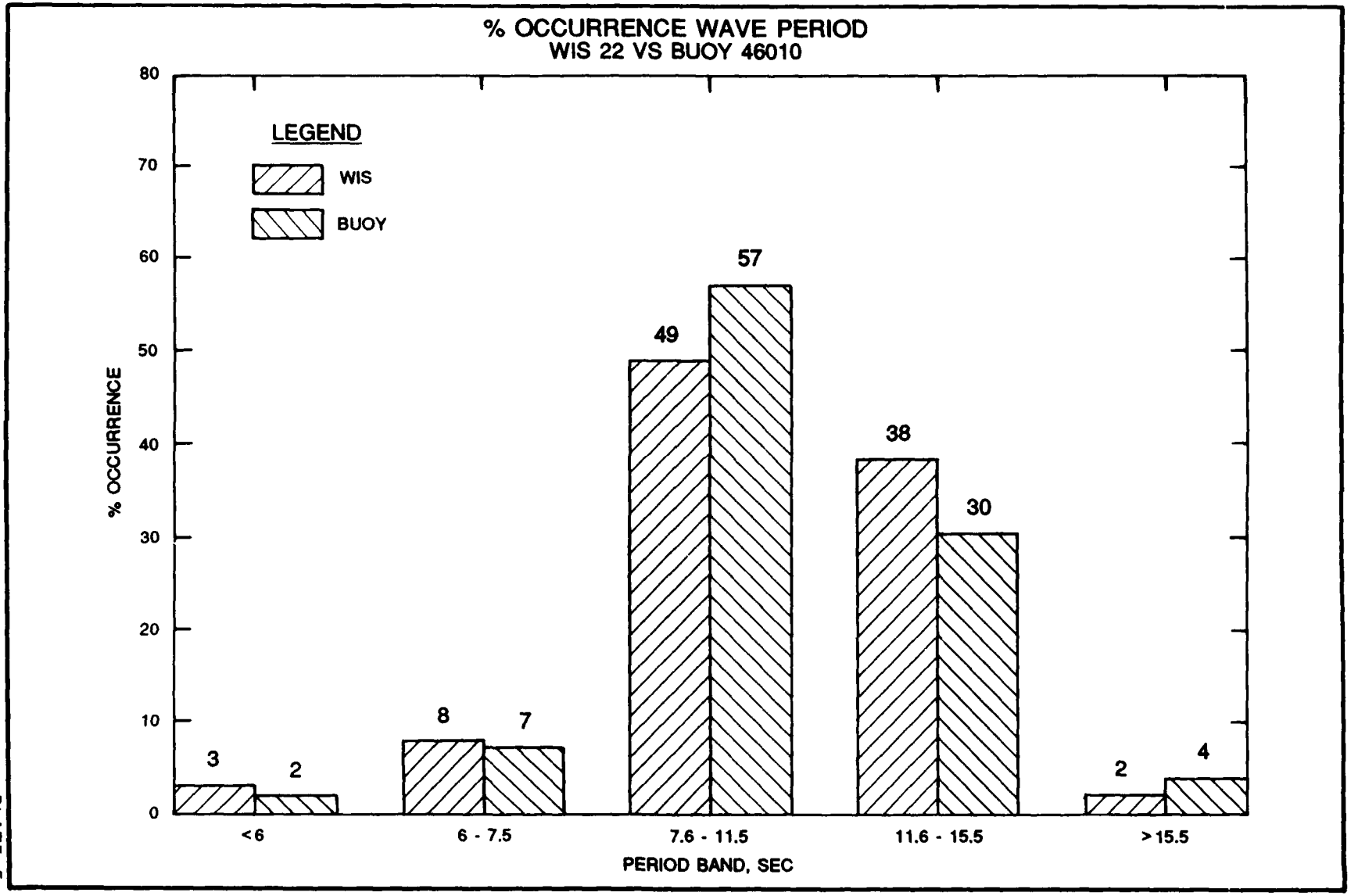

% OCCURRENCE WAVE PERIOD
WIS 22 VS BUOY 46010
LEGEND
WIS
BUOY
% OCCURRENCE
80
70
60
50
40
30
20
10
0
3
2
8
7
49
57
38
30
2
4
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

PLATE 5

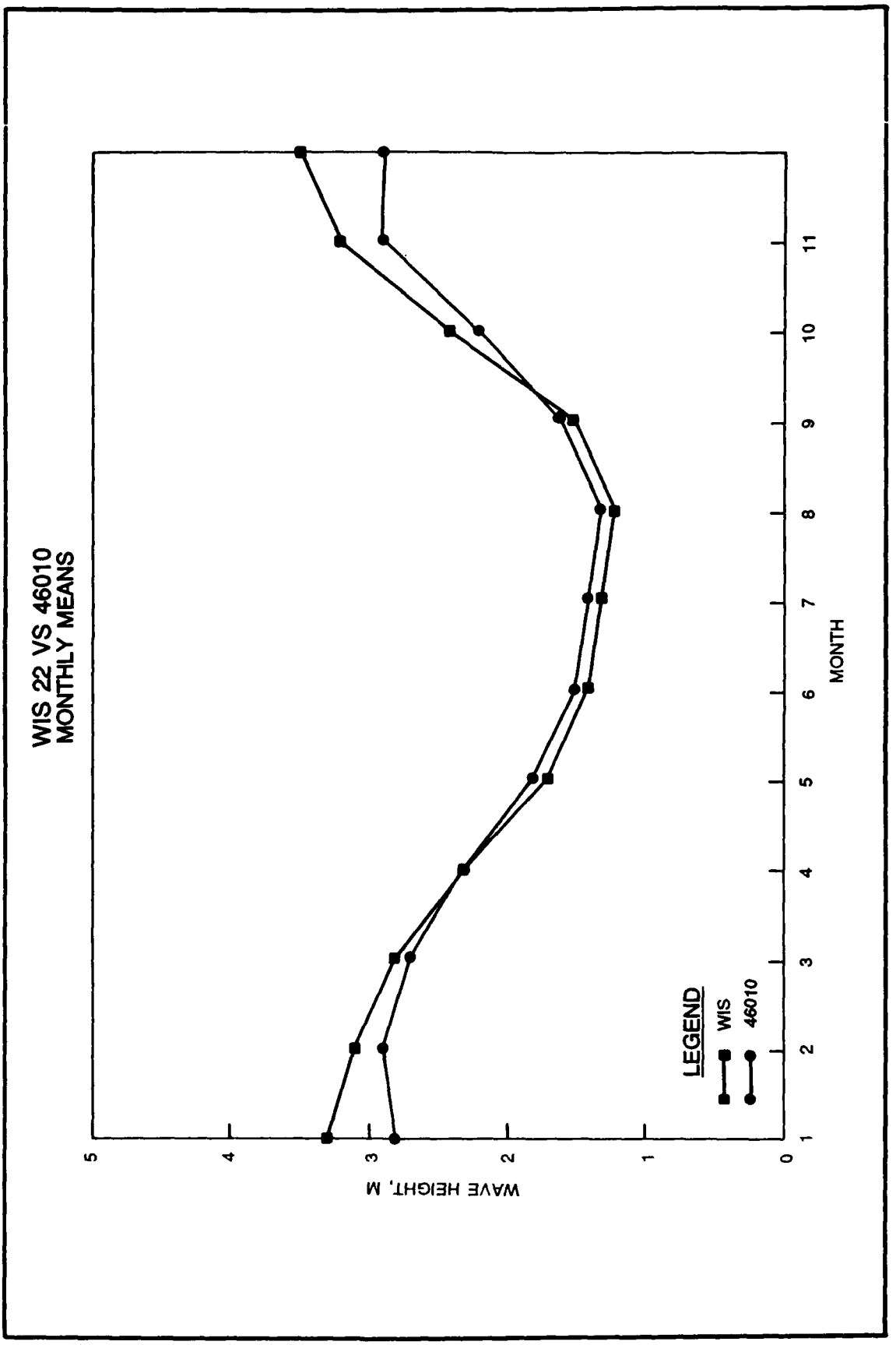

WIS 22 VS 46010
MONTHLY MEANS
WAVE HEIGHT, M
MONTH
LEGEND
WIS
46010
0
1
2
3
4
5
6
7
8
9
10
11

PLATE 6

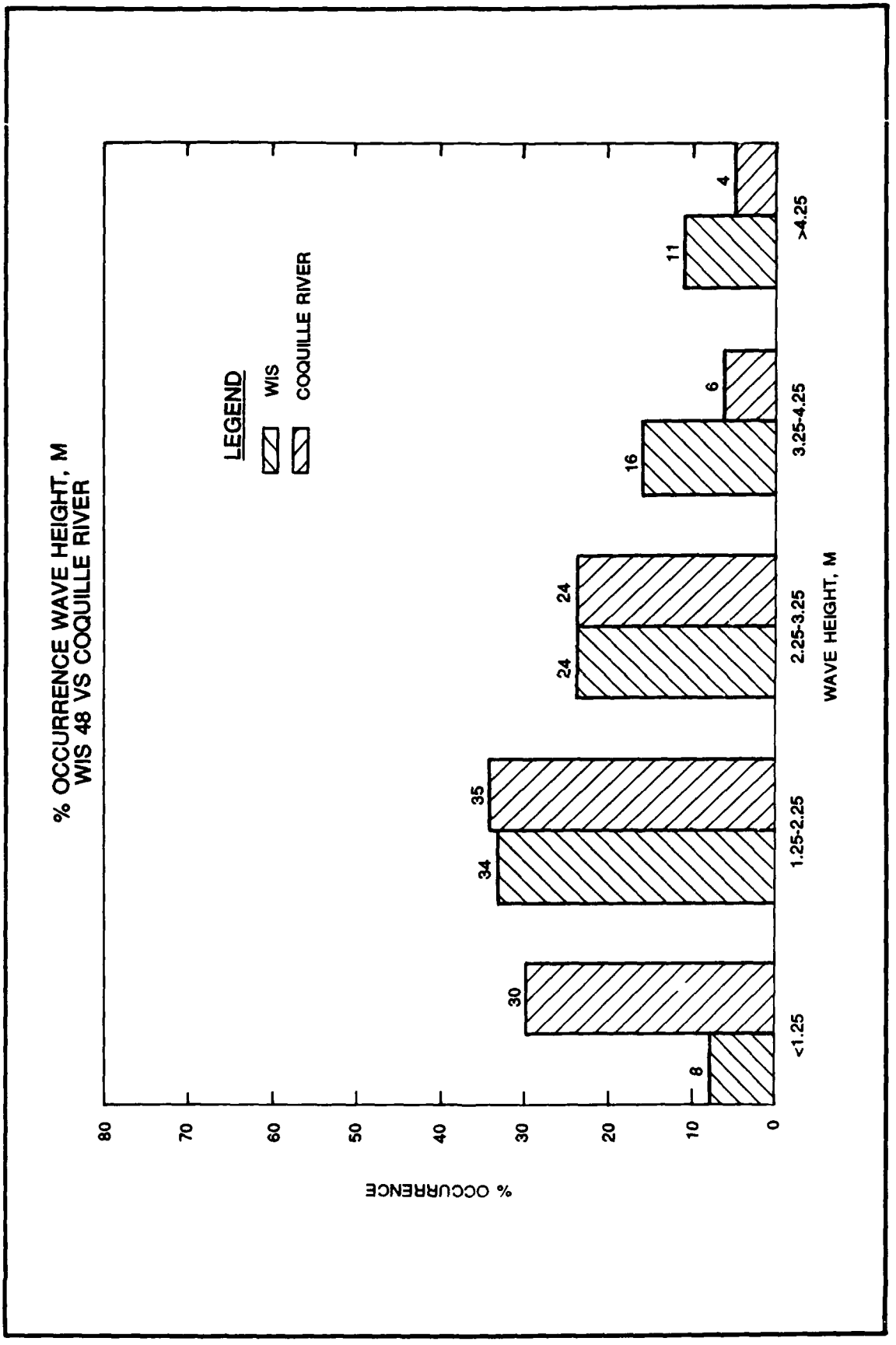
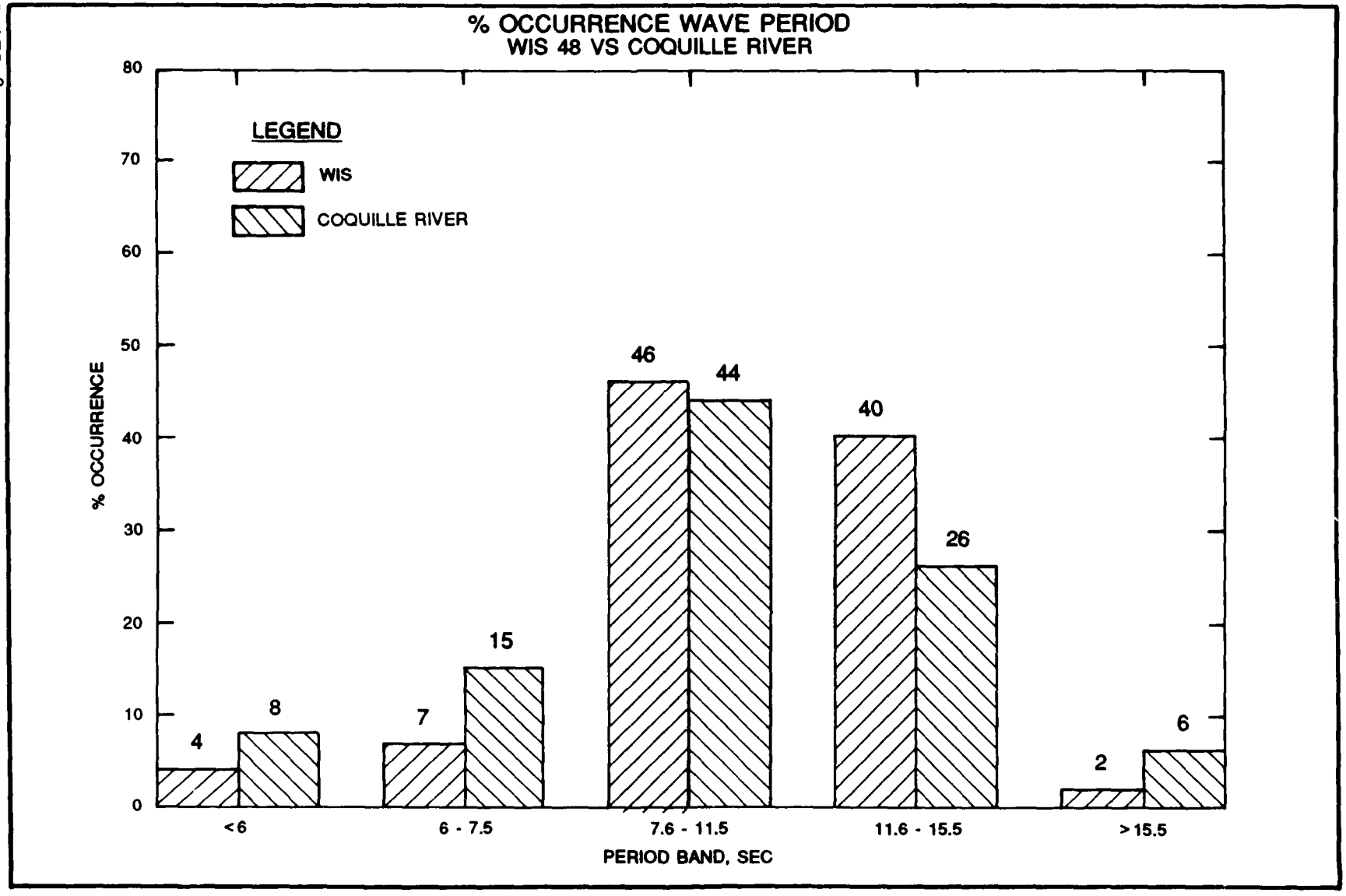

% OCCURRENCE WAVE HEIGHT, M
WIS 48 VS COQUILLE RIVER
LEGEND
WIS
COQUILLE RIVER
% OCCURRENCE
0
10
20
30
40
50
60
70
80
8
30
35
34
24
24
16
6
11
4
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 7

PLATE 8


% OCCURRENCE WAVE PERIOD
WIS 48 VS COQUILLE RIVER
LEGEND
WIS
COQUILLE RIVER
% OCCURRENCE
80
70
60
50
40
30
20
10
0
4
8
7
15
46
44
40
26
2
6
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

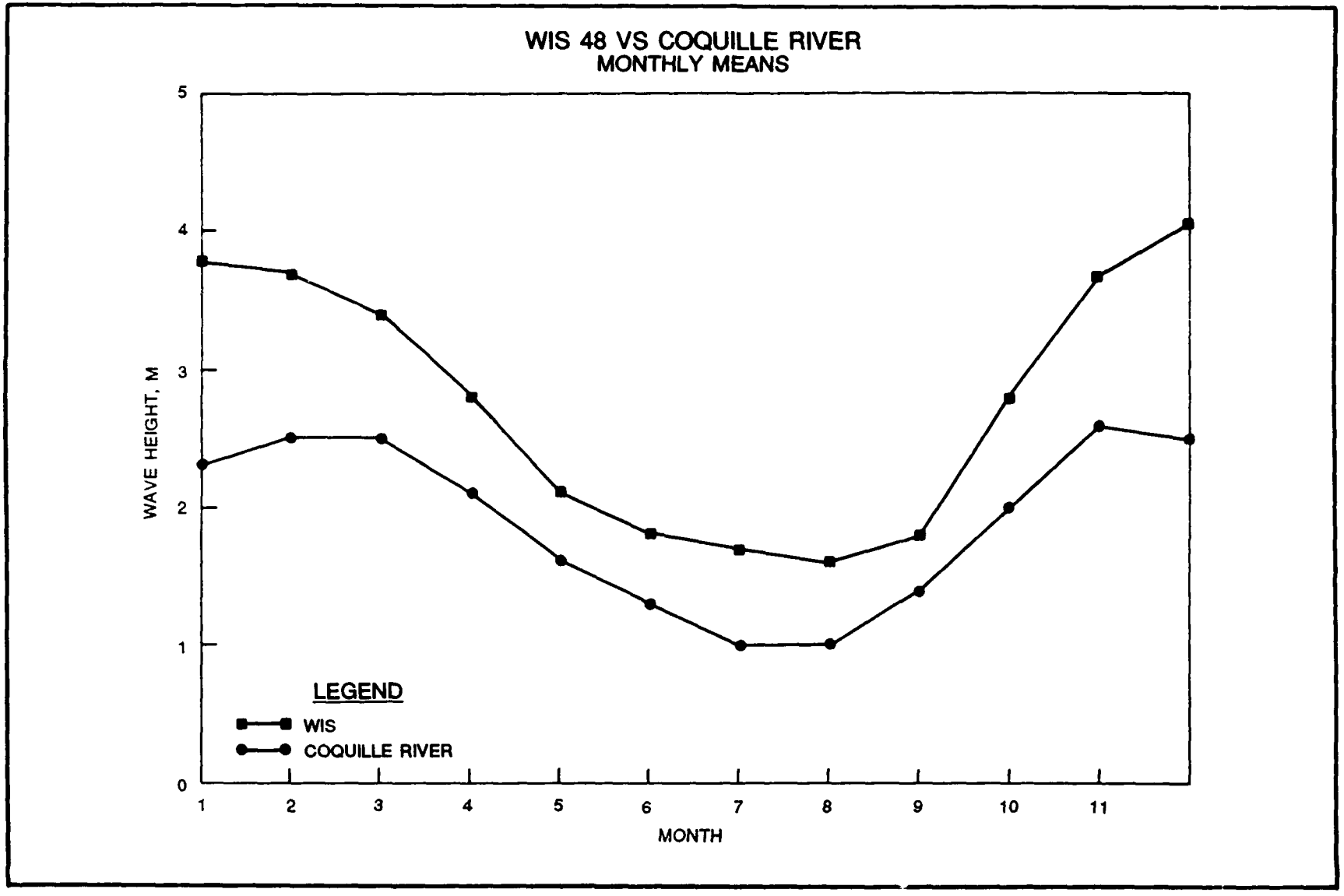

WIS 48 VS COQUILLE RIVER
MONTHLY MEANS
WAVE HEIGHT, M
0
1
2
3
4
5
MONTH
1
2
3
4
5
6
7
8
9
10
11
LEGEND
WIS
COQUILLE RIVER

PLATE 9

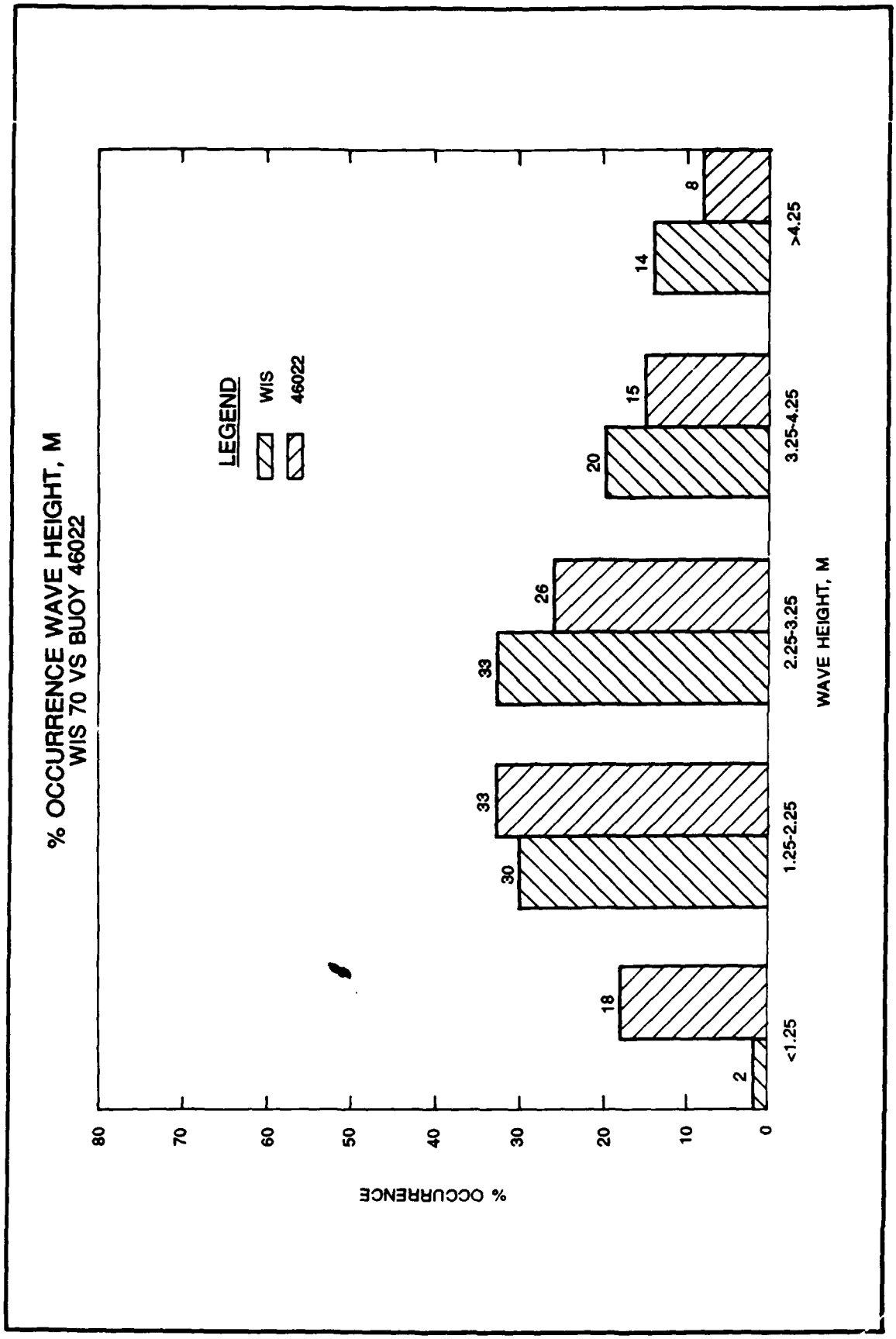

% OCCURRENCE WAVE HEIGHT, M
WIS 70 VS BUOY 46022
LEGEND
WIS
46022
% OCCURRENCE
0
10
20
30
40
50
60
70
80
2
18
30
33
33
26
20
15
14
8
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 10

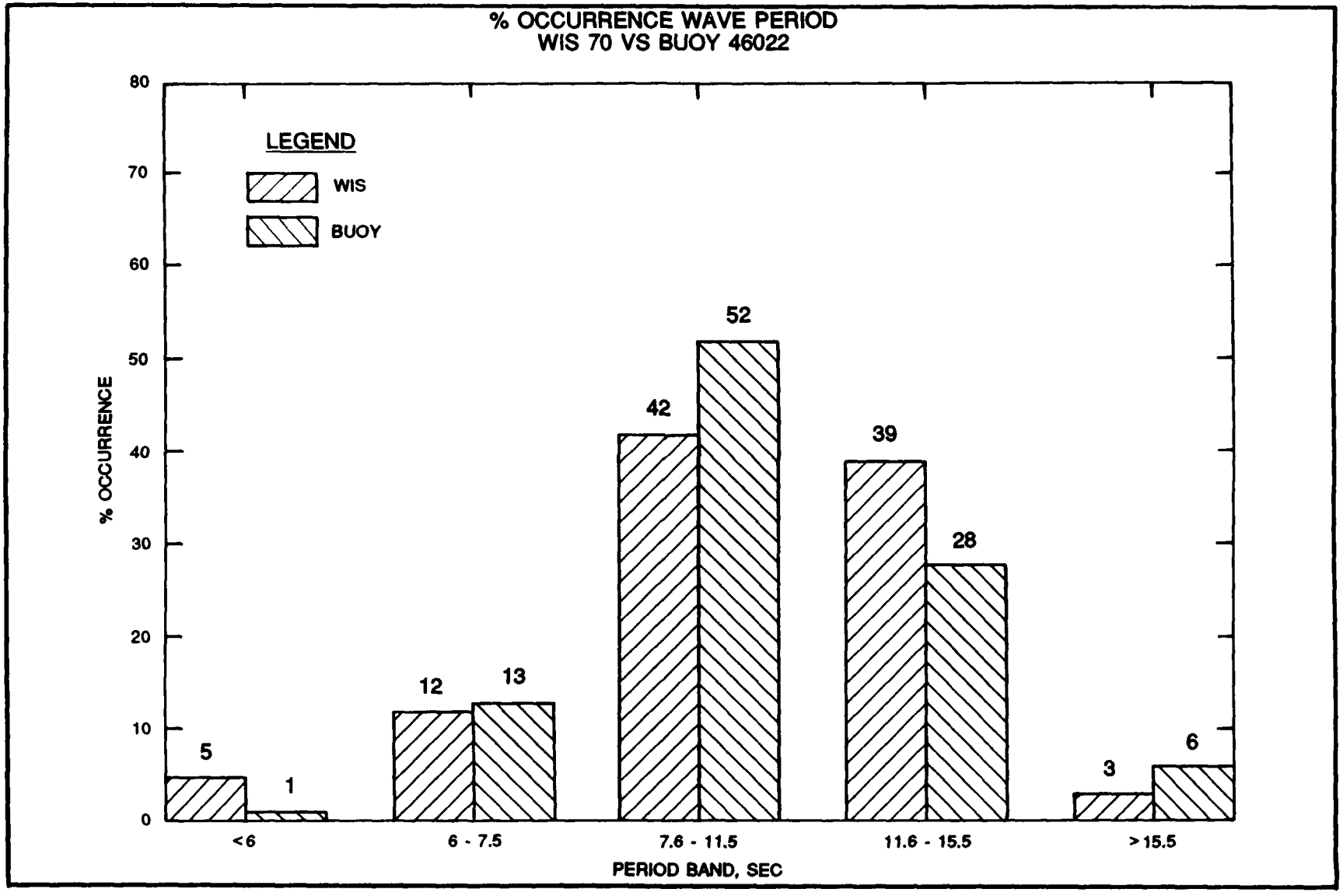

% OCCURRENCE WAVE PERIOD
WIS 70 VS BUOY 46022
LEGEND
WIS
BUOY
% OCCURRENCE
80
70
60
50
40
30
20
10
0
5
1
12
13
42
52
39
28
3
6
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

PLATE 11

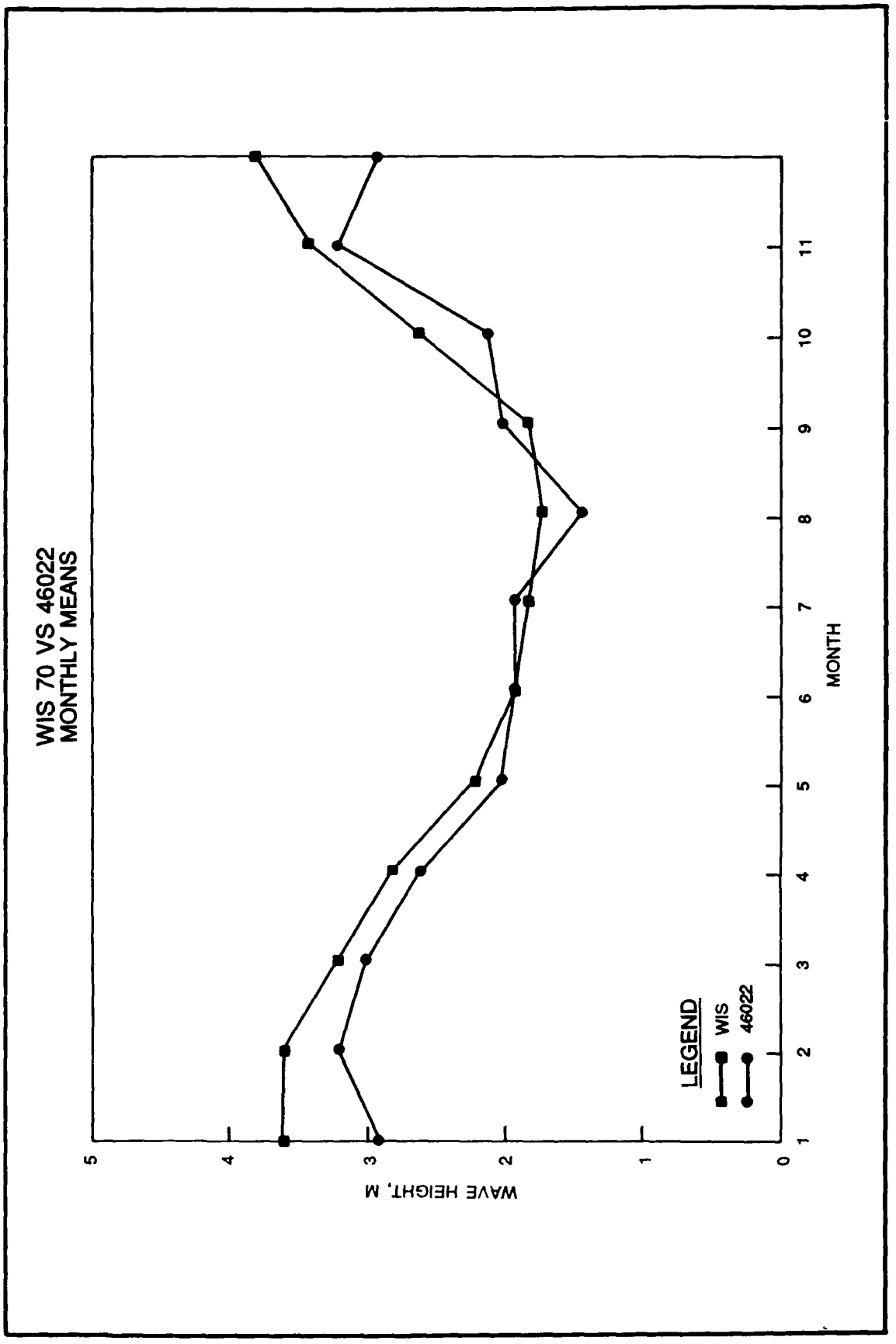

WIS 70 VS 46022
MONTHLY MEANS
WAVE HEIGHT, M
MONTH
LEGEND
WIS
46022
0
1
2
3
4
5
6
7
8
9
10
11

PLATE 12

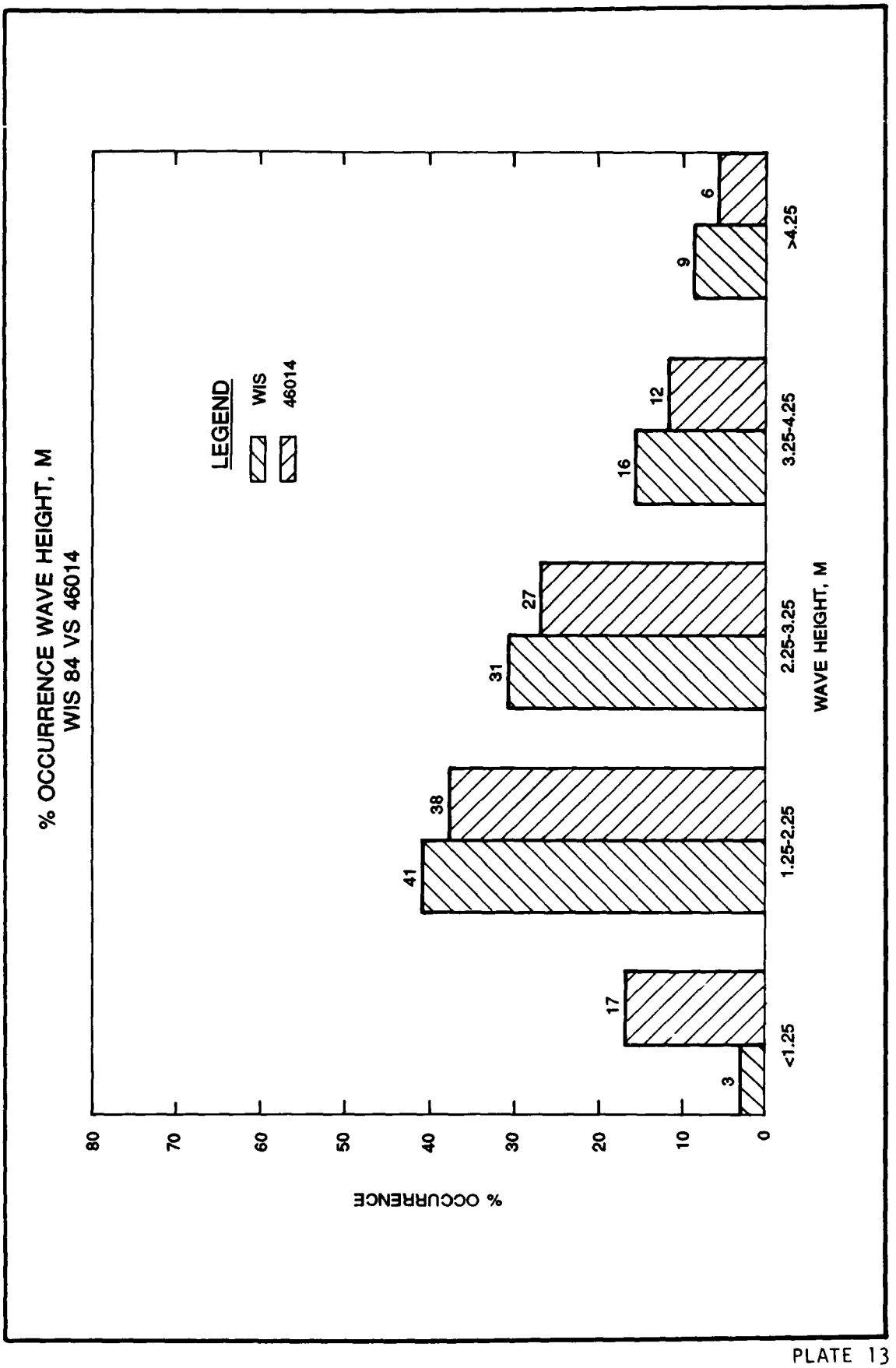

% OCCURRENCE WAVE HEIGHT, M
WIS 84 VS 46014
LEGEND
WIS
46014
% OCCURRENCE
0
10
20
30
40
50
60
70
80
3
17
41
38
31
27
16
12
9
6
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 13

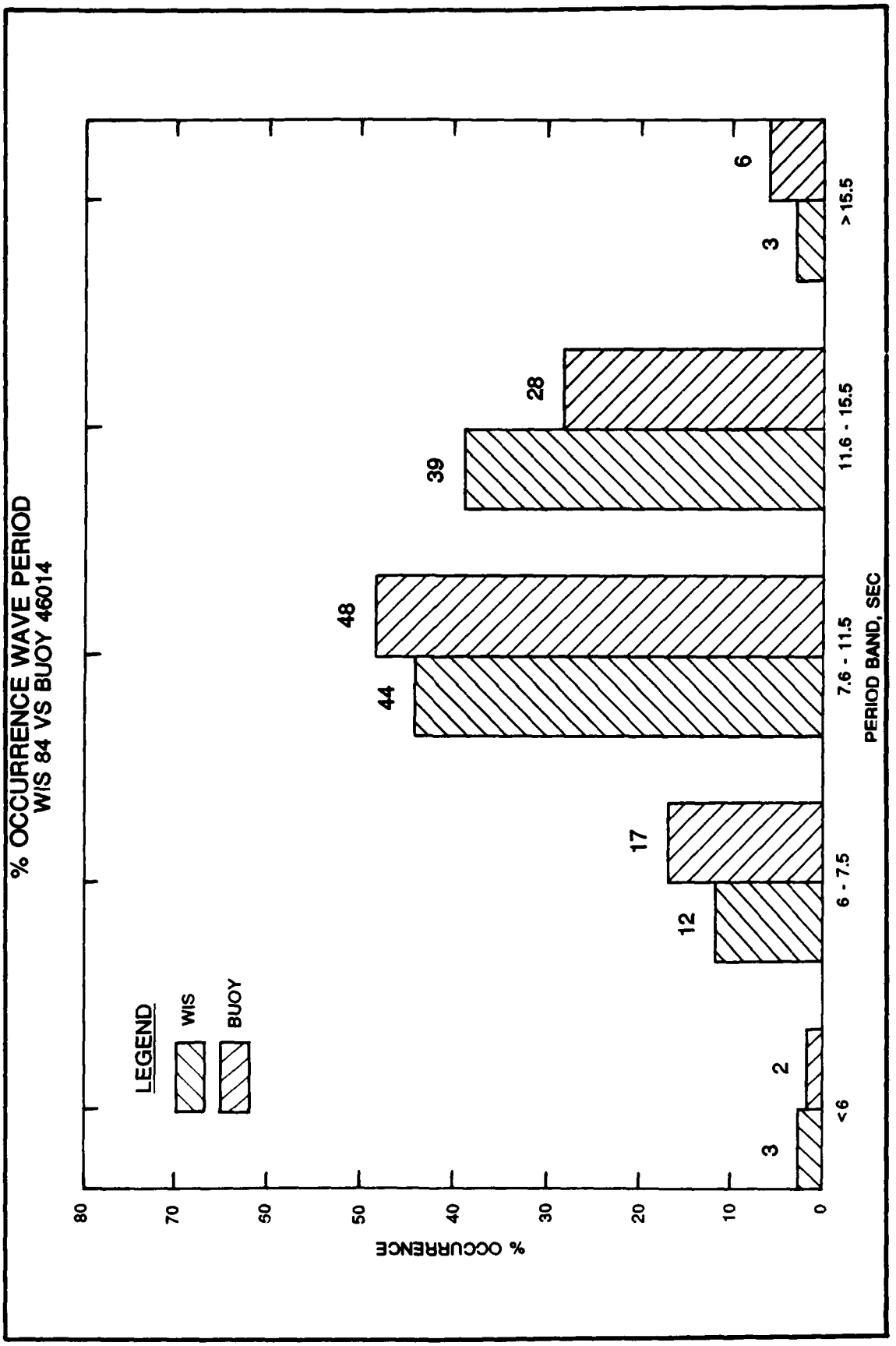

% OCCURRENCE WAVE PERIOD
WIS 84 VS BUOY 46014
LEGEND
WIS
BUOY
% OCCURRENCE
0
10
20
30
40
50
60
70
80
3
2
17
12
48
44
39
28
6
3
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

PLATE 14

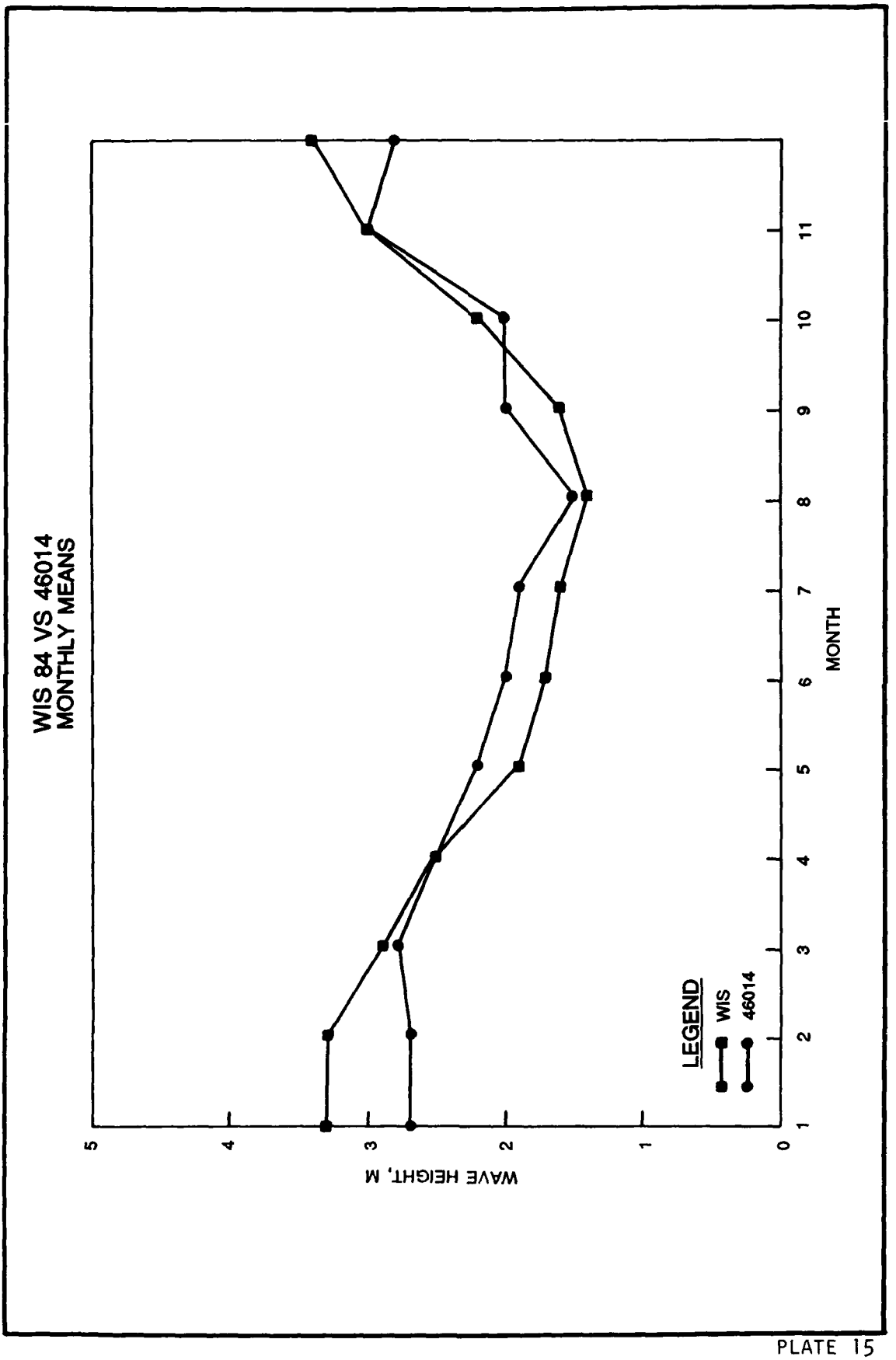

WIS 84 VS 46014
MONTHLY MEANS
WAVE HEIGHT, M
MONTH
LEGEND
WIS
46014
0
1
2
3
4
5
1
2
3
4
5
6
7
8
9
10
11

PLATE 15

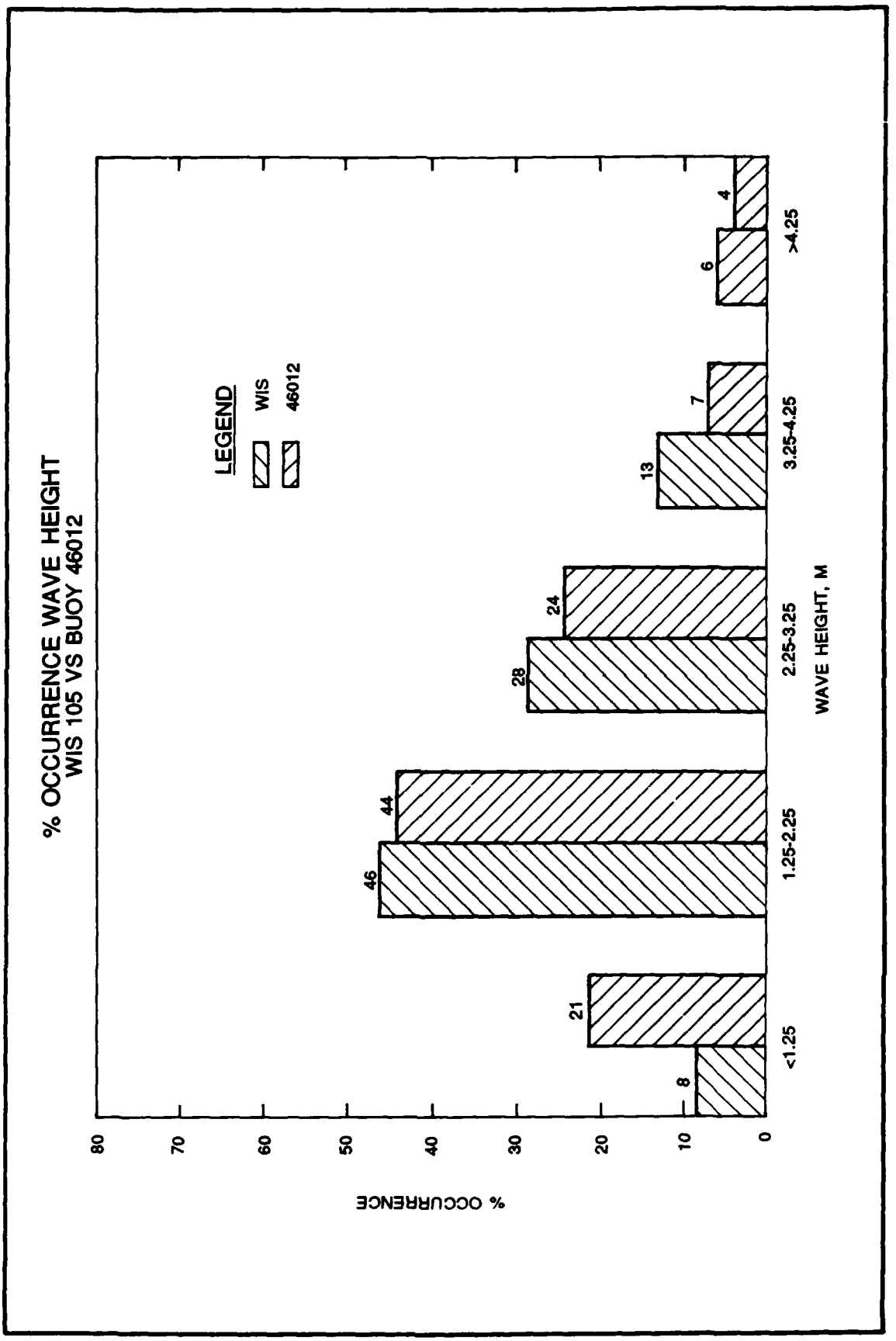

% OCCURRENCE WAVE HEIGHT
WIS 105 VS BUOY 46012
LEGEND
WIS
46012
% OCCURRENCE
0
10
20
30
40
50
60
70
80
8
21
46
44
28
24
13
7
6
4
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 16

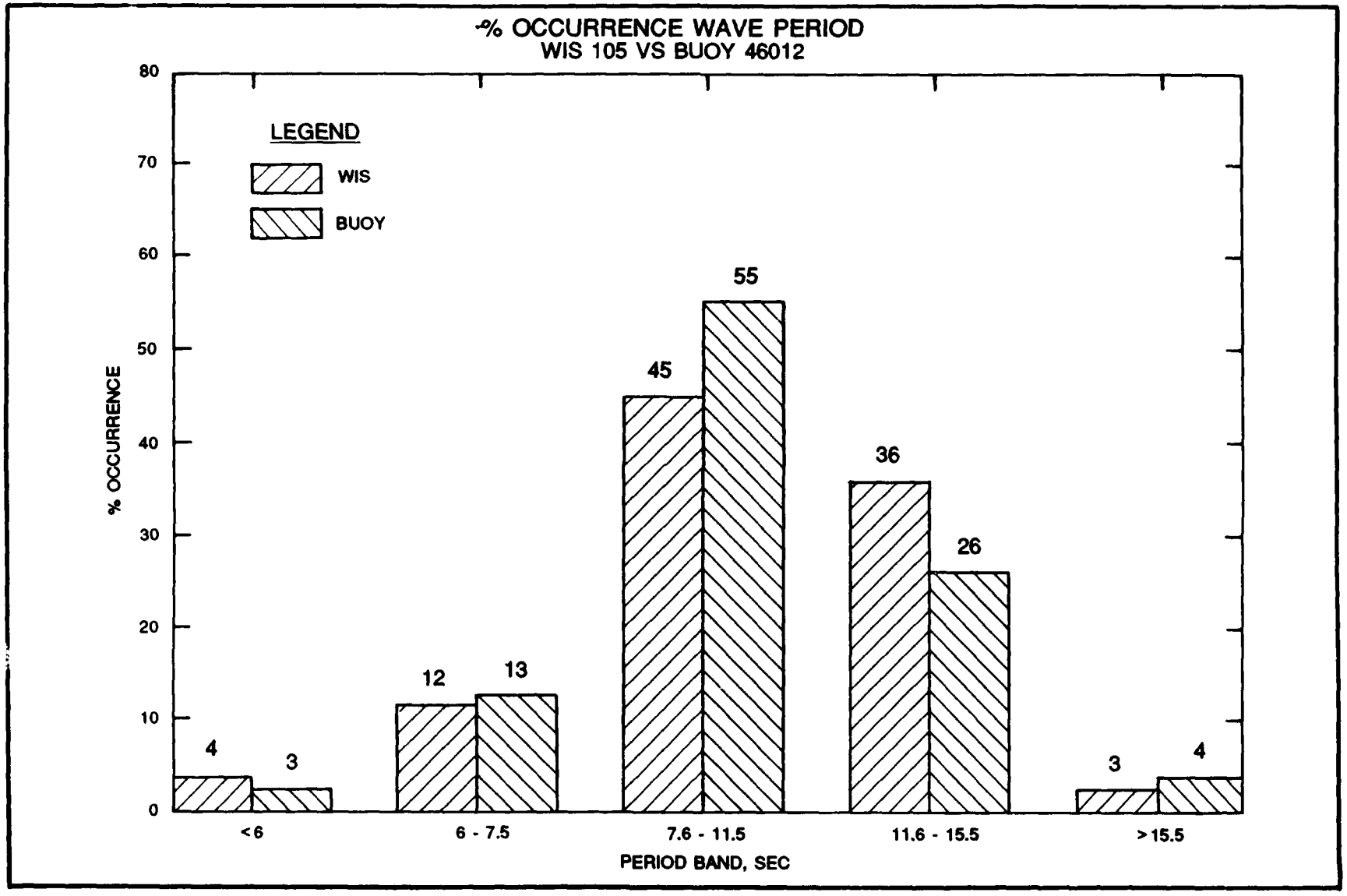
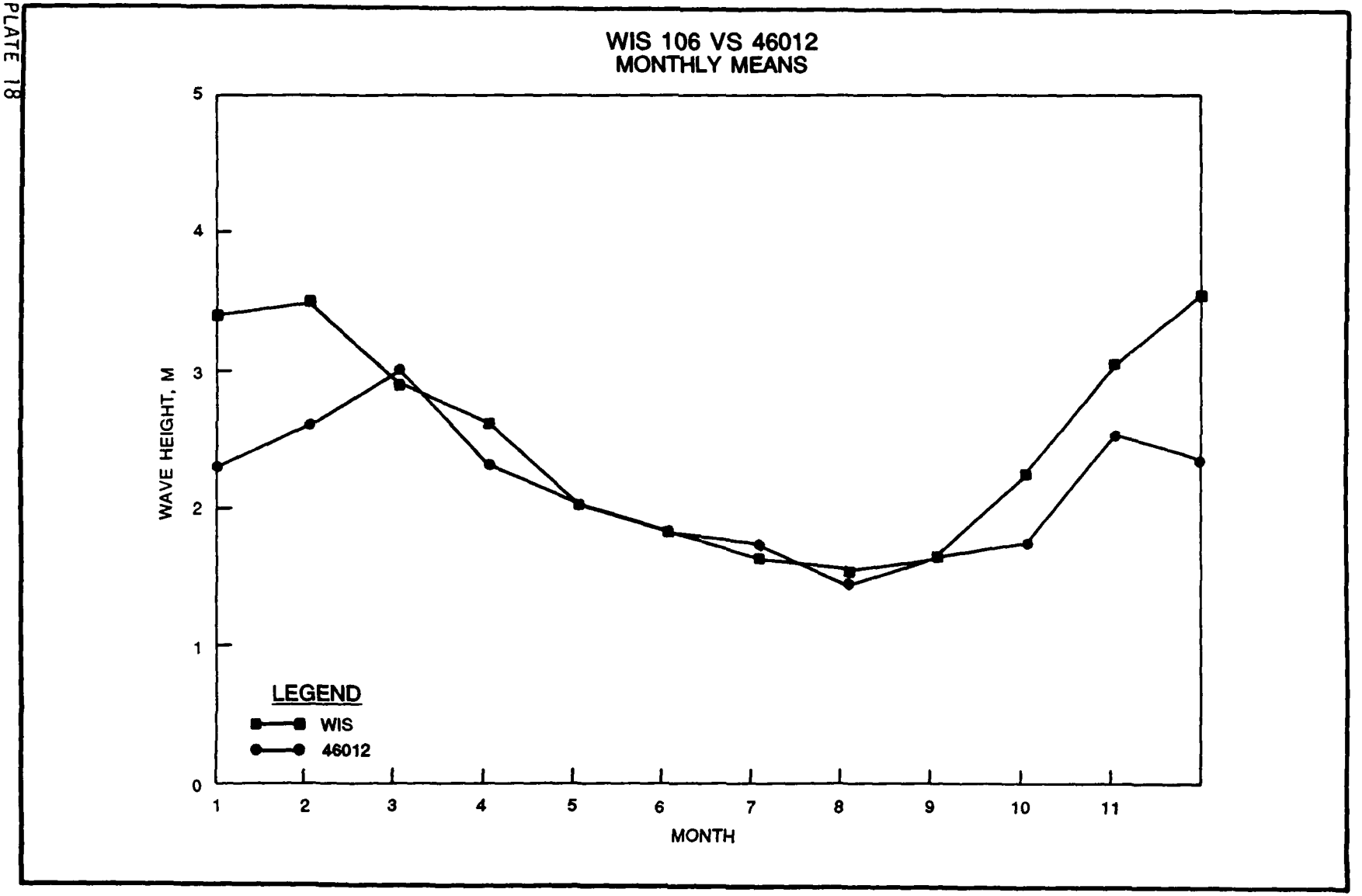

% OCCURRENCE WAVE PERIOD
WIS 105 VS BUOY 46012
LEGEND
WIS
BUOY
% OCCURRENCE
80
70
60
50
40
30
20
10
0
4
3
12
13
45
55
36
26
3
4
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

PLATE 17

PLATE 18


WIS 106 VS 46012
MONTHLY MEANS
WAVE HEIGHT, M
0
1
2
3
4
5
MONTH
1
2
3
4
5
6
7
8
9
10
11
LEGEND
WIS
46012

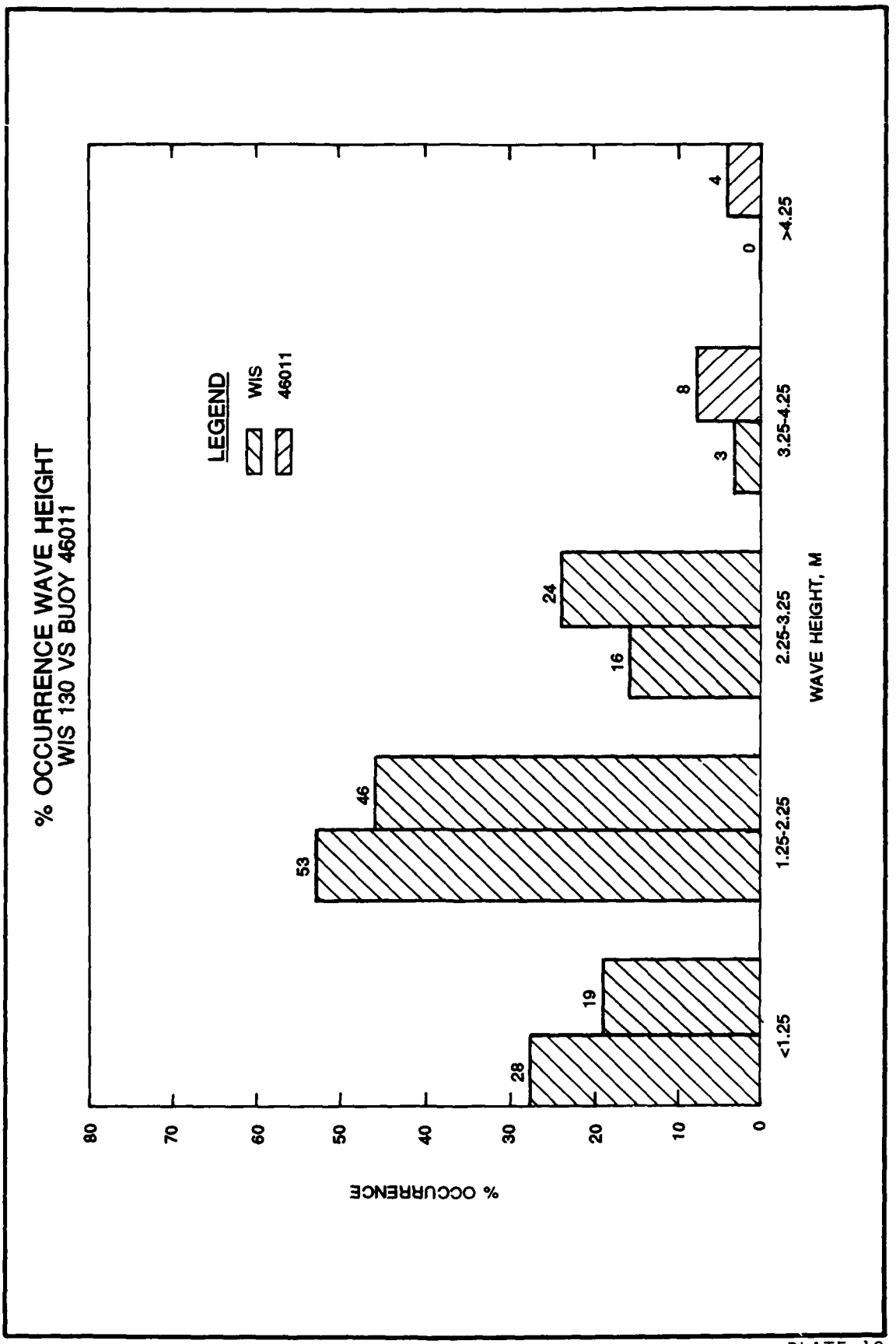

% OCCURRENCE WAVE HEIGHT
WIS 130 VS BUOY 46011
LEGEND
WIS
46011
% OCCURRENCE
0
10
20
30
40
50
60
70
80
28
19
53
46
24
16
8
3
4
0
<1.25
1.25-2.25
2.25-3.25
3.25-4.25
>4.25
WAVE HEIGHT, M

PLATE 19

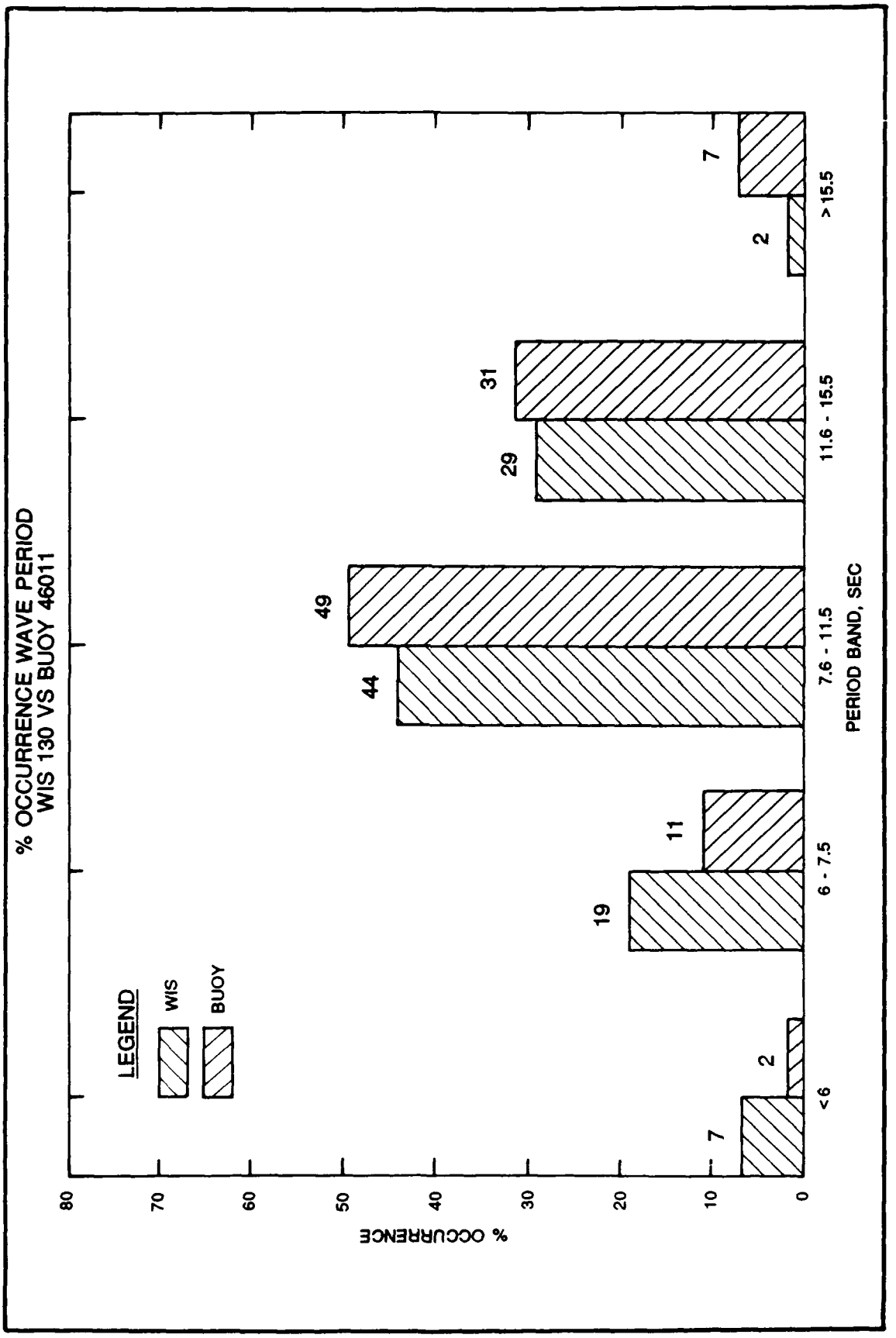

% OCCURRENCE WAVE PERIOD
WIS 130 VS BUOY 46011
LEGEND
WIS
BUOY
% OCCURRENCE
0
10
20
30
40
50
60
70
80
7
2
19
11
49
44
31
29
7
2
<6
6 - 7.5
7.6 - 11.5
11.6 - 15.5
>15.5
PERIOD BAND, SEC

PLATE 20

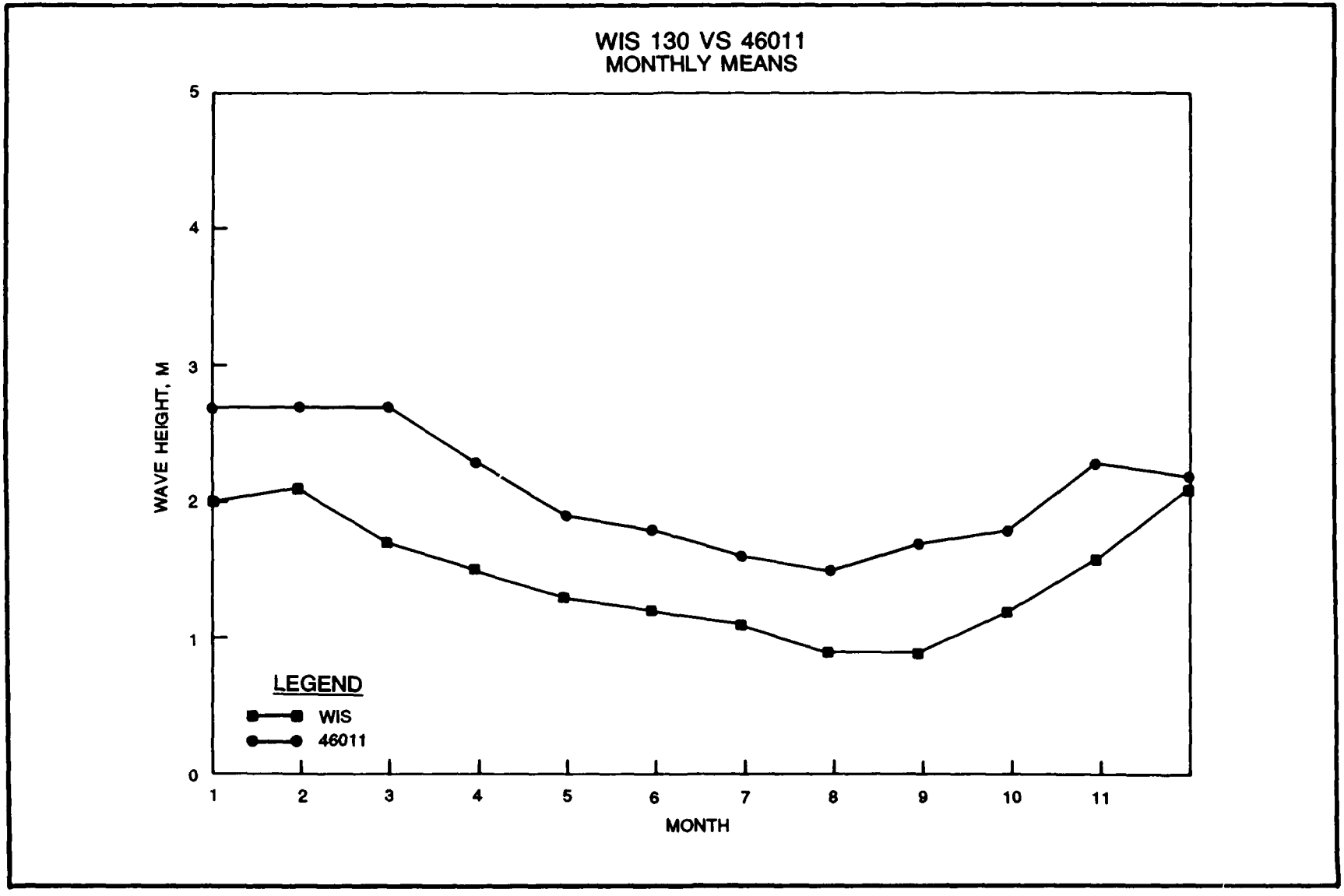
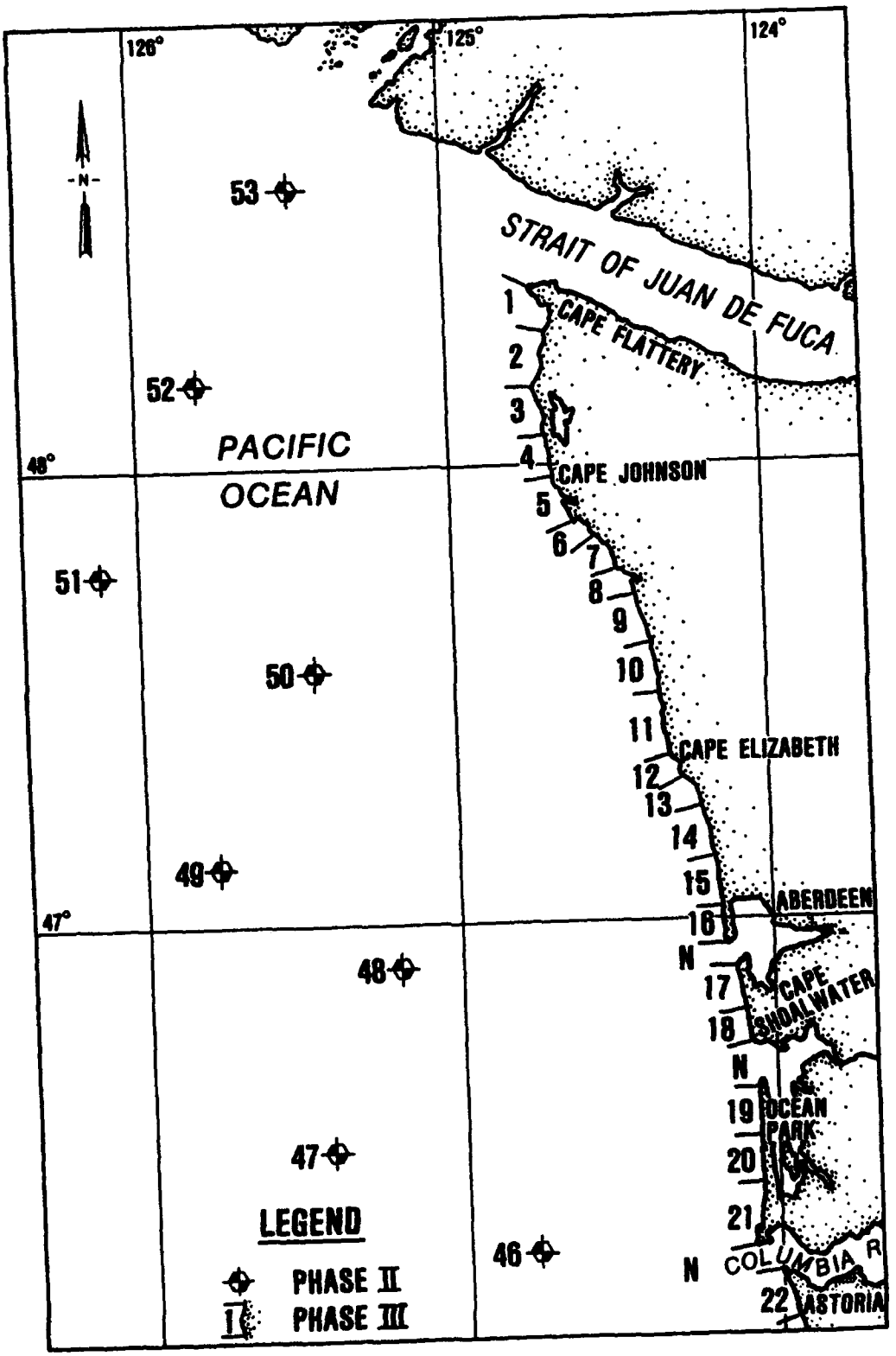

WIS 130 VS 46011
MONTHLY MEANS
WAVE HEIGHT, M
0
1
2
3
4
5
MONTH
1
2
3
4
5
6
7
8
9
10
11
LEGEND
WIS
46011

PLATE 21

Appendix A: Sta 1 through 21


126°
125°
124°
-N-
53
52
51
50
49
48
47
46
PACIFIC
OCEAN
STRAIT OF JUAN DE FUCA
CAPE FLATTERY
CAPE JOHNSON
CAPE ELIZABETH
ABERDEEN
CAPE SHOALWATER
OCEAN PARK
COLUMBIA R
ASTORIA
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
N
17
18
N
19
20
21
N
22
LEGEND
PHASE II
PHASE III

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	17	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.89 LARGEST HS(M) = 0.98 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 10

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	59	11	15	.	.	8	.	.	.	.	93
0.50 - 0.99	552	2149	1110	5	.	.	.	.	.	.	3816
1.00 - 1.49	1074	2421	3629	188	11	1	.	.	.	.	7324
1.50 - 1.99	650	1009	1769	614	73	.	.	.	.	.	4115
2.00 - 2.49	42	595	487	602	258	22	.	.	.	.	2006
2.50 - 2.99	.	100	172	263	453	85	.	.	.	.	1071
3.00 - 3.49	.	42	47	90	354	131	1	.	.	.	665
3.50 - 3.99	.	.	8	20	140	237	5	.	.	.	410
4.00 - 4.49	.	.	3	6	37	159	15	.	.	.	220
4.50 - 4.99	.	.	.	.	1	65	15	.	.	.	81
5.00 +	.	.	.	.	1	42	39	.	.	.	82
TOTAL	2377	6327	7240	1788	1328	748	75	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 5.99 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 11636

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	13	.	.	3	.	.	23	.	49
0.50 - 0.99	53	1310	1451	515	88	18	8	.	17	.	3460
1.00 - 1.49	90	1892	5092	2992	1050	305	20	18	1	.	11461
1.50 - 1.99	135	639	3685	4504	3196	1242	183	32	1	.	13697
2.00 - 2.49	56	616	1115	3073	4142	2193	396	25	.	.	11616
2.50 - 2.99	.	289	515	939	3560	3465	865	27	.	.	9760
3.00 - 3.49	.	56	347	465	2089	3757	1398	46	.	.	8178
3.50 - 3.99	.	6	183	236	1030	3263	1887	77	.	.	6682
4.00 - 4.49	.	.	77	112	554	2012	2008	159	.	.	4922
4.50 - 4.99	.	.	10	47	160	869	1552	157	.	.	2795
5.00 +	.	.	.	11	53	499	2147	701	.	.	3411
TOTAL	334	4818	12488	12994	16022	17627	10464	1242	42	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 44453

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	29	.	.	.	.	.	.	.	.	32
1.00 - 1.49	18	183	70	1	3	.	.	.	.	.	275
1.50 - 1.99	92	258	239	73	47	10	.	.	.	.	719
2.00 - 2.49	34	278	278	140	97	10	.	.	.	.	837
2.50 - 2.99	3	155	210	181	167	58	1	.	.	.	775
3.00 - 3.49	.	44	140	143	212	51	3	.	.	.	593
3.50 - 3.99	.	8	41	44	160	75	17	.	.	.	345
4.00 - 4.49	.	.	6	13	90	46	6	.	.	.	161
4.50 - 4.99	.	.	.	5	61	39	5	.	.	.	110
5.00 +	.	.	.	1	20	70	17	.	.	.	108
TOTAL	150	955	984	601	857	359	49	0	0	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 2325

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	5	.	.	.	.	.	.	.	.	11
0.50 - 0.99	5	8	.	.	.	.	.	.	.	.	13
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.54 LARGEST HS(M) = 0.96 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

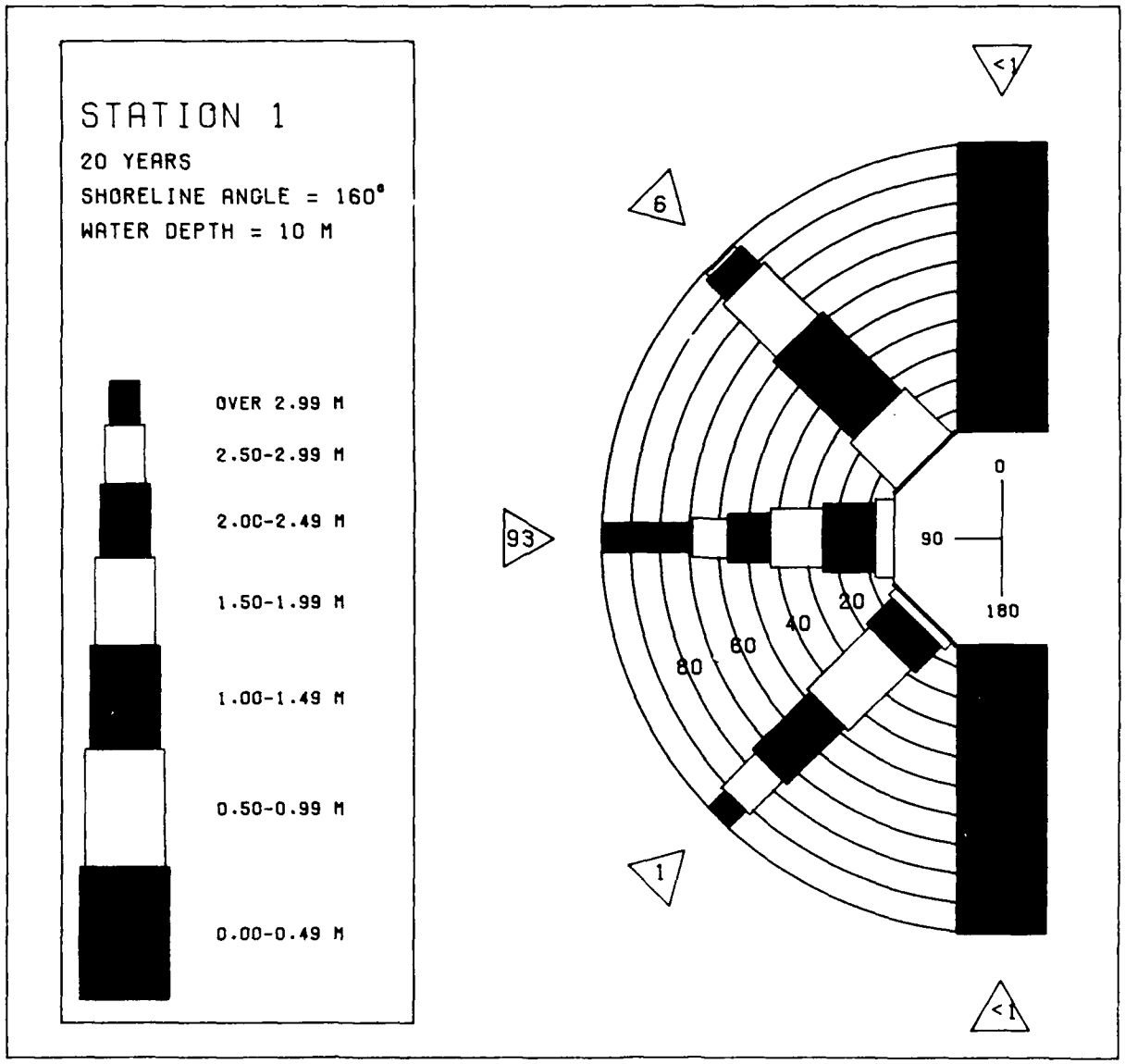
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 1 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 5.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	2	2			1	.	.	2	.	13
0.50 - 0.99	63	349	256	52	8	1	.	.	1	.	730
1.00 - 1.49	118	449	879	318	106	30	2	1	.	.	1903
1.50 - 1.99	87	190	569	527	331	125	18	3	.	.	1850
2.00 - 2.49	13	149	188	381	449	222	39	2	.	.	1443
2.50 - 2.99	.	54	89	138	428	360	86	2	.	.	1157
3.00 - 3.49	.	14	53	72	265	394	140	4	.	.	942
3.50 - 3.99	.	1	23	30	133	357	190	7	.	.	741
4.00 - 4.49	.	.	8	13	68	221	203	15	.	.	528
4.50 - 4.99	.	.	1	5	22	97	157	15	.	.	297
5.00 +				1	7	61	220	70	3	0	359
TOTAL	287	1208	2068	1537	1817	1869	1055	119	3	0	

MEAN HS(M) = 2.42 LARGEST HS(M) = 7.52 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	2.9	2.8	2.2	1.8	1.8	1.3	1.2	1.5	2.3	3.1	3.3	2.3
1957	2.5	2.8	2.5	2.0	1.8	1.5	1.1	1.0	1.7	2.2	3.1	3.6	2.2
1958	4.3	3.6	3.5	2.9	1.6	1.4	1.5	1.3	1.8	2.5	3.3	4.0	2.6
1959	3.8	3.0	3.0	2.0	1.9	1.4	1.4	1.2	1.8	2.6	2.7	3.8	2.4
1960	3.2	4.0	2.3	2.4	1.8	1.6	1.1	1.3	1.5	2.5	3.5	3.6	2.4
1961	4.1	3.8	3.4	2.2	1.6	1.4	1.2	1.0	1.5	2.6	3.0	3.2	2.4
1962	3.0	3.0	2.2	2.1	1.5	1.3	1.0	1.4	1.7	2.6	3.8	3.7	2.3
1963	3.3	4.0	2.8	1.7	1.4	1.6	1.1	0.8	1.9	3.1	3.5	3.8	2.4
1964	4.6	3.3	2.9	2.3	1.7	1.6	1.4	1.5	1.8	2.3	3.0	4.1	2.5
1965	3.4	3.1	2.9	2.1	1.8	1.9	1.3	1.1	1.4	2.2	2.6	3.3	2.3
1966	4.2	2.8	3.0	2.1	1.9	1.5	1.1	1.3	2.0	2.5	2.5	3.6	2.4
1967	3.6	3.4	2.4	1.6	1.5	1.3	1.1	1.1	2.1	2.9	2.8	3.5	2.3
1968	3.2	4.0	3.0	2.2	1.5	1.5	1.3	1.2	1.5	2.6	3.7	3.3	2.4
1969	2.5	3.7	2.9	2.9	1.6	1.8	1.3	1.3	1.9	2.6	3.3	5.0	2.6
1970	3.7	4.2	3.6	2.7	1.8	1.5	1.5	1.2	1.7	2.3	2.8	3.7	2.6
1971	3.3	3.5	3.5	2.6	1.9	1.7	0.9	1.4	1.7	2.3	3.4	3.2	2.5
1972	4.0	3.3	2.5	2.4	1.7	1.5	1.5	1.2	1.5	2.0	3.9	3.4	2.5
1973	4.0	4.6	3.3	2.2	2.1	1.9	1.9	1.4	1.9	2.5	3.2	4.3	2.7
1974	3.5	3.5	3.3	2.7	2.0	1.8	1.4	1.3	1.5	3.0	3.5	4.2	2.6
1975	3.4	3.0	2.8	1.9	1.6	1.2	1.1	1.2	1.0	2.6	3.3	3.3	2.2
MEAN	3.6	3.4	2.9	2.3	1.7	1.6	1.3	1.2	1.7	2.6	3.2	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	4.7	5.1	4.2	3.0	2.9	2.0	2.5	3.0	4.1	5.0	5.7
1957	4.6	5.8	5.5	4.7	3.8	2.6	2.0	1.8	3.0	3.9	5.0	5.4
1958	6.7	6.3	5.3	6.0	2.9	2.2	2.4	2.0	2.9	4.6	5.1	6.7
1959	6.2	5.3	5.7	3.9	3.6	2.6	2.1	2.1	2.1	5.2	6.6	6.4
1960	7.0	6.9	3.7	4.0	2.7	3.1	1.8	2.2	2.4	6.1	6.0	6.3
1961	6.5	6.1	6.3	4.4	2.4	2.4	1.8	2.5	2.7	5.5	5.5	4.8
1962	6.1	4.6	3.9	3.7	2.7	1.9	1.7	2.7	4.4	5.6	7.3	6.3
1963	5.9	6.3	5.6	3.2	2.8	3.1	1.9	1.5	3.1	6.5	5.5	7.3
1964	6.4	6.2	4.6	4.4	3.1	2.7	2.3	2.5	3.2	3.8	5.1	6.2
1965	6.2	5.2	4.9	2.9	4.4	3.0	2.2	1.9	2.4	5.6	5.3	5.5
1966	6.4	5.3	5.3	4.6	3.0	2.7	2.0	2.2	4.0	4.9	5.0	6.4
1967	5.7	6.2	4.9	3.2	2.3	2.2	1.7	1.8	3.5	6.2	5.7	6.9
1968	6.3	6.2	5.1	3.6	3.0	2.6	2.4	2.3	3.0	5.4	6.3	5.6
1969	4.3	5.5	5.5	5.7	3.2	3.1	2.3	2.2	3.3	3.7	6.6	7.3
1970	6.7	6.4	6.1	5.4	2.9	2.6	2.3	1.8	2.9	4.7	6.6	6.5
1971	6.2	5.7	6.0	4.4	3.6	2.9	1.7	3.5	3.0	4.1	5.8	6.0
1972	6.6	6.3	5.6	4.1	2.7	2.8	3.7	1.9	3.2	4.1	6.0	7.5
1973	6.7	6.2	6.1	4.3	3.4	3.0	3.0	2.1	3.2	6.0	6.3	6.5
1974	6.3	6.5	6.2	4.9	3.4	3.6	2.9	2.6	2.3	5.2	5.4	6.5
1975	5.3	6.1	6.0	4.1	3.5	2.1	1.9	1.9	1.8	4.4	5.9	5.6

20 YR. STATISTICS FOR PACIFIC STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		72122600

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	32	1	.	.	.	.	.	.	.	.	33
1.00 - 1.49	309	1	1	.	.	.	.	.	.	.	311
1.50 - 1.99	364	25	.	.	.	.	.	.	.	.	389
2.00 - 2.49	27	32	.	.	.	.	.	.	.	.	59
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	1	.	.	.	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	732	66	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 471

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	44	.	15	.	.	10	.	.	20	.	89
0.50 - 0.99	506	2277	1877	446	68	17	8	.	20	.	5219
1.00 - 1.49	886	3439	7185	2760	994	258	23	5	1	.	15551
1.50 - 1.99	824	1242	4734	4592	2907	1208	155	41	1	.	15714
2.00 - 2.49	176	965	1255	3340	3821	2130	417	25	.	.	12129
2.50 - 2.99	3	222	378	942	3518	3331	903	29	.	.	9326
3.00 - 3.49	.	75	167	412	2049	3559	1466	58	.	.	7786
3.50 - 3.99	.	6	63	131	833	2813	1921	131	.	.	5898
4.00 - 4.49	.	.	5	34	244	1753	1969	140	.	.	4145
4.50 - 4.99	.	.	5	8	63	737	1451	162	.	.	2426
5.00 +	.	.	.	.	20	299	1627	660	.	.	2606
TOTAL	2439	8226	15684	12665	14517	16115	9950	1251	42	0	

MEAN HS(M) = 2.41 LARGEST HS(M) = 7.25 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 47291

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		11	.	.	.	.	.	.	.	.	11
0.50 - 0.99	27	730	396	46	.	.	.	.	.	.	1199
1.00 - 1.49	65	982	1481	364	135	65	.	.	.	.	3092
1.50 - 1.99	159	504	1197	744	634	109	.	.	.	.	3347
2.00 - 2.49	39	574	607	768	975	299	11	.	.	.	3273
2.50 - 2.99	.	177	352	379	1040	612	97	.	.	.	2657
3.00 - 3.49	.	23	176	191	568	886	154	.	.	.	1998
3.50 - 3.99	.	.	80	85	316	492	196	11	.	.	1180
4.00 - 4.49	.	.	30	34	133	231	162	10	.	.	600
4.50 - 4.99	.	.	1	11	20	106	102	10	.	.	250
5.00 +	.	.	.	1	6	61	203	5	.	.	276
TOTAL	290	3001	4320	2623	3827	2851	925	36	0	0	

MEAN HS(M) = 2.32 LARGEST HS(M) = 6.32 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 10469

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	10	.	.	.	.	.	.	.	.	18
0.50 - 0.99	20	63	1	.	.	.	.	.	.	.	84
1.00 - 1.49	27	59	3	.	.	.	.	.	.	.	89
1.50 - 1.99	32	92	.	.	.	.	.	.	.	.	124
2.00 - 2.49	3	29	.	.	.	.	.	.	.	.	32
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	90	255	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.36 LARGEST HS(M) = 3.11 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 208

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

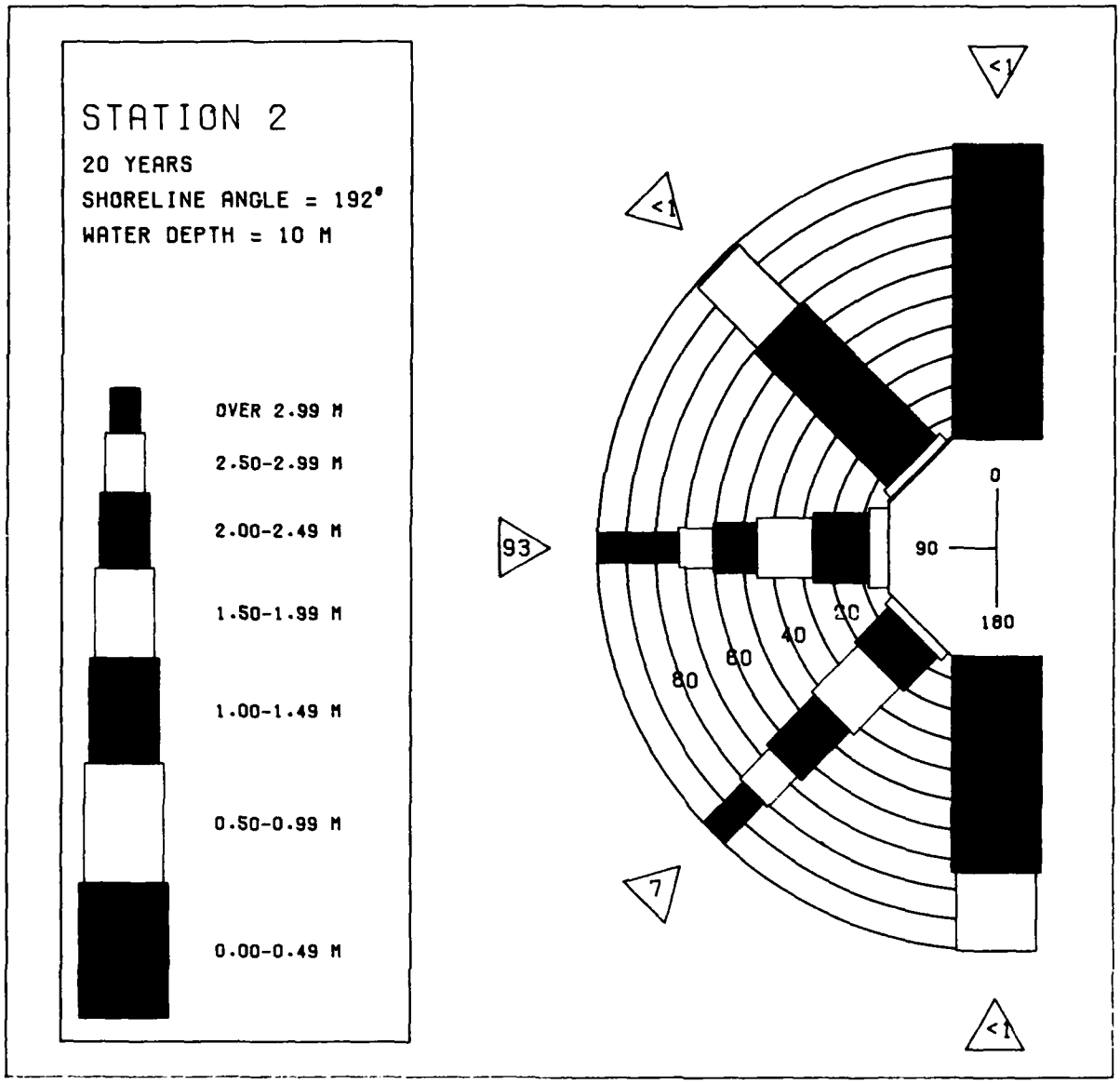
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	5	2	1								11
0.50 - 0.99	58	307	227	49	6	1	.	.	2	.	650
1.00 - 1.49	128	448	867	312	112	32	2	.	2	.	1901
1.50 - 1.99	138	166	593	533	354	131	16	4	.	.	1955
2.00 - 2.49	24	160	186	410	479	242	42	2	.	.	1545
2.50 - 2.99	.	40	73	132	455	394	100	2	.	.	1196
3.00 - 3.49	.	10	34	60	261	444	162	5	.	.	976
3.50 - 3.99	.	.	14	21	114	330	211	14	.	.	704
4.00 - 4.49	.	.	3	6	37	198	213	15	.	.	472
4.50 - 4.99	.	.	.	2	8	84	155	17	.	.	266
5.00 +	.	.	.	.	2	36	183	66	.	.	287
TOTAL	353	1153	1998	1525	1828	1893	1084	125	4	0	

MEAN HS(M) = 2.38 LARGEST HS(M) = 7.25 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.9	2.8	2.2	1.9	1.8	1.4	1.3	1.5	2.4	3.0	3.2	2.3
1957	2.6	2.8	3.1	2.0	1.9	1.5	1.2	1.1	1.7	2.1	3.1	3.4	2.2
1958	4.1	3.2	2.4	2.2	1.7	1.5	1.6	1.4	1.8	2.5	3.2	3.8	2.5
1959	3.6	2.9	3.0	2.0	1.9	1.4	1.4	1.3	1.8	2.5	2.6	3.6	2.3
1960	3.1	3.9	2.2	2.3	1.7	1.6	1.2	1.3	1.6	2.4	3.5	3.4	2.3
1961	3.9	3.6	2.3	2.3	1.5	1.4	1.5	1.1	1.6	2.7	3.0	3.1	2.4
1962	2.9	3.0	2.2	2.1	1.6	1.3	1.1	1.4	1.7	2.5	3.7	3.4	2.2
1963	3.3	3.6	2.9	1.7	1.4	1.7	1.2	0.8	1.9	3.1	3.3	3.5	2.4
1964	4.4	3.3	2.9	2.4	1.8	1.6	1.5	1.6	1.8	2.3	2.9	4.0	2.5
1965	3.2	3.1	2.9	2.1	1.9	2.0	1.3	1.1	1.5	2.6	2.3	3.3	2.3
1966	4.1	2.7	2.9	2.2	2.0	1.4	1.2	1.3	2.0	2.5	2.4	3.4	2.3
1967	3.5	3.4	2.4	2.8	1.5	1.4	1.2	1.1	2.1	2.8	2.9	3.4	2.3
1968	2.8	3.7	2.9	2.3	1.5	1.5	1.4	1.3	1.5	2.5	3.6	2.9	2.3
1969	2.4	2.9	2.7	2.8	1.6	1.8	1.4	1.4	1.8	2.6	3.2	4.9	2.5
1970	3.4	4.2	3.7	2.7	1.7	1.5	1.6	1.2	1.7	2.3	3.6	3.5	2.5
1971	3.2	3.4	3.4	2.6	1.9	1.7	1.0	1.5	1.7	2.3	3.3	3.2	2.4
1972	4.0	3.1	3.0	2.3	1.7	1.6	1.5	1.3	1.5	2.1	3.8	3.2	2.4
1973	3.7	3.5	3.3	2.2	2.1	1.9	2.0	1.5	1.9	2.5	3.1	4.0	2.6
1974	3.2	3.3	3.1	2.6	2.0	1.8	1.5	1.4	1.6	3.0	3.5	4.0	2.6
1975	3.3	2.9	2.7	2.0	1.7	1.3	1.1	1.2	1.0	2.5	3.0	3.2	2.2
MEAN	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	4.9	5.2	4.2	3.1	2.9	2.2	2.6	3.3	4.2	4.8	5.4
1957	4.8	5.2	5.2	4.7	3.8	2.5	2.1	1.9	3.1	3.9	5.5	5.5
1958	6.6	6.1	5.2	6.0	2.9	2.4	2.6	2.2	2.9	4.8	5.1	6.4
1959	6.2	5.1	5.6	3.9	3.5	2.7	2.2	2.2	3.2	4.9	6.5	6.2
1960	6.6	6.6	3.7	4.0	2.7	3.1	2.0	2.2	2.6	6.1	5.9	6.2
1961	6.3	5.4	6.0	4.3	2.4	2.3	1.9	2.4	2.7	5.2	6.0	4.6
1962	6.0	4.5	3.8	3.7	2.8	2.0	1.9	2.7	4.4	5.2	7.3	5.6
1963	5.6	5.6	6.2	3.5	5.6	3.2	2.0	1.5	2.8	6.5	5.2	6.7
1964	6.4	5.9	4.2	4.8	3.5	2.6	2.3	2.7	3.1	3.8	5.3	6.0
1965	6.1	5.5	4.7	2.9	4.8	3.4	2.4	2.0	2.4	6.2	4.9	5.7
1966	6.4	5.5	5.6	4.5	3.1	2.7	2.2	2.2	4.1	4.7	5.2	6.3
1967	5.6	6.3	5.0	3.6	2.4	2.3	1.8	1.8	3.5	6.1	6.2	6.4
1968	6.0	6.0	5.0	3.7	3.4	2.4	2.4	2.4	3.0	5.1	6.1	5.1
1969	4.6	5.4	5.7	5.6	3.3	3.0	2.2	2.3	3.1	3.9	6.4	7.0
1970	6.1	6.3	6.1	5.1	3.8	2.8	2.2	2.0	3.1	4.6	6.4	6.3
1971	5.4	5.7	5.6	4.9	3.4	2.8	2.1	2.4	3.1	3.7	5.5	6.0
1972	6.7	6.4	5.6	4.3	2.8	2.9	3.6	2.1	3.0	4.3	6.1	7.2
1973	6.5	6.0	6.1	4.4	3.4	3.0	2.9	2.2	3.1	5.8	6.3	6.1
1974	5.5	5.2	6.0	4.8	3.5	3.7	3.0	2.4	2.4	5.4	5.5	6.1
1975	5.1	6.3	6.0	4.4	3.6	2.2	1.9	2.0	1.8	4.4	5.3	5.2

20 YR. STATISTICS FOR PACIFIC STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	96.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	22	.	.	.	.	.	.	.	.	.	22
1.00 - 1.49	222	.	.	.	.	.	.	.	.	.	222
1.50 - 1.99	138	.	.	.	.	.	.	.	.	.	138
2.00 - 2.49	3	.	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	385	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.10 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 226

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	47	1	5	.	.	1	.	.	.	.	54
0.50 - 0.99	501	1093	224	.	.	1	.	.	.	.	1819
1.00 - 1.49	939	1806	1204	53	6	.	.	.	.	.	4008
1.50 - 1.99	1021	891	881	232	29	.	.	.	.	.	3054
2.00 - 2.49	145	722	379	319	83	3	.	.	.	.	1651
2.50 - 2.99	.	128	133	157	212	32	.	.	.	.	662
3.00 - 3.49	.	59	59	53	217	94	.	.	.	.	482
3.50 - 3.99	.	3	11	18	46	133	.	.	.	.	211
4.00 - 4.49	.	.	1	3	22	95	10	.	.	.	131
4.50 - 4.99	.	.	1	.	8	25	6	.	.	.	40
5.00 +							6				6
TOTAL	2653	4703	2898	835	623	384	22	0	0	0	

MEAN HS(M) = 1.68 LARGEST HS(M) = 5.58 MEAN TP(SEC) = 7.7 NUMBER OF CASES = 7097

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	11	.	.	8	.	18	.	.	47
0.50 - 0.99	71	1880	2010	456	75	17	8	22	.	.	4539
1.00 - 1.49	106	2486	7024	2849	954	258	17	8	1	.	13703
1.50 - 1.99	138	747	4673	4760	3020	1189	160	39	1	.	14727
2.00 - 2.49	53	622	1278	3533	4183	2079	378	29	.	.	12155
2.50 - 2.99	.	265	528	1071	3964	3359	814	20	.	.	10021
3.00 - 3.49	.	58	280	559	2263	3844	1382	49	.	.	8435
3.50 - 3.99	.	.	150	225	1165	3323	1844	77	.	.	6784
4.00 - 4.49	.	.	54	100	516	2103	1998	155	.	.	4926
4.50 - 4.99	.	.	8	37	128	922	1598	150	.	.	2843
5.00 +				8	44	571	2263	713			3599
TOTAL	368	6068	16016	13598	16312	17673	10462	1240	42	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 7.54 MEAN TP(SEC) = 11.0 NUMBER OF CASES = 47813

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	27	.	.	.	.	.	.	.	.	27
1.00 - 1.49	18	195	94	6	.	.	.	.	.	.	313
1.50 - 1.99	104	282	302	100	71	10	.	.	.	.	869
2.00 - 2.49	59	349	350	179	126	20	.	.	.	.	1083
2.50 - 2.99	3	219	280	219	236	87	3	.	.	.	1047
3.00 - 3.49	.	51	217	177	308	80	6	.	.	.	839
3.50 - 3.99	.	11	80	71	203	174	20	.	.	.	559
4.00 - 4.49	.	1	34	29	162	126	20	.	.	.	372
4.50 - 4.99	.	.	1	18	83	111	23	3	.	.	239
5.00 +	.	.	.	3	29	80	58	1	.	.	171
TOTAL	184	1135	1358	802	1218	688	130	4	0	0	

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 3241

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	8	3	.	.	.	.	.	.	.	.	11
1.00 - 1.49	17	11	.	.	.	.	.	.	.	.	28
1.50 - 1.99	23	8	.	.	.	.	.	.	.	.	31
2.00 - 2.49	6	22	.	.	.	.	.	.	.	.	28
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	55	45	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 2.71 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 62

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

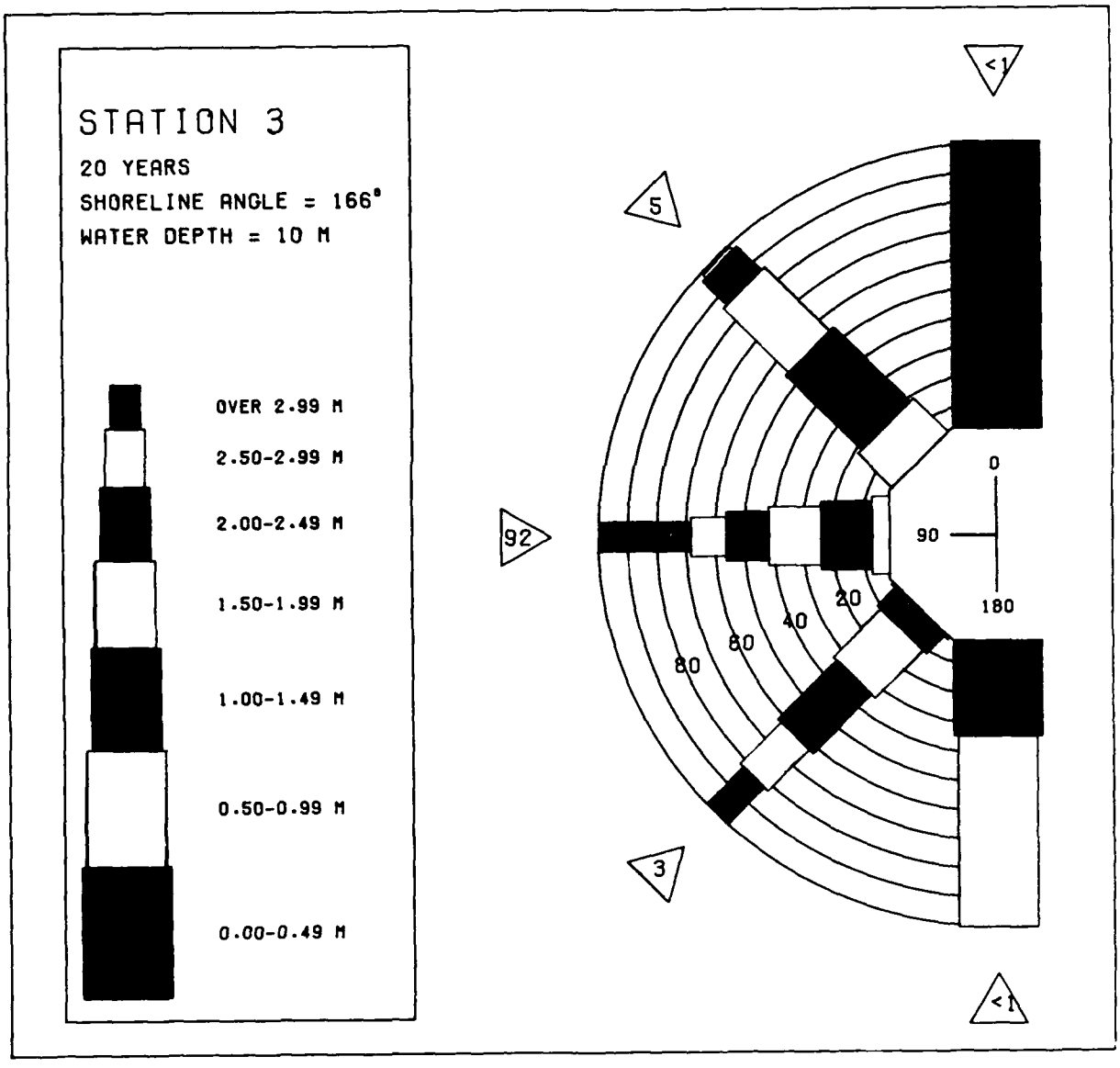
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 3 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.9	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	4	1	1	.	.	1	.	.	1	.	8
0.50 - 0.99	60	300	223	45	7	1	.	.	2	.	638
1.00 - 1.49	130	450	832	290	96	25	2	.	.	.	1824
1.50 - 1.99	142	193	585	509	312	119	16	3	.	.	1879
2.00 - 2.49	26	171	200	403	439	210	37	2	.	.	1488
2.50 - 2.99	.	61	94	144	441	347	81	2	.	.	1170
3.00 - 3.49	.	16	55	79	278	401	150	4	.	.	971
3.50 - 3.99	.	1	24	31	141	393	163	7	.	.	753
4.00 - 4.49	.	.	9	13	70	232	202	15	.	.	541
4.50 - 4.99	.	.	1	5	22	105	162	15	.	.	310
5.00 +	.	.	.	1	7	65	232	71	3	0	376
TOTAL	362	1193	2024	1520	1813	1869	1055	119	3	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.54 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 3 (48.17N/ 124.75W TO 48.06N/ 124.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	2.9	2.9	2.3	1.9	1.8	1.4	1.3	1.5	2.4	3.1	3.4	2.4
1957	2.6	2.9	3.2	2.1	1.9	1.6	1.2	1.1	1.7	2.3	3.2	3.6	2.3
1958	4.3	3.6	2.5	3.0	1.7	1.5	1.5	1.4	1.8	2.6	3.3	4.0	2.6
1959	3.6	3.1	3.1	2.1	1.9	1.5	1.4	1.2	1.8	2.6	2.7	3.8	2.4
1960	3.2	4.0	2.3	2.4	1.8	1.6	1.2	1.3	1.5	2.5	2.6	3.6	2.4
1961	4.1	3.8	2.2	2.3	1.6	1.4	1.2	1.1	1.6	2.7	3.0	3.2	2.5
1962	3.0	3.0	2.2	2.2	1.5	1.3	1.1	1.4	1.7	2.6	3.8	3.7	2.3
1963	3.3	4.0	2.9	1.7	1.5	1.7	1.2	0.8	1.9	3.2	3.5	3.8	2.5
1964	4.6	3.3	2.9	2.4	1.8	1.7	1.5	1.6	1.8	2.3	3.0	4.2	2.6
1965	3.4	3.1	3.0	2.1	1.9	1.9	1.3	1.1	1.5	2.8	2.6	3.5	2.4
1966	4.3	2.8	3.0	2.2	2.0	1.5	1.2	1.3	2.0	2.5	2.6	3.8	2.4
1967	3.6	3.4	2.5	1.7	1.5	1.3	1.1	1.1	1.7	3.0	2.9	3.6	2.3
1968	3.2	4.0	3.0	2.3	1.5	1.5	1.4	1.3	1.6	2.6	3.8	3.3	2.5
1969	2.6	3.7	2.9	2.9	1.7	1.8	1.4	1.4	1.9	2.7	3.3	5.1	2.6
1970	3.7	4.3	3.7	2.7	1.8	1.5	1.6	1.2	1.7	2.4	2.9	3.7	2.6
1971	3.3	3.6	3.5	2.6	1.9	1.7	1.0	1.5	1.7	2.4	3.4	3.3	2.5
1972	4.1	3.3	3.2	2.4	1.7	1.6	1.5	1.3	1.5	2.1	4.0	3.4	2.5
1973	4.0	3.6	3.3	2.2	2.1	1.9	2.0	1.4	2.0	2.5	3.2	4.3	2.7
1974	3.5	3.5	3.3	2.7	2.0	1.8	1.5	1.4	1.6	3.0	3.6	4.2	2.7
1975	3.5	3.1	2.8	2.0	1.7	1.3	1.1	1.2	1.0	2.6	3.3	3.4	2.2
MEAN	3.6	3.5	3.0	2.3	1.8	1.6	1.3	1.3	1.7	2.6	3.2	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 3 (48.17N/ 124.75W TO 48.06N/ 124.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	4.8	5.2	4.2	3.0	2.9	2.2	2.6	3.1	4.2	5.0	5.7
1957	4.7	5.8	5.6	4.7	3.8	2.6	2.1	1.8	3.1	4.0	5.1	5.4
1958	6.7	6.3	5.3	6.1	2.9	2.4	2.6	2.2	3.0	4.7	5.2	6.7
1959	6.2	5.1	5.7	4.0	3.6	2.8	2.1	2.1	3.2	5.2	6.6	6.4
1960	7.0	6.9	3.8	4.0	2.8	3.1	2.0	2.1	2.5	6.1	6.1	6.4
1961	6.5	6.1	6.3	4.4	2.4	2.4	1.9	2.5	2.7	5.5	5.7	4.8
1962	6.1	4.7	5.9	3.8	2.8	2.0	1.9	2.7	4.4	5.5	7.3	6.3
1963	5.9	6.3	5.8	5.4	5.0	3.2	1.9	1.2	3.1	6.6	5.2	7.3
1964	6.4	6.2	4.6	4.6	3.3	2.7	2.3	2.5	3.2	3.8	5.1	6.2
1965	6.3	5.4	4.9	2.9	4.6	3.2	2.3	2.0	2.4	5.8	5.1	5.6
1966	6.4	5.4	5.3	4.7	3.0	2.8	2.2	2.2	4.1	4.9	5.1	6.4
1967	5.7	6.3	4.9	3.4	2.4	2.3	1.8	1.8	3.5	6.2	5.9	6.6
1968	6.3	6.2	5.2	3.6	3.2	2.6	2.4	2.4	3.0	5.4	6.3	5.4
1969	4.4	5.6	5.6	5.7	3.3	3.1	2.3	2.2	3.3	3.8	6.6	7.3
1970	6.7	6.4	6.1	5.4	3.9	2.7	2.3	1.5	3.0	4.9	6.6	6.6
1971	6.2	5.7	6.0	4.5	3.5	2.9	2.0	3.5	3.1	4.1	5.9	6.0
1972	6.6	6.4	5.6	4.2	3.7	2.8	2.7	2.1	3.4	4.1	6.1	7.5
1973	6.7	6.2	6.1	4.4	3.4	3.0	3.0	2.2	3.2	6.0	6.3	6.5
1974	6.2	5.4	6.3	5.1	3.4	3.7	3.0	2.4	2.3	5.3	5.5	6.5
1975	5.3	6.2	6.0	4.2	3.6	2.2	1.9	1.9	1.9	4.4	5.9	5.5

20 YR. STATISTICS FOR PACIFIC STATION 3 (48.17N/ 124.75W TO 48.06N/ 124.70W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		72122600

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	217	5	.	.	.	.	.	.	.	.	222
1.50 - 1.99	92	47	.	.	.	.	.	.	.	.	139
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	310	62	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.48 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 219

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	331	898	862	110	47	11	1	.	.	.	2268
1.00 - 1.49	718	1887	1931	568	277	53	.	.	.	.	5434
1.50 - 1.99	992	1201	1394	703	655	278	3	.	.	.	5226
2.00 - 2.49	75	754	770	485	648	528	13	.	.	.	2773
2.50 - 2.99	.	176	167	212	473	402	27	.	.	.	1457
3.00 - 3.49	.	37	80	65	408	201	3	.	.	.	794
3.50 - 3.99	.	.	22	17	128	193	.	.	.	.	360
4.00 - 4.49	.	.	1	6	25	142	.	.	.	.	174
4.50 - 4.99	.	.	.	1	5	35	3	.	.	.	44
5.00 +	.	.	.	.	.	20	1	.	.	.	21
TOTAL	2119	4953	4727	2175	2666	1863	51	0	0	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 5.76 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 10859

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	8	.	.	.	.	.	13	.	.	34
0.50 - 0.99	63	947	1444	422	70	13	25	3	.	.	2987
1.00 - 1.49	71	1599	5030	2517	1134	337	53	18	1	.	10760
1.50 - 1.99	90	795	3112	3675	2619	1654	249	44	3	.	12041
2.00 - 2.49	25	491	1076	2631	3400	2388	633	32	3	.	10679
2.50 - 2.99	.	167	436	987	3400	3574	1293	100	8	.	9965
3.00 - 3.49	.	53	242	513	1976	3935	1763	102	1	.	8582
3.50 - 3.99	.	1	126	213	1158	3408	2430	198	.	.	7544
4.00 - 4.49	.	.	47	119	525	2488	2494	251	3	.	5927
4.50 - 4.99	.	.	5	47	172	1054	1993	249	.	.	3520
5.00 +	.	.	.	11	78	578	2758	1004	.	.	4429
TOTAL	262	4053	11528	11135	14532	19229	13696	2016	19	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.63 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 44714

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	5	.	.	.	.	.	.	.	.	10
1.00 - 1.49	17	85	85	3	.	.	.	.	.	.	186
1.50 - 1.99	75	188	112	41	27	5	.	.	.	.	448
2.00 - 2.49	15	297	191	112	71	15	.	.	.	.	701
2.50 - 2.99	.	142	217	176	251	75	6	.	.	.	867
3.00 - 3.49	.	30	189	99	256	92	5	.	.	.	671
3.50 - 3.99	.	.	87	85	222	142	22	.	.	.	558
4.00 - 4.49	.	.	37	56	171	148	22	.	.	.	434
4.50 - 4.99	.	.	3	27	94	116	32	.	.	.	272
5.00 +	.	.	.	5	54	104	99	13	.	.	275
TOTAL	108	747	921	604	1146	697	186	13	0	0	

MEAN HS(M) = 3.15 LARGEST HS(M) = 7.26 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 2597

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	13	.	.	.	.	.	.	.	.	14
1.00 - 1.49	11	13	.	.	.	.	.	.	.	.	24
1.50 - 1.99	5	20	3	.	.	.	.	.	.	.	28
2.00 - 2.49	.	11	1	.	.	.	.	.	.	.	12
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	58	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 51

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

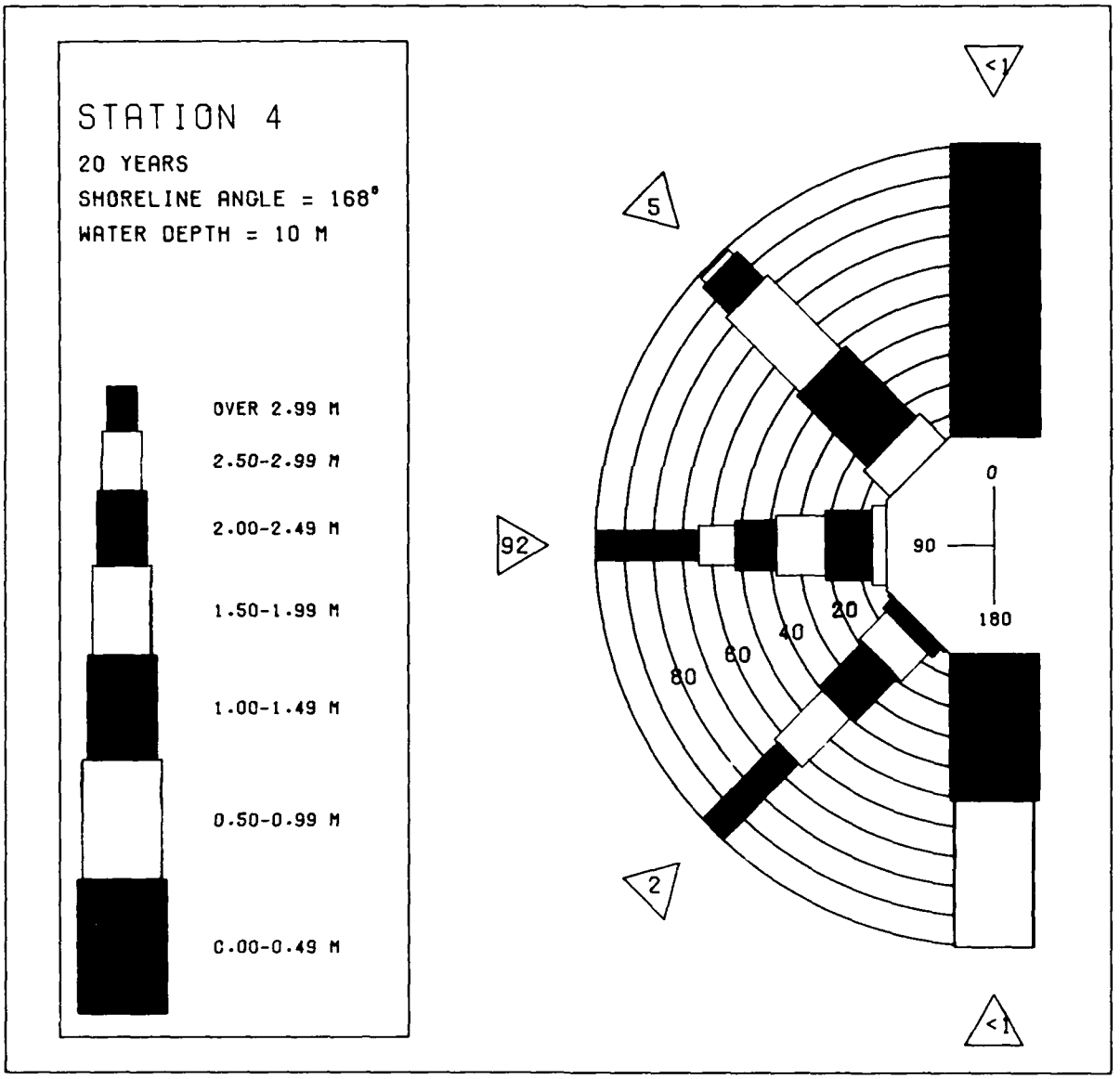
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 4 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START- 48.06N/124.70W LAT. LON. END= 47.96N/124.66W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1							1	.	.	2
0.50 - 0.99	40	186	230	54	11	2	2	.	.	.	525
1.00 - 1.49	103	359	704	308	141	39	5	1	.	.	1660
1.50 - 1.99	125	225	462	441	330	173	25	4	.	.	1785
2.00 - 2.49	11	156	154	323	412	293	64	3	.	.	1416
2.50 - 2.99	.	48	82	137	412	405	132	10	.	.	1226
3.00 - 3.49	.	12	51	67	264	422	176	10	.	.	1002
3.50 - 3.99	.	.	23	31	150	374	246	19	.	.	843
4.00 - 4.49	.	.	8	18	72	277	251	25	.	.	651
4.50 - 4.99	.	.	.	7	27	120	202	24	.	.	380
5.00 +	.	.	.	1	13	70	285	101	.	.	470
TOTAL	280	986	1714	1387	1832	2175	1388	198	0	0	

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.63 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.0	3.0	2.5	2.1	1.8	1.4	1.3	1.6	2.5	3.2	3.6	2.5
1957	2.7	3.0	3.4	2.3	1.9	1.5	1.2	1.1	1.8	2.5	3.4	4.0	2.4
1958	4.6	4.0	2.8	3.2	1.8	1.4	1.6	1.4	1.9	2.8	3.4	4.4	2.8
1959	4.1	3.4	3.[illegible]	3.2	2.0	1.5	1.5	1.3	1.9	2.7	2.9	4.0	2.6
1960	3.5	4.1	2.[illegible]	2.5	1.9	1.6	1.3	1.4	1.6	2.8	3.7	4.0	2.6
1961	4.3	4.0	3.5	2.5	1.9	1.5	1.2	1.1	1.6	2.9	3.3	3.5	2.6
1962	3.2	3.1	2.6	2.3	1.6	1.5	1.1	1.3	1.7	2.9	4.0	4.0	2.5
1963	3.5	4.2	3.0	2.0	1.6	1.8	1.2	0.9	1.9	3.4	3.8	4.0	2.6
1964	4.8	3.4	3.0	2.5	1.8	1.7	1.6	1.6	1.9	2.5	3.3	4.1	2.7
1965	3.6	3.2	3.0	2.5	1.9	1.9	1.4	1.2	1.5	3.0	2.9	3.9	2.5
1966	4.4	3.0	3.2	2.2	2.0	1.5	1.3	1.3	2.0	2.7	2.7	3.9	2.5
1967	3.8	3.4	2.7	2.1	1.5	1.3	1.2	1.2	2.1	3.0	3.2	3.8	2.4
1968	3.4	4.1	3.2	2.2	1.6	1.5	1.3	1.3	1.6	2.8	3.9	3.4	2.5
1969	2.7	4.0	3.1	2.3	1.8	1.8	1.4	1.4	1.9	2.9	3.6	5.2	2.8
1970	4.1	4.5	3.7	2.7	1.8	1.5	1.6	1.3	1.7	2.6	3.4	4.1	2.7
1971	3.4	3.7	3.7	2.9	2.0	1.7	1.0	1.5	1.9	2.5	3.7	3.5	2.6
1972	4.2	3.6	3.4	2.7	1.9	1.6	1.7	1.3	1.8	2.2	4.3	3.7	2.7
1973	4.3	3.9	3.5	2.3	2.1	2.0	2.0	1.5	2.1	2.8	3.5	4.7	2.9
1974	3.5	3.8	3.4	2.9	2.2	1.9	1.5	1.5	1.6	3.0	4.0	4.4	2.8
1975	3.6	3.3	2.8	2.1	1.7	1.2	1.1	1.2	1.1	2.8	3.7	3.5	2.3
MEAN	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.4	5.0	4.2	3.4	2.8	2.3	2.3	2.8	4.2	4.8	6.1
1957	4.9	5.9	5.9	4.7	3.4	5.5	2.2	1.9	3.4	4.3	5.5	5.7
1958	6.8	6.5	5.5	6.3	2.9	2.2	2.6	2.2	3.4	4.8	5.8	6.5
1959	6.3	5.4	4.8	4.2	3.3	2.7	2.1	2.2	3.1	5.6	6.3	6.6
1960	7.0	6.9	4.0	4.4	2.8	3.1	2.0	2.1	2.4	6.2	6.3	6.2
1961	6.4	6.3	6.3	4.4	2.5	2.6	1.9	2.6	2.8	5.6	5.7	5.9
1962	5.4	4.8	4.2	3.7	2.6	2.6	1.9	2.7	4.3	5.9	7.4	6.1
1963	5.8	6.1	5.8	3.2	3.0	3.3	2.1	1.5	3.0	7.3	6.0	7.6
1964	6.7	5.6	4.7	4.6	3.8	2.7	2.4	2.5	3.2	4.2	5.7	6.2
1965	6.2	5.1	4.8	3.9	3.7	3.1	2.3	2.1	2.4	5.8	6.2	6.3
1966	6.6	5.3	5.3	4.7	3.0	2.9	2.1	2.2	3.9	4.9	5.1	6.4
1967	5.8	6.2	5.0	4.4	2.5	2.2	1.6	1.9	3.5	6.0	6.2	6.7
1968	6.4	6.1	5.1	3.3	3.1	2.2	2.3	2.4	3.1	5.4	6.3	5.0
1969	4.4	5.7	5.6	6.4	3.2	3.1	2.4	2.2	3.2	4.3	6.5	7.2
1970	6.9	6.4	6.1	5.3	2.8	2.7	2.5	2.2	2.8	4.7	6.6	6.9
1971	6.2	5.8	6.8	4.5	3.2	2.5	1.9	2.5	3.1	4.3	6.3	5.8
1972	6.5	6.5	5.6	5.0	3.0	2.7	3.5	2.1	2.9	4.1	6.1	7.4
1973	7.5	6.2	6.1	4.3	3.3	3.5	2.9	2.3	3.1	5.9	6.5	7.2
1974	6.1	5.9	6.5	4.9	3.9	3.6	3.1	2.3	2.4	5.5	5.8	6.4
1975	5.7	6.1	6.1	4.6	3.5	2.1	1.9	2.0	1.8	4.4	6.0	5.9

20 YR. STATISTICS FOR PACIFIC STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	32	3	.	.	.	.	.	.	.	.	35
1.00 - 1.49	485	36	.	.	.	.	.	.	.	.	521
1.50 - 1.99	249	150	.	.	.	.	.	.	.	.	399
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	766	202	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 568

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	3	13					8	.	.	42
0.50 - 0.99	395	1642	2109	516	95	27	5		.	.	4789
1.00 - 1.49	629	2751	5289	2085	1153	326	51	13	.	.	12297
1.50 - 1.99	648	1471	2679	2474	1983	1031	121	8	.	.	10415
2.00 - 2.49	42	727	583	1427	2029	1375	456	6	.	.	6645
2.50 - 2.99	.	183	253	393	1558	1538	681	49	.	.	4655
3.00 - 3.49	.	25	111	160	831	1172	704	46	.	.	3049
3.50 - 3.99	.	.	30	39	306	894	527	121	.	.	1917
4.00 - 4.49	.	.	1	11	85	460	407	42	.	.	1006
4.50 - 4.99	.	.	.	5	15	145	227	51	.	.	443
5.00 +	.	.	.		5	29	177	35	.	.	246
TOTAL	1732	6802	11068	7110	8060	6997	3356	379	0	0	

MEAN HS(M) = 1.97 LARGEST HS(M) = 6.70 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 26614

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49								8	.	.	8
0.50 - 0.99	22	453	544	143	47	10	20	3	.	.	1242
1.00 - 1.49	42	862	2056	1285	604	181	41	8	1	.	5080
1.50 - 1.99	77	578	1454	1952	1481	985	159	30	5	.	6721
2.00 - 2.49	20	497	674	1329	1849	1651	422	53	10	.	6505
2.50 - 2.99	.	212	432	681	2137	2470	718	53	.	.	6703
3.00 - 3.49	.	70	328	463	1332	2785	1079	63	.	.	6120
3.50 - 3.99	.	1	179	208	848	2537	1853	118	1	.	5745
4.00 - 4.49	.	.	95	164	480	1901	1945	172	1	.	4758
4.50 - 4.99	.	.	15	63	227	831	1629	162	.	.	2927
5.00 +	.	.		15	112	619	2371	908	.	.	4025
TOTAL	161	2673	5777	6303	9117	13970	10237	1578	18	0	

MEAN HS(M) = 3.02 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 29145

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	10	.	.	.	.	.	.	.	.	13
1.00 - 1.49	3	59	15	.	.	.	.	.	.	.	77
1.50 - 1.99	87	150	44	13	3	.	.	.	.	.	297
2.00 - 2.49	18	280	147	66	25	10	.	.	.	.	546
2.50 - 2.99	.	191	217	130	97	18	.	.	.	.	653
3.00 - 3.49	.	56	208	111	193	68	3	.	.	.	639
3.50 - 3.99	.	.	109	75	205	68	8	.	.	.	465
4.00 - 4.49	.	.	30	47	159	77	6	.	.	.	319
4.50 - 4.99	.	.	1	23	131	111	15	.	.	.	281
5.00 +	.	.	.	6	58	104	42	3	.	.	213
TOTAL	111	746	771	471	871	456	74	3	0	0	

MEAN HS(M) = 3.24 LARGEST HS(M) = 6.76 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 2061

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	29	15	.	.	.	.	.	.	.	.	44
1.50 - 1.99	10	23	1	.	.	.	.	.	.	.	34
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	1	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	40	43	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 52

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

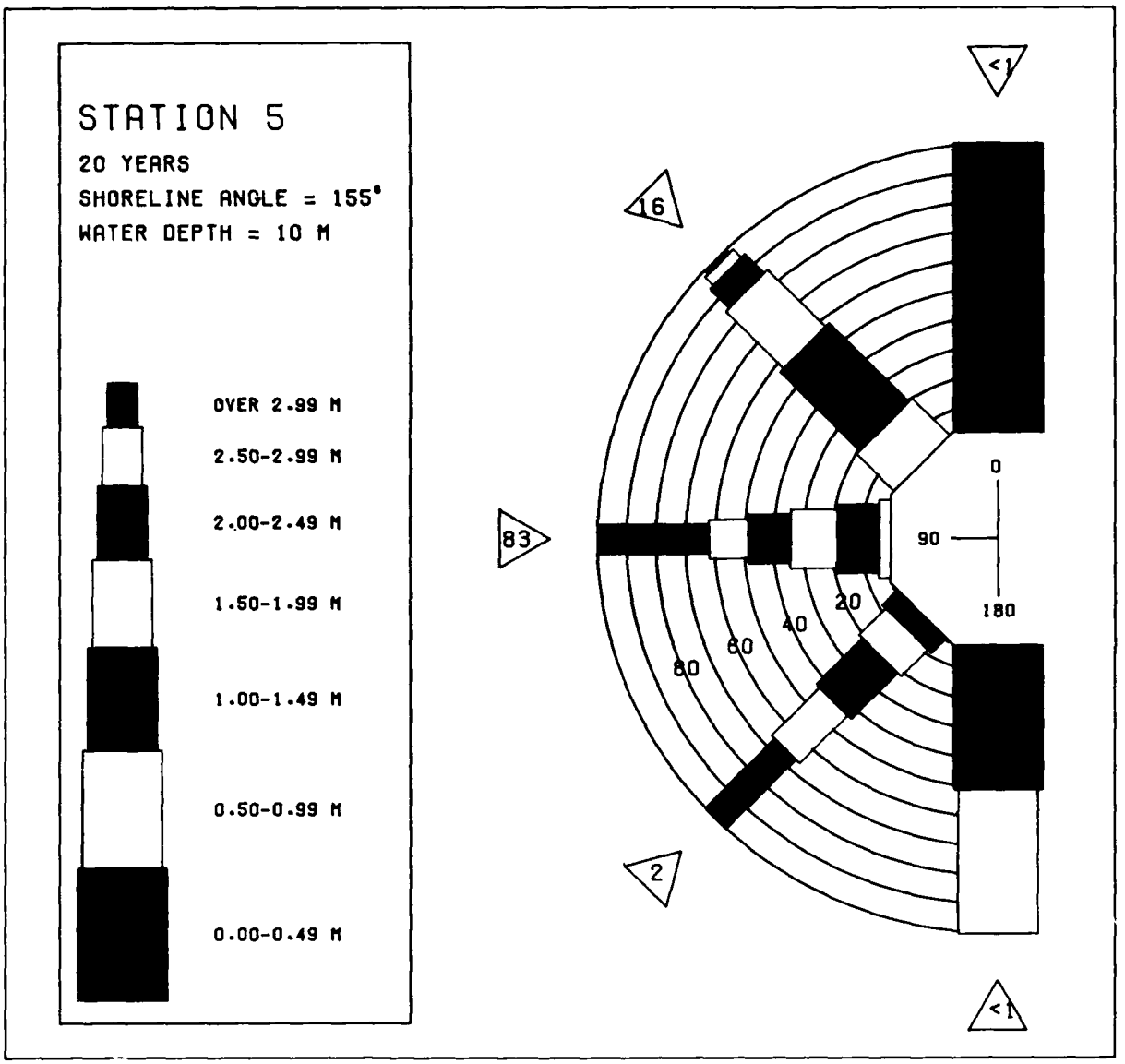
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 5 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1		1					1	.	.	3
0.50 - 0.99	45	210	265	66	14	3	2		.	.	605
1.00 - 1.49	119	372	736	337	175	50	9	2	.	.	1800
1.50 - 1.99	107	237	418	244	346	201	28	3	.	.	1784
2.00 - 2.49	8	152	140	282	390	303	87	5	1	.	1368
2.50 - 2.99	.	58	90	120	379	402	139	10	.	.	1198
3.00 - 3.49	.	15	64	73	235	402	178	10	.	.	977
3.50 - 3.99	.	.	31	32	135	350	238	23	.	.	810
4.00 - 4.49	.	.	12	22	72	243	235	21	.	.	605
4.50 - 4.99	.	.	1	9	37	108	187	21	.	.	363
5.00 +	.	.	.	2	17	75	259	94	1	0	447
TOTAL	280	1044	1758	1387	1801	2137	1362	190	1	0	

MEAN HS(M) = 2.54 LARGEST HS(M) = 7.72 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 5 (47.96N/ 124.68W TO 47.86N/ 124.61W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.0	2.9	2.4	2.0	1.8	1.3	1.3	1.5	2.4	3.1	3.5	2.4
1957	2.6	2.9	3.3	2.2	1.9	1.5	1.2	1.0	1.8	2.5	3.3	3.9	2.3
1958	4.6	4.0	2.8	3.1	1.7	1.4	1.5	1.3	1.8	2.7	3.3	4.3	2.7
1959	4.1	3.3	3.1	2.1	1.9	1.5	1.4	1.2	1.8	2.7	2.8	4.0	2.5
1960	3.5	4.0	2.4	2.5	1.9	1.5	1.2	1.3	1.5	2.7	3.6	3.9	2.5
1961	4.3	3.9	2.5	2.3	1.8	1.5	1.2	1.1	1.5	2.7	3.2	3.4	2.5
1962	3.2	3.1	2.5	2.6	1.5	1.4	1.1	1.5	1.7	2.8	3.9	4.0	2.4
1963	3.4	4.3	2.9	1.9	1.5	1.7	1.2	0.8	1.9	3.4	3.8	4.0	2.6
1964	4.7	3.3	2.9	2.4	1.8	1.7	1.5	1.6	1.8	2.5	3.2	4.0	2.6
1965	3.6	3.1	2.9	2.4	1.8	1.9	1.3	1.1	1.5	3.0	2.9	3.8	2.4
1966	4.3	2.9	3.1	2.1	2.0	1.5	1.2	1.3	2.0	2.6	2.7	4.0	2.5
1967	3.7	3.3	2.6	1.9	1.4	1.2	1.2	1.1	2.0	3.0	3.1	3.7	2.4
1968	3.5	4.1	3.2	2.1	1.5	1.5	1.3	1.2	1.6	2.7	3.9	3.4	2.5
1969	2.7	3.9	3.0	2.3	1.8	1.8	1.3	1.3	1.9	2.8	3.5	5.2	2.7
1970	4.0	4.4	3.6	2.7	1.7	1.5	1.5	1.3	1.7	2.5	3.3	4.0	2.7
1971	3.4	3.7	3.7	2.8	1.9	1.6	1.0	1.5	1.8	2.4	3.6	3.4	2.6
1972	4.1	3.5	3.4	2.6	1.8	1.6	1.6	1.2	1.7	2.1	4.2	3.7	2.6
1973	4.3	3.8	3.4	2.2	2.1	2.0	1.9	1.5	2.0	2.7	3.4	4.7	2.8
1974	3.6	3.7	3.4	2.8	2.1	1.8	1.5	1.4	1.6	2.9	3.9	4.4	2.7
1975	3.5	3.3	2.8	2.0	1.7	1.2	1.1	1.2	1.1	2.7	3.6	3.5	2.3
MEAN	3.7	3.6	3.1	2.4	1.8	1.6	1.3	1.3	1.7	2.7	3.4	3.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 5 (47.96N/ 124.68W TO 47.86N/ 124.61W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.1	4.9	4.1	3.2	2.7	2.2	2.2	2.6	4.0	4.8	6.0
1957	4.6	6.2	5.9	4.6	3.4	2.5	2.1	1.8	3.4	4.0	5.1	5.5
1958	6.8	6.6	5.4	6.2	2.9	2.1	2.5	2.1	3.1	4.5	5.5	6.5
1959	6.3	6.0	4.7	4.1	3.3	2.6	2.1	2.1	3.2	5.6	6.2	6.6
1960	7.1	7.0	3.9	4.2	2.7	3.0	1.9	2.0	2.3	6.0	6.2	6.3
1961	6.5	6.4	6.3	4.3	2.4	2.6	1.8	2.5	2.7	5.6	5.3	5.8
1962	5.5	4.8	4.2	3.7	2.6	2.4	1.8	2.7	2.4	5.9	7.4	6.7
1963	5.9	6.3	5.4	3.0	3.0	2.2	2.0	1.4	3.1	7.1	5.9	7.7
1964	6.5	5.5	4.6	4.5	3.6	2.7	2.3	2.4	3.2	4.2	5.3	6.2
1965	6.2	4.8	4.7	3.6	3.5	2.9	2.2	2.0	2.3	5.8	6.1	5.9
1966	6.8	5.0	5.2	4.6	2.9	2.8	2.0	2.1	3.7	4.9	4.9	6.4
1967	5.7	6.0	4.9	4.0	2.4	2.1	1.5	1.9	3.4	5.9	5.7	6.8
1968	6.8	6.2	5.1	3.3	2.9	2.4	2.3	2.3	3.0	5.4	6.3	5.7
1969	4.2	5.7	5.4	6.2	3.2	3.1	2.4	2.1	3.2	4.0	6.6	7.4
1970	7.0	6.4	5.9	5.3	2.8	2.6	2.4	2.0	2.7	4.7	6.7	7.0
1971	6.3	5.7	6.7	4.3	3.1	2.4	1.8	3.5	2.9	4.3	6.4	5.4
1972	6.3	6.5	5.5	4.7	2.9	2.6	3.5	2.0	2.9	3.8	6.1	7.3
1973	7.7	6.2	6.1	4.1	3.4	3.6	2.8	2.1	3.1	5.9	6.5	6.9
1974	6.7	5.6	6.4	4.7	3.7	3.5	3.0	2.2	2.3	5.3	5.6	6.5
1975	5.5	6.0	6.0	4.3	3.4	2.1	1.9	2.0	1.8	4.3	6.2	6.0

20 YR. STATISTICS FOR PACIFIC STATION 5 (47.96N/ 124.68W TO 47.86N/ 124.61W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	56	22	.	.	.	.	.	.	.	.	78
0.50 - 0.99	949	1315	11	.	.	.	.	.	.	.	2275
1.00 - 1.49	1167	1220	5	.	.	.	.	.	.	.	2392
1.50 - 1.99	135	634	11	.	.	.	.	.	.	.	780
2.00 - 2.49	.	49	.	.	.	.	.	.	.	.	49
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	2307	3240	27	0	0	0	0	0	0	0	

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.31 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3261

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	88	232	41	1	1	1	17	.	.	403
0.50 - 0.99	135	2898	5730	1943	936	326	48	10	.	.	12027
1.00 - 1.49	164	2638	6890	5035	3319	1665	405	49	8	.	20373
1.50 - 1.99	143	1206	1909	3056	4021	3107	1125	100	6	.	14673
2.00 - 2.49	5	756	908	1175	2929	3466	1377	111	.	.	10727
2.50 - 2.99	.	224	465	539	1659	3287	1560	109	1	.	7844
3.00 - 3.49	.	32	171	241	853	2226	1647	128	.	.	5298
3.50 - 3.99	.	.	51	99	314	1457	1509	100	.	.	3539
4.00 - 4.49	.	.	11	17	126	525	1095	179	.	.	1953
4.50 - 4.99	.	.	.	3	22	302	639	171	.	.	1137
5.00 +				1	1	157	609	278	.	.	1046
TOTAL	469	7842	16367	12150	14181	16719	10016	1252	15	0	

MEAN HS(M) = 1.97 LARGEST HS(M) = 7.23 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 46198

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	1	.	1
0.50 - 0.99	13	30	3	.	.	.	.	.	.	.	47
1.00 - 1.49	61	167	126	22	5	5	.	.	.	.	386
1.50 - 1.99	201	473	248	90	102	32	3	.	.	.	1149
2.00 - 2.49	35	521	347	193	234	128	11	.	.	.	1469
2.50 - 2.99	.	542	472	265	308	331	94	6	.	.	2018
3.00 - 3.49	.	142	554	321	456	504	333	15	1	.	2306
3.50 - 3.99	.	18	354	304	484	566	431	51	.	.	2208
4.00 - 4.49	.	.	210	215	501	337	236	46	.	.	1545
4.50 - 4.99	.	.	30	131	299	255	236	30	.	.	981
5.00 +			1	37	189	410	620	181	2	0	1452
TOTAL	310	1893	2345	1579	2578	2567	2009	329	2	0	

MEAN HS(M) = 3.45 LARGEST HS(M) = 7.43 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 8011

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	1	.	.	.	.	.	.	.	.	6
1.00 - 1.49	92	8	.	.	.	.	.	.	.	.	100
1.50 - 1.99	106	208	22	5	1	.	.	.	.	.	342
2.00 - 2.49	10	373	63	.	.	.	.	.	.	.	446
2.50 - 2.99	.	203	128	13	.	.	.	.	.	.	344
3.00 - 3.49	.	59	157	17	1	.	.	.	.	.	234
3.50 - 3.99	.	.	61	23	6	.	.	.	.	.	90
4.00 - 4.49	.	.	25	29	6	.	.	.	.	.	60
4.50 - 4.99	.	.	.	3	11	.	.	.	.	.	14
5.00 +	.	.	.	.	5	3	.	.	.	.	8
TOTAL	213	852	456	90	30	3	0	0	0	0	

MEAN HS(M) = 2.53 LARGEST HS(M) = 6.14 MEAN TP(SEC) = 7.6 NUMBER OF CASES = 969

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.79 LARGEST HS(M) = 0.79 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

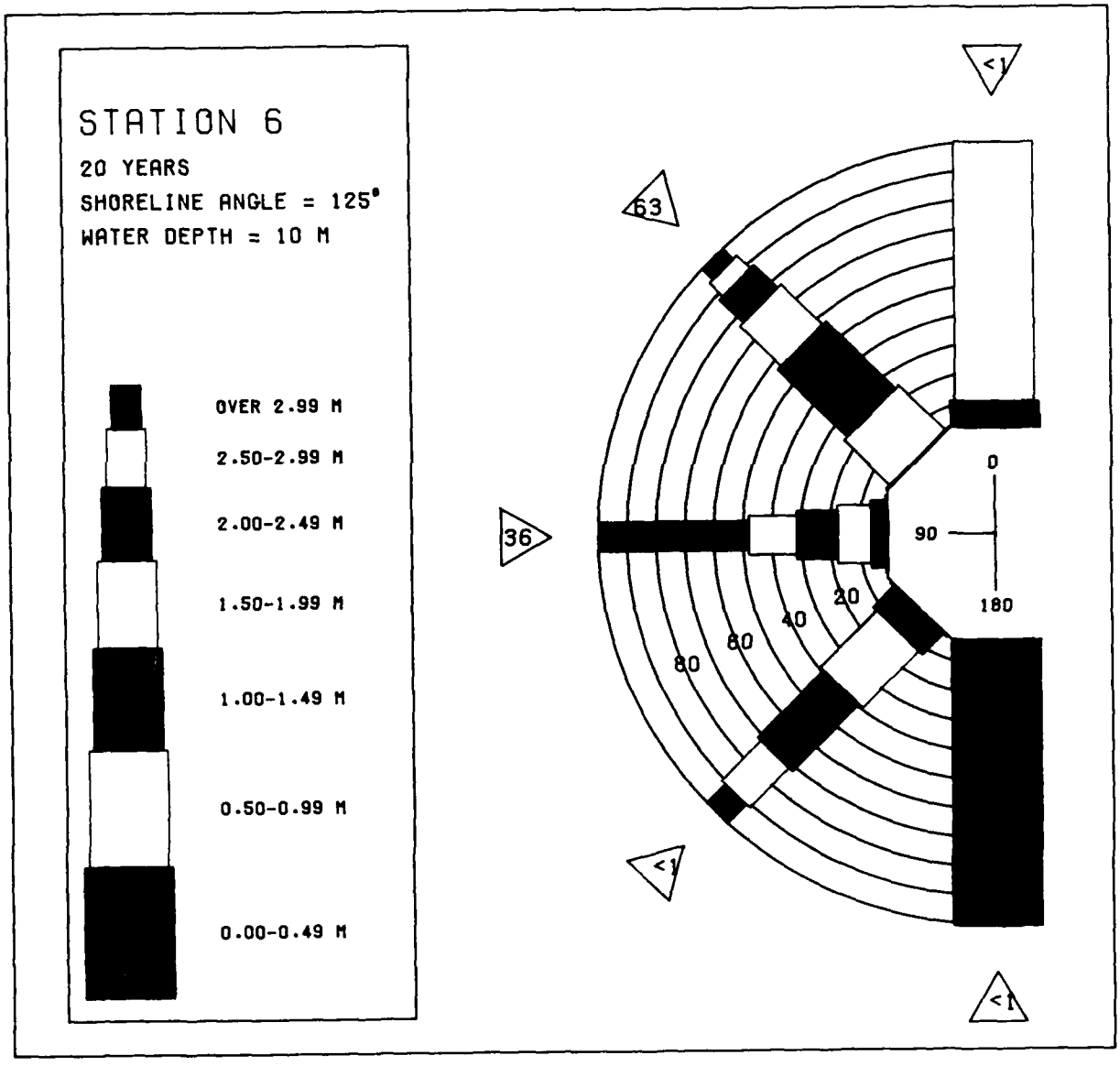
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 6 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7	11	23	4	.	.	.	.	.	.	46
0.50 - 0.99	110	424	574	194	93	32	4	1	.	.	1432
1.00 - 1.49	148	403	702	505	332	187	40	4	.	.	2321
1.50 - 1.99	58	252	219	315	412	313	112	10	.	.	1691
2.00 - 2.49	5	170	131	136	316	359	138	11	.	.	1266
2.50 - 2.99	.	97	106	81	196	361	164	11	.	.	1016
3.00 - 3.49	.	23	88	58	131	273	198	14	.	.	785
3.50 - 3.99	.	1	46	42	80	202	194	15	.	.	580
4.00 - 4.49	.	.	24	26	63	86	142	22	.	.	363
4.50 - 4.99	.	.	3	13	33	55	87	20	.	.	211
5.00 +	.	.	.	3	19	57	124	46	.	.	249
TOTAL	328	1381	1916	1377	1675	1925	1203	155	0	0	

MEAN HS(M) = 2.14 LARGEST HS(M) = 7.43 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	2.4	2.5	1.9	1.5	1.5	1.1	1.0	1.2	1.9	2.7	3.2	2.0
1957	2.2	2.4	2.8	1.7	1.5	1.3	1.0	0.9	1.5	2.0	2.6	3.4	1.9
1958	4.2	3.7	2.2	2.6	1.3	1.2	1.2	1.1	1.5	2.1	2.7	3.9	2.3
1959	3.6	2.7	2.7	1.7	1.6	1.3	1.1	0.9	1.5	2.3	2.4	3.5	2.1
1960	3.0	3.6	2.1	2.2	1.6	1.3	1.0	1.0	1.2	2.1	3.0	3.3	2.1
1961	4.0	3.5	3.1	1.7	1.4	1.2	1.0	0.8	1.2	2.1	2.6	2.9	2.1
1962	2.9	2.6	1.9	1.9	1.2	1.1	0.8	1.2	1.4	2.4	3.4	3.7	2.0
1963	3.0	4.1	2.2	1.5	1.3	1.3	0.9	0.6	1.6	2.9	3.3	3.7	2.2
1964	4.2	2.8	2.5	1.8	1.3	1.5	1.2	1.2	1.5	2.1	2.7	3.6	2.2
1965	3.2	2.6	2.4	1.9	1.5	1.5	1.0	0.9	1.1	2.6	2.5	3.1	2.0
1966	3.6	2.4	2.7	1.7	1.6	1.3	0.9	1.0	1.7	2.1	2.3	3.7	2.1
1967	3.2	2.8	2.1	1.3	1.2	1.0	0.9	0.9	1.7	2.7	2.4	3.2	1.9
1968	3.2	3.9	2.9	1.7	1.3	1.3	1.0	1.0	1.3	2.3	3.5	3.1	2.2
1969	2.4	3.3	2.4	2.7	1.5	1.5	1.1	1.1	1.6	2.4	3.0	4.8	2.3
1970	3.7	3.8	3.0	2.2	1.5	1.2	1.3	0.9	1.4	2.1	2.7	3.4	2.3
1971	3.0	3.2	2.2	2.3	1.5	1.4	0.8	1.2	1.4	2.0	3.0	2.6	2.1
1972	3.3	3.1	3.0	2.0	1.4	1.2	1.3	1.0	1.3	1.6	3.5	3.3	2.2
1973	3.9	3.3	2.8	1.8	1.8	1.7	1.6	1.1	1.6	2.0	2.7	4.1	2.4
1974	3.3	3.2	3.0	2.3	1.7	1.5	1.2	1.1	1.3	2.4	3.0	3.8	2.3
1975	3.0	2.9	2.4	1.4	1.3	1.0	0.9	1.0	0.9	2.4	3.1	3.1	2.0
MEAN	3.3	3.1	2.6	1.9	1.4	1.3	1.1	1.0	1.4	2.2	2.9	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	3.7	4.4	3.4	2.6	2.4	1.5	1.8	2.3	3.4	4.3	5.4
1957	3.9	6.3	5.4	3.8	2.9	2.4	1.6	1.6	3.3	4.0	3.8	5.1
1958	6.5	6.1	4.6	5.4	2.6	1.6	1.9	1.6	2.5	3.9	4.6	6.5
1959	6.0	6.1	4.2	3.8	2.9	2.3	2.0	1.6	3.1	4.9	5.6	6.2
1960	7.0	7.1	3.4	3.6	2.3	2.5	1.6	1.7	2.2	5.4	5.6	6.0
1961	6.5	6.3	6.0	3.9	5.1	2.3	1.5	2.3	2.3	5.1	4.0	5.2
1962	5.3	4.2	3.9	3.3	2.1	1.9	1.2	2.3	4.0	5.4	6.6	7.0
1963	5.4	6.4	4.0	2.9	2.8	2.4	1.6	1.0	3.3	6.4	5.3	7.1
1964	6.1	5.0	4.4	3.7	2.4	2.7	2.0	1.9	3.0	4.1	4.7	6.1
1965	5.7	3.6	4.2	2.9	2.8	2.1	1.7	1.6	1.9	5.6	6.5	5.3
1966	6.3	4.2	4.6	4.0	2.6	2.5	1.5	1.7	3.1	4.4	4.8	6.1
1967	5.4	5.0	4.1	2.4	2.1	1.7	1.3	1.6	3.1	5.1	3.9	6.2
1968	7.2	6.5	4.6	2.9	2.1	2.5	1.9	1.8	2.6	4.9	5.8	6.4
1969	3.9	6.3	4.2	5.1	3.1	2.9	2.2	1.7	2.9	3.7	6.7	7.4
1970	6.9	6.2	5.2	4.9	2.5	2.2	2.3	1.5	2.2	4.3	6.4	6.6
1971	6.4	5.1	6.2	3.4	2.8	2.1	1.3	3.2	2.6	3.9	6.5	4.5
1972	5.5	5.9	4.8	3.5	2.3	2.1	3.3	1.5	2.9	2.8	5.4	7.1
1973	7.3	6.2	5.0	3.4	3.5	3.4	2.4	1.6	2.6	5.4	6.0	6.8
1974	7.0	4.9	5.7	4.3	2.8	3.0	2.6	2.0	2.1	4.1	4.3	6.7
1975	4.8	5.6	5.3	2.9	2.8	1.7	1.5	1.9	1.6	4.9	6.2	6.2

20 YR. STATISTICS FOR PACIFIC STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121200

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	90	22	.	.	.	.	.	.	.	.	112
1.00 - 1.49	578	114	.	.	.	.	.	.	.	.	692
1.50 - 1.99	121	77	.	.	.	.	.	.	.	.	198
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	789	213	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 1.78 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 587

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	25	5	29	.	.	.	.	15	.	.	74
0.50 - 0.99	436	2174	2785	799	162	61	8	1	.	.	6426
1.00 - 1.49	581	3177	6586	2883	1772	535	102	15	.	.	15651
1.50 - 1.99	496	1634	2854	3324	2799	1731	189	8	.	.	13035
2.00 - 2.49	22	655	657	1634	2693	2375	723	34	.	.	8793
2.50 - 2.99	.	157	258	419	2039	2327	828	49	.	.	6077
3.00 - 3.49	.	17	133	189	970	1931	876	85	.	.	4201
3.50 - 3.99	.	.	17	46	343	1356	711	131	.	.	2598
4.00 - 4.49	.	.	3	15	85	569	593	107	.	.	1372
4.50 - 4.99	.	.	.	3	30	162	366	73	.	.	634
5.00 +	.	.	.	.	5	34	219	109	.	.	367
TOTAL	1560	7819	13322	9312	10898	11075	4615	627	0	0	

MEAN HS(M) = 1.99 LARGEST HS(M) = 6.66 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 34632

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	1	.	.	1
0.50 - 0.99	5	253	260	44	10	6	15	1	.	.	594
1.00 - 1.49	25	509	1071	768	239	92	10	11	1	.	2726
1.50 - 1.99	71	431	896	1081	942	532	123	27	5	.	4108
2.00 - 2.49	29	504	580	823	1214	963	390	44	10	.	4557
2.50 - 2.99	.	253	429	583	1420	1610	598	47	.	.	4945
3.00 - 3.49	.	97	373	427	1042	1925	997	47	.	.	4908
3.50 - 3.99	.	3	239	191	740	1930	1680	97	3	.	4883
4.00 - 4.49	.	.	114	172	489	1502	1664	114	.	.	4055
4.50 - 4.99	.	.	17	82	273	698	1363	135	.	.	2568
5.00 +	.	.	.	20	140	636	2017	761	.	.	3574
TOTAL	130	2050	3979	4196	6509	9894	8857	1285	19	0	

MEAN HS(M) = 3.22 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 21596

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	17	.	.	.	.	.	.	.	.	18
1.00 - 1.49	13	65	5	.	.	.	.	.	.	.	83
1.50 - 1.99	90	138	35	11	1	.	.	.	.	.	275
2.00 - 2.49	20	289	121	34	15	8	.	.	.	.	487
2.50 - 2.99	.	169	189	111	83	8	.	.	.	.	560
3.00 - 3.49	.	39	188	111	102	17	1	.	.	.	458
3.50 - 3.99	.	.	85	70	133	37	6	.	.	.	331
4.00 - 4.49	.	.	23	51	124	46	5	.	.	.	249
4.50 - 4.99	.	.	3	22	71	53	3	.	.	.	152
5.00 +	.	.	.	5	46	56	13	.	.	.	120
TOTAL	124	717	649	415	575	225	28	0	0	0	

MEAN HS(M) = 3.08 LARGEST HS(M) = 6.98 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 1610

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	1	.	.	.	.	.	.	.	.	2
1.00 - 1.49	11	6	.	.	.	.	.	.	.	.	17
1.50 - 1.99	.	1	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	8	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.16 LARGEST HS(M) = 1.51 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

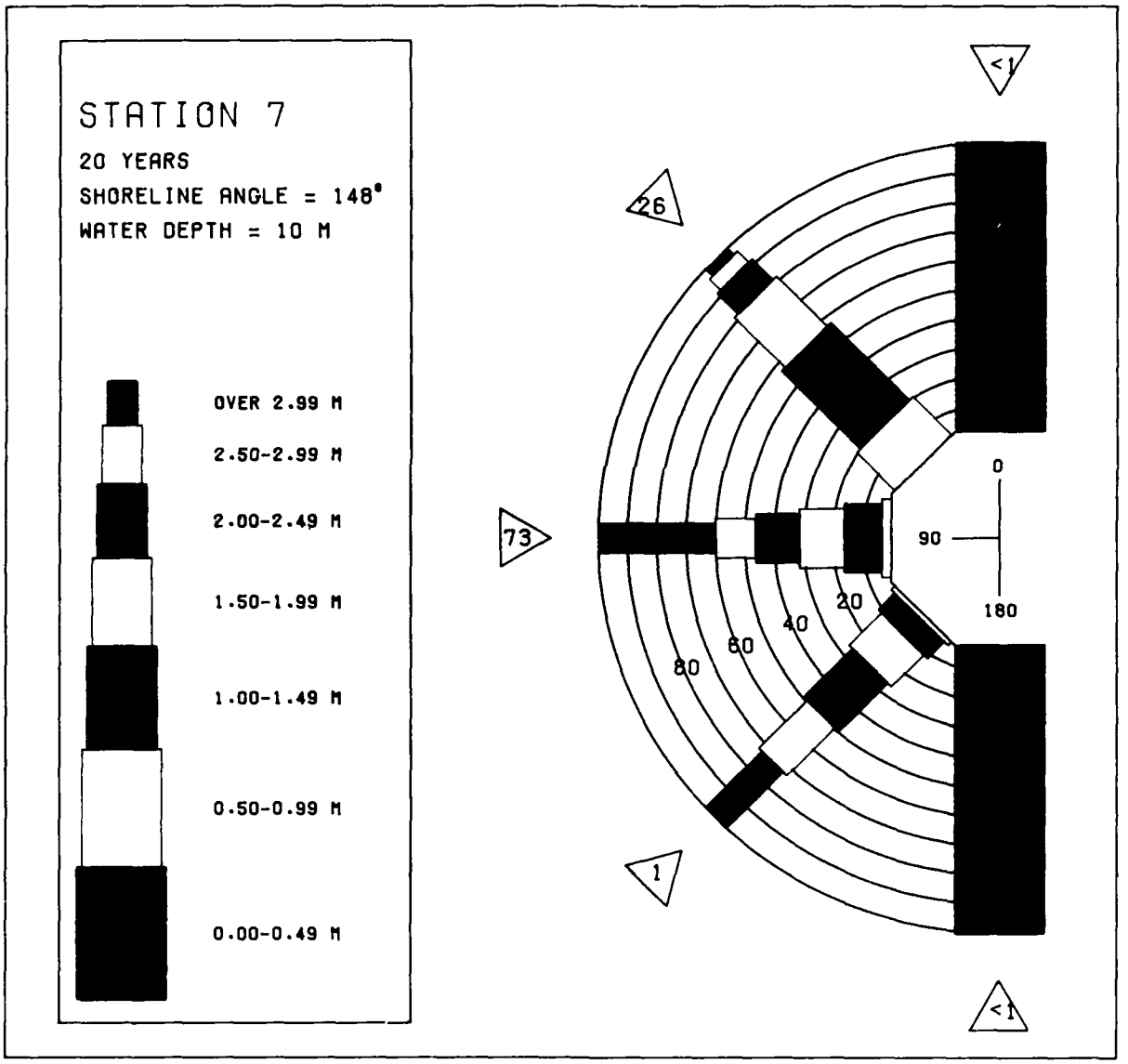
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 7 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2		2					1	.	.	5
0.50 - 0.99	53	246	304	84	17	6	2	.	.	.	712
1.00 - 1.49	121	387	766	365	201	62	11	2	.	.	1915
1.50 - 1.99	78	228	378	441	374	226	31	3	.	.	1759
2.00 - 2.49	7	144	135	249	392	334	111	7	1	.	1380
2.50 - 2.99	.	58	87	111	354	394	142	9	.	.	1155
3.00 - 3.49	.	15	69	72	211	337	187	13	.	.	954
3.50 - 3.99	.	.	34	30	121	331	239	22	.	.	777
4.00 - 4.49	.	.	14	23	69	211	226	22	.	.	565
4.50 - 4.99	.	.	2	10	37	91	173	20	.	.	333
5.00 +				2	19	72	225	87	.	.	405
TOTAL	261	1078	1791	1387	1795	2114	1347	186	1	0	

MEAN HS(M) = 2.47 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	2.9	2.9	2.3	1.9	1.7	1.3	1.2	1.5	2.3	3.1	3.5	2.3
1957	2.5	2.8	3.3	2.1	1.8	1.4	1.1	1.0	1.7	2.4	3.2	3.8	2.3
1958	4.5	4.0	2.7	3.1	1.6	1.4	1.4	1.3	1.8	2.6	3.2	4.3	2.6
1959	4.0	3.2	3.0	2.1	1.9	1.4	1.4	1.1	1.8	2.6	3.7	3.9	2.4
1960	3.4	4.0	2.4	2.4	1.9	1.5	1.2	1.2	1.4	2.6	3.5	3.8	2.4
1961	4.3	3.9	3.5	2.2	1.7	1.4	1.1	1.0	1.5	2.6	3.1	3.3	2.5
1962	3.2	3.0	2.4	2.2	1.5	1.3	1.0	1.4	1.6	2.7	3.9	4.0	2.3
1963	3.4	4.3	2.8	1.9	1.5	1.6	1.1	0.8	1.9	3.3	3.7	4.0	2.5
1964	4.6	3.2	2.9	2.3	1.7	1.6	1.4	1.5	1.7	2.4	3.2	4.0	2.5
1965	3.5	3.0	2.8	2.3	1.7	1.5	1.2	1.1	1.4	2.9	2.9	3.7	2.4
1966	4.3	2.8	3.1	2.0	1.9	1.5	1.1	1.2	1.9	2.5	2.6	3.9	2.4
1967	3.6	3.2	2.5	1.8	1.4	1.2	1.1	1.2	2.0	2.9	3.0	3.6	2.3
1968	3.4	4.1	3.1	2.1	1.5	1.3	1.2	1.1	1.5	2.6	3.8	3.4	2.5
1969	2.7	3.8	2.9	3.1	1.7	1.7	1.3	1.3	1.9	2.7	3.4	5.2	2.6
1970	4.0	4.3	3.5	2.6	1.7	1.4	1.5	1.2	1.7	2.4	3.2	3.9	2.6
1971	3.3	3.6	3.6	2.8	1.8	1.6	0.9	1.4	1.8	2.3	3.5	3.2	2.5
1972	4.0	3.5	3.3	2.5	1.7	1.5	1.6	1.2	1.6	2.0	4.1	3.6	2.5
1973	4.2	3.8	3.3	2.1	2.0	1.9	1.8	1.4	2.0	2.6	3.3	4.6	2.8
1974	3.5	3.6	3.3	2.7	2.0	1.8	1.4	1.3	1.5	2.8	3.7	4.3	2.7
1975	3.5	3.2	2.7	1.9	1.6	1.2	1.0	1.1	1.1	2.7	3.5	3.4	2.2
MEAN	3.7	3.5	3.0	2.3	1.7	1.5	1.3	1.2	1.7	2.6	3.3	3.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	4.9	4.8	4.0	3.0	2.7	2.0	2.2	2.5	3.9	4.7	5.9
1957	4.4	6.2	5.8	4.5	3.3	2.5	2.0	1.8	3.4	3.8	4.9	5.3
1958	6.8	6.6	5.3	6.2	2.9	2.0	2.3	2.0	3.0	4.4	5.3	6.5
1959	6.3	6.1	4.6	4.0	3.2	2.5	2.1	2.0	3.2	5.5	6.1	6.6
1960	7.1	7.1	3.8	4.1	2.6	2.9	1.8	2.0	2.3	5.9	6.1	6.3
1961	6.5	6.4	6.3	4.3	2.3	2.5	1.7	2.5	2.7	5.5	4.9	5.7
1962	5.5	4.7	4.2	3.6	2.5	2.6	1.6	2.6	4.3	5.8	7.3	6.7
1963	5.8	6.3	5.1	3.0	3.0	3.0	1.9	1.3	3.2	7.0	5.8	7.6
1964	6.5	5.4	4.6	4.4	3.3	2.7	2.3	2.3	3.2	4.2	5.2	6.1
1965	6.1	4.6	4.7	3.3	3.4	2.7	2.1	1.9	2.2	5.8	6.1	5.6
1966	6.8	4.8	5.1	4.5	2.9	2.8	1.9	2.0	3.6	4.8	4.7	6.5
1967	5.7	5.9	4.7	3.8	2.4	2.1	1.5	1.9	3.4	5.8	5.5	6.6
1968	7.0	6.2	5.0	3.2	2.7	2.4	2.2	2.3	3.0	5.3	6.2	5.9
1969	4.0	5.7	5.2	6.0	2.2	3.1	2.4	2.0	3.2	3.9	6.5	7.4
1970	7.0	6.4	5.7	5.3	2.8	2.3	2.4	1.9	2.6	4.6	6.7	6.9
1971	6.3	5.6	6.6	4.1	3.1	2.3	1.7	3.4	2.8	4.1	6.4	5.0
1972	6.3	6.3	5.4	4.4	2.8	2.5	3.4	1.9	2.9	3.6	6.0	7.3
1973	7.7	6.2	6.1	4.0	3.5	3.6	2.7	2.0	3.0	5.8	6.2	6.7
1974	6.8	5.4	6.3	4.5	3.5	3.4	2.9	2.2	2.2	5.1	5.4	6.5
1975	5.3	5.9	5.9	4.0	3.3	2.0	1.8	2.0	1.8	4.4	6.2	6.1

20 YR. STATISTICS FOR PACIFIC STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73012318

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	.	.	.	.	.	.	.	.	.	13
0.50 - 0.99	207	11	.	.	.	.	.	.	.	.	218
1.00 - 1.49	870	121	.	.	.	.	.	.	.	.	991
1.50 - 1.99	136	63	.	.	.	.	.	.	.	.	199
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1226	196	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.25 LARGEST HS(M) = 2.02 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 834

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	87	73	109	5	.	1	6	13	.	.	294
0.50 - 0.99	518	3319	4873	1375	489	220	27	.	.	.	10821
1.00 - 1.49	506	2612	7602	4296	2648	1115	114	5	.	.	18899
1.50 - 1.99	395	915	2229	3574	3287	1883	417	3	.	.	12903
2.00 - 2.49	37	472	550	1339	3304	2642	564	54	.	.	8962
2.50 - 2.99	.	123	200	412	2169	2631	641	66	.	.	6242
3.00 - 3.49	.	1	27	107	915	2325	515	94	.	.	3984
3.50 - 3.99	.	.	6	17	219	1230	349	47	.	.	1868
4.00 - 4.49	.	.	.	.	37	463	268	34	.	.	802
4.50 - 4.99	.	.	.	1	3	85	172	20	.	.	281
5.00 +	.	.	.	.	1	25	94	18	.	.	138
TOTAL	1533	7515	15596	11126	13072	12620	3167	354	0	0	

MEAN HS(M) = 1.80 LARGEST HS(M) = 6.34 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 37998

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	22	10	.	.	.	3	1	1	.	36
0.50 - 0.99	13	234	429	169	54	13	1	11	1	.	925
1.00 - 1.49	39	326	776	812	516	318	77	49	10	.	2923
1.50 - 1.99	154	359	604	463	806	786	366	78	10	.	3658
2.00 - 2.49	59	393	456	446	884	1279	819	59	6	.	4401
2.50 - 2.99	.	217	373	381	701	1492	1365	104	15	.	4598
3.00 - 3.49	.	82	314	314	574	1117	1704	169	13	.	4287
3.50 - 3.99	.	13	183	131	367	766	1675	116	1	.	3452
4.00 - 4.49	.	1	57	75	207	352	1324	210	6	.	2252
4.50 - 4.99	.	.	13	47	102	205	682	205	.	.	1315
5.00 +	.	.	1	17	61	285	588	410	.	.	1362
TOTAL	265	1657	3236	2855	4292	6626	8804	1411	63	0	

MEAN HS(M) = 2.86 LARGEST HS(M) = 6.79 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 17097

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	20	1	.	.	.	.	.	.	.	27
1.00 - 1.49	41	107	27	.	.	.	.	.	.	.	175
1.50 - 1.99	162	287	88	13	8	.	.	.	.	.	558
2.00 - 2.49	44	420	251	80	46	5	.	.	.	.	846
2.50 - 2.99	.	306	227	196	114	5	.	.	.	.	648
3.00 - 3.49	.	102	249	147	198	15	5	.	.	.	716
3.50 - 3.99	.	30	160	133	205	23	6	.	.	.	557
4.00 - 4.49	.	.	34	41	143	61	5	.	.	.	284
4.50 - 4.99	.	.	5	23	56	34	1	.	.	.	119
5.00 +	.	.	.	6	39	32	11	.	.	.	88
TOTAL	253	1272	1042	639	809	175	28	0	0	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 6.87 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 2480

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	13	.	.	.	.	.	.	.	.	.	13
1.00 - 1.49	20	3	.	.	.	.	.	.	.	.	23
1.50 - 1.99	3	10	.	.	.	.	.	.	.	.	13
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	37	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.18 LARGEST HS(M) = 1.87 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 31

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

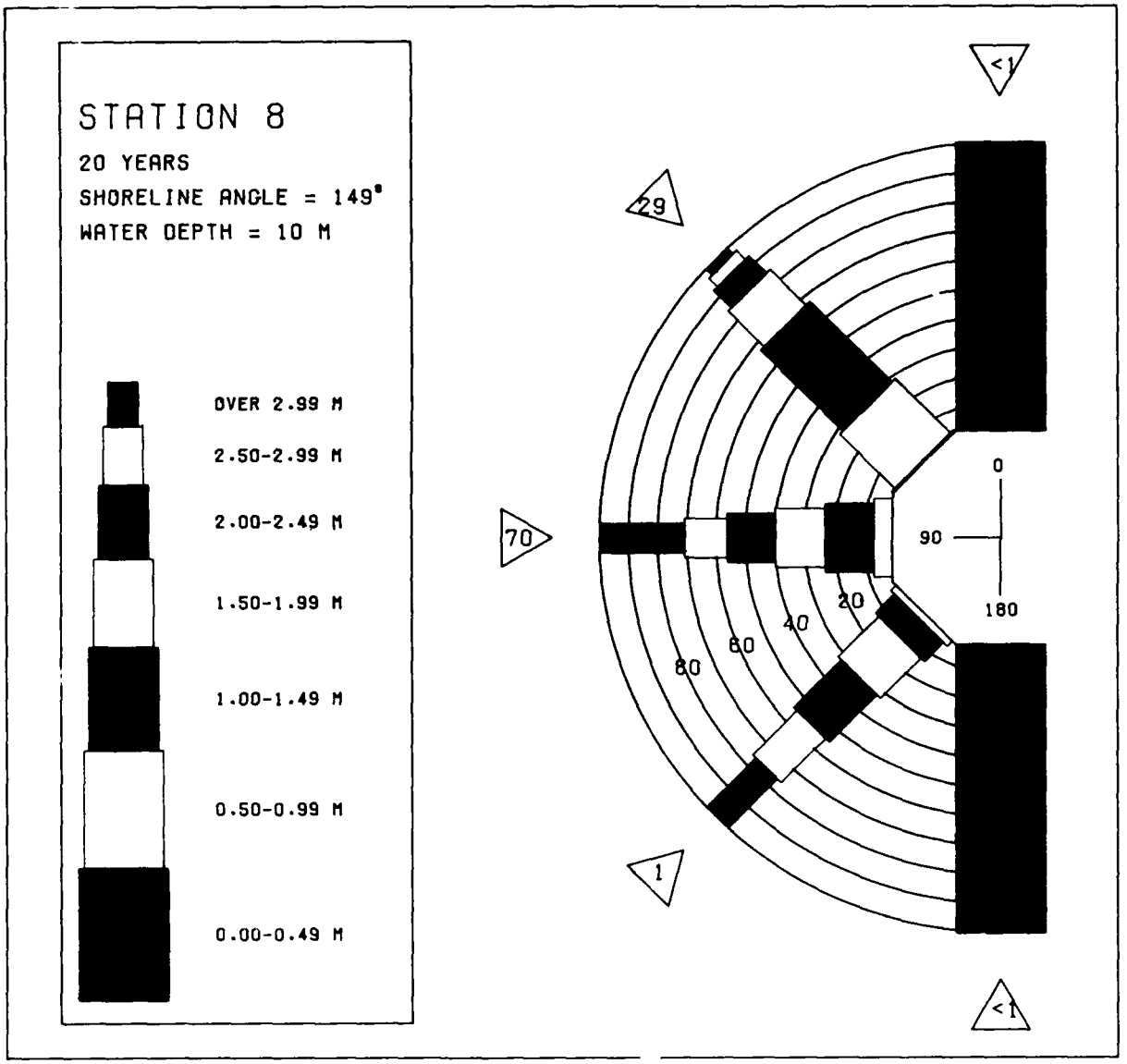
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 8 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	9	11				1	1	.	.	32
0.50 - 0.99	75	358	530	154	54	23	2	1	.	.	1197
1.00 - 1.49	147	317	840	510	316	143	19	5	1	.	2298
1.50 - 1.99	84	164	292	405	412	267	78	8	1	.	1711
2.00 - 2.49	14	128	125	186	423	392	138	11	.	.	1417
2.50 - 2.99	.	64	80	99	298	407	200	17	1	.	1166
3.00 - 3.49	.	18	59	56	168	345	222	26	1	.	895
3.50 - 3.99	.	4	35	28	79	202	223	16	.	.	587
4.00 - 4.49	.	.	11	11	38	87	159	24	.	.	330
4.50 - 4.99	.	.	1	7	16	38	65	22	.	.	169
5.00 +	.	.	.	2	10	34	69	42	.	.	157
TOTAL	330	1062	1984	1458	1814	1938	1196	173	4	0	

MEAN HS(M) = 2.15 LARGEST HS(M) = 6.87 MEAN TP(SEC)= 10.6 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 8 (47.76N/ 124.48W TO 47.70N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.1	2.6	2.5	1.9	1.6	1.4	1.1	1.1	1.3	2.0	2.6	2.9	2.0
1957	2.3	2.6	2.7	1.8	1.6	1.2	1.0	0.9	1.5	2.0	2.8	3.4	2.0
1958	3.9	3.3	2.4	2.5	1.4	1.2	1.3	1.1	1.6	2.3	2.9	3.6	2.3
1959	3.4	2.9	2.6	1.8	1.5	1.2	1.2	1.1	1.5	2.0	2.4	3.3	2.1
1960	3.0	3.4	2.0	2.1	1.6	1.2	1.1	1.2	1.2	2.2	3.1	3.0	2.1
1961	3.7	3.4	2.9	2.0	1.5	1.2	0.9	1.0	1.3	2.3	2.7	2.8	2.1
1962	2.5	2.6	2.1	1.9	1.3	1.1	0.9	1.2	1.4	2.3	3.3	3.4	2.0
1963	2.6	3.5	2.5	1.6	1.3	1.4	1.0	0.7	1.6	2.9	3.0	3.4	2.1
1964	4.1	2.7	2.5	2.1	1.5	1.3	1.1	1.4	1.5	2.1	2.8	3.6	2.2
1965	3.0	2.8	2.2	2.0	1.6	1.6	1.1	1.0	1.2	2.6	2.7	3.3	2.1
1966	3.8	2.7	2.6	1.9	1.7	1.2	1.0	1.1	1.6	2.1	2.4	3.6	2.1
1967	3.2	3.0	2.4	1.6	1.2	1.1	1.0	1.0	1.6	2.6	2.6	3.2	2.0
1968	3.1	3.1	2.7	1.9	1.3	1.3	1.1	1.1	1.3	2.3	3.2	3.1	2.1
1969	2.4	3.4	2.6	2.7	1.5	1.3	1.1	1.2	1.6	2.2	2.9	4.5	2.3
1970	3.3	3.8	3.2	2.4	1.4	1.3	1.3	1.1	1.5	2.3	2.9	3.4	2.3
1971	3.0	3.0	3.2	2.4	1.6	1.4	0.9	1.3	1.5	2.0	3.1	2.9	2.2
1972	3.6	3.2	2.9	2.2	1.4	1.4	1.3	1.0	1.4	1.7	3.5	3.2	2.2
1973	3.7	3.2	2.9	1.8	1.8	1.6	1.6	1.3	1.7	2.3	3.0	4.0	2.4
1974	3.0	3.1	3.0	2.3	1.7	1.5	1.2	1.1	1.3	2.3	3.2	3.7	2.3
1975	2.9	2.7	2.4	1.7	1.4	1.0	0.9	1.0	0.8	2.5	3.1	3.0	1.9
MEAN	3.2	3.1	2.6	2.0	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 8 (47.76N/ 124.48W TO 47.70N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.8	4.3	4.7	3.5	2.7	2.7	1.8	2.2	2.5	3.7	3.8	5.1
1957	4.1	6.1	4.4	3.5	2.8	2.2	1.9	1.7	2.7	3.6	4.3	5.1
1958	6.3	5.0	4.0	5.6	2.4	2.0	2.2	1.7	2.6	4.0	4.9	6.2
1959	5.8	5.9	4.1	3.5	2.6	2.3	1.9	1.9	3.3	4.0	5.7	6.4
1960	5.4	6.2	3.7	3.3	2.3	2.5	1.7	1.9	2.2	5.1	5.6	5.2
1961	6.3	5.4	4.3	3.3	2.2	1.9	1.6	2.4	2.5	4.3	4.5	5.0
1962	5.2	4.1	3.7	2.9	2.5	1.8	1.6	2.0	4.2	4.3	6.7	6.3
1963	4.7	6.0	5.0	2.7	2.5	2.4	1.8	1.3	2.8	6.5	4.6	6.8
1964	6.3	4.4	4.3	4.1	2.9	2.4	2.1	2.2	3.1	3.4	4.9	6.0
1965	5.3	4.4	3.4	2.9	3.8	2.6	2.0	1.8	1.8	5.1	5.7	5.0
1966	6.6	4.7	4.2	3.5	2.7	2.2	1.7	1.8	3.3	3.9	4.7	6.1
1967	5.5	5.1	4.7	3.5	2.1	1.8	1.4	1.5	2.9	4.7	5.3	5.8
1968	6.9	4.4	4.3	3.3	2.8	2.4	2.0	2.1	2.5	3.8	5.3	6.2
1969	4.0	5.6	4.6	5.3	2.9	2.1	2.1	2.0	2.9	3.8	6.6	6.7
1970	6.2	5.7	5.6	4.6	2.4	2.4	2.0	1.8	2.6	4.5	5.7	5.9
1971	6.2	5.1	6.5	3.9	3.2	2.2	1.6	3.0	2.6	4.0	5.8	5.3
1972	6.2	6.3	4.5	4.1	2.4	2.2	2.6	1.7	2.9	3.1	5.1	6.9
1973	6.5	5.1	5.2	3.3	3.3	2.7	2.5	1.9	2.3	4.2	5.8	6.6
1974	6.3	5.0	5.8	4.5	3.1	2.9	2.3	1.6	2.0	4.5	4.8	5.5
1975	4.3	5.1	4.5	3.7	3.3	1.7	1.5	1.8	1.3	4.3	5.9	6.1

20 YR. STATISTICS FOR PACIFIC STATION 8 (47.76N/ 124.48W TO 47.70N/ 124.43W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	106.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		72121612

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	37	.	.	.	.	.	.	.	.	.	37
1.00 - 1.49	130	8	.	.	.	.	.	.	.	.	138
1.50 - 1.99	1	11	.	.	.	.	.	.	.	.	12
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	168	19	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.19 LARGEST HS(M) = 1.66 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 111

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	80	25	35	.	1	.	.	.	.	.	141
0.50 - 0.99	549	2079	1582	280	78	66	5	.	.	.	4639
1.00 - 1.49	1090	2691	3254	723	605	270	6	.	.	.	8639
1.50 - 1.99	864	1047	1718	838	540	497	78	.	.	.	5582
2.00 - 2.49	49	568	477	687	361	379	130	.	.	.	2651
2.50 - 2.99	.	155	167	289	672	282	83	.	.	.	1648
3.00 - 3.49	.	25	73	97	467	301	63	.	.	.	926
3.50 - 3.99	.	.	8	11	201	261	23	.	.	.	504
4.00 - 4.49	.	.	1	5	46	181	25	.	.	.	258
4.50 - 4.99	.	.	.	.	10	58	18	.	.	.	86
5.00 +	.	.	.	.	1	32	17	.	.	.	50
TOTAL	2632	6590	7315	2930	2981	2228	448	0	0	0	

MEAN HS(M) = 1.65 LARGEST HS(M) = 6.10 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 14701

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	47	35	1	.	.	.	3	11	.	.	97
0.50 - 0.99	35	674	2710	903	258	49	23	13	3	.	4668
1.00 - 1.49	39	492	4897	3841	1976	812	131	44	10	.	12232
1.50 - 1.99	82	177	1813	3436	3478	2019	465	71	10	.	11551
2.00 - 2.49	35	232	504	1618	3797	3215	1136	88	5	.	10630
2.50 - 2.99	.	114	225	564	2614	3793	1858	152	20	.	9340
3.00 - 3.49	.	27	133	254	1262	3465	2051	248	13	.	7453
3.50 - 3.99	.	.	49	73	455	2185	2460	312	1	.	5436
4.00 - 4.49	.	1	22	27	119	908	1839	215	8	.	3139
4.50 - 4.99	.	.	10	10	18	325	1035	285	1	.	1684
5.00 +	.	.	.	.	3	148	802	515	.	.	1468
TOTAL	191	1754	10398	10727	13981	16919	11803	1854	71	0	

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 39589

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	61	5	.	.	.	.	.	.	.	74
1.00 - 1.49	34	200	135	.	.	.	.	.	.	.	369
1.50 - 1.99	142	381	289	90	42	10	.	.	.	.	954
2.00 - 2.49	51	407	385	174	162	25	.	.	.	.	1204
2.50 - 2.99	.	248	391	297	302	97	13	.	.	.	1348
3.00 - 3.49	.	82	270	188	385	136	10	.	.	.	1071
3.50 - 3.99	.	8	135	97	313	169	15	.	.	.	737
4.00 - 4.49	.	.	42	61	165	167	32	.	.	.	467
4.50 - 4.99	.	.	1	22	70	111	29	3	.	.	236
5.00 +				6	39	90	102	1			238
TOTAL	235	1387	1653	935	1478	805	201	4	0	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 6.45 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 3928

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	13	.	.	.	.	.	.	.	.	.	13
1.00 - 1.49	27	20	.	.	.	.	.	.	.	.	47
1.50 - 1.99	23	49	.	.	.	.	.	.	.	.	72
2.00 - 2.49	3	41	.	.	.	.	.	.	.	.	44
2.50 - 2.99	.	6	.	.	.	.	.	.	.	.	6
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	69	116	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.66 LARGEST HS(M) = 2.82 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 111

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

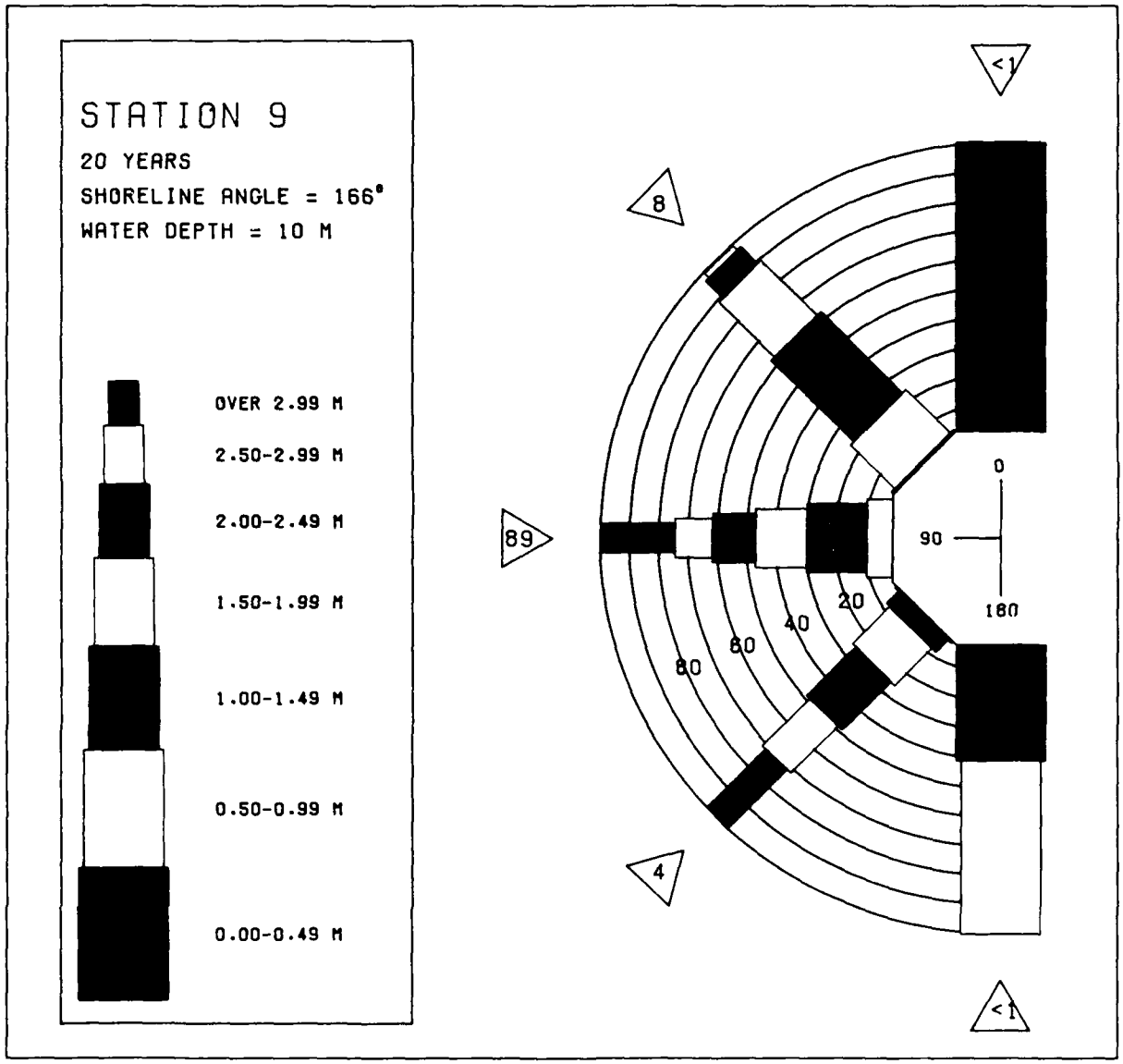
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 9 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	8	7	7				1	.	.	.	23
0.50 - 0.99	64	281	429	118	33	11	2	1	.	.	939
1.00 - 1.49	132	340	828	456	258	108	13	4	1	.	2140
1.50 - 1.99	111	166	382	436	406	252	54	7	1	.	1815
2.00 - 2.49	14	124	136	248	432	362	126	8	.	.	1450
2.50 - 2.99	.	52	78	115	359	417	193	15	2	.	1233
3.00 - 3.49	.	13	47	54	211	380	212	24	1	.	942
3.50 - 3.99	.	.	19	18	97	261	250	21	.	.	666
4.00 - 4.49	.	.	6	9	33	125	189	21	.	.	383
4.50 - 4.99	.	.	1	3	9	49	108	28	.	.	198
5.00 +					4	27	92	51	.	.	174
TOTAL	329	983	1933	1457	1842	1992	1241	181	5	0	

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.8	2.6	2.0	1.7	1.5	1.2	1.1	1.4	2.2	2.7	3.0	2.1
1957	2.4	2.7	2.9	2.0	1.7	1.2	1.1	1.0	1.6	2.0	3.0	3.5	2.1
1958	4.0	3.1	2.5	2.7	1.5	1.2	1.4	1.2	1.7	2.4	3.0	3.6	2.4
1959	3.4	3.1	2.7	1.9	1.6	1.3	1.2	1.1	1.6	2.1	2.5	3.4	2.2
1960	3.1	3.5	2.0	2.1	1.7	1.3	1.1	1.2	1.3	2.3	3.2	3.2	2.2
1961	3.7	3.5	2.9	2.2	1.6	1.2	1.0	1.0	1.4	2.5	2.9	2.9	2.2
1962	2.6	2.8	2.3	1.9	1.4	1.2	1.0	1.3	1.5	2.4	3.5	3.4	2.1
1963	2.8	3.5	2.7	1.7	1.4	1.5	1.1	0.7	1.7	3.0	3.1	3.4	2.2
1964	4.2	3.8	2.6	2.2	1.6	1.4	1.4	1.5	1.6	2.2	2.9	3.7	2.3
1965	3.1	3.0	2.4	2.1	1.7	1.7	1.2	1.1	1.3	2.6	2.7	3.4	2.2
1966	3.9	2.8	2.7	2.1	1.8	1.3	1.1	1.2	1.7	2.3	2.5	3.3	2.2
1967	3.3	3.1	2.5	1.8	1.3	1.1	1.1	1.0	1.7	2.7	2.8	3.3	2.1
1968	3.0	3.1	2.7	2.1	1.4	1.3	1.2	1.2	1.4	2.4	3.3	3.1	2.2
1969	2.5	3.6	2.8	2.8	1.5	1.4	1.2	1.3	1.7	2.3	3.0	4.6	2.4
1970	3.4	4.0	3.3	2.5	1.4	1.4	1.4	1.2	1.6	2.4	3.0	3.5	2.4
1971	3.0	3.1	3.3	2.5	1.7	1.5	0.9	1.4	1.6	2.1	3.3	3.1	2.3
1972	3.8	3.2	3.0	2.3	1.6	1.5	1.4	1.1	1.5	1.8	3.6	3.2	2.3
1973	3.8	3.3	3.0	2.0	1.8	1.7	1.7	1.4	1.8	2.4	3.1	4.0	2.5
1974	3.0	3.2	3.1	2.4	1.8	1.6	1.3	1.2	1.3	2.4	3.4	3.8	2.4
1975	3.0	2.8	2.5	1.9	1.5	1.0	0.9	1.0	0.8	2.5	3.1	3.0	2.0
MEAN	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.4	4.6	4.9	3.7	2.9	2.8	2.0	2.4	2.9	4.0	4.0	5.2
1957	4.5	5.9	4.5	3.8	3.0	2.2	2.0	1.8	2.7	3.3	4.8	5.2
1958	6.5	5.1	4.3	6.0	2.6	2.2	2.5	1.9	2.7	4.4	5.1	6.0
1959	6.3	5.3	4.3	3.8	2.8	2.3	1.9	2.0	3.2	4.1	6.0	6.3
1960	5.0	6.2	3.9	3.4	2.4	2.6	1.8	2.0	2.4	5.5	5.9	5.2
1961	6.3	5.4	4.4	3.4	2.4	2.0	1.8	2.4	2.6	4.4	5.2	5.1
1962	5.3	4.3	3.8	3.0	2.6	2.1	1.8	2.2	4.3	3.9	7.0	6.2
1963	4.7	5.7	5.6	3.0	2.4	2.6	1.9	1.4	2.7	6.7	4.9	6.4
1964	6.3	4.7	4.3	4.4	3.2	2.3	2.2	2.3	3.1	3.7	5.0	6.0
1965	5.5	4.8	3.6	3.2	4.2	3.0	2.2	1.9	2.1	5.6	5.3	5.2
1966	6.5	5.1	4.8	3.6	2.8	2.3	1.9	2.0	3.5	4.0	5.0	6.4
1967	5.5	5.4	5.0	4.1	2.1	1.9	1.5	1.6	3.0	4.9	5.9	6.1
1968	5.9	4.3	4.5	3.5	3.1	2.4	2.1	2.2	2.5	4.0	5.1	5.3
1969	4.2	5.4	4.9	5.6	2.9	2.2	2.1	2.1	2.9	3.7	6.5	6.7
1970	6.0	6.0	6.0	4.7	2.5	2.6	2.0	1.9	2.8	4.5	5.9	5.9
1971	6.2	5.6	6.4	4.1	3.2	2.3	1.8	3.1	2.8	3.9	6.0	6.0
1972	6.3	6.7	4.7	4.5	2.5	2.4	2.6	1.9	2.8	3.4	5.3	7.0
1973	6.2	5.4	5.6	3.5	3.2	2.8	2.7	2.0	2.4	4.6	6.2	6.4
1974	6.3	5.0	6.1	4.6	3.2	3.0	2.5	1.8	2.2	4.8	5.3	5.9
1975	4.5	5.5	4.7	4.1	3.5	1.9	1.6	1.9	1.3	4.0	5.6	5.7

20 YR. STATISTICS FOR PACIFIC STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.2
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	84.5
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	72122512

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	88	.	.	.	.	.	.	.	.	.	88
1.50 - 1.99	20	.	.	.	.	.	.	.	.	.	20
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	125	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.26 LARGEST HS(M) = 1.87 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 74

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	32	20	18	.	.	.	.	.	.	.	70
0.50 - 0.99	494	1327	1288	244	30	15	1	.	.	.	3399
1.00 - 1.49	1031	2334	2369	947	492	114	.	.	.	.	7187
1.50 - 1.99	989	1014	1187	869	793	371	.	.	.	.	5223
2.00 - 2.49	53	610	290	456	634	393	.	.	.	.	2441
2.50 - 2.99	.	172	140	225	554	340	.	.	.	.	1431
3.00 - 3.49	.	23	78	59	371	157	.	.	.	.	688
3.50 - 3.99	.	.	8	17	116	140	.	.	.	.	281
4.00 - 4.49	.	.	1	5	23	116	.	.	.	.	145
4.50 - 4.99	.	.	.	.	6	22	.	.	.	.	28
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2599	5500	5379	2722	3019	1673	1	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 4.93 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 12226

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	54	42	1	.	3	3	18	15	.	137
0.50 - 0.99	41	829	2701	901	198	63	34	5	.	.	4772
1.00 - 1.49	22	511	5448	3757	2215	812	143	53	6	.	12967
1.50 - 1.99	59	181	1873	3425	3885	2315	523	83	15	.	11959
2.00 - 2.49	22	212	429	1490	3716	3532	1291	90	11	.	11083
2.50 - 2.99	.	87	135	496	2546	4611	2246	147	22	.	10290
3.00 - 3.49	.	27	73	236	1163	3735	2748	217	6	.	8205
3.50 - 3.99	.	.	46	47	458	2330	2840	282	3	.	6056
4.00 - 4.49	.	.	10	17	131	971	2369	302	5	.	3805
4.50 - 4.99	.	.	1	8	27	328	1291	301	.	.	1956
5.00 +	.	.	.	.	.	160	879	629	.	.	1668
TOTAL	145	1901	10758	10378	13939	19200	14367	2127	83	0	

MEAN HS(M) = 2.44 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 42627

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	53	23	3	.	.	.	.	.	.	84
1.00 - 1.49	22	162	196	23	5	.	.	.	.	.	408
1.50 - 1.99	107	295	227	140	37	5	.	.	.	.	812
2.00 - 2.49	32	249	309	200	181	35	.	.	.	.	1006
2.50 - 2.99	.	174	328	225	309	104	8	.	.	.	1148
3.00 - 3.49	.	42	183	177	367	159	13	.	.	.	941
3.50 - 3.99	.	1	71	65	314	188	34	.	.	.	673
4.00 - 4.49	.	.	20	44	128	169	46	.	.	.	407
4.50 - 4.99	.	.	.	17	47	80	30	3	.	.	177
5.00 +	.	.	.	6	22	82	73	13	.	.	196
TOTAL	166	977	1357	900	1410	822	204	16	0	0	

MEAN HS(M) = 2.84 LARGEST HS(M) = 6.53 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 3436

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	13	1	.	.	.	.	.	.	.	.	14
1.00 - 1.49	6	20	.	.	.	.	.	.	.	.	26
1.50 - 1.99	25	34	.	.	.	.	.	.	.	.	59
2.00 - 2.49	.	13	3	.	.	.	.	.	.	.	16
2.50 - 2.99	.	6	3	.	.	.	.	.	.	.	9
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	1	.	.	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	44	74	7	0	0	0	0	0	0	0	

MEAN HS(M) = 1.67 LARGEST HS(M) = 3.51 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 77

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

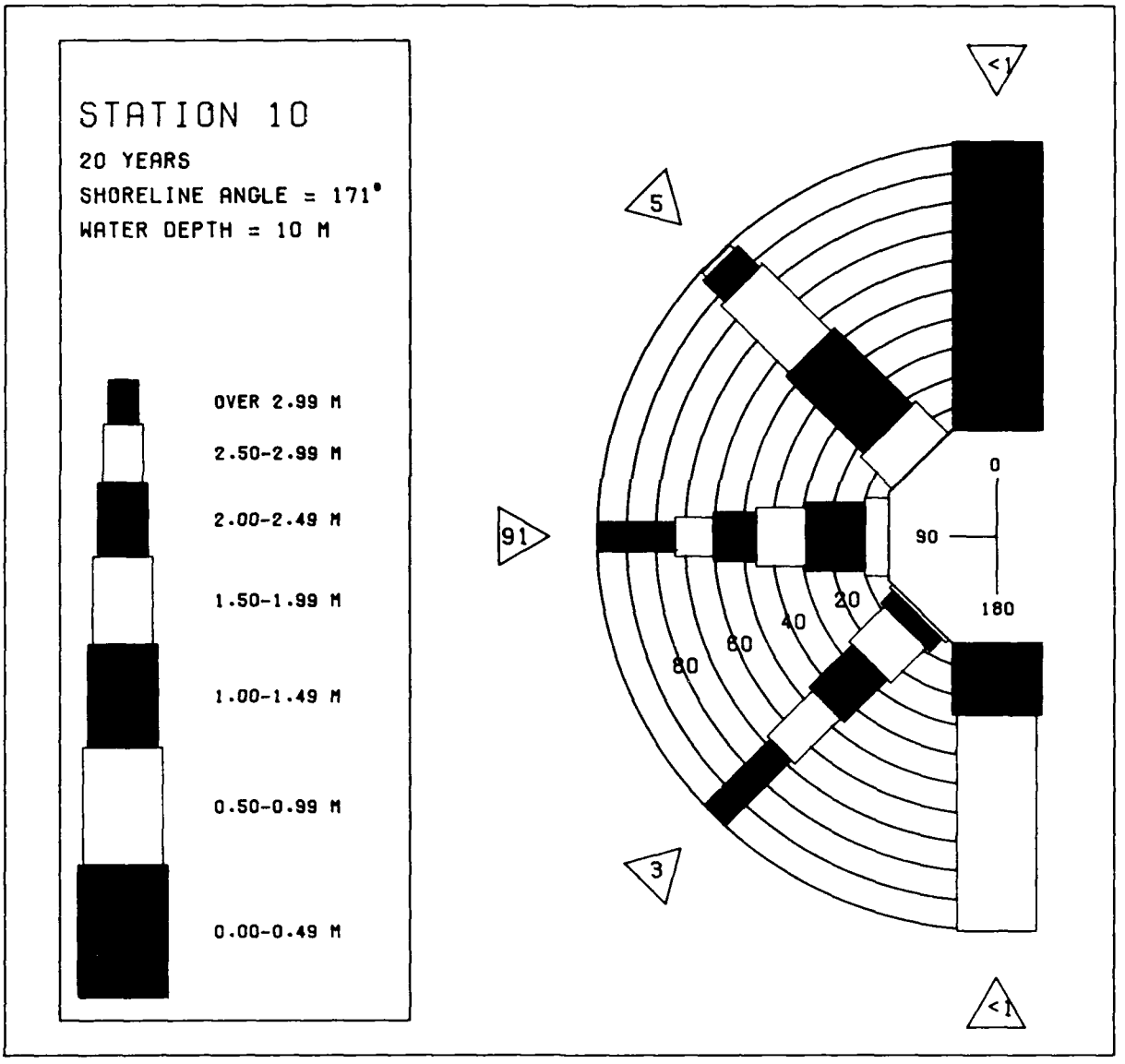
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 10 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	3	7	6					1	1	.	18
0.50 - 0.99	57	221	401	114	22	7	3	.	.	.	825
1.00 - 1.49	117	302	801	462	271	92	14	5	.	.	2064
1.50 - 1.99	120	152	328	443	431	269	52	8	1	.	1804
2.00 - 2.49	10	108	103	214	453	425	129	9	1	.	1452
2.50 - 2.99	.	44	60	94	341	505	225	14	2	.	1285
3.00 - 3.49	.	9	33	47	190	405	276	21	.	.	981
3.50 - 3.99	.	.	12	13	88	270	287	28	.	.	698
4.00 - 4.49	.	.	3	6	28	125	241	30	.	.	433
4.50 - 4.99	.	.	.	2	8	43	132	30	.	.	215
5.00 +	.	.	.	.	2	24	95	64	.	.	185
TOTAL	307	843	1747	1395	1834	2165	1454	210	5	0	

MEAN HS(M) = 2.30 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	2.8	2.7	2.1	1.9	1.5	1.2	1.2	1.5	2.2	2.7	3.0	2.2
1957	2.5	2.7	2.9	2.1	1.7	1.2	1.1	1.0	1.6	2.2	3.1	3.6	2.1
1958	4.0	3.4	2.6	2.8	1.6	1.2	1.5	1.2	1.8	2.5	3.1	3.7	2.5
1959	3.6	3.2	2.6	2.0	1.7	1.3	1.3	1.2	1.7	2.2	2.5	3.5	2.2
1960	3.3	3.5	2.1	2.2	1.7	1.3	1.2	1.3	1.4	2.5	3.3	3.3	2.3
1961	3.7	3.4	2.9	2.3	1.7	1.3	1.0	1.1	1.4	2.6	3.0	3.0	2.3
1962	2.6	2.8	2.4	2.0	1.4	1.3	1.0	1.3	1.6	2.5	3.5	3.4	2.2
1963	2.8	3.4	2.8	1.9	1.4	1.6	1.2	0.8	1.7	3.1	3.2	3.5	2.3
1964	4.2	2.8	2.7	2.3	1.7	1.4	1.4	1.5	1.6	2.2	3.0	3.6	2.4
1965	3.2	3.0	2.4	2.3	1.7	1.8	1.3	1.1	1.3	2.6	2.9	3.7	2.3
1966	3.9	2.8	2.8	2.1	1.9	1.2	1.2	1.2	1.7	2.3	2.5	3.5	2.3
1967	3.4	3.1	2.6	2.0	1.3	1.1	1.2	1.1	1.7	2.7	3.0	3.4	2.2
1968	3.0	3.1	2.7	2.1	1.4	1.3	1.2	1.2	1.4	2.4	3.3	3.1	2.2
1969	2.5	3.7	2.9	2.9	1.6	1.4	1.3	1.3	1.7	2.4	3.1	4.6	2.4
1970	3.5	4.0	3.3	2.5	1.5	1.4	1.4	1.2	1.6	2.4	3.1	3.7	2.5
1971	3.0	3.1	3.3	2.6	1.8	1.4	1.0	1.4	1.7	2.1	3.3	3.2	2.3
1972	3.8	3.3	3.0	2.5	1.7	1.5	1.5	1.2	1.6	1.9	3.7	3.3	2.4
1973	3.8	3.4	3.1	2.1	1.9	1.7	1.7	1.5	1.8	2.5	3.3	4.2	2.6
1974	3.0	3.4	3.1	2.5	1.9	1.6	1.3	1.2	1.4	2.4	3.6	3.8	2.4
1975	3.1	2.8	2.5	2.0	1.6	1.1	1.0	1.0	0.9	2.6	3.3	3.1	2.1
MEAN	3.3	3.2	2.8	2.3	1.6	1.4	1.3	1.2	1.6	2.4	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.3	4.8	3.6	3.3	2.7	2.4	2.1	2.7	4.1	4.0	5.1
1957	4.6	5.9	4.5	3.9	2.7	2.5	2.1	1.8	2.8	3.8	5.2	5.3
1958	6.0	5.6	4.2	6.2	2.7	2.6	2.6	2.0	3.0	4.7	5.4	5.7
1959	6.3	5.2	4.4	3.8	3.0	2.3	2.0	2.1	3.0	4.4	5.9	6.2
1960	5.6	6.2	3.7	3.7	2.6	2.6	1.9	1.9	2.3	5.5	5.7	5.2
1961	6.3	5.4	4.4	3.6	2.4	2.4	1.8	2.4	2.7	4.4	5.2	5.2
1962	5.2	4.5	3.9	3.2	2.5	2.5	1.9	2.3	4.3	4.2	6.4	6.3
1963	4.1	5.6	5.7	3.0	2.5	3.0	2.1	1.4	2.7	7.0	5.1	6.8
1964	6.3	4.8	4.8	4.4	3.7	2.2	2.1	2.4	3.1	3.5	5.4	6.0
1965	5.8	4.9	3.7	3.7	4.2	3.1	2.3	2.0	2.1	5.6	6.1	5.9
1966	6.2	5.2	4.9	3.7	2.9	2.4	2.0	2.0	3.4	4.0	5.0	6.2
1967	5.4	5.4	4.9	4.4	2.0	2.0	1.6	1.6	3.0	4.8	6.1	6.2
1968	6.0	4.3	4.4	3.4	3.1	2.3	2.1	2.3	2.6	3.9	5.1	5.4
1969	4.3	5.6	4.9	5.7	3.0	2.2	2.1	2.1	2.9	3.8	6.3	6.8
1970	5.8	5.9	5.9	4.6	2.5	2.7	2.1	2.2	2.7	4.2	5.9	6.3
1971	6.1	5.6	5.8	4.2	3.5	2.3	2.0	3.3	2.8	3.7	6.3	5.6
1972	6.3	6.8	4.6	4.9	2.5	2.4	2.5	1.9	2.8	3.5	5.1	6.9
1973	6.2	5.4	5.6	4.1	3.4	2.7	2.4	2.3	2.6	4.9	6.4	6.8
1974	5.7	5.7	5.7	4.5	3.5	3.1	2.6	1.9	2.3	5.0	5.7	5.9
1975	5.2	5.6	4.8	4.5	3.3	1.9	1.8	1.9	1.4	4.0	5.8	5.3

20 YR. STATISTICS FOR PACIFIC STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	79.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	160	1	.	.	.	.	.	.	.	.	161
1.50 - 1.99	88	22	.	.	.	.	.	.	.	.	110
2.00 - 2.49	1	6	.	.	.	.	.	.	.	.	7
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	266	29	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.48 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 175

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	30	20	17	.	.	.	.	.	.	.	67
0.50 - 0.99	489	1300	1269	242	34	15	1	.	.	.	3350
1.00 - 1.49	917	2330	2368	831	504	119	.	.	.	.	7068
1.50 - 1.99	1059	1014	1184	862	802	371	.	.	.	.	5292
2.00 - 2.49	68	631	292	462	648	400	.	.	.	.	2501
2.50 - 2.99	.	184	142	225	564	340	.	.	.	.	1455
3.00 - 3.49	.	30	80	59	378	157	.	.	.	.	704
3.50 - 3.99	.	.	10	17	116	140	.	.	.	.	283
4.00 - 4.49	.	.	1	5	23	116	.	.	.	.	145
4.50 - 4.99	.	.	.	.	8	22	.	.	.	.	30
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2563	5509	5363	2703	3077	1679	1	0	0	0	

MEAN HS(M) = 1.65 LARGEST HS(M) = 4.93 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 12224

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	54	42	1	.	3	3	17	15	.	136
0.50 - 0.99	41	821	2683	891	195	63	34	6	.	.	4734
1.00 - 1.49	20	506	5426	3738	2185	800	142	53	6	.	12876
1.50 - 1.99	54	181	1873	3396	3446	2315	521	83	15	.	11884
2.00 - 2.49	22	212	441	1522	3728	3814	1393	90	11	.	11133
2.50 - 2.99	.	87	135	497	2537	4609	2239	145	22	.	10271
3.00 - 3.49	.	27	73	236	1160	3740	2754	219	6	.	8215
3.50 - 3.99	.	.	46	47	458	2380	2840	282	3	.	6056
4.00 - 4.49	.	.	10	17	131	973	2368	301	5	.	3805
4.50 - 4.99	.	.	1	8	25	328	1293	302	.	.	1957
5.00 +	.	.	.	.	.	160	879	629	.	.	1668
TOTAL	138	1888	10730	10353	13865	19185	14366	2127	83	0	

MEAN HS(M) = 2.45 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 42530

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.46N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	53	23	3	.	.	.	.	.	.	84
1.00 - 1.49	22	162	193	23	5	.	.	.	.	.	405
1.50 - 1.99	107	296	225	140	37	5	.	.	.	.	810
2.00 - 2.49	32	249	311	200	181	35	.	.	.	.	1008
2.50 - 2.99	.	174	328	225	309	104	8	.	.	.	1148
3.00 - 3.49	.	42	183	177	367	159	13	.	.	.	941
3.50 - 3.99	.	1	71	65	314	188	34	.	.	.	673
4.00 - 4.49	.	.	20	44	128	169	46	.	.	.	407
4.50 - 4.99	.	.	.	17	47	80	30	3	.	.	177
5.00 +	.	.	.	6	22	82	73	13	.	.	196
TOTAL	166	977	1354	900	1410	822	204	16	0	0	

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.53 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 3434

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.46N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	13	1	.	.	.	.	.	.	.	.	14
1.00 - 1.49	6	20	.	.	.	.	.	.	.	.	26
1.50 - 1.99	25	34	.	.	.	.	.	.	.	.	59
2.00 - 2.49	.	13	3	.	.	.	.	.	.	.	16
2.50 - 2.99	.	6	3	.	.	.	.	.	.	.	9
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	1	.	.	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	44	74	7	0	0	0	0	0	0	0	

MEAN HS(M) = 1.67 LARGEST HS(M) = 3.51 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 77

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.46N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

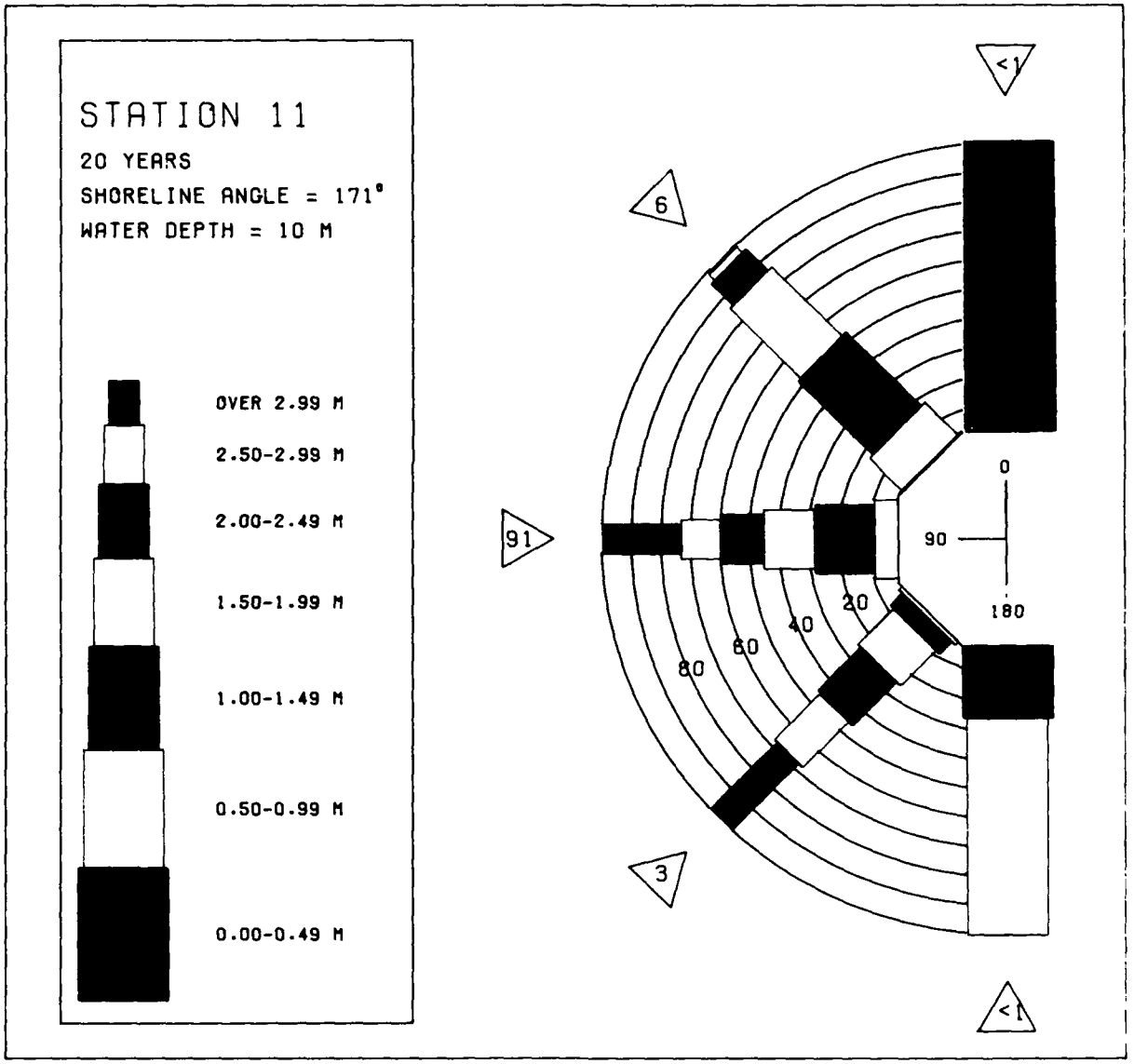
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 11 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	3	7	5					1	1	.	17
0.50 - 0.99	56	217	397	114	22	7	3	.	.	.	815
1.00 - 1.49	112	302	798	459	269	91	14	5	.	.	2050
1.50 - 1.99	133	154	328	439	428	269	52	8	1	.	1812
2.00 - 2.49	12	111	104	218	455	425	129	9	1	.	1464
2.50 - 2.99	.	45	60	94	341	505	224	14	2	.	1285
3.00 - 3.49	.	10	33	47	190	405	276	21	.	.	982
3.50 - 3.99	.	.	13	13	88	270	287	28	.	.	699
4.00 - 4.49	.	.	3	6	28	125	241	30	.	.	433
4.50 - 4.99	.	.	.	2	8	43	132	30	.	.	215
5.00 +	.	.	.	.	2	24	95	64	.	.	185
TOTAL	316	846	1741	1391	1831	2164	1453	210	5	0	

MEAN HS(M) = 2.30 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	2.8	2.7	2.1	1.9	1.6	1.3	1.2	1.5	2.2	2.7	3.0	2.2
1957	2.5	2.7	2.6	2.1	1.7	1.2	1.1	1.0	1.8	2.5	3.1	3.6	2.1
1958	4.0	3.4	2.6	2.8	1.6	1.3	1.3	1.2	1.8	2.5	3.1	3.7	2.5
1959	3.6	3.2	2.6	2.0	1.7	1.3	1.3	1.2	1.7	2.2	2.6	3.5	2.2
1960	3.3	3.5	2.1	2.2	1.7	1.3	1.2	1.3	1.4	2.5	3.3	3.3	2.3
1961	3.7	3.4	2.9	2.3	1.7	1.3	1.0	1.1	1.4	2.6	3.0	3.0	2.3
1962	2.6	2.8	2.4	2.0	1.4	1.3	1.0	1.3	1.6	2.5	3.5	3.4	2.2
1963	2.8	3.4	2.8	1.9	1.4	1.6	1.2	0.8	1.7	3.1	3.2	3.5	2.3
1964	4.2	2.8	2.7	2.3	1.7	1.4	1.4	1.5	1.6	2.2	3.0	3.6	2.4
1965	3.5	3.0	2.4	2.3	1.8	1.8	1.3	1.1	1.4	2.6	2.9	3.7	2.3
1966	3.9	2.8	2.8	2.1	1.9	1.2	1.2	1.2	1.7	2.3	2.5	3.5	2.3
1967	3.4	3.1	2.6	2.0	1.3	1.1	1.2	1.1	1.7	2.7	3.0	3.4	2.2
1968	3.0	3.1	2.7	2.1	1.4	1.3	1.2	1.2	1.4	2.4	3.3	3.1	2.2
1969	2.5	3.7	2.9	2.9	1.6	1.4	1.3	1.3	1.7	2.4	3.1	4.6	2.4
1970	3.5	4.0	3.3	2.5	1.5	1.4	1.4	1.2	1.6	2.4	3.1	3.7	2.5
1971	3.0	3.1	3.3	2.6	1.8	1.4	1.0	1.4	1.7	2.2	3.3	3.2	2.3
1972	3.8	3.3	3.0	2.5	1.7	1.5	1.5	1.2	1.6	1.9	3.7	3.3	2.4
1973	3.8	3.4	3.1	2.1	1.9	1.7	1.3	1.5	1.8	2.5	3.3	4.2	2.6
1974	3.0	3.4	3.1	2.5	1.9	1.6	1.3	1.2	1.4	2.4	3.6	3.8	2.4
1975	3.1	2.8	2.5	2.0	1.6	1.1	1.0	1.0	0.9	2.6	3.3	3.1	2.1
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.4	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.3	4.8	3.6	3.3	2.7	2.5	2.1	2.7	4.1	4.0	5.1
1957	4.6	5.9	4.5	3.9	2.7	2.2	2.1	1.8	2.8	3.8	5.2	5.3
1958	6.0	5.6	4.2	6.2	2.7	2.2	2.6	2.0	3.0	4.7	5.4	5.7
1959	6.3	5.2	4.4	3.8	3.0	2.3	2.0	2.1	3.0	4.4	5.9	6.2
1960	5.6	6.2	3.7	3.7	2.6	2.6	2.0	1.9	2.3	5.5	5.7	5.2
1961	6.3	5.4	4.4	3.6	2.4	2.4	1.9	2.4	2.7	4.4	5.2	5.2
1962	5.2	4.5	3.9	3.2	2.5	2.5	1.9	2.3	4.3	4.2	6.4	6.3
1963	4.1	5.6	5.7	3.1	2.5	3.0	2.1	1.4	2.7	7.0	5.1	6.8
1964	6.3	4.8	4.8	4.4	3.7	2.2	2.2	2.4	3.1	3.5	5.4	6.0
1965	5.8	4.9	3.7	3.7	4.2	3.1	2.3	2.0	2.2	5.6	6.1	5.9
1966	6.2	5.2	4.9	3.7	2.9	2.4	2.0	2.0	3.4	4.0	5.0	6.2
1967	5.4	5.4	4.9	4.4	2.1	2.0	1.7	1.6	3.0	4.8	6.1	6.2
1968	6.0	4.3	4.4	3.4	3.1	2.3	2.1	2.3	2.6	3.9	5.1	5.4
1969	4.3	5.6	4.9	5.7	3.0	2.2	2.1	2.1	2.9	3.8	6.3	6.8
1970	5.8	5.9	5.9	4.6	3.5	2.7	2.1	2.2	2.7	4.2	5.9	6.3
1971	6.1	5.6	5.8	4.2	3.5	2.3	2.0	3.3	2.8	3.7	6.3	5.6
1972	6.3	6.8	4.6	4.9	2.5	2.4	2.5	1.9	2.8	3.5	5.1	6.9
1973	6.2	5.4	5.6	4.1	3.4	2.7	2.5	2.3	2.6	4.9	6.4	6.8
1974	5.7	5.7	5.7	4.5	3.5	3.1	2.6	1.9	2.3	5.0	5.7	5.9
1975	5.2	5.6	4.8	4.5	3.3	1.9	1.8	1.9	1.4	4.0	5.8	5.3

20 YR. STATISTICS FOR PACIFIC STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	79.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	352	37	.	.	.	.	.	.	.	.	389
1.00 - 1.49	1045	237	.	.	.	.	.	.	.	.	1282
1.50 - 1.99	369	195	.	.	.	.	.	.	.	.	564
2.00 - 2.49	.	18	.	.	.	.	.	.	.	.	18
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1783	487	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1329

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	44	107	99	5	.	3	13	18	.	.	289
0.50 - 0.99	333	2671	4948	1697	424	159	22	.	.	.	10254
1.00 - 1.49	302	2440	7409	4726	3235	1338	143	22	.	.	19615
1.50 - 1.99	326	790	1851	3482	4029	2635	513	10	.	.	13636
2.00 - 2.49	34	484	376	1043	3249	3810	1062	58	.	.	10116
2.50 - 2.99	.	147	147	308	1969	3244	1338	83	1	.	7237
3.00 - 3.49	.	22	46	95	624	2635	1261	131	.	.	4814
3.50 - 3.99	.	.	10	5	205	1291	1050	136	.	.	2697
4.00 - 4.49	.	.	.	5	37	463	655	123	.	.	1283
4.50 - 4.99	.	.	.	.	1	73	330	70	.	.	474
5.00 +	.	.	.	.	.	29	165	70	.	.	264
TOTAL	1039	6661	14886	11366	13773	15680	6552	721	1	0	

MEAN HS(M) = 1.89 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 41323

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	15	.	16
0.50 - 0.99	10	165	251	88	20	15	5	5	.	.	559
1.00 - 1.49	29	224	537	523	381	188	68	54	15	.	2019
1.50 - 1.99	109	302	436	362	578	576	304	70	15	.	2752
2.00 - 2.49	54	364	371	352	740	1134	763	66	8	.	3852
2.50 - 2.99	.	189	340	335	561	1161	1177	85	22	.	3870
3.00 - 3.49	.	88	268	265	521	841	1416	169	1	.	3569
3.50 - 3.99	.	13	177	112	427	556	1569	123	.	.	2977
4.00 - 4.49	.	.	66	82	225	248	1096	160	5	.	1932
4.50 - 4.99	.	.	17	34	123	212	580	210	.	.	1176
5.00 +	.	.	1	13	61	254	455	371	.	.	1155
TOTAL	202	1345	2465	2166	3637	5185	7433	1313	81	0	

MEAN HS(M) = 2.93 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 13948

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	20	.	.	.	.	.	.	.	.	28
1.00 - 1.49	22	71	6	.	.	.	.	.	.	.	99
1.50 - 1.99	119	213	56	11	1	.	.	.	.	.	400
2.00 - 2.49	20	266	171	68	20	.	.	.	.	.	545
2.50 - 2.99	1	263	186	136	104	1	.	.	.	.	691
3.00 - 3.49	.	102	189	119	124	13	.	.	.	.	547
3.50 - 3.99	.	11	116	102	150	20	.	.	.	.	399
4.00 - 4.49	.	.	17	46	114	49	6	.	.	.	232
4.50 - 4.99	.	.	1	10	49	37	6	.	.	.	103
5.00 +	.	.	.	1	20	18	1	.	.	.	40
TOTAL	170	946	742	493	582	138	13	0	0	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1819

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	.	.	.	.	.	.	.	.	.	8
1.00 - 1.49	13	.	.	.	.	.	.	.	.	.	13
1.50 - 1.99	3	6	.	.	.	.	.	.	.	.	9
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	9	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 21

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

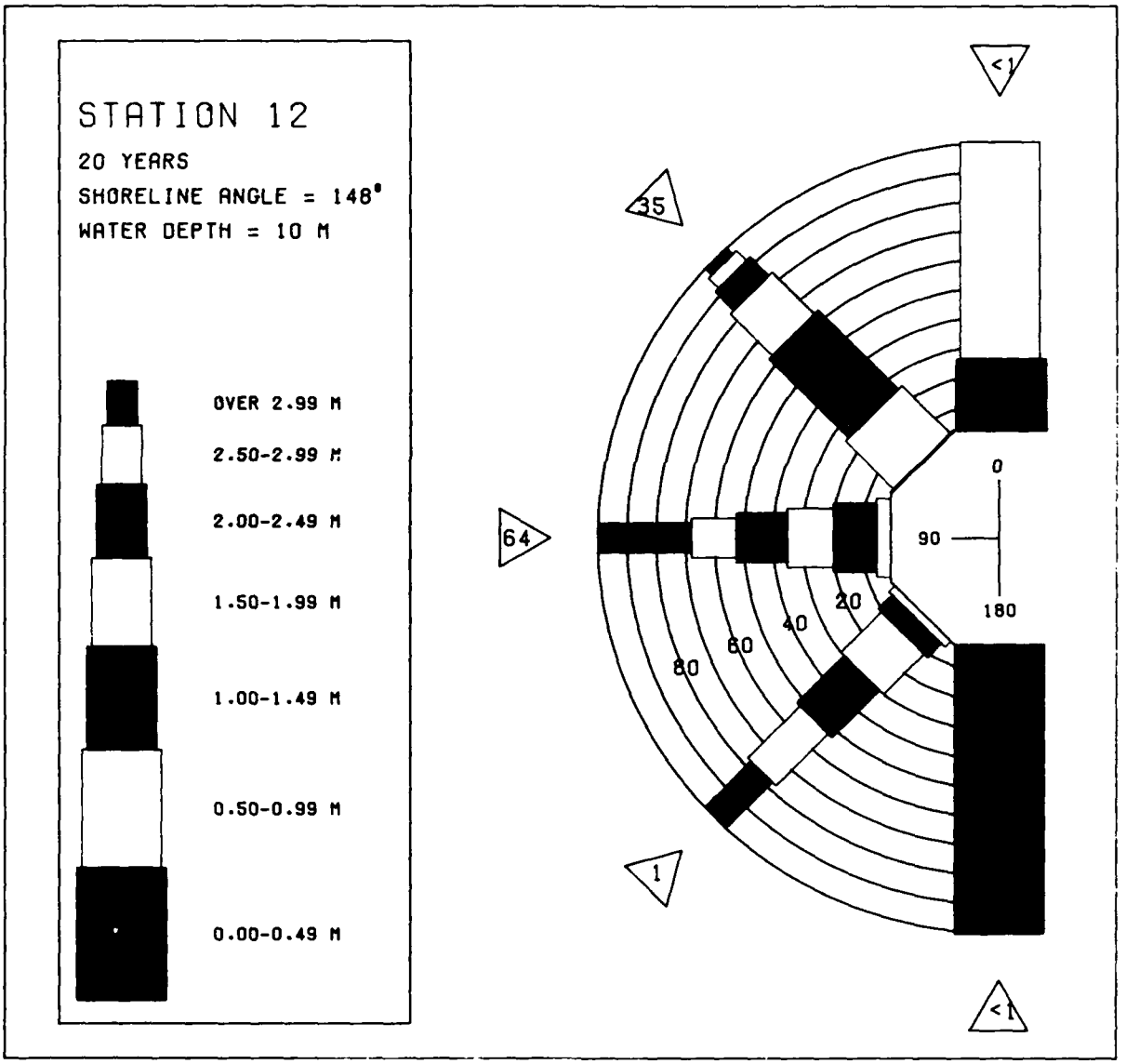
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 12 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	6	10	10	.	.	1	1	1	.	.	29
0.50 - 0.99	71	289	520	178	44	17	2	.	.	.	1121
1.00 - 1.49	141	297	795	524	361	152	21	7	1	.	2299
1.50 - 1.99	92	150	234	385	460	321	81	8	1	.	1732
2.00 - 2.49	10	113	91	146	401	494	182	12	.	.	1449
2.50 - 2.99	.	60	67	78	263	440	251	16	2	.	1177
3.00 - 3.49	.	21	50	48	127	349	267	30	.	.	892
3.50 - 3.99	.	2	30	22	78	186	261	26	.	.	605
4.00 - 4.49	.	.	8	13	37	76	175	28	.	.	337
4.50 - 4.99	.	.	1	4	17	32	91	28	.	.	173
5.00 +				1	8	30	62	44	.	.	145
TOTAL	320	942	1806	1399	1796	2097	1394	200	5	0	

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.99 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.6	2.5	1.9	1.7	1.4	1.1	1.1	1.4	2.0	2.5	2.9	2.0
1957	2.3	2.6	2.7	1.9	1.5	1.2	1.0	0.9	1.5	2.0	2.8	3.4	2.0
1958	3.9	3.4	2.4	2.6	1.4	1.2	1.4	1.1	1.6	2.3	2.8	3.6	2.3
1959	3.4	3.0	2.5	1.8	1.6	1.2	1.2	1.1	1.6	2.0	2.4	3.3	2.1
1960	3.1	3.4	2.0	2.1	1.6	1.2	1.1	1.1	1.2	2.2	3.1	3.1	2.1
1961	3.7	3.3	2.8	2.0	1.6	1.2	1.0	1.0	1.3	2.3	2.7	3.8	2.1
1962	2.5	2.6	2.2	1.8	1.3	1.2	0.9	1.2	1.5	2.3	3.4	3.4	2.0
1963	2.6	3.5	2.5	1.7	1.3	1.4	1.1	0.7	1.6	2.9	3.1	3.4	2.2
1964	4.1	2.6	2.5	2.1	1.5	1.3	1.3	1.4	1.5	2.1	2.8	3.5	2.2
1965	3.0	2.8	2.2	2.1	1.6	1.6	1.2	1.0	1.2	2.5	2.8	3.4	2.1
1966	3.8	2.7	2.7	1.9	1.7	1.2	1.0	1.1	1.6	2.1	2.4	3.5	2.1
1967	3.2	2.9	2.4	1.7	1.2	1.0	1.0	1.0	1.6	2.6	2.7	3.2	2.0
1968	3.0	3.1	2.7	1.9	1.5	1.3	1.2	1.1	1.3	2.3	3.2	3.1	2.1
1969	2.4	3.5	2.6	2.7	1.5	1.3	1.2	1.1	1.6	2.3	2.9	4.2	2.3
1970	3.4	3.7	3.1	2.4	1.4	1.3	1.3	1.1	1.5	2.3	2.9	3.5	2.3
1971	3.0	2.9	3.1	2.4	1.6	1.3	0.9	1.3	1.6	2.0	3.1	2.9	2.2
1972	3.5	3.2	2.9	2.3	1.5	1.4	1.3	1.1	1.5	1.7	3.5	3.2	2.2
1973	3.7	3.2	2.9	1.9	1.7	1.6	1.6	1.3	1.7	2.3	3.1	4.0	2.4
1974	3.0	3.2	3.0	2.3	1.7	1.5	1.2	1.1	1.2	2.2	3.3	3.7	2.3
1975	2.9	2.7	2.3	1.7	1.4	1.0	0.9	1.0	0.8	2.5	3.1	3.0	1.9
MEAN	3.2	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.7	4.6	4.3	3.3	2.9	2.6	2.1	2.0	2.4	3.8	3.7	5.2
1957	4.1	6.1	4.3	5.6	2.6	2.1	1.9	1.6	2.8	3.4	4.5	5.0
1958	5.9	5.0	3.9	5.8	2.4	2.0	2.3	1.8	2.6	4.1	4.8	6.0
1959	6.2	6.0	4.1	3.5	2.8	2.3	1.9	1.9	3.1	4.1	5.6	6.1
1960	5.7	6.2	3.5	3.4	2.4	2.4	1.8	1.8	2.1	4.9	5.4	5.2
1961	6.3	5.2	4.2	3.3	2.3	2.0	1.7	2.4	2.5	3.9	4.3	5.0
1962	5.0	4.3	3.8	3.0	2.3	2.1	1.7	2.1	4.1	4.3	6.1	6.5
1963	4.1	5.9	4.9	2.7	2.8	2.6	1.9	1.3	2.9	6.4	4.7	7.0
1964	6.4	4.4	4.5	4.1	3.5	2.4	2.0	2.2	3.1	3.3	5.1	6.0
1965	5.7	4.4	3.4	3.2	3.7	2.7	2.1	1.8	1.8	5.0	5.6	5.2
1966	6.3	4.7	4.1	3.4	2.5	2.3	1.8	1.8	3.1	3.8	4.7	6.0
1967	5.5	5.0	4.4	3.7	2.0	1.8	1.5	1.5	2.8	4.5	5.2	5.9
1968	6.7	4.5	4.2	3.1	2.7	2.3	2.0	2.1	2.5	3.8	5.2	6.3
1969	3.9	5.6	4.5	5.3	2.8	2.1	1.9	1.9	2.8	3.5	6.5	6.8
1970	5.9	5.5	5.5	4.5	2.4	2.5	1.9	1.9	2.5	4.2	5.6	6.0
1971	6.2	5.2	5.8	2.8	3.3	2.1	1.7	2.9	2.5	3.5	5.9	4.8
1972	5.8	6.4	4.3	4.2	2.3	2.2	2.5	1.8	2.9	3.0	5.0	6.9
1973	6.0	5.1	5.2	3.7	3.5	2.7	2.4	2.0	2.4	4.3	6.2	6.6
1974	6.6	5.1	5.6	4.5	3.1	2.9	2.4	1.7	2.0	4.5	5.2	5.6
1975	4.8	5.2	4.5	3.9	3.1	1.7	1.7	1.8	1.3	4.2	6.3	5.8

20 YR. STATISTICS FOR PACIFIC STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	352	37	.	.	.	.	.	.	.	.	389
1.00 - 1.49	1045	237	.	.	.	.	.	.	.	.	1282
1.50 - 1.99	369	195	.	.	.	.	.	.	.	.	564
2.00 - 2.49	.	18	.	.	.	.	.	.	.	.	18
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1783	487	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1329

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	44	107	99	5	.	3	13	18	.	.	289
0.50 - 0.99	333	2671	4948	1697	424	159	22	.	.	.	10254
1.00 - 1.49	302	2440	7409	4726	3235	1338	143	22	.	.	19615
1.50 - 1.99	326	790	1851	3482	4029	2635	513	10	.	.	13636
2.00 - 2.49	34	484	376	1043	3249	3810	1062	58	.	.	10116
2.50 - 2.99	.	147	147	308	1969	3244	1338	83	1	.	7237
3.00 - 3.49	.	22	46	95	624	2635	1261	131	.	.	4814
3.50 - 3.99	.	.	10	5	205	1291	1050	136	.	.	2697
4.00 - 4.49	.	.	.	5	37	463	655	123	.	.	1283
4.50 - 4.99	.	.	.	.	1	73	330	70	.	.	474
5.00 +	.	.	.	.	.	29	165	70	.	.	264
TOTAL	1039	6661	14886	11366	13773	15680	6552	721	1	0	

MEAN HS(M) = 1.89 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 41323

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	15	.	16
0.50 - 0.99	10	165	251	83	20	15	5	5	.	.	559
1.00 - 1.49	29	224	537	523	381	188	68	54	15	.	2019
1.50 - 1.99	109	302	436	362	578	576	304	70	15	.	2752
2.00 - 2.49	54	364	371	352	740	1134	763	66	8	.	3852
2.50 - 2.99	.	189	340	335	561	1161	1177	85	22	.	3870
3.00 - 3.49	.	88	268	265	521	841	1416	169	1	.	3569
3.50 - 3.99	.	13	177	112	427	556	1569	123	.	.	2977
4.00 - 4.49	.	.	66	82	225	248	1096	160	5	.	1882
4.50 - 4.99	.	.	17	34	123	212	580	210	.	.	1176
5.00 +	.	.	1	12	61	254	455	371	.	.	1155
TOTAL	202	1345	2465	2166	3637	5185	7433	1313	81	0	

MEAN HS(M) = 2.93 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 13948

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	20	.	.	.	.	.	.	.	.	28
1.00 - 1.49	22	71	6	.	.	.	.	.	.	.	99
1.50 - 1.99	119	213	56	11	1	.	.	.	.	.	400
2.00 - 2.49	20	266	171	68	20	.	.	.	.	.	545
2.50 - 2.99	1	263	186	136	104	1	.	.	.	.	691
3.00 - 3.49	.	102	189	119	124	13	.	.	.	.	547
3.50 - 3.99	.	11	116	102	150	20	.	.	.	.	399
4.00 - 4.49	.	.	17	46	114	49	6	.	.	.	232
4.50 - 4.99	.	.	1	10	49	37	6	.	.	.	103
5.00 +	.	.	.	1	20	18	1	.	.	.	40
TOTAL	170	946	742	493	582	138	13	0	0	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1819

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	.	.	.	.	.	.	.	.	.	8
1.00 - 1.49	13	.	.	.	.	.	.	.	.	.	13
1.50 - 1.99	3	6	.	.	.	.	.	.	.	.	9
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	9	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 21

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

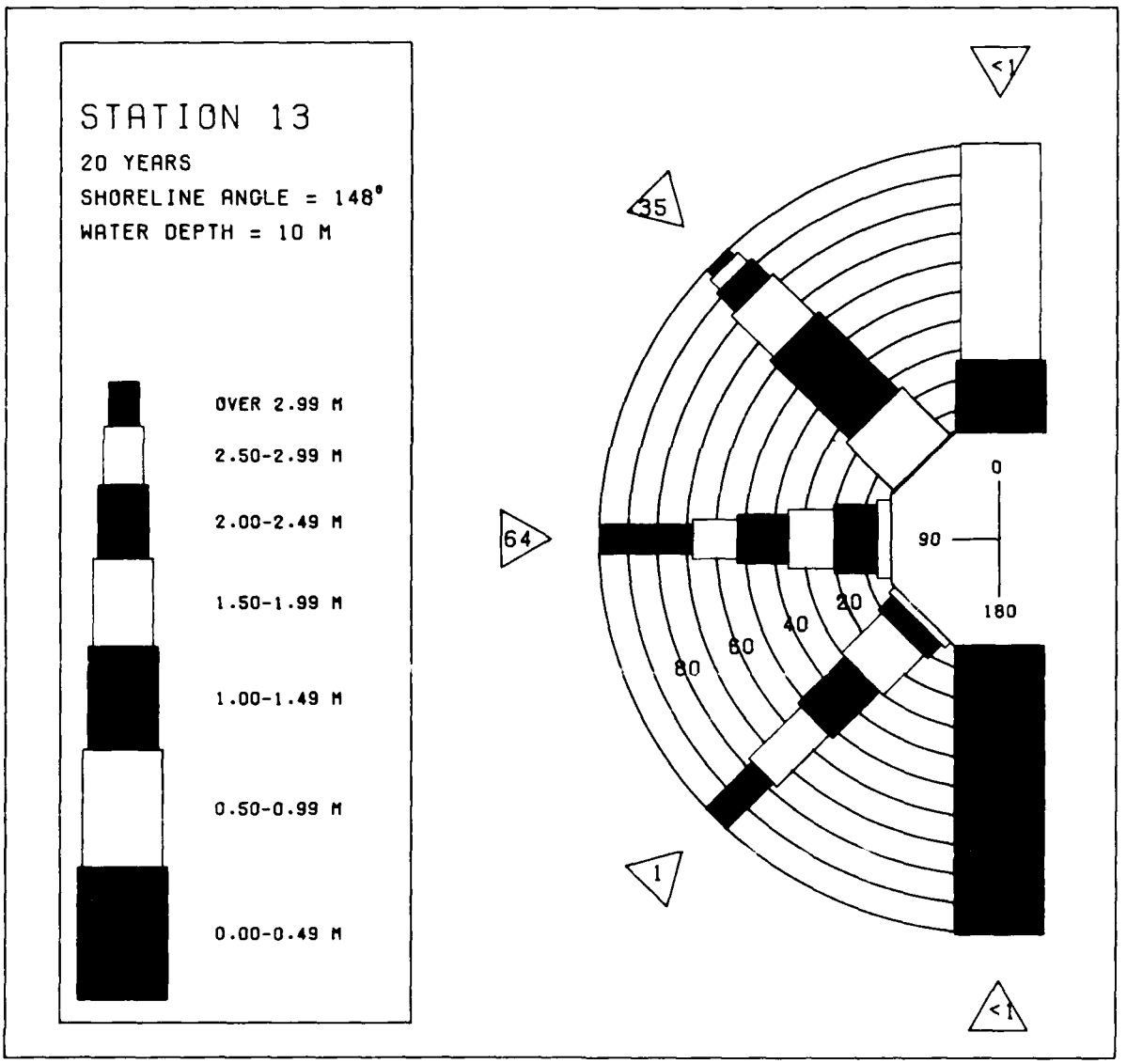
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 13 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	10	10	.	.	.	1	1	.	.	29
0.50 - 0.99	71	289	520	178	44	17	2	.	.	.	1121
1.00 - 1.49	141	297	795	524	361	152	21	7	1	.	2299
1.50 - 1.99	92	150	234	385	460	321	81	8	1	.	1732
2.00 - 2.49	10	113	91	146	401	494	182	12	.	.	1449
2.50 - 2.99	.	60	67	78	263	440	251	16	2	.	1177
3.00 - 3.49	.	21	50	48	127	349	267	30	.	.	892
3.50 - 3.99	.	2	30	22	78	186	261	26	.	.	605
4.00 - 4.49	.	.	8	13	37	76	175	28	.	.	337
4.50 - 4.99	.	.	1	4	17	32	91	28	.	.	173
5.00 +	.	.	.	1	8	30	62	44	.	.	145
TOTAL	320	942	1806	1399	1796	2097	1394	200	5	0	

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.99 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.6	2.5	1.9	1.7	1.4	1.1	1.1	1.4	2.0	2.5	2.9	2.0
1957	2.3	2.6	2.7	1.9	1.5	1.2	1.0	0.9	1.5	2.0	2.8	3.4	2.0
1958	3.9	3.4	2.4	2.6	1.4	1.2	1.4	1.1	1.6	2.3	2.8	3.6	2.3
1959	3.4	3.0	2.5	1.8	1.6	1.2	1.2	1.1	1.6	2.0	2.4	3.3	2.1
1960	3.1	3.4	2.0	2.1	1.6	1.2	1.1	1.1	1.2	2.2	3.1	3.1	2.1
1961	3.7	3.3	2.8	2.0	1.6	1.2	1.0	1.0	1.3	2.3	2.7	2.8	2.1
1962	2.5	2.6	2.2	1.8	1.3	1.2	0.9	1.2	1.5	2.3	3.4	3.4	2.0
1963	2.6	2.5	2.5	1.7	1.5	1.4	1.1	0.7	1.6	2.9	3.1	3.4	2.2
1964	4.1	2.6	2.5	2.1	1.5	1.3	1.3	1.4	1.5	2.1	2.8	3.5	2.2
1965	3.0	2.8	2.2	2.1	1.6	1.6	1.2	1.0	1.2	2.5	2.8	3.4	2.1
1966	3.8	2.7	2.7	1.9	1.7	1.2	1.0	1.1	1.6	2.1	2.4	3.5	2.1
1967	3.2	2.9	2.4	1.7	1.2	1.0	1.0	1.0	1.6	2.6	2.7	3.2	2.0
1968	3.0	3.1	2.7	1.9	1.3	1.3	1.1	1.1	1.3	2.3	3.2	3.1	2.1
1969	2.4	3.5	2.6	2.7	1.5	1.3	1.2	1.1	1.6	2.3	2.9	4.5	2.3
1970	3.4	3.7	3.1	2.4	1.4	1.3	1.3	1.1	1.5	2.3	2.9	3.5	2.2
1971	3.0	2.9	3.1	2.4	1.6	1.3	0.9	1.3	1.6	2.0	3.1	2.9	2.2
1972	3.5	3.2	2.9	2.3	1.5	1.4	1.3	1.1	1.5	1.7	3.5	3.2	2.2
1973	3.7	3.2	2.9	1.9	1.7	1.6	1.6	1.3	1.7	2.3	3.1	4.0	2.4
1974	3.0	3.2	3.0	2.3	1.7	1.5	1.2	1.1	1.2	2.2	3.3	3.7	2.3
1975	2.9	2.7	2.3	1.7	1.4	1.0	0.9	1.0	0.8	2.5	3.1	3.0	1.9
MEAN	3.2	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.7	4.6	4.3	3.3	2.9	2.6	2.1	2.0	2.4	3.8	3.7	5.2
1957	4.1	6.1	4.3	3.6	2.6	2.1	1.9	1.6	2.8	3.4	4.5	5.0
1958	5.9	5.0	3.9	5.8	2.4	2.0	2.3	1.8	2.6	4.1	4.8	6.0
1959	6.2	6.0	4.4	3.5	2.8	2.3	1.9	1.9	3.1	4.3	5.6	6.1
1960	5.7	6.2	3.5	3.4	2.4	2.4	1.8	1.8	2.1	4.9	5.4	5.2
1961	6.3	5.2	4.2	3.3	2.3	2.0	1.7	2.4	2.5	3.9	4.3	5.0
1962	5.0	4.3	3.8	3.0	2.3	2.1	1.7	2.1	4.1	4.3	5.1	6.5
1963	4.1	5.9	4.9	2.7	2.8	2.6	1.9	1.3	2.9	6.4	4.7	7.0
1964	6.4	4.4	4.5	4.1	3.2	2.4	2.0	2.2	3.1	3.3	5.1	6.0
1965	5.7	4.4	3.4	3.2	3.7	2.7	2.1	1.8	1.8	5.0	5.6	5.2
1966	6.3	4.7	4.1	3.4	2.5	2.3	1.8	1.8	3.1	3.8	4.7	6.0
1967	5.5	5.0	4.4	3.7	3.0	1.8	1.5	1.5	2.8	4.5	5.2	5.9
1968	6.7	4.5	4.2	3.4	2.7	2.3	2.0	2.1	2.5	3.8	5.2	6.3
1969	3.9	5.6	4.5	5.3	2.8	2.1	1.9	1.9	2.8	3.5	6.5	6.8
1970	5.9	5.5	5.5	4.5	2.4	2.5	1.9	1.9	2.5	4.2	5.6	6.0
1971	6.2	5.2	5.8	3.8	3.3	2.1	1.7	2.9	2.5	3.5	5.9	4.8
1972	5.8	6.4	4.3	4.2	3.3	2.2	2.5	1.8	2.9	3.0	5.0	6.9
1973	6.0	5.1	5.2	3.7	3.5	2.7	2.4	2.0	2.4	4.3	6.2	6.6
1974	6.6	5.1	5.6	4.5	3.1	2.9	2.4	1.7	2.0	4.5	5.2	5.6
1975	4.8	5.2	4.5	3.9	3.1	1.7	1.7	1.8	1.3	4.2	6.3	5.8

20 YR. STATISTICS FOR PACIFIC STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	212	17	.	.	.	.	.	.	.	.	229
1.50 - 1.99	73	51	.	.	.	.	.	.	.	.	124
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	288	68	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.43 LARGEST HS(M) = 1.97 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 209

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	13	1	.	.	.	.	.	.	.	.	14
0.50 - 0.99	349	1136	1216	195	34	27	6	.	.	.	2963
1.00 - 1.49	781	2156	2874	1204	497	97	22	.	.	.	7621
1.50 - 1.99	994	1391	1706	1396	1028	309	20	.	.	.	6844
2.00 - 2.49	90	303	379	720	1332	879	35	.	.	.	4198
2.50 - 2.99	.	205	140	290	893	1148	176	.	.	.	2852
3.00 - 3.49	.	35	92	87	568	775	227	.	.	.	1784
3.50 - 3.99	.	.	29	30	215	480	177	.	.	.	931
4.00 - 4.49	.	.	1	10	27	330	119	.	.	.	487
4.50 - 4.99	.	.	.	.	.	70	85	.	.	.	155
5.00 +						13	46				59
TOTAL	2227	5686	6438	3932	4584	4128	913	0	0	0	

MEAN HS(M) = 1.91 LARGEST HS(M) = 6.24 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 16325

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	6	8	.	.	.	.	.	15	.	.	34
0.50 - 0.99	59	685	970	285	66	20	23	1	.	.	2110
1.00 - 1.49	37	1067	4123	2279	917	304	61	22	1	.	8811
1.50 - 1.99	61	677	2549	3069	2250	1331	227	39	6	.	10209
2.00 - 2.49	23	467	877	2022	2891	1950	561	75	5	.	8871
2.50 - 2.99	1	186	424	817	3039	3044	1103	85	20	.	9719
3.00 - 3.49	.	37	269	455	1716	3718	1461	102	10	.	7768
3.50 - 3.99	.	.	157	260	966	3355	2511	130	3	.	7411
4.00 - 4.49	.	.	61	112	468	2231	3525	273	5	.	6675
4.50 - 4.99	.	.	13	53	212	1002	2126	249	.	.	3655
5.00 +				3	90	569	3366	1141			4674
TOTAL	186	3126	9481	9360	12605	17524	13664	2161	50	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.30 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 39856

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	3	.	.	.	.	.	.	.	.	3
1.00 - 1.49	3	59	44	6	.	.	.	.	.	.	112
1.50 - 1.99	39	162	77	29	10	.	.	.	.	.	317
2.00 - 2.49	15	177	155	82	32	6	.	.	.	.	467
2.50 - 2.99	.	102	184	133	169	44	.	.	.	.	632
3.00 - 3.49	.	27	162	97	239	65	3	.	.	.	593
3.50 - 3.99	.	.	73	78	219	112	17	.	.	.	499
4.00 - 4.49	.	.	25	32	143	142	18	.	.	.	360
4.50 - 4.99	.	.	3	13	97	92	13	.	.	.	218
5.00 +	.	.	.	1	35	97	83	1	.	.	217
TOTAL	57	530	723	471	944	558	134	1	0	0	

MEAN HS(M) = 3.25 LARGEST HS(M) = 7.30 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2012

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	5	.	.	.	.	.	.	.	.	6
1.00 - 1.49	8	10	.	.	.	.	.	.	.	.	18
1.50 - 1.99	8	17	.	.	.	.	.	.	.	.	25
2.00 - 2.49	.	6	5	.	.	.	.	.	.	.	11
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	17	39	5	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.34 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 38

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

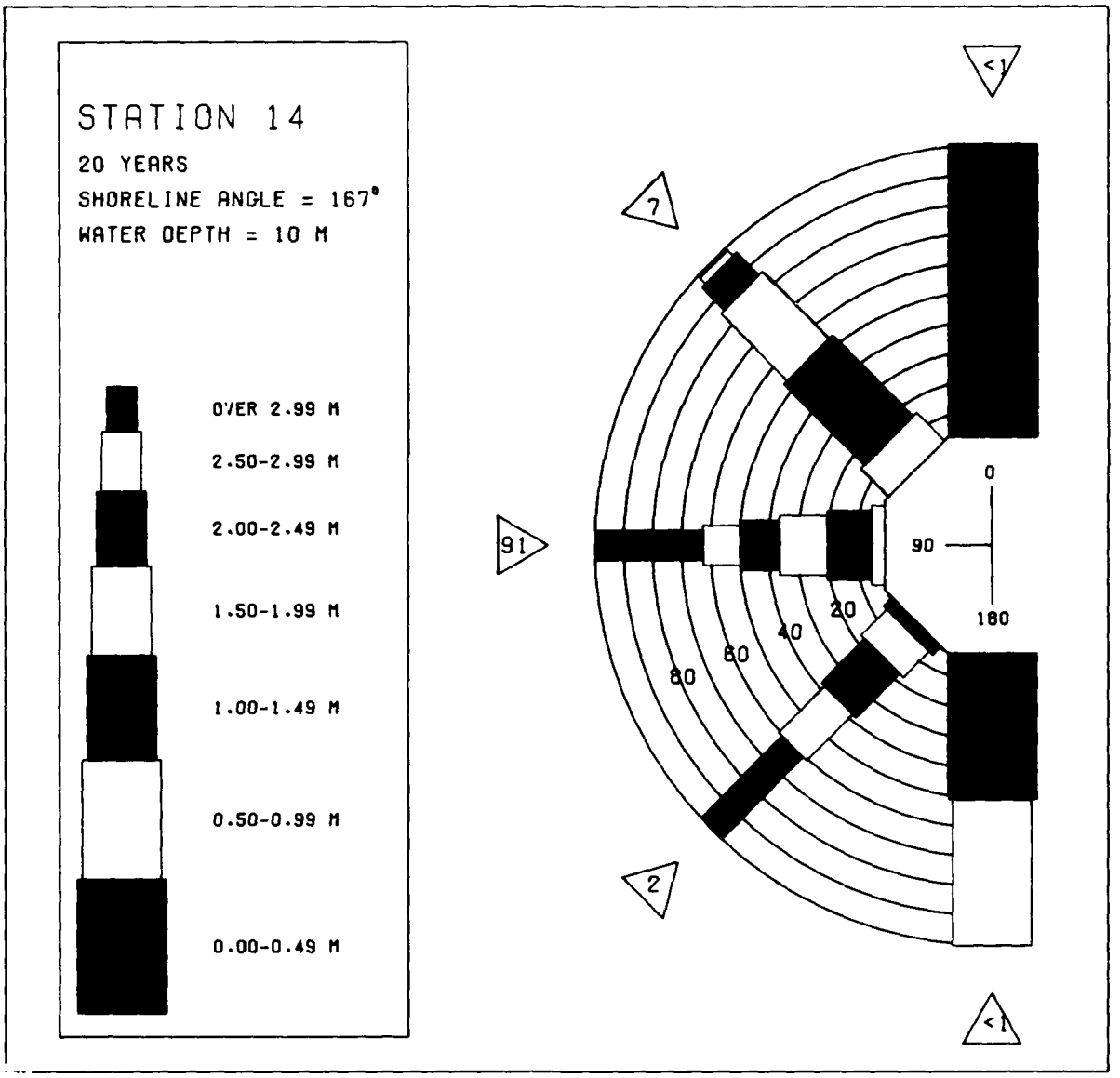
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - [illegible]	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 14 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	.	.	.	.	.	1	.	.	3
0.50 - 0.99	41	183	218	48	10	4	3	.	.	.	507
1.00 - 1.49	104	331	704	349	140	40	8	2	.	.	1678
1.50 - 1.99	117	229	433	449	328	164	24	3	.	.	1747
2.00 - 2.49	13	141	141	282	424	283	59	7	.	.	1350
2.50 - 2.99	.	49	74	124	410	423	127	8	2	.	1217
3.00 - 3.49	.	10	55	63	252	455	189	10	1	.	1035
3.50 - 3.99	.	.	26	36	140	394	270	15	.	.	881
4.00 - 4.49	.	.	8	15	63	270	266	27	.	.	649
4.50 - 4.99	.	.	1	6	30	116	222	24	.	.	399
5.00 +	.	.	.	1	12	63	299	114	.	.	494
TOTAL	276	943	1661	1373	1809	2217	1467	211	3	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.30 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 14 (47.23N/ 124.23W TO 47.13N/ 124.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.1	3.0	2.5	2.1	1.8	1.4	1.3	1.6	2.5	3.2	3.6	2.5
1957	2.7	2.9	3.4	2.4	1.9	1.5	1.2	1.1	1.8	2.5	3.4	4.1	2.4
1958	4.7	4.1	2.9	3.3	1.8	1.4	1.5	1.4	1.9	2.8	3.3	4.4	2.8
1959	4.2	3.5	3.1	2.3	2.0	1.5	1.5	1.2	1.9	2.8	2.9	4.0	2.6
1960	3.6	4.1	2.5	2.6	2.0	1.5	1.3	1.3	1.5	2.9	3.7	4.0	2.6
1961	4.3	4.0	3.5	2.5	2.0	1.5	1.2	1.1	1.5	2.9	3.4	3.5	2.6
1962	4.3	4.2	3.2	2.3	1.4	1.2	1.1	1.1	1.9	2.4	2.4	3.8	2.5
1963	3.2	2.5	3.7	2.1	1.9	1.3	1.2	1.2	1.7	3.0	4.1	4.0	2.5
1964	3.5	4.3	3.1	2.1	1.7	1.6	1.2	0.9	1.9	3.5	3.8	4.0	2.7
1965	4.8	3.4	3.0	2.5	1.8	1.7	1.6	1.6	1.9	2.5	3.4	4.0	2.7
1966	3.7	3.2	2.9	2.6	1.9	1.9	1.3	1.2	1.5	3.0	3.1	4.0	2.5
1967	4.4	3.0	3.2	2.1	2.1	1.5	1.2	1.3	1.9	2.7	2.8	4.0	2.5
1968	3.9	3.3	2.7	2.2	1.4	1.2	1.2	1.2	2.0	3.0	3.3	3.8	2.4
1969	3.5	4.1	3.1	2.5	1.6	1.5	1.3	1.3	1.6	2.8	3.6	3.5	2.5
1970	2.8	4.1	3.4	2.4	1.8	1.8	1.4	1.4	2.0	2.9	3.9	3.2	2.6
1971	4.2	4.4	3.7	2.7	1.8	1.5	1.6	1.4	1.7	2.6	3.5	4.1	2.9
1972	3.4	3.7	3.8	3.0	2.0	1.6	1.0	1.5	2.0	2.5	3.8	3.5	2.7
1973	4.2	3.6	3.5	2.8	1.9	1.7	1.7	1.3	1.8	2.1	4.3	3.7	2.7
1974	4.3	4.0	3.5	2.3	2.2	2.1	1.9	1.6	2.1	2.8	3.7	4.9	2.9
1975	3.5	3.8	3.5	3.0	2.3	1.9	1.5	1.5	1.6	2.8	4.1	4.4	2.8
	3.6	3.3	2.8	2.1	1.7	1.2	1.1	1.2	1.1	2.8	3.8	3.5	2.4
MEAN	3.8	3.7	3.2	2.6	1.9	1.6	1.4	1.3	1.8	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 14 (47.23N/ 124.23W TO 47.13N/ 124.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.4	5.8	5.1	4.1	3.6	2.7	2.4	2.3	2.7	4.2	5.2	6.1
1957	4.5	6.0	6.1	4.6	3.3	2.5	2.1	1.9	3.5	4.5	5.7	5.7
1958	6.8	6.5	5.4	6.4	3.2	2.2	2.8	2.2	3.5	4.7	5.9	6.4
1959	6.4	5.6	4.7	4.9	3.5	2.6	2.2	2.6	3.1	5.9	6.3	6.4
1960	7.0	6.7	4.2	4.4	3.0	2.6	2.0	1.9	2.4	6.2	6.5	6.2
1961	6.4	6.5	6.3	4.2	2.7	2.6	1.9	2.5	3.0	5.7	5.3	5.7
1962	5.5	4.9	4.6	3.9	2.6	2.9	1.9	2.6	4.6	6.1	7.0	6.4
1963	5.5	6.3	5.7	3.2	3.1	3.2	2.1	1.5	2.9	7.3	6.4	7.1
1964	6.7	5.4	4.8	4.6	3.7	2.8	2.3	2.5	5.2	4.2	6.0	6.3
1965	6.2	5.0	4.4	4.1	3.8	3.0	2.4	2.7	2.3	5.9	6.2	6.4
1966	6.6	5.2	5.2	4.6	3.1	3.0	1.9	2.1	3.7	4.9	5.0	6.5
1967	5.7	6.2	4.6	4.6	2.4	2.1	1.7	2.0	3.2	5.7	5.8	6.8
1968	6.2	6.2	5.1	3.8	2.9	2.1	2.3	2.4	3.0	5.3	6.2	5.1
1969	4.5	5.5	5.4	6.2	3.1	3.3	2.4	2.1	3.2	4.3	6.5	7.3
1970	7.0	6.2	6.1	5.3	2.7	2.7	2.5	2.4	2.8	4.6	6.6	7.0
1971	6.3	5.8	6.7	4.3	3.4	2.4	1.9	2.5	2.9	4.1	6.5	5.8
1972	6.8	6.5	5.5	5.3	3.0	2.6	2.4	2.2	3.0	3.9	6.1	7.3
1973	7.3	6.3	6.1	4.1	3.4	2.2	2.7	2.5	3.1	5.7	6.5	7.2
1974	6.4	6.0	6.5	4.9	3.9	3.6	3.2	2.5	2.3	5.4	6.4	6.4
1975	6.1	6.2	6.1	4.8	3.5	2.1	1.9	2.0	1.8	4.4	6.5	5.7

20 YR. STATISTICS FOR PACIFIC STATION 14 (47.23N/ 124.23W TO 47.13N/ 124.20W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	131	1	.	.	.	.	.	.	.	.	132
1.50 - 1.99	42	29	.	.	.	.	.	.	.	.	71
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	173	30	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 1.97 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 120

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	306	747	626	106	25	6	1	.	.	.	1817
1.00 - 1.49	785	1632	1724	489	193	13	.	.	.	.	4836
1.50 - 1.99	1059	1187	1202	811	513	78	.	.	.	.	4850
2.00 - 2.49	124	773	213	475	746	282	.	.	.	.	2613
2.50 - 2.99	.	215	121	188	446	268	.	.	.	.	1238
3.00 - 3.49	.	41	71	32	258	155	1	.	.	.	558
3.50 - 3.99	.	.	25	23	78	71	.	.	.	.	197
4.00 - 4.49	.	.	1	11	10	51	.	.	.	.	73
4.50 - 4.99	.	.	.	.	.	37	.	.	.	.	37
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	2284	4595	3983	2135	2269	962	2	0	0	0	

MEAN HS(M) = 1.74 LARGEST HS(M) = 5.01 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 9500

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	6	8	.	.	.	.	15	.	.	37
0.50 - 0.99	88	995	1475	326	68	37	25	1	.	.	3015
1.00 - 1.49	71	1543	5041	2828	1083	367	78	11	.	.	11022
1.50 - 1.99	87	823	3175	3607	2753	1442	235	47	6	.	12176
2.00 - 2.49	13	446	1038	2457	3396	2577	552	80	5	.	10564
2.50 - 2.99	.	176	426	936	3601	3749	1221	73	22	.	10204
3.00 - 3.49	.	37	268	492	2135	4483	1839	100	8	.	9362
3.50 - 3.99	.	.	133	261	1100	3752	2683	159	5	.	8093
4.00 - 4.49	.	.	49	97	489	2642	2689	254	5	.	6225
4.50 - 4.99	.	.	10	30	184	1093	2258	266	.	.	3041
5.00 +	.	.	.	6	77	564	3010	1165	.	.	4842
TOTAL	267	4026	11623	11040	14886	20706	14611	2171	51	0	

MEAN HS(M) = 2.80 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 46414

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	5	.	.	.	.	.	.	.	.	6
1.00 - 1.49	15	83	111	6	.	.	.	.	.	.	215
1.50 - 1.99	39	198	123	61	30	.	.	.	.	.	451
2.00 - 2.49	22	201	181	119	75	11	.	.	.	.	609
2.50 - 2.99	1	94	217	157	246	71	1	.	.	.	787
3.00 - 3.49	.	22	140	95	246	90	8	.	.	.	601
3.50 - 3.99	.	.	77	77	183	164	30	.	.	.	531
4.00 - 4.49	.	.	22	35	147	165	29	.	.	.	398
4.50 - 4.99	.	.	3	18	71	80	10	.	.	.	202
5.00 +	.	.	.	5	47	80	83	11	.	.	226
TOTAL	78	603	874	573	1045	661	181	11	0	0	

MEAN HS(M) = 3.09 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2368

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	6	.	.	.	.	.	.	.	.	7
1.00 - 1.49	6	8	.	.	.	.	.	.	.	.	14
1.50 - 1.99	3	17	3	.	.	.	.	.	.	.	23
2.00 - 2.49	.	6	8	.	.	.	.	.	.	.	14
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	38	11	0	0	0	0	0	0	0	

MEAN HS(M) = 1.52 LARGEST HS(M) = 2.26 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 38

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

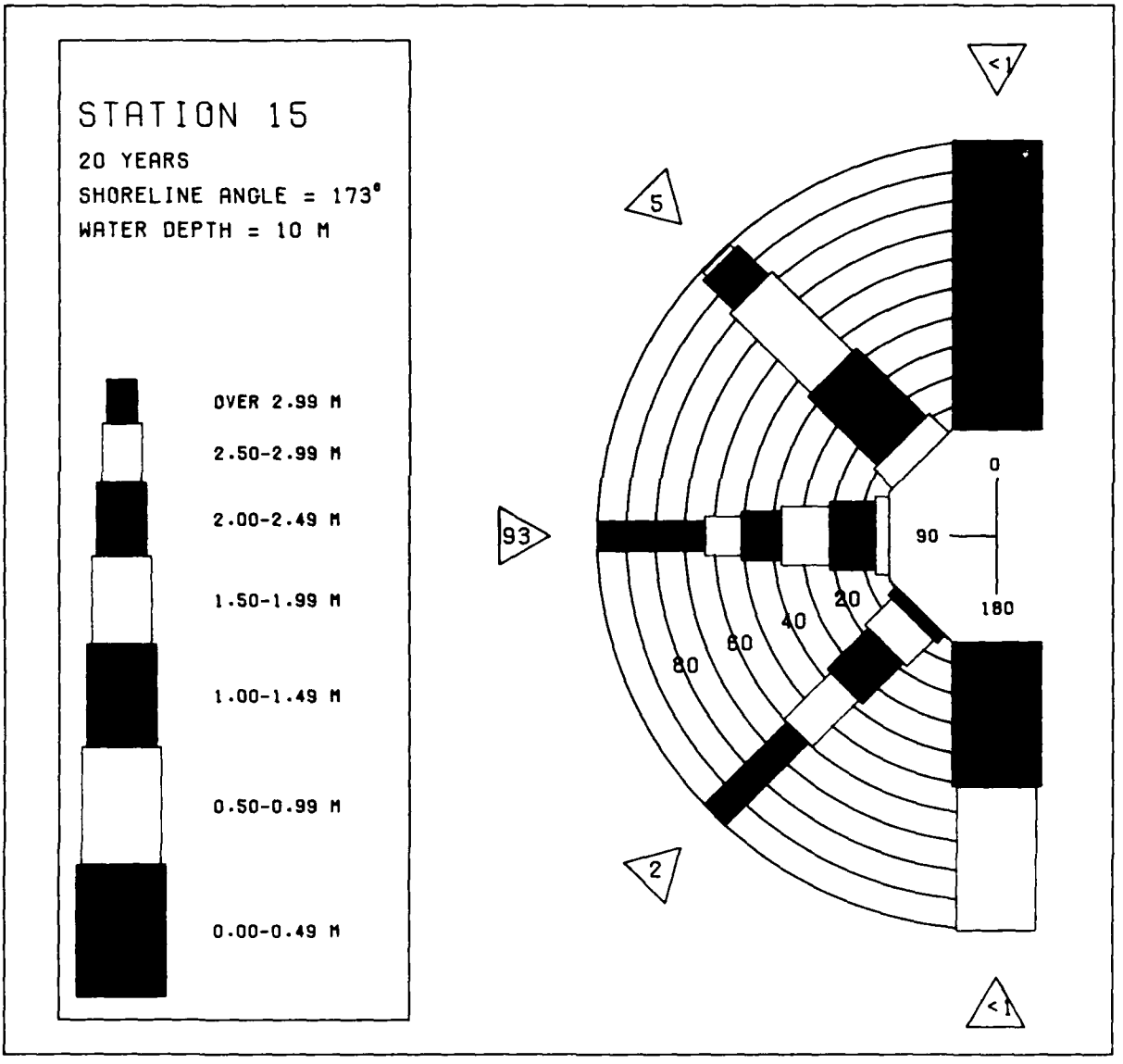
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 15 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1							1	.	.	2
0.50 - 0.99	39	175	210	43	9	4	2	.	.	.	482
1.00 - 1.49	101	327	687	332	127	38	7	1	.	.	1620
1.50 - 1.99	123	225	450	447	329	152	23	4	.	.	1753
2.00 - 2.49	16	142	144	305	421	287	55	8	.	.	1378
2.50 - 2.99	.	48	76	128	429	408	122	7	2	.	1220
3.00 - 3.49	.	10	48	62	264	472	164	10	.	.	1050
3.50 - 3.99	.	.	23	36	136	398	271	15	.	.	879
4.00 - 4.49	.	.	7	14	64	285	271	25	.	.	666
4.50 - 4.99	.	.	1	4	25	121	228	26	.	.	405
5.00 +	.	.	.	1	12	64	311	117	.	.	505
TOTAL	280	927	1646	1372	1816	2229	1470	214	2	0	

MEAN HS(M) = 2.64 LARGEST HS(M) = 7.36 MEAN TP(SEC) 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 15 (47.13N/ 124.20W TO 47.01N/ 124.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.1	3.1	2.5	2.2	1.8	1.4	1.3	1.6	2.6	3.2	3.6	2.5
1957	2.7	2.9	3.5	3.3	1.9	1.5	1.2	1.1	1.8	2.6	3.5	4.2	2.4
1958	4.7	4.1	3.0	3.3	1.8	1.4	1.6	1.4	1.9	2.8	3.4	4.4	2.8
1959	4.2	3.5	3.1	2.4	2.1	1.5	1.5	1.2	1.9	2.8	3.9	4.0	2.6
1960	3.6	4.1	2.5	2.6	2.0	1.6	1.3	1.4	1.5	2.9	3.7	4.1	2.6
1961	4.3	4.0	3.5	2.6	2.0	1.5	1.2	1.1	1.6	3.0	3.4	3.6	2.6
1962	3.3	3.2	2.7	2.4	1.6	1.6	1.2	1.5	1.7	3.0	4.1	4.0	2.5
1963	3.5	4.2	3.1	2.1	1.7	1.8	1.3	0.9	1.9	3.5	3.9	4.0	2.7
1964	4.8	3.4	3.0	2.6	1.9	1.7	1.6	1.7	1.9	2.6	3.4	4.0	2.7
1965	3.7	3.2	2.9	2.6	1.9	2.0	1.4	1.2	1.5	3.0	3.1	4.0	2.6
1966	4.4	3.0	3.2	2.2	2.1	1.5	1.3	1.4	2.0	2.8	2.8	3.9	2.5
1967	3.9	3.3	2.8	2.3	1.5	1.2	1.3	1.2	2.0	3.0	3.3	3.8	2.5
1968	3.4	4.1	3.2	2.3	1.6	1.5	1.3	1.3	1.6	2.8	3.9	3.5	2.5
1969	2.8	4.1	3.2	2.4	1.9	1.8	1.4	1.4	2.0	2.9	3.6	5.2	2.8
1970	4.1	4.4	3.7	2.7	1.8	1.5	1.6	1.4	1.7	2.6	3.5	4.1	2.8
1971	3.4	3.7	3.8	3.1	2.0	1.9	1.0	1.5	2.0	2.6	3.9	3.6	2.7
1972	4.2	3.6	3.5	2.8	1.9	1.7	1.7	1.3	1.9	2.1	4.4	3.7	2.7
1973	4.3	4.0	3.5	3.3	2.2	1.4	2.0	1.6	2.1	2.6	3.7	4.9	3.0
1974	3.5	3.8	3.5	3.0	2.3	1.9	1.5	1.5	1.6	2.9	4.2	4.4	2.8
1975	3.7	3.3	2.8	2.1	1.8	1.2	1.1	1.2	1.1	2.8	3.8	3.5	2.4
MEAN	3.8	3.7	3.2	2.6	1.9	1.6	1.4	1.3	1.8	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 15 (47.13N/ 124.20W TO 47.01N/ 124.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.9	5.1	4.2	3.7	2.7	2.5	2.3	2.7	4.3	5.2	6.1
1957	4.6	6.0	6.0	4.9	3.3	2.5	2.2	1.9	3.5	4.6	5.8	5.7
1958	6.7	6.5	5.4	6.4	3.3	2.2	2.9	2.3	3.6	4.7	6.0	6.4
1959	6.3	5.7	4.7	4.9	3.5	2.6	2.2	2.2	3.0	5.9	6.3	6.4
1960	6.9	6.7	4.2	4.5	3.0	2.6	2.0	2.0	3.5	6.2	6.6	6.2
1961	6.4	6.4	6.3	4.6	3.7	2.7	1.9	2.2	3.0	5.7	5.4	5.7
1962	5.5	4.9	4.7	3.9	2.6	3.0	2.0	2.7	4.6	6.1	7.1	6.2
1963	5.4	6.3	5.9	3.2	3.1	3.3	2.2	1.6	2.9	7.4	6.4	7.1
1964	6.7	5.4	4.8	4.6	3.8	2.8	2.3	2.5	3.2	4.2	6.1	6.3
1965	6.1	5.1	4.4	4.2	3.9	3.1	2.4	2.2	2.3	5.5	6.3	6.4
1966	6.5	5.3	5.4	4.6	3.2	3.1	2.0	2.1	3.7	4.9	5.1	6.5
1967	5.2	6.2	4.7	4.7	3.4	2.2	1.7	2.0	3.2	5.7	5.9	6.7
1968	6.2	6.5	5.1	3.8	3.0	2.1	2.3	2.4	3.1	5.3	6.2	5.1
1969	4.6	5.7	5.4	6.5	3.1	3.3	2.4	2.1	3.2	4.4	6.4	7.2
1970	6.9	6.2	6.1	5.3	2.7	2.7	2.5	2.5	2.8	4.6	6.5	7.0
1971	6.1	5.8	6.8	4.4	3.4	2.4	2.0	3.6	3.0	4.1	6.6	6.0
1972	6.9	6.5	5.6	5.4	3.0	2.7	3.4	2.3	3.0	4.0	6.1	7.3
1973	7.2	6.4	6.1	4.2	3.3	3.2	2.7	2.4	3.2	5.9	6.5	7.2
1974	6.0	6.2	6.4	5.0	4.0	3.6	3.2	2.5	2.4	5.5	6.5	6.4
1975	6.2	6.1	6.1	5.0	3.5	2.1	2.0	2.0	1.8	4.4	6.5	5.6

20 YR. STATISTICS FOR PACIFIC STATION 15 (47.13N/ 124.20W TO 47.01N/ 124.18W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	20	.	.	.	.	.	.	.	.	.	20
1.00 - 1.49	140	3	.	.	.	.	.	.	.	.	143
1.50 - 1.99	83	17	.	.	.	.	.	.	.	.	100
2.00 - 2.49	8	10	.	.	.	.	.	.	.	.	18
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	251	30	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 166

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	11	11	.	.	.	.	.	.	.	51
0.50 - 0.99	436	1149	989	155	23	10	.	.	.	.	2762
1.00 - 1.49	905	1995	2433	804	345	34	.	.	.	.	6516
1.50 - 1.99	1069	1117	1158	956	679	100	.	.	.	.	5079
2.00 - 2.49	95	718	744	436	936	207	.	.	.	.	2636
2.50 - 2.99	.	186	136	177	492	177	.	.	.	.	1178
3.00 - 3.49	.	46	75	42	265	82	.	.	.	.	510
3.50 - 3.99	.	5	35	20	80	30	.	.	.	.	170
4.00 - 4.49	.	.	1	13	6	47	.	.	.	.	67
4.50 - 4.99	.	.	.	.	1	6	.	.	.	.	7
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2534	5237	5082	2603	2827	693	0	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 11105

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	49	24	1	.	10	6	11	6	.	.	106
0.50 - 0.99	37	773	2587	735	188	71	27	6	.	.	4424
1.00 - 1.49	27	607	5263	3857	2008	795	143	41	.	.	12761
1.50 - 1.99	44	154	1889	3461	3690	2337	467	107	11	.	12160
2.00 - 2.49	17	177	419	1497	4041	3998	1173	82	18	.	11422
2.50 - 2.99	.	73	136	460	2440	5246	2120	145	23	.	10643
3.00 - 3.49	.	22	82	212	1322	4443	2873	201	17	.	9172
3.50 - 3.99	.	.	35	56	450	2575	3182	249	3	.	6550
4.00 - 4.49	.	.	10	20	140	1177	2472	563	5	.	4087
4.50 - 4.99	.	.	.	6	39	350	1632	309	1	.	2335
5.00 +	.	.	.	.	.	126	1057	823	1	.	2007
TOTAL	125	1855	10444	10335	14318	21118	15152	2237	84	0	

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 44245

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	34	15	11	.	.	.	.	.	.	65
1.00 - 1.49	18	148	181	25	23	.	.	.	.	.	395
1.50 - 1.99	63	195	249	124	30	1	.	.	.	.	662
2.00 - 2.49	10	124	278	171	189	41	.	.	.	.	813
2.50 - 2.99	.	100	242	201	261	100	10	.	.	.	914
3.00 - 3.49	.	46	130	159	367	150	18	.	.	.	870
3.50 - 3.99	.	3	30	30	254	159	46	.	.	.	522
4.00 - 4.49	.	.	8	25	90	171	44	1	.	.	339
4.50 - 4.99	.	.	.	8	46	54	35	1	.	.	144
5.00 +	.	.	.	1	5	66	71	10	.	.	153
TOTAL	97	650	1133	755	1265	742	224	12	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2870

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	13	8	.	.	.	.	.	.	.	.	21
1.50 - 1.99	20	27	.	.	.	.	.	.	.	.	47
2.00 - 2.49	.	11	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	39	49	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 54

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

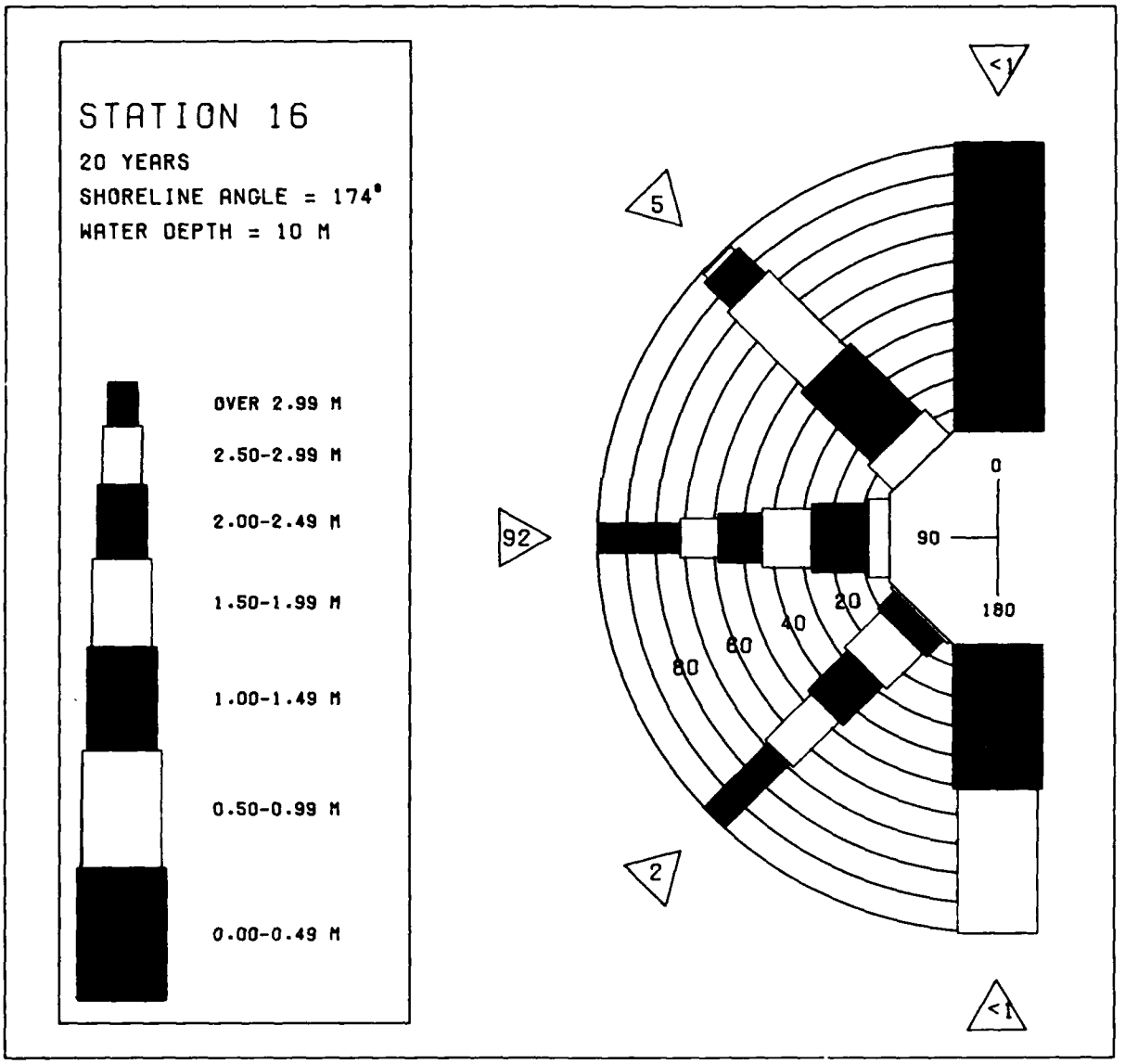
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 16 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	6	3		1			1	.	.	14
0.50 - 0.99	50	195	359	90	21	8	2	.	.	.	725
1.00 - 1.49	110	276	787	471	237	81	14	4	.	.	1980
1.50 - 1.99	128	151	329	454	440	244	46	10	1	.	1803
2.00 - 2.49	13	104	94	210	516	424	117	8	1	.	1487
2.50 - 2.99	.	37	51	84	319	552	213	14	2	.	1272
3.00 - 3.49	.	11	28	41	195	467	289	20	1	.	1052
3.50 - 3.99	.	.	10	10	78	276	322	24	.	.	720
4.00 - 4.49	.	.	2	5	23	139	251	26	.	.	446
4.50 - 4.99	.	.	.	1	8	41	166	31	.	.	247
5.00 +						19	112	83	.	.	214
TOTAL	304	780	1663	1366	1837	2252	1532	221	5	0	

MEAN HS(M) = 2.35 LARGEST HS(M) = 7.17 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	2.9	2.7	2.2	2.0	1.6	1.3	1.2	1.5	2.3	2.7	3.0	2.2
1957	2.4	2.7	3.0	2.2	1.7	1.3	1.2	1.0	1.6	2.3	3.2	3.7	2.2
1958	4.1	3.5	2.7	3.0	1.6	1.3	1.5	1.3	1.8	2.6	3.1	3.8	2.5
1959	3.7	3.3	2.6	2.2	1.8	1.3	1.4	1.2	1.7	2.3	2.6	3.5	2.3
1960	3.4	3.5	2.2	2.2	1.8	1.4	1.3	1.3	1.4	2.6	3.3	3.5	2.3
1961	3.8	3.4	2.6	2.4	1.9	1.3	1.1	1.1	1.5	2.6	3.1	3.1	2.3
1962	2.6	2.8	2.6	2.0	1.5	1.4	1.1	1.4	1.6	2.6	3.2	3.4	2.2
1963	2.8	3.4	2.9	2.0	1.5	1.7	1.2	0.8	1.6	3.2	3.3	3.5	2.3
1964	4.2	2.9	2.7	2.4	1.8	1.4	1.5	1.6	1.7	2.2	3.2	3.6	2.4
1965	3.2	3.0	2.4	2.4	1.8	1.8	1.3	1.1	1.4	2.6	3.0	3.9	2.3
1966	3.9	2.9	2.9	2.1	1.9	1.2	1.2	1.3	1.7	2.4	2.6	3.5	2.3
1967	3.5	3.0	2.6	2.1	1.3	1.1	1.2	1.2	1.7	2.7	3.2	3.5	2.2
1968	3.1	3.1	2.7	2.1	1.4	1.3	1.3	1.2	1.4	2.4	3.3	3.2	2.2
1969	2.6	3.8	2.9	2.9	1.7	1.4	1.3	1.3	1.7	2.5	3.2	4.6	2.5
1970	3.6	4.0	3.4	2.5	1.5	1.4	1.3	1.3	1.6	2.5	3.2	3.7	2.5
1971	3.1	3.1	3.4	2.7	1.9	1.4	1.0	1.4	1.8	2.2	3.5	3.3	2.4
1972	3.8	3.4	3.1	2.6	1.7	1.6	1.5	1.2	1.8	1.9	3.8	3.3	2.5
1973	3.8	3.5	3.1	2.1	1.9	1.8	1.8	1.6	1.9	2.6	3.5	4.4	2.7
1974	3.1	3.5	3.2	2.6	1.9	1.7	1.4	1.3	1.4	2.4	3.8	3.8	2.5
1975	3.1	2.8	2.5	2.0	1.6	1.2	1.0	1.1	0.9	2.6	3.4	3.1	2.1
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.8	4.4	3.5	3.5	2.6	2.5	2.1	2.7	4.2	4.2	5.1
1957	4.3	5.7	4.5	4.0	2.7	2.0	2.1	1.8	3.0	4.3	5.5	5.7
1958	6.0	6.0	4.6	6.2	3.2	2.1	2.6	2.1	3.3	4.8	6.0	5.4
1959	6.3	5.6	4.4	4.1	3.1	2.5	2.2	2.1	2.9	4.6	6.0	6.3
1960	6.0	6.3	3.9	3.8	2.7	2.7	2.1	1.8	2.4	5.6	6.3	5.4
1961	6.3	5.3	4.4	3.9	2.6	2.6	1.9	2.4	2.9	4.5	4.9	5.1
1962	5.0	4.3	4.4	3.3	2.3	2.9	2.0	2.3	4.1	4.9	7.2	6.2
1963	4.6	5.8	5.5	3.1	2.5	3.3	2.1	1.5	2.6	7.1	5.3	6.7
1964	6.4	5.1	4.8	4.5	3.7	2.3	2.4	2.5	3.1	3.7	5.8	6.0
1965	5.5	5.0	3.7	4.1	4.3	3.0	2.4	2.1	2.3	4.7	6.2	6.3
1966	6.2	5.3	5.0	3.7	3.0	2.5	2.0	2.0	3.4	4.0	5.0	6.2
1967	5.4	5.3	4.6	4.5	2.1	1.9	1.8	1.7	2.9	4.7	4.9	6.5
1968	5.6	4.4	4.4	3.4	2.9	2.0	2.2	2.3	3.3	3.9	5.1	5.5
1969	4.5	5.4	4.9	5.5	3.0	2.3	2.1	2.0	3.0	4.2	6.4	6.8
1970	5.8	5.9	5.9	4.4	2.4	2.8	2.2	2.4	2.6	4.3	6.1	6.2
1971	6.2	5.4	6.3	4.2	3.5	2.3	2.2	3.5	2.7	4.0	6.4	5.8
1972	6.2	6.6	4.6	5.2	2.5	2.5	2.7	2.1	3.0	3.5	5.4	6.7
1973	6.3	6.0	5.6	4.1	3.1	2.6	2.4	2.4	2.8	5.1	6.4	6.9
1974	6.6	5.7	6.0	4.7	3.4	3.2	2.8	2.1	2.4	5.0	6.3	5.9
1975	5.9	5.6	4.5	4.8	3.2	2.0	1.9	1.9	1.5	4.0	5.8	5.7

20 YR. STATISTICS FOR PACIFIC STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	32	.	.	.	.	.	.	.	.	.	32
1.00 - 1.49	379	11	.	.	.	.	.	.	.	.	390
1.50 - 1.99	227	107	.	.	.	.	.	.	.	.	334
2.00 - 2.49	15	25	.	.	.	.	.	.	.	.	40
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	653	143	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 468

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	32	37	25	.	.	1	.	.	.	.	95
0.50 - 0.99	448	1605	2224	441	61	66	11	.	.	.	4936
1.00 - 1.49	763	2433	4543	2200	1059	304	22	.	.	.	11324
1.50 - 1.99	872	1081	1793	1897	1646	737	87	.	.	.	8113
2.00 - 2.49	56	718	381	739	1966	1254	150	.	.	.	5264
2.50 - 2.99	.	184	160	285	1078	1634	350	.	.	.	3691
3.00 - 3.49	.	37	88	77	670	1071	448	.	.	.	2391
3.50 - 3.99	.	5	22	30	157	725	436	.	.	.	1375
4.00 - 4.49	.	.	1	11	47	318	265	.	.	.	642
4.50 - 4.99	.	.	.	.	8	58	189	.	.	.	255
5.00 +						5	94				99
TOTAL	2171	6180	9237	5680	6692	6173	2052	0	0	0	

MEAN HS(M) = 1.87 LARGEST HS(M) = 6.33 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 22332

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	32	13	1	.	8	6	11	6	.	80
0.50 - 0.99	32	354	1587	566	171	27	15	6	.	.	2758
1.00 - 1.49	13	212	3280	2705	1601	627	140	54	.	.	8632
1.50 - 1.99	54	95	1108	2464	2748	1786	403	95	13	.	8765
2.00 - 2.49	22	189	292	1043	2955	3162	1124	99	22	.	8908
2.50 - 2.99	.	94	160	340	1796	3791	1860	147	63	.	8211
3.00 - 3.49	.	27	109	217	788	3198	2445	310	11	.	7005
3.50 - 3.99	.	1	34	56	386	1854	2681	318	3	.	5263
4.00 - 4.49	.	.	13	27	112	776	2221	265	5	.	3419
4.50 - 4.99	.	.	.	11	42	251	1288	318	.	.	1910
5.00 +				3	11	175	867	775	1	.	1833
TOTAL	124	1004	6596	7433	10610	15655	13050	2228	84	0	

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.10 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 33211

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	29	10	.	.	.	.	.	.	.	44
1.00 - 1.49	8	130	83	3	.	.	.	.	.	.	224
1.50 - 1.99	66	207	145	68	6	.	.	.	.	.	492
2.00 - 2.49	6	143	232	97	65	10	.	.	.	.	553
2.50 - 2.99	.	118	249	191	176	47	1	.	.	.	782
3.00 - 3.49	.	51	155	162	306	111	15	.	.	.	800
3.50 - 3.99	.	6	49	51	282	104	10	.	.	.	502
4.00 - 4.49	.	.	17	25	142	177	34	.	.	.	395
4.50 - 4.99	.	.	3	10	46	61	29	.	.	.	149
5.00 +				1	6	49	63				119
TOTAL	85	684	943	608	1029	559	152	0	0	0	

MEAN HS(M) = 2.99 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 2386

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	13	3	.	.	.	.	.	.	.	.	16
1.50 - 1.99	22	15	.	.	.	.	.	.	.	.	37
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	41	29	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 2.97 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 43

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

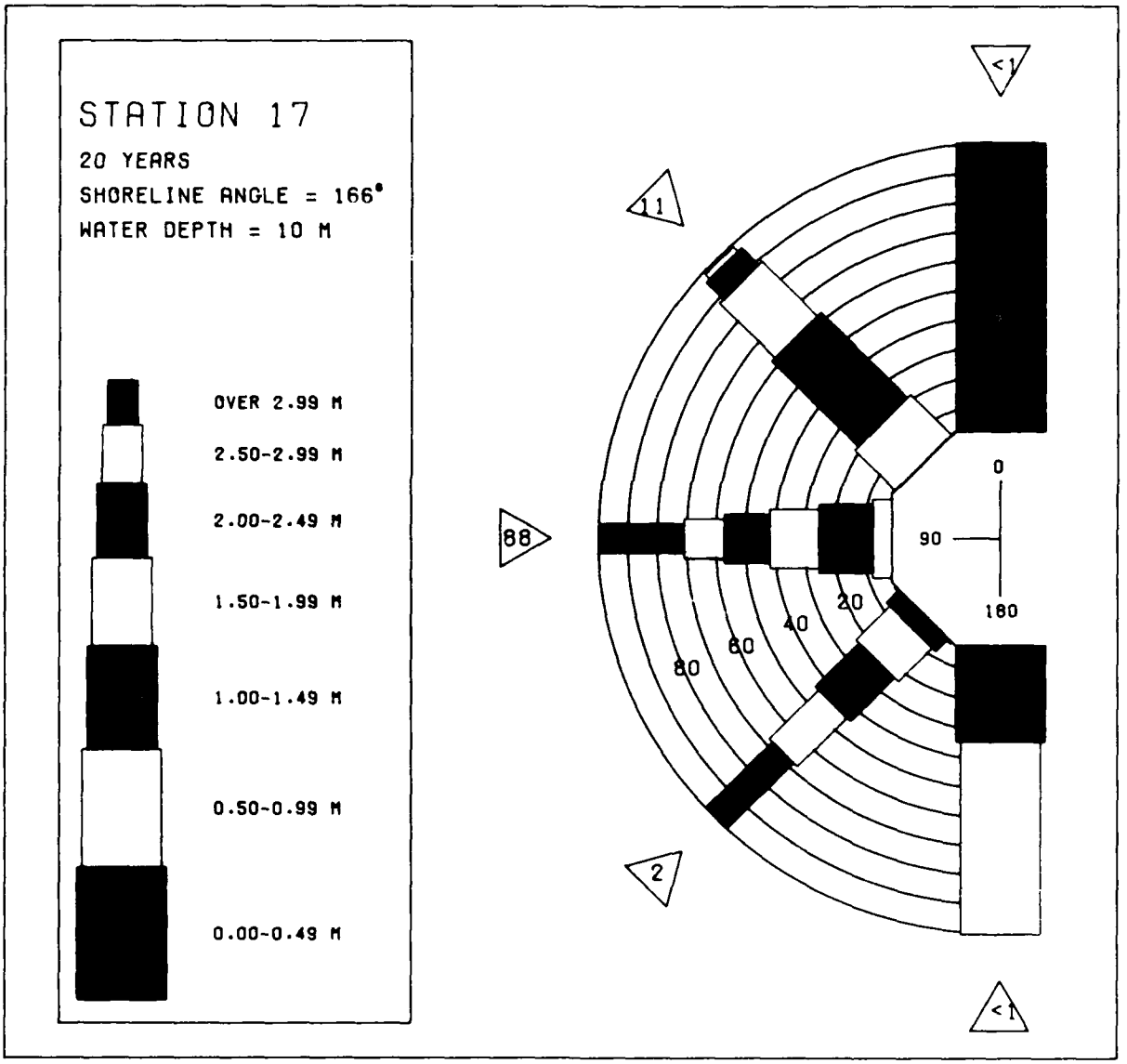
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 17 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	3	7	3	.	1	.	.	1	.	.	15
0.50 - 0.99	52	206	382	100	23	9	2	.	.	.	774
1.00 - 1.49	117	279	790	490	266	93	16	5	.	.	2056
1.50 - 1.99	124	150	304	443	440	252	49	9	1	.	1772
2.00 - 2.49	10	108	90	188	498	442	127	9	2	.	1474
2.50 - 2.99	.	40	57	61	305	547	221	14	2	.	1267
3.00 - 3.49	.	11	35	45	176	438	290	21	1	.	1017
3.50 - 3.99	.	1	10	13	82	268	312	24	.	.	710
4.00 - 4.49	.	.	3	6	30	127	252	26	.	.	444
4.50 - 4.99	.	.	.	2	9	37	150	31	.	.	229
5.00 +	.	.	.	.	1	23	102	77	.	.	203
TOTAL	306	802	1674	1368	1830	2237	1521	217	6	0	

MEAN HS(M) = 2.32 LARGEST HS(M) = 7.10 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 17 (46.90N/ 124.15W TO 46.78N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	2.9	2.7	2.2	2.0	1.5	1.2	1.2	1.5	2.2	2.7	3.0	2.2
1957	2.4	2.7	2.9	2.2	1.7	1.2	1.1	1.0	1.6	2.3	3.1	3.7	2.2
1958	4.1	3.5	2.7	2.9	1.6	1.2	1.5	1.2	1.8	2.5	3.0	3.8	2.5
1959	3.6	3.3	2.6	2.1	1.8	1.3	1.4	1.2	1.7	2.3	2.5	3.5	2.3
1960	3.4	3.5	2.2	2.2	1.8	1.3	1.2	1.3	1.3	2.6	3.3	3.5	2.3
1961	3.8	3.4	2.9	2.4	1.8	1.3	1.1	1.1	1.5	2.6	3.0	3.1	2.3
1962	2.6	2.8	2.5	2.0	1.4	1.4	1.1	1.4	1.6	2.6	3.6	3.4	2.2
1963	2.8	2.5	2.8	2.0	1.5	1.6	1.2	0.8	1.6	3.1	3.3	3.5	2.2
1964	4.2	2.8	2.7	2.3	1.7	1.4	1.4	1.5	1.7	2.2	3.1	3.6	2.4
1965	3.2	3.0	2.4	2.4	1.8	1.8	1.3	1.1	1.4	2.6	3.0	3.8	2.3
1966	3.9	2.9	2.9	2.0	1.9	1.2	1.2	1.3	1.7	2.3	2.5	3.5	2.3
1967	3.4	2.9	2.6	2.1	1.3	1.1	1.2	1.1	1.7	2.7	3.1	3.4	2.2
1968	3.1	3.1	2.7	2.0	1.4	1.3	1.2	1.2	1.4	2.4	3.3	3.2	2.2
1969	2.5	3.7	2.9	2.9	1.6	1.4	1.3	1.2	1.7	2.5	3.2	4.6	2.5
1970	3.5	4.0	3.3	2.5	1.5	1.3	1.5	1.5	1.6	2.4	3.3	3.7	2.5
1971	3.1	3.1	3.3	2.7	1.8	1.4	1.0	1.4	1.8	2.2	3.4	3.2	2.4
1972	3.7	3.3	3.1	2.5	1.7	1.5	1.5	1.2	1.7	1.9	3.8	3.3	2.4
1973	3.9	3.4	3.1	2.1	1.9	1.7	1.8	1.6	1.9	2.6	3.4	4.3	2.6
1974	3.1	3.4	3.1	2.5	1.9	1.7	1.4	1.2	1.4	2.4	3.7	3.8	2.5
1975	3.1	2.8	2.5	2.0	1.6	1.1	1.0	1.1	0.9	2.5	3.4	3.1	2.1
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.4	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 17 (46.90N/ 124.15W TO 46.78N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.5	5.6	4.4	3.5	3.4	2.6	2.5	2.1	2.6	4.1	4.1	5.3
1957	4.2	5.9	4.5	3.9	2.7	2.0	2.1	1.8	3.0	4.1	5.3	5.6
1958	5.9	5.8	4.5	6.2	3.1	2.1	2.8	2.0	3.2	4.6	5.8	5.4
1959	6.3	5.5	4.3	4.0	3.0	2.2	2.1	2.1	3.0	4.2	5.9	6.3
1960	5.9	6.3	3.9	3.7	2.6	2.6	2.1	1.8	2.4	5.5	6.1	5.3
1961	6.3	5.3	4.4	3.7	2.5	2.5	1.9	2.4	2.9	4.4	4.8	5.1
1962	5.0	4.3	4.2	3.2	2.3	2.8	2.0	2.3	4.1	4.7	7.1	6.2
1963	4.6	6.1	5.3	3.0	2.6	3.2	2.1	1.5	2.7	7.0	5.2	6.8
1964	6.4	4.9	4.8	4.3	3.6	2.5	2.3	2.4	3.1	3.6	5.6	6.0
1965	5.5	4.8	3.7	3.9	4.2	3.0	2.3	2.0	2.2	4.7	6.0	6.3
1966	6.2	5.1	4.8	3.7	2.9	2.4	2.0	2.0	3.3	3.9	4.9	6.1
1967	5.4	5.3	4.5	4.4	5.1	1.9	1.7	1.7	2.9	4.7	4.7	6.4
1968	6.1	4.5	4.4	3.4	2.9	2.0	2.2	2.2	3.3	3.7	5.1	5.7
1969	4.4	5.3	4.9	5.5	2.9	2.3	2.1	1.9	3.0	4.1	6.4	6.9
1970	5.9	5.8	5.8	4.5	2.4	2.7	2.2	2.4	2.6	4.4	6.1	6.2
1971	6.2	5.2	6.2	4.1	3.5	2.2	2.2	3.4	2.7	4.1	6.4	5.6
1972	6.1	6.6	4.5	5.0	2.4	2.5	2.6	2.0	3.1	3.4	5.2	6.7
1973	6.4	5.9	5.5	4.1	3.1	2.6	2.4	2.3	2.8	4.9	6.4	6.8
1974	5.9	5.5	6.0	4.5	3.5	3.1	2.7	2.1	2.4	4.9	6.1	6.8
1975	5.7	5.6	4.5	4.6	3.2	1.9	1.8	1.9	1.5	3.9	5.7	5.9

20 YR. STATISTICS FOR PACIFIC STATION 17 (46.90N/ 124.15W TO 46.78N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	23	.	.	.	.	.	.	.	.	.	23
1.00 - 1.49	171	5	.	.	.	.	.	.	.	.	176
1.50 - 1.99	165	32	.	.	.	.	.	.	.	.	197
2.00 - 2.49	17	18	.	.	.	.	.	.	.	.	35
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	376	55	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 2.40 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 254

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	11	11	.	.	.	.	.	.	.	51
0.50 - 0.99	431	1146	1023	155	23	10	.	.	.	.	2788
1.00 - 1.49	857	2003	2501	795	342	34	.	.	.	.	6532
1.50 - 1.99	1060	1103	1158	953	679	99	.	.	.	.	5052
2.00 - 2.49	104	730	244	439	934	208	.	.	.	.	2659
2.50 - 2.99	.	208	138	179	492	177	.	.	.	.	1194
3.00 - 3.49	.	47	75	42	265	80	.	.	.	.	509
3.50 - 3.99	.	5	35	20	78	32	.	.	.	.	170
4.00 - 4.49	.	.	1	13	8	47	.	.	.	.	69
4.50 - 4.99	.	.	.	.	1	6	.	.	.	.	7
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2481	5253	5186	2596	2822	693	0	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 11138

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	49	23	1	.	10	6	11	6	.	106
0.50 - 0.99	37	759	2544	730	186	71	27	6	.	.	4360
1.00 - 1.49	27	592	5172	3880	2002	785	143	41	.	.	12642
1.50 - 1.99	44	150	1880	3437	3687	2335	467	107	11	.	12118
2.00 - 2.49	17	176	424	1516	4034	3995	1172	82	18	.	11434
2.50 - 2.99	.	73	135	460	2443	5244	2120	145	23	.	10643
3.00 - 3.49	.	22	82	212	1327	4443	2874	201	17	.	9178
3.50 - 3.99	.	.	35	56	448	2578	3181	249	3	.	6550
4.00 - 4.49	.	.	10	20	142	1175	2474	263	5	.	4089
4.50 - 4.99	.	.	.	6	37	352	1532	309	.	.	2336
5.00 +	.	.	.	.	1	126	1057	823	1	.	2008
TOTAL	125	1821	10305	10318	14307	21114	15153	2237	84	0	

MEAN HS(M) = 2.51 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 44126

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.76N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	34	15	11	.	.	.	.	.	.	65
1.00 - 1.49	18	148	177	25	23	.	.	.	.	.	391
1.50 - 1.99	63	195	249	124	30	1	.	.	.	.	662
2.00 - 2.49	10	124	278	171	189	41	.	.	.	.	813
2.50 - 2.99	.	100	242	201	261	100	10	.	.	.	914
3.00 - 3.49	.	46	130	159	367	150	18	.	.	.	870
3.50 - 3.99	.	3	30	30	254	159	46	.	.	.	522
4.00 - 4.49	.	.	8	25	90	171	44	1	.	.	339
4.50 - 4.99	.	.	.	8	46	54	35	1	.	.	144
5.00 +	.	.	.	1	5	66	71	10	.	.	153
TOTAL	97	650	1129	755	1265	742	224	12	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2868

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.76N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	13	8	.	.	.	.	.	.	.	.	21
1.50 - 1.99	20	27	.	.	.	.	.	.	.	.	47
2.00 - 2.49	.	11	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	39	49	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 54

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.76N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

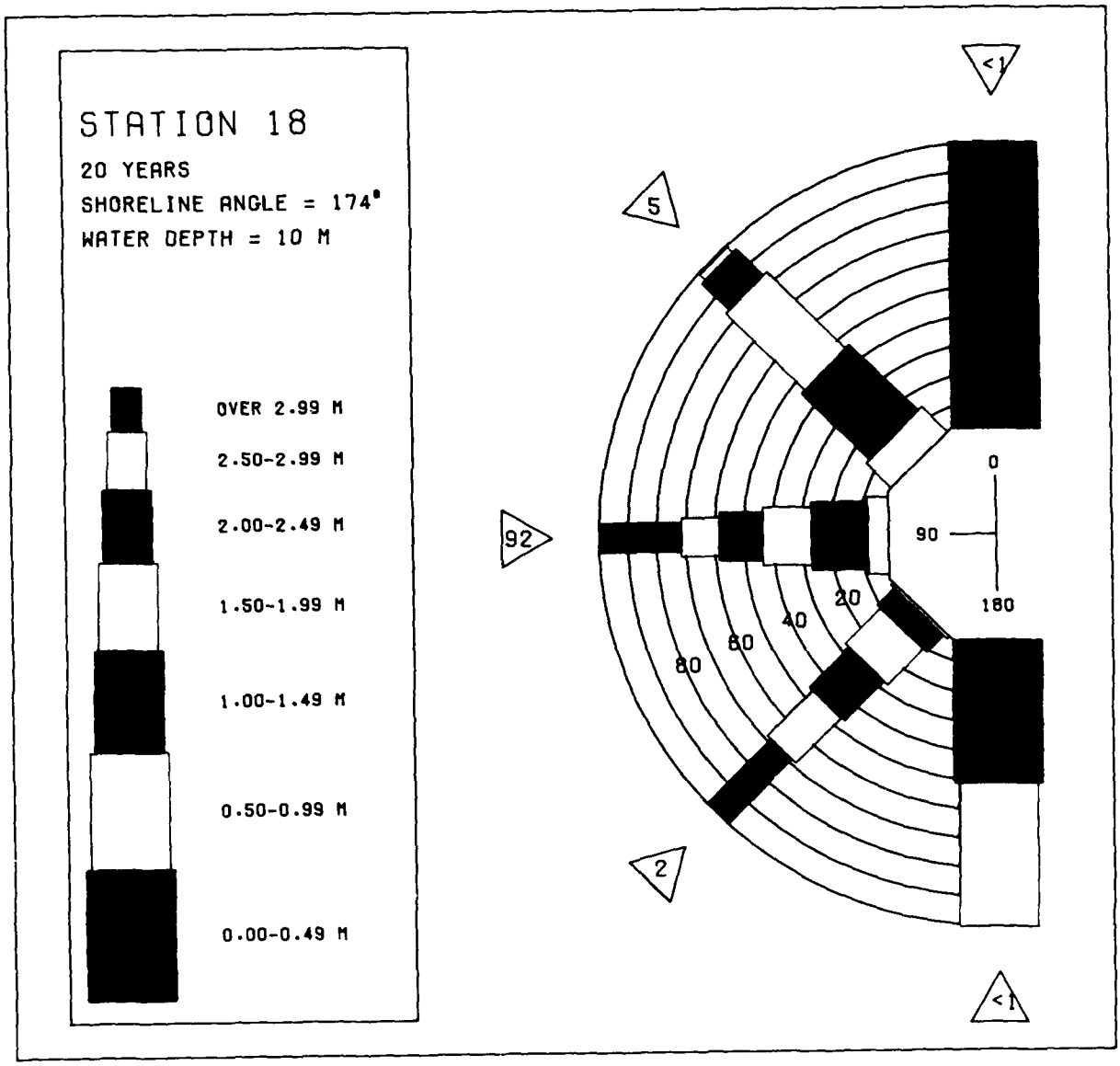
HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 18 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	6	1		1			1	.	.	14
0.50 - 0.99	50	194	356	89	21	8	2	.	.	.	722
1.00 - 1.49	108	275	785	470	236	81	14	4	.	.	1973
1.50 - 1.99	135	150	328	451	439	243	45	10	1	.	1803
2.00 - 2.49	14	106	94	212	515	424	117	8	1	.	1491
2.50 - 2.99	.	38	51	84	319	552	213	14	2	.	1273
3.00 - 3.49	.	11	28	41	196	467	289	20	1	.	1053
3.50 - 3.99	.	.	10	10	78	277	322	24	.	.	721
4.00 - 4.49	.	.	2	5	24	139	251	26	.	.	447
4.50 - 4.99	.	.	.	1	8	41	156	31	.	.	247
5.00 +	.	.	.	.	.	19	112	83	.	.	214
TOTAL	310	780	1659	1363	1836	2252	1532	221	5	0	

MEAN HS(M) = 2.35 LARGEST HS(M) = 7.17 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	2.9	2.7	2.2	2.0	1.6	1.3	1.2	1.5	2.3	2.7	3.0	2.2
1957	2.4	2.7	3.0	2.2	1.7	1.3	1.2	1.0	1.6	2.3	3.2	3.7	2.2
1958	4.1	3.5	2.7	3.0	1.6	1.3	1.5	1.3	1.8	2.6	3.1	3.8	2.5
1959	3.7	3.3	2.6	2.2	1.8	1.3	1.4	1.2	1.7	2.3	2.6	3.5	2.3
1960	3.4	3.5	2.2	2.2	1.8	1.4	1.3	1.3	1.4	2.6	3.3	3.5	2.3
1961	3.8	3.4	2.6	2.4	1.9	1.3	1.1	1.1	1.5	2.6	3.1	3.1	2.4
1962	2.6	2.8	2.6	2.0	1.5	1.4	1.2	1.4	1.6	2.6	3.2	3.4	2.2
1963	2.8	3.4	2.9	2.0	1.5	1.7	1.2	0.8	1.9	2.2	2.9	3.5	2.3
1964	4.2	3.9	2.7	2.4	1.8	1.4	1.5	1.6	1.7	2.2	3.2	3.6	2.4
1965	3.2	3.0	2.4	2.4	1.8	1.8	1.3	1.1	1.4	2.6	3.0	3.9	2.3
1966	3.9	2.9	2.9	2.1	1.9	1.2	1.2	1.3	1.7	2.4	2.6	3.5	2.3
1967	3.5	3.0	2.6	2.1	1.3	1.1	1.2	1.2	1.7	2.7	3.2	3.5	2.2
1968	3.1	3.1	2.7	2.1	1.4	1.3	1.3	1.2	1.4	2.4	3.3	3.2	2.2
1969	2.6	3.8	2.9	2.9	1.7	1.4	1.3	1.3	1.7	2.5	3.2	4.6	2.5
1970	3.5	4.0	3.4	2.5	1.5	1.4	1.5	1.3	1.6	2.5	3.3	3.7	2.5
1971	3.1	3.1	3.4	2.7	1.9	1.4	1.0	1.4	1.8	2.2	3.2	3.3	2.4
1972	3.8	3.4	3.1	2.6	1.7	1.6	1.5	1.2	1.8	1.9	3.8	3.3	2.5
1973	3.8	3.5	3.1	2.1	1.9	1.8	1.8	1.6	1.9	2.6	3.5	4.4	2.7
1974	3.1	3.5	3.2	2.6	1.9	1.7	1.4	1.3	1.4	2.4	3.8	3.8	2.5
1975	3.1	2.8	2.5	2.0	1.6	1.2	1.0	1.1	0.9	2.6	3.4	3.1	2.1
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.8	4.4	3.5	3.5	2.6	2.6	2.1	2.7	4.2	4.2	5.1
1957	4.3	5.7	4.5	4.0	2.7	2.0	2.1	1.8	3.0	4.3	5.5	5.7
1958	6.0	6.0	4.6	6.2	3.2	2.1	2.9	2.1	3.3	4.8	6.0	5.4
1959	6.3	5.6	4.4	4.1	3.4	2.5	2.3	2.1	2.9	4.6	6.0	6.3
1960	6.0	6.3	3.9	3.8	2.7	2.7	2.1	1.9	2.4	5.6	6.3	5.4
1961	6.3	5.3	4.4	3.9	2.6	2.6	1.9	2.4	2.9	4.5	4.9	5.1
1962	5.0	4.3	4.4	3.3	2.3	2.9	2.0	2.3	4.1	4.9	7.2	6.2
1963	4.6	5.8	5.5	3.1	2.5	3.4	2.1	1.6	2.6	7.1	5.3	6.7
1964	6.4	5.1	4.8	4.5	3.7	2.3	2.4	2.5	3.1	3.7	5.8	6.0
1965	5.5	5.0	3.7	4.1	4.3	3.1	2.4	2.1	2.3	4.7	6.2	6.3
1966	6.2	5.3	5.0	3.7	3.0	2.5	2.0	2.0	2.4	4.0	5.0	6.2
1967	5.4	5.3	4.6	4.5	2.8	1.9	1.8	1.7	2.9	4.7	4.9	6.5
1968	5.6	4.4	4.4	3.4	2.9	2.0	2.2	2.3	3.3	3.9	5.1	5.5
1969	4.5	5.4	4.9	5.5	3.0	2.3	2.1	2.0	3.0	4.2	6.4	6.8
1970	5.8	5.9	5.9	4.4	2.4	2.8	2.2	2.4	2.6	4.3	6.1	6.2
1971	6.2	5.4	6.3	4.2	3.5	2.3	2.3	3.5	2.7	4.0	6.4	5.8
1972	6.2	6.6	4.6	5.2	2.5	2.5	2.7	2.1	3.0	3.5	5.4	6.7
1973	6.3	6.0	5.6	4.1	3.1	2.6	2.4	2.4	2.8	5.1	6.4	6.9
1974	5.6	5.7	6.0	4.7	3.7	3.2	2.8	2.6	2.2	5.0	6.3	5.9
1975	5.9	5.6	4.5	4.8	3.2	2.0	1.9	1.9	1.5	4.0	5.8	5.7

20 YR. STATISTICS FOR PACIFIC STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	143	3	.	.	.	.	.	.	.	.	146
1.50 - 1.99	106	53	.	.	.	.	.	.	.	.	159
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	250	66	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 186

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	1	1	.	.	.	.	.	.	.	15
0.50 - 0.99	256	643	550	68	13	1	.	.	.	.	1531
1.00 - 1.49	792	1541	1589	287	70	.	.	.	.	.	4279
1.50 - 1.99	1088	1160	1146	749	296	.	.	.	.	.	4439
2.00 - 2.49	131	894	198	509	511	.	.	.	.	.	2243
2.50 - 2.99	.	263	118	135	386	.	.	.	.	.	902
3.00 - 3.49	.	68	75	18	162	10	.	.	.	.	333
3.50 - 3.99	.	.	32	15	47	13	.	.	.	.	107
4.00 - 4.49	.	.	6	18	3	1	.	.	.	.	28
4.50 - 4.99	.	.	.	.	.	1	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2280	4570	3715	1799	1488	26	0	0	0	0	

MEAN HS(M) = 1.69 LARGEST HS(M) = 4.69 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 8124

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	3	1	.	5	6	.	.	.	.	28
0.50 - 0.99	82	852	1498	304	80	29	22	5	.	.	2872
1.00 - 1.49	68	1469	5198	2756	1141	282	78	10	.	.	11002
1.50 - 1.99	53	588	3343	3742	3018	1545	241	54	5	.	12589
2.00 - 2.49	17	345	1016	2662	3788	2695	581	71	8	.	11183
2.50 - 2.99	.	162	299	1019	3865	4029	1091	59	22	.	10546
3.00 - 3.49	.	58	229	420	2154	5032	1822	99	15	.	9829
3.50 - 3.99	.	1	160	207	1151	4245	2662	140	6	.	8572
4.00 - 4.49	.	.	37	90	462	2753	2612	239	1	.	6194
4.50 - 4.99	.	.	8	32	155	1134	2395	219	1	.	3941
5.00 +	.	.	.	5	77	533	3446	1238	1	.	5300
TOTAL	220	3488	11791	11238	15891	22282	14954	2134	58	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.48 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47977

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	.	.	.	.	.	.	.	5
0.50 - 0.99	5	54	106	17	.	.	.	.	.	.	182
1.00 - 1.49	30	169	126	87	17	1	.	.	.	.	430
1.50 - 1.99	8	126	157	114	88	18	1	.	.	.	512
2.00 - 2.49	.	42	193	169	231	56	.	.	.	.	691
2.50 - 2.99	.	10	119	99	179	82	6	.	.	.	494
3.00 - 3.49	.	.	66	77	207	164	25	.	.	.	539
3.50 - 3.99	.	.	20	37	131	152	29	.	.	.	369
4.00 - 4.49	.	.	.	10	59	71	29	.	.	.	169
4.50 - 4.99	.	.	.	3	29	92	80	5	.	.	209
5.00 +											
TOTAL	44	404	788	613	941	636	169	5	0	0	

MEAN HS(M) = 3.11 LARGEST HS(M) = 7.10 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2117

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2	1	.	.	.	.	.	.	.	.	3
0.50 - 0.99	6	3	.	.	.	.	.	.	.	.	9
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	1	23	1	.	.	.	.	.	.	.	25
2.00 - 2.49	.	3	8	.	.	.	.	.	.	.	11
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	12	35	9	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 36

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

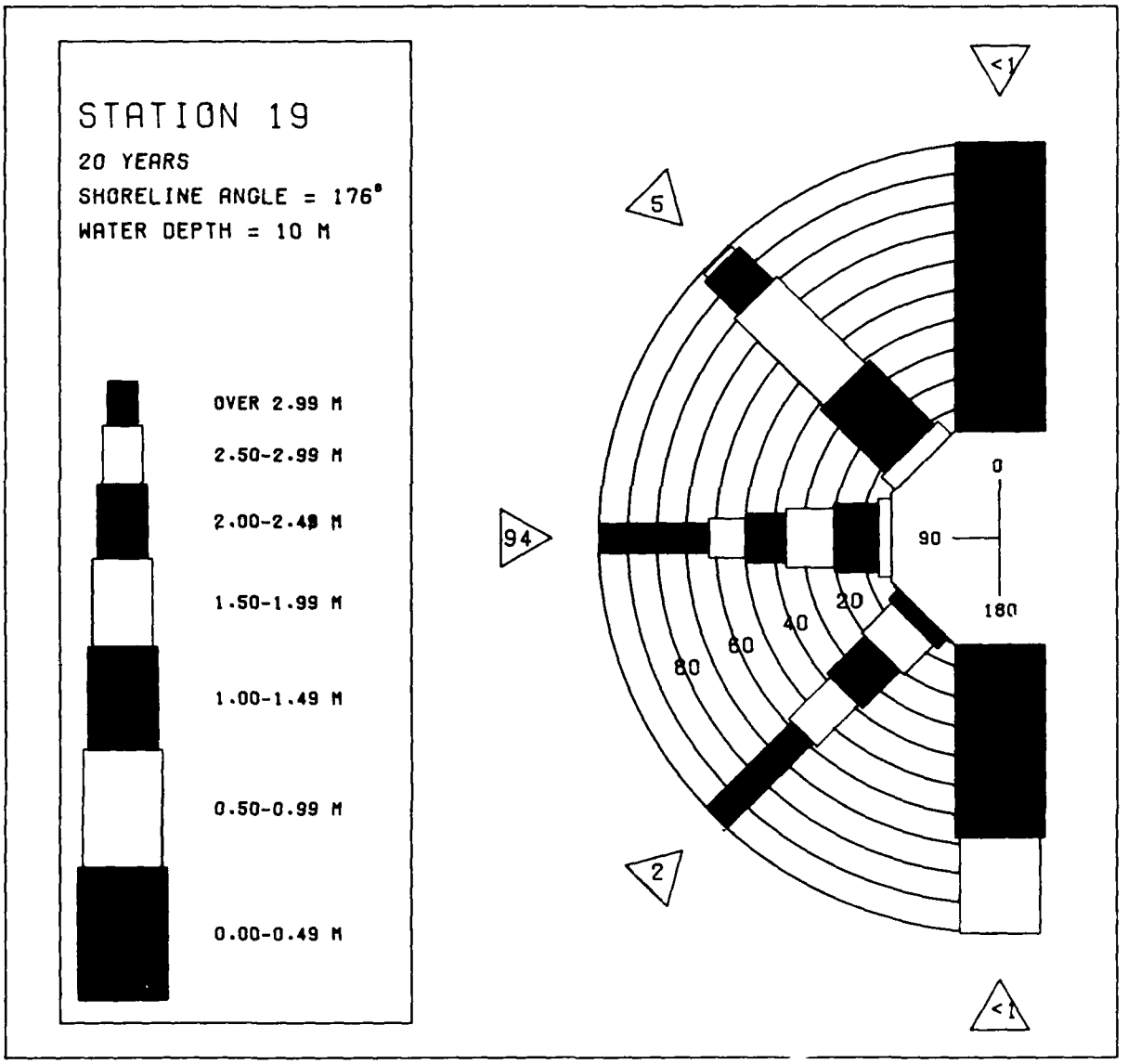
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 19 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	1									2
0.50 - 0.99	34	150	205	37	9	3	2				440
1.00 - 1.49	101	307	689	306	121	28	7	1			1560
1.50 - 1.99	127	199	461	457	333	154	24	5			1760
2.00 - 2.49	15	138	138	328	438	271	58	7			1393
2.50 - 2.99		46	61	132	448	408	109	5	2		1211
3.00 - 3.49		13	42	53	249	512	182	9	1		1061
3.50 - 3.99			26	29	140	442	268	14			919
4.00 - 4.49			6	14	59	290	264	23			656
4.50 - 4.99				4	21	120	242	21			408
5.00 +					10	62	352	124			548
TOTAL	278	854	1628	1360	1828	2290	1508	209	3	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.48 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.1	2.6	2.3	1.8	1.4	1.4	1.6	2.6	3.2	3.6	2.5
1957	2.7	2.9	3.4	2.5	2.0	1.5	1.3	1.2	1.8	2.7	3.6	4.2	2.5
1958	4.7	4.2	3.0	3.3	1.9	1.4	1.6	1.4	1.9	2.9	3.4	4.4	2.9
1959	4.2	3.6	3.1	2.5	2.1	1.5	1.6	1.3	1.9	2.8	3.0	4.1	2.6
1960	3.7	4.0	2.6	2.6	2.0	1.6	1.4	1.4	1.5	3.0	3.7	4.1	2.7
1961	4.3	4.0	3.5	2.7	2.2	1.6	1.2	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.3	3.1	2.9	2.4	1.6	1.6	1.2	1.6	1.8	3.1	4.1	4.0	2.6
1963	3.4	4.3	3.2	2.3	1.8	1.9	1.3	0.9	1.9	3.6	3.9	4.0	2.7
1964	4.7	3.4	3.1	2.6	1.9	1.7	1.7	1.7	1.9	2.6	3.6	4.0	2.7
1965	3.7	3.2	2.9	2.8	2.0	2.0	1.4	1.2	1.6	3.0	3.2	4.2	2.6
1966	4.4	3.1	3.3	2.2	1.5	1.3	1.4	1.4	1.9	2.8	2.8	3.9	2.6
1967	3.9	3.2	2.8	2.4	1.5	1.3	1.4	1.2	1.9	2.9	3.4	3.9	2.5
1968	3.6	4.0	3.2	2.3	1.5	1.3	1.4	1.3	1.6	2.8	3.8	3.2	2.5
1969	2.8	4.2	3.5	2.4	2.0	1.8	1.4	1.4	2.0	3.0	3.7	5.2	2.8
1970	4.2	4.4	3.7	2.7	1.8	1.6	1.6	1.5	1.7	2.7	3.7	4.5	2.8
1971	3.4	3.7	3.8	3.2	2.1	1.6	1.1	1.5	2.0	2.6	3.9	3.7	2.7
1972	4.2	3.6	3.6	2.9	2.0	1.7	1.8	1.4	2.0	2.2	4.4	3.7	2.8
1973	4.3	4.0	3.6	2.4	2.2	2.1	2.0	1.7	2.1	3.0	3.8	5.0	3.0
1974	3.5	3.9	3.5	3.1	2.3	1.8	1.6	1.5	1.7	2.8	4.3	4.3	2.9
1975	3.7	3.3	2.8	2.2	1.8	1.3	1.2	1.2	1.1	2.8	3.9	3.6	2.4
MEAN	3.8	3.7	3.2	2.6	2.0	1.6	1.4	1.4	1.8	2.8	3.6	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	6.2	5.4	4.1	3.8	2.7	2.7	2.1	2.6	4.5	5.1	6.1
1957	4.5	5.7	5.8	5.0	3.3	2.5	2.1	1.9	3.5	5.1	5.9	5.9
1958	6.7	6.4	5.4	6.5	3.7	2.1	3.0	2.3	3.8	4.8	6.1	6.4
1959	6.4	6.0	5.1	5.1	3.7	2.6	2.2	2.3	2.9	6.1	6.2	6.6
1960	6.7	6.5	4.2	4.5	3.2	3.1	2.1	2.3	2.5	6.3	6.2	6.3
1961	6.6	6.3	6.2	4.2	3.3	2.9	1.9	2.5	3.2	5.5	5.5	5.6
1962	5.5	4.9	5.2	3.7	2.6	3.3	2.1	2.7	4.5	5.9	6.9	5.9
1963	5.5	6.1	5.8	3.3	2.9	3.5	2.2	1.8	2.8	7.5	6.3	6.8
1964	6.8	5.7	5.1	4.6	4.2	2.9	2.4	2.5	3.1	4.3	6.1	6.3
1965	6.5	5.2	4.1	4.5	4.2	3.1	2.4	2.1	4.6	5.5	6.2	6.4
1966	6.3	5.4	5.4	4.6	3.2	3.1	2.1	2.2	3.7	4.7	5.0	6.4
1967	5.7	6.0	4.6	4.9	2.4	2.1	1.8	2.0	3.2	5.1	5.3	6.7
1968	5.9	6.1	5.1	3.7	3.0	2.1	2.4	2.4	3.0	4.9	6.2	6.2
1969	4.8	5.9	5.1	6.2	3.3	3.1	2.2	2.0	3.4	4.8	6.7	7.3
1970	6.7	6.1	6.2	5.2	2.7	2.7	2.5	2.8	2.9	4.8	6.5	6.9
1971	6.1	5.7	7.0	4.4	3.7	2.2	2.1	2.8	3.0	4.2	6.8	6.1
1972	6.3	6.2	5.7	5.1	3.0	2.7	3.6	2.4	3.2	4.0	6.0	7.2
1973	6.9	6.2	6.1	4.1	3.2	3.0	2.7	2.5	3.3	5.6	6.6	7.2
1974	6.2	6.3	6.4	5.2	4.2	3.6	3.2	2.3	2.5	5.2	6.6	6.3
1975	6.3	6.0	5.6	5.2	3.6	2.1	2.0	2.1	1.7	4.5	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	106	3	.	.	.	.	.	.	.	.	109
1.50 - 1.99	82	37	.	.	.	.	.	.	.	.	119
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	189	43	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.04 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 137

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	246	549	434	51	5	1	.	.	.	.	1286
1.00 - 1.49	800	1344	1259	186	30	.	.	.	.	.	3619
1.50 - 1.99	1120	1120	867	463	88	.	.	.	.	.	3658
2.00 - 2.49	128	903	155	308	162	.	.	.	.	.	1656
2.50 - 2.99	.	285	90	41	99	.	.	.	.	.	515
3.00 - 3.49	.	65	53	6	47	10	.	.	.	.	181
3.50 - 3.99	.	.	32	3	25	6	.	.	.	.	66
4.00 - 4.49	.	.	8	8	1	.	.	.	.	.	17
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2305	4266	2898	1066	457	17	0	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 4.43 MEAN TP(SEC) = 7.6 NUMBER OF CASES = 6446

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	15	3	1	.	5	6	.	.	.	31
0.50 - 0.99	88	930	1593	308	87	30	22	5	.	.	3063
1.00 - 1.49	78	1646	5494	2845	1144	273	75	8	.	.	11563
1.50 - 1.99	65	617	3607	4034	3220	1528	246	58	5	.	13380
2.00 - 2.49	29	347	1069	2878	4149	2683	576	71	8	.	11810
2.50 - 2.99	.	162	313	1101	4194	4067	1076	56	23	.	10992
3.00 - 3.49	.	61	219	424	2255	5053	1803	104	13	.	9932
3.50 - 3.99	.	.	159	205	1155	4276	2700	140	6	.	8641
4.00 - 4.49	.	.	35	99	448	2737	2633	236	1	.	6189
4.50 - 4.99	.	.	8	29	145	1110	2405	220	.	.	3917
5.00 +	.	.	.	1	73	527	3444	1242	1	.	5288
TOTAL	261	3778	12500	11925	16870	22289	14986	2140	57	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.50 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 49582

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	1	5	.	.	.	.	.	.	.	7
1.00 - 1.49	10	61	126	18	.	.	.	.	.	.	215
1.50 - 1.99	32	188	167	97	22	1	.	.	.	.	507
2.00 - 2.49	8	123	172	124	114	30	1	.	.	.	572
2.50 - 2.99	.	42	189	189	251	61	.	.	.	.	732
3.00 - 3.49	.	10	128	78	183	118	8	.	.	.	525
3.50 - 3.99	.	1	58	70	215	184	29	.	.	.	557
4.00 - 4.49	.	.	17	39	99	154	25	.	.	.	334
4.50 - 4.99	.	.	.	8	54	73	39	.	.	.	174
5.00 +	.	.	.	1	25	92	71	5	0	0	194
TOTAL	51	426	862	624	963	713	173	5	0	0	

MEAN HS(M) = 3.03 LARGEST HS(M) = 7.06 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2246

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	6	5	1	.	.	.	.	.	.	.	12
1.00 - 1.49	3	8	1	.	.	.	.	.	.	.	12
1.50 - 1.99	1	10	3	.	.	.	.	.	.	.	14
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	29	5	0	0	0	0	0	0	0	

MEAN HS(M) = 1.10 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 29

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

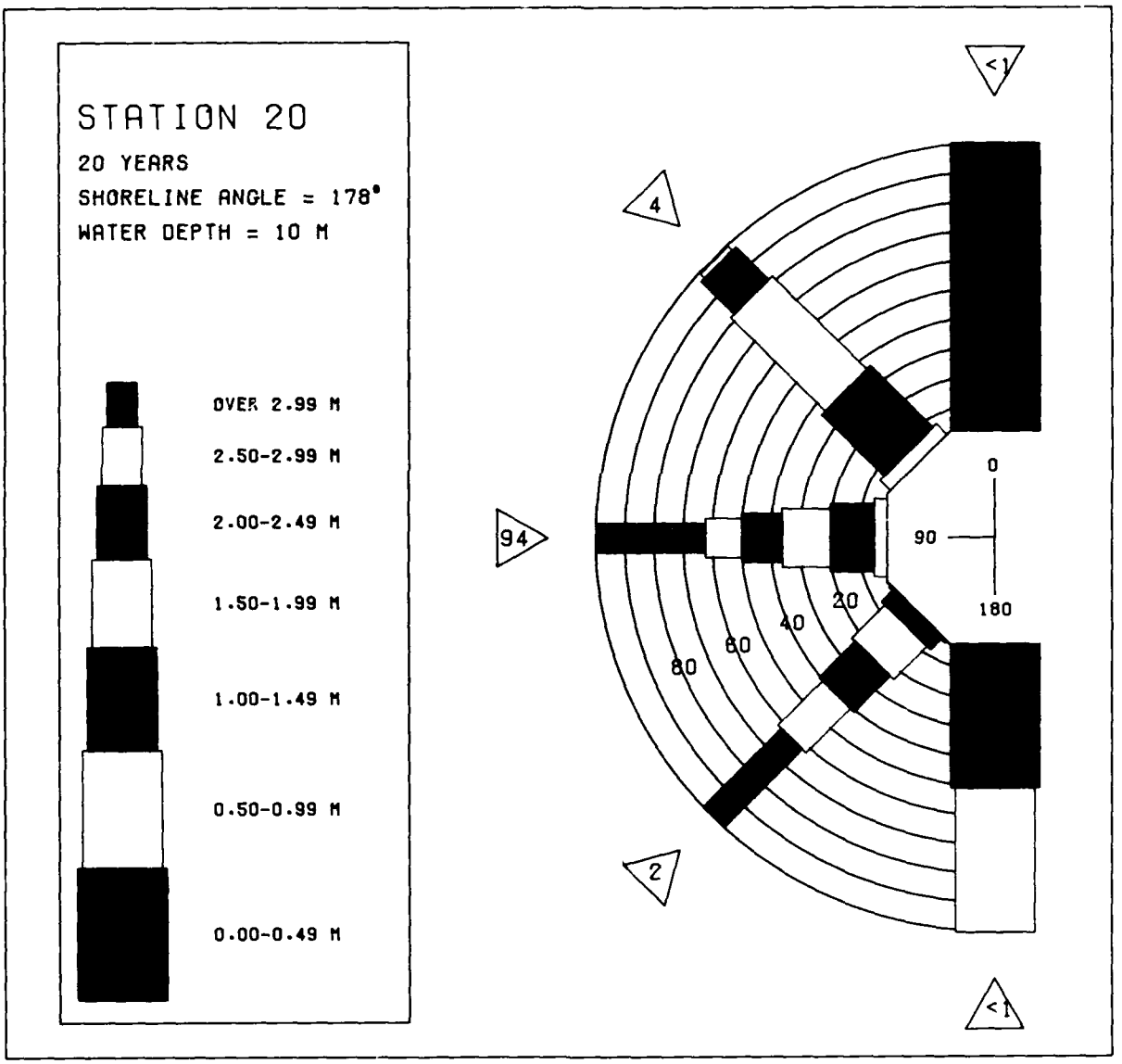
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 20 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.50N/124.08W LAT. LON. END= 46.40N/124.08W
SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1	2									3
0.50 - 0.99	34	148	203	35	9	3	2	.	.	.	434
1.00 - 1.49	99	306	688	305	117	27	7	.	.	.	1549
1.50 - 1.99	130	197	464	459	333	152	24	5	.	.	1764
2.00 - 2.49	16	137	139	331	442	271	57	7	.	.	1400
2.50 - 2.99	.	49	59	133	454	412	107	5	2	.	1221
3.00 - 3.49	.	13	40	50	248	518	181	10	1	.	1061
3.50 - 3.99	.	.	24	27	139	446	272	14	.	.	922
4.00 - 4.49	.	.	6	14	54	289	265	23	.	.	651
4.50 - 4.99	.	.	.	3	20	118	244	22	.	.	407
5.00 +					9	61	351	124	.	.	545
TOTAL	280	852	1623	1357	1825	2297	1510	210	3	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.50 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.2	3.1	2.6	2.3	1.8	1.5	1.4	1.6	2.6	3.2	3.6	2.5
1957	2.7	2.9	3.4	2.5	2.0	1.5	1.3	1.2	1.8	2.6	3.6	4.2	2.5
1958	4.7	4.2	3.0	3.3	1.9	1.4	1.6	1.4	1.9	2.9	3.4	4.4	2.8
1959	4.2	3.6	3.1	2.5	2.2	1.5	1.6	1.3	1.9	2.8	3.0	4.1	2.6
1960	3.7	4.0	2.6	2.6	2.0	1.6	1.4	1.4	1.5	3.1	3.7	4.1	2.7
1961	4.3	4.0	3.4	2.7	2.2	1.6	1.2	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.3	3.1	2.9	2.4	1.7	1.6	1.2	1.6	1.8	3.1	4.1	4.0	2.6
1963	3.4	4.2	3.2	2.3	1.8	1.9	1.3	0.9	1.9	3.6	3.9	4.0	2.7
1964	4.7	3.4	3.1	2.6	2.0	1.7	1.7	1.7	1.9	2.6	3.6	4.0	2.7
1965	3.7	3.2	2.9	2.8	2.0	2.0	1.4	1.2	1.6	3.0	3.2	4.2	2.6
1966	4.4	3.1	3.3	2.2	1.5	1.5	1.3	1.4	1.9	2.8	3.8	3.9	2.6
1967	3.9	3.2	2.8	2.4	1.5	1.2	1.4	1.2	2.0	2.9	3.5	3.9	2.5
1968	3.5	4.0	3.2	2.3	1.5	1.5	1.4	1.7	1.6	2.8	3.8	3.5	2.5
1969	2.8	4.2	3.2	3.4	2.0	1.8	1.4	1.4	2.0	3.0	3.7	5.2	2.8
1970	4.1	4.4	3.7	2.7	1.8	1.6	1.6	1.5	1.7	2.6	3.7	4.2	2.8
1971	3.4	3.7	3.8	3.2	2.1	1.6	1.1	1.6	2.0	2.6	3.9	3.7	2.7
1972	4.2	3.6	3.6	2.9	2.0	1.7	1.8	1.4	2.0	2.2	4.4	3.7	2.8
1973	4.3	4.0	3.6	2.4	2.2	2.1	2.0	1.7	2.2	3.0	3.8	5.0	3.0
1974	3.5	3.9	3.5	3.1	2.3	1.9	1.6	1.5	1.7	2.8	4.3	4.3	2.9
1975	3.7	3.3	2.8	2.2	1.8	1.3	1.2	1.2	1.1	2.8	3.9	3.6	2.4
MEAN	3.8	3.7	3.2	2.7	2.0	1.6	1.4	1.4	1.8	2.8	3.6	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	6.1	5.4	4.1	3.8	2.7	2.7	2.1	2.7	4.5	5.1	6.1
1957	4.2	5.6	5.8	5.0	3.3	2.5	2.2	1.9	3.5	5.1	6.0	5.9
1958	6.7	6.4	5.4	6.5	3.7	2.1	3.1	2.3	3.8	4.8	6.1	6.4
1959	6.4	6.1	5.1	5.1	3.7	2.6	2.2	2.3	2.8	6.1	6.2	6.5
1960	6.7	6.5	4.2	4.6	3.3	3.1	2.2	2.3	2.5	6.3	6.3	6.3
1961	6.6	6.3	6.2	4.2	3.3	3.0	1.9	2.5	3.2	5.5	5.5	5.6
1962	5.2	4.9	5.2	3.7	2.6	3.4	2.1	2.7	4.4	5.9	6.9	5.9
1963	5.5	6.1	5.8	3.3	2.9	3.5	2.2	1.8	2.7	7.5	6.3	6.8
1964	6.8	5.7	5.1	4.6	4.2	2.8	2.5	2.5	3.1	4.3	6.1	6.3
1965	6.1	5.2	4.1	4.6	4.2	3.1	2.5	2.1	2.6	5.4	6.1	6.4
1966	6.2	5.4	5.4	4.6	3.3	3.1	2.1	2.2	3.7	4.7	5.0	6.4
1967	5.7	6.0	4.6	4.9	2.4	2.1	1.9	2.0	3.3	5.1	5.3	6.7
1968	5.8	6.0	5.1	3.7	3.0	2.1	2.4	2.4	3.0	4.9	6.1	6.1
1969	4.8	5.9	5.2	6.2	3.3	3.1	2.2	2.0	3.4	4.8	6.7	7.2
1970	6.7	6.1	6.1	5.2	4.7	2.7	2.5	2.8	2.9	4.8	6.5	6.9
1971	6.1	5.7	6.9	4.4	3.7	2.2	2.1	3.8	3.0	4.2	6.8	6.0
1972	6.3	6.2	5.7	5.8	3.0	2.7	3.6	2.4	3.2	4.0	6.0	7.2
1973	6.8	6.1	6.1	4.1	3.2	3.0	2.7	2.6	3.3	5.7	6.6	7.2
1974	6.2	6.3	6.4	5.2	4.2	3.6	3.2	2.3	2.5	5.5	6.5	6.3
1975	6.3	6.0	5.6	5.2	3.6	2.1	2.0	2.1	1.7	4.6	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	25	.	.	.	.	.	.	.	.	.	25
1.50 - 1.99	18	.	.	.	.	.	.	.	.	.	18
2.00 - 2.49	3	.	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	49	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.22 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 30

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	1	.	.	.	.	.	.	.	.	9
0.50 - 0.99	183	107	11	.	.	.	.	.	.	.	301
1.00 - 1.49	898	355	66	10	1	.	.	.	.	.	1330
1.50 - 1.99	1461	711	20	15	3	.	.	.	.	.	2210
2.00 - 2.49	225	669	18	.	.	.	.	.	.	.	912
2.50 - 2.99	3	167	15	.	.	.	.	.	.	.	185
3.00 - 3.49	.	20	10	3	.	.	.	.	.	.	33
3.50 - 3.99	.	1	3	1	.	.	.	.	.	.	5
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2778	2031	143	29	4	0	0	0	0	0	

MEAN HS(M) = 1.70 LARGEST HS(M) = 3.85 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 2922

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	47	17	.	.	18	1	.	.	.	89
0.50 - 0.99	208	1476	2900	626	171	51	15	3	.	.	5450
1.00 - 1.49	195	2152	7205	3940	1901	530	157	35	1	.	16116
1.50 - 1.99	145	496	3518	4560	4067	2231	381	107	8	.	15513
2.00 - 2.49	41	398	734	2358	4832	3868	1221	70	18	.	13570
2.50 - 2.99	.	309	201	636	3194	5186	1863	116	27	.	11532
3.00 - 3.49	.	100	162	213	1671	4924	2532	169	22	.	9793
3.50 - 3.99	.	5	68	65	506	3081	3314	270	1	.	7310
4.00 - 4.49	.	.	41	41	152	1457	2508	275	1	.	4475
4.50 - 4.99	.	.	.	3	23	485	1907	290	1	.	2709
5.00 +	.	.	.	1	6	142	1464	917	.	.	2530
TOTAL	595	4983	14846	12453	16523	21973	15363	2272	79	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52088

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	8	49	95	37	8	.	.	.	.	.	197
1.00 - 1.49	1	106	304	92	68	.	.	.	.	.	571
1.50 - 1.99	42	68	299	179	229	56	.	.	.	.	893
2.00 - 2.49	15	94	186	239	391	188	23	.	.	.	1136
2.50 - 2.99	.	73	140	219	407	287	65	3	.	.	1194
3.00 - 3.49	.	25	73	90	314	242	63	.	.	.	807
3.50 - 3.99	.	1	23	18	104	183	99	.	.	.	428
4.00 - 4.49	.	.	1	15	44	119	77	1	.	.	257
4.50 - 4.99	.	.	1	1	10	71	70	5	.	.	158
5.00 +	.	.	.	1	3	6	22	1	.	.	33
TOTAL	67	436	1122	891	1578	1152	419	10	0	0	

MEAN HS(M) = 2.57 LARGEST HS(M) = 5.58 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3335

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	5	.	.	.	.	.	.	.	.	11
1.00 - 1.49	17	35	.	.	.	.	.	.	.	.	52
1.50 - 1.99	8	23	3	.	.	.	.	.	.	.	34
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	31	71	3	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.22 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 64

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

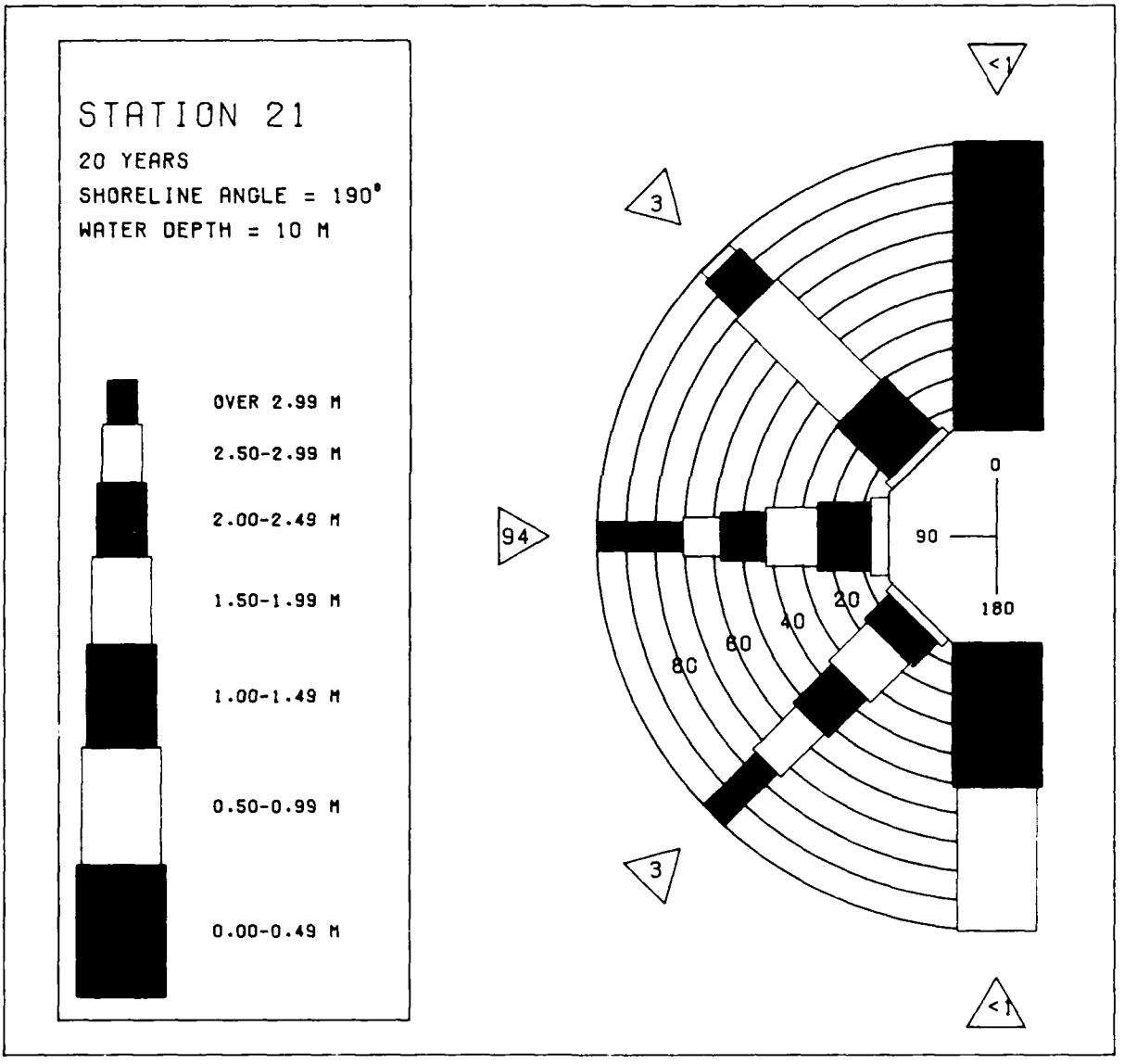
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.44 LARGEST HS(M) = 0.44 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 21 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	4	1	.	1	.	.	.	.	.	7
0.50 - 0.99	41	163	300	66	17	5	1	.	.	.	593
1.00 - 1.49	113	265	757	404	197	53	15	3	.	.	1807
1.50 - 1.99	167	132	384	475	430	228	38	10	.	.	1664
2.00 - 2.49	28	117	93	260	522	405	124	9	1	.	1559
2.50 - 2.99	.	55	35	85	360	547	192	11	2	.	1287
3.00 - 3.49	.	14	24	30	198	516	259	16	2	.	1059
3.50 - 3.99	.	.	9	8	61	326	341	27	.	.	772
4.00 - 4.49	.	.	4	5	19	157	258	27	.	.	470
4.50 - 4.99	.	.	.	.	3	55	197	29	.	.	284
5.00 +	.	.	.	.	1	14	148	91	.	.	254
TOTAL	350	750	1607	1333	1808	2307	1573	223	5	0	

MEAN HS(M) = 2.43 LARGEST HS(M) = 7.29 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	3.0	2.8	2.3	2.3	1.6	1.4	1.3	1.6	2.4	2.7	3.0	2.3
1957	2.4	2.7	3.0	2.5	1.7	1.3	1.2	1.1	1.6	2.4	3.3	3.8	2.3
1958	4.2	3.5	2.9	3.0	1.8	1.3	1.6	1.4	1.9	2.7	3.1	3.6	2.6
1959	3.7	3.4	2.9	2.4	1.9	1.3	1.6	1.3	1.7	2.4	2.7	3.6	2.4
1960	3.4	3.4	2.3	2.3	1.8	1.5	1.4	1.4	1.4	2.8	3.5	3.6	2.4
1961	3.7	3.3	2.9	2.6	2.1	1.4	1.2	1.2	1.7	2.8	3.2	3.2	2.4
1962	2.6	2.8	2.8	2.1	1.6	1.5	1.2	1.5	1.6	2.8	3.7	3.3	2.3
1963	2.7	3.2	3.0	2.2	1.7	1.8	1.3	0.9	1.6	2.3	3.4	3.5	2.4
1964	4.2	2.9	2.8	2.6	1.9	1.4	1.6	1.7	1.8	2.3	3.4	3.5	2.5
1965	3.3	3.0	2.5	2.6	1.9	2.0	1.4	1.2	1.5	2.8	3.1	4.0	2.4
1966	3.5	3.0	3.0	2.1	2.1	1.3	1.3	1.4	1.7	2.5	2.9	3.4	2.4
1967	3.5	2.9	2.7	2.4	1.5	1.4	1.4	1.2	1.7	2.6	3.3	3.5	2.3
1968	3.1	3.0	2.7	2.1	1.5	1.3	1.3	1.3	1.5	2.5	3.3	3.3	2.2
1969	2.6	3.9	3.0	3.0	1.8	1.4	1.4	1.3	1.8	2.6	3.3	4.5	2.6
1970	3.5	3.9	3.4	2.6	1.6	1.4	1.6	1.5	1.6	2.5	3.5	3.8	2.6
1971	3.1	3.1	3.5	2.9	2.0	1.4	1.1	1.4	2.0	3.3	3.6	3.5	2.5
1972	3.6	3.4	3.1	2.8	1.9	1.7	1.7	1.3	1.9	3.1	4.0	3.3	2.6
1973	3.8	3.5	3.2	2.3	2.0	1.8	1.9	1.8	2.0	2.8	3.6	4.5	2.8
1974	3.0	3.6	3.5	2.8	2.1	1.8	1.4	1.3	1.5	2.5	4.0	3.8	2.6
1975	3.2	2.8	2.5	2.2	1.8	1.3	1.1	1.1	1.0	2.6	3.6	3.1	2.2
MEAN	3.3	3.2	2.9	2.5	1.8	1.5	1.4	1.3	1.6	2.6	3.4	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

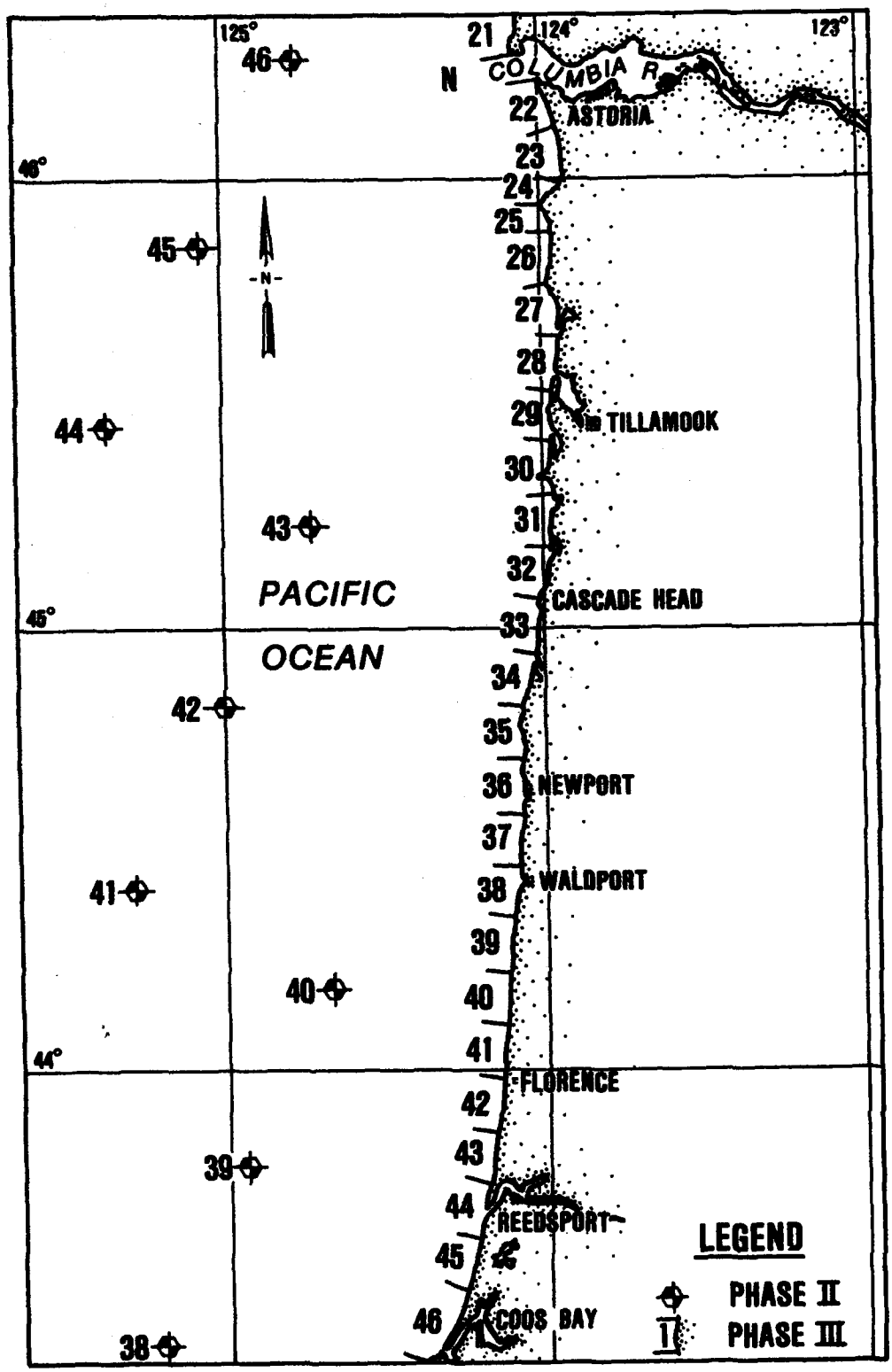
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	6.0	4.6	4.0	3.8	2.6	2.9	2.1	2.7	4.4	3.9	5.1
1957	4.0	4.9	4.3	4.1	3.0	2.0	2.3	1.8	3.1	5.0	5.9	5.6
1958	6.3	6.1	4.9	6.3	3.8	2.2	3.1	2.3	3.7	4.8	6.3	5.5
1959	6.2	6.1	4.4	4.4	3.3	2.2	2.8	2.3	2.8	5.1	6.3	6.6
1960	6.5	6.3	3.9	4.2	3.1	2.6	2.3	2.3	2.9	5.3	6.4	6.1
1961	5.6	5.0	4.4	4.2	3.4	3.0	2.2	2.5	3.2	5.2	5.2	5.4
1962	4.9	4.4	5.2	3.4	2.6	2.4	2.2	2.6	4.2	5.3	6.9	5.3
1963	4.3	4.9	5.6	3.2	2.7	3.6	2.4	1.7	2.5	7.3	5.7	6.4
1964	6.3	4.8	4.9	4.7	4.4	2.5	2.8	2.6	3.1	4.1	6.1	6.1
1965	5.4	5.3	3.8	4.7	4.4	3.3	2.6	2.1	2.4	4.9	6.1	6.3
1966	6.1	5.5	5.2	3.7	3.2	2.6	2.1	2.3	3.3	4.1	5.0	5.8
1967	5.3	5.2	4.4	4.9	2.5	2.2	3.0	1.9	3.2	4.7	5.4	6.7
1968	6.2	4.1	4.3	3.5	3.0	2.1	2.5	2.3	3.3	3.9	4.8	5.9
1969	4.7	5.8	5.0	5.5	3.3	2.4	2.5	2.0	3.1	4.7	6.2	6.6
1970	5.4	6.1	5.7	4.7	3.4	2.8	2.3	2.8	2.7	4.6	5.9	6.4
1971	6.2	5.4	6.6	4.2	3.5	2.2	2.4	3.8	2.8	4.1	6.6	6.1
1972	6.2	6.7	4.9	6.1	2.8	2.7	3.0	2.3	3.1	3.7	6.0	6.5
1973	6.3	6.1	5.7	4.4	3.2	2.9	2.7	2.7	3.0	5.5	6.5	6.9
1974	5.6	6.2	6.0	5.2	4.0	3.3	3.0	2.2	2.6	5.1	6.5	6.2
1975	6.2	5.8	4.5	5.1	3.1	2.2	1.9	2.1	1.7	4.5	6.3	5.8

20 YR. STATISTICS FOR PACIFIC STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	85.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

Appendix B: Sta 22 through 45


125°
124°
123°
46°
45°
44°
N
COLUMBIA R.
ASTORIA
TILLAMOOK
CASCADE HEAD
NEWPORT
WALDPORT
FLORENCE
REEDSPORT
COOS BAY
PACIFIC
OCEAN
46
45
44
43
42
41
40
39
38
21
22
23
24
25
26
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28
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41
42
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44
45
46
LEGEND
PHASE II
PHASE III

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	142	3	.	.	.	.	.	.	.	.	145
1.00 - 1.49	989	165	.	.	.	.	.	.	.	.	1154
1.50 - 1.99	181	160	.	.	.	.	.	.	.	.	341
2.00 - 2.49	1	20	.	.	.	.	.	.	.	.	21
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1324	349	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 981

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	70	27	1	.	18	1	.	.	.	137
0.50 - 0.99	347	1966	3524	852	142	75	18	.	.	.	6924
1.00 - 1.49	503	2472	7289	4091	1914	657	116	22	.	.	17064
1.50 - 1.99	559	1030	2558	3954	3244	1659	258	18	.	.	13280
2.00 - 2.49	22	633	422	1165	3324	2284	436	32	.	.	8316
2.50 - 2.99	.	224	160	355	1902	3181	920	51	.	.	6793
3.00 - 3.49	.	30	99	116	828	2200	1180	56	.	.	4589
3.50 - 3.99	.	.	44	42	282	1312	1055	111	.	.	2846
4.00 - 4.49	.	.	10	10	41	504	1067	107	.	.	1739
4.50 - 4.99	.	.	.	1	11	114	564	112	.	.	803
5.00 +	.	.	.	.	1	8	388	200	.	.	597
TOTAL	1451	6425	14133	10587	11689	12092	6003	709	0	0	

MEAN HS(M) = 2.02 LARGEST HS(M) = 7.09 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 36890

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	.	.	.	5	.	.	.	10
0.50 - 0.99	10	123	444	183	100	15	3	3	.	.	881
1.00 - 1.49	1	154	737	841	906	366	88	29	3	.	3125
1.50 - 1.99	47	131	379	708	1406	1054	285	73	13	.	4096
2.00 - 2.49	22	152	201	362	1529	2316	937	46	25	.	5590
2.50 - 2.99	.	148	172	231	826	2542	1372	106	29	.	5426
3.00 - 3.49	.	68	159	196	429	2067	1724	148	6	.	4797
3.50 - 3.99	.	13	49	68	393	1103	2044	159	.	.	3829
4.00 - 4.49	.	.	17	29	159	530	1445	183	1	.	2364
4.50 - 4.99	.	.	3	10	71	273	905	184	1	.	1447
5.00 +	.	.	.	1	23	159	506	525	.	.	1214
TOTAL	81	792	2162	2629	5842	10425	9314	1456	78	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.06 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 19181

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	11	.	.	.	.	.	.	.	.	12
1.00 - 1.49	13	78	11	.	.	.	.	.	.	.	102
1.50 - 1.99	46	140	46	.	.	.	.	.	.	.	252
2.00 - 2.49	22	73	128	53	23	1	.	.	.	.	300
2.50 - 2.99	.	68	179	119	128	3	1	.	.	.	498
3.00 - 3.49	.	47	130	140	118	37	5	.	.	.	477
3.50 - 3.99	.	.	30	102	147	53	1	.	.	.	333
4.00 - 4.49	.	1	5	20	99	51	5	.	.	.	181
4.50 - 4.99	.	.	3	10	59	27	11	.	.	.	110
5.00 +	.	.	1	1	13	49	15	.	.	.	78
TOTAL	82	418	532	465	587	221	38	0	0	0	

MEAN HS(M) = 3.06 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 1383

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.15 LARGEST HS(M) = 1.98 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 5

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

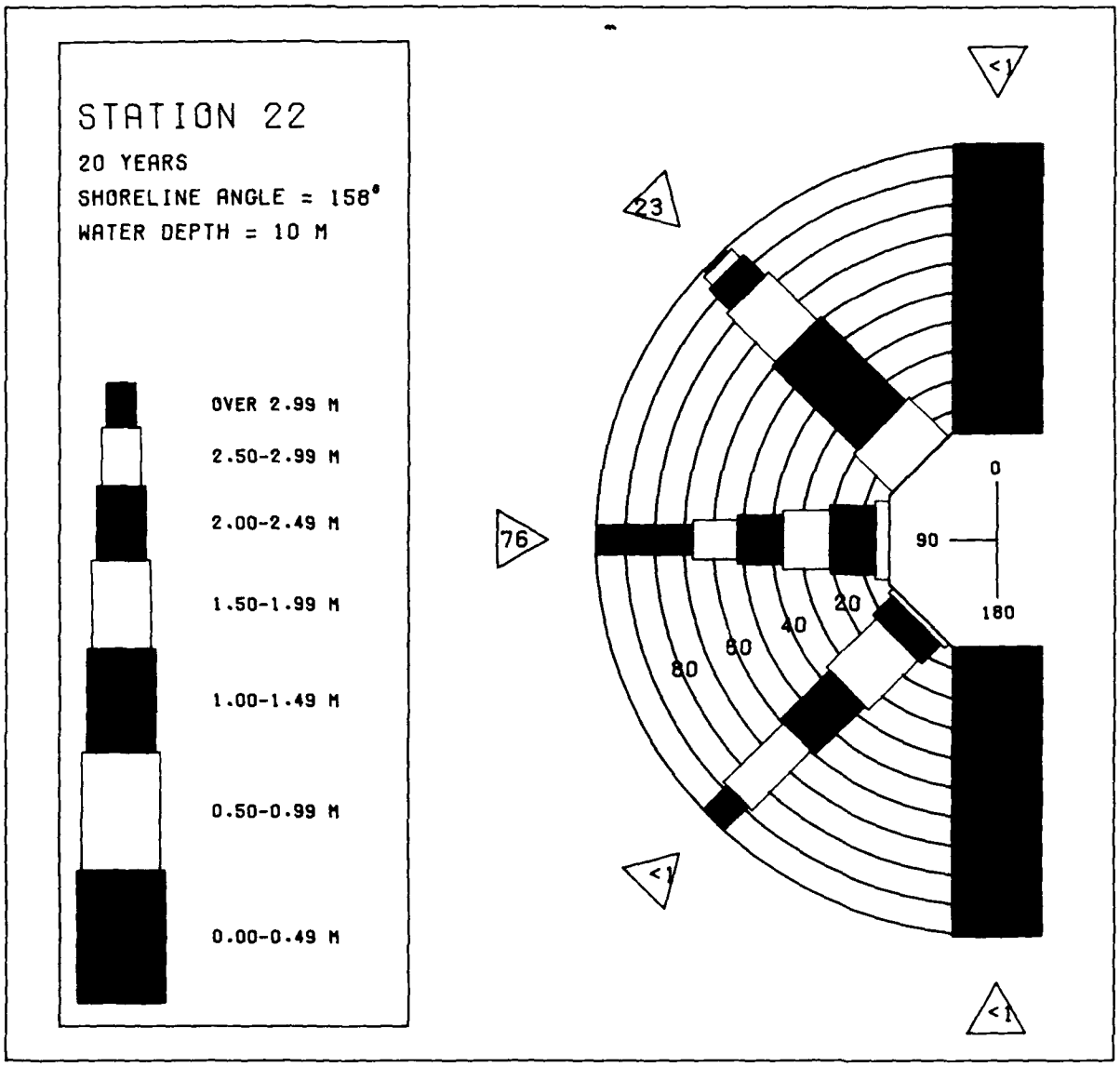
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 22 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	7	2		1						13
0.50 - 0.99	50	210	396	103	24	9	2	.	.	.	794
1.00 - 1.49	151	287	803	493	282	102	20	5	.	.	2143
1.50 - 1.99	83	146	298	468	465	271	54	9	1	.	1795
2.00 - 2.49	6	87	75	158	487	460	137	7	2	.	1419
2.50 - 2.99	.	44	51	70	285	572	229	15	2	.	1268
3.00 - 3.49	.	14	38	45	137	438	291	20	.	.	983
3.50 - 3.99	.	1	12	21	82	246	310	27	.	.	699
4.00 - 4.49	.	.	3	5	29	108	251	29	.	.	425
4.50 - 4.99	.	.	.	2	14	41	148	29	.	.	234
5.00 +	.	.	.	.	3	21	91	72	.	.	187
TOTAL	293	796	1678	1365	1808	2269	1533	213	5	0	

MEAN HS(M) = 2.30 LARGEST HS(M) = 7.06 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	2.8	2.6	2.1	2.0	1.5	1.2	1.2	1.4	2.2	2.6	3.0	2.1
1957	2.3	2.7	2.9	2.2	1.6	1.2	1.1	1.0	1.6	2.3	3.1	3.7	2.1
1958	4.1	3.5	2.7	2.8	1.6	1.2	1.2	1.2	1.7	2.5	2.9	3.8	2.5
1959	3.6	3.2	2.6	2.2	1.8	1.2	1.4	1.2	1.7	2.2	2.6	3.5	2.2
1960	3.4	3.4	2.2	2.2	1.7	1.3	1.2	1.3	1.3	2.6	3.3	3.4	2.3
1961	3.8	3.3	2.9	2.3	1.9	1.3	1.1	1.1	1.5	2.5	3.0	3.1	2.3
1962	2.6	2.7	2.5	1.9	1.4	1.4	1.0	1.4	1.5	2.6	3.6	3.4	2.2
1963	2.6	3.5	2.7	2.0	1.5	1.6	1.2	0.8	1.6	3.1	3.2	3.5	2.3
1964	4.2	2.7	2.7	2.3	1.7	1.4	1.4	1.5	1.6	2.2	3.2	3.5	2.4
1965	3.3	2.9	2.3	2.4	1.7	1.8	1.3	1.1	1.3	2.5	3.0	3.8	2.3
1966	3.9	2.9	2.3	1.9	1.8	1.2	1.2	1.3	1.2	2.3	2.5	3.5	2.2
1967	3.4	2.8	2.6	2.1	1.6	1.1	1.2	1.1	1.6	2.6	3.0	3.4	2.2
1968	3.2	3.1	2.7	2.0	1.3	1.3	1.2	1.2	1.3	2.4	3.2	3.3	2.2
1969	2.5	3.7	2.9	2.9	1.7	1.3	1.3	1.2	1.7	2.5	3.2	4.5	2.4
1970	3.5	3.8	3.2	2.4	1.5	1.3	1.4	1.3	1.5	2.4	3.3	3.7	2.4
1971	3.1	3.0	3.3	2.6	1.8	1.3	1.0	1.3	1.8	2.1	3.4	3.2	2.3
1972	3.7	3.3	3.1	2.5	1.7	1.5	1.5	1.2	1.7	1.9	3.8	3.4	2.4
1973	3.9	3.5	3.0	2.1	1.8	1.7	1.7	1.5	1.9	2.5	3.4	4.3	2.6
1974	3.2	3.4	3.2	2.6	1.9	1.6	1.3	1.2	1.3	2.3	3.7	3.7	2.5
1975	3.0	2.8	2.4	2.0	1.6	1.1	1.1	1.1	0.9	2.5	3.3	3.1	2.1
MEAN	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.4	5.5	4.2	3.7	3.3	2.5	2.4	2.0	2.3	4.1	3.7	5.0
1957	3.9	5.1	4.2	3.9	2.9	1.9	2.0	1.7	3.1	4.3	5.2	5.5
1958	6.1	5.9	4.4	6.4	3.2	2.0	2.7	2.0	3.2	4.3	5.7	5.2
1959	6.4	5.5	4.2	4.0	3.0	2.1	2.1	2.0	3.0	4.5	6.2	6.3
1960	6.3	6.3	3.8	3.8	2.7	2.7	1.9	2.1	2.4	5.4	6.1	5.3
1961	6.0	5.0	4.3	3.7	2.9	2.6	1.7	2.4	3.0	4.6	4.8	5.3
1962	4.9	4.4	4.4	3.1	2.5	2.9	1.8	2.3	4.2	4.7	6.9	6.2
1963	4.5	6.1	5.1	2.9	2.8	3.1	2.0	1.5	2.8	7.1	5.1	6.6
1964	6.4	4.5	4.7	4.2	3.8	2.4	2.2	2.4	3.0	3.6	5.6	6.2
1965	5.3	4.7	3.6	3.9	3.9	2.8	2.3	1.9	2.1	5.1	5.6	6.3
1966	6.3	5.0	4.6	3.5	2.8	2.4	1.8	2.0	3.2	3.8	4.8	5.7
1967	5.3	5.0	4.2	4.2	2.1	2.0	1.7	1.7	2.7	4.3	4.8	6.3
1968	6.4	4.7	4.2	3.3	2.7	2.0	2.1	2.1	3.3	3.7	5.0	6.4
1969	4.4	5.3	4.9	5.3	3.0	2.2	2.0	1.8	2.9	4.1	6.2	6.8
1970	6.2	5.7	5.3	4.6	2.1	2.4	2.0	2.4	2.5	4.1	5.8	6.1
1971	6.1	5.1	6.4	4.0	3.3	2.1	1.9	3.3	2.6	3.8	6.4	5.3
1972	5.9	6.5	4.3	5.2	2.4	2.4	2.6	2.0	3.0	3.2	5.3	6.7
1973	6.5	6.0	5.4	4.0	3.1	2.4	2.3	2.3	2.8	4.8	6.3	6.8
1974	6.4	5.5	6.0	4.8	3.5	3.1	2.7	1.8	2.3	4.8	6.4	5.7
1975	5.6	5.5	4.5	4.4	3.0	1.8	1.9	1.9	1.5	4.2	5.6	5.6

20 YR. STATISTICS FOR PACIFIC STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	75.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	20	.	.	.	.	.	.	.	.	.	20
1.00 - 1.49	162	.	.	.	.	.	.	.	.	.	162
1.50 - 1.99	20	.	.	.	.	.	.	.	.	.	20
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	205	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.25 LARGEST HS(M) = 1.93 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 121

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	17	6	.	.	.	.	.	.	.	43
0.50 - 0.99	383	1250	1317	200	18	1	1	.	.	.	3170
1.00 - 1.49	1170	2145	3278	1216	402	51	.	.	.	.	8262
1.50 - 1.99	1043	1244	1596	1586	973	152	.	.	.	.	6594
2.00 - 2.49	77	754	349	675	1427	338	.	.	.	.	3620
2.50 - 2.99	.	273	155	229	898	504	.	.	.	.	2059
3.00 - 3.49	.	47	92	47	465	552	.	.	.	.	1203
3.50 - 3.99	.	.	29	30	100	278	.	.	.	.	437
4.00 - 4.49	.	.	10	10	25	138	.	.	.	.	183
4.50 - 4.99	.	.	.	.	5	41	.	.	.	.	46
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2693	5730	6832	3993	4313	2055	1	0	0	0	

MEAN HS(M) = 1.75 LARGEST HS(M) = 4.99 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 14985

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	42	11	1	.	.	.	.	.	.	.	74
0.50 - 0.99	39	542	1960	549	165	54	15	3	.	.	3327
1.00 - 1.49	7	450	4464	3114	1829	626	160	35	3	.	10684
1.50 - 1.99	35	119	1793	3176	3299	2197	391	95	10	.	11135
2.00 - 2.49	18	154	323	1370	3673	3810	1201	75	22	.	10646
2.50 - 2.99	.	121	136	426	2168	4929	1984	124	30	.	9918
3.00 - 3.49	.	54	78	196	1125	4346	2737	183	11	.	8730
3.50 - 3.99	.	6	39	58	432	2619	3148	251	.	.	6553
4.00 - 4.49	.	.	22	27	121	1237	2652	289	1	.	4349
4.50 - 4.99	.	.	3	3	32	390	1877	266	1	.	2572
5.00 +	.	.	.	1	6	147	1247	882	.	.	2283
TOTAL	95	1488	8829	8940	12850	20373	15415	2203	78	0	

MEAN HS(M) = 2.60 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 41092

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	18	35	5	.	.	.	.	.	.	58
1.00 - 1.49	10	126	114	32	11	.	.	.	.	.	293
1.50 - 1.99	37	145	176	83	20	1	.	.	.	.	462
2.00 - 2.49	17	66	234	121	119	23	.	.	.	.	580
2.50 - 2.99	.	61	121	155	212	68	3	.	.	.	620
3.00 - 3.49	.	42	116	171	290	130	23	3	.	.	775
3.50 - 3.99	.	1	37	53	203	147	30	.	.	.	471
4.00 - 4.49	.	.	1	11	94	111	51	.	.	.	268
4.50 - 4.99	.	.	.	10	37	61	30	.	.	.	138
5.00 +	.	.	.	.	8	61	53	3	.	.	125
TOTAL	65	459	834	641	994	602	190	6	0	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.30 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 2232

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	.	.	.	.	.	.	.	.	.	5
1.00 - 1.49	5	1	.	.	.	.	.	.	.	.	6
1.50 - 1.99	3	.	.	.	.	.	.	.	.	.	3
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.08 LARGEST HS(M) = 1.64 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 10

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

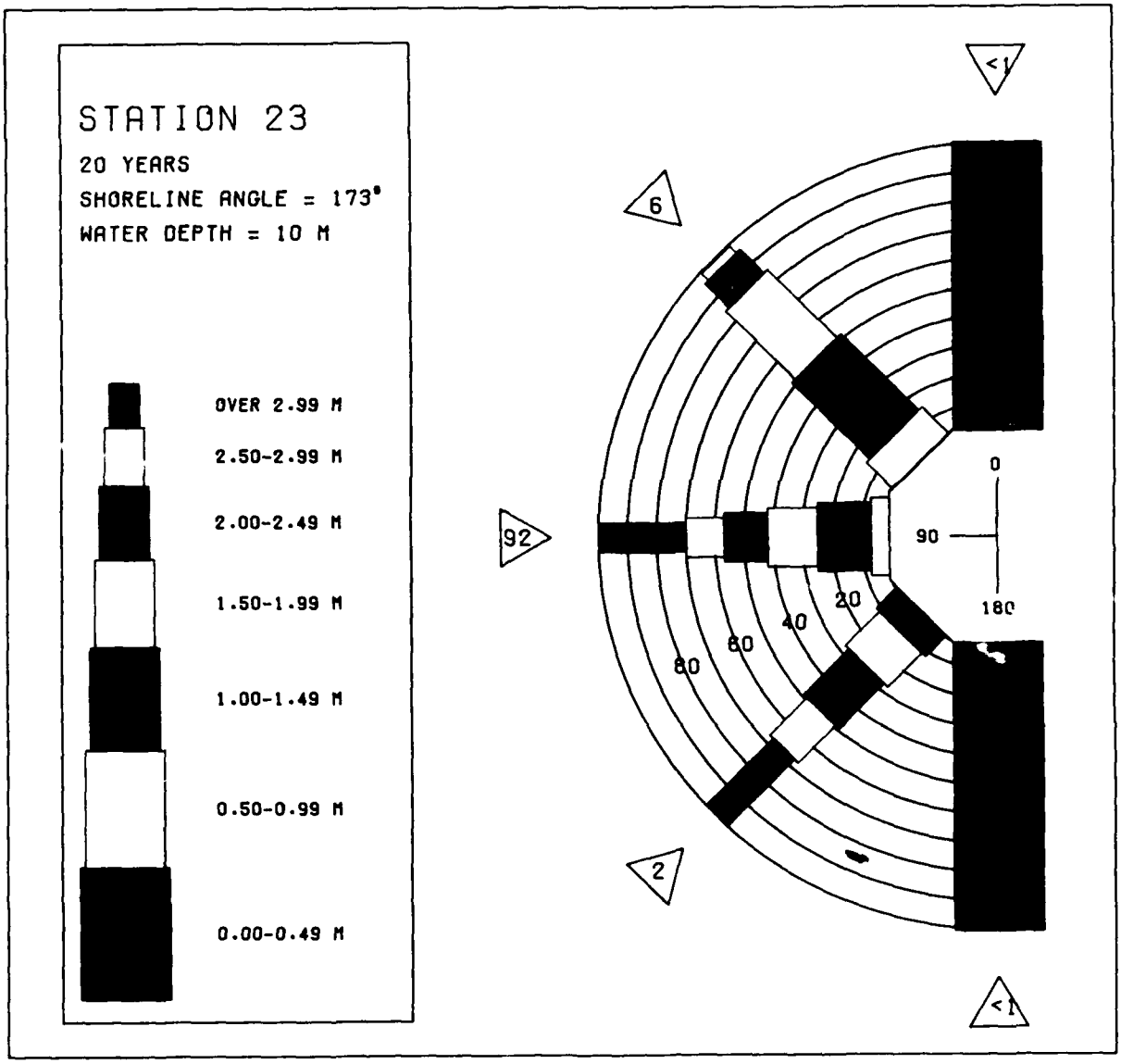
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 23 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2	5	1		1						9
0.50 - 0.99	44	181	331	75	18	5	1				655
1.00 - 1.49	135	272	785	436	224	67	16	3			1938
1.50 - 1.99	114	150	356	486	429	235	39	9	1		1819
2.00 - 2.49	11	97	90	216	522	417	120	7	2		1482
2.50 - 2.99		45	41	81	327	550	198	12	3		1257
3.00 - 3.49		14	28	41	188	502	276	18	1		1068
3.50 - 3.99			10	14	73	304	317	25			743
4.00 - 4.49			3	4	24	148	270	28			477
4.50 - 4.99				1	7	49	190	26			273
5.00 +					1	20	130	88	7	0	239
TOTAL	306	764	1645	1354	1813	2298	1557	216	7	0	

MEAN HS(M) = 2.39 LARGEST HS(M) = 7.41 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.0	2.8	2.3	2.1	1.6	1.3	1.2	1.5	2.3	2.7	3.1	2.2
1957	2.4	2.7	3.0	2.4	1.7	1.3	1.2	1.1	1.6	2.3	3.3	3.8	2.2
1958	4.2	3.6	2.8	3.0	1.7	1.3	1.5	1.3	1.8	2.6	3.1	3.8	2.6
1959	3.7	3.3	3.6	2.3	1.9	1.3	1.5	1.2	1.7	2.3	2.7	3.6	2.3
1960	3.5	3.4	2.2	2.3	1.8	1.4	1.3	1.3	1.4	2.7	3.4	3.6	2.4
1961	3.8	3.4	2.9	2.5	2.0	1.3	1.1	1.1	1.6	2.7	3.2	3.2	2.4
1962	2.9	2.8	2.7	2.0	1.5	1.3	1.1	1.4	1.6	2.7	3.7	3.4	2.3
1963	2.7	3.4	2.9	2.1	1.6	1.7	1.3	0.9	1.6	3.2	3.3	3.5	2.4
1964	4.2	2.9	2.8	2.5	1.8	1.4	1.5	1.6	1.7	2.3	3.3	3.6	2.5
1967	3.2	3.0	2.4	2.5	1.8	1.9	1.3	1.1	1.4	2.6	3.1	4.0	2.4
1966	3.9	3.0	3.0	2.0	2.0	1.3	1.3	1.4	1.7	2.4	2.6	3.5	2.3
1967	3.5	2.9	2.7	2.3	1.3	1.1	1.3	1.2	1.7	2.6	3.2	3.5	2.3
1968	3.2	3.1	2.7	2.1	1.4	1.3	1.3	1.2	1.4	2.5	3.3	3.3	2.2
1969	2.6	3.6	3.0	2.0	1.8	1.4	1.4	1.2	1.7	2.6	3.3	4.0	2.5
1970	3.5	3.9	3.3	2.5	1.5	1.4	1.5	1.4	1.5	2.5	3.4	3.8	2.5
1971	3.1	3.1	3.4	2.8	1.9	1.4	1.0	1.4	1.9	2.2	3.6	3.4	2.4
1972	3.8	3.4	3.1	2.7	1.8	1.6	1.6	1.3	1.8	2.0	3.9	3.4	2.5
1973	3.9	3.5	3.2	2.2	1.9	1.8	1.8	1.7	2.0	2.7	3.6	4.5	2.7
1974	3.1	3.5	3.2	2.8	2.0	1.7	1.4	1.3	1.4	2.4	3.9	3.8	2.6
1975	3.2	2.8	2.5	2.2	1.7	1.2	1.1	1.1	0.9	2.6	3.5	3.1	2.2
MEAN	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.8	4.5	3.9	3.6	2.6	2.6	2.1	2.5	4.3	3.8	5.1
1957	4.0	4.8	4.2	4.1	3.0	1.9	2.1	1.8	3.1	4.7	5.7	5.6
1958	6.1	6.1	4.7	6.4	3.6	2.1	2.9	2.2	3.5	4.6	6.2	5.2
1959	6.3	5.9	4.4	4.3	3.2	2.2	2.5	2.2	2.9	4.9	6.3	6.3
1960	6.2	6.3	3.9	4.0	3.0	2.8	2.1	2.2	2.5	5.7	6.4	5.8
1961	6.0	5.0	4.3	4.0	3.2	2.8	1.8	2.5	3.1	4.9	5.0	5.4
1962	5.0	4.5	4.9	3.3	2.4	3.2	3.0	2.4	4.2	5.0	7.0	6.1
1963	4.5	5.6	5.4	3.1	2.6	3.5	2.1	1.6	2.6	7.4	5.5	6.5
1964	6.4	4.6	4.9	4.4	4.2	2.5	2.5	2.5	3.1	5.9	6.1	6.0
1965	5.4	5.1	3.7	4.4	4.2	3.0	2.5	2.0	2.2	5.2	6.0	6.4
1966	6.2	5.3	5.0	3.7	3.1	2.5	2.0	2.1	3.3	3.9	5.0	5.8
1967	5.1	5.2	4.3	4.7	2.2	2.1	1.9	1.8	3.0	4.6	5.2	6.6
1968	6.2	4.2	4.3	3.4	2.9	2.0	2.2	2.2	3.5	3.8	4.9	5.7
1969	4.6	5.5	4.8	5.5	3.2	2.3	2.1	1.9	3.0	4.5	6.2	6.8
1970	5.9	6.0	5.6	4.7	3.2	2.6	2.2	2.7	2.6	4.4	5.9	6.4
1971	6.2	5.3	6.6	4.2	3.4	2.2	2.2	2.6	2.7	4.0	6.5	5.8
1972	6.1	6.7	4.7	5.8	3.6	2.9	2.8	2.5	3.0	3.5	5.8	6.6
1973	6.4	6.2	5.7	4.3	3.0	2.7	2.4	2.5	2.9	5.2	6.4	7.1
1974	6.3	6.0	6.1	5.1	3.8	3.2	2.9	2.0	2.5	5.0	6.5	6.1
1975	6.0	5.7	4.6	4.9	3.1	2.0	1.9	2.0	1.6	4.3	6.1	5.5

20 YR. STATISTICS FOR PACIFIC STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.4
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	79.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	63102406

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	148	80	6	.	.	.	.	.	.	.	234
1.00 - 1.49	944	234	18	.	.	.	.	.	.	.	1196
1.50 - 1.99	1132	610	11	3	.	.	.	.	.	.	1756
2.00 - 2.49	138	444	13	.	.	.	.	.	.	.	595
2.50 - 2.99	.	109	5	.	.	.	.	.	.	.	114
3.00 - 3.49	.	10	8	.	.	.	.	.	.	.	18
3.50 - 3.99	.	.	3	.	.	.	.	.	.	.	3
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2372	1487	64	3	0	0	0	0	0	0	

MEAN HS(M) = 1.66 LARGEST HS(M) = 3.68 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 2301

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	49	15	7	7	18	1	.	.	.	91
0.50 - 0.99	254	1514	2936	631	171	51	15	3	.	.	5575
1.00 - 1.49	272	2286	7308	3966	1919	533	157	37	1	.	16479
1.50 - 1.99	254	663	3528	4664	4075	2236	386	111	8	.	15925
2.00 - 2.49	56	539	723	2286	4566	3880	1226	88	18	.	13582
2.50 - 2.99	.	326	200	629	2153	5193	1872	128	27	.	11533
3.00 - 3.49	.	104	162	217	1656	4909	2544	164	22	.	9778
3.50 - 3.99	.	6	68	65	501	3033	3338	272	1	.	7284
4.00 - 4.49	.	.	39	39	150	1452	2452	280	1	.	4413
4.50 - 4.99	.	.	.	3	23	485	1914	285	1	.	2711
5.00 +	.	.	.	1	6	140	1463	918	.	.	2528
TOTAL	844	5487	14979	12501	16520	21935	15368	2286	79	0	

MEAN HS(M) = 2.45 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 52621

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	1	1								3
0.50 - 0.99	8	58	107	37	11	.	.	.	.	.	221
1.00 - 1.49	1	100	350	107	82	.	.	.	.	.	640
1.50 - 1.99	46	78	308	196	260	75	3	.	.	.	966
2.00 - 2.49	15	100	191	248	426	215	32	.	.	.	1227
2.50 - 2.99	.	83	142	207	395	313	71	3	.	.	1214
3.00 - 3.49	.	20	68	85	282	266	77	.	.	.	798
3.50 - 3.99	.	.	18	20	82	172	111	.	.	.	403
4.00 - 4.49	.	.	1	13	42	116	73	3	.	.	248
4.50 - 4.99	.	.	.	3	8	49	61	5	.	.	126
5.00 +					1	3	18				22
TOTAL	71	440	1186	916	1589	1209	446	11	0	0	

MEAN HS(M) = 2.50 LARGEST HS(M) = 5.50 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3447

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49											0
0.50 - 0.99	8	3									11
1.00 - 1.49	15	47	1								63
1.50 - 1.99	8	22	3								33
2.00 - 2.49	.	8									8
2.50 - 2.99	.										0
3.00 - 3.49	.										0
3.50 - 3.99	.										0
4.00 - 4.49	.										0
4.50 - 4.99	.										0
5.00 +											0
TOTAL	31	80	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.43 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 70

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

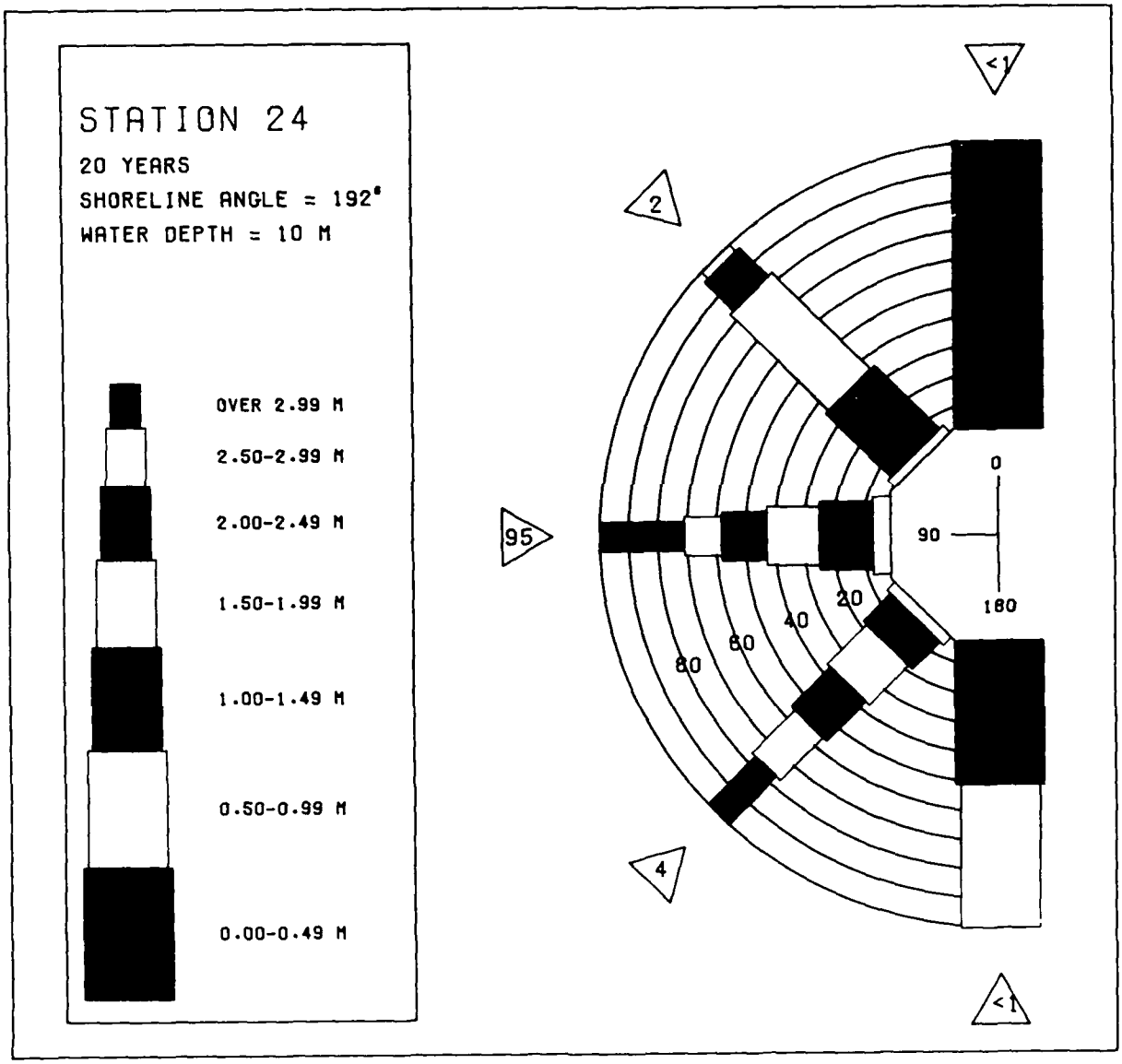
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.42 LARGEST HS(M) = 0.42 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 24 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2	5	1		1						9
0.50 - 0.99	42	165	305	66	18	5	1				602
1.00 - 1.49	123	266	767	407	200	53	15	3			1834
1.50 - 1.99	144	137	385	486	433	231	39	11			1866
2.00 - 2.49	21	109	92	253	529	408	125	8	1		1547
2.50 - 2.99		52	34	83	354	551	194	13	2		1283
3.00 - 3.49		13	23	30	193	517	262	16	2		1056
3.50 - 3.99			9	8	58	320	344	27			766
4.00 - 4.49			4	5	19	156	252	28			464
4.50 - 4.99					3	53	197	29			282
5.00 +						14	148	91			253
TOTAL	332	747	1620	1338	1807	2310	1577	226	5	0	

MEAN HS(M) = 2.42 LARGEST HS(M) = 7.27 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	3.0	2.8	2.3	2.3	1.6	1.4	1.3	1.6	2.4	2.7	3.0	2.2
1957	2.4	2.7	3.0	2.5	1.7	1.3	1.2	1.1	1.6	2.4	3.3	3.8	2.3
1958	4.1	3.5	2.8	3.0	1.8	1.3	1.6	1.4	1.9	2.7	3.1	3.8	2.6
1959	3.7	3.4	2.6	2.4	1.9	1.3	1.5	1.3	1.7	2.4	2.7	3.6	2.4
1960	3.4	3.4	2.3	2.3	1.8	1.4	1.3	1.4	1.4	2.8	3.4	3.6	2.4
1961	3.7	3.3	2.9	2.6	2.1	1.4	1.2	1.2	1.7	2.8	3.2	3.2	2.4
1962	2.6	2.8	2.8	2.1	1.5	1.2	1.2	1.5	1.6	2.8	3.7	3.2	2.3
1963	2.7	3.2	3.0	2.2	1.7	1.8	1.3	0.9	1.6	3.2	3.4	3.4	2.4
1964	4.2	2.9	2.8	2.6	1.9	1.4	1.6	1.7	1.8	2.3	3.4	3.5	2.5
1965	3.2	3.0	2.5	2.6	1.9	2.0	1.4	1.2	1.5	2.6	3.1	4.0	2.4
1966	3.9	3.0	3.0	2.1	2.1	1.3	1.3	1.4	1.7	2.5	2.6	3.4	2.3
1967	3.5	2.9	2.7	2.4	1.3	1.2	1.4	1.2	1.7	2.6	3.3	3.5	2.3
1968	3.1	2.9	2.7	2.1	1.5	1.3	1.3	1.3	1.5	2.5	3.3	3.3	2.2
1969	2.5	3.9	3.0	3.0	1.8	1.4	1.4	1.3	1.8	2.6	3.3	4.5	2.6
1970	3.4	3.9	3.3	2.6	1.6	1.4	1.6	1.5	1.6	2.5	3.5	3.8	2.6
1971	3.1	3.1	3.4	2.9	2.0	1.4	1.4	1.4	2.0	2.3	3.6	3.3	2.5
1972	3.9	3.4	3.1	2.8	1.9	1.7	1.7	1.3	1.9	2.1	4.0	3.3	2.6
1973	3.8	3.5	3.2	2.3	2.0	1.8	1.9	1.8	2.0	2.8	3.6	4.5	2.8
1974	3.0	3.6	3.2	2.8	2.1	1.8	1.4	1.3	1.5	2.5	4.0	3.8	2.6
1975	3.2	2.8	2.5	2.2	1.8	1.2	1.1	1.1	1.0	2.6	3.6	3.1	2.2
MEAN	3.3	3.2	2.9	2.5	1.8	1.5	1.4	1.3	1.6	2.6	3.3	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.2	6.0	4.6	4.0	3.8	2.5	2.9	2.1	2.7	4.4	3.9	5.1
1957	4.0	4.9	4.3	4.1	3.0	2.0	2.3	1.8	3.1	5.0	5.9	5.6
1958	6.3	6.1	4.9	6.3	3.8	2.2	2.1	2.3	3.7	4.8	6.3	5.5
1959	6.2	6.1	4.4	4.4	3.3	2.6	2.8	2.3	2.8	5.1	6.3	6.6
1960	6.2	6.3	5.9	4.2	3.1	2.8	2.6	2.3	2.6	5.2	6.4	6.1
1961	5.9	5.0	4.4	4.2	3.4	3.0	1.9	2.5	3.2	5.2	5.2	5.4
1962	4.9	4.4	5.2	3.4	2.6	3.4	2.1	2.5	4.2	5.3	6.9	5.0
1963	4.2	4.8	5.6	3.2	2.7	3.5	2.3	1.7	2.5	7.3	5.7	6.4
1964	6.3	4.8	4.9	4.6	4.4	2.5	2.7	2.6	3.1	4.1	6.1	6.1
1965	5.4	5.3	3.8	4.7	4.4	3.2	2.6	2.1	2.3	4.9	6.1	6.3
1966	6.1	5.5	5.3	3.7	3.2	2.5	2.1	2.2	2.3	4.1	5.0	5.8
1967	5.3	5.2	4.4	4.9	3.3	2.6	2.0	1.9	2.1	4.7	5.4	6.6
1968	6.1	4.1	4.3	3.5	3.0	2.0	2.2	2.3	2.5	3.9	4.8	5.9
1969	4.7	5.8	5.0	5.5	3.3	2.4	2.2	2.0	2.1	4.7	6.2	6.6
1970	5.4	6.0	5.7	4.7	2.3	2.8	2.3	2.8	2.7	4.6	5.8	6.3
1971	6.2	5.4	6.5	4.2	3.5	2.2	2.4	3.8	2.7	4.1	6.6	6.1
1972	6.2	6.7	4.9	6.1	2.8	2.7	3.0	2.3	3.1	3.7	6.0	6.5
1973	6.3	6.1	5.7	4.4	3.1	2.9	2.6	2.6	3.0	5.5	6.5	6.9
1974	5.4	6.2	6.0	5.2	4.0	3.3	3.0	2.1	2.6	5.1	6.5	6.2
1975	6.2	5.8	4.5	5.2	3.1	2.1	1.9	2.1	1.7	4.5	6.3	5.8

20 YR. STATISTICS FOR PACIFIC STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	35	20	.	.	.	.	.	.	.	.	55
1.00 - 1.49	85	124	.	.	.	.	.	.	.	.	209
1.50 - 1.99	.	41	1	.	.	.	.	.	.	.	42
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	123	185	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.20 LARGEST HS(M) = 1.75 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 183

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	23	27	11	1	10	1	.	.	.	.	73
0.50 - 0.99	208	1297	2162	508	167	56	30	8	42	.	4478
1.00 - 1.49	583	2790	7532	3651	1476	398	119	29	.	.	16578
1.50 - 1.99	335	1119	4438	4668	3434	1700	265	53	3	.	16015
2.00 - 2.49	8	472	862	3001	4534	2878	658	75	8	.	12496
2.50 - 2.99	.	164	242	917	4000	4452	1244	75	22	.	11116
3.00 - 3.49	.	23	169	361	2046	5236	1954	128	8	.	9925
3.50 - 3.99	.	.	70	131	937	3969	2619	183	8	.	7917
4.00 - 4.49	.	.	22	58	266	2491	2686	284	.	.	5807
4.50 - 4.99	.	.	1	5	68	1038	2433	275	1	.	3821
5.00 +	.	.	.	1	46	417	3321	1122	.	.	4907
TOTAL	1157	5892	15509	13302	16974	22645	15330	2232	92	0	

MEAN HS(M) = 2.61 LARGEST HS(M) = 7.42 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 54450

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	27	145	61	1	.	.	.	.	.	.	234
1.00 - 1.49	6	184	313	73	15	.	.	.	.	.	591
1.50 - 1.99	23	205	296	231	135	6	.	.	.	.	866
2.00 - 2.49	3	112	231	253	349	107	1	.	.	.	1056
2.50 - 2.99	.	44	184	268	314	181	11	1	.	.	1003
3.00 - 3.49	.	10	155	131	386	331	58	.	.	.	1071
3.50 - 3.99	.	3	56	94	231	321	70	1	.	.	776
4.00 - 4.49	.	.	6	27	114	152	80	.	.	.	379
4.50 - 4.99	.	.	.	17	53	95	68	3	.	.	236
5.00 +	.	.	.	1	13	66	82	8	.	.	170
TOTAL	59	703	1272	1096	1610	1259	370	13	0	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 6.51 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 3747

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	11	.	.	.	.	.	.	.	.	12
1.00 - 1.49	11	32	1	.	.	.	.	.	.	.	44
1.50 - 1.99	5	20	3	.	.	.	.	.	.	.	28
2.00 - 2.49	.	8	1	.	.	.	.	.	.	.	9
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	71	5	0	0	0	0	0	0	0	

MEAN HS(M) = 1.40 LARGEST HS(M) = 2.46 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 59

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

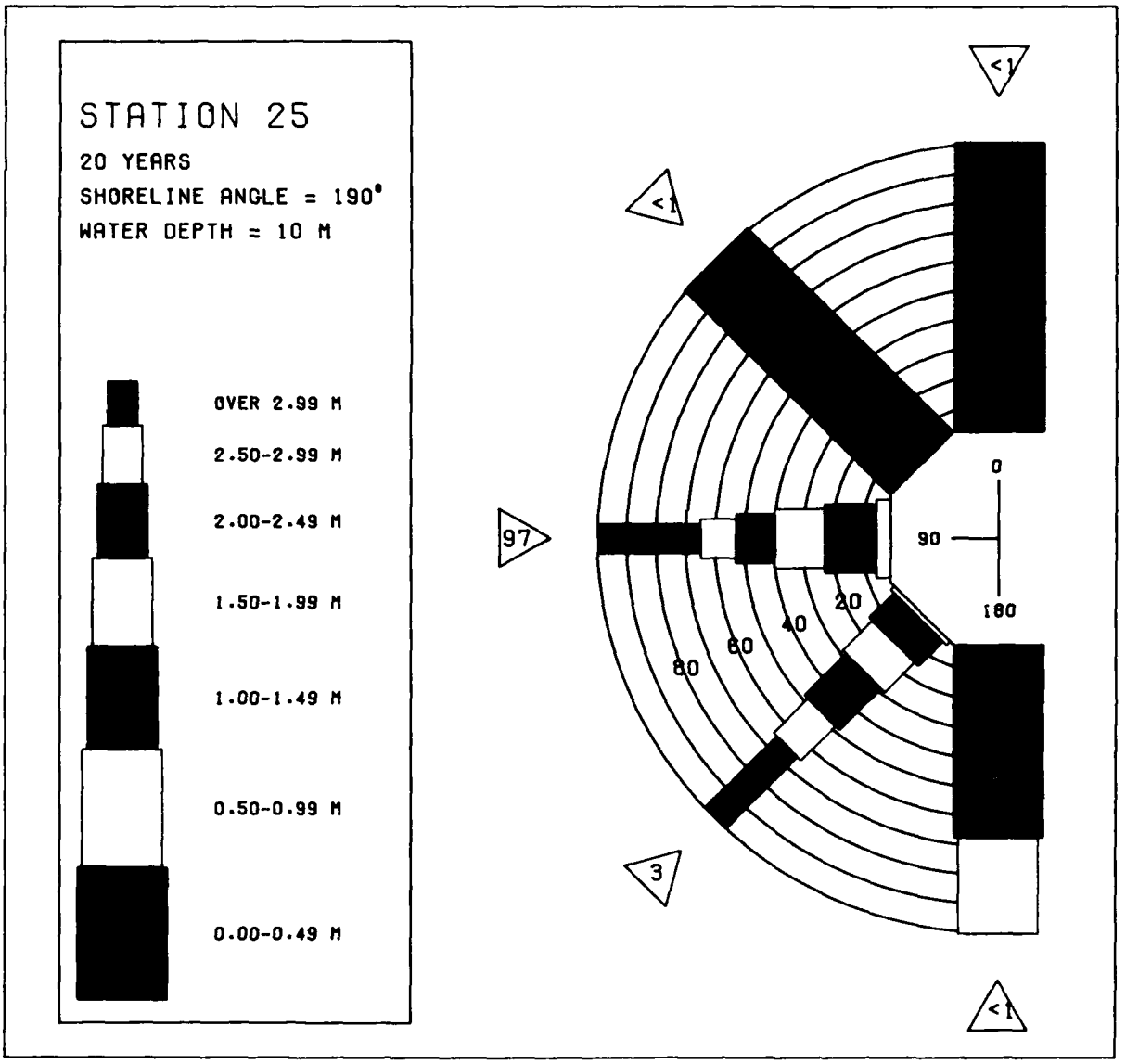
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 25 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	2	1	.	.	1	.	.	.	.	7
0.50 - 0.99	27	147	222	50	16	5	3	.	4	.	474
1.00 - 1.49	68	313	784	372	149	39	11	2	.	.	1738
1.50 - 1.99	36	138	471	489	356	170	26	5	.	.	1691
2.00 - 2.49	1	59	109	325	488	298	66	7	.	.	1353
2.50 - 2.99	.	20	42	118	431	463	125	7	2	.	1208
3.00 - 3.49	.	3	32	49	243	556	201	12	.	.	1096
3.50 - 3.99	.	.	12	22	116	429	268	18	.	.	865
4.00 - 4.49	.	.	2	8	38	264	276	28	.	.	616
4.50 - 4.99	.	.	.	2	12	113	250	27	.	.	404
5.00 +	.	.	.	.	5	48	340	113	.	.	506
TOTAL	135	682	1675	1435	1854	2386	1566	219	6	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.42 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.2	3.1	2.7	2.4	1.7	1.3	1.3	1.6	2.5	3.1	3.5	2.5
1957	3.2	3.2	3.4	2.6	1.9	1.4	1.2	1.1	1.7	2.7	3.6	4.2	2.5
1958	4.8	4.1	3.0	3.4	1.9	1.3	1.5	1.4	1.9	2.8	3.3	4.3	2.8
1959	4.1	3.6	2.9	2.5	2.1	1.4	1.5	1.3	1.9	2.8	2.9	4.0	2.6
1960	3.7	3.9	2.6	2.6	2.0	1.5	1.3	1.3	1.5	3.1	3.8	4.1	2.6
1961	4.2	3.8	3.3	2.6	2.2	1.6	1.2	1.1	1.6	3.0	3.5	3.5	2.6
1962	3.2	3.1	2.9	2.3	1.6	1.6	1.1	1.6	1.7	3.2	4.0	3.9	2.5
1963	3.2	3.9	3.1	2.3	1.7	1.8	1.3	0.9	1.9	3.6	3.8	3.9	2.6
1964	4.6	3.2	3.0	2.5	1.9	1.6	1.6	1.7	1.8	2.6	3.5	3.8	2.6
1965	3.6	3.2	2.8	2.6	1.9	1.9	1.4	1.1	1.5	2.9	3.2	4.2	2.5
1966	4.4	3.1	3.3	2.1	2.1	1.5	1.4	1.4	1.9	2.7	2.8	3.7	2.5
1967	3.7	3.0	2.8	2.4	1.4	1.2	1.3	1.2	1.9	2.8	3.5	3.8	2.4
1968	3.4	3.9	3.1	2.2	1.4	1.4	1.3	1.3	1.5	2.8	3.7	3.4	2.4
1969	2.8	4.3	3.2	3.4	2.0	1.7	1.4	1.3	1.9	2.9	3.6	5.1	2.8
1970	4.0	4.3	3.7	2.6	1.7	1.5	1.5	1.5	1.6	2.6	3.7	4.2	2.7
1971	3.4	3.9	3.8	3.1	2.1	1.6	1.0	1.5	2.0	2.5	3.9	3.6	2.7
1972	4.0	3.6	3.6	2.9	2.0	1.8	1.8	1.4	1.9	2.6	4.5	3.6	2.8
1973	4.2	4.0	3.5	2.4	2.2	2.0	1.9	1.7	2.2	3.0	3.8	4.9	3.0
1974	3.3	3.8	3.5	3.1	2.3	1.9	1.5	1.4	1.7	2.8	4.3	4.2	2.8
1975	3.6	3.2	2.7	2.3	1.9	1.3	1.2	1.2	1.1	2.7	3.8	3.4	2.4
MEAN	3.7	3.6	3.2	2.6	1.9	1.6	1.4	1.3	1.7	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	6.1	5.6	4.7	3.9	2.6	2.0	2.1	2.7	4.6	4.9	5.8
1957	4.1	5.0	5.6	4.9	3.1	2.5	2.1	1.9	3.4	5.2	6.0	5.8
1958	6.7	6.4	5.3	6.4	4.1	2.0	2.7	2.4	3.9	5.0	6.3	6.3
1959	6.3	6.2	4.9	5.2	3.4	2.7	2.2	2.4	2.8	6.1	6.2	6.2
1960	6.6	6.4	4.3	4.6	3.3	3.1	2.0	2.4	2.6	6.3	6.3	6.4
1961	6.3	6.1	5.9	4.2	3.4	3.0	1.7	2.5	3.2	5.1	5.8	5.9
1962	5.3	4.9	5.1	3.9	2.6	3.5	1.8	2.8	4.7	5.6	6.9	6.0
1963	5.1	6.0	5.6	3.3	2.8	3.5	2.2	1.7	2.9	7.4	6.3	6.5
1964	6.6	5.9	5.2	4.4	3.9	2.6	2.5	2.4	3.2	4.4	6.1	6.3
1965	6.0	5.1	4.1	4.6	4.0	2.9	2.2	1.9	2.3	5.4	6.1	6.4
1966	6.1	5.4	5.3	4.4	3.4	3.0	2.1	2.2	3.6	4.7	5.2	6.3
1967	5.5	5.7	4.1	4.9	2.4	2.3	1.9	1.9	3.4	5.1	5.8	6.9
1968	5.5	6.0	5.0	3.5	2.6	2.1	2.5	2.4	2.9	4.7	5.9	6.1
1969	4.5	6.1	5.1	5.9	3.6	2.7	2.3	1.9	3.7	5.3	6.6	7.1
1970	6.7	6.1	6.1	4.9	2.6	2.3	2.3	2.8	3.0	5.2	6.2	6.6
1971	6.2	5.5	6.8	4.6	3.6	2.5	1.9	4.2	2.9	4.3	6.7	6.1
1972	6.1	6.5	5.5	6.0	3.1	3.0	3.6	2.4	3.2	3.9	6.0	6.8
1973	6.4	6.1	6.1	4.0	3.2	2.9	2.7	2.7	3.2	5.7	6.6	7.2
1974	5.8	6.3	6.4	5.4	4.4	3.5	2.9	2.2	2.7	5.4	6.5	6.3
1975	6.2	5.8	5.3	5.2	3.3	2.2	2.0	2.0	1.6	4.5	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.6
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.3
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.3
LARGEST WAVE HS . . . . . (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	88.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	63102409

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	102	.	.	.	.	.	.	.	.	.	102
1.50 - 1.99	22	15	.	.	.	.	.	.	.	.	37
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	125	15	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 1.99 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 83

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	.	1	.	.	.	.	.	.	.	11
0.50 - 0.99	126	241	73	5	.	.	.	.	.	.	445
1.00 - 1.49	740	710	302	35	6	3	.	.	.	.	1795
1.50 - 1.99	1250	836	102	22	1	.	.	.	.	.	2271
2.00 - 2.49	118	879	34	.	.	.	.	.	.	.	1031
2.50 - 2.99	.	203	65	3	.	.	.	.	.	.	271
3.00 - 3.49	.	39	35	1	.	.	.	.	.	.	75
3.50 - 3.99	.	1	5	1	.	.	.	.	.	.	7
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2244	2969	617	67	7	3	0	0	0	0	

MEAN HS(M) = 1.68 LARGEST HS(M) = 3.78 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 3461

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	1	1	.	.	10	1	.	.	.	24
0.50 - 0.99	100	826	1675	388	130	42	27	1	42	.	3231
1.00 - 1.49	99	1976	6432	3112	1211	321	77	18	.	.	13246
1.50 - 1.99	83	658	4426	4549	3374	1584	220	51	3	.	14948
2.00 - 2.49	27	297	1069	3382	4430	2758	597	68	8	.	12636
2.50 - 2.99	.	205	246	1083	4206	4378	1170	68	22	.	11378
3.00 - 3.49	.	56	207	406	2222	5354	1892	123	6	.	10268
3.50 - 3.99	.	.	116	159	1028	4223	2683	174	10	.	8423
4.00 - 4.49	.	.	44	70	338	2638	2698	273	.	.	6061
4.50 - 4.99	.	.	6	22	95	1071	2465	278	.	.	3937
5.00 +	.	.	.	1	49	485	3444	1124	.	.	5103
TOTAL	309	4029	14222	13205	17083	22864	15274	2178	91	0	

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.40 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52185

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	32	10	.	.	.	.	.	.	.	50
1.00 - 1.49	6	107	191	18	.	.	.	.	.	.	322
1.50 - 1.99	20	157	179	121	51	3	.	.	.	.	531
2.00 - 2.49	3	83	163	181	164	49	.	.	.	.	663
2.50 - 2.99	.	47	195	201	302	82	3	1	.	.	831
3.00 - 3.49	.	11	133	107	260	186	22	.	.	.	719
3.50 - 3.99	.	3	56	92	253	231	44	.	.	.	679
4.00 - 4.49	.	.	13	29	112	154	47	.	.	.	355
4.50 - 4.99	.	.	1	13	70	71	49	.	.	.	204
5.00 +	.	.	.	3	22	90	71	8	.	.	194
TOTAL	37	440	961	765	1234	866	236	9	0	0	

MEAN HS(M) = 2.99 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2674

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	8	5	.	.	.	.	.	.	.	.	13
1.50 - 1.99	6	22	1	.	.	.	.	.	.	.	29
2.00 - 2.49	.	11	1	.	.	.	.	.	.	.	12
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	38	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 2.24 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 37

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

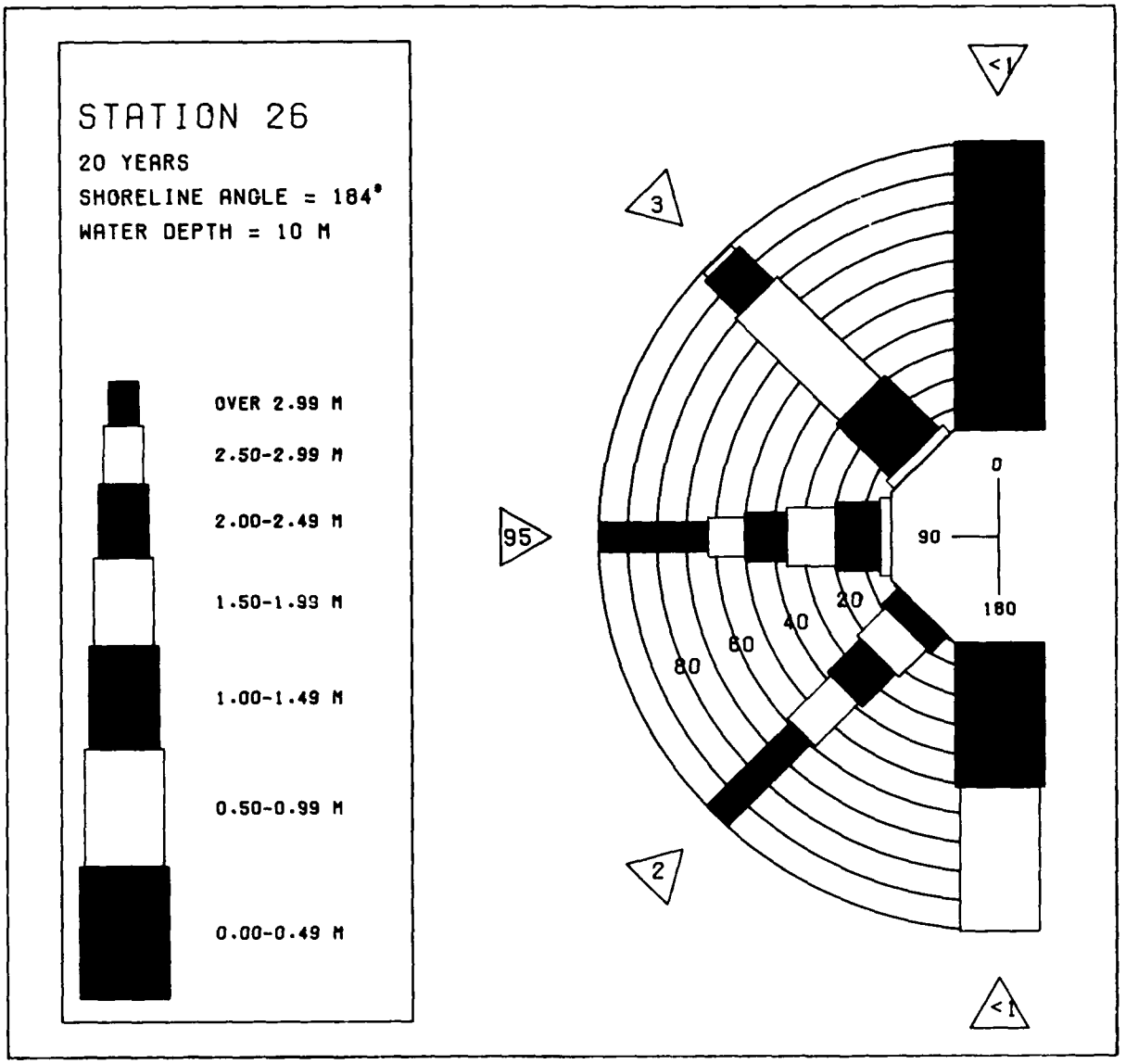
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 26 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	1	1				1					3
0.50 - 0.99	24	110	175	39	13	4	2		4		371
1.00 - 1.49	95	279	692	316	121	32	7	1			1543
1.50 - 1.99	138	175	471	469	342	158	22	5			1780
2.00 - 2.49	14	127	128	356	459	280	59	6			1429
2.50 - 2.99		45	50	128	450	446	117	7	2		1245
3.00 - 3.49		10	37	51	248	554	191	12			1103
3.50 - 3.99			17	28	128	445	272	17	1		908
4.00 - 4.49			5	9	45	279	274	27			639
4.50 - 4.99				3	16	114	251	27			411
5.00 +					7	57	351	113	1	0	528
TOTAL	272	747	1575	1399	1829	2370	1546	215	7	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.40 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.2	3.2	2.7	2.4	1.8	1.5	1.4	1.6	2.5	3.2	3.5	2.5
1957	2.7	2.9	3.5	2.7	2.0	1.5	1.3	1.2	1.8	2.7	3.7	4.2	2.5
1958	4.8	4.2	3.1	3.4	2.0	1.4	1.7	1.5	1.9	2.8	3.3	4.4	2.9
1959	4.1	3.6	2.9	2.6	2.1	1.5	1.6	1.4	1.9	2.8	3.0	4.0	2.6
1960	3.7	4.0	2.6	2.6	2.0	1.6	1.4	1.4	1.5	2.1	3.8	4.1	2.7
1961	4.2	3.9	3.4	2.7	2.2	1.6	1.3	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.3	3.1	2.9	2.4	1.7	1.7	1.2	1.6	1.7	2.2	4.1	4.0	2.6
1963	3.3	4.0	3.1	2.3	1.8	1.9	1.4	1.0	1.9	2.6	3.8	3.9	2.7
1964	4.6	3.3	3.0	2.6	2.0	1.7	1.7	1.7	1.9	2.5	3.6	3.9	2.7
1965	3.7	3.2	2.9	2.8	2.0	2.0	1.5	1.2	1.6	3.0	3.2	4.3	2.6
1966	4.4	3.2	3.3	2.2	2.2	1.5	1.4	1.5	1.9	2.7	2.9	3.8	2.6
1967	3.8	3.1	2.8	2.4	1.4	1.3	1.4	1.3	1.9	2.8	3.5	3.9	2.5
1968	3.5	3.9	3.2	2.2	1.5	1.5	1.4	1.3	1.5	2.8	3.7	3.5	2.5
1969	2.8	4.3	3.5	2.4	2.3	1.7	1.5	1.4	2.0	3.0	3.7	5.2	2.8
1970	4.1	4.3	3.7	2.7	1.8	1.6	1.7	1.5	1.7	2.7	3.7	4.2	2.6
1971	3.4	3.7	3.9	3.1	2.2	1.7	1.2	1.6	2.1	2.5	3.9	3.6	2.7
1972	4.1	3.6	3.6	3.0	2.1	1.9	1.9	1.4	2.0	2.2	4.5	3.7	2.8
1973	4.3	4.0	3.6	2.4	2.2	2.1	2.0	1.8	2.2	3.0	3.8	5.0	3.0
1974	3.4	3.8	3.6	3.1	2.3	2.0	1.6	1.6	1.7	2.8	4.3	4.2	2.9
1975	3.6	3.3	2.8	2.4	2.0	1.3	1.3	1.2	1.2	2.8	3.8	3.5	2.4
MEAN	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	6.1	5.6	4.7	3.8	2.7	2.5	2.1	2.6	4.6	4.9	5.9
1957	4.4	5.0	5.7	4.9	3.2	2.5	2.1	1.9	3.5	5.2	6.0	5.8
1958	6.7	6.4	5.3	6.5	4.0	2.2	3.0	2.4	3.8	5.0	6.3	6.4
1959	6.3	6.2	4.9	5.3	3.5	2.7	2.4	2.5	2.9	6.1	6.2	6.5
1960	6.7	6.4	4.3	4.7	3.3	3.1	2.2	2.3	2.6	6.3	6.3	6.4
1961	6.3	6.3	6.0	4.4	3.4	3.0	1.9	2.5	3.2	5.1	5.7	5.9
1962	5.3	5.0	5.0	3.9	2.6	3.5	2.1	2.8	4.7	5.6	6.9	6.2
1963	5.3	6.2	5.5	3.3	2.8	3.6	2.2	1.8	2.9	7.4	6.3	6.6
1964	6.6	6.0	5.2	4.4	4.2	2.7	2.5	2.5	3.2	4.3	6.1	6.4
1965	6.1	5.3	4.4	4.6	4.4	3.1	2.4	2.1	2.5	5.4	6.1	6.4
1966	6.1	5.4	5.3	4.5	3.3	3.1	2.2	2.2	3.6	4.8	5.5	6.4
1967	5.6	5.8	4.3	4.8	2.5	2.4	2.0	1.9	3.5	5.0	5.7	7.0
1968	5.6	6.0	5.1	3.5	2.8	2.1	2.5	2.4	3.0	4.8	6.0	6.1
1969	4.5	6.1	5.1	6.0	3.5	2.7	2.4	1.9	3.7	5.2	6.7	7.2
1970	6.7	6.1	6.1	4.9	2.6	2.6	2.5	2.9	2.9	5.2	6.3	6.7
1971	6.2	5.6	6.9	4.5	3.8	2.5	2.2	4.1	3.0	4.3	6.8	6.1
1972	6.5	6.5	5.6	6.0	3.0	3.0	2.6	2.4	3.2	3.9	6.0	6.9
1973	6.5	6.2	6.2	4.0	3.2	2.9	2.8	2.7	3.2	5.6	6.6	7.2
1974	6.2	6.3	6.5	5.5	4.3	3.6	3.1	2.4	2.7	5.4	6.6	6.3
1975	6.2	5.8	5.3	5.1	3.4	2.4	2.0	2.1	1.6	4.5	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.7
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.3
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.4
LARGEST WAVE HS . . . . . (METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	85.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	63102409

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	41	.	.	.	.	.	.	.	.	.	41
1.00 - 1.49	564	23	.	.	.	.	.	.	.	.	587
1.50 - 1.99	343	254	.	.	.	.	.	.	.	.	597
2.00 - 2.49	1	41	.	.	.	.	.	.	.	.	42
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	954	318	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.25 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 746

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	17	6	1	.	.	1	.	.	.	31
0.50 - 0.99	189	860	1250	227	56	23	6	.	.	.	2611
1.00 - 1.49	513	2029	3747	1457	473	88	6	.	.	.	8313
1.50 - 1.99	775	1131	1979	1938	1230	376	1	.	.	.	7430
2.00 - 2.49	58	764	357	1067	1760	727	5	.	.	.	4738
2.50 - 2.99	.	253	140	266	1194	1113	11	.	.	.	2977
3.00 - 3.49	.	35	106	98	607	1172	133	.	.	.	2141
3.50 - 3.99	.	.	27	34	212	768	152	.	.	.	1193
4.00 - 4.49	.	.	1	6	30	388	77	.	.	.	502
4.50 - 4.99	.	.	1	.	1	92	32	.	.	.	126
5.00 +	.	.	.	.	.	11	29	.	.	.	40
TOTAL	1541	5089	7614	5084	5563	4758	453	0	0	0	

MEAN HS(M) = 1.95 LARGEST HS(M) = 5.62 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 17612

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	3	.	.	10	.	.	.	.	14
0.50 - 0.99	46	374	766	266	88	23	22	.	42	.	1627
1.00 - 1.49	15	783	3394	2075	959	328	109	22	.	.	7685
1.50 - 1.99	39	393	2440	2751	2327	1444	219	61	6	.	9680
2.00 - 2.49	6	227	598	2065	2929	2169	648	63	11	.	8716
2.50 - 2.99	.	147	280	770	2688	3483	1255	82	15	.	8720
3.00 - 3.49	.	35	253	371	1569	3961	1925	130	17	.	8261
3.50 - 3.99	.	3	164	234	879	3331	2488	189	.	.	7288
4.00 - 4.49	.	.	46	95	354	2156	2575	254	.	.	5480
4.50 - 4.99	.	.	5	37	174	860	2339	277	.	.	3692
5.00 +	.	.	.	6	75	542	3177	1054	.	.	4854
TOTAL	106	1963	7949	8670	12042	18307	14757	2132	91	0	

MEAN HS(M) = 2.94 LARGEST HS(M) = 7.38 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 38602

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	5	.	.	.	.	.	.	.	.	5
1.00 - 1.49	1	49	39	.	.	.	.	.	.	.	89
1.50 - 1.99	20	99	66	27	3	.	.	.	.	.	215
2.00 - 2.49	5	63	100	51	18	.	.	.	.	.	237
2.50 - 2.99	.	41	152	121	100	17	3	.	.	.	434
3.00 - 3.49	.	11	95	90	160	47	1	.	.	.	404
3.50 - 3.99	.	5	58	100	176	92	3	1	.	.	435
4.00 - 4.49	.	.	13	29	152	138	11	.	.	.	343
4.50 - 4.99	.	.	.	13	82	58	18	.	.	.	171
5.00 +	.	.	.	1	37	82	42	.	.	.	162
TOTAL	26	273	523	432	728	434	78	1	0	0	

MEAN HS(M) = 3.34 LARGEST HS(M) = 6.90 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1472

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	3	1	.	.	.	.	.	.	.	.	4
1.50 - 1.99	3	.	.	.	.	.	.	.	.	.	3
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.16 LARGEST HS(M) = 1.59 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 8

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

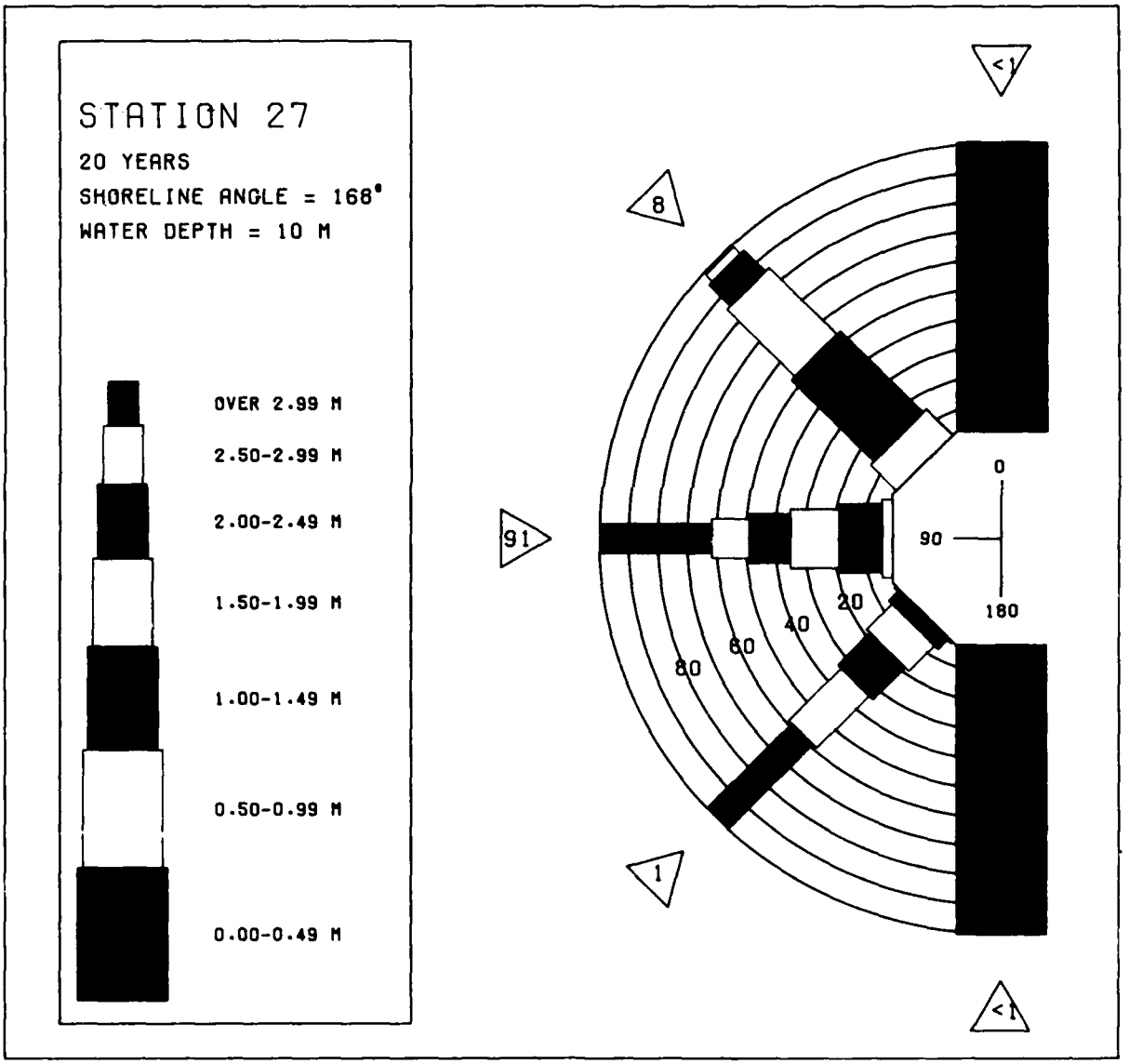
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 27 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		1	1		1						4
0.50 - 0.99	28	124	201	49	14	4	2		4		426
1.00 - 1.49	109	288	718	353	143	41	11	2			1665
1.50 - 1.99	118	187	448	471	356	182	22	6			1790
2.00 - 2.49	7	109	105	318	470	289	65	6	1		1370
2.50 - 2.99		44	57	115	398	461	127	8	1		1211
3.00 - 3.49		8	45	55	233	518	206	13	1		1079
3.50 - 3.99			24	36	126	419	264	19			888
4.00 - 4.49			6	13	53	268	266	25			631
4.50 - 4.99				5	25	101	239	27			397
5.00 +					11	63	324	105			503
TOTAL	263	761	1605	1415	1829	2347	1526	211	7	0	

MEAN HS(M) = 2.63 LARGEST HS(M) = 7.38 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 27 (45.76N/ 124.00W TO 45.65N/ 123.95W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.1	3.1	2.6	2.3	1.8	1.4	1.3	1.6	2.5	3.1	3.5	2.5
1957	2.6	2.9	3.4	2.6	1.9	1.5	1.3	1.2	1.8	2.7	3.6	4.2	2.5
1958	4.8	4.2	3.0	3.4	1.9	1.4	1.6	1.4	1.9	2.7	3.3	4.4	2.8
1959	4.1	3.6	2.9	2.5	2.1	1.5	1.6	1.3	1.9	2.8	2.9	4.0	2.6
1960	3.7	4.0	2.6	2.6	2.0	1.6	1.4	1.4	1.5	3.0	3.7	4.1	2.6
1961	4.3	3.9	3.4	2.6	2.1	1.6	1.2	1.1	1.6	2.9	3.4	3.5	2.6
1962	3.3	3.1	2.8	2.3	1.6	1.6	1.5	1.6	1.7	3.1	4.0	4.1	2.5
1963	3.3	4.2	3.0	2.2	1.7	1.8	1.3	0.9	1.9	3.5	3.8	4.0	2.6
1964	4.7	3.2	3.0	2.5	1.9	1.7	1.7	1.7	1.8	2.5	3.5	3.9	2.7
1965	3.7	3.2	2.8	2.7	1.9	1.9	1.4	1.2	1.5	2.9	3.2	4.2	2.6
1966	4.4	3.1	3.3	2.1	2.1	1.5	1.4	1.4	1.9	2.7	3.8	3.9	2.5
1967	3.8	3.0	2.8	2.3	1.4	1.3	1.3	1.2	1.9	2.8	3.4	3.8	2.4
1968	3.6	4.1	3.2	2.2	1.5	1.5	1.3	1.3	1.5	2.8	3.7	3.6	2.5
1969	2.8	4.3	3.5	3.4	2.0	1.7	1.5	1.5	1.9	2.9	3.6	5.2	2.8
1970	4.1	4.3	3.7	2.6	1.8	1.5	1.6	1.5	1.6	2.6	3.6	4.2	2.9
1971	3.5	3.7	3.8	3.0	2.1	1.6	1.1	1.5	2.0	2.4	3.9	3.6	2.7
1972	4.0	3.6	3.6	2.9	2.0	1.8	1.8	1.4	1.9	2.1	4.5	3.7	2.8
1973	4.3	3.9	3.5	2.4	2.2	2.0	2.0	1.8	2.1	2.9	3.8	4.9	3.0
1974	3.5	3.8	3.6	3.0	2.2	1.9	1.5	1.5	1.6	2.7	4.2	4.2	2.8
1975	3.6	3.3	2.8	2.3	1.9	1.3	1.2	1.2	1.1	2.7	3.7	3.5	2.4
MEAN	3.8	3.6	3.2	2.6	1.9	1.6	1.4	1.4	1.7	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 27 (45.76N/ 124.00W TO 45.65N/ 123.95W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.4	5.8	5.4	4.4	3.7	2.6	2.3	2.1	2.5	4.4	4.9	5.9
1957	4.0	5.0	5.8	4.9	3.2	2.5	2.1	1.8	3.6	4.9	5.7	5.7
1958	6.7	6.5	5.2	6.5	3.7	2.1	2.8	2.2	3.6	4.7	5.9	6.4
1959	6.3	6.0	4.8	5.3	3.5	2.6	2.1	2.4	2.9	6.1	6.2	6.3
1960	6.9	6.6	4.3	4.5	3.1	3.0	2.1	2.2	2.4	6.2	6.1	6.2
1961	6.4	6.4	6.1	4.1	3.3	2.9	1.9	2.5	3.1	5.2	5.6	5.5
1962	5.4	5.0	4.7	3.8	2.6	3.3	1.9	2.7	4.7	5.7	6.9	6.3
1963	5.7	6.2	5.3	3.2	2.8	3.4	2.1	1.7	3.0	7.4	6.3	6.8
1964	6.6	6.0	5.2	4.3	3.9	2.7	2.4	2.4	3.2	4.1	6.1	6.5
1965	6.1	5.1	4.0	4.3	3.9	2.9	2.4	2.0	2.3	5.4	6.1	6.5
1966	6.2	5.2	5.1	4.5	3.2	3.0	2.1	2.1	3.5	4.8	5.0	6.4
1967	5.6	5.7	4.1	4.5	2.4	2.3	1.9	1.9	3.3	4.9	5.4	6.9
1968	6.3	6.0	5.1	3.5	2.7	2.2	2.4	2.3	2.9	4.8	6.0	6.3
1969	4.6	6.0	5.0	5.9	3.4	2.8	2.3	1.9	3.5	5.0	6.9	7.3
1970	6.9	6.1	6.2	5.0	2.6	2.5	2.4	2.7	2.8	4.9	6.3	6.7
1971	6.2	5.7	6.9	4.4	3.7	2.5	2.1	3.9	2.9	4.2	6.7	5.8
1972	6.1	6.5	5.6	5.6	2.8	2.9	3.6	2.3	3.1	3.7	6.0	6.9
1973	6.7	6.2	6.1	4.9	3.3	2.9	2.8	2.5	3.2	5.3	6.6	7.2
1974	6.6	6.4	6.6	5.2	4.1	3.5	3.0	2.2	2.6	5.3	6.7	6.4
1975	6.2	5.7	5.4	4.8	3.3	2.3	2.0	2.0	1.6	4.4	6.1	5.9

20 YR. STATISTICS FOR PACIFIC STATION 27 (45.76N/ 124.00W TO 45.65N/ 123.95W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	61	.	.	.	.	.	.	.	.	.	61
1.50 - 1.99	15	8	.	.	.	.	.	.	.	.	23
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	77	8	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 51

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	.	1	.	.	.	.	.	.	.	11
0.50 - 0.99	106	111	22	3	.	.	.	.	.	.	242
1.00 - 1.49	720	455	118	20	1	1	.	.	.	.	1315
1.50 - 1.99	1288	776	37	11	.	.	.	.	.	.	2112
2.00 - 2.49	130	814	18	.	.	.	.	.	.	.	962
2.50 - 2.99	.	157	32	.	.	.	.	.	.	.	189
3.00 - 3.49	.	18	25	1	.	.	.	.	.	.	44
3.50 - 3.99	.	.	3	1	.	.	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2254	2331	256	36	1	1	0	0	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.63 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 2859

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	11	1	1	.	10	1	.	.	.	25
0.50 - 0.99	116	908	1694	379	126	39	27	1	42	.	3332
1.00 - 1.49	131	2176	6565	3119	1202	326	75	18	1	.	13613
1.50 - 1.99	124	722	4438	4531	3350	1552	224	51	3	.	14995
2.00 - 2.49	34	407	1064	3341	4397	2756	600	68	8	.	12675
2.50 - 2.99	.	263	261	1060	4202	4383	1178	70	22	.	11439
3.00 - 3.49	.	78	203	378	2186	5371	1897	123	6	.	10242
3.50 - 3.99	.	1	111	162	1016	4152	2695	171	10	.	8318
4.00 - 4.49	.	.	41	70	308	2623	2710	268	.	.	6020
4.50 - 4.99	.	.	5	15	82	1064	2472	284	.	.	3922
5.00 +	.	.	.	1	49	456	3403	1131	.	.	5040
TOTAL	406	4566	14383	13048	16918	22732	15282	2185	91	0	

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52393

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	63	29	.	.	.	.	.	.	.	100
1.00 - 1.49	6	136	213	27	.	.	.	.	.	.	382
1.50 - 1.99	20	186	225	172	82	5	.	.	.	.	690
2.00 - 2.49	3	92	220	229	246	83	1	.	.	.	854
2.50 - 2.99	.	49	196	231	292	119	5	1	.	.	893
3.00 - 3.49	.	8	140	124	333	254	42	.	.	.	901
3.50 - 3.99	.	3	53	94	232	258	46	1	.	.	686
4.00 - 4.49	.	.	13	27	107	157	68	1	.	.	373
4.50 - 4.99	.	.	.	18	63	80	51	1	.	.	213
5.00 +	.	.	.	1	11	85	71	8	.	.	176
TOTAL	37	537	1069	923	1366	1041	284	11	0	0	

MEAN HS(M) = 2.89 LARGEST HS(M) = 6.62 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 3096

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	10	13	.	.	.	.	.	.	.	.	23
1.50 - 1.99	6	17	3	.	.	.	.	.	.	.	26
2.00 - 2.49	.	11	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	20	42	3	0	0	0	0	0	0	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 2.53 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 41

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

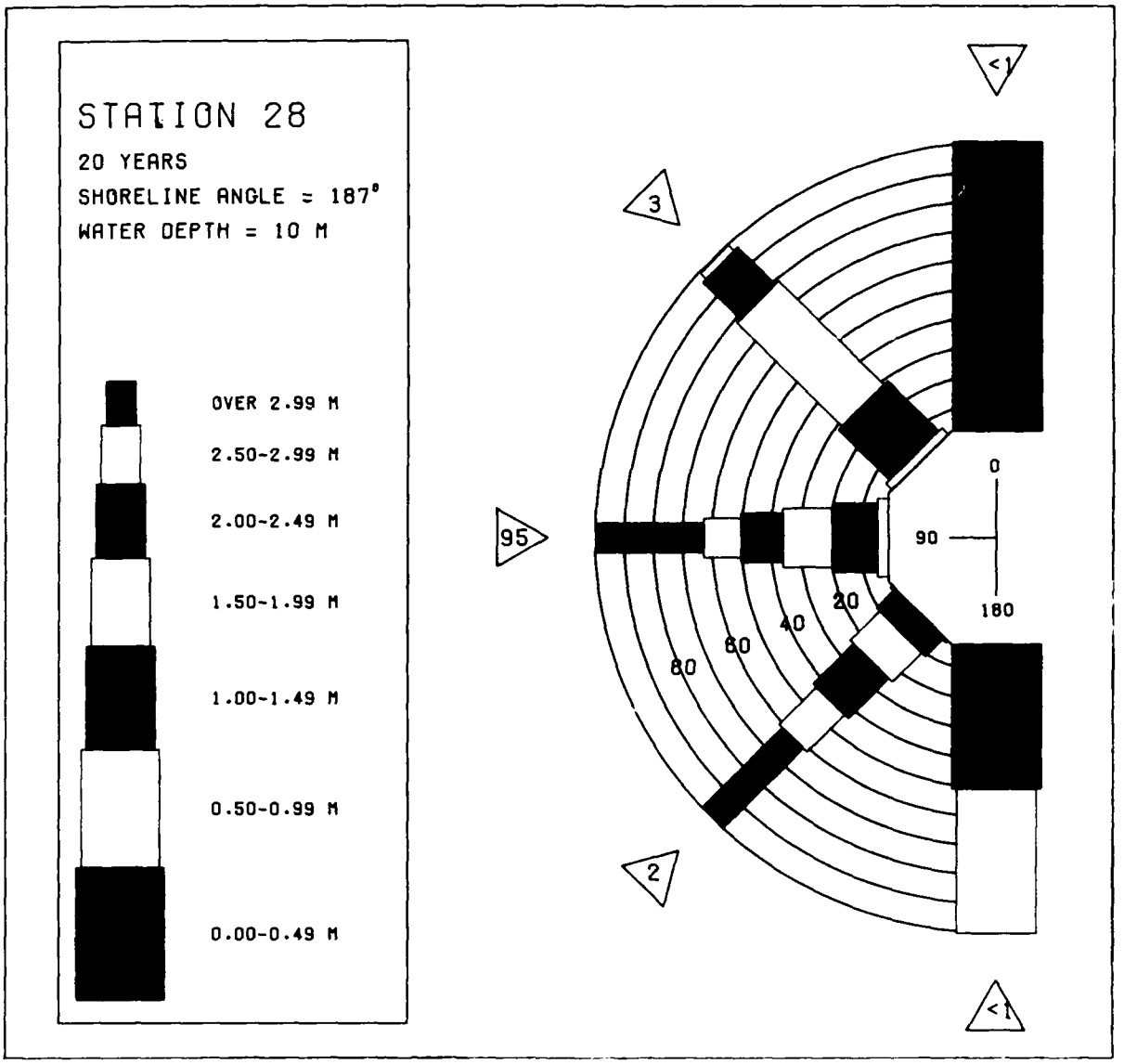
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 28 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	1				1					3
0.50 - 0.99	23	108	174	38	12	3	2		4		364
1.00 - 1.49	93	278	689	315	120	32	7	1			1535
1.50 - 1.99	145	171	470	471	343	155	22	5			1782
2.00 - 2.49	16	132	128	357	464	284	60	6			1447
2.50 - 2.99		47	49	129	449	450	118	7	2		1251
3.00 - 3.49		10	36	50	252	562	194	12			1116
3.50 - 3.99			16	25	124	441	274	17	1		898
4.00 - 4.49			5	9	41	278	277	27			637
4.50 - 4.99				3	14	114	252	28			411
5.00 +					6	54	347	113			520
TOTAL	278	747	1567	1397	1825	2374	1553	216	7	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.41 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 28 (45.65N/ 123.95W TO 45.53N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.2	3.2	2.7	2.4	1.8	1.5	1.4	1.6	2.5	3.2	3.5	2.5
1957	2.7	2.9	3.5	2.7	2.0	1.5	1.3	1.2	1.8	2.7	3.7	4.2	2.5
1958	4.8	4.1	3.1	3.4	2.0	1.4	1.7	1.5	1.9	2.8	3.3	4.3	2.9
1959	4.1	3.6	2.9	2.6	2.1	1.5	1.6	1.4	1.9	2.8	3.0	4.0	2.6
1960	3.7	4.0	2.6	2.6	2.0	1.6	1.4	1.4	1.6	3.1	3.8	4.1	2.7
1961	4.2	3.9	3.4	2.7	2.2	1.6	1.3	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.3	3.1	3.0	2.4	1.7	1.7	1.3	1.6	1.7	3.2	4.1	4.0	2.6
1963	3.3	4.0	3.2	2.3	1.8	1.9	1.4	1.0	1.9	3.6	3.8	3.9	2.7
1964	4.6	3.3	3.0	2.7	2.0	1.7	1.7	1.7	1.9	2.5	3.6	3.9	2.7
1965	3.6	3.2	2.9	2.8	2.0	2.0	1.5	1.2	1.6	3.0	3.2	4.3	2.6
1966	4.4	3.2	3.3	2.5	2.2	1.5	1.4	1.2	1.9	3.7	3.8	3.7	2.6
1967	3.8	3.0	2.8	2.5	1.4	1.3	1.4	1.3	1.9	2.8	3.5	3.9	2.5
1968	3.5	3.9	3.1	2.2	1.5	1.5	1.4	1.3	1.5	2.8	3.7	3.5	2.5
1969	2.8	4.3	3.2	3.4	2.0	1.7	1.5	1.4	2.0	3.0	3.7	5.1	2.8
1970	4.1	4.3	3.7	2.7	1.8	1.6	1.7	1.5	1.7	2.7	3.7	4.2	2.8
1971	3.4	3.7	3.9	3.1	2.2	1.7	1.2	1.6	2.1	2.5	3.9	3.7	2.7
1972	4.1	3.6	3.6	3.0	2.1	1.9	1.9	1.4	2.0	3.2	4.5	3.7	2.8
1973	4.3	4.0	3.6	2.4	2.2	2.1	2.0	1.9	2.2	3.0	3.8	4.9	3.0
1974	3.4	3.8	3.6	3.1	2.3	2.0	1.6	1.6	1.7	2.8	4.3	4.2	2.9
1975	3.6	3.2	2.8	2.4	2.0	1.4	1.3	1.2	1.2	2.8	3.8	3.5	2.4
MEAN	3.7	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 28 (45.65N/ 123.95W TO 45.53N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	6.1	5.6	4.7	3.9	2.7	2.5	2.1	2.7	4.6	4.9	5.9
1957	4.1	5.0	5.6	4.9	3.2	2.5	2.2	1.9	3.4	5.2	6.0	5.8
1958	6.7	6.4	5.3	6.5	4.0	2.2	3.0	2.4	3.9	5.0	6.3	6.4
1959	6.3	6.2	4.9	5.3	3.5	2.7	2.4	2.5	2.9	6.1	6.2	6.5
1960	6.7	6.4	4.3	4.7	3.3	3.1	2.3	2.4	2.6	6.3	6.3	6.4
1961	6.3	6.2	5.9	4.4	3.5	3.0	2.0	2.5	3.2	5.1	5.8	5.9
1962	5.3	5.0	5.1	3.9	2.6	3.5	2.1	2.8	4.7	5.6	6.9	6.2
1963	5.2	6.1	5.6	3.3	2.8	3.6	2.2	1.8	2.9	7.4	6.3	6.5
1964	6.6	5.9	5.2	4.4	4.2	2.7	2.5	2.5	3.2	4.3	6.1	6.4
1965	6.0	5.3	4.1	4.6	4.1	3.1	2.5	2.1	2.5	5.4	6.1	6.4
1966	6.1	5.4	5.3	4.5	3.3	3.0	2.2	2.2	3.6	4.7	5.2	6.3
1967	5.6	5.8	4.3	4.9	2.5	2.4	2.1	1.9	3.5	5.1	5.7	6.9
1968	5.6	6.0	5.1	3.5	2.8	2.1	2.5	2.4	3.0	4.7	6.0	6.1
1969	4.5	6.1	5.1	6.0	3.6	2.7	2.3	1.9	3.7	5.3	6.7	7.1
1970	6.7	6.1	6.1	4.9	3.6	2.6	2.5	2.9	3.0	5.4	6.3	6.7
1971	6.2	5.6	6.8	4.5	3.8	2.5	2.3	4.2	3.0	4.3	6.8	6.1
1972	6.2	6.5	5.5	6.0	3.1	3.0	3.6	2.4	3.2	3.9	6.0	6.9
1973	6.4	6.2	6.2	4.0	3.2	2.9	2.8	2.7	3.2	5.6	6.6	7.2
1974	6.1	6.3	6.4	5.5	4.4	3.6	3.1	2.4	2.7	5.4	6.6	6.3
1975	6.2	5.8	5.3	5.1	3.4	2.5	2.0	2.1	1.6	4.5	5.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 28 (45.65N/ 123.95W TO 45.53N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	400	8	.	.	.	.	.	.	.	.	408
1.50 - 1.99	304	85	.	.	.	.	.	.	.	.	389
2.00 - 2.49	.	22	.	.	.	.	.	.	.	.	22
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	724	115	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 492

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	10	5	.	.	.	.	.	.	.	25
0.50 - 0.99	213	633	453	35	10	1	1	.	.	.	1346
1.00 - 1.49	722	1415	1671	210	32	11	.	.	.	.	4061
1.50 - 1.99	1155	1220	864	107	42	.	.	.	.	.	3388
2.00 - 2.49	58	913	213	71	22	.	.	.	.	.	1277
2.50 - 2.99	.	215	85	34	17	.	.	.	.	.	351
3.00 - 3.49	.	30	61	5	22	.	.	.	.	.	118
3.50 - 3.99	.	.	25	15	11	.	.	.	.	.	51
4.00 - 4.49	.	.	8	.	3	.	.	.	.	.	11
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2158	4436	3385	477	159	12	1	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 4.13 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 6222

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	23	11	.	.	1	.	.	.	.	.	35
0.50 - 0.99	49	535	2113	619	224	87	42	10	41	.	3720
1.00 - 1.49	10	704	5227	3933	1904	627	167	23	1	.	12596
1.50 - 1.99	32	174	2888	4506	4094	2424	373	77	6	.	14614
2.00 - 2.49	17	133	509	2549	5020	3836	1120	73	18	.	13275
2.50 - 2.99	.	35	201	698	3328	5648	2043	124	15	.	12092
3.00 - 3.49	.	11	100	254	1670	5251	2797	215	10	.	10308
3.50 - 3.99	.	3	23	83	420	2218	3222	294	1	.	7264
4.00 - 4.49	.	.	3	22	112	1379	2085	287	1	.	4689
4.50 - 4.99	.	.	.	1	53	448	1962	378	3	.	2845
5.00 +	.	.	.	.	1	135	1603	920	.	.	2659
TOTAL	108	1618	11075	12705	16826	23054	16214	2401	96	0	

MEAN HS(M) = 2.57 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49172

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	34	32	13	1	.	.	.	.	.	85
1.00 - 1.49	10	130	160	51	25	.	.	.	.	.	376
1.50 - 1.99	27	150	210	95	47	15	.	.	.	.	544
2.00 - 2.49	3	65	157	160	203	41	3	.	.	.	632
2.50 - 2.99	.	51	188	189	338	138	34	.	.	.	938
3.00 - 3.49	.	13	88	183	299	188	23	.	.	.	794
3.50 - 3.99	.	3	18	35	174	186	51	.	.	.	467
4.00 - 4.49	.	.	1	11	77	121	42	.	.	.	252
4.50 - 4.99	.	.	.	3	11	66	25	1	.	.	106
5.00 +	.	.	.	.	3	18	27	5	.	.	53
TOTAL	46	446	854	740	1178	773	205	6	0	0	

MEAN HS(M) = 2.75 LARGEST HS(M) = 5.79 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2500

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	3	15	.	.	.	.	.	.	.	.	18
1.00 - 1.49	11	22	13	.	.	.	.	.	.	.	46
1.50 - 1.99	1	18	.	.	.	.	.	.	.	.	19
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	59	13	0	0	0	0	0	0	0	

MEAN HS(M) = 1.20 LARGEST HS(M) = 2.00 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 54

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

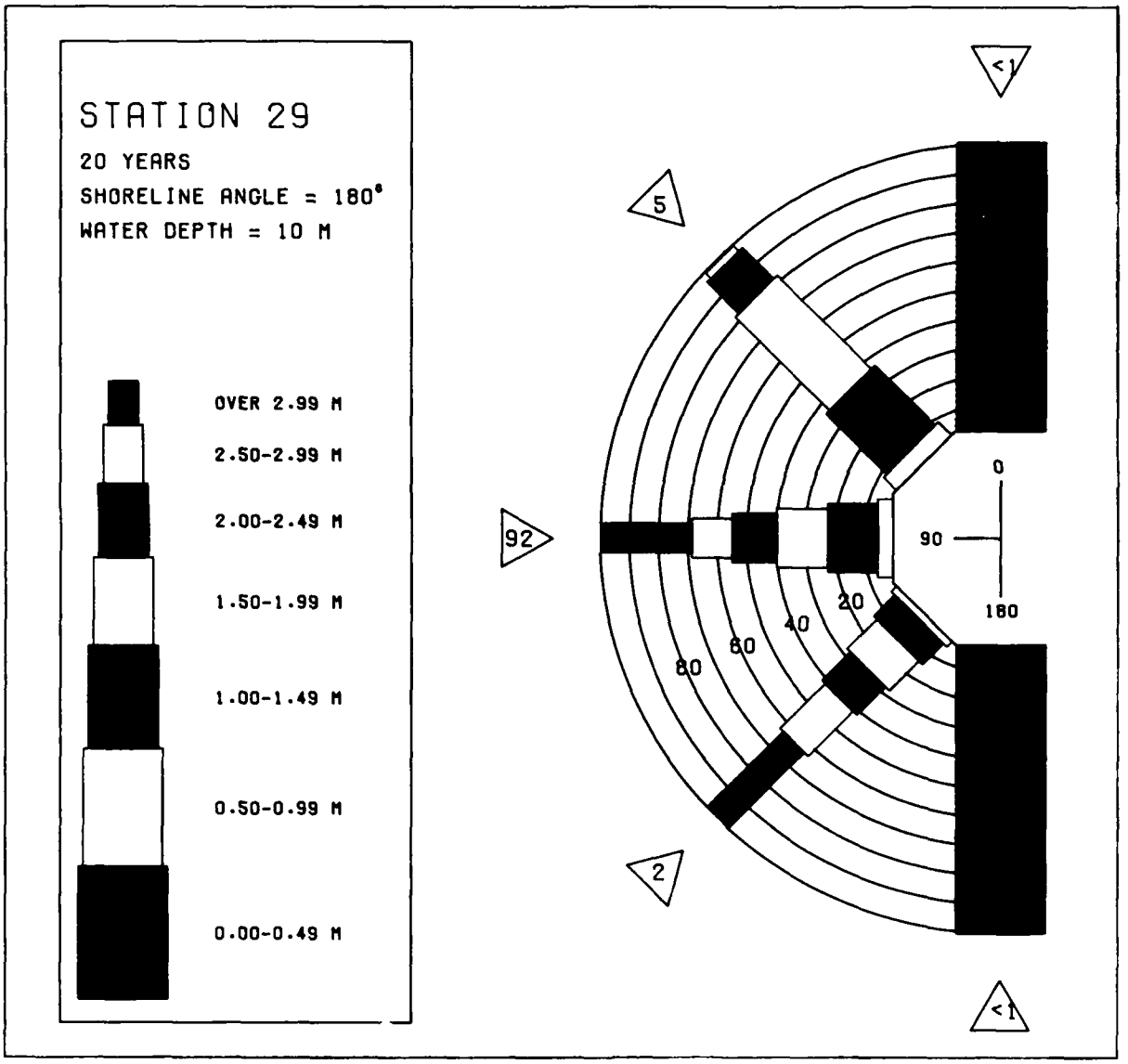
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 29 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	.	.	.	.	.	.	.	5
0.50 - 0.99	28	121	259	66	23	8	4	1	4	.	514
1.00 - 1.49	115	228	707	419	156	63	16	2	.	.	1746
1.50 - 1.99	152	164	396	475	418	244	37	7	.	.	1893
2.00 - 2.49	7	113	88	278	524	387	112	7	1	.	1517
2.50 - 2.99	.	30	47	92	368	578	207	12	1	.	1335
3.00 - 3.49	.	5	25	44	199	543	282	21	1	.	1120
3.50 - 3.99	.	.	6	13	60	340	327	29	.	.	775
4.00 - 4.49	.	.	1	3	19	150	292	28	.	.	493
4.50 - 4.99	.	.	.	.	6	51	198	37	.	.	292
5.00 +	.	.	.	.	.	15	163	92	.	.	270
TOTAL	303	664	1530	1390	1813	2379	1638	236	7	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.15 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.1	3.0	2.5	2.3	1.7	1.4	1.3	1.6	2.4	2.8	3.0	2.3
1957	2.4	2.8	3.2	2.5	1.8	1.3	1.3	1.2	1.7	2.4	3.4	3.9	2.3
1958	4.4	3.6	3.0	3.1	1.9	1.3	1.7	1.4	1.8	2.7	3.2	3.8	2.7
1959	3.8	3.5	2.6	2.5	1.9	1.3	1.6	1.4	1.9	2.4	2.9	3.6	2.4
1960	3.5	3.6	2.4	2.4	1.9	1.5	1.4	1.4	1.4	2.9	3.6	3.7	2.5
1961	3.9	3.4	2.9	2.6	2.1	1.5	1.2	1.1	1.6	2.7	3.3	3.3	2.5
1962	2.7	2.9	2.8	2.1	1.6	1.6	1.2	1.6	1.6	2.9	3.7	3.4	2.3
1963	2.7	3.2	2.9	2.2	1.6	1.8	1.4	0.9	1.7	3.3	3.4	3.6	2.4
1964	4.2	2.9	2.8	2.5	1.8	1.5	1.6	1.7	1.7	2.3	3.4	3.4	2.5
1965	3.3	3.0	2.5	2.6	1.9	1.9	1.5	1.1	1.6	2.7	3.2	4.2	2.4
1966	4.0	3.0	2.9	2.0	2.0	1.3	1.5	1.4	1.7	2.5	2.7	3.4	2.4
1967	3.4	2.6	2.7	2.3	1.3	1.2	1.3	1.2	1.7	2.4	3.4	3.5	2.3
1968	3.1	3.0	2.8	2.1	1.4	1.3	1.3	1.3	1.4	2.6	3.2	3.2	2.2
1969	2.7	4.1	3.1	3.1	1.9	1.4	1.4	1.3	1.8	2.7	3.4	4.6	2.6
1970	3.5	4.0	3.3	2.5	1.6	1.5	1.5	1.5	1.5	2.6	3.5	3.9	2.6
1971	3.0	3.1	3.5	2.9	2.1	1.6	1.2	1.5	2.0	2.2	3.6	3.4	2.5
1972	3.8	3.4	3.2	3.0	2.0	1.9	1.8	1.4	1.9	2.1	4.1	3.4	2.7
1973	4.0	3.6	3.3	2.4	2.0	1.9	1.9	1.9	2.1	2.8	3.6	4.5	2.8
1974	3.0	3.7	3.3	2.8	2.1	1.9	1.5	1.4	1.6	2.5	4.0	3.8	2.6
1975	3.3	3.0	2.6	2.2	1.9	1.3	1.2	1.2	1.0	2.7	3.6	3.1	2.3
MEAN	3.4	3.3	2.9	2.5	1.9	1.5	1.4	1.4	1.7	2.6	3.4	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.7	4.9	5.2	3.7	2.5	2.5	2.2	2.5	4.4	3.9	4.9
1957	3.9	5.2	5.0	4.2	2.9	2.1	2.1	1.8	3.0	5.5	5.8	5.5
1958	6.3	6.1	4.8	6.3	4.1	2.1	2.7	2.4	3.7	4.8	6.2	5.3
1959	6.5	6.1	4.1	4.8	3.2	2.4	2.2	2.6	2.8	5.2	6.2	6.3
1960	6.3	6.2	4.2	4.2	3.2	2.8	2.1	2.3	2.5	6.3	6.3	6.3
1961	6.1	5.1	4.4	4.0	3.0	3.0	1.9	2.2	3.1	4.7	5.8	5.6
1962	4.6	4.0	4.5	3.6	2.4	3.5	2.0	2.8	4.6	5.5	6.5	5.0
1963	4.2	5.2	5.3	3.1	2.5	3.5	2.1	1.9	2.9	6.9	6.0	6.5
1964	6.4	5.0	5.0	4.4	4.0	2.6	2.5	2.4	2.9	4.0	6.2	6.3
1965	5.5	5.1	3.8	4.4	4.0	3.0	2.3	2.2	2.3	5.0	5.8	6.3
1966	6.1	4.9	4.6	3.6	3.3	2.5	2.1	2.1	3.2	3.8	4.8	5.4
1967	5.1	4.7	4.3	4.7	2.4	2.3	2.0	1.9	2.8	4.9	5.7	6.5
1968	5.0	4.3	4.2	3.3	2.6	1.9	2.3	2.3	2.8	4.0	5.1	5.3
1969	4.4	6.1	4.8	5.5	3.5	2.2	2.1	1.9	3.5	5.0	6.2	6.8
1970	6.1	6.0	6.1	4.4	2.3	2.5	2.2	2.9	2.7	5.4	5.7	6.4
1971	6.1	5.8	6.6	4.5	3.6	2.5	2.1	4.2	2.8	4.0	6.8	6.0
1972	6.1	6.3	4.9	6.0	4.9	3.2	3.4	2.3	2.9	5.6	6.0	6.6
1973	6.4	5.6	5.8	4.1	3.1	2.6	2.6	2.8	3.1	5.3	6.6	7.2
1974	5.6	6.2	6.0	5.4	4.0	3.2	3.0	2.2	2.8	4.8	6.5	6.1
1975	5.6	5.6	4.8	4.6	3.2	2.6	2.0	2.0	1.5	4.5	6.3	6.0

20 YR. STATISTICS FOR PACIFIC STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121403

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	400	8	.	.	.	.	.	.	.	.	408
1.50 - 1.99	304	85	.	.	.	.	.	.	.	.	389
2.00 - 2.49	.	22	.	.	.	.	.	.	.	.	22
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	724	115	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 492

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	10	5	.	.	.	.	.	.	.	25
0.50 - 0.99	213	633	453	35	10	1	1	.	.	.	1346
1.00 - 1.49	722	1415	1658	210	32	11	.	.	.	.	4048
1.50 - 1.99	1155	1220	874	107	42	.	.	.	.	.	3398
2.00 - 2.49	58	913	215	71	22	.	.	.	.	.	1279
2.50 - 2.99	.	215	85	32	17	.	.	.	.	.	349
3.00 - 3.49	.	30	61	5	22	.	.	.	.	.	118
3.50 - 3.99	.	.	25	15	11	.	.	.	.	.	51
4.00 - 4.49	.	.	8	.	3	.	.	.	.	.	11
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	2158	4436	3384	475	159	12	1	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 4.13 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 6220

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	23	11	.	.	1	.	.	.	.	.	35
0.50 - 0.99	49	535	2113	619	224	87	42	10	41	.	3720
1.00 - 1.49	10	703	5212	3928	1902	627	167	23	1	.	12573
1.50 - 1.99	32	174	2885	4514	4067	2421	371	77	6	.	14547
2.00 - 2.49	17	130	521	2568	4994	3795	1113	73	18	.	13229
2.50 - 2.99	.	35	205	699	3333	5614	2017	121	15	.	12039
3.00 - 3.49	.	11	100	265	1668	5266	2201	212	10	.	10333
3.50 - 3.99	.	3	23	83	456	3210	3175	294	1	.	7245
4.00 - 4.49	.	.	3	22	119	1409	2900	289	1	.	4738
4.50 - 4.99	.	.	.	1	54	468	1962	378	3	.	2866
5.00 +					1	138	1640	922		.	2701
TOTAL	108	1614	11073	12699	16813	23036	16188	2399	96	0	

MEAN HS(M) = 2.58 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49130

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	30	32	11	.	.	.	.	.	.	78
1.00 - 1.49	8	128	155	54	27	.	.	.	.	.	372
1.50 - 1.99	27	142	179	92	41	15	.	.	.	.	496
2.00 - 2.49	3	71	177	152	200	39	6	.	.	.	648
2.50 - 2.99	.	56	200	193	328	131	32	.	.	.	940
3.00 - 3.49	.	13	94	205	309	167	22	.	.	.	810
3.50 - 3.99	.	3	23	46	177	205	46	.	.	.	500
4.00 - 4.49	.	.	3	10	97	121	51	.	.	.	282
4.50 - 4.99	.	.	.	5	11	70	25	1	.	.	112
5.00 +	.	.	.	.	3	20	29	5	.	.	57
TOTAL	44	443	863	768	1193	768	211	6	0	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 5.83 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2526

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	13	18	1	.	.	.	.	.	.	.	32
1.50 - 1.99	5	54	15	.	.	.	.	.	.	.	74
2.00 - 2.49	.	3	1	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	21	79	17	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 72

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

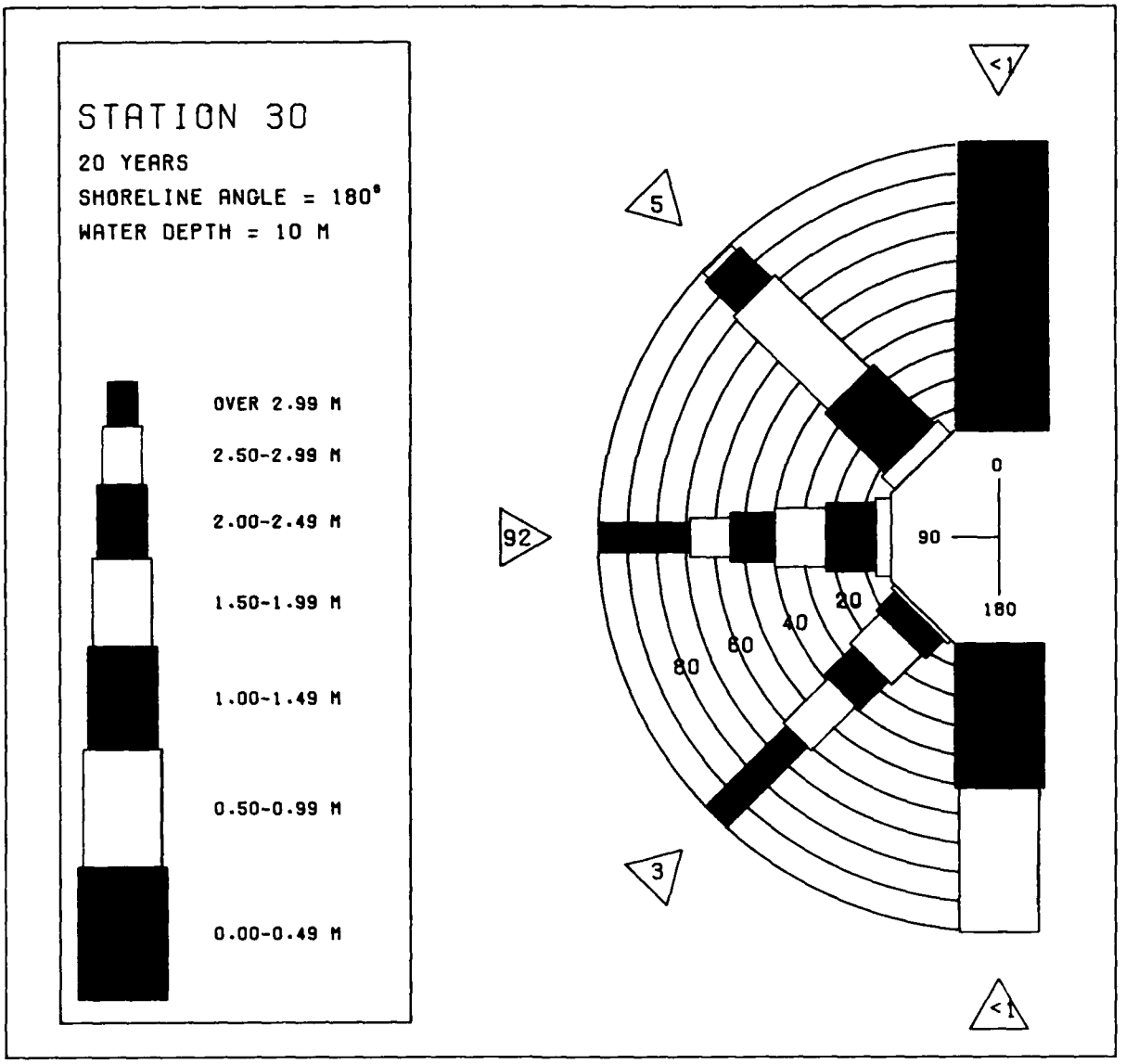
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 30 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	3	1								5
0.50 - 0.99	28	120	259	66	23	6	4	1	4	.	513
1.00 - 1.49	115	227	702	419	196	63	16	2	.	.	1740
1.50 - 1.99	152	167	395	471	415	243	37	7	.	.	1887
2.00 - 2.49	7	114	91	279	521	383	112	7	1	.	1515
2.50 - 2.99	.	30	49	92	367	574	204	12	1	.	1329
3.00 - 3.49	.	5	25	47	200	543	282	21	1	.	1124
3.50 - 3.99	.	.	7	14	64	341	322	29	.	.	777
4.00 - 4.49	.	.	1	3	21	153	295	28	.	.	501
4.50 - 4.99	.	.	.	.	6	53	198	37	.	.	294
5.00 +						15	167	92			274
TOTAL	303	666	1530	1391	1813	2376	1637	236	7	0	

MEAN HS(M) = 2.47 LARGEST HS(M) = 7.15 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 30 (45.41N/ 123.96W TO 45.30N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.1	3.0	2.5	2.3	1.7	1.4	1.3	1.6	2.4	2.8	3.0	2.3
1957	2.4	2.8	3.2	2.5	1.8	1.3	1.3	1.2	1.7	2.4	3.5	3.9	2.3
1958	4.4	3.6	3.0	3.1	1.9	1.3	1.7	1.4	1.8	2.7	3.2	3.8	2.7
1959	3.8	3.5	2.6	2.5	1.9	1.3	1.6	1.4	1.9	2.4	2.9	3.6	2.4
1960	3.5	3.6	2.4	2.4	1.9	1.5	1.4	1.4	1.4	2.9	3.9	3.7	2.5
1961	3.9	3.4	2.9	2.6	2.1	1.5	1.2	1.1	1.6	2.7	3.3	3.3	2.5
1962	2.7	2.9	2.8	2.1	1.6	1.6	1.2	1.6	1.6	2.9	3.7	3.5	2.3
1963	2.7	3.2	2.9	2.2	1.7	1.8	1.4	0.9	1.7	3.3	3.4	3.6	2.4
1964	4.2	2.9	2.8	2.5	1.8	1.5	1.6	1.7	1.7	2.3	3.4	3.5	2.5
1965	3.3	3.0	2.5	2.6	1.9	1.9	1.5	1.1	1.6	2.7	3.2	4.2	2.5
1966	4.0	3.0	2.9	2.0	2.0	1.3	1.5	1.4	1.7	2.5	2.7	3.4	2.4
1967	3.5	2.6	2.7	2.3	1.3	1.2	1.3	1.2	1.7	2.6	3.4	3.5	2.3
1968	3.1	3.0	2.6	2.1	1.4	1.3	1.3	1.3	1.4	2.6	3.2	3.3	2.2
1969	2.7	4.1	3.1	3.1	1.9	1.4	1.4	1.3	1.8	2.7	3.4	4.6	2.6
1970	3.6	4.0	3.3	2.5	1.6	1.5	1.5	1.5	1.5	2.6	3.5	3.9	2.6
1971	3.0	3.1	3.5	2.9	2.1	1.6	1.2	1.5	2.0	2.2	3.6	3.4	2.5
1972	3.8	3.4	3.2	3.0	2.0	1.9	1.8	1.4	1.9	2.1	4.1	3.4	2.7
1973	4.0	3.6	3.3	2.4	2.0	1.9	1.9	1.9	2.1	2.8	3.7	4.6	2.8
1974	3.0	3.7	3.3	2.8	2.1	1.9	1.5	1.4	1.6	2.5	4.0	3.8	2.6
1975	3.3	3.0	2.6	2.2	1.9	1.3	1.2	1.2	1.0	2.7	3.6	3.1	2.3
MEAN	3.4	3.3	2.9	2.5	1.9	1.5	1.4	1.4	1.7	2.6	3.4	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 30 (45.41N/ 123.96W TO 45.30N/ 123.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.7	4.9	5.2	3.7	2.5	2.5	2.2	2.5	4.4	3.9	4.9
1957	3.9	5.4	5.0	4.2	2.9	2.1	2.1	1.8	3.1	5.5	5.8	5.5
1958	6.3	6.1	4.9	6.3	4.1	2.1	2.7	2.4	3.7	4.8	6.2	5.3
1959	6.5	6.1	4.1	4.8	3.2	2.4	2.2	2.6	2.8	5.2	6.2	6.3
1960	6.3	6.2	4.2	4.2	3.2	2.8	2.1	2.3	2.5	6.3	6.3	6.3
1961	6.1	5.2	4.4	4.0	3.0	3.0	1.9	2.2	3.1	4.7	5.8	5.6
1962	4.6	4.0	4.5	3.6	2.4	3.5	2.0	2.8	4.6	5.5	6.5	5.0
1963	4.2	5.2	5.3	3.1	2.5	3.5	2.1	1.9	2.9	6.9	6.2	6.6
1964	6.4	5.0	5.0	4.4	4.0	2.6	2.3	2.4	2.9	4.0	6.2	6.3
1965	5.5	5.1	3.8	4.4	4.0	3.0	2.3	2.2	2.3	5.0	5.8	6.4
1966	6.1	4.9	4.6	3.6	3.3	2.5	2.1	2.1	3.2	3.8	4.8	5.4
1967	5.2	4.7	4.3	4.7	2.4	2.3	2.0	1.9	2.8	4.9	5.7	6.5
1968	5.0	4.3	4.2	3.3	2.6	1.9	2.3	2.3	2.8	4.0	5.1	5.3
1969	4.4	6.1	4.8	5.5	3.5	2.2	2.1	1.9	3.5	5.0	6.2	6.8
1970	6.1	6.0	6.1	4.4	2.3	2.5	2.2	2.9	2.7	5.4	5.7	6.5
1971	6.1	5.8	6.6	4.5	3.6	2.2	2.1	4.2	2.8	4.0	6.8	6.0
1972	6.1	6.3	4.9	6.0	2.9	3.2	3.4	2.3	2.9	3.6	6.0	6.6
1973	6.4	5.7	5.8	4.1	3.1	2.6	2.6	2.8	3.2	5.3	6.6	7.2
1974	5.7	6.2	6.1	5.4	4.0	3.2	3.0	2.2	2.8	4.8	6.5	6.1
1975	5.6	5.6	4.8	4.6	3.2	2.6	2.0	2.0	1.5	4.5	6.3	6.0

20 YR. STATISTICS FOR PACIFIC STATION 30 (45.41N/ 123.96W TO 45.30N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121403

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	27	.	.	.	.	.	.	.	.	.	27
1.00 - 1.49	130	.	.	.	.	.	.	.	.	.	130
1.50 - 1.99	15	.	.	.	.	.	.	.	.	.	15
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	172	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.22 LARGEST HS(M) = 1.86 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 101

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	1	3	1	.	.	.	.	.	.	13
0.50 - 0.99	154	455	280	22	6	5	1	.	.	.	923
1.00 - 1.49	903	1182	1302	154	15	8	.	.	.	.	3564
1.50 - 1.99	1170	946	749	102	18	.	.	.	.	.	2985
2.00 - 2.49	124	734	155	30	3	.	.	.	.	.	1046
2.50 - 2.99	.	174	58	17	.	.	.	.	.	.	249
3.00 - 3.49	.	30	35	5	.	.	.	.	.	.	70
3.50 - 3.99	.	1	11	.	.	.	.	.	.	.	12
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2359	3523	2593	331	42	13	1	0	0	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 5189

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	6	5	.	.	.	.	.	.	.	12
0.50 - 0.99	53	580	1255	400	181	70	51	1	46	.	2637
1.00 - 1.49	66	1192	5208	3193	1297	390	95	18	.	.	11459
1.50 - 1.99	37	484	3891	4733	3507	1813	213	59	5	.	14742
2.00 - 2.49	17	203	1091	3196	4635	2838	576	87	11	.	12654
2.50 - 2.99	.	128	272	1013	4163	4478	1295	75	8	.	11432
3.00 - 3.49	.	44	181	480	2257	5427	1972	154	5	.	10520
3.50 - 3.99	.	3	128	171	1018	4140	2619	171	6	.	8256
4.00 - 4.49	.	.	47	88	328	2727	2845	285	.	.	6320
4.50 - 4.99	.	.	3	25	123	1067	2455	290	1	.	3963
5.00 +	.	.	.	6	66	528	3720	1228	1	.	5549
TOTAL	174	2640	12081	13305	17575	23478	15841	2368	82	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51184

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	13	17	.	.	.	.	.	.	.	0
0.50 - 0.99	.	13	17	.	.	.	.	.	.	.	30
1.00 - 1.49	5	99	95	13	.	.	.	.	.	.	212
1.50 - 1.99	30	58	99	87	17	.	.	.	.	.	291
2.00 - 2.49	3	66	148	73	80	6	.	.	.	.	376
2.50 - 2.99	.	71	159	124	195	46	5	.	.	.	600
3.00 - 3.49	.	17	124	106	172	99	6	1	.	.	525
3.50 - 3.99	.	3	83	92	147	148	35	.	.	.	508
4.00 - 4.49	.	.	22	42	106	142	30	.	.	.	342
4.50 - 4.99	.	.	1	15	107	63	25	.	.	.	211
5.00 +	.	.	.	1	46	112	49	6	.	.	214
TOTAL	38	327	748	553	870	616	150	7	0	0	

MEAN HS(M) = 3.18 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 1949

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	1	11	.	.	.	.	.	.	.	.	12
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	1	.	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	17	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.79 LARGEST HS(M) = 3.35 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 17

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

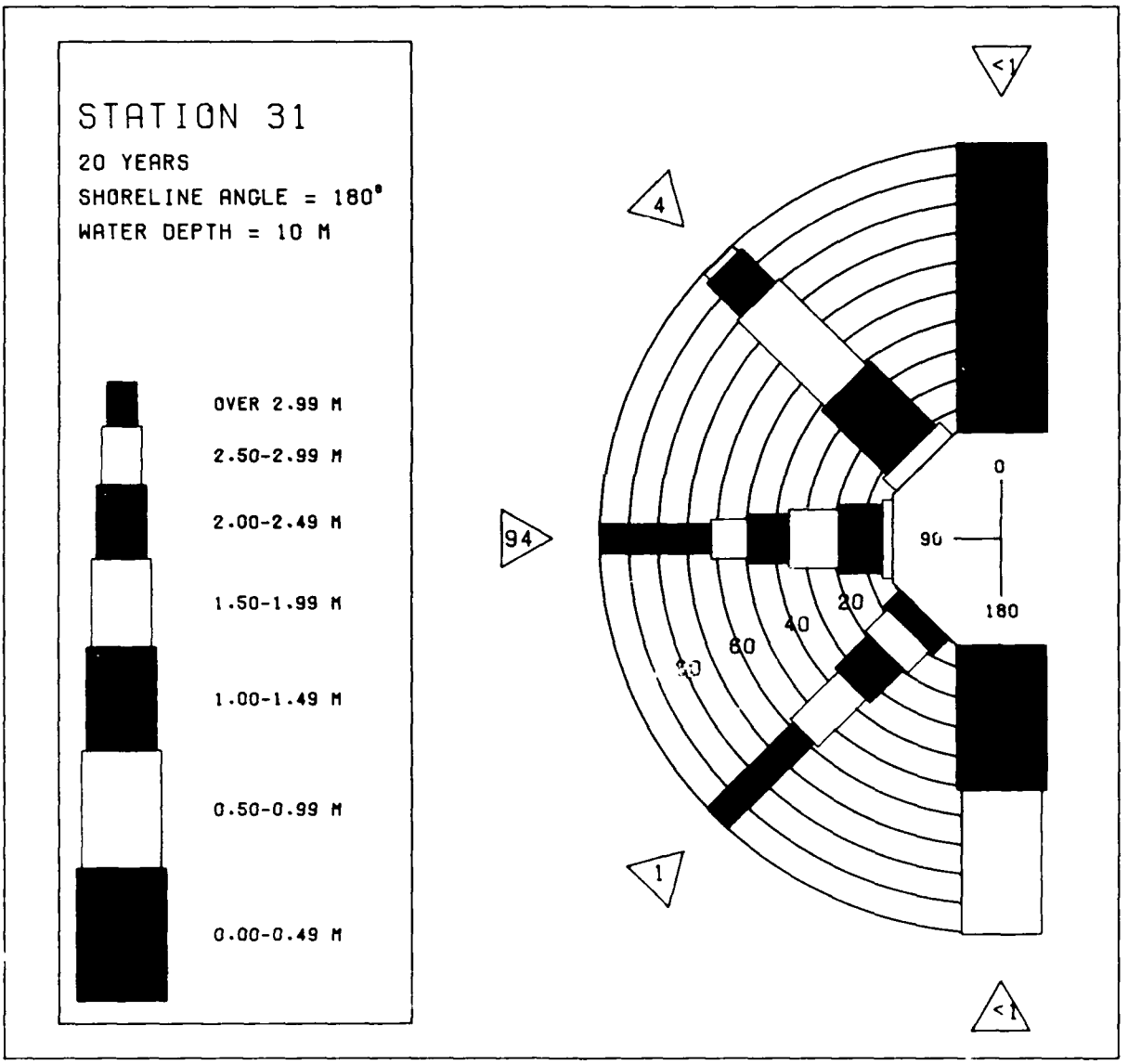
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 31 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.16N/123.98W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1										1
0.50 - 0.99	23	104	155	42	18	7	5	.	4	.	358
1.00 - 1.49	111	247	660	336	131	39	9	1	.	.	1534
1.50 - 1.99	125	150	473	492	354	181	21	5	.	.	1801
2.00 - 2.49	14	100	139	330	471	284	57	8	1	.	1404
2.50 - 2.99	.	37	48	115	435	452	130	7	.	.	1224
3.00 - 3.49	.	9	34	59	242	552	197	15	.	.	1108
3.50 - 3.99	.	.	22	26	116	428	265	17	.	.	874
4.00 - 4.49	.	.	7	13	43	286	287	28	.	.	664
4.50 - 4.99	.	.	.	4	23	113	248	29	.	.	417
5.00 +	.	.	.	.	11	64	376	123	5	0	574
TOTAL	274	647	1538	1417	1844	2406	1595	233	5	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.29 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 31 (45.30N/ 123.96W TO 45.18N/ 123.98W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.2	2.7	2.4	1.8	1.5	1.4	1.6	2.5	3.1	3.6	2.5
1957	2.7	2.9	3.5	2.7	2.0	1.5	1.3	1.2	1.8	2.7	3.7	4.2	2.5
1958	5.0	4.3	3.1	3.4	2.0	1.4	1.6	1.5	1.9	2.8	3.4	4.4	2.9
1959	4.2	3.7	2.9	2.7	2.0	1.5	1.6	1.4	2.0	2.9	3.0	4.1	2.7
1960	3.7	4.0	2.6	2.7	2.1	1.6	1.4	1.5	1.5	3.0	3.2	4.2	2.7
1961	4.3	4.0	3.5	2.7	2.2	1.7	1.2	1.1	1.7	2.9	3.5	3.6	2.7
1962	3.3	3.1	2.9	2.4	1.7	1.7	1.3	1.7	1.7	3.2	4.1	4.1	2.6
1963	3.3	4.1	3.1	2.3	1.8	1.9	1.4	1.0	2.0	3.6	3.8	4.1	2.7
1964	4.7	3.2	3.0	2.6	1.9	1.7	1.7	1.7	1.8	2.5	3.7	3.9	2.7
1965	3.7	3.2	2.8	2.9	2.0	2.0	1.5	1.2	1.5	3.0	3.3	4.3	2.6
1966	4.5	3.5	4.2	3.1	2.2	1.5	1.5	1.5	1.9	2.7	2.9	3.9	2.9
1967	3.8	2.6	2.6	2.4	1.4	1.3	1.4	1.3	2.0	2.8	3.6	3.9	2.5
1968	3.5	4.0	3.2	2.2	1.5	1.5	1.4	1.4	1.5	2.8	3.7	3.6	2.5
1969	2.9	4.5	3.2	3.4	2.1	1.7	1.5	1.4	2.0	3.0	3.7	5.2	2.9
1970	4.2	4.3	3.7	2.6	1.8	1.5	1.6	1.5	1.6	2.7	3.7	4.2	2.8
1971	3.5	3.7	3.9	3.1	2.2	1.8	1.2	1.6	2.0	2.4	3.9	3.6	2.7
1972	4.1	3.7	3.8	3.1	2.1	1.9	1.9	1.5	2.0	2.2	4.5	3.8	2.9
1973	4.4	4.0	3.6	2.5	2.3	2.1	2.0	1.9	2.3	2.9	3.8	5.0	3.1
1974	3.5	3.8	3.7	3.1	2.4	2.0	1.6	1.6	1.7	2.8	4.3	4.3	2.9
1975	3.6	3.3	2.8	2.3	2.0	1.4	1.3	1.2	1.2	2.8	3.8	3.5	2.4
MEAN	3.8	3.7	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 31 (45.30N/ 123.96W TO 45.18N/ 123.98W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.7	5.6	5.3	3.8	2.9	2.4	2.1	2.5	4.7	4.8	5.8
1957	4.1	4.8	5.9	4.8	3.2	2.5	2.3	1.9	3.6	5.6	6.0	6.0
1958	6.7	6.5	5.2	6.5	4.1	2.1	2.7	2.6	3.8	4.7	6.4	6.4
1959	6.3	6.2	4.8	5.2	3.4	2.6	2.2	2.5	3.0	6.1	6.3	6.3
1960	6.5	6.5	4.6	4.7	3.3	3.0	2.4	2.3	2.5	6.2	6.3	6.4
1961	6.6	6.4	5.8	4.1	3.5	3.0	2.0	2.4	3.1	5.0	6.1	5.8
1962	5.3	5.0	4.7	3.9	2.7	3.5	2.1	3.1	2.6	5.6	6.9	6.3
1963	5.7	6.2	5.4	3.3	2.8	3.8	2.2	1.8	3.3	7.3	6.3	6.7
1964	6.7	5.8	5.3	4.6	4.1	2.9	2.8	2.4	3.1	4.2	6.2	6.5
1965	5.9	5.3	4.1	4.6	4.1	3.2	2.3	2.2	2.5	5.6	6.1	6.3
1966	6.2	5.1	5.2	4.5	3.3	3.0	2.2	2.1	3.5	4.4	5.0	6.3
1967	5.9	5.5	4.3	4.6	2.7	2.5	2.0	1.9	3.5	5.2	5.9	6.8
1968	5.7	6.0	5.1	3.7	2.8	2.2	2.5	2.4	3.1	4.6	6.0	6.2
1969	4.7	6.1	5.0	6.0	3.6	2.6	2.6	2.0	3.7	5.4	6.8	7.2
1970	6.8	6.1	6.1	5.0	3.9	2.6	2.3	2.9	2.8	5.2	6.3	6.7
1971	6.2	5.8	6.8	4.6	3.8	2.5	2.3	4.4	3.0	4.3	6.9	5.9
1972	6.2	6.5	5.6	6.2	3.1	3.3	3.7	2.3	3.1	3.7	6.0	7.2
1973	6.6	6.2	6.2	4.3	3.3	3.7	2.9	2.8	3.4	5.1	6.6	7.2
1974	6.3	6.4	6.6	5.5	4.4	3.6	3.0	2.4	2.9	5.2	6.6	6.3
1975	5.9	6.0	5.2	4.6	3.4	2.8	2.1	2.1	1.7	4.6	6.3	6.1

20 YR. STATISTICS FOR PACIFIC STATION 31 (45.30N/ 123.96W TO 45.18N/ 123.98W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	18	.	.	.	.	.	.	.	.	.	18
1.00 - 1.49	71	.	.	.	.	.	.	.	.	.	71
1.50 - 1.99	42	.	.	.	.	.	.	.	.	.	42
2.00 - 2.49	3	.	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	134	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.37 LARGEST HS(M) = 2.16 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 80

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	107	90	13	1	1	.	.	.	.	.	212
1.00 - 1.49	728	270	41	22	.	.	.	.	.	.	1061
1.50 - 1.99	1557	573	25	3	.	.	.	.	.	.	2158
2.00 - 2.49	242	651	42	.	.	.	.	.	.	.	935
2.50 - 2.99	8	213	35	.	.	.	.	.	.	.	256
3.00 - 3.49	.	23	22	.	.	.	.	.	.	.	45
3.50 - 3.99	.	.	3	.	.	.	.	.	.	.	3
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2645	1820	181	26	1	0	0	0	0	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 3.77 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 2739

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	6	.	.	.	.	.	.	.	.	14
0.50 - 0.99	75	740	1375	355	177	71	53	1	46	.	2893
1.00 - 1.49	123	1865	6079	3186	1226	364	90	15	6	.	12948
1.50 - 1.99	128	693	4496	4584	3357	1747	201	56	5	.	15267
2.00 - 2.49	32	366	1211	3259	4524	2785	604	83	10	.	12874
2.50 - 2.99	.	191	234	971	4200	4476	1271	77	10	.	11430
3.00 - 3.49	.	59	155	391	2171	5412	2010	154	5	.	10357
3.50 - 3.99	.	1	90	133	926	4089	2662	179	6	.	8089
4.00 - 4.49	.	.	44	63	237	2667	2828	272	.	.	6111
4.50 - 4.99	.	.	1	10	82	1048	2470	319	1	.	3931
5.00 +	.	.	.	.	41	395	3617	1238	.	.	5291
TOTAL	358	3923	13691	12952	16944	23054	15806	2394	83	0	

MEAN HS(M) = 2.74 LARGEST HS(M) = 7.28 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 52155

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	23	128	53	.	.	.	.	.	.	.	204
1.00 - 1.49	11	179	219	41	11	.	.	.	.	.	461
1.50 - 1.99	34	160	256	189	130	6	.	.	.	.	775
2.00 - 2.49	3	85	174	254	272	87	3	.	.	.	878
2.50 - 2.99	.	68	188	231	287	155	10	1	.	.	940
3.00 - 3.49	.	11	148	154	326	256	65	.	.	.	960
3.50 - 3.99	.	1	73	80	179	308	53	1	.	.	695
4.00 - 4.49	.	.	17	32	135	181	78	3	.	.	446
4.50 - 4.99	.	.	1	13	70	106	71	5	.	.	266
5.00 +				3	34	77	82	1	.	.	197
TOTAL	71	632	1129	997	1444	1176	362	11	0	0	

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.38 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 3418

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	11	.	.	.	.	.	.	.	.	12
1.00 - 1.49	10	18	.	.	.	.	.	.	.	.	28
1.50 - 1.99	6	15	1	.	.	.	.	.	.	.	22
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	17	57	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 47

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

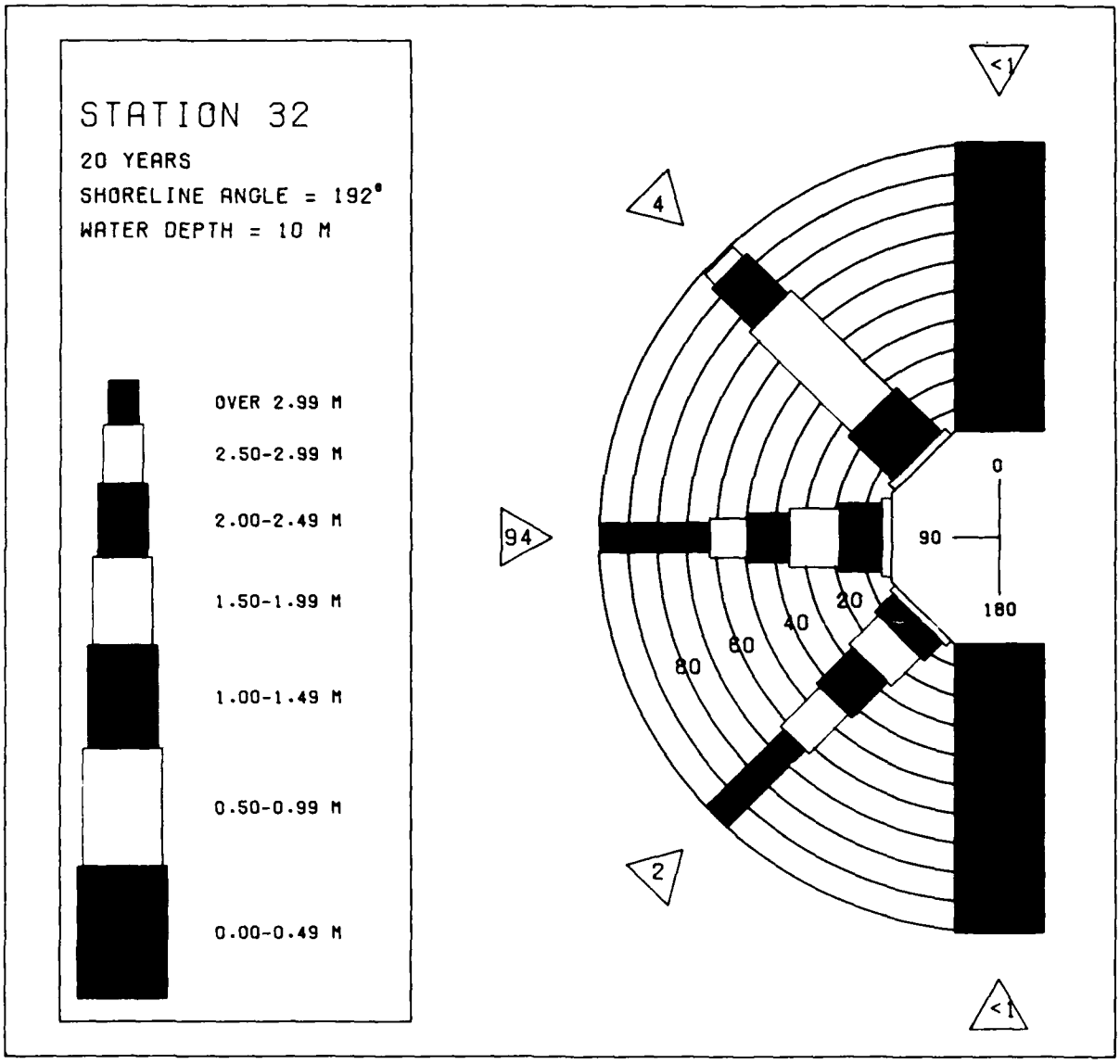
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.47 LARGEST HS(M) = 0.47 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 32 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.18N/123.98W LAT. LON. END= 45.06N/124.01W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	22	97	144	35	17	7	5	.	4	.	331
1.00 - 1.49	94	233	633	324	123	36	9	1	.	.	1453
1.50 - 1.99	176	144	478	477	348	175	20	5	.	.	1823
2.00 - 2.49	28	111	142	351	479	287	60	8	1	.	1467
2.50 - 2.99	.	47	45	120	448	463	128	7	1	.	1259
3.00 - 3.49	.	9	32	54	249	556	207	15	.	.	1132
3.50 - 3.99	.	.	16	21	110	439	271	18	.	.	875
4.00 - 4.49	.	.	6	9	37	284	290	27	.	.	653
4.50 - 4.99	.	.	.	2	15	115	254	32	.	.	418
5.00 +	.	.	.	.	7	47	369	124	.	.	547
TOTAL	320	641	1496	1393	1833	2419	1613	237	6	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.28 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.2	3.2	2.8	2.5	1.9	1.5	1.4	1.6	2.5	3.1	3.5	2.5
1957	2.7	2.9	3.5	2.7	2.0	1.5	1.4	1.3	1.8	2.7	3.7	4.2	2.5
1958	4.9	4.2	3.1	3.4	2.0	1.4	1.7	1.5	1.9	2.8	3.4	4.3	2.9
1959	4.2	3.7	2.9	2.7	2.1	1.5	1.7	1.4	2.0	2.9	3.1	4.0	2.7
1960	3.6	4.0	2.6	2.7	2.1	1.7	1.5	1.5	1.5	3.1	3.9	4.1	2.7
1961	4.2	3.9	3.4	2.8	2.3	1.7	1.3	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.2	3.1	2.9	2.4	1.7	1.7	1.3	1.7	1.7	3.3	4.1	4.0	2.6
1963	3.2	3.9	3.1	2.3	1.8	1.9	1.4	1.0	2.0	3.6	3.8	4.0	2.7
1964	4.6	3.3	3.0	2.7	2.0	1.7	1.8	1.8	1.8	2.5	3.7	3.8	2.7
1965	3.7	3.2	2.8	2.9	2.0	2.1	1.5	1.2	1.6	3.0	3.3	4.3	2.6
1966	4.4	3.2	3.2	2.1	2.3	1.5	1.5	1.5	1.9	2.7	2.8	3.8	2.6
1967	3.8	2.9	2.8	2.4	1.4	1.3	1.5	1.3	2.0	2.8	3.6	3.9	2.5
1968	3.4	3.8	3.2	2.3	1.5	1.5	1.4	1.4	1.5	2.8	3.7	3.5	2.5
1969	2.8	4.5	3.2	3.4	2.1	1.7	1.6	1.4	2.0	3.0	3.7	5.1	2.9
1970	4.1	4.3	3.7	2.7	1.9	1.6	1.7	1.6	1.6	2.7	3.7	4.2	2.8
1971	3.4	3.6	3.9	3.1	2.2	1.8	1.2	1.6	2.1	2.4	3.9	3.6	2.7
1972	4.1	3.6	3.7	3.2	2.2	2.0	1.9	1.5	2.0	2.2	4.5	3.7	2.9
1973	4.3	4.0	3.6	2.6	2.3	2.1	2.1	2.0	2.3	3.0	3.8	4.9	3.1
1974	3.4	3.8	3.6	3.1	2.4	2.1	1.6	1.6	1.7	2.8	4.3	4.2	2.9
1975	3.6	3.3	2.8	2.4	2.1	1.4	1.4	1.3	1.2	2.8	3.8	3.5	2.4
MEAN	3.8	3.6	3.2	2.7	2.0	1.7	1.6	1.5	1.8	2.8	3.7	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.7	5.7	5.5	3.9	2.9	2.6	2.2	2.6	4.8	4.7	5.7
1957	4.2	5.0	5.7	4.8	3.2	2.5	2.5	1.9	3.5	5.8	6.1	6.0
1958	6.6	6.4	5.2	6.4	4.2	2.2	2.9	2.6	3.9	4.8	6.4	6.3
1959	6.3	6.2	4.8	5.3	3.4	2.6	2.4	2.6	3.0	6.1	6.3	6.4
1960	6.4	6.4	4.6	4.8	3.4	3.0	2.6	2.3	2.6	6.3	6.3	6.5
1961	6.6	6.3	5.7	4.2	3.6	3.1	2.1	2.4	3.1	5.1	6.1	5.9
1962	5.1	4.9	4.8	3.9	2.8	3.6	2.4	3.2	5.0	5.8	6.9	6.0
1963	5.3	6.1	5.5	3.4	2.8	3.9	2.4	1.9	3.3	7.3	6.4	6.6
1964	6.6	5.7	5.3	4.6	4.2	3.0	2.8	2.5	3.1	4.3	6.3	6.3
1965	5.8	5.4	4.1	4.8	4.1	3.3	2.4	2.3	2.6	5.5	6.1	6.3
1966	6.1	5.2	5.1	4.4	3.4	3.0	2.3	2.1	3.5	4.4	5.0	6.3
1967	5.8	5.5	4.4	4.8	2.7	2.6	2.1	1.9	3.5	5.2	6.0	6.7
1968	5.5	6.0	5.0	3.7	2.8	2.3	2.5	2.4	3.1	4.5	6.0	6.1
1969	4.6	6.1	5.0	6.0	3.7	2.5	2.6	2.0	3.8	5.6	6.6	7.0
1970	6.7	6.1	6.0	4.9	2.9	2.7	2.5	3.0	2.9	5.4	6.3	6.7
1971	6.2	5.6	6.8	4.7	3.8	2.5	2.4	4.5	3.1	4.3	6.8	6.1
1972	6.2	6.4	5.4	6.1	3.2	3.4	3.7	2.4	3.0	3.8	6.0	7.2
1973	6.5	6.1	6.2	4.3	3.3	3.7	3.0	2.8	3.4	5.3	6.6	7.2
1974	6.1	6.3	6.5	5.6	4.5	3.6	3.1	2.7	3.0	5.2	6.6	6.2
1975	6.0	6.0	5.1	4.7	3.4	2.9	2.1	2.2	1.7	4.7	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0 LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	29	.	.	.	.	.	.	.	.	.	29
1.00 - 1.49	270	.	.	.	.	.	.	.	.	.	270
1.50 - 1.99	290	23	.	.	.	.	.	.	.	.	313
2.00 - 2.49	22	6	.	.	.	.	.	.	.	.	28
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	611	29	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.52 LARGEST HS(M) = 2.50 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 376

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	1	.	.	.	.	.	.	.	.	6
0.50 - 0.99	135	316	148	10	8	3	1	.	.	.	621
1.00 - 1.49	657	891	537	88	10	6	.	.	.	.	2189
1.50 - 1.99	1281	836	188	44	10	.	.	.	.	.	2359
2.00 - 2.49	195	797	114	.	1	.	.	.	.	.	1107
2.50 - 2.99	.	224	47	5	.	.	.	.	.	.	276
3.00 - 3.49	.	27	37	3	.	.	.	.	.	.	67
3.50 - 3.99	.	1	6	.	.	.	.	.	.	.	7
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2273	3092	1078	150	29	9	1	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 3.80 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3885

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	1	5	1	.	.	.	.	.	.	14
0.50 - 0.99	63	643	1327	371	172	68	51	1	46	.	2742
1.00 - 1.49	73	1368	5751	3174	1262	383	92	17	.	.	12120
1.50 - 1.99	58	532	4418	4642	3459	1772	208	56	5	.	15150
2.00 - 2.49	13	213	1168	3324	4548	2025	562	82	10	.	12745
2.50 - 2.99	.	136	260	1047	4226	4421	1291	78	10	.	11469
3.00 - 3.49	.	46	181	473	2304	5462	1962	150	5	.	10583
3.50 - 3.99	.	1	126	159	995	4151	2647	165	6	.	8250
4.00 - 4.49	.	.	46	78	309	2751	2854	287	.	.	6325
4.50 - 4.99	.	.	1	23	111	1081	2443	306	1	.	3966
5.00 +	.	.	.	3	58	503	3766	1228	.	.	5558
TOTAL	207	2947	13283	13295	17444	23417	15876	2370	83	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51989

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	32	20	.	.	.	.	.	.	.	52
1.00 - 1.49	10	107	109	15	.	.	.	.	.	.	241
1.50 - 1.99	29	87	126	92	23	.	.	.	.	.	357
2.00 - 2.49	3	59	160	119	114	17	.	.	.	.	472
2.50 - 2.99	.	70	157	135	215	59	5	.	.	.	641
3.00 - 3.49	.	15	128	114	177	126	11	1	.	.	572
3.50 - 3.99	.	3	78	94	179	186	41	.	.	.	581
4.00 - 4.49	.	.	23	44	119	131	29	.	.	.	346
4.50 - 4.99	.	.	.	10	90	80	30	1	.	.	211
5.00 +	.	.	.	1	47	104	58	5	.	.	215
TOTAL	42	373	801	624	964	703	174	7	0	0	

MEAN HS(M) = 3.11 LARGEST HS(M) = 6.69 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2171

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	3	6	.	.	.	.	.	.	.	.	9
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	20	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.78 LARGEST HS(M) = 3.20 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 19

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

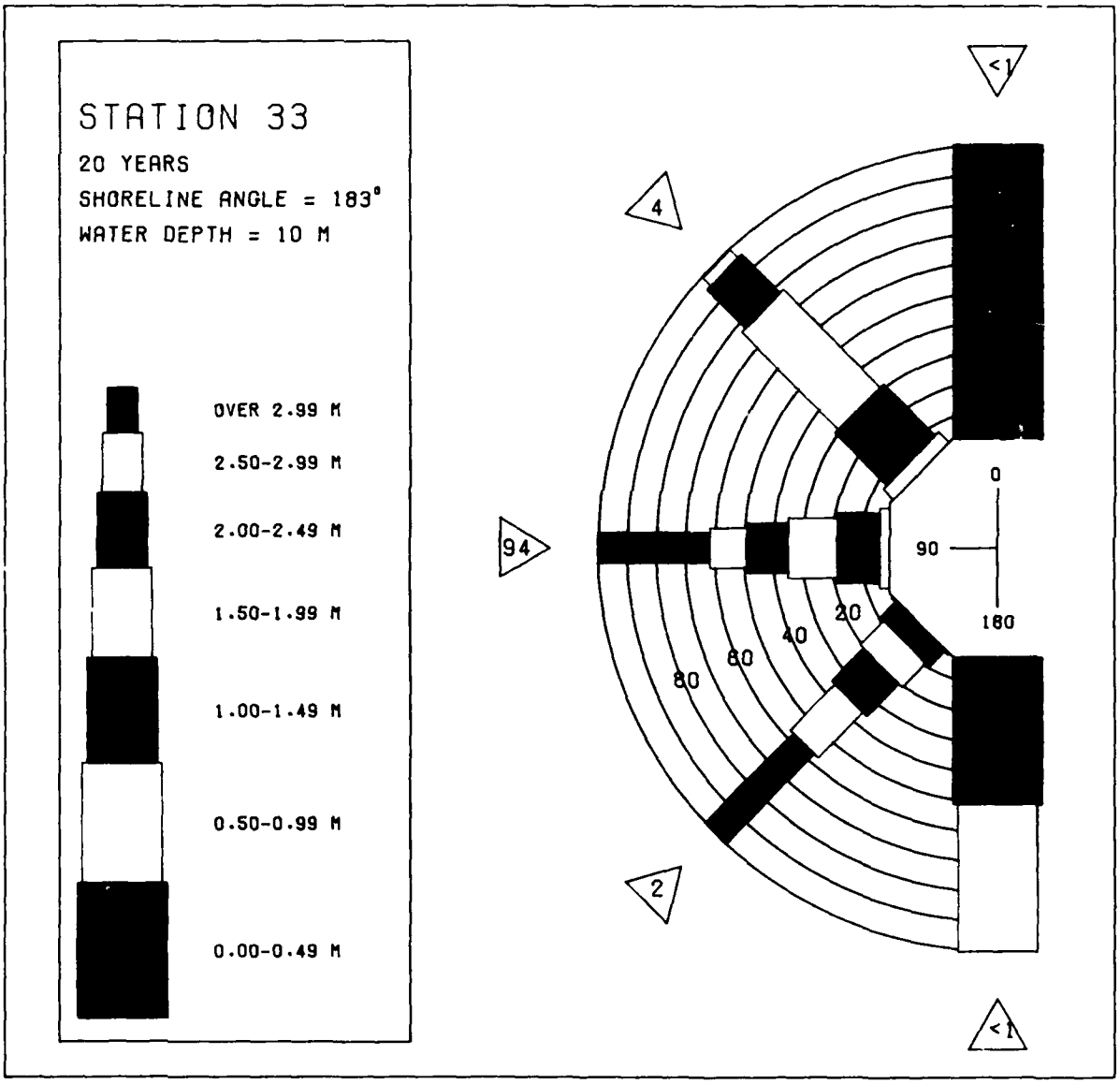
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 33 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	22	99	149	38	18	7	5	.	4	.	342
1.00 - 1.49	101	237	639	327	127	39	9	1	.	.	1480
1.50 - 1.99	166	148	473	477	349	177	20	5	.	.	1815
2.00 - 2.49	23	108	144	344	466	284	56	8	1	.	1434
2.50 - 2.99	.	43	46	118	444	448	129	7	1	.	1236
3.00 - 3.49	.	9	34	59	248	558	197	15	.	.	1120
3.50 - 3.99	.	.	21	25	117	433	268	16	.	.	680
4.00 - 4.49	.	.	7	12	42	288	289	28	.	.	665
4.50 - 4.99	.	.	.	3	20	116	247	30	.	.	416
5.00 +	.	.	.	.	10	60	382	123	6	0	575
TOTAL	312	644	1513	1403	1841	2410	1601	233	6	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.29 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.2	2.7	2.4	1.8	1.5	1.4	1.6	2.5	3.1	3.5	2.6
1957	3.7	3.6	3.5	2.7	2.0	1.5	1.4	1.3	1.8	2.7	3.7	4.2	2.5
1958	5.0	4.2	3.1	3.4	2.0	1.4	1.7	1.5	1.9	2.8	3.4	4.4	2.9
1959	4.2	3.7	2.9	2.7	2.1	1.5	1.7	1.4	2.0	2.9	3.1	4.1	2.7
1960	3.7	4.0	2.6	2.7	2.1	1.7	1.5	1.5	1.5	3.1	3.9	4.2	2.7
1961	4.3	4.0	3.5	2.7	2.3	1.7	1.3	1.2	1.7	3.0	3.5	3.6	2.7
1962	3.3	3.1	2.9	2.4	1.7	1.7	1.3	1.7	1.7	3.3	4.1	4.1	2.6
1963	3.3	4.1	3.1	2.3	1.8	1.9	1.4	1.0	2.0	3.6	3.8	4.0	2.7
1964	4.7	3.3	3.0	2.7	1.9	1.7	1.8	1.7	1.8	2.5	3.7	3.9	2.7
1965	3.7	3.2	2.8	2.9	2.0	1.7	1.5	1.2	1.6	3.0	3.3	4.3	2.6
1966	4.5	3.2	3.2	2.1	2.2	1.5	1.5	1.5	1.9	2.7	2.9	3.9	2.6
1967	3.8	2.9	2.8	2.4	1.4	1.3	1.5	1.3	2.0	2.8	3.6	3.9	2.5
1968	3.5	4.0	3.2	2.2	1.5	1.5	1.4	1.4	1.5	2.8	3.7	3.6	2.5
1969	2.9	4.5	3.2	3.4	2.1	1.7	1.5	1.4	2.0	3.0	3.7	5.2	2.9
1970	4.1	4.3	3.7	2.6	1.9	1.6	1.7	1.5	1.6	2.7	3.7	4.2	2.8
1971	3.5	3.7	3.9	3.1	2.2	1.8	1.2	1.6	2.0	2.4	3.9	3.6	2.7
1972	4.1	3.6	3.8	3.1	2.1	2.0	1.9	1.5	2.0	2.2	4.6	3.8	2.9
1973	4.4	4.0	3.6	2.6	2.3	2.1	2.1	1.9	2.3	2.9	3.8	5.0	3.1
1974	3.5	3.8	3.7	3.1	2.4	2.1	1.6	1.6	1.7	2.8	4.3	4.3	2.9
1975	3.6	3.3	2.8	2.3	2.1	1.4	1.4	1.2	1.2	2.8	3.8	3.5	2.4
MEAN	3.8	3.7	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.7	5.7	5.3	3.8	2.9	2.6	2.1	2.6	4.7	4.7	5.8
1957	4.2	4.9	5.8	4.8	3.2	2.5	2.4	1.9	3.6	5.7	6.0	6.0
1958	6.7	6.5	5.2	6.5	4.1	2.2	2.8	2.6	3.9	4.7	6.4	6.4
1959	6.3	6.2	4.8	5.2	3.4	2.6	2.3	2.5	3.0	6.1	6.3	6.3
1960	6.5	6.5	4.6	4.8	3.3	3.0	2.5	2.3	2.5	6.3	6.3	6.4
1961	6.9	6.4	5.8	4.2	3.5	3.1	2.1	2.4	3.1	5.0	6.1	5.8
1962	5.3	4.9	4.8	3.9	2.7	3.5	2.3	3.1	5.0	5.7	6.9	6.3
1963	5.6	6.2	5.5	3.3	2.8	3.8	2.4	1.9	3.3	7.3	6.3	6.7
1964	6.7	5.8	5.3	4.6	4.1	3.0	2.8	2.5	3.1	4.2	6.3	6.4
1965	5.9	5.3	4.1	4.7	4.1	3.3	2.4	2.2	2.5	5.6	6.1	6.3
1966	6.2	5.2	5.2	4.5	3.3	3.0	2.3	2.1	3.5	4.4	5.0	6.3
1967	5.9	5.5	4.3	4.7	2.7	2.6	2.1	1.9	3.5	5.2	5.9	6.8
1968	5.6	6.0	5.1	3.7	2.8	2.3	2.5	2.4	3.1	4.6	6.0	6.2
1969	4.7	6.1	5.0	6.0	3.7	2.6	2.6	2.0	3.7	5.5	6.8	7.1
1970	6.8	6.1	6.1	5.0	2.9	2.7	2.5	3.0	2.8	5.3	6.3	6.7
1971	6.2	5.7	6.8	4.6	3.8	2.5	2.4	4.5	3.0	4.3	6.9	6.0
1972	6.2	6.5	5.5	6.2	3.1	3.3	3.7	2.4	3.0	3.7	6.0	7.2
1973	6.6	6.1	6.2	4.3	3.3	3.7	3.0	2.8	3.4	5.2	6.6	7.2
1974	6.2	6.4	6.6	5.6	4.5	3.6	3.1	2.6	2.9	5.2	6.6	6.3
1975	5.9	6.0	5.2	4.7	3.4	2.9	2.1	2.2	1.7	4.6	6.3	6.1

20 YR. STATISTICS FOR PACIFIC STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	85.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	17	.	.	.	.	.	.	.	.	.	17
1.00 - 1.49	172	.	.	.	.	.	.	.	.	.	172
1.50 - 1.99	200	17	.	.	.	.	.	.	.	.	217
2.00 - 2.49	.	13	.	.	.	.	.	.	.	.	13
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	389	30	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 246

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	1	1	.	.	.	.	.	.	3
0.50 - 0.99	116	71	37	3	.	.	.	.	.	.	227
1.00 - 1.49	653	304	39	13	.	.	.	.	.	.	1009
1.50 - 1.99	1675	675	32	1	.	.	.	.	.	.	2383
2.00 - 2.49	154	944	15	.	.	.	.	.	.	.	1113
2.50 - 2.99	.	215	13	.	.	.	.	.	.	.	228
3.00 - 3.49	.	27	15	.	.	.	.	.	.	.	42
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2599	2236	152	18	0	0	0	0	0	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 3.50 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 2932

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	8	.	.	.	3	.	.	.	.	16
0.50 - 0.99	58	573	1254	323	95	59	42	.	30	.	2434
1.00 - 1.49	112	1610	5470	2951	1175	331	71	15	5	.	11740
1.50 - 1.99	100	799	4324	4659	3206	1536	201	49	1	.	14755
2.00 - 2.49	30	342	1185	3437	4527	2727	520	73	10	.	12851
2.50 - 2.99	.	145	244	1112	4291	4216	1235	68	13	.	11324
3.00 - 3.49	.	66	104	345	2224	5426	1858	160	5	.	10198
3.50 - 3.99	.	1	104	119	1023	4488	2614	176	6	.	8731
4.00 - 4.49	.	.	35	68	225	2780	2842	280	1	.	6231
4.50 - 4.99	.	.	3	6	92	1141	2583	314	.	.	4139
5.00 +	.	.	.	1	27	453	4344	1444	5	.	6274
TOTAL	300	3421	12731	13021	16885	23160	16520	2579	76	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51858

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	25	119	47								191
1.00 - 1.49	11	136	263	32	17						459
1.50 - 1.99	39	121	282	198	126	13					779
2.00 - 2.49	3	85	183	244	284	70	1				870
2.50 - 2.99		61	186	207	301	162	17				934
3.00 - 3.49		8	130	145	308	263	63				917
3.50 - 3.99		3	70	82	212	256	73				706
4.00 - 4.49			11	27	114	196	77	6			431
4.50 - 4.99				18	66	85	71	5			245
5.00 +				1	15	80	77				173
TOTAL	78	533	1172	954	1443	1135	379	11	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 3349

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 0.99	1	23									24
1.00 - 1.49	10	20									30
1.50 - 1.99	1	20	1								22
2.00 - 2.49		6	3								9
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	13	69	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.27 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 54

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

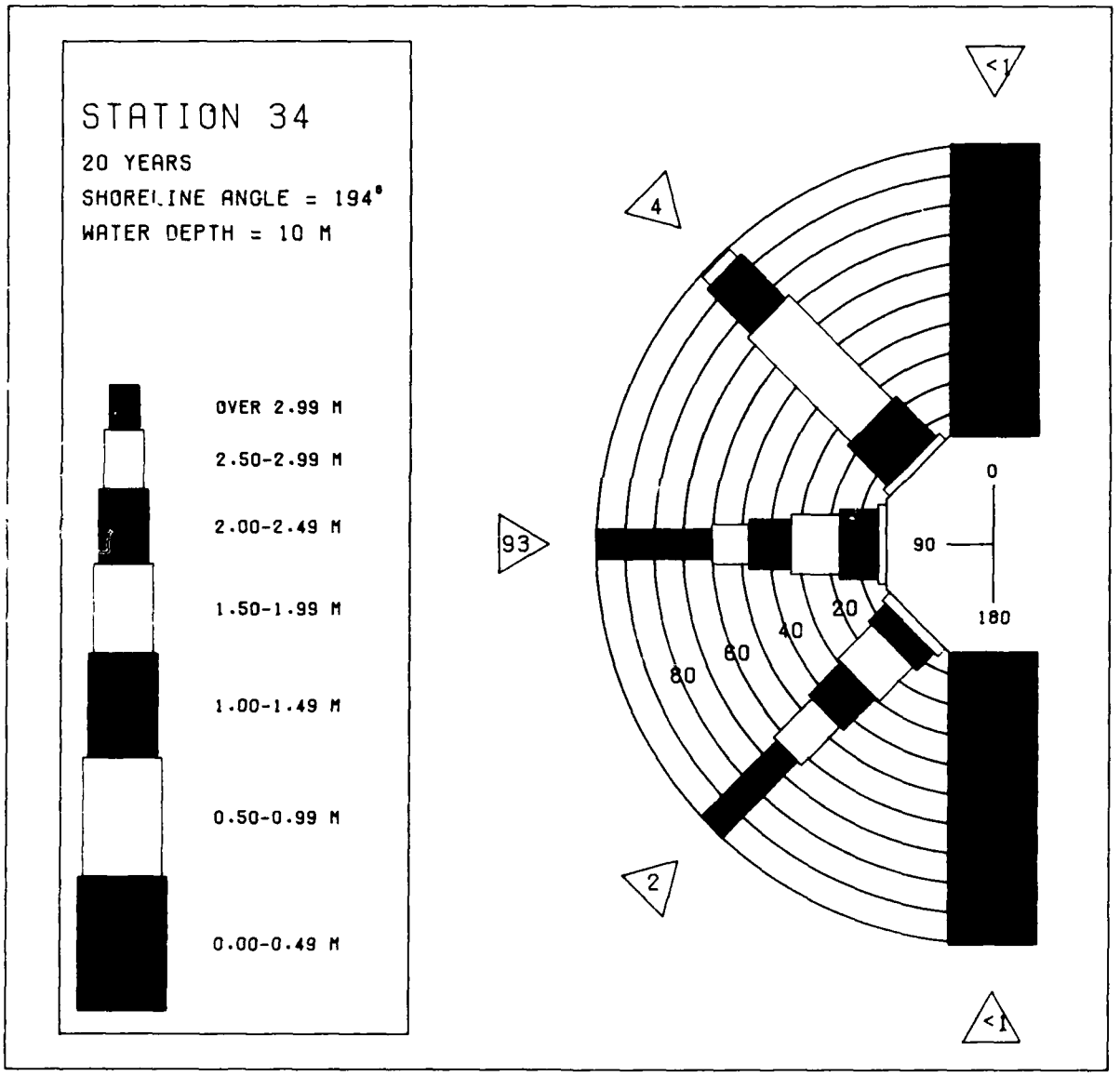
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 34 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49			1								1
0.50 - 0.99	21	78	133	32	9	5	4	1	3		285
1.00 - 1.49	96	207	577	299	119	33	7	1			1339
1.50 - 1.99	201	151	464	485	333	155	20	4			1813
2.00 - 2.49	18	139	138	368	481	279	52	7	1		1483
2.50 - 2.99		42	44	131	459	437	125	6	1		1245
3.00 - 3.49		10	24	49	253	568	193	16			1113
3.50 - 3.99			17	20	123	475	288	17			940
4.00 - 4.49			4	9	34	297	291	28			663
4.50 - 4.99				2	15	122	265	31			435
5.00 +					4	53	442	144	5	0	643
TOTAL	336	627	1402	1395	1830	2424	1687	254	5	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.21 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.3	3.4	2.9	2.5	1.9	1.6	1.5	1.7	2.6	3.2	3.6	2.6
1957	2.7	3.0	3.6	2.8	2.1	1.5	1.5	1.3	1.8	2.8	3.9	4.3	2.6
1958	5.0	4.2	3.3	3.6	2.1	1.5	1.8	1.6	1.9	2.8	3.5	4.3	3.0
1959	4.2	3.8	3.0	2.8	2.1	1.5	1.7	1.5	2.1	2.9	3.2	4.1	2.8
1960	3.7	4.2	2.7	2.8	2.1	1.7	1.6	1.6	1.6	3.1	4.0	4.2	2.8
1961	4.4	4.0	3.5	2.9	2.3	1.8	1.3	1.2	1.8	3.0	3.6	3.7	2.8
1962	3.3	3.3	2.9	2.4	1.7	1.8	1.4	1.7	1.8	3.3	4.2	4.1	2.7
1963	3.4	3.9	3.2	2.3	1.8	2.0	1.5	1.1	2.0	3.6	3.8	4.1	2.7
1964	4.7	3.3	3.1	2.7	2.0	1.7	1.8	1.8	1.8	2.5	3.8	3.8	2.8
1965	3.7	3.3	2.9	2.9	2.1	2.1	1.6	1.2	1.6	3.1	3.3	4.5	2.7
1966	4.5	3.3	3.2	2.2	2.3	1.5	1.6	1.6	2.0	2.7	2.9	3.9	2.6
1967	3.8	2.9	2.8	2.5	1.5	1.3	1.5	1.3	2.0	2.9	3.7	3.9	2.5
1968	3.4	3.9	3.3	3.1	1.5	1.9	1.5	1.4	1.5	2.9	3.7	3.5	2.5
1969	2.9	4.6	3.4	3.5	2.6	1.7	1.6	1.4	2.0	3.1	3.8	5.3	3.0
1970	4.1	4.5	3.7	2.7	1.9	1.6	1.7	1.6	1.7	2.8	3.7	4.3	2.9
1971	3.5	3.7	3.9	3.2	2.3	1.9	1.3	1.7	2.1	2.5	3.9	3.7	2.8
1972	4.2	3.7	3.8	3.3	2.3	2.1	2.0	1.6	2.0	2.3	4.7	3.7	3.0
1973	4.4	4.1	3.8	2.7	2.4	2.2	2.2	2.1	2.4	3.0	3.8	5.0	3.2
1974	3.5	3.9	3.8	3.2	2.5	2.1	1.6	1.6	1.8	2.8	4.4	4.3	3.0
1975	3.7	3.4	2.9	2.4	2.2	1.5	1.4	1.3	1.2	2.9	3.8	3.5	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.6	6.0	6.1	4.2	3.1	2.6	2.3	2.6	4.8	4.8	5.8
1957	4.3	5.0	5.8	4.9	3.4	2.5	2.3	1.9	3.5	6.0	6.1	6.0
1958	6.6	6.3	5.4	6.4	4.5	2.1	3.0	2.7	4.0	4.9	6.4	6.7
1959	6.3	6.2	4.9	5.6	3.5	2.7	2.4	2.8	3.1	6.1	6.3	6.4
1960	6.4	6.3	4.5	4.8	3.5	3.0	2.5	2.4	2.6	6.6	6.6	6.5
1961	6.7	6.3	6.1	4.5	3.7	3.2	2.0	2.4	3.1	5.2	6.3	6.0
1962	5.3	5.0	4.6	4.0	2.7	3.7	2.2	3.2	5.2	6.0	6.8	6.0
1963	5.5	6.1	5.7	3.4	2.9	3.9	2.2	2.1	3.5	7.2	6.4	6.7
1964	6.9	5.8	5.2	4.9	4.0	2.7	2.9	2.5	3.0	4.4	6.3	6.7
1965	6.0	5.5	4.6	4.6	4.0	3.6	2.6	2.1	2.4	5.9	6.1	6.3
1966	6.2	5.3	5.3	4.5	3.5	3.0	2.3	2.3	3.6	4.5	4.9	6.2
1967	5.4	5.3	4.2	4.6	2.7	2.5	2.3	1.9	3.8	5.6	6.3	7.0
1968	5.4	6.0	5.2	4.0	2.7	2.2	2.6	2.4	3.3	4.6	6.0	6.1
1969	4.6	6.1	5.3	6.0	3.9	2.4	2.5	2.1	4.1	5.7	6.7	7.0
1970	6.6	6.0	6.2	5.0	3.1	2.6	2.3	3.1	2.9	5.9	6.2	6.9
1971	6.1	5.8	6.9	5.0	3.9	2.6	2.3	4.8	3.0	4.4	6.7	6.2
1972	6.4	6.4	5.6	6.3	3.4	3.7	2.9	2.5	2.9	3.9	6.2	6.8
1973	6.6	6.1	6.2	4.5	3.5	3.7	3.1	2.9	3.6	5.4	6.6	7.2
1974	6.2	6.6	6.5	5.9	4.5	3.6	3.2	2.4	3.3	5.4	6.6	6.2
1975	5.7	5.9	5.4	4.7	3.7	3.0	2.2	2.2	1.7	4.9	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.8
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.3
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES)	89.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	63102409

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	46	.	.	.	.	.	.	.	.	.	46
1.00 - 1.49	592	8	.	.	.	.	.	.	.	.	600
1.50 - 1.99	460	164	.	.	.	.	.	.	.	.	624
2.00 - 2.49	.	30	.	.	.	.	.	.	.	.	30
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1103	203	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 765

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	1	.	.	.	.	.	.	.	2
0.50 - 0.99	133	395	328	22	1	1	1	.	.	.	881
1.00 - 1.49	482	1168	1507	239	41	17	.	.	.	.	3454
1.50 - 1.99	1042	1078	891	157	17	1	.	.	.	.	3186
2.00 - 2.49	53	819	208	71	3	.	.	.	.	.	1154
2.50 - 2.99	.	171	32	46	.	.	.	.	.	.	249
3.00 - 3.49	.	30	39	11	18	.	.	.	.	.	98
3.50 - 3.99	.	.	30	1	20	.	.	.	.	.	51
4.00 - 4.49	.	.	5	.	.	.	.	.	.	.	5
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1710	3661	3041	548	100	19	1	0	0	0	

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.07 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5317

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	8	.	.	.	3	.	.	.	.	16
0.50 - 0.99	39	431	1045	359	100	70	41	.	34	.	2119
1.00 - 1.49	46	908	4431	2907	1214	325	82	15	1	.	9929
1.50 - 1.99	35	458	3680	4662	3336	1640	189	51	5	.	14056
2.00 - 2.49	15	177	992	3436	4714	2754	518	78	8	.	12692
2.50 - 2.99	.	94	266	1040	4260	4283	1196	66	11	.	11216
3.00 - 3.49	.	47	133	444	2250	5410	1895	174	6	.	10359
3.50 - 3.99	.	3	123	154	1131	4416	2765	159	5	.	8756
4.00 - 4.49	.	.	47	102	319	2888	2808	284	1	.	6449
4.50 - 4.99	.	.	1	23	142	1187	2600	319	.	.	4272
5.00 +				6	51	571	4479	1406	5	.	6518
TOTAL	135	2123	10726	13133	17517	23547	16573	2552	76	0	

MEAN HS(M) = 2.89 LARGEST HS(M) = 7.31 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50506

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	17	15	.	.	.	.	.	.	.	38
1.00 - 1.49	5	66	80	8	.	.	.	.	.	.	159
1.50 - 1.99	30	58	95	63	5	.	.	.	.	.	251
2.00 - 2.49	5	61	119	65	68	8	.	.	.	.	326
2.50 - 2.99	.	83	164	116	162	39	.	.	.	.	564
3.00 - 3.49	.	11	143	112	160	83	5	.	.	.	514
3.50 - 3.99	.	3	82	90	152	126	37	.	.	.	490
4.00 - 4.49	.	.	18	53	130	157	25	.	.	.	383
4.50 - 4.99	.	.	.	17	94	56	46	.	.	.	213
5.00 +	.	.	.	1	29	102	34	5	.	.	171
TOTAL	46	299	716	525	800	571	147	5	0	0	

MEAN HS(M) = 3.23 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1830

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	8	11	.	.	.	.	.	.	.	.	19
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	19	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.71 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 22

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

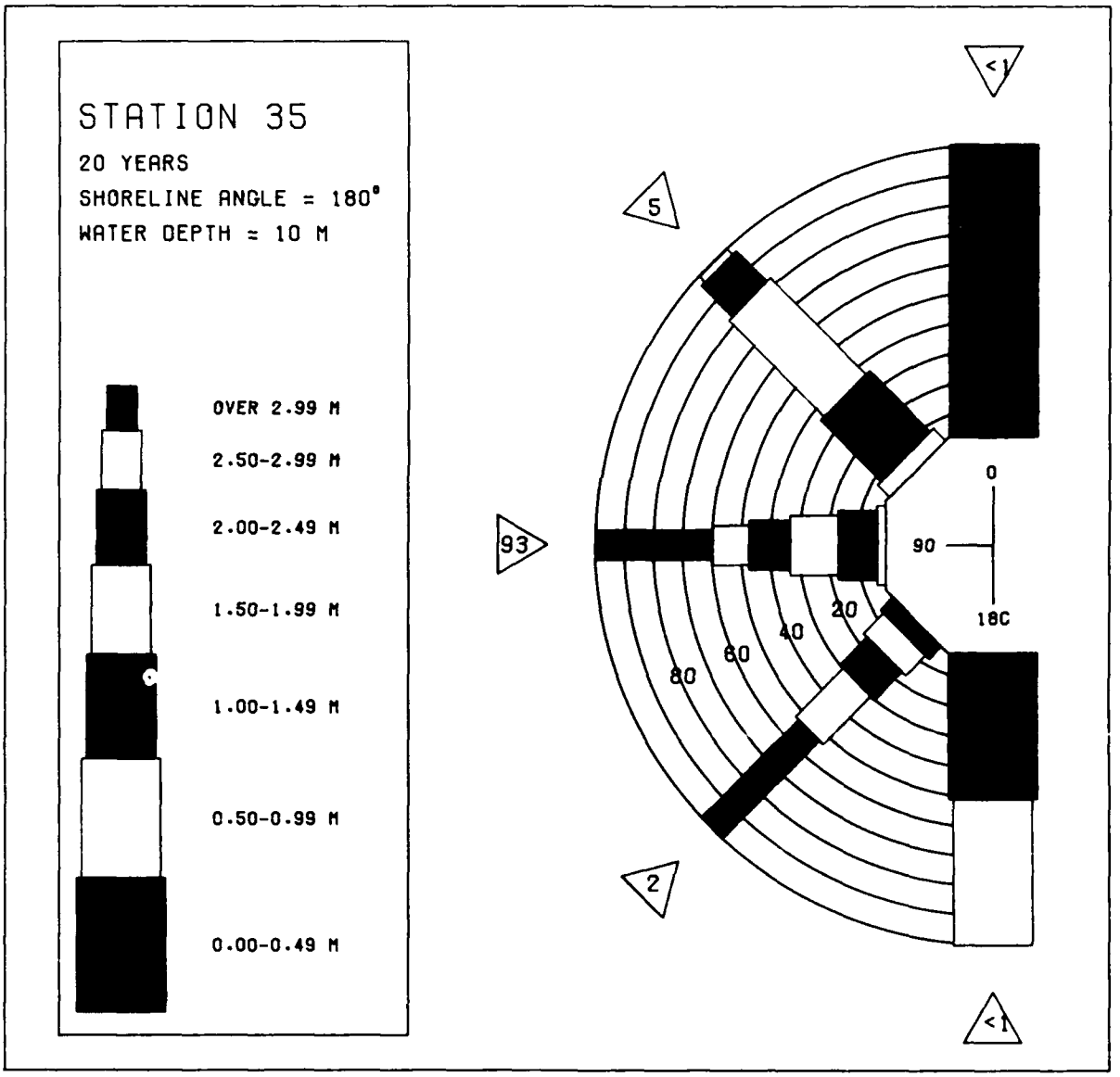
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 35 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.83N/124.05W LAT. LON. END= 44.70N/124.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49			1								1
0.50 - 0.99	22	84	138	38	10	7	4		3		306
1.00 - 1.49	113	215	601	315	125	34	8	1			1412
1.50 - 1.99	157	177	466	488	335	164	18	5			1810
2.00 - 2.49	7	109	132	357	478	276	51	7			1417
2.50 - 2.99		35	46	120	442	432	119	6	1		1201
3.00 - 3.49		9	31	56	242	549	190	17			1094
3.50 - 3.99			23	24	130	454	280	15			926
4.00 - 4.49			7	15	45	304	283	28			682
4.50 - 4.99				4	23	124	264	31			446
5.00 +					8	67	451	141			667
TOTAL	299	629	1445	1417	1838	2411	1668	251	4	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.31 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.3	3.3	2.8	2.5	1.9	1.5	1.4	1.6	2.5	3.2	3.7	2.6
1957	3.8	3.0	3.6	2.8	2.1	1.5	1.4	1.3	1.8	2.8	3.9	4.3	2.6
1958	5.1	4.4	3.9	3.6	2.1	1.4	1.7	1.5	1.9	2.8	3.5	4.4	3.0
1959	4.3	3.8	3.0	2.8	2.1	1.5	1.7	1.5	2.1	2.9	3.2	4.2	2.7
1960	3.7	4.2	3.7	2.8	2.2	1.7	1.5	1.5	1.5	3.1	4.0	4.2	2.8
1961	4.5	4.1	3.6	2.8	2.3	1.8	1.3	1.2	1.7	3.0	3.6	3.7	2.8
1962	3.3	3.3	2.9	2.4	1.7	1.7	1.3	1.7	1.8	3.3	4.2	4.3	2.7
1963	3.4	4.2	3.1	2.3	1.8	2.0	1.4	1.0	2.0	3.7	3.8	4.2	2.7
1964	4.8	3.3	3.1	2.7	1.9	1.7	1.8	1.7	1.8	2.5	3.8	3.9	2.8
1965	3.8	3.3	2.6	2.9	2.0	2.1	1.6	1.2	1.6	3.1	3.4	4.5	2.7
1966	4.6	3.3	3.3	2.1	2.3	1.5	1.6	1.5	2.0	2.7	3.0	4.0	2.7
1967	3.9	2.9	3.9	2.4	1.4	1.3	1.5	1.3	2.0	2.9	3.7	3.9	2.5
1968	3.5	4.0	3.3	2.3	1.5	1.6	1.4	1.4	1.5	2.9	3.8	3.6	2.6
1969	3.0	4.6	3.3	3.5	2.2	1.7	1.5	1.4	2.0	3.1	3.8	5.4	3.0
1970	4.2	4.5	3.8	2.7	1.9	1.6	1.7	1.6	1.6	2.8	3.7	4.3	2.9
1971	3.5	3.8	4.0	3.2	2.2	1.9	1.2	1.6	2.1	2.4	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.3	2.2	2.1	2.0	1.8	2.0	3.3	4.7	3.8	3.0
1973	4.5	4.1	3.7	3.2	2.4	2.2	2.2	2.0	2.3	3.0	3.8	5.0	3.2
1974	3.6	3.9	3.8	3.2	2.5	2.1	1.6	1.6	1.8	2.8	4.3	4.4	3.0
1975	3.7	3.4	2.9	2.4	2.2	1.4	1.4	1.3	1.2	2.9	3.8	3.6	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.6	6.0	5.9	4.0	3.1	2.5	2.3	2.5	4.7	4.8	5.9
1957	4.2	5.1	6.0	4.9	3.5	2.5	2.3	1.9	3.6	5.8	6.0	6.0
1958	6.7	6.5	5.4	6.5	4.3	2.1	2.9	2.6	3.9	4.7	6.4	6.8
1959	6.3	6.2	5.0	5.5	3.5	2.7	2.3	2.8	3.1	6.1	6.3	6.3
1960	6.6	6.4	4.6	4.7	3.4	3.0	2.4	2.3	2.8	6.6	6.5	6.5
1961	6.8	6.4	6.1	4.5	3.6	3.1	1.9	2.4	3.1	5.0	6.3	6.0
1962	5.5	5.2	4.6	4.0	2.8	3.6	2.0	3.1	3.2	6.0	6.9	6.3
1963	6.0	6.2	5.7	3.3	2.9	3.7	2.1	2.0	3.5	7.3	6.5	6.8
1964	7.0	5.9	5.2	4.8	3.9	2.7	2.9	2.4	3.0	4.3	6.3	6.6
1965	6.1	5.4	4.2	4.5	3.9	3.1	2.5	2.1	2.3	6.0	6.1	6.4
1966	6.4	5.2	5.4	4.6	3.4	3.0	2.3	2.2	3.6	4.6	5.0	6.3
1967	5.7	5.4	4.0	4.5	2.7	2.5	2.2	1.9	3.7	5.5	6.2	7.1
1968	6.6	6.0	5.3	3.9	5.7	2.2	2.2	2.4	3.2	4.7	6.5	6.5
1969	4.8	6.2	5.2	6.0	3.8	2.4	2.3	2.0	4.0	5.5	7.0	7.3
1970	6.8	6.1	6.2	5.1	3.0	2.5	2.3	3.0	2.9	5.7	6.3	7.1
1971	6.1	5.9	7.0	4.9	3.8	2.6	2.2	4.7	3.0	4.3	6.9	6.1
1972	6.3	6.5	5.7	6.2	3.2	3.6	3.8	2.4	2.9	3.7	6.2	6.9
1973	6.7	6.1	6.2	4.5	3.4	3.8	3.1	2.8	3.6	5.2	6.6	7.3
1974	6.4	6.5	6.6	5.8	4.3	3.6	3.1	2.4	3.2	5.3	6.6	6.3
1975	5.7	5.7	5.4	4.6	3.7	2.9	2.2	2.2	1.7	4.8	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	97.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	41	.	.	.	.	.	.	.	.	.	41
1.00 - 1.49	537	3	.	.	.	.	.	.	.	.	540
1.50 - 1.99	429	142	.	.	.	.	.	.	.	.	571
2.00 - 2.49	.	25	.	.	.	.	.	.	.	.	25
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1010	171	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 692

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	1	1	.	.	.	.	.	.	3
0.50 - 0.99	136	359	275	18	1	1	1	.	.	.	791
1.00 - 1.49	521	1095	1216	189	23	17	.	.	.	.	3061
1.50 - 1.99	1122	1066	728	107	13	.	.	.	.	.	3036
2.00 - 2.49	56	850	165	17	1	.	.	.	.	.	1089
2.50 - 2.99	.	171	27	20	.	.	.	.	.	.	218
3.00 - 3.49	.	27	37	1	5	.	.	.	.	.	70
3.50 - 3.99	.	.	11	.	13	.	.	.	.	.	24
4.00 - 4.49	.	.	5	.	.	.	.	.	.	.	5
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1836	3568	2465	353	56	18	1	0	0	0	

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.08 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 4861

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	8	.	.	.	3	.	.	.	.	16
0.50 - 0.99	39	450	1088	352	102	68	41	.	34	.	2174
1.00 - 1.49	47	975	4693	2939	1216	319	60	15	1	.	10285
1.50 - 1.99	39	473	3832	4693	3316	1629	191	47	5	.	14225
2.00 - 2.49	15	174	1045	3511	4700	2754	515	78	8	.	12800
2.50 - 2.99	.	97	268	1083	4265	4257	1196	68	11	.	11245
3.00 - 3.49	.	49	124	450	2287	5419	1889	172	6	.	10396
3.50 - 3.99	.	3	138	152	1143	4433	2761	159	5	.	8794
4.00 - 4.49	.	.	46	95	321	2893	2825	282	1	.	6463
4.50 - 4.99	.	.	1	20	138	1189	2583	318	.	.	4249
5.00 +	.	.	.	5	46	566	4503	1413	5	.	6538
TOTAL	140	2226	11243	13300	17534	23530	16584	2552	76	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50974

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	27	15	.	.	.	.	.	.	.	48
1.00 - 1.49	3	63	85	10	.	.	.	.	.	.	161
1.50 - 1.99	32	63	109	63	13	1	.	.	.	.	281
2.00 - 2.49	5	66	126	71	71	8	.	.	.	.	347
2.50 - 2.99	.	83	150	119	169	42	.	.	.	.	563
3.00 - 3.49	.	11	152	111	167	90	6	.	.	.	537
3.50 - 3.99	.	3	77	88	154	147	41	.	.	.	510
4.00 - 4.49	.	.	18	53	121	155	27	.	.	.	374
4.50 - 4.99	.	.	.	18	95	58	44	.	.	.	215
5.00 +	.	.	.	3	32	100	37	5	.	.	177
TOTAL	46	316	732	536	822	601	155	5	0	0	

MEAN HS(M) = 3.21 LARGEST HS(M) = 6.91 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 1893

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	1	.	.	.	.	.	.	.	.	6
1.50 - 1.99	6	13	.	.	.	.	.	.	.	.	19
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	17	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.61 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 20

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

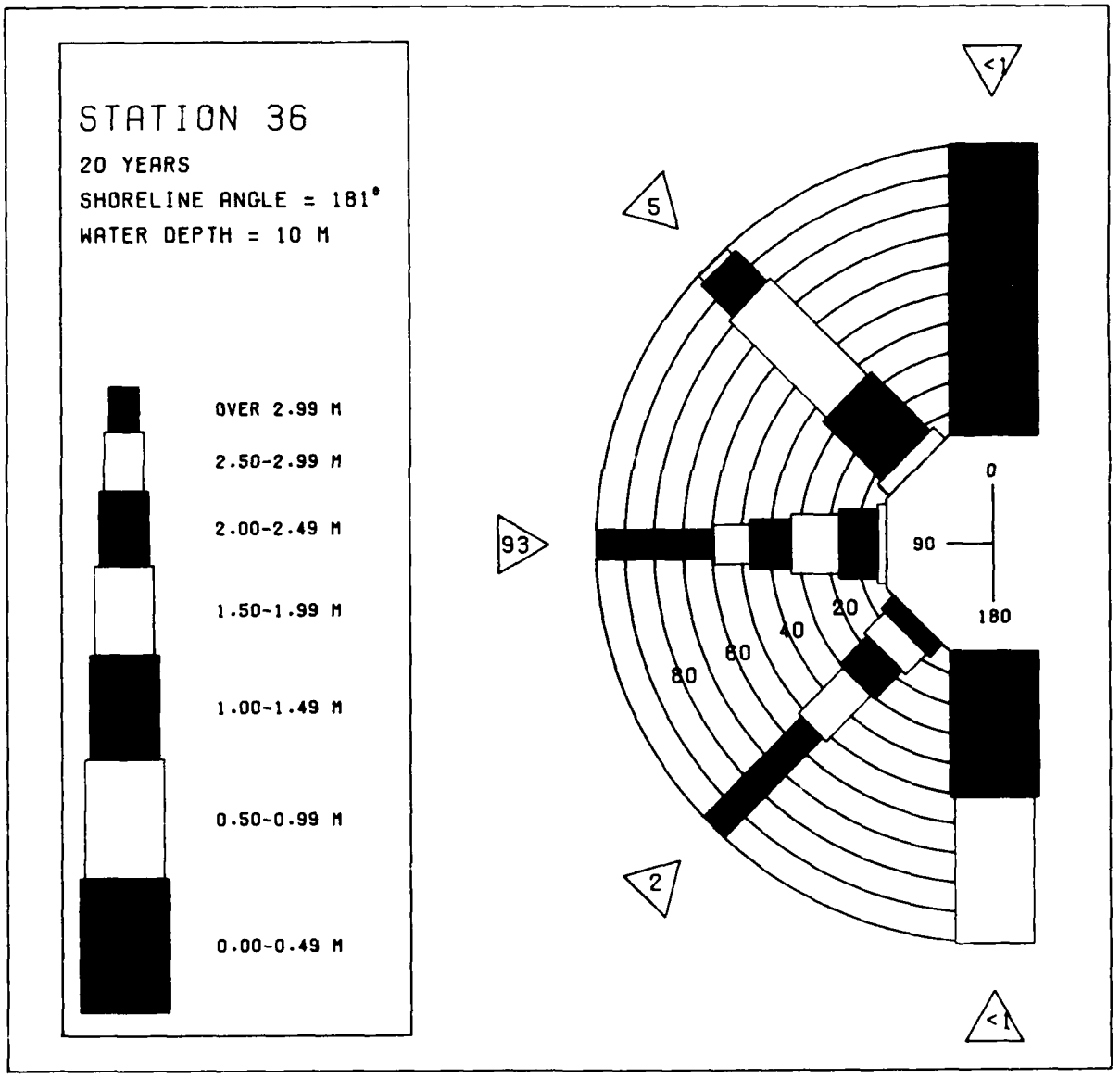
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 36 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49			1								1
0.50 - 0.99	22	83	137	37	10	7	4	.	3	.	303
1.00 - 1.49	111	213	599	313	124	33	8	1	.	.	1402
1.50 - 1.99	163	175	467	486	334	163	19	4	.	.	1811
2.00 - 2.49	7	111	133	360	477	276	51	7	.	.	1422
2.50 - 2.99	.	35	44	122	443	430	119	6	1	.	1200
3.00 - 3.49	.	8	31	56	246	550	189	17	.	.	1097
3.50 - 3.99	.	.	22	24	131	458	280	15	.	.	930
4.00 - 4.49	.	.	7	14	44	304	285	28	.	.	682
4.50 - 4.99	.	.	.	3	23	124	262	31	.	.	443
5.00 +	.	.	.	.	7	66	454	141	.	.	668
TOTAL	303	625	1441	1415	1839	2411	1671	250	4	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.27 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.3	3.3	2.9	2.5	1.9	1.5	1.4	1.6	2.5	3.2	3.7	2.6
1957	2.8	3.0	3.6	2.8	2.1	1.5	1.4	1.3	1.8	2.8	3.9	4.3	2.6
1958	5.1	4.3	3.3	3.6	2.1	1.4	1.7	1.5	1.9	2.8	3.5	4.4	3.0
1959	4.3	3.8	3.0	2.8	2.1	1.5	1.7	1.5	2.1	2.9	3.2	4.2	2.7
1960	3.7	4.2	2.7	2.8	2.2	1.7	1.5	1.5	1.6	3.1	4.0	4.2	2.8
1961	4.5	4.1	3.5	2.8	2.3	1.8	1.3	1.2	1.7	3.0	3.6	3.7	2.8
1962	3.3	3.3	2.9	2.4	1.7	1.7	1.3	1.5	1.8	3.3	4.2	4.3	2.7
1963	3.4	4.1	3.1	2.3	1.8	2.0	1.4	1.0	2.0	3.7	3.8	4.2	2.7
1964	4.8	3.3	3.1	2.7	1.9	1.7	1.8	1.7	1.8	2.5	3.8	3.9	2.8
1965	3.8	3.3	2.9	2.9	2.0	2.1	1.6	1.2	1.6	3.1	3.4	4.5	2.7
1966	4.6	3.3	3.3	2.1	2.3	1.5	1.6	1.6	2.0	2.7	3.0	4.0	2.7
1967	3.9	2.9	2.9	2.4	1.4	1.3	1.5	1.3	2.0	2.9	3.7	4.0	2.5
1968	3.5	4.0	3.3	2.3	1.5	1.6	1.4	1.4	1.5	2.9	3.8	3.6	2.6
1969	3.0	4.6	3.3	3.5	2.2	1.7	1.5	1.4	2.0	3.1	3.8	5.4	3.0
1970	4.2	4.5	3.8	2.7	2.6	1.6	1.7	1.6	1.6	2.8	3.7	4.3	2.9
1971	3.5	3.8	4.0	3.2	2.3	1.9	1.3	1.6	2.1	2.5	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.3	2.2	2.1	2.0	1.5	2.0	2.3	4.7	3.8	3.0
1973	4.5	4.1	3.7	2.7	2.4	2.2	2.2	2.0	2.3	3.0	3.8	5.0	3.2
1974	3.6	3.9	3.8	3.2	2.5	2.1	1.6	1.6	1.8	2.8	4.3	4.4	3.0
1975	3.7	3.4	2.9	2.4	2.2	1.4	1.4	1.3	1.2	2.9	3.8	3.6	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.6	6.0	6.0	4.0	3.1	2.5	2.3	2.5	4.7	4.8	5.9
1957	4.2	5.1	6.0	4.9	3.5	2.5	2.3	1.9	3.6	5.9	6.0	6.0
1958	6.7	6.5	5.4	6.5	4.2	2.1	2.9	2.6	3.9	4.8	6.4	6.8
1959	6.3	6.2	5.0	5.5	3.5	2.7	2.3	2.8	3.1	6.1	6.3	6.3
1960	6.6	6.4	4.6	4.8	3.4	3.0	2.4	2.3	2.5	6.6	6.6	6.5
1961	6.8	6.4	6.1	4.5	3.6	3.1	1.9	2.4	3.1	5.1	6.4	6.0
1962	5.5	5.2	4.6	4.0	2.8	3.6	2.0	3.1	5.2	6.0	6.9	6.3
1963	6.0	6.2	5.7	3.3	2.9	3.8	2.1	2.0	3.5	7.3	6.5	6.8
1964	7.0	5.9	5.2	4.8	3.9	2.7	2.9	2.4	3.0	4.3	6.3	6.7
1965	6.1	5.4	4.2	4.5	3.9	3.1	2.3	2.1	2.3	6.0	6.1	6.4
1966	6.4	5.2	5.4	4.6	3.4	3.0	2.3	2.2	3.6	4.6	5.0	6.3
1967	5.7	5.4	4.0	4.5	2.7	2.5	2.2	1.9	3.7	5.5	6.2	7.1
1968	5.6	6.0	5.3	3.9	2.7	2.2	2.6	2.4	3.2	4.7	6.2	6.2
1969	4.8	6.2	5.2	6.0	3.8	2.4	2.5	2.0	4.0	5.5	7.0	7.3
1970	6.8	6.1	6.2	5.1	3.0	2.5	2.3	3.0	2.9	5.8	6.3	7.1
1971	6.1	5.9	7.0	4.9	3.8	2.6	2.2	4.7	3.0	4.3	6.9	6.1
1972	6.3	6.5	5.7	6.2	3.2	3.6	2.6	2.4	2.9	4.7	6.2	6.9
1973	6.7	6.1	6.2	4.5	3.4	3.8	3.1	2.9	3.6	5.2	6.6	7.2
1974	6.3	6.5	6.6	5.8	4.4	3.6	3.2	2.4	3.2	5.3	6.6	6.3
1975	5.7	5.7	5.4	4.6	3.7	2.9	2.2	2.2	1.7	4.8	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	98.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	35	.	.	.	.	.	.	.	.	.	35
1.00 - 1.49	414	1	.	.	.	.	.	.	.	.	415
1.50 - 1.99	364	87	.	.	.	.	.	.	.	.	451
2.00 - 2.49	1	18	.	.	.	.	.	.	.	.	19
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	815	106	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.41 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 541

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	1	.	.	.	.	.	.	.	3
0.50 - 0.99	135	258	172	13	.	1	1	.	.	.	580
1.00 - 1.49	597	917	535	90	10	6	.	.	.	.	2155
1.50 - 1.99	1286	965	205	37	8	.	.	.	.	.	2501
2.00 - 2.49	77	913	54	.	.	.	.	.	.	.	1044
2.50 - 2.99	.	189	20	8	.	.	.	.	.	.	217
3.00 - 3.49	.	25	23	.	.	.	.	.	.	.	48
3.50 - 3.99	.	.	8	.	.	.	.	.	.	.	8
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	2096	3267	1018	149	18	7	1	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 3.85 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3841

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	8	3	.	.	.	.	.	.	.	16
0.50 - 0.99	46	521	1175	340	99	65	41	.	34	.	2321
1.00 - 1.49	61	1115	5278	2977	1214	321	78	13	1	.	11058
1.50 - 1.99	54	542	4325	4741	3292	1591	191	49	3	.	14788
2.00 - 2.49	11	177	1189	3530	4674	2736	513	78	10	.	12918
2.50 - 2.99	.	97	268	1103	4301	4233	1192	66	11	.	11271
3.00 - 3.49	.	51	123	444	2303	5424	1860	164	6	.	10375
3.50 - 3.99	.	3	128	140	1137	4490	2784	164	5	.	8851
4.00 - 4.49	.	.	42	87	306	2871	2833	275	1	.	6415
4.50 - 4.99	.	.	3	22	126	1206	2590	321	.	.	4268
5.00 +				1	34	552	4515	1428	5	.	6535
TOTAL	172	2511	12539	13385	17486	23492	16597	2558	76	0	

MEAN HS(M) = 2.85 LARGEST HS(M) = 7.24 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51928

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	30	18	.	.	.	.	.	.	.	54
1.00 - 1.49	3	83	94	10	.	.	.	.	.	.	190
1.50 - 1.99	35	82	142	75	15	1	.	.	.	.	350
2.00 - 2.49	3	70	135	131	109	23	.	.	.	.	471
2.50 - 2.99	.	83	150	119	179	58	1	.	.	.	590
3.00 - 3.49	.	13	152	112	201	123	11	.	.	.	612
3.50 - 3.99	.	1	62	95	152	169	44	.	.	.	523
4.00 - 4.49	.	.	11	42	135	143	39	.	.	.	370
4.50 - 4.99	.	.	.	17	92	61	41	.	.	.	211
5.00 +	.	.	.	5	34	104	39	5	0	0	187
TOTAL	47	362	784	606	917	682	175	5	0	0	

MEAN HS(M) = 3.13 LARGEST HS(M) = 6.81 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2106

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	6	1	.	.	.	.	.	.	.	.	7
1.50 - 1.99	5	18	.	.	.	.	.	.	.	.	23
2.00 - 2.49	.	.	1	.	.	.	.	.	.	.	1
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	22	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.61 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 24

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

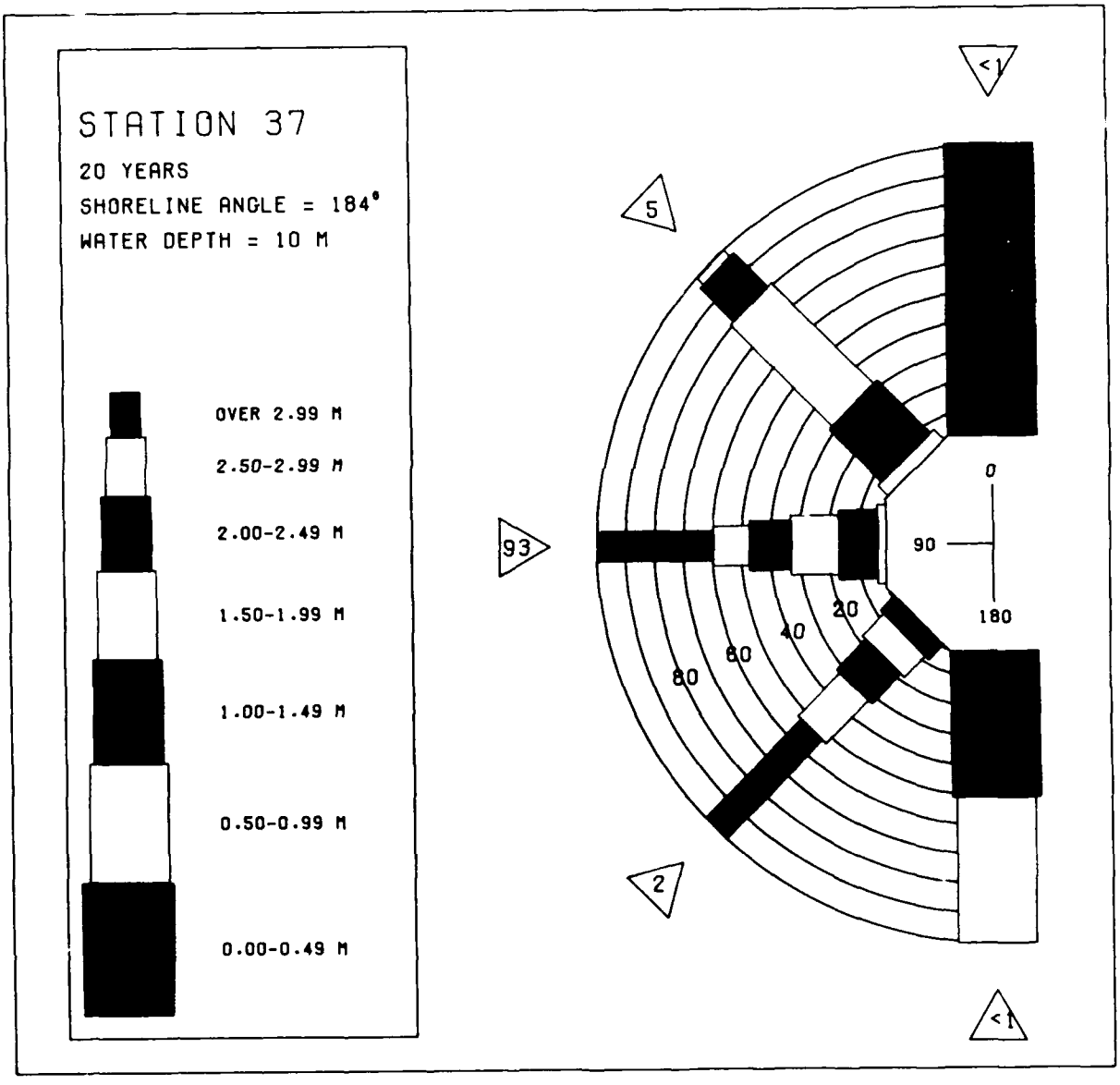
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 37 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.03W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49			1								1
0.50 - 0.99	22	81	136	35	9	6	4	1	3		296
1.00 - 1.49	108	212	590	307	122	32	7	1			1379
1.50 - 1.99	174	169	467	485	331	159	19	4			1808
2.00 - 2.49	9	118	138	366	478	276	51	7	1		1444
2.50 - 2.99		37	43	123	448	429	119	6	1		1206
3.00 - 3.49		9	29	55	250	554	187	16			1100
3.50 - 3.99			21	23	129	465	282	16			936
4.00 - 4.49			5	13	44	301	287	27			677
4.50 - 4.99				3	21	126	263	32			445
5.00 +					6	65	455	143			669
TOTAL	313	626	1430	1410	1838	2413	1674	252	5	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.24 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.3	3.4	2.9	2.5	1.9	1.5	1.4	1.6	2.5	3.2	3.7	2.6
1957	2.8	3.0	3.6	2.8	2.1	1.5	1.4	1.3	1.8	2.8	3.9	4.3	2.6
1958	5.1	4.3	3.3	3.6	2.1	1.4	1.7	1.5	1.9	2.8	3.5	4.4	3.0
1959	4.3	3.8	3.0	2.8	2.1	1.5	1.7	1.5	2.1	2.9	3.2	4.2	2.8
1960	3.7	4.2	2.7	2.8	2.2	1.7	1.5	1.5	1.6	3.1	4.0	4.2	2.8
1961	4.5	4.1	3.5	2.8	2.3	1.8	1.3	1.2	1.7	3.0	3.6	3.7	2.8
1962	3.3	3.3	2.9	2.4	1.7	1.7	1.4	1.7	1.8	3.3	4.2	4.2	2.7
1963	3.4	4.1	3.1	2.3	1.8	2.0	1.5	1.0	2.0	3.7	3.8	4.2	2.7
1964	4.8	3.3	3.1	2.7	1.9	1.8	1.8	1.8	1.8	2.5	3.8	3.9	2.8
1965	3.8	3.3	2.9	2.9	2.0	2.1	1.6	1.2	1.6	3.1	3.4	4.5	2.7
1966	4.6	3.3	3.3	2.5	2.3	1.3	1.6	1.6	2.0	2.7	3.9	4.0	2.7
1967	3.9	3.0	2.9	2.5	1.5	1.3	1.5	1.3	2.0	2.9	3.7	3.9	2.5
1968	3.5	4.0	3.3	2.3	1.5	1.6	1.5	1.4	1.5	2.9	3.7	3.6	2.6
1969	3.0	4.6	3.4	3.5	2.2	1.7	1.6	1.4	2.0	3.1	3.8	5.4	3.0
1970	4.2	4.5	3.8	2.7	1.9	1.6	1.7	1.6	1.7	2.8	3.7	4.3	2.9
1971	3.5	3.8	4.0	3.2	2.3	1.9	1.3	1.6	2.1	2.5	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.3	2.2	2.1	2.0	1.6	2.0	2.3	4.7	3.8	3.0
1973	4.5	4.1	3.8	2.7	2.4	2.2	2.2	2.0	2.4	3.0	3.8	5.0	3.2
1974	3.6	3.9	3.8	3.2	2.5	2.1	1.6	1.6	1.8	2.8	4.4	4.4	3.0
1975	3.7	3.4	2.9	2.4	2.2	1.4	1.4	1.3	1.2	2.9	3.8	3.6	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.6	6.0	6.0	4.1	3.1	2.5	2.3	2.5	4.7	4.8	5.9
1957	4.2	5.0	6.0	4.9	3.5	2.5	2.3	1.9	3.5	5.9	6.0	6.0
1958	6.7	6.4	5.4	6.5	4.4	2.1	2.9	2.6	3.9	4.8	6.4	6.8
1959	6.3	6.2	5.0	5.5	3.5	2.7	2.3	2.8	3.1	6.1	6.3	6.3
1960	6.6	6.4	4.6	4.8	3.4	3.0	2.4	2.4	2.6	6.6	6.6	6.5
1961	6.8	6.4	6.1	4.5	3.6	3.1	2.0	2.4	3.1	5.1	6.4	6.0
1962	5.4	5.2	4.6	4.0	2.8	3.6	2.1	3.1	5.2	6.0	6.9	6.1
1963	5.9	6.2	5.7	3.4	2.9	3.8	2.1	2.0	3.5	7.2	6.5	6.8
1964	6.9	5.9	5.2	4.8	4.0	2.7	2.9	2.4	3.0	4.3	6.3	6.7
1965	6.1	5.4	4.3	4.5	3.9	3.1	2.6	2.1	2.4	6.0	6.1	6.4
1966	6.4	5.3	5.4	4.6	3.4	3.0	2.3	2.2	3.6	4.6	6.9	6.3
1967	5.6	5.4	4.1	4.5	2.7	2.5	2.2	1.9	3.7	5.6	6.2	7.1
1968	5.5	6.0	5.2	4.0	2.7	2.2	2.6	2.4	3.2	4.7	6.1	6.2
1969	4.7	6.2	5.2	6.0	3.8	2.4	2.5	2.0	4.0	5.6	6.9	7.1
1970	6.7	6.1	6.2	5.1	3.1	2.6	2.3	3.1	2.9	5.8	6.2	7.1
1971	6.1	5.9	7.0	5.0	3.8	2.6	2.2	4.7	3.0	4.3	6.8	6.2
1972	6.3	6.5	5.7	6.3	3.3	3.6	3.8	2.4	2.9	3.7	6.2	6.9
1973	6.7	6.1	6.2	4.5	3.4	3.8	3.1	2.9	3.6	5.3	6.6	7.2
1974	6.2	6.5	6.6	5.8	4.4	3.6	3.2	2.4	3.2	5.4	6.6	6.3
1975	5.7	5.7	5.4	4.6	3.7	3.0	2.2	2.2	1.7	4.8	6.5	6.

20 YR. STATISTICS FOR PACIFIC STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.5
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	71	.	.	.	.	.	.	.	.	.	71
1.00 - 1.49	657	42	.	.	.	.	.	.	.	.	699
1.50 - 1.99	537	280	.	.	.	.	.	.	.	.	817
2.00 - 2.49	.	66	.	.	.	.	.	.	.	.	66
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1266	388	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.49 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 969

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	1	1	.	.	.	.	.	.	6
0.50 - 0.99	154	311	200	6	.	3	1	.	.	.	675
1.00 - 1.49	686	1187	792	179	51	5	.	.	.	.	2900
1.50 - 1.99	1368	1427	254	47	8	.	.	.	.	.	3104
2.00 - 2.49	73	1067	111	20	.	.	.	.	.	.	1271
2.50 - 2.99	.	200	47	17	3	.	.	.	.	.	267
3.00 - 3.49	.	29	41	.	1	.	.	.	.	.	71
3.50 - 3.99	.	.	20	10	1	.	.	.	.	.	31
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2284	4222	1466	280	64	8	1	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 3.87 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 4875

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3	1	1	.	.	.	.	.	.	8
0.50 - 0.99	42	294	1529	398	160	65	58	6	29	.	2581
1.00 - 1.49	22	852	5094	3531	1680	497	107	35	1	.	11819
1.50 - 1.99	35	256	3728	4962	4087	2126	473	80	8	.	15755
2.00 - 2.49	22	142	749	2927	5029	3954	1122	70	6	.	14021
2.50 - 2.99	.	49	201	727	3725	5609	2000	128	18	.	12457
3.00 - 3.49	.	25	131	248	1767	5492	2611	236	5	.	10515
3.50 - 3.99	.	.	29	65	482	3511	3307	578	6	.	7678
4.00 - 4.49	.	.	1	20	126	1552	2999	368	5	.	4071
4.50 - 4.99	.	.	.	1	41	501	2241	304	1	.	3089
5.00 +	.	.	.	.	3	164	2079	1067	5	.	3318
TOTAL	121	1619	11465	12879	17100	23474	16997	2473	84	0	

MEAN HS(M) = 2.64 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50406

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	11	29	.	.	.	.	.	.	.	40
0.50 - 0.99	11	80	116	17	5	.	.	.	.	.	229
1.00 - 1.49	32	63	148	66	53	5	1	.	.	.	375
1.50 - 1.99	3	90	169	143	179	34	5	.	.	.	623
2.00 - 2.49	.	56	160	229	363	104	22	.	.	.	834
2.50 - 2.99	.	8	71	188	265	176	17	.	.	.	725
3.00 - 3.49	.	1	30	53	176	148	53	.	.	.	461
3.50 - 3.99	.	.	.	11	75	121	27	.	.	.	234
4.00 - 4.49	.	.	.	.	27	32	15	6	.	.	80
4.50 - 4.99	.	.	.	.	.	8	20	.	.	.	29
5.00 +											
TOTAL	53	309	723	708	1043	628	160	6	0	0	

MEAN HS(M) = 2.84 LARGEST HS(M) = 5.73 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2135

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	1	13	.	.	.	.	.	.	.	.	14
1.00 - 1.49	18	25	1	.	.	.	.	.	.	.	44
1.50 - 1.99	5	17	1	.	.	.	.	.	.	.	23
2.00 - 2.49	.	3	1	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	24	61	3	0	0	0	0	0	0	0	

MEAN HS(M) = 1.28 LARGEST HS(M) = 2.12 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 55

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

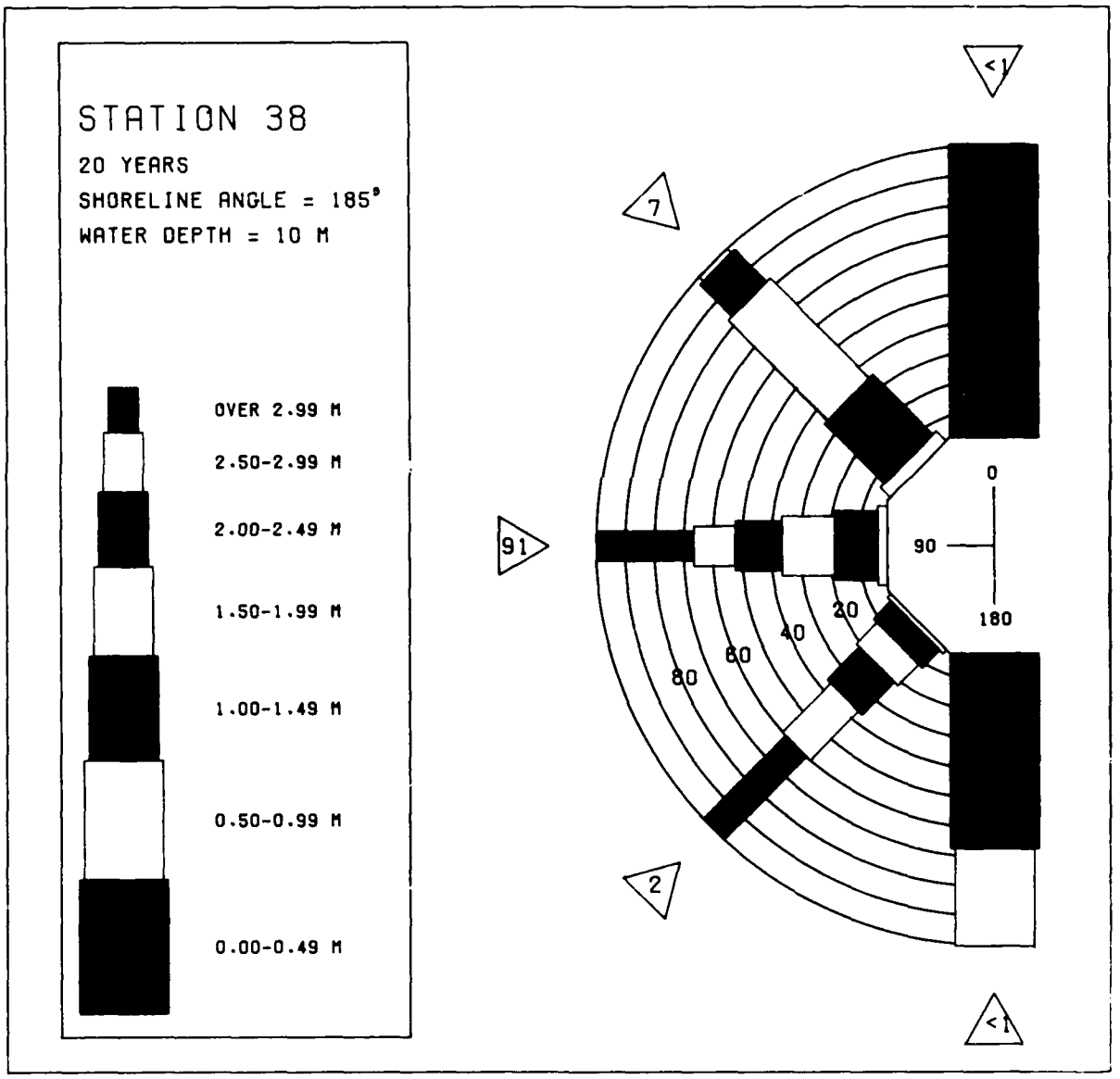
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 38 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	27	63	175	40	16	6	5	.	2	.	334
1.00 - 1.49	139	218	600	372	173	50	10	3	.	.	1565
1.50 - 1.99	198	204	413	507	414	213	47	8	.	.	2004
2.00 - 2.49	9	137	103	309	520	398	112	7	.	.	1595
2.50 - 2.99	.	30	41	97	399	571	202	12	1	.	1353
3.00 - 3.49	.	6	24	43	203	566	262	23	.	.	1127
3.50 - 3.99	.	.	8	12	66	366	336	27	.	.	815
4.00 - 4.49	.	.	.	3	20	167	302	26	.	.	518
4.50 - 4.99	.	.	.	.	6	59	225	31	.	.	315
5.00 +	.	.	.	.	.	17	209	106	.	.	332
TOTAL	373	658	1364	1383	1817	2407	1710	243	3	0	

MEAN HS(M) = 2.54 LARGEST HS(M) = 7.16 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 38 (44.46N/ 124.08W TO 44.35N/ 124.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.1	3.1	2.7	2.4	1.8	1.5	1.4	1.6	2.4	2.8	3.1	2.4
1957	2.2	2.8	3.3	2.6	1.9	1.3	1.4	1.2	1.7	2.5	3.6	4.0	2.4
1958	4.5	3.7	3.2	3.2	2.0	1.4	1.7	1.5	1.8	2.7	3.3	3.8	2.7
1959	3.8	3.5	2.6	2.7	1.9	1.4	1.7	1.5	2.0	2.5	3.1	3.7	2.5
1960	3.5	3.7	2.5	2.6	1.9	1.6	1.5	1.5	1.5	2.9	3.8	3.7	2.6
1961	4.0	3.5	3.0	2.6	2.2	1.7	1.3	1.2	1.7	2.7	3.3	3.4	2.6
1962	2.7	3.0	2.8	2.2	1.6	1.7	1.4	1.2	1.7	3.0	3.8	3.5	2.4
1963	2.7	3.1	2.9	2.2	1.7	1.0	1.5	1.1	1.8	3.3	3.5	3.6	2.5
1964	4.2	3.9	2.8	2.6	1.9	1.6	1.7	1.2	1.7	2.3	3.5	3.4	2.5
1965	3.4	3.0	2.5	2.7	1.9	2.0	1.6	1.2	1.6	2.6	3.3	4.3	2.5
1966	4.1	3.1	2.9	2.0	2.2	1.4	1.6	1.6	1.7	2.4	2.7	3.5	2.4
1967	3.5	2.5	2.7	2.4	1.4	1.3	1.5	1.3	1.9	2.6	3.6	3.6	2.3
1968	3.0	3.0	2.9	2.2	1.5	1.4	1.4	1.4	1.4	2.6	3.2	3.3	2.3
1969	2.8	4.3	3.2	3.1	2.1	1.5	1.5	1.4	1.9	2.8	3.5	4.7	2.7
1970	3.6	4.0	3.3	2.5	1.8	1.6	1.6	1.6	1.5	2.6	3.5	4.0	2.6
1971	3.0	3.0	3.5	3.0	2.2	1.7	1.3	1.2	2.0	2.3	2.9	3.5	2.6
1972	3.9	3.4	3.3	2.2	2.5	2.1	1.8	1.6	1.9	2.2	4.2	3.5	2.8
1973	4.1	3.6	3.5	2.6	2.2	2.0	2.0	2.0	2.2	2.8	3.6	4.6	2.9
1974	3.0	3.7	3.4	2.9	2.3	2.0	1.5	1.5	1.7	2.5	4.1	3.9	2.7
1975	3.4	3.1	2.7	2.3	2.1	1.4	1.4	1.3	1.1	2.7	3.5	3.1	2.3
MEAN	3.4	3.3	3.0	2.6	2.0	1.6	1.6	1.5	1.7	2.6	3.5	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 38 (44.46N/ 124.08W TO 44.35N/ 124.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.5	5.4	5.4	6.0	4.0	2.7	2.4	2.3	2.4	4.6	4.0	4.9
1957	4.1	4.7	5.3	4.6	3.0	2.2	2.2	1.8	2.2	5.8	6.0	5.9
1958	6.4	6.0	5.0	6.1	4.3	2.6	2.8	2.7	3.7	4.9	6.2	5.4
1959	6.5	6.1	4.2	4.4	3.4	2.6	2.3	2.7	3.0	5.4	6.3	6.3
1960	6.4	6.3	4.2	4.2	3.2	2.7	2.4	2.4	2.5	6.2	6.2	6.3
1961	5.7	5.2	4.9	4.2	3.5	3.4	1.9	2.3	3.0	4.8	6.3	5.7
1962	4.9	4.8	4.8	4.1	2.4	3.6	2.0	3.0	4.7	6.0	5.8	5.7
1963	4.1	4.5	5.5	3.1	2.7	3.7	2.1	2.1	3.1	6.8	6.2	6.3
1964	6.4	5.1	4.7	5.0	3.8	2.5	2.7	2.4	2.8	4.1	6.1	6.4
1965	5.3	5.0	3.9	4.4	3.6	3.0	2.5	2.1	2.2	5.2	5.4	6.3
1966	6.1	5.0	4.4	3.6	3.3	2.5	2.4	2.1	2.6	4.6	4.7	5.2
1967	5.0	4.1	4.5	4.6	2.6	2.3	2.2	1.9	4.0	5.2	6.1	6.7
1968	4.4	3.9	4.6	3.5	2.5	1.9	2.4	2.3	3.3	4.2	5.0	6.2
1969	4.4	6.1	5.0	5.4	3.8	2.3	2.0	2.0	3.8	5.2	6.5	6.8
1970	6.2	5.6	5.3	4.3	3.0	2.4	2.2	3.0	2.7	5.7	5.8	6.7
1971	6.1	5.3	6.4	4.6	3.7	2.4	2.2	4.6	2.8	4.1	6.4	6.0
1972	6.6	6.0	5.0	6.2	3.1	3.5	3.6	2.4	2.8	3.5	6.0	6.4
1973	6.3	6.1	6.0	4.1	3.7	3.4	2.8	2.9	3.4	5.3	6.6	7.2
1974	5.6	6.3	6.1	5.6	4.2	3.1	2.8	2.3	3.2	4.6	6.5	6.6
1975	5.4	5.6	5.2	4.4	3.3	2.9	2.0	2.0	1.6	4.7	6.4	6.0

20 YR. STATISTICS FOR PACIFIC STATION 38 (44.46N/ 124.08W TO 44.35N/ 124.10W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121400

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	88	1	.	.	.	.	.	.	.	.	89
1.00 - 1.49	821	65	.	.	.	.	.	.	.	.	886
1.50 - 1.99	633	391	.	.	.	.	.	.	.	.	1024
2.00 - 2.49	1	47	.	.	.	.	.	.	.	.	48
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1544	504	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1200

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3	1	1	.	.	.	.	.	.	8
0.50 - 0.99	142	378	402	18	.	8	10	.	.	.	958
1.00 - 1.49	605	1399	1512	328	80	6	.	.	.	.	3930
1.50 - 1.99	1125	1403	802	128	32	3	.	.	.	.	3493
2.00 - 2.49	54	987	254	42	27	.	.	.	.	.	1364
2.50 - 2.99	.	172	54	41	17	.	.	.	.	.	284
3.00 - 3.49	.	29	56	18	25	.	.	.	.	.	128
3.50 - 3.99	.	.	25	10	15	.	.	.	.	.	50
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1929	4371	3106	586	196	17	10	0	0	0	

MEAN HS(M) = 1.58 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5981

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	5	1	.	.	.	.	.	10
0.50 - 0.99	41	260	1377	400	164	61	47	6	29	.	2385
1.00 - 1.49	17	634	4490	3447	1685	506	107	35	1	.	10922
1.50 - 1.99	30	210	3155	4965	4134	2169	484	82	8	.	15237
2.00 - 2.49	23	121	605	2794	5018	3983	1149	70	6	.	13769
2.50 - 2.99	.	41	189	699	3660	5655	1976	131	20	.	12371
3.00 - 3.49	.	22	114	232	1735	5420	2619	224	5	.	10371
3.50 - 3.99	.	1	23	68	470	3509	3316	284	5	.	7676
4.00 - 4.49	.	.	.	20	131	1514	2977	275	5	.	4922
4.50 - 4.99	.	.	.	1	42	470	2257	311	.	.	3081
5.00 +	.	.	.	.	1	167	2017	1050	6	.	3241
TOTAL	111	1290	9956	12626	17040	23459	16949	2469	85	0	

MEAN HS(M) = 2.66 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 49105

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	8	25	.	.	.	.	.	.	.	33
1.00 - 1.49	11	85	104	17	3	.	.	.	.	.	220
1.50 - 1.99	42	73	124	54	30	1	.	.	.	.	324
2.00 - 2.49	5	88	174	135	147	20	3	.	.	.	572
2.50 - 2.99	.	71	169	213	231	83	8	.	.	.	775
3.00 - 3.49	.	8	92	205	258	133	18	.	.	.	714
3.50 - 3.99	.	1	32	73	196	174	29	.	.	.	505
4.00 - 4.49	.	.	.	17	118	124	47	.	.	.	306
4.50 - 4.99	.	.	.	.	29	51	11	3	.	.	94
5.00 +	.	.	1	.	1	11	22	3	.	.	38
TOTAL	58	334	720	715	1013	597	138	6	0	0	

MEAN HS(M) = 2.92 LARGEST HS(M) = 5.89 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2109

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	1	8	.	.	.	.	.	.	.	.	9
1.00 - 1.49	15	13	1	.	.	.	.	.	.	.	29
1.50 - 1.99	3	23	.	.	.	.	.	.	.	.	26
2.00 - 2.49	.	3	1	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	19	50	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.36 LARGEST HS(M) = 2.46 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 45

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

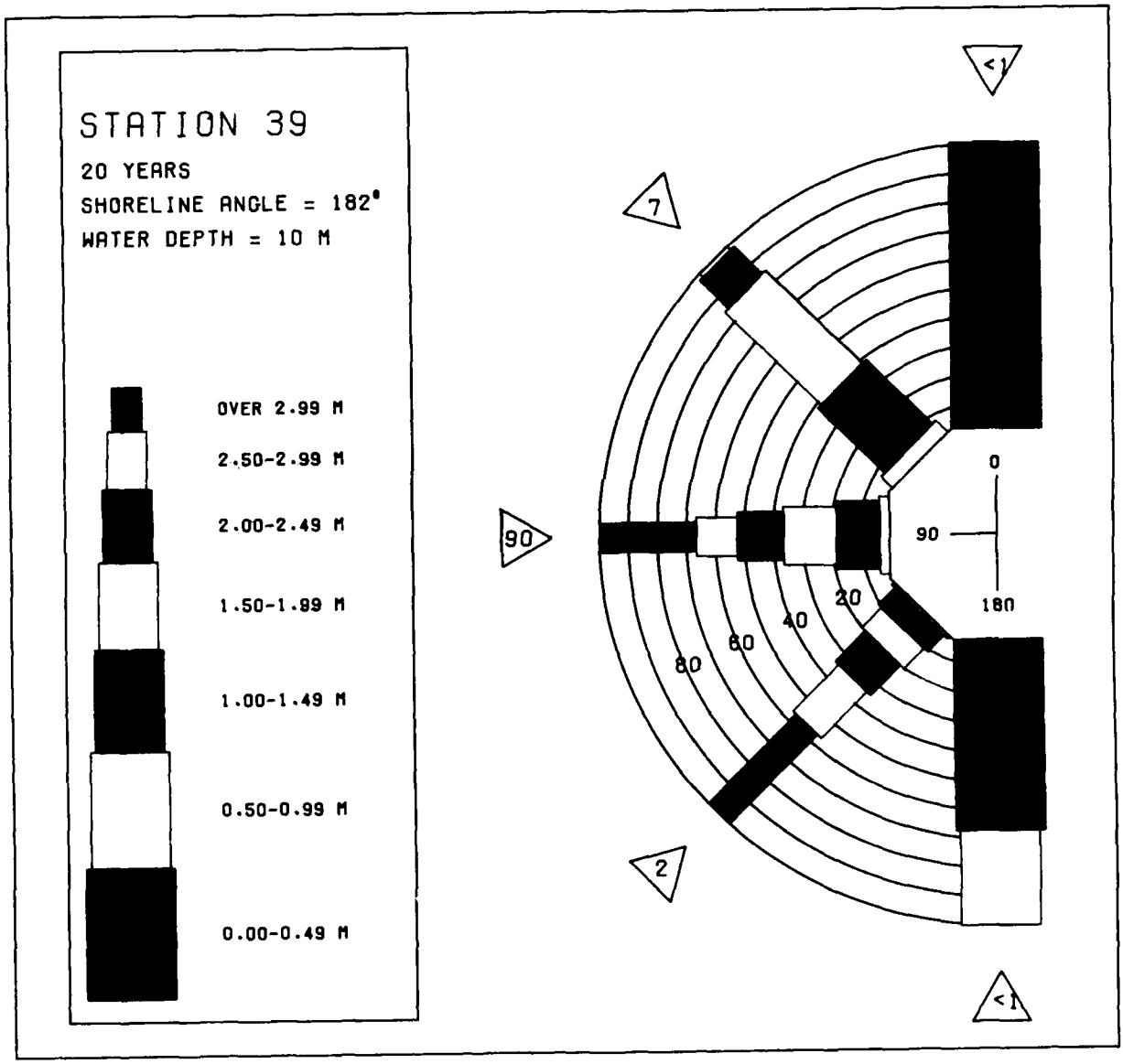
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 39 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	27	65	180	41	16	7	5	.	2	.	343
1.00 - 1.49	147	219	610	379	176	51	10	3	.	.	1595
1.50 - 1.99	183	210	408	514	419	217	48	8	.	.	2007
2.00 - 2.49	8	124	103	297	519	400	115	7	.	.	1573
2.50 - 2.99	.	28	41	95	390	573	198	13	2	.	1340
3.00 - 3.49	.	5	26	45	201	555	263	22	.	.	1117
3.50 - 3.99	.	.	8	15	68	368	334	28	.	.	821
4.00 - 4.49	.	.	.	3	24	163	302	27	.	.	519
4.50 - 4.99	.	.	.	.	7	52	226	31	.	.	316
5.00 +						17	203	105			325
TOTAL	365	651	1376	1389	1820	2403	1704	244	4	0	

MEAN HS(M) = 2.53 LARGEST HS(M) = 7.17 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.1	3.1	2.7	2.4	1.8	1.5	1.4	1.6	2.4	2.8	3.1	2.4
1957	2.5	2.8	3.3	2.5	1.9	1.3	1.4	1.3	1.7	2.5	3.5	4.0	2.4
1958	4.5	3.7	3.2	3.2	2.0	1.4	1.7	1.5	1.8	2.6	3.3	3.8	2.7
1959	3.8	3.5	2.6	2.7	1.9	1.4	1.7	1.5	2.0	2.5	3.0	3.7	2.5
1960	3.5	3.7	2.5	2.6	1.9	1.6	1.5	1.5	1.5	2.9	3.8	3.7	2.6
1961	4.1	3.5	3.0	2.6	2.2	1.7	1.3	1.1	1.7	2.7	3.3	3.4	2.5
1962	2.7	3.0	2.8	2.9	1.6	1.7	1.4	1.2	1.7	2.7	3.8	3.5	2.4
1963	2.7	3.2	2.9	2.2	1.9	1.9	1.3	1.1	1.8	2.3	3.2	3.6	2.3
1964	4.2	2.9	2.8	2.6	1.9	1.6	1.7	1.7	1.7	2.3	3.5	3.4	2.5
1965	3.4	3.0	2.5	2.7	1.9	2.0	1.6	1.2	1.6	2.8	3.3	4.3	2.5
1966	4.1	3.1	2.9	2.0	2.2	1.4	1.6	1.6	1.7	2.4	2.7	3.5	2.4
1967	3.5	2.5	2.7	2.4	1.3	1.3	1.5	1.3	1.9	2.6	3.6	3.6	2.3
1968	3.1	3.0	2.9	2.2	1.4	1.4	1.4	1.4	1.4	2.6	3.2	3.3	2.3
1969	2.8	4.3	3.2	3.1	2.1	1.5	1.5	1.4	1.9	2.8	3.5	4.7	2.7
1970	3.6	4.0	3.5	2.5	1.8	1.5	1.5	1.6	1.5	2.6	3.5	4.0	2.6
1971	3.0	3.0	3.5	2.9	2.1	1.7	1.3	1.6	2.0	2.2	3.6	3.5	2.6
1972	3.9	3.4	3.3	3.2	2.1	2.0	1.9	1.5	1.9	2.2	4.2	3.5	2.8
1973	4.1	3.6	3.5	2.6	2.2	2.0	2.0	2.0	2.2	2.8	3.6	4.6	2.9
1974	3.1	3.7	3.4	2.9	2.3	2.0	1.5	1.5	1.7	2.5	4.1	3.9	2.7
1975	3.3	3.1	2.6	2.3	2.1	1.4	1.4	1.3	1.1	2.7	3.5	3.1	2.3
MEAN	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.5	5.4	5.4	5.9	3.9	2.7	2.4	2.3	2.4	4.5	4.0	4.9
1957	4.1	4.7	5.1	4.5	3.0	2.2	2.5	1.8	3.4	5.8	6.0	5.9
1958	6.4	6.0	5.0	6.1	4.3	2.0	2.7	2.7	3.7	4.8	6.2	5.3
1959	6.5	6.1	4.2	5.3	3.1	2.6	2.3	2.7	3.0	5.3	6.3	6.3
1960	6.4	6.3	4.2	4.2	3.1	2.7	2.3	2.3	2.5	6.2	6.2	6.4
1961	5.7	5.2	4.9	4.1	3.4	3.4	1.9	2.3	3.0	4.8	6.2	5.7
1962	4.9	4.8	4.8	4.1	2.4	3.6	2.0	3.0	4.7	6.0	5.8	5.6
1963	4.2	4.7	5.4	3.1	2.6	3.7	2.1	2.1	3.1	6.9	6.2	6.3
1964	6.4	5.0	4.8	4.9	3.7	2.5	2.7	2.4	2.8	4.0	6.1	6.4
1965	5.3	5.0	3.9	4.4	3.6	2.9	2.5	2.1	2.5	5.1	5.4	6.3
1966	6.1	5.0	4.4	3.6	3.3	2.5	2.4	2.3	3.2	4.0	4.7	5.2
1967	5.0	4.1	4.4	4.5	2.6	2.3	2.2	1.8	4.0	5.2	6.1	6.7
1968	4.4	4.0	4.6	3.5	2.5	1.9	2.4	2.3	3.3	4.2	5.0	6.2
1969	4.4	6.1	5.0	5.5	3.8	2.3	2.0	2.0	3.8	5.1	6.5	6.8
1970	6.2	5.6	5.3	4.3	3.0	2.4	2.2	3.0	2.7	5.6	5.8	6.7
1971	6.1	5.3	6.5	4.6	3.6	2.4	2.1	4.5	2.8	4.1	6.5	5.9
1972	9.6	5.9	4.9	6.1	3.1	3.5	3.3	2.4	2.9	3.5	6.0	9.5
1973	6.3	6.1	6.0	4.1	3.2	3.3	2.7	2.9	3.3	5.2	6.6	7.2
1974	5.8	6.3	6.1	5.6	4.2	3.1	2.8	2.3	3.2	4.5	6.5	6.6
1975	5.4	5.5	5.2	4.3	3.3	2.9	2.0	2.0	1.6	4.7	6.4	6.0

20 YR. STATISTICS FOR PACIFIC STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121400

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	66	.	.	.	.	.	.	.	.	.	66
1.00 - 1.49	617	6	.	.	.	.	.	.	.	.	623
1.50 - 1.99	480	112	.	.	.	.	.	.	.	.	592
2.00 - 2.49	39	30	.	.	.	.	.	.	.	.	69
2.50 - 2.99	1	.	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1203	148	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 793

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	3	1	.	.	.	.	.	.	.	9
0.50 - 0.99	109	354	426	42	1	8	8	.	.	.	948
1.00 - 1.49	549	1105	1498	229	41	11	.	.	.	.	3433
1.50 - 1.99	944	942	884	92	22	3	.	.	.	.	2887
2.00 - 2.49	123	728	208	29	8	.	.	.	.	.	1096
2.50 - 2.99	1	191	54	20	1	.	.	.	.	.	267
3.00 - 3.49	.	44	39	10	6	.	.	.	.	.	99
3.50 - 3.99	.	3	10	1	.	.	.	.	.	.	14
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.0) +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1731	3367	3122	424	79	22	8	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 3.92 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5127

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	1	.	.	.	8	.	.	.	.	17
0.50 - 0.99	53	427	1119	379	148	104	25	1	39	.	2295
1.00 - 1.49	56	963	4459	3032	1244	438	111	34	15	.	10352
1.50 - 1.99	49	473	3648	4998	3667	1598	251	41	10	.	14735
2.00 - 2.49	15	195	994	3237	4621	2857	581	49	5	.	12554
2.50 - 2.99	.	94	299	987	4188	4690	1363	71	17	.	11709
3.00 - 3.49	.	41	195	420	2116	5427	2029	201	5	.	10434
3.50 - 3.99	.	1	142	165	1033	4293	2845	193	5	.	8677
4.00 - 4.49	.	.	35	83	373	2689	2684	280	5	.	6149
4.50 - 4.99	.	.	1	39	138	1038	2665	270	.	.	4151
5.00 +	.	.	.	8	30	537	3056	1274	1	.	5706
TOTAL	173	2202	10893	13348	17558	23679	16410	2414	102	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.47 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50737

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METER')	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	10	17	.	.	.	.	.	.	.	33
1.00 - 1.49	3	58	70	8	.	.	.	.	.	.	139
1.50 - 1.99	15	61	133	59	1	.	.	.	.	.	269
2.00 - 2.49	.	59	99	66	63	1	.	.	.	.	288
2.50 - 2.99	.	82	181	99	109	29	1	.	.	.	501
3.00 - 3.49	.	32	126	130	147	65	5	.	.	.	505
3.50 - 3.99	.	5	66	106	177	128	41	.	.	.	523
4.00 - 4.49	.	.	13	54	116	147	18	.	.	.	348
4.50 - 4.99	.	.	8	11	100	63	35	.	.	.	217
5.00 +	.	.	.	3	29	99	51	3	.	.	185
TOTAL	24	307	713	536	742	532	151	3	0	0	

MEAN HS(M) = 3.27 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1771

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	8	.	.	.	.	.	.	.	.	.	8
1.00 - 1.49	3	5	.	.	.	.	.	.	.	.	8
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	6	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.52 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 12

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

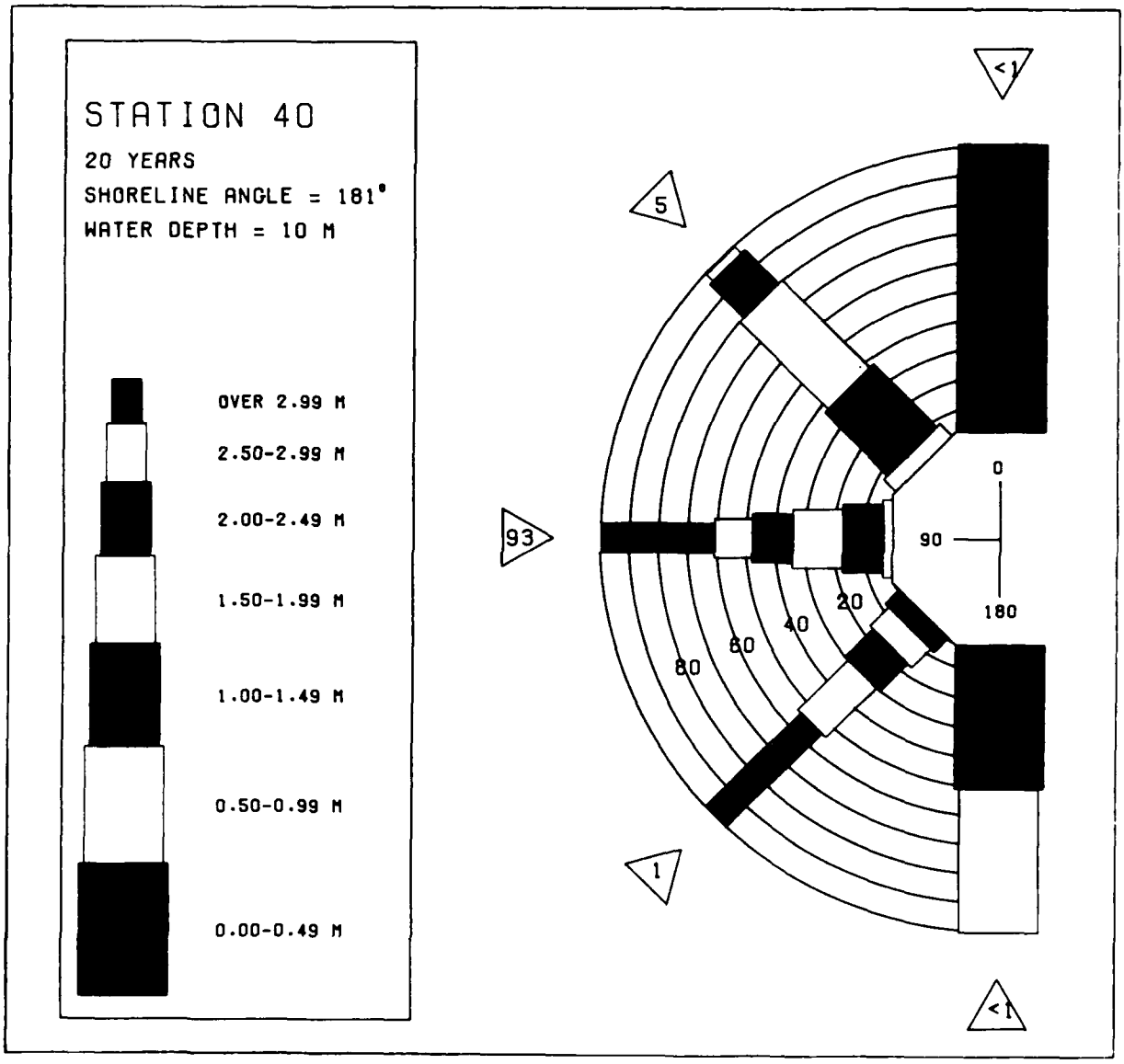
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 40 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	23	79	156	42	15	11	3	.	3	.	332
1.00 - 1.49	123	213	602	327	128	45	11	3	1	.	1453
1.50 - 1.99	149	159	466	515	369	160	25	4	1	.	1848
2.00 - 2.49	17	101	130	333	469	285	58	4	.	.	1397
2.50 - 2.99	.	36	53	110	430	471	136	7	1	.	1244
3.00 - 3.49	.	11	36	56	227	549	203	20	.	.	1102
3.50 - 3.99	.	1	21	27	121	442	288	19	.	.	919
4.00 - 4.49	.	.	4	13	48	283	270	28	.	.	646
4.50 - 4.99	.	.	1	5	23	110	270	27	.	.	436
5.00 +	.	.	.	1	5	63	390	127	.	.	586
TOTAL	312	600	1469	1429	1835	2419	1654	239	6	0	

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.47 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.2	3.3	2.9	2.4	1.9	1.5	1.4	1.6	2.4	3.1	3.6	2.6
1957	2.7	2.9	3.5	2.8	2.0	1.5	1.4	1.3	1.7	2.8	3.8	4.3	2.6
1958	5.0	4.3	3.3	3.5	2.1	1.4	1.7	1.5	1.9	2.7	3.4	4.3	2.9
1959	4.2	3.8	2.9	2.8	2.0	1.5	1.7	1.5	2.0	2.8	3.2	4.1	2.7
1960	3.7	4.1	2.7	2.8	2.1	1.6	1.5	1.5	1.5	3.0	4.0	4.1	2.7
1961	4.4	4.0	3.4	2.7	2.3	1.8	1.3	1.4	1.7	2.9	3.5	3.6	2.7
1962	3.2	3.2	2.9	2.4	1.6	1.7	1.4	1.7	1.7	3.3	4.1	4.2	2.6
1963	3.2	4.0	3.1	2.3	1.8	1.9	1.5	1.1	2.0	3.6	3.7	4.0	2.7
1964	4.6	3.2	3.0	2.6	1.9	1.7	1.8	1.7	1.7	2.5	3.7	3.8	2.7
1965	3.8	3.2	2.7	2.9	2.0	2.1	1.6	1.2	1.5	3.0	3.4	4.5	2.7
1966	4.5	3.3	3.2	2.1	2.3	1.6	1.6	1.5	1.9	2.6	2.9	4.0	2.6
1967	3.8	2.8	2.8	2.4	1.4	1.3	1.5	1.3	2.0	2.9	3.6	3.9	2.5
1968	3.5	2.9	3.3	2.3	1.5	1.6	1.4	1.4	1.4	2.8	3.7	3.6	2.5
1969	2.9	4.6	3.3	3.4	2.1	1.7	1.5	1.4	2.0	3.0	3.7	3.3	2.9
1970	4.1	4.4	3.6	2.6	1.9	1.5	1.7	1.6	1.6	2.7	3.7	4.3	2.8
1971	3.4	3.6	3.8	3.1	2.2	1.9	1.3	1.6	2.1	2.4	3.8	3.6	2.7
1972	4.1	3.7	3.8	3.3	2.2	2.1	1.9	1.5	1.9	2.2	4.6	3.8	2.9
1973	4.4	4.0	3.7	2.7	2.4	2.2	2.1	2.0	2.3	2.9	3.8	5.0	3.1
1974	3.6	3.9	3.8	3.1	2.5	2.1	1.6	1.6	1.7	3.7	4.2	4.4	2.9
1975	3.6	3.4	2.9	2.3	2.2	1.4	1.4	1.3	1.1	2.8	3.7	3.5	2.5
MEAN	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.5	5.7	6.0	6.0	4.1	3.0	2.3	2.3	2.3	4.7	4.5	5.5
1957	4.5	4.8	5.8	4.6	3.4	2.5	2.2	2.0	3.5	5.8	6.0	6.4
1958	6.7	6.4	5.2	6.4	4.2	2.0	3.1	2.6	3.8	4.7	6.4	6.6
1959	6.6	6.1	4.6	5.5	3.8	2.7	2.4	2.7	3.0	6.1	5.9	6.3
1960	6.6	6.5	4.6	4.6	3.2	2.8	2.4	2.3	2.4	6.5	6.4	6.4
1961	6.6	6.4	6.0	4.4	3.8	3.1	1.9	2.3	3.1	5.0	6.3	5.8
1962	5.4	4.9	4.7	4.1	2.7	3.4	2.2	2.1	5.1	5.0	6.4	6.1
1963	6.1	6.3	5.4	3.2	5.9	3.9	2.5	2.1	3.3	7.2	6.3	6.7
1964	6.5	5.6	5.1	4.7	3.9	2.8	2.3	2.3	3.0	4.1	6.2	6.6
1965	5.6	5.1	4.1	4.5	3.9	3.2	2.4	2.1	2.4	5.9	6.1	6.5
1966	6.3	5.0	5.2	4.5	3.4	2.9	2.3	2.3	3.4	4.5	4.8	6.2
1967	5.9	4.8	4.2	4.3	2.7	2.6	2.3	2.2	4.2	5.3	6.1	7.1
1968	5.5	6.0	5.1	3.6	2.7	2.4	2.6	2.3	3.2	4.5	6.0	6.2
1969	4.6	6.2	5.1	5.7	3.8	2.5	2.4	2.1	3.9	5.4	6.5	7.5
1970	6.8	6.0	6.1	4.9	3.1	2.4	2.4	2.9	2.8	5.6	6.2	6.5
1971	5.2	5.7	6.8	4.7	3.8	2.6	2.2	4.8	2.9	4.3	6.8	5.8
1972	5.1	5.7	5.6	6.0	3.3	3.5	3.6	2.5	3.3	3.6	6.1	6.9
1973	6.5	6.2	6.1	4.3	3.6	3.9	3.1	2.9	3.5	5.2	6.6	7.2
1974	6.8	6.5	6.5	5.8	4.4	3.6	3.2	2.4	3.2	5.0	6.5	6.3
1975	5.5	5.5	5.3	4.2	3.4	3.1	2.2	2.4	1.7	4.6	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	98.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	46	.	.	.	.	.	.	.	.	.	46
1.00 - 1.49	485	3	.	.	.	.	.	.	.	.	488
1.50 - 1.99	410	56	.	.	.	.	.	.	.	.	466
2.00 - 2.49	41	8	.	.	.	.	.	.	.	.	49
2.50 - 2.99	1	5	.	.	.	.	.	.	.	.	6
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	983	72	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.71 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 619

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	3	1	.	.	.	.	.	.	.	9
0.50 - 0.99	123	272	217	15	1	5	1	.	.	.	634
1.00 - 1.49	633	860	562	135	25	1	.	.	.	.	2216
1.50 - 1.99	1110	927	181	35	8	.	.	.	.	.	2261
2.00 - 2.49	147	776	102	8	1	.	.	.	.	.	1034
2.50 - 2.99	3	196	51	5	.	.	.	.	.	.	255
3.00 - 3.49	.	46	34	.	.	.	.	.	.	.	80
3.50 - 3.99	.	3	6	.	.	.	.	.	.	.	9
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2021	3080	1156	199	35	6	1	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 3.94 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 3807

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	8	1	.	.	8	.	.	.	.	17
0.50 - 0.99	49	470	1278	388	143	107	32	1	37	.	2505
1.00 - 1.49	58	1156	5350	3059	1230	431	112	32	17	.	11445
1.50 - 1.99	54	496	4348	5022	3607	1589	246	42	10	.	15414
2.00 - 2.49	15	203	1095	3288	4604	2802	559	49	5	.	12620
2.50 - 2.99	.	92	287	995	4223	4705	1360	71	13	.	11750
3.00 - 3.49	.	44	181	434	2178	5443	2024	195	8	.	10508
3.50 - 3.99	.	1	118	150	1009	4300	2823	196	5	.	8502
4.00 - 4.49	.	.	29	78	345	2717	2703	272	5	.	6149
4.50 - 4.99	.	.	1	29	135	1050	2660	268	.	.	4143
5.00 +	.	.	.	8	22	513	3916	1291	1	.	5751
TOTAL	176	2470	12688	13451	17496	23669	16435	2418	101	0	

MEAN HS(M) = 2.80 LARGEST HS(M) = 7.38 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51979

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	11	34	20	.	.	.	.	.	.	.	65
1.00 - 1.49	6	78	82	11	.	.	.	.	.	.	177
1.50 - 1.99	15	97	148	75	11	.	.	.	.	.	346
2.00 - 2.49	.	59	118	95	75	3	.	.	.	.	350
2.50 - 2.99	.	78	184	112	133	41	1	.	.	.	549
3.00 - 3.49	.	29	130	131	179	95	8	.	.	.	572
3.50 - 3.99	.	5	85	105	188	157	46	.	.	.	587
4.00 - 4.49	.	.	17	47	123	142	22	.	.	.	351
4.50 - 4.99	.	.	8	17	94	77	44	.	.	.	240
5.00 +	.	.	.	.	29	109	56	3	.	.	197
TOTAL	32	380	792	594	832	624	177	3	0	0	

MEAN HS(M) = 3.18 LARGEST HS(M) = 6.90 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2020

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	8	1	.	.	.	.	.	.	.	.	9
1.50 - 1.99	3	3	.	.	.	.	.	.	.	.	6
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	10	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.74 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

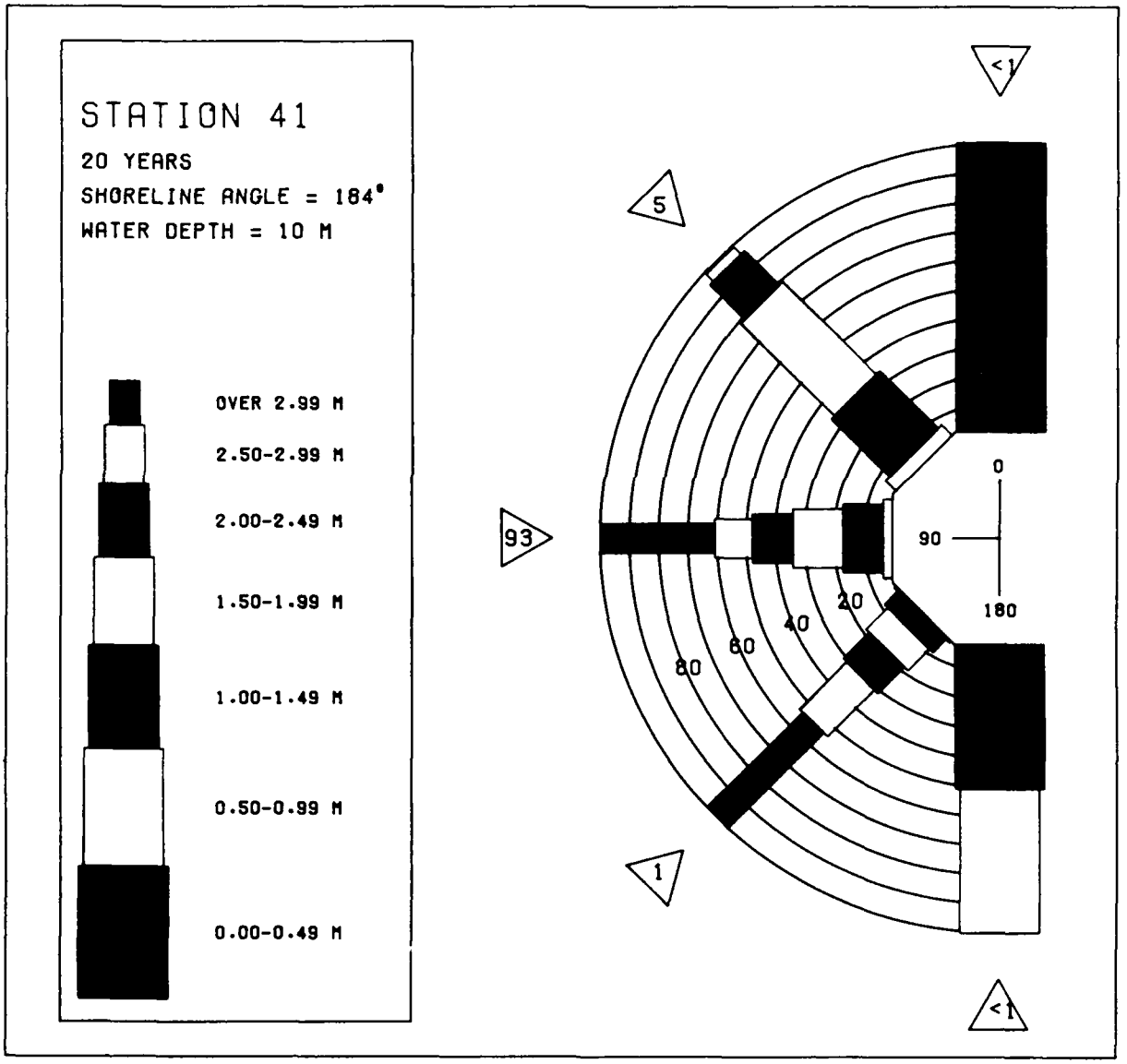
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 41 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	23	77	151	40	14	11	3	.	3	.	322
1.00 - 1.49	119	210	599	320	125	43	11	3	1	.	1431
1.50 - 1.99	159	158	467	513	362	158	24	4	1	.	1846
2.00 - 2.49	20	105	131	339	468	280	55	4	.	.	1402
2.50 - 2.99	.	37	52	111	435	475	136	7	1	.	1254
3.00 - 3.49	.	11	34	56	235	553	203	19	.	.	1111
3.50 - 3.99	.	1	21	25	119	445	286	19	.	.	916
4.00 - 4.49	.	.	4	12	46	285	272	27	.	.	646
4.50 - 4.99	.	.	1	4	22	112	270	26	.	.	435
5.00 +					5	62	397	129	6	0	593
TOTAL	321	599	1460	1420	1831	2424	1657	238	6	0	

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.38 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.3	2.9	2.4	1.9	1.5	1.4	1.6	2.5	3.1	3.6	2.6
1957	2.7	2.9	3.5	2.8	2.0	1.5	1.4	1.3	1.7	2.8	3.8	4.3	2.6
1958	5.0	4.3	3.3	3.5	2.1	1.4	1.7	1.5	1.9	2.7	3.4	4.3	2.9
1959	4.2	3.8	3.9	2.8	2.0	1.5	1.7	1.5	2.1	2.8	3.2	4.1	2.7
1960	2.7	4.1	2.7	2.8	2.1	1.6	1.5	1.5	1.5	3.0	4.0	4.1	2.7
1961	4.4	4.0	3.4	2.7	2.3	1.8	1.3	1.1	1.7	2.9	3.5	3.6	2.7
1962	3.2	3.2	2.9	2.4	1.6	1.7	1.4	1.7	1.7	3.3	4.1	4.2	2.6
1963	3.2	4.0	3.1	2.3	1.8	2.0	1.5	1.1	2.0	3.6	3.7	4.0	2.7
1964	4.6	3.2	3.0	2.7	1.9	1.7	1.8	1.7	1.7	2.5	3.7	3.8	2.7
1965	3.8	3.5	2.7	2.9	2.0	2.1	1.6	1.2	1.6	3.0	3.4	4.5	2.7
1966	4.5	3.3	3.2	2.1	1.3	1.6	1.2	1.5	1.9	2.6	2.9	4.0	2.6
1967	3.8	2.8	2.8	2.4	1.5	1.3	1.2	1.3	1.3	2.9	3.6	3.9	2.5
1968	3.5	3.9	3.3	2.5	1.5	1.6	1.4	1.4	1.4	2.8	3.7	3.6	2.5
1969	2.9	4.6	3.3	3.4	2.2	1.7	1.6	1.4	2.0	3.0	3.7	5.3	2.9
1970	4.1	4.4	3.6	2.6	1.9	1.5	1.7	1.6	1.6	2.7	3.7	4.3	2.8
1971	3.4	3.6	3.8	3.1	2.3	1.9	1.3	1.6	2.1	2.4	3.9	3.6	2.8
1972	4.1	3.7	3.8	3.3	2.2	2.1	1.9	1.5	1.9	2.2	4.6	3.8	2.9
1973	4.4	4.0	3.7	2.7	2.4	2.2	2.2	2.0	2.3	2.9	3.8	5.0	3.1
1974	3.6	3.9	3.8	3.1	2.5	2.1	1.6	1.6	1.8	2.7	4.3	4.4	2.9
1975	3.6	3.4	2.9	2.3	2.2	1.4	1.4	1.3	1.2	2.8	3.7	3.5	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.7	6.0	6.1	4.1	3.0	2.4	2.3	2.4	4.7	4.6	5.4
1957	4.2	4.7	5.8	4.6	3.3	2.5	2.3	2.0	3.5	5.9	6.0	6.5
1958	6.6	6.4	5.3	6.4	4.3	2.1	3.2	2.6	3.8	4.8	6.4	6.6
1959	6.6	6.1	4.6	5.6	3.8	2.7	2.4	2.7	3.0	6.1	5.9	6.3
1960	6.6	6.5	4.6	4.6	3.2	2.9	2.4	2.3	2.5	6.5	6.4	6.5
1961	6.6	6.4	6.0	4.4	3.6	3.1	1.9	2.3	3.1	5.0	6.3	5.9
1962	5.4	4.9	4.7	4.1	2.7	3.5	2.2	2.6	2.1	6.0	6.4	6.1
1963	6.1	6.3	5.4	3.2	2.9	3.9	2.4	2.1	3.3	7.2	6.3	6.6
1964	6.5	5.6	5.1	4.8	3.9	2.8	2.9	2.3	3.0	4.2	6.3	6.5
1965	5.6	5.2	4.2	4.5	3.9	3.3	2.5	2.1	2.5	5.9	6.1	6.5
1966	6.2	5.1	5.1	4.4	3.4	2.9	2.3	2.3	3.4	4.5	4.8	6.2
1967	5.9	4.8	4.2	4.4	2.7	2.6	2.3	2.2	4.2	5.4	6.2	7.0
1968	5.4	6.0	5.1	3.6	2.8	2.4	2.6	2.3	3.2	4.5	5.9	6.2
1969	4.5	6.2	5.1	5.7	3.8	2.5	2.4	2.1	4.0	5.5	6.5	7.4
1970	6.7	6.0	6.1	4.8	3.1	2.4	2.4	2.9	2.8	5.6	6.2	6.5
1971	6.2	5.7	6.8	4.8	3.8	2.6	2.2	4.9	2.9	4.3	6.8	5.9
1972	6.2	5.7	5.6	6.1	3.3	3.5	3.6	2.6	3.3	3.6	6.1	6.9
1973	6.5	6.2	6.1	4.4	3.7	3.9	3.1	2.9	3.5	5.2	6.6	7.2
1974	6.7	6.5	6.5	5.8	4.4	3.6	3.3	2.4	3.2	5.1	6.5	6.3
1975	5.5	5.5	5.3	4.2	3.4	3.2	2.2	2.4	1.7	4.6	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	99.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	37	.	.	.	.	.	.	.	.	.	37
1.00 - 1.49	443	3	.	.	.	.	.	.	.	.	446
1.50 - 1.99	385	37	.	.	.	.	.	.	.	.	422
2.00 - 2.49	42	6	.	.	.	.	.	.	.	.	48
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	907	49	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 561

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	1	1	.	.	.	.	.	.	.	7
0.50 - 0.99	126	237	181	15	1	5	.	.	.	.	565
1.00 - 1.49	669	797	467	107	17	1	.	.	.	.	2058
1.50 - 1.99	1168	913	124	29	8	.	.	.	.	.	2242
2.00 - 2.49	157	778	85	3	.	.	.	.	.	.	1023
2.50 - 2.99	5	207	47	3	.	.	.	.	.	.	262
3.00 - 3.49	.	46	34	.	.	.	.	.	.	.	80
3.50 - 3.99	.	3	6	.	.	.	.	.	.	.	9
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2130	2981	945	158	26	6	0	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3659

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	3	1	1	1	4	1	.	.	.	19
0.50 - 0.99	54	489	1305	388	143	106	34	1	35	.	2555
1.00 - 1.49	58	1206	5403	3064	1220	427	111	32	18	.	11539
1.50 - 1.99	54	499	4401	5006	3588	1587	248	42	10	.	15435
2.00 - 2.49	15	207	1139	3295	4585	2782	556	49	3	.	12631
2.50 - 2.99	.	97	284	1009	4260	4702	1362	71	15	.	11800
3.00 - 3.49	.	44	169	438	2157	5427	2007	193	8	.	10443
3.50 - 3.99	.	1	111	147	1001	4317	2828	200	5	.	8610
4.00 - 4.49	.	.	29	75	340	2737	2710	270	5	.	6166
4.50 - 4.99	.	.	1	29	126	1050	2648	261	.	.	4115
5.00 +	.	.	.	8	18	504	3937	1300	1	.	5768
TOTAL	181	2551	12845	13459	17438	23647	16441	2419	100	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.34 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 52082

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	11	44	20	.	.	.	.	.	.	.	75
1.00 - 1.49	10	82	83	18	.	.	.	.	.	.	193
1.50 - 1.99	15	111	162	75	13	.	.	.	.	.	376
2.00 - 2.49	.	61	118	114	77	8	.	.	.	.	378
2.50 - 2.99	.	78	196	118	148	49	1	.	.	.	590
3.00 - 3.49	.	25	138	128	198	107	13	.	.	.	609
3.50 - 3.99	.	3	67	99	189	167	44	.	.	.	589
4.00 - 4.49	.	.	17	49	123	140	23	.	.	.	352
4.50 - 4.99	.	.	8	15	99	77	49	.	.	.	248
5.00 +	.	.	.	.	30	112	54	3	.	.	199
TOTAL	36	404	829	616	877	660	184	3	0	0	

MEAN HS(M) = 3.15 LARGEST HS(M) = 6.89 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2124

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	8	1	.	.	.	.	.	.	.	.	9
1.50 - 1.99	3	1	.	.	.	.	.	.	.	.	4
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	8	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.73 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 14

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

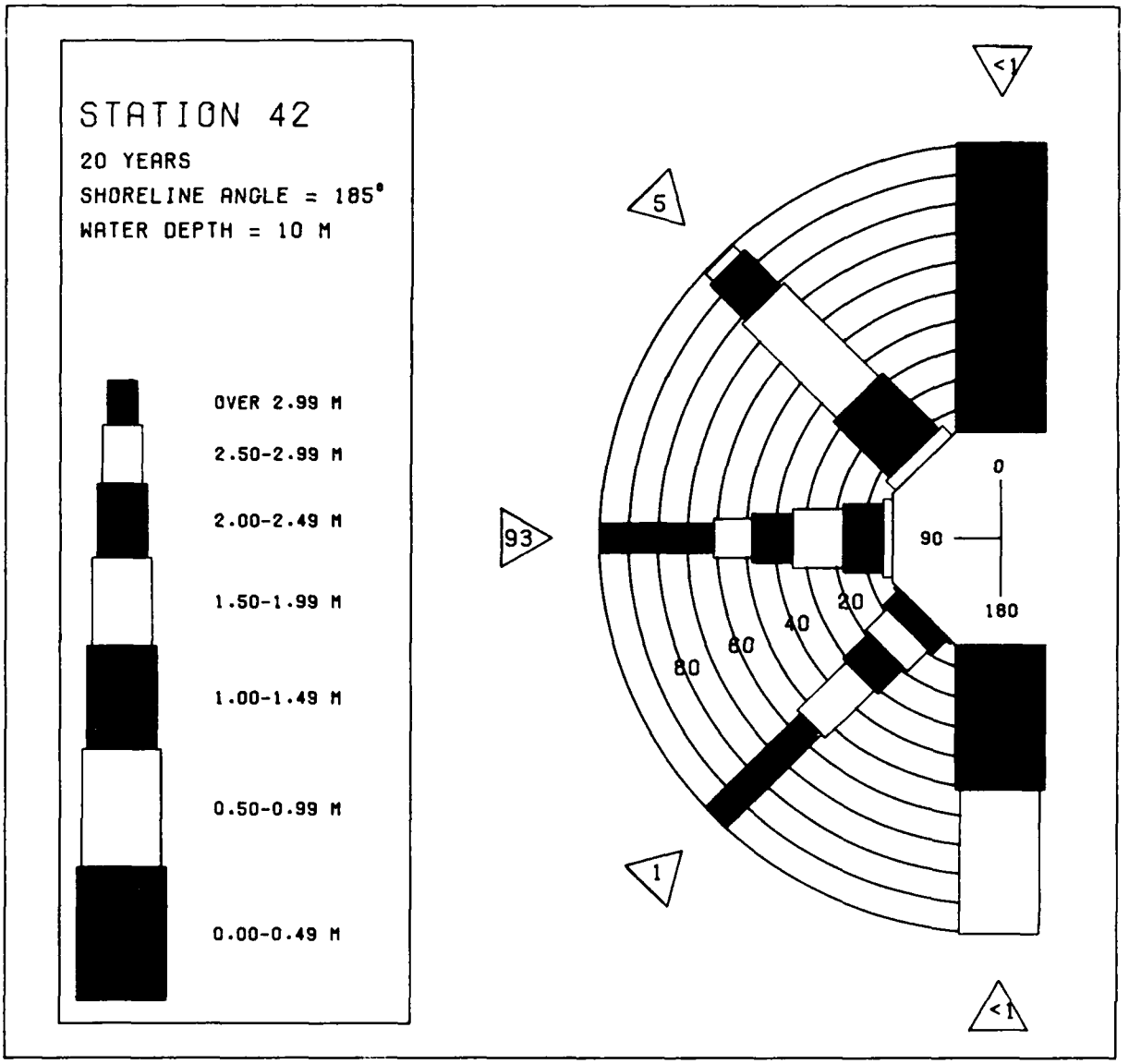
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 42 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.98N/124.15W LAT. LON. END= 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	23	77	150	40	14	11	3	.	3	.	321
1.00 - 1.49	118	209	595	319	123	42	11	3	1	.	1421
1.50 - 1.99	162	156	468	511	361	158	24	4	1	.	1845
2.00 - 2.49	21	105	134	341	466	279	55	4	.	.	1405
2.50 - 2.99	.	39	52	113	440	475	136	7	1	.	1263
3.00 - 3.49	.	11	34	56	235	553	202	19	.	.	1110
3.50 - 3.99	.	.	20	24	119	448	287	20	.	.	918
4.00 - 4.49	.	.	4	12	46	287	273	27	.	.	649
4.50 - 4.99	.	.	1	4	22	112	269	26	.	.	434
5.00 +	.	.	.	.	4	61	399	130	6	0	594
TOTAL	324	597	1458	1420	1830	2426	1659	240	6	0	

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.34 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 42 (43.98N/ 124.15W TO 43.86N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.3	2.9	2.5	1.9	1.5	1.4	1.6	2.5	3.1	3.6	2.6
1957	3.7	3.6	3.5	2.8	2.0	1.5	1.4	1.3	1.7	2.8	3.8	4.3	2.6
1958	5.0	4.3	3.3	3.5	2.1	1.4	1.7	1.5	1.9	3.7	3.5	4.3	2.9
1959	4.2	3.8	3.9	2.8	2.0	1.5	1.7	1.5	2.1	3.8	3.2	4.1	2.7
1960	3.7	4.1	3.7	2.8	2.1	1.6	1.5	1.5	1.5	3.0	4.0	4.1	2.7
1961	4.4	4.0	3.4	2.7	2.3	1.8	1.3	1.1	1.7	2.9	3.5	3.6	2.7
1962	3.2	3.2	2.9	2.4	1.6	1.7	1.4	1.7	1.7	3.3	4.1	4.2	2.6
1963	3.2	4.0	3.1	2.3	1.8	2.0	1.5	1.1	2.0	3.6	3.7	4.0	2.7
1964	4.6	3.2	3.0	2.7	1.9	1.7	1.8	1.7	1.7	2.5	3.7	3.8	2.7
1965	3.8	3.2	2.7	2.9	2.0	2.1	1.6	1.2	1.6	3.0	3.4	4.5	2.7
1966	4.5	3.3	3.2	2.1	2.3	1.6	1.6	1.5	1.9	3.6	2.9	4.0	2.6
1967	3.8	3.8	3.9	2.4	1.2	1.3	1.5	1.3	2.0	3.9	3.9	3.9	2.5
1968	3.4	3.9	3.3	2.3	1.5	1.6	1.5	1.4	1.4	3.8	3.7	3.9	2.5
1969	2.9	4.6	3.3	3.4	2.2	1.7	1.6	1.4	2.0	3.0	3.7	5.2	2.9
1970	4.1	4.4	3.6	2.6	1.9	1.5	1.7	1.6	1.6	2.7	3.7	4.3	2.8
1971	3.4	3.6	3.8	3.1	2.3	1.9	1.3	1.7	2.1	2.4	3.9	3.7	2.8
1972	4.1	3.7	3.8	3.3	2.3	2.1	1.9	1.5	1.9	2.2	4.6	3.7	2.9
1973	4.4	4.0	3.7	2.7	2.4	2.2	2.2	2.0	2.3	3.9	3.8	5.0	3.1
1974	3.6	3.9	3.8	3.1	2.5	2.1	1.6	1.6	1.8	3.7	4.3	4.4	2.9
1975	3.6	3.4	2.9	2.3	2.2	1.4	1.4	1.3	1.2	2.8	3.7	3.5	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 42 (43.98N/ 124.15W TO 43.86N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.7	6.0	6.1	4.1	3.0	2.4	2.3	2.4	4.7	4.6	5.4
1957	4.2	4.7	5.8	4.6	3.3	2.5	2.3	2.0	3.5	5.9	6.1	6.5
1958	6.6	6.4	5.3	6.4	4.3	2.1	3.2	2.6	3.8	4.8	6.4	6.6
1959	6.6	6.1	4.6	5.6	3.8	2.7	2.4	2.7	3.0	6.1	5.9	6.3
1960	6.6	6.5	4.6	4.7	3.3	2.9	2.4	2.4	2.5	6.5	6.4	6.5
1961	6.6	6.4	5.9	4.4	3.9	3.1	1.9	2.1	2.1	5.0	6.3	5.9
1962	5.4	4.9	4.7	4.1	3.9	3.5	2.2	2.2	2.1	6.0	6.4	6.1
1963	6.1	6.3	5.5	3.2	3.9	3.9	2.4	2.1	3.3	7.2	6.3	6.6
1964	6.5	5.6	5.1	4.8	3.9	2.8	2.9	2.4	3.0	4.2	6.3	6.5
1965	5.6	5.2	4.2	4.5	3.9	3.3	2.5	2.1	2.5	5.9	6.1	6.5
1966	6.2	5.1	5.1	4.4	3.4	2.9	2.3	2.3	3.4	4.5	4.9	6.2
1967	5.9	4.8	4.3	4.4	2.7	2.6	2.3	2.2	4.3	5.4	6.2	7.0
1968	5.4	6.0	5.1	3.6	3.8	3.4	2.6	2.3	3.2	4.5	5.9	6.2
1969	4.5	6.2	5.7	5.7	3.9	2.5	2.4	2.1	2.0	5.5	6.5	7.5
1970	6.7	6.0	6.1	4.8	3.1	2.4	2.4	3.0	2.8	5.7	6.2	6.5
1971	6.2	5.7	6.8	4.8	3.8	2.6	2.2	4.9	2.9	4.3	6.8	5.9
1972	6.2	5.7	5.6	6.1	3.3	3.5	3.6	2.6	3.3	3.6	6.1	6.9
1973	6.5	6.2	6.1	4.4	3.7	3.9	3.1	2.9	3.5	5.3	6.6	7.2
1974	6.6	6.5	6.5	5.8	4.4	3.6	3.3	2.4	3.2	5.1	6.5	6.5
1975	5.5	5.5	5.3	4.2	3.4	3.2	2.2	2.4	1.7	4.6	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 42 (43.98N/ 124.15W TO 43.86N/ 124.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	99.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	42	1	.	.	.	.	.	.	.	.	43
1.00 - 1.49	527	34	.	.	.	.	.	.	.	.	561
1.50 - 1.99	391	275	.	.	.	.	.	.	.	.	666
2.00 - 2.49	.	78	.	.	.	.	.	.	.	.	78
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	961	388	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.45 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 791

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	.	.	.	.	.	.	.	.	4
0.50 - 0.99	130	164	121	6	.	1	5	.	.	.	427
1.00 - 1.49	699	884	508	107	23	.	.	.	.	.	2221
1.50 - 1.99	1264	1339	135	23	3	.	.	.	.	.	2764
2.00 - 2.49	66	1031	68	5	.	.	.	.	.	.	1170
2.50 - 2.99	.	164	44	10	.	.	.	.	.	.	218
3.00 - 3.49	.	11	41	3	.	.	.	.	.	.	55
3.50 - 3.99	.	.	8	1	.	.	.	.	.	.	9
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2159	3594	928	155	26	1	5	0	0	0	

MEAN HS(M) = 1.66 LARGEST HS(M) = 3.70 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 4023

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	37	331	1067	183	63	47	20	1	15	.	1764
1.00 - 1.49	61	992	4733	2698	1018	304	70	27	17	.	9920
1.50 - 1.99	39	518	4784	4770	3352	1374	215	25	8	.	15085
2.00 - 2.49	11	220	1309	3838	4526	2577	513	41	.	.	13035
2.50 - 2.99	.	111	285	1078	4298	4573	1252	65	11	.	11673
3.00 - 3.49	.	34	188	429	2393	5545	1868	159	8	.	10624
3.50 - 3.99	.	3	128	164	1050	4493	2794	193	1	.	8826
4.00 - 4.49	.	.	32	75	376	2895	2722	251	10	.	6361
4.50 - 4.99	.	.	.	17	140	1261	2686	268	.	.	4372
5.00 +	.	.	.	1	34	605	4466	1343	3	.	6452
TOTAL	148	2215	12526	13253	17250	23674	16606	2373	73	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51516

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	10	51	18	.	.	.	.	.	.	.	79
1.00 - 1.49	5	97	87	13	.	.	.	.	.	.	202
1.50 - 1.99	22	90	184	78	29	.	.	.	.	.	403
2.00 - 2.49	.	66	118	116	106	10	.	.	.	.	416
2.50 - 2.99	.	65	181	109	167	51	1	.	.	.	574
3.00 - 3.49	.	11	148	104	147	121	17	.	.	.	548
3.50 - 3.99	.	3	78	118	188	157	44	.	.	.	588
4.00 - 4.49	.	.	27	44	121	118	41	.	.	.	351
4.50 - 4.99	.	.	3	22	92	61	51	.	.	.	229
5.00 +	.	.	.	1	34	99	49	6	.	.	189
TOTAL	37	383	844	605	884	617	203	6	0	0	

MEAN HS(M) = 3.11 LARGEST HS(M) = 7.22 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2104

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	6
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.22 LARGEST HS(M) = 1.60 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 6

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

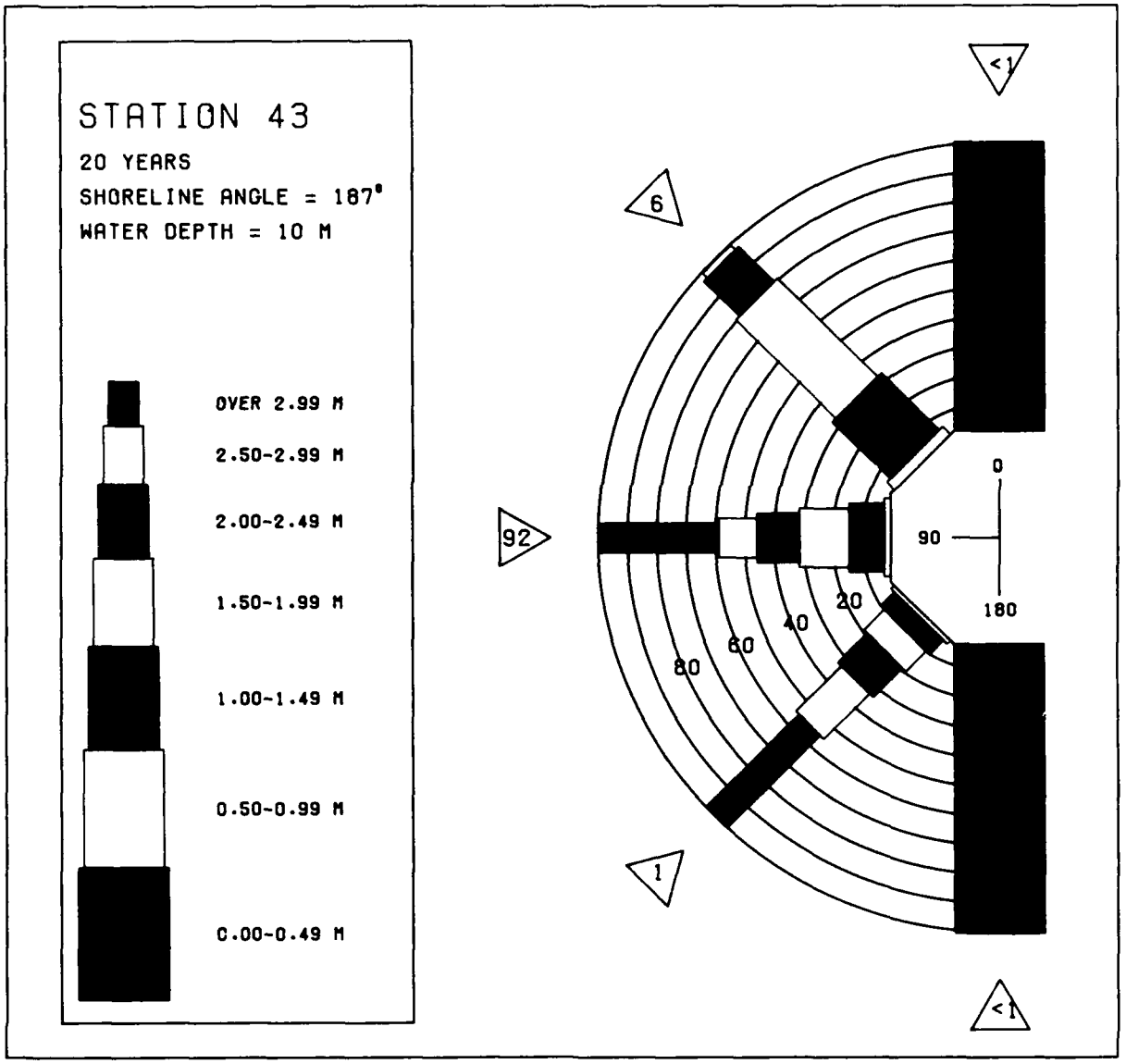
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 43 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49											0
0.50 - 0.99	22	54	120	18	6	4	2	.	1	.	227
1.00 - 1.49	129	201	532	281	104	30	7	2	1	.	1287
1.50 - 1.99	171	222	510	487	338	137	21	2	.	.	1868
2.00 - 2.49	7	139	149	395	463	258	51	4	.	.	1466
2.50 - 2.99	.	34	51	119	446	462	125	6	1	.	1244
3.00 - 3.49	.	5	37	53	254	566	188	15	.	.	1118
3.50 - 3.99	.	.	21	28	123	465	283	19	.	.	939
4.00 - 4.49	.	.	5	11	49	301	276	25	1	.	668
4.50 - 4.99	.	.	.	3	23	132	273	26	.	.	457
5.00 +	.	.	.	.	6	70	451	135	.	.	662
TOTAL	329	655	1425	1395	1812	2425	1677	234	4	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.41 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.4	3.4	3.0	2.5	2.0	1.6	1.5	1.6	2.5	3.2	3.6	2.6
1957	2.7	3.0	3.6	2.8	2.1	1.5	1.5	1.4	1.8	2.9	3.9	4.4	2.6
1958	5.1	4.3	3.4	3.5	2.2	1.5	1.8	1.6	1.9	2.8	3.5	4.4	3.0
1959	4.1	3.8	3.0	2.9	2.1	1.6	1.8	1.6	2.1	2.9	3.3	4.1	2.8
1960	3.7	4.3	2.7	2.9	2.1	1.7	1.6	1.6	1.6	3.0	4.1	4.2	2.8
1961	4.5	4.0	3.5	2.8	2.4	1.9	1.4	1.2	1.8	2.9	3.5	3.6	2.8
1962	3.2	3.4	2.9	2.5	1.7	1.8	1.5	1.7	1.8	3.3	4.2	4.3	2.7
1963	3.4	4.0	3.1	2.3	1.8	2.0	1.5	1.2	2.0	3.6	3.8	4.1	2.7
1964	4.7	3.3	3.1	2.8	2.0	1.8	1.9	1.8	1.8	2.5	3.8	3.8	2.8
1965	3.9	3.2	2.8	2.9	2.0	2.2	1.7	1.3	1.6	3.1	3.5	4.6	2.7
1966	4.6	3.4	3.3	2.2	2.4	1.6	1.7	1.6	1.9	2.6	2.9	4.1	2.7
1967	3.8	2.8	2.8	2.4	1.5	1.4	1.5	1.3	2.1	3.0	3.8	4.0	2.5
1968	3.5	3.9	3.4	2.3	1.6	1.6	1.5	1.5	1.4	2.9	3.7	3.6	2.6
1969	3.0	4.7	3.5	2.4	2.3	1.7	1.6	1.5	2.0	3.1	3.8	5.4	3.0
1970	4.1	4.6	3.6	2.7	2.0	1.6	1.7	1.6	1.9	2.7	3.7	4.4	2.9
1971	3.4	3.7	3.6	3.2	2.3	2.0	1.3	1.7	2.1	2.4	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.4	2.3	2.3	2.0	1.6	1.9	2.3	4.7	3.8	3.0
1973	4.5	4.2	3.8	2.9	2.5	2.2	2.2	2.1	2.4	2.9	3.8	5.0	3.2
1974	3.7	3.9	3.9	3.2	2.6	2.1	1.6	1.6	1.8	2.7	4.3	4.4	3.0
1975	3.7	3.5	3.0	2.4	2.2	1.5	1.5	1.4	1.2	2.8	3.8	3.5	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.5	5.5	6.1	6.1	4.2	3.0	2.3	2.4	2.4	4.7	4.8	5.6
1957	4.2	4.7	5.9	4.8	3.3	2.6	2.3	1.8	3.6	5.7	6.0	6.4
1958	6.8	6.5	5.6	6.5	4.3	2.1	3.4	3.0	3.8	5.1	6.4	6.6
1959	6.5	6.1	4.8	5.9	4.0	2.8	2.3	2.8	3.2	6.1	6.6	6.3
1960	6.7	6.6	4.7	4.5	3.2	3.0	2.4	2.4	2.4	6.5	6.5	6.4
1961	6.7	6.3	6.1	4.4	3.9	3.5	2.0	1.7	3.1	4.9	6.4	6.0
1962	5.5	5.1	5.0	4.6	2.6	3.4	2.1	3.1	5.3	6.0	6.6	6.1
1963	6.1	6.3	5.8	3.2	3.1	3.8	2.1	2.1	3.5	7.1	6.4	6.7
1964	6.5	5.7	5.0	5.2	3.8	2.8	3.0	2.4	2.9	4.3	6.2	6.7
1965	5.7	5.2	4.5	4.6	3.7	3.1	2.5	2.2	3.2	6.1	6.1	6.4
1966	6.4	5.3	5.6	4.6	3.5	3.0	2.4	2.2	3.5	4.6	4.7	6.2
1967	6.0	4.9	4.6	4.2	2.7	2.5	2.1	1.9	4.6	5.7	6.4	7.1
1968	5.4	6.0	5.3	3.7	2.5	2.2	2.7	2.4	3.8	4.8	6.3	5.6
1969	4.5	6.2	5.7	5.8	3.9	2.4	2.6	2.1	4.0	5.6	7.0	7.4
1970	6.7	6.1	6.2	5.0	3.2	2.5	2.3	2.9	2.7	5.6	6.2	6.8
1971	6.1	5.9	6.9	4.9	3.8	2.7	2.2	2.1	3.0	4.5	6.5	5.9
1972	6.5	6.4	5.7	6.2	3.4	3.7	3.7	2.5	3.1	3.7	6.1	6.9
1973	6.8	6.1	6.2	4.5	3.8	3.7	3.1	2.9	3.6	5.2	6.7	7.2
1974	6.4	6.6	6.6	6.1	4.5	3.6	3.0	2.3	3.4	5.2	6.5	6.6
1975	5.7	5.7	5.3	4.1	3.6	3.0	2.2	2.2	1.7	4.6	6.4	6.0

20 YR. STATISTICS FOR PACIFIC STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	104.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	18	.	.	.	.	.	.	.	.	.	18
1.00 - 1.49	400	17	.	.	.	.	.	.	.	.	417
1.50 - 1.99	359	207	.	.	.	.	.	.	.	.	566
2.00 - 2.49	.	54	.	.	.	.	.	.	.	.	54
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	777	278	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 618

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	.	.	.	.	.	.	.	.	2
0.50 - 0.99	130	107	44	3	.	.	3	.	.	.	287
1.00 - 1.49	740	771	210	47	6	.	.	.	.	.	1774
1.50 - 1.99	1478	1286	83	6	.	.	.	.	.	.	2853
2.00 - 2.49	95	1148	49	.	.	.	.	.	.	.	1292
2.50 - 2.99	.	196	39	3	.	.	.	.	.	.	238
3.00 - 3.49	.	20	25	.	.	.	.	.	.	.	45
3.50 - 3.99	.	.	6	.	.	.	.	.	.	.	6
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2444	3528	457	59	6	0	3	0	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.69 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 3806

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	46	321	1105	176	61	46	22	1	13	.	1791
1.00 - 1.49	80	1071	4953	2717	1013	305	71	27	18	.	10256
1.50 - 1.99	49	571	4715	4644	3352	1350	215	23	8	.	14927
2.00 - 2.49	11	232	1339	3843	4466	2541	516	39	.	.	12987
2.50 - 2.99	.	124	272	1098	4312	4611	1238	63	10	.	11728
3.00 - 3.49	.	37	183	388	2393	5544	1894	160	10	.	10609
3.50 - 3.99	.	3	116	142	1023	3526	2784	201	1	.	8796
4.00 - 4.49	.	.	35	68	328	2861	2719	248	10	.	6269
4.50 - 4.99	.	.	.	10	123	1232	2703	268	.	.	4336
5.00 +	.	.	.	.	20	573	4430	1353	3	.	6379
TOTAL	186	2365	12718	13086	17091	23590	16592	2383	73	0	

MEAN HS(M) = 2.87 LARGEST HS(M) = 7.19 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51496

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	13	88	23	.	.	.	.	.	.	.	124
1.00 - 1.49	5	116	114	18	.	.	.	.	.	.	253
1.50 - 1.99	20	97	239	114	34	1	.	.	.	.	505
2.00 - 2.49	.	70	147	174	162	23	.	.	.	.	576
2.50 - 2.99	.	56	193	135	184	63	3	.	.	.	634
3.00 - 3.49	.	10	148	133	210	162	37	.	.	.	700
3.50 - 3.99	.	1	73	131	183	188	39	.	.	.	615
4.00 - 4.49	.	.	23	34	135	136	68	.	.	.	396
4.50 - 4.99	.	.	1	20	87	83	54	.	.	.	245
5.00 +				3	35	85	66	6			195
TOTAL	38	438	961	762	1030	741	267	6	0	0	

MEAN HS(M) = 3.03 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2496

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	8	.	.	.	.	.	.	.	.	13
0.50 - 0.99	1	11	.	.	.	.	.	.	.	.	12
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	12	25	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.96 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 24

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

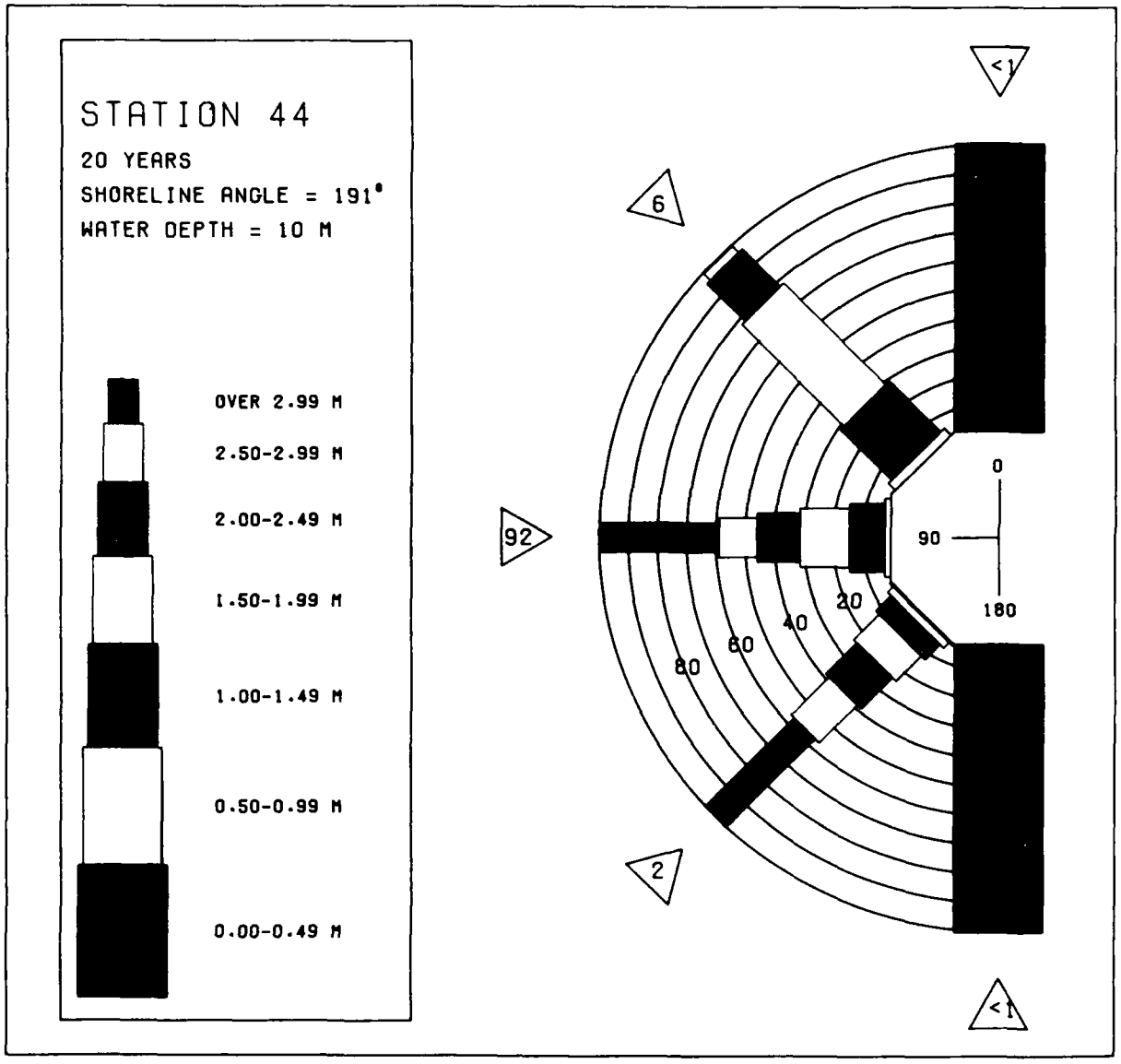
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 44 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METEPS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49		1									1
0.50 - 0.99	21	53	117	17	6	4	2	1	1	.	221
1.00 - 1.49	123	197	527	278	101	30	7	2	1	.	1266
1.50 - 1.99	190	216	503	476	338	135	21	2	.	.	1881
2.00 - 2.49	10	150	153	401	462	256	51	3	.	.	1486
2.50 - 2.99	.	38	50	123	449	467	124	6	1	.	1258
3.00 - 3.49	.	6	35	52	260	570	193	16	1	.	1133
3.50 - 3.99	.	.	19	27	120	471	262	20	.	.	939
4.00 - 4.49	.	.	5	10	46	299	278	24	.	.	663
4.50 - 4.99	.	.	.	3	21	131	275	26	.	.	456
5.00 +	.	.	.	.	5	65	449	136	5	0	655
TOTAL	344	661	1409	1387	1808	2428	1682	235	5	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.29 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.4	3.5	3.0	2.5	2.0	1.6	1.5	1.6	2.5	3.2	3.6	2.6
1957	2.7	3.0	3.6	2.8	2.1	1.5	1.5	1.4	1.8	2.9	3.9	4.4	2.6
1958	5.1	4.3	3.4	3.5	2.2	1.5	1.8	1.6	1.9	2.8	3.5	4.4	3.0
1959	4.1	3.8	3.0	3.0	2.1	1.6	1.8	1.6	2.1	2.9	3.3	4.1	2.8
1960	3.7	4.2	2.7	2.9	2.1	1.7	1.6	1.6	1.6	3.0	4.1	4.2	2.8
1961	4.4	4.0	3.5	2.8	2.4	1.9	1.4	1.2	1.8	2.9	3.5	3.6	2.8
1962	3.2	3.3	2.9	2.5	1.7	1.8	1.5	1.5	1.8	3.3	4.2	4.3	2.7
1963	3.3	4.0	3.1	2.3	1.8	2.1	1.6	1.2	2.0	3.6	3.8	4.1	2.7
1964	4.7	3.4	3.1	2.8	2.0	1.8	1.9	1.8	1.8	2.5	3.8	3.8	2.8
1965	3.8	3.3	2.8	2.9	2.1	2.2	1.7	1.3	1.7	3.1	3.4	4.6	2.7
1966	4.5	3.3	3.3	2.2	2.4	1.6	1.8	1.6	1.9	2.6	2.9	4.0	2.7
1967	3.8	2.8	2.8	2.5	1.5	1.4	1.5	1.3	2.1	3.0	3.8	4.0	2.5
1968	3.4	3.9	3.4	2.3	1.6	1.6	1.5	1.5	1.4	2.9	3.7	3.6	2.6
1969	3.0	4.7	3.5	2.4	2.3	1.7	1.6	1.5	2.0	3.1	3.8	5.3	3.0
1970	4.0	4.6	3.7	2.7	2.0	1.6	1.7	1.6	1.6	2.7	3.7	4.3	2.9
1971	3.4	3.7	3.9	3.2	2.3	2.0	1.4	1.7	2.1	2.4	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.4	2.3	2.3	2.0	1.6	1.9	2.3	4.7	3.8	3.0
1973	4.5	4.1	3.8	2.9	2.5	2.2	2.2	2.1	2.4	2.9	3.8	5.0	3.2
1974	3.6	3.9	3.9	3.2	2.6	2.2	1.6	1.7	1.8	2.7	4.3	4.4	3.0
1975	3.7	3.5	3.0	2.4	2.3	1.5	1.5	1.4	1.2	2.8	3.8	3.5	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.5	6.1	6.1	4.2	3.1	2.4	2.4	2.4	4.8	4.8	5.6
1957	4.2	4.7	5.9	4.8	3.5	2.6	2.3	1.8	3.5	5.7	6.0	6.4
1958	6.7	6.4	5.6	6.5	4.4	2.1	3.4	3.1	3.8	5.1	6.4	6.6
1959	6.5	6.1	4.8	5.9	4.0	2.8	2.4	2.8	3.2	6.1	6.6	6.3
1960	6.6	6.5	4.7	4.5	3.3	3.0	2.5	2.4	2.5	6.5	6.5	6.4
1961	6.6	6.3	6.0	4.5	3.9	3.5	2.0	1.7	3.1	4.9	6.4	6.0
1962	5.5	5.1	5.0	4.6	2.6	3.5	2.2	3.2	5.3	6.0	6.6	6.1
1963	6.0	6.2	5.8	3.2	3.1	3.8	2.2	2.2	3.5	7.1	6.4	6.6
1964	6.5	5.7	4.9	5.3	3.9	2.8	3.0	2.4	2.9	4.3	6.2	6.7
1965	5.7	5.2	4.5	4.6	3.7	3.1	2.5	2.2	2.2	6.0	6.1	6.3
1966	6.4	5.3	5.6	4.6	3.5	2.2	2.5	2.2	3.5	4.6	4.7	6.2
1967	6.0	4.8	4.7	4.2	2.7	2.5	2.2	1.9	4.6	5.7	6.4	7.0
1968	5.3	6.0	5.4	3.7	2.5	2.2	2.7	2.4	3.8	4.8	6.2	5.6
1969	4.5	6.2	5.7	5.7	4.0	2.4	2.6	2.1	4.1	5.7	7.0	7.3
1970	6.7	6.1	6.2	5.0	3.3	2.6	2.3	3.0	2.8	5.6	6.2	6.7
1971	6.1	5.8	6.8	4.9	3.8	2.7	2.2	2.1	3.0	4.5	6.5	5.9
1972	6.4	6.4	5.7	6.3	3.4	3.7	2.7	2.5	3.0	3.7	6.1	6.9
1973	6.8	6.1	6.2	4.5	3.9	3.7	3.1	3.0	3.6	5.3	6.7	7.2
1974	6.4	6.6	6.6	6.2	4.5	3.6	3.0	2.4	3.4	5.2	6.5	6.6
1975	5.7	5.7	5.3	4.1	3.6	3.0	2.2	2.2	1.7	4.6	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	105.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 1

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	326	8	.	.	.	.	.	.	.	.	334
1.50 - 1.99	331	155	.	.	.	.	.	.	.	.	486
2.00 - 2.49	3	39	.	.	.	.	.	.	.	.	42
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	666	202	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.32 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 510

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	.	.	.	.	.	.	.	.	2
0.50 - 0.99	131	75	17	3	.	.	3	.	.	.	229
1.00 - 1.49	770	639	82	23	3	.	.	.	.	.	1517
1.50 - 1.99	1613	1266	46	1	.	.	.	.	.	.	2926
2.00 - 2.49	119	1201	41	.	.	.	.	.	.	.	1361
2.50 - 2.99	.	236	35	.	.	.	.	.	.	.	271
3.00 - 3.49	.	25	23	.	.	.	.	.	.	.	48
3.50 - 3.99	.	.	5	.	.	.	.	.	.	.	5
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2634	3442	250	27	3	0	3	0	0	0	

MEAN HS(M) = 1.76 LARGEST HS(M) = 3.72 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3723

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	39	323	1108	171	61	42	22	1	13	.	1780
1.00 - 1.49	87	1153	4964	2722	1013	311	71	27	18	.	10366
1.50 - 1.99	68	610	4673	4585	3323	1346	224	22	8	.	14859
2.00 - 2.49	11	272	1339	3785	4368	2542	509	41	.	.	12867
2.50 - 2.99	.	123	273	1079	4324	4597	1245	61	10	.	11712
3.00 - 3.49	.	35	172	366	2368	5590	1921	165	10	.	10627
3.50 - 3.99	.	3	107	133	990	4495	2778	205	1	.	8712
4.00 - 4.49	.	.	35	63	301	2850	2698	237	10	.	6194
4.50 - 4.99	.	.	.	8	109	1187	2736	266	1	.	4307
5.00 +	.	.	.	.	18	540	4344	1358	3	.	6263
TOTAL	205	2525	12671	12912	16875	23500	16548	2383	74	0	

MEAN HS(M) = 2.86 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51272

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	20	107	30	.	.	.	.	.	.	.	157
1.00 - 1.49	6	124	177	34	.	.	.	.	.	.	341
1.50 - 1.99	22	100	280	131	65	3	.	.	.	.	601
2.00 - 2.49	.	77	183	225	220	22	1	.	.	.	728
2.50 - 2.99	.	54	203	176	242	97	10	.	.	.	782
3.00 - 3.49	.	6	140	148	224	188	53	.	.	.	759
3.50 - 3.99	.	1	70	118	193	229	56	.	.	.	667
4.00 - 4.49	.	.	25	34	143	147	78	.	.	.	427
4.50 - 4.99	.	.	.	18	68	102	61	1	.	.	250
5.00 +	.	.	.	1	34	77	88	5	.	.	205
TOTAL	48	469	1108	885	1189	865	347	6	0	0	

MEAN HS(M) = 2.95 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2889

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	18	.	.	.	.	.	.	.	.	24
0.50 - 0.99	3	22	.	.	.	.	.	.	.	.	25
1.00 - 1.49	5	15	.	.	.	.	.	.	.	.	20
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	57	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.82 LARGEST HS(M) = 2.51 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 45

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

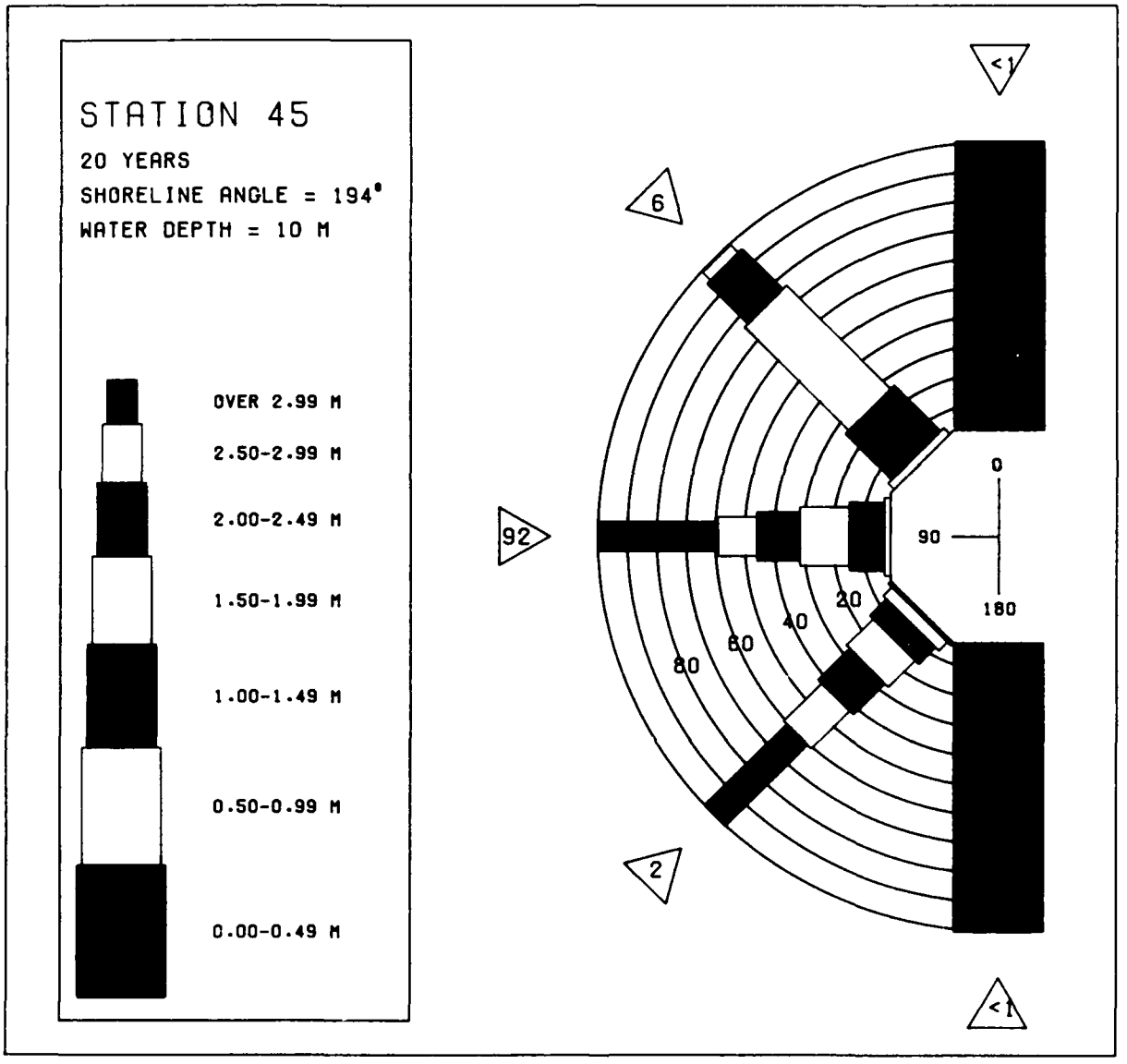
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 45 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	2									3
0.50 - 0.99	20	52	115	17	6	4	2		1		217
1.00 - 1.49	119	194	522	278	101	31	7	2	1		1255
1.50 - 1.99	203	213	500	471	338	135	22	2			1884
2.00 - 2.49	13	159	156	401	458	256	51	4			1498
2.50 - 2.99		41	51	125	456	459	125	6	1		1274
3.00 - 3.49		6	33	51	259	577	197	16	1		1140
3.50 - 3.99			18	25	118	472	283	20			936
4.00 - 4.49			6	9	44	239	277	23	1		659
4.50 - 4.99				2	17	129	279	26			453
5.00 +					5	61	443	136			645
TOTAL	356	667	1401	1379	1802	2433	1686	235	5	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.17 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.4	3.5	3.0	2.5	2.0	1.6	1.5	1.6	2.5	3.2	3.6	2.6
1957	2.7	3.0	3.6	2.8	2.1	1.5	1.5	1.4	1.8	2.9	3.9	4.4	2.6
1958	5.0	4.3	3.4	3.5	2.2	1.5	1.8	1.6	1.9	2.8	3.5	4.3	3.0
1959	4.1	3.8	3.0	3.0	2.1	1.6	1.8	1.6	2.1	2.9	3.3	4.1	2.8
1960	3.6	4.2	2.7	2.9	2.1	1.7	1.6	1.6	1.6	3.0	4.1	4.2	2.8
1961	4.4	4.0	3.4	2.8	2.4	1.9	1.4	1.2	1.8	2.9	3.5	3.6	2.8
1962	3.2	3.3	2.9	2.5	1.7	1.8	1.5	1.8	1.8	3.3	4.2	4.3	2.7
1963	3.3	3.9	3.1	2.3	1.8	2.1	1.6	1.2	2.0	3.6	3.8	4.0	2.7
1964	4.7	3.3	3.1	2.8	2.0	1.8	1.9	1.8	1.8	2.5	3.8	3.8	2.8
1965	3.8	3.3	2.9	2.9	2.1	2.2	1.7	1.3	1.7	3.1	3.4	4.6	2.7
1966	4.5	3.3	3.3	2.2	2.4	1.6	1.8	1.7	1.9	2.6	2.9	4.0	2.7
1967	3.8	2.8	2.8	2.5	1.5	1.4	1.5	1.3	2.1	2.9	3.8	4.0	2.5
1968	3.4	3.9	3.3	2.3	1.6	1.6	1.5	1.5	1.4	2.9	3.7	4.5	2.6
1969	3.0	4.7	3.5	3.4	2.3	1.7	1.7	1.5	2.0	3.1	3.7	5.3	3.0
1970	4.0	4.6	3.7	2.7	2.0	1.6	1.7	1.6	1.6	2.7	3.7	4.3	2.9
1971	3.4	3.7	3.9	3.2	2.4	2.0	1.4	1.7	2.1	2.4	3.9	3.7	2.8
1972	4.2	3.7	3.9	3.4	2.3	2.3	2.0	1.6	1.9	2.3	4.7	3.7	3.0
1973	4.5	4.1	3.8	2.9	2.5	2.3	2.2	2.1	2.4	2.9	3.8	5.0	3.2
1974	3.6	3.9	3.8	3.2	2.6	2.2	1.6	1.7	1.8	2.7	4.3	4.4	3.0
1975	3.7	3.5	3.0	2.4	2.3	1.5	1.5	1.4	1.2	2.8	3.8	3.5	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.6	1.8	2.9	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

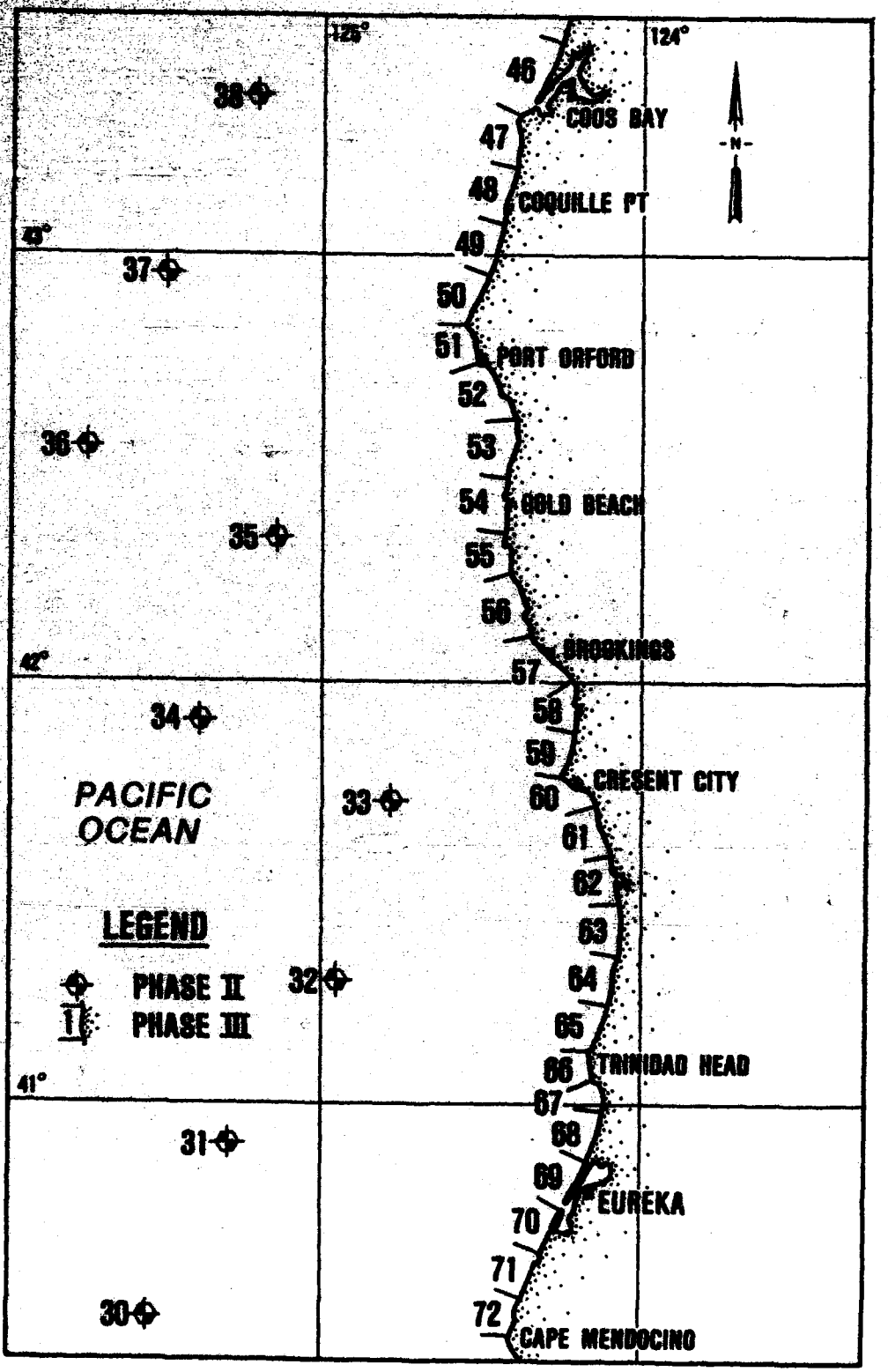
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.5	6.1	6.1	4.2	3.1	2.4	2.4	2.5	4.8	4.7	5.6
1957	4.1	4.7	5.8	4.8	3.5	2.6	2.4	1.8	3.5	5.8	6.0	6.4
1958	6.7	6.4	5.7	6.4	4.4	2.1	3.4	3.1	3.8	5.2	6.4	6.5
1959	6.5	6.1	4.8	6.0	4.0	2.8	2.4	2.8	3.2	6.1	6.6	6.3
1960	6.6	6.5	4.6	4.5	3.3	3.0	2.5	2.4	2.5	6.5	6.5	6.4
1961	6.5	6.3	6.0	4.5	3.9	3.5	2.0	1.7	3.1	4.9	6.4	6.1
1962	5.4	5.0	5.0	4.6	2.6	3.5	2.2	3.2	3.2	6.0	6.5	6.1
1963	6.0	6.1	5.8	3.2	3.1	3.9	2.2	2.2	3.5	7.1	6.4	6.6
1964	6.5	5.7	4.9	5.3	3.9	2.8	3.0	2.4	2.9	4.3	6.2	6.7
1965	5.7	5.2	4.5	4.7	3.8	3.1	2.5	2.2	2.3	6.0	6.1	6.3
1966	6.3	5.3	5.5	4.6	3.6	2.9	2.5	2.2	3.5	4.6	4.7	6.2
1967	5.9	4.8	4.7	4.3	2.8	2.5	2.2	1.9	4.7	5.7	6.4	7.0
1968	5.2	6.0	5.4	3.7	2.5	2.2	2.7	2.4	3.8	4.8	6.2	5.6
1969	4.4	6.2	5.7	5.7	4.0	2.4	2.6	2.1	4.1	5.7	6.9	7.2
1970	6.6	6.1	6.1	5.0	3.3	2.6	2.3	3.0	2.8	5.6	6.2	6.7
1971	6.1	5.8	6.8	4.9	3.8	2.7	2.3	5.2	3.1	4.5	6.5	6.0
1972	6.4	6.4	5.7	6.3	3.4	3.7	3.7	2.6	3.0	3.8	6.1	6.9
1973	6.7	6.1	6.2	4.5	3.9	3.7	3.1	3.0	3.6	5.3	6.7	7.2
1974	6.4	6.5	6.6	6.2	4.6	3.6	3.0	2.4	3.5	5.2	6.4	6.6
1975	5.7	5.7	5.3	4.2	3.6	3.1	2.2	2.2	1.7	4.7	6.4	6.0

20 YR. STATISTICS FOR PACIFIC STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88.5
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121318

Appendix C: Sta 46 through 72


125°
124°
45°
42°
41°
38
37
36
35
34
33
32
31
30
PACIFIC OCEAN
LEGEND
PHASE II
PHASE III
46
47
48
49
50
51
52
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57
58
59
60
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62
63
64
65
66
67
68
69
70
71
72
COOS BAY
COQUILLE PT
PORT ORFORD
GOLD BEACH
BROOKINGS
CRESENT CITY
TRINIDAD HEAD
EUREKA
CAPE MENDOCINO
N

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	77	5	.	.	.	.	.	.	.	.	82
1.50 - 1.99	49	63	.	.	.	.	.	.	.	.	112
2.00 - 2.49	.	11	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	132	79	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 125

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	106	20	3	.	.	.	.	.	.	.	129
1.00 - 1.49	920	333	.	.	.	.	.	.	.	.	1253
1.50 - 1.99	2118	1278	.	1	.	.	.	.	.	.	3397
2.00 - 2.49	207	1654	30	.	.	.	.	.	.	.	1891
2.50 - 2.99	.	342	32	.	.	.	.	.	.	.	374
3.00 - 3.49	.	68	30	.	.	.	.	.	.	.	98
3.50 - 3.99	.	1	13	.	.	.	.	.	.	.	14
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3351	3696	108	1	0	0	0	0	0	0	

MEAN HS(M) = 1.85 LARGEST HS(M) = 3.77 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 4187

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	.	.	.	.	.	.	.	5
0.50 - 0.99	44	325	929	196	32	37	6	1	17	.	1587
1.00 - 1.49	251	1203	4336	2522	1072	362	71	23	10	.	9935
1.50 - 1.99	241	817	4178	4149	3175	1233	208	30	6	.	14037
2.00 - 2.49	42	436	1401	3427	4098	2513	551	17	.	.	12497
2.50 - 2.99	.	164	212	1059	3998	4597	1336	85	5	.	11456
3.00 - 3.49	.	35	119	261	2219	5340	1374	218	3	.	10069
3.50 - 3.99	.	.	118	71	776	4110	2701	225	3	.	8004
4.00 - 4.49	.	.	25	41	179	2373	2624	201	6	.	5449
4.50 - 4.99	.	.	.	11	47	903	2542	239	1	.	3743
5.00 +	.	.	.	1	8	338	3496	1332	.	.	5218
TOTAL	579	3070	11319	11739	15604	21806	15512	2321	51	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.05 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47947

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	34	145	99	3	1						282
1.00 - 1.49	5	219	588	143	35	11					1001
1.50 - 1.99	41	160	598	422	294	34	1				1550
2.00 - 2.49	3	138	296	456	520	193	23				1629
2.50 - 2.99		63	254	261	588	482	70				1718
3.00 - 3.49		10	148	188	472	588	186				1592
3.50 - 3.99		1	75	114	272	501	210				1173
4.00 - 4.49			8	42	135	314	201	1			701
4.50 - 4.99				13	83	136	200	1			433
5.00 +				3	11	124	164	29			331
TOTAL	83	736	2066	1645	2411	2383	1055	31	0	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 6.85 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 6102

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	32									52
0.50 - 0.99	11	29									40
1.00 - 1.49	8	11	1								20
1.50 - 1.99	1	3	1								5
2.00 - 2.49		1	1								2
2.50 - 2.99		1									1
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	40	77	3	0	0	0	0	0	0	0	

MEAN HS(M) = 0.76 LARGEST HS(M) = 2.81 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 75

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

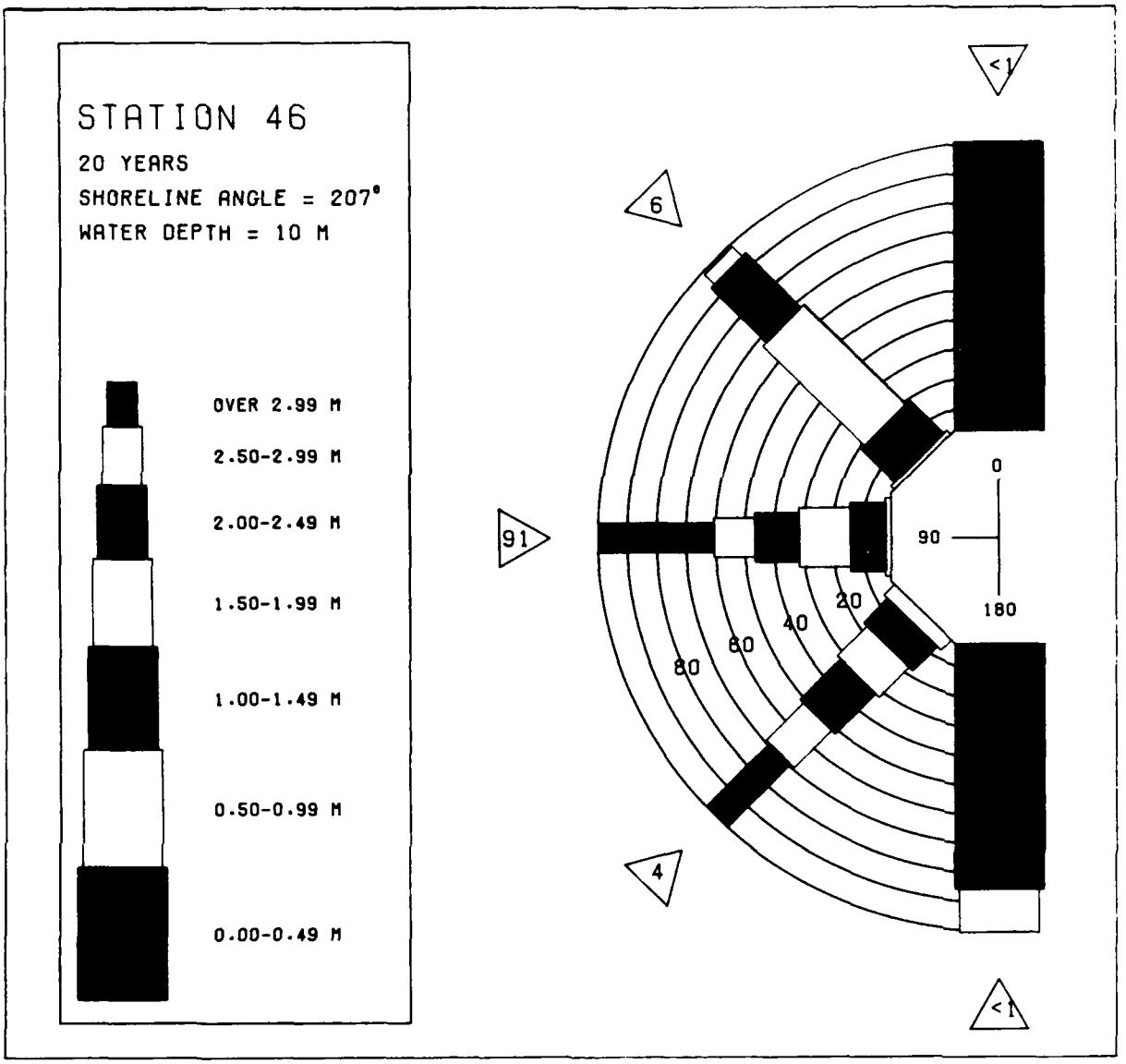
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5										5
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	5	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.22 LARGEST HS(M) = 0.42 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 3

PHASE 3 ST. 46 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.28W
SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	19	52	103	20	3	3	.	.	1	.	201
1.00 - 1.49	126	185	492	266	110	37	7	2	1	.	1226
1.50 - 1.99	245	232	477	457	347	126	21	3	.	.	1908
2.00 - 2.49	25	224	172	388	461	270	58	1	.	.	1599
2.50 - 2.99	.	57	49	132	458	508	140	8	.	.	1352
3.00 - 3.49	.	11	29	45	269	592	216	11	.	.	1173
3.50 - 3.99	.	.	20	18	104	461	291	22	.	.	916
4.00 - 4.49	.	.	3	8	31	268	282	20	.	.	612
4.50 - 4.99	.	.	.	2	13	104	274	24	.	.	417
5.00 +	.	.	.	.	2	46	365	141	2	0	554
TOTAL	418	764	1345	1336	1798	2415	1654	232	2	0	

MEAN HS(M) = 2.74 LARGEST HS(M) = 7.05 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 46 (43.50N/ 124.26W TO 43.31N/ 124.38W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	3.3	3.5	2.9	2.5	2.0	1.7	1.6	1.6	2.4	3.1	3.5	2.6
1957	2.6	2.9	3.4	2.8	2.2	1.5	1.6	1.4	1.8	2.8	3.7	4.3	2.6
1958	4.9	4.0	3.4	3.4	2.3	1.5	1.9	1.6	1.9	2.8	3.5	4.1	2.9
1959	3.8	3.7	3.0	3.0	2.0	1.6	1.9	1.7	2.1	2.9	3.4	4.0	2.8
1960	3.6	4.1	2.6	2.8	2.1	1.7	1.7	1.7	1.6	2.9	4.0	4.1	2.7
1961	4.2	3.7	3.3	2.7	2.3	2.0	1.4	1.2	1.8	2.8	3.4	3.5	2.7
1962	3.1	3.3	2.9	2.5	1.7	1.8	1.6	1.7	1.8	3.3	4.1	4.1	2.7
1963	3.2	3.6	3.1	2.3	1.8	2.1	1.6	1.2	2.0	3.5	3.7	3.9	2.7
1964	4.5	3.4	3.0	2.9	2.0	1.8	1.9	1.8	1.8	2.4	3.6	3.7	2.7
1965	3.8	3.2	2.8	2.9	2.1	2.2	1.7	1.5	1.7	3.0	3.3	4.5	2.7
1966	4.4	3.3	3.2	2.2	2.4	1.7	1.8	1.7	1.9	2.6	2.8	3.8	2.6
1967	3.6	2.8	2.8	2.4	1.5	1.4	1.5	1.4	2.1	2.9	3.8	3.9	2.5
1968	3.2	3.6	3.2	2.3	1.6	1.6	1.6	1.5	1.5	2.9	3.6	3.4	2.5
1969	3.0	4.7	3.6	3.3	2.3	1.8	1.7	1.5	2.0	3.0	3.7	5.1	3.0
1970	3.7	4.6	3.8	2.8	2.1	1.7	1.8	1.7	1.6	2.7	3.6	4.3	2.8
1971	3.2	3.5	3.7	2.2	2.3	2.0	1.4	1.8	2.1	2.4	3.7	3.7	2.8
1972	4.2	3.6	3.7	3.3	2.3	2.3	2.0	1.7	1.9	2.3	4.6	3.6	3.0
1973	4.3	4.0	3.9	2.9	2.5	2.2	2.2	2.2	2.4	2.9	3.6	4.8	3.2
1974	3.5	3.9	3.8	3.1	2.6	2.2	1.6	1.7	1.8	2.7	4.2	4.3	3.0
1975	3.5	3.3	3.0	2.3	2.2	1.6	1.5	1.4	1.2	2.7	3.6	3.3	2.5
MEAN	3.7	3.6	3.3	2.8	2.1	1.8	1.7	1.6	1.8	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 46 (43.50N/ 124.26W TO 43.31N/ 124.38W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.6	6.1	5.7	4.1	2.9	2.4	2.4	2.5	4.8	4.6	5.5
1957	4.1	4.5	5.2	4.6	3.4	2.5	3.1	2.1	3.3	5.7	6.0	6.3
1958	6.6	6.3	5.8	6.2	4.1	2.2	3.7	3.0	3.6	5.3	6.1	5.9
1959	6.2	6.1	4.8	6.1	3.7	2.6	2.5	2.7	3.2	6.0	6.7	6.2
1960	6.3	6.4	4.4	4.4	3.3	2.8	2.6	2.4	2.4	6.4	6.3	6.4
1961	6.2	5.9	5.8	4.3	3.5	3.6	2.1	2.0	3.1	4.8	6.1	6.0
1962	5.2	4.9	4.8	4.9	2.5	3.3	2.3	3.0	5.2	6.0	6.2	6.0
1963	5.2	6.0	5.7	3.4	3.1	3.9	2.4	2.2	3.4	6.8	6.1	6.3
1964	6.5	5.8	4.7	5.5	3.9	2.6	3.0	2.3	2.9	4.4	6.1	5.7
1965	5.6	5.0	5.0	4.7	3.6	3.3	2.5	2.2	2.3	6.0	6.1	6.2
1966	6.1	5.1	5.4	4.4	3.5	2.9	2.5	2.5	3.6	4.5	4.8	6.1
1967	5.4	4.3	4.8	4.3	2.7	2.5	2.2	1.9	4.8	5.8	6.1	6.9
1968	5.0	5.6	5.4	4.1	2.8	2.2	2.6	2.4	3.8	4.9	6.0	5.4
1969	4.4	6.3	6.2	5.6	4.0	2.6	2.3	2.2	4.0	5.7	6.7	6.9
1970	6.5	6.1	6.0	4.9	3.2	2.5	2.3	2.8	2.7	5.3	6.1	6.5
1971	6.0	5.4	6.3	4.7	3.7	2.7	2.4	4.8	3.1	4.5	6.3	5.9
1972	6.4	5.7	5.5	6.2	3.3	3.6	3.5	2.7	2.8	3.9	6.0	6.7
1973	6.7	6.2	6.2	4.5	3.9	3.5	3.0	2.9	3.5	4.8	6.6	7.0
1974	6.1	6.5	6.3	6.1	4.3	3.3	3.2	2.4	3.5	5.1	6.3	6.6
1975	5.7	5.7	5.5	3.7	3.5	3.0	2.4	2.3	1.8	5.1	6.4	6.0

20 YR. STATISTICS FOR PACIFIC STATION 46 (43.50N/ 124.26W TO 43.31N/ 124.38W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.7
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.6
LARGEST WAVE HS . . . . . (METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	94.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	73121321

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	100	8	.	.	.	.	.	.	.	.	108
1.00 - 1.49	874	109	.	.	.	.	.	.	.	.	983
1.50 - 1.99	550	742	.	.	.	.	.	.	.	.	1292
2.00 - 2.49	1	109	.	.	.	.	.	.	.	.	110
2.50 - 2.99	.	8	.	.	.	.	.	.	.	.	8
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1525	976	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1465

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	5	3	.	.	.	.	.	.	9
0.50 - 0.99	99	297	292	27	.	6	3	.	.	.	724
1.00 - 1.49	583	1232	1274	254	44	6	.	.	.	.	3393
1.50 - 1.99	906	1406	781	102	20	1	.	.	.	.	3216
2.00 - 2.49	29	912	242	61	11	.	.	.	.	.	1255
2.50 - 2.99	.	157	71	53	15	5	.	.	.	.	301
3.00 - 3.49	.	13	66	11	13	3	.	.	.	.	104
3.50 - 3.99	.	.	20	3	1	25	.	.	.	.	49
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1618	4017	2751	514	104	46	3	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 3.96 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5304

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	29	260	833	184	41	37	3	1	22	.	1410
1.00 - 1.49	35	770	3011	2462	1048	343	75	22	5	.	8671
1.50 - 1.99	51	484	4430	4839	3403	1265	210	32	6	.	14721
2.00 - 2.49	5	217	1132	3648	4502	2623	518	22	.	.	12667
2.50 - 2.99	.	131	331	1042	4255	4628	1232	73	8	.	11700
3.00 - 3.49	.	23	244	386	2426	5453	1935	124	.	.	10591
3.50 - 3.99	.	3	172	164	1127	4353	3679	195	1	.	8724
4.00 - 4.49	.	.	54	111	369	2833	3674	203	6	.	6250
4.50 - 4.99	.	.	.	44	165	1264	2626	237	1	.	4337
5.00 +	.	.	.	5	68	602	4226	1387	.	.	6288
TOTAL	120	1894	11107	12905	17404	23412	16178	2296	49	0	

MEAN HS(M) = 2.91 LARGEST HS(M) = 7.70 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49910

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	11	25	10	.	.	.	.	.	.	.	46
1.00 - 1.49	5	82	49	6	.	.	.	.	.	.	142
1.50 - 1.99	25	95	119	37	1	.	.	.	.	.	277
2.00 - 2.49	1	58	102	73	41	6	.	.	.	.	281
2.50 - 2.99	.	85	165	83	133	22	.	.	.	.	488
3.00 - 3.49	.	10	142	112	133	56	5	.	.	.	458
3.50 - 3.99	.	3	70	114	133	118	35	.	.	.	473
4.00 - 4.49	.	.	17	78	154	121	25	.	.	.	395
4.50 - 4.99	.	.	1	25	95	66	30	.	.	.	217
5.00 +				1	44	102	44	3			194
TOTAL	42	358	675	529	734	491	139	3	0	0	

MEAN HS(M) = 3.27 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 1752

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	3	.	.	.	.	.	.	.	.	4
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	1	3	.	.	.	.	.	.	.	.	4
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	4	7	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.24 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 9

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

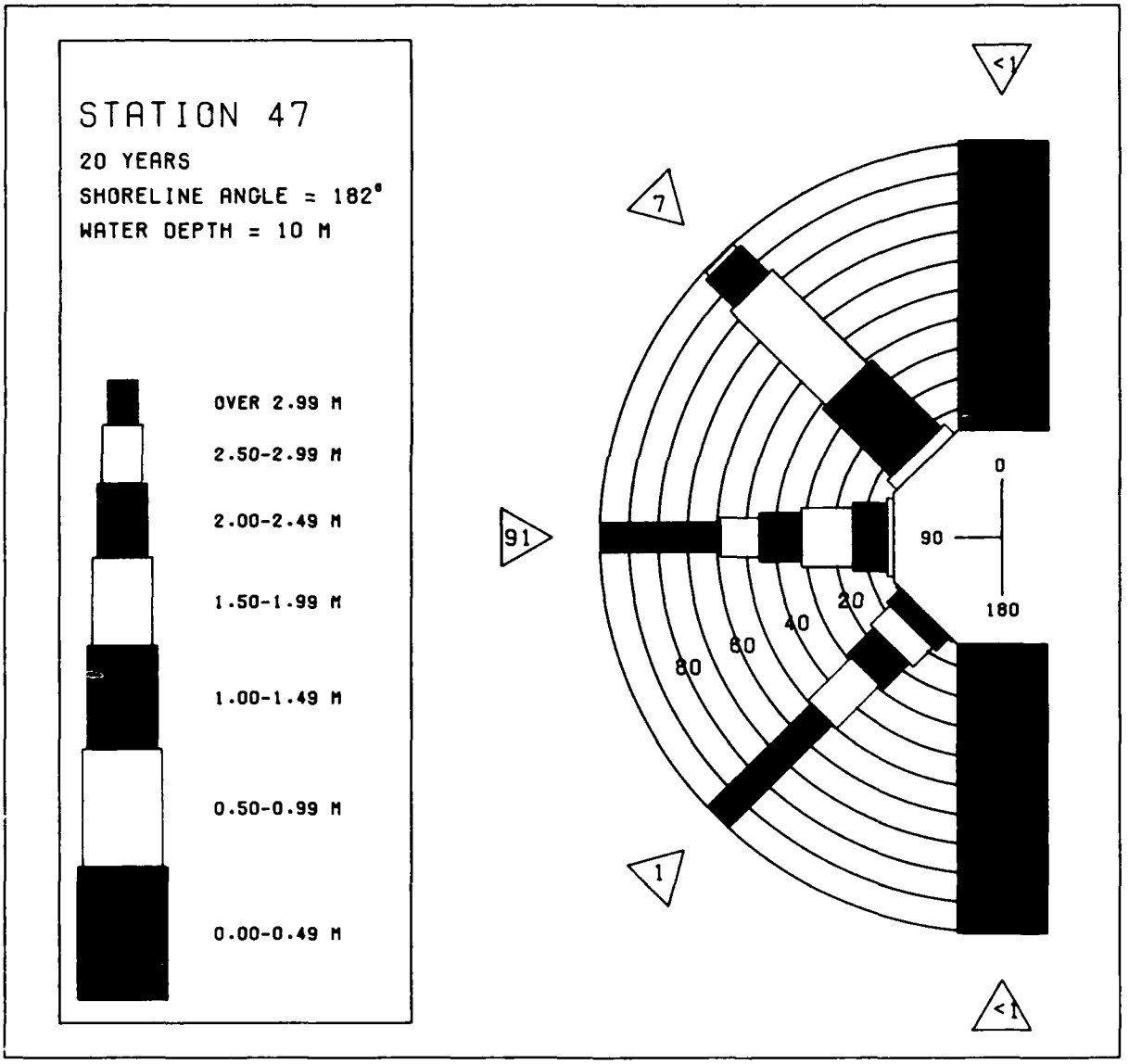
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 47 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.31N/124.38W LAT. LON. END= 43.20N/124.40W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	24	59	113	21	4	4			2		227
1.00 - 1.49	150	219	523	272	109	35	7	2			1317
1.50 - 1.99	153	273	533	497	342	126	21	3			1948
2.00 - 2.49	3	129	147	378	455	263	51	2			1428
2.50 - 2.99		38	56	117	440	465	123	7			1246
3.00 - 3.49		4	45	51	257	551	194	12			1114
3.50 - 3.99			26	30	126	450	271	19			922
4.00 - 4.49			7	18	52	295	270	20			662
4.50 - 4.99				7	26	133	265	23			454
5.00 +					11	70	427	139			647
TOTAL	330	722	1450	1391	1822	2392	1629	227	2	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.70 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 47 (43.31N/ 124.38W TO 43.20N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.4	3.5	2.8	2.5	2.0	1.6	1.5	1.6	2.4	3.1	3.6	2.6
1957	2.7	3.0	3.5	2.8	2.2	1.5	1.5	1.4	1.9	2.8	3.7	4.4	2.6
1958	5.1	4.3	3.5	3.5	2.2	1.5	1.8	1.6	1.9	2.7	3.5	4.4	3.0
1959	4.0	3.8	3.0	3.0	2.0	1.6	1.8	1.6	2.1	2.9	3.4	4.1	2.8
1960	3.7	4.2	2.6	2.8	2.1	1.7	1.6	1.6	1.5	2.9	4.0	4.2	2.8
1961	4.5	3.9	3.5	2.7	2.3	2.0	1.4	1.1	1.7	2.8	3.4	3.6	2.7
1962	3.2	3.4	2.9	2.6	1.7	1.7	1.5	1.2	1.8	3.3	4.2	4.4	2.7
1963	3.3	4.1	3.1	2.3	1.8	2.0	1.5	1.2	2.0	3.6	3.7	4.1	2.7
1964	4.7	3.4	3.0	2.8	1.9	1.8	1.9	1.7	1.8	2.5	3.7	3.9	2.7
1965	3.9	3.2	2.8	2.9	2.0	2.1	1.6	1.3	1.6	3.0	3.5	4.6	2.7
1966	4.6	3.4	3.3	2.1	2.3	1.7	1.8	1.6	1.9	2.6	2.9	4.1	2.7
1967	3.8	2.9	2.8	2.4	1.5	1.4	1.5	1.3	2.1	3.0	3.7	4.0	2.5
1968	3.5	4.0	3.4	2.3	1.6	1.6	1.5	1.5	1.5	2.9	3.8	3.6	2.6
1969	3.1	4.7	3.6	3.3	2.3	1.8	1.6	1.5	2.0	3.0	3.7	5.4	3.0
1970	4.1	4.7	3.8	2.7	2.0	1.6	1.7	1.6	1.5	2.7	3.6	4.4	2.9
1971	3.5	3.6	3.8	3.3	2.2	2.0	1.3	1.7	2.0	2.4	3.8	3.7	2.8
1972	4.2	3.7	3.9	3.3	2.2	2.2	2.0	1.6	1.8	2.3	4.7	3.9	3.0
1973	4.5	4.1	3.9	2.9	2.4	2.2	2.2	2.0	2.3	2.9	3.7	5.0	3.2
1974	3.8	4.0	3.9	3.2	2.6	2.1	1.6	1.6	1.8	2.7	4.2	4.5	3.0
1975	3.6	3.5	3.0	2.3	2.2	1.5	1.5	1.4	1.1	2.7	3.7	3.5	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 47 (43.31N/ 124.38W TO 43.20N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.6	6.0	5.5	3.9	2.9	2.3	2.3	2.4	4.6	4.7	5.5
1957	4.2	5.0	5.6	4.8	3.5	2.6	2.7	1.9	3.5	5.5	6.0	6.5
1958	6.8	6.4	5.7	6.5	4.0	2.2	3.5	2.9	3.5	5.1	6.2	6.7
1959	6.3	6.1	4.9	5.9	3.9	2.6	2.4	2.6	3.1	6.1	6.7	6.2
1960	6.6	6.6	4.6	4.4	3.2	2.9	2.4	2.4	2.2	6.4	6.4	6.4
1961	6.7	6.4	6.1	4.3	3.5	3.5	1.9	1.8	3.0	4.7	6.1	5.8
1962	5.6	4.7	4.9	4.7	2.6	3.2	2.2	3.0	5.3	6.0	6.5	6.3
1963	6.1	6.3	5.7	3.2	3.1	3.7	3.1	2.0	3.4	6.9	6.0	6.8
1964	6.6	5.7	4.9	5.4	3.8	2.8	3.0	2.3	2.9	4.2	6.2	5.9
1965	5.9	4.9	5.0	4.6	3.5	3.1	3.3	2.1	2.2	6.0	6.2	6.3
1966	6.6	5.1	5.6	4.6	3.5	2.9	2.5	2.2	3.7	4.7	4.8	6.3
1967	5.8	4.5	4.6	4.1	2.6	2.4	2.1	1.8	4.6	5.7	6.1	7.1
1968	5.2	6.0	5.3	4.0	2.7	2.3	2.6	2.4	3.8	4.8	6.3	5.6
1969	4.6	6.4	6.1	5.7	3.9	2.5	2.3	2.1	3.9	5.5	6.9	7.7
1970	7.0	6.2	6.2	5.1	3.1	2.4	2.2	2.7	2.7	5.2	6.1	6.8
1971	6.6	5.9	6.7	4.7	3.6	2.7	2.1	4.6	3.1	4.4	6.6	5.7
1972	6.5	5.9	5.7	6.2	3.2	3.5	3.5	2.6	3.1	3.6	6.1	6.9
1973	7.0	6.3	6.3	4.5	3.9	3.7	3.1	2.8	3.7	4.6	6.6	7.1
1974	6.9	6.5	6.7	6.0	4.2	3.3	3.0	2.3	3.3	5.1	6.5	6.7
1975	5.5	5.7	5.6	3.6	3.5	2.8	2.1	2.1	1.6	5.0	6.4	6.4

20 YR. STATISTICS FOR PACIFIC STATION 47 (43.31N/ 124.38W TO 43.20N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	95.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121115

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	44	.	.	.	.	.	.	.	.	.	44
1.00 - 1.49	566	53	.	.	.	.	.	.	.	.	619
1.50 - 1.99	431	395	.	.	.	.	.	.	.	.	826
2.00 - 2.49	1	99	.	.	.	.	.	.	.	.	100
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1042	552	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.86 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 933

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	106	114	54	5	.	.	1	.	.	.	280
1.00 - 1.49	761	877	350	66	20	.	.	.	.	.	2074
1.50 - 1.99	1415	1563	104	5	3	.	.	.	.	.	3090
2.00 - 2.49	92	1237	61	5	.	.	.	.	.	.	1395
2.50 - 2.99	.	210	51	3	.	.	.	.	.	.	264
3.00 - 3.49	.	22	41	.	.	.	.	.	.	.	63
3.50 - 3.99	.	.	13	.	.	.	.	.	.	.	13
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2374	4023	674	84	23	0	1	0	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.72 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 4202

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	6	1	.	.	.	.	.	.	.	8
0.50 - 0.99	75	342	983	200	33	39	5	1	17	.	1652
1.00 - 1.49	58	985	4522	2501	1009	345	75	23	8	.	9526
1.50 - 1.99	66	545	4873	4681	3302	1220	201	27	8	.	14923
2.00 - 2.49	10	254	1457	3723	4409	2522	497	22	.	.	12894
2.50 - 2.99	.	142	294	1185	4348	4656	1213	71	5	.	11910
3.00 - 3.49	.	25	179	383	2539	5477	1950	121	3	.	10677
3.50 - 3.99	.	3	148	138	1045	4491	2660	191	1	.	8677
4.00 - 4.49	.	.	35	82	302	2830	2710	207	6	.	6172
4.50 - 4.99	.	.	.	27	128	1223	2626	236	3	.	4243
5.00 +	.	.	.	3	35	549	4447	1418	.	.	6252
TOTAL	170	2302	12492	12923	17147	23348	16184	2317	51	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.45 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 50829

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	11	73	15	.	.	.	.	.	.	.	99
1.00 - 1.49	5	112	123	13	.	.	.	.	.	.	253
1.50 - 1.99	29	118	179	111	27	5	.	.	.	.	469
2.00 - 2.49	.	77	148	179	131	11	.	.	.	.	546
2.50 - 2.99	.	68	212	114	169	49	1	.	.	.	613
3.00 - 3.49	.	10	176	130	203	140	23	.	.	.	682
3.50 - 3.99	.	1	70	136	183	189	42	.	.	.	621
4.00 - 4.49	.	.	20	68	167	159	47	.	.	.	461
4.50 - 4.99	.	.	.	23	78	63	58	.	.	.	222
5.00 +	.	.	.	1	42	104	49	3	.	.	201
TOTAL	45	459	943	775	1000	722	220	3	0	0	

MEAN HS(M) = 3.08 LARGEST HS(M) = 7.23 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2450

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	8	.	.	.	.	.	.	.	.	11
0.50 - 0.99	6	22	.	.	.	.	.	.	.	.	28
1.00 - 1.49	1	1	.	.	.	.	.	.	.	.	2
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	31	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.69 LARGEST HS(M) = 1.49 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 26

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

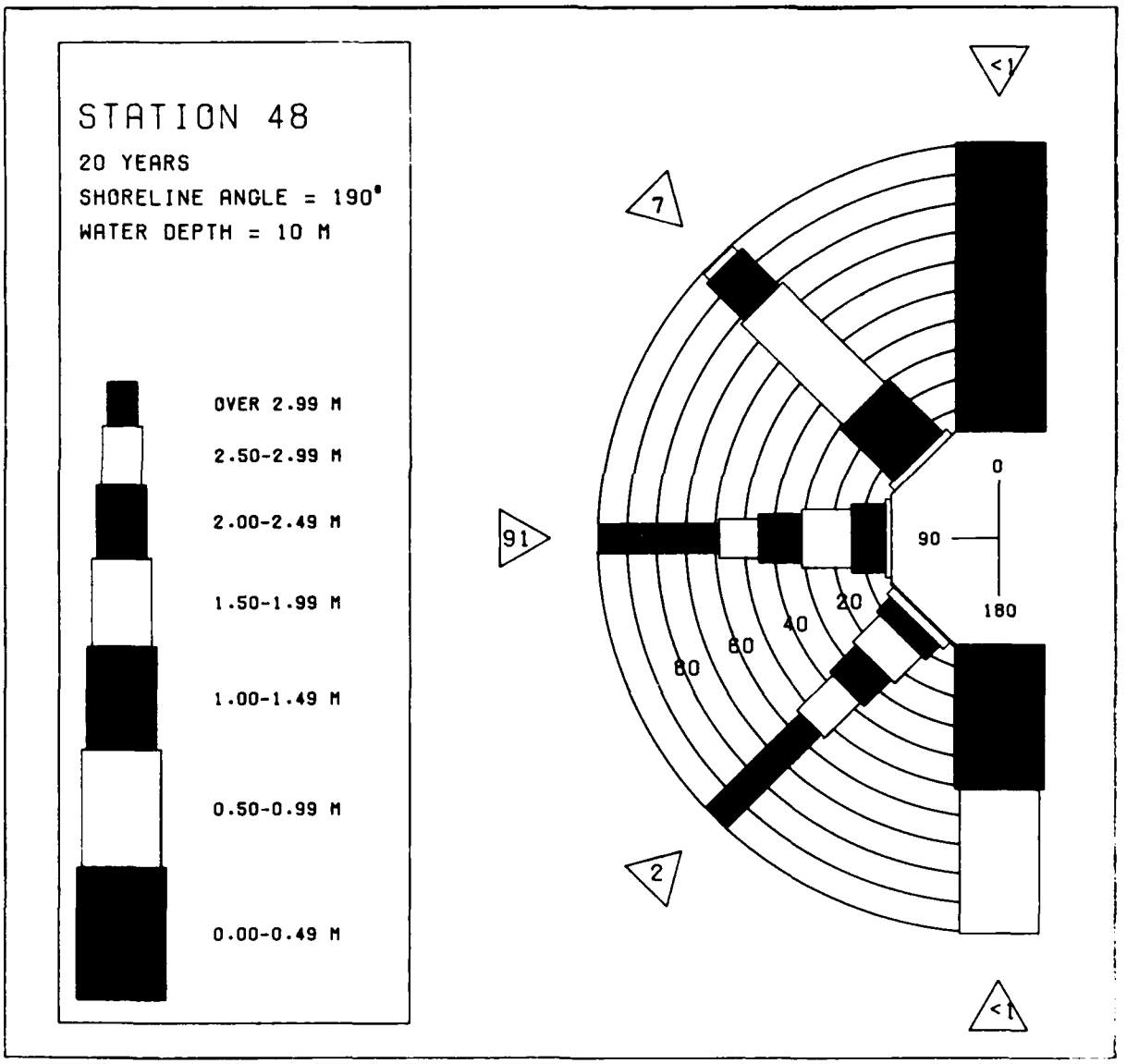
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 48 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		1					.	.		.	1
0.50 - 0.99	20	55	105	20	3	3	.	.	1	.	207
1.00 - 1.49	139	203	499	258	103	34	7	2	.	.	1245
1.50 - 1.99	194	262	515	479	333	122	20	2	.	.	1927
2.00 - 2.49	10	166	166	390	454	253	49	2	.	.	1490
2.50 - 2.99	.	42	55	130	451	470	121	7	.	.	1276
3.00 - 3.49	.	5	39	51	274	561	197	12	.	.	1139
3.50 - 3.99	.	.	23	27	122	488	270	19	.	.	929
4.00 - 4.49	.	.	5	15	47	298	275	20	.	.	660
4.50 - 4.99	.	.	.	5	20	128	268	23	.	.	444
5.00 +	.	.	.	.	7	65	429	142	.	.	643
TOTAL	363	734	1407	1375	1814	2402	1636	229	1	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.45 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.4	3.5	2.9	2.5	2.0	1.6	1.5	1.6	2.4	3.2	3.6	2.6
1957	3.7	3.0	3.5	2.8	2.2	1.5	1.5	1.4	1.9	2.8	3.8	4.4	2.6
1958	5.1	4.2	3.5	3.5	2.2	1.5	1.9	1.6	1.9	2.8	3.5	4.3	3.0
1959	4.0	3.8	3.0	3.0	2.0	1.6	1.8	1.6	2.1	2.9	3.4	4.1	2.8
1960	3.7	4.2	2.6	2.9	2.1	1.7	1.6	1.7	1.5	3.0	4.0	4.2	2.8
1961	4.4	3.9	3.5	2.7	2.4	2.0	1.4	1.2	1.8	2.8	3.5	3.6	2.7
1962	3.2	3.4	2.9	2.5	1.7	1.8	1.5	1.7	1.8	3.3	4.2	4.3	2.7
1963	3.3	4.0	3.2	2.3	1.9	2.1	1.6	1.2	2.0	3.6	3.7	4.0	2.7
1964	4.6	3.4	3.0	2.8	1.9	1.8	1.9	1.8	1.8	2.5	3.7	3.8	2.8
1965	3.9	3.2	2.9	2.9	2.1	2.2	1.7	1.3	1.7	3.0	3.5	4.6	2.7
1966	4.5	3.4	3.3	2.2	2.4	1.7	1.8	1.7	1.9	2.6	2.9	4.0	2.7
1967	3.7	2.9	2.8	2.4	1.5	1.4	1.5	1.3	2.2	3.0	3.8	4.0	2.5
1968	3.4	3.9	3.3	2.3	1.6	1.6	1.5	1.5	1.5	2.9	3.7	3.5	2.6
1969	3.0	4.7	3.6	3.4	2.3	1.8	1.6	1.5	2.0	3.1	3.7	5.3	3.0
1970	4.0	4.7	3.8	2.8	2.0	1.7	1.8	1.6	1.6	2.7	3.6	4.4	2.9
1971	3.4	3.6	3.8	3.2	2.3	2.0	1.4	1.7	2.1	2.4	3.8	3.7	2.8
1972	4.2	3.7	3.9	3.3	2.3	2.3	2.0	1.6	1.9	3.3	4.7	3.8	3.0
1973	4.5	4.1	4.0	2.9	2.5	2.2	2.2	2.1	2.4	2.9	3.7	4.9	3.2
1974	3.7	4.0	3.9	3.2	2.6	2.2	1.6	1.6	1.8	2.7	4.2	4.5	3.0
1975	3.6	3.4	3.0	2.3	2.2	1.5	1.5	1.4	1.1	2.7	3.7	3.4	2.5
MEAN	3.8	3.7	3.4	2.8	2.1	1.8	1.7	1.6	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.6	6.1	5.6	4.0	2.9	2.4	2.4	2.4	4.7	4.7	5.5
1957	4.2	4.7	5.6	4.8	3.5	2.6	2.9	2.0	3.4	5.6	6.0	6.4
1958	6.8	6.4	5.8	6.4	4.1	2.2	3.6	2.9	3.6	5.2	6.2	6.5
1959	6.3	6.1	4.9	6.0	3.9	2.6	2.4	2.7	3.1	6.1	6.7	6.2
1960	6.5	6.3	4.6	4.4	3.3	2.9	2.5	2.4	2.3	6.4	6.4	6.4
1961	6.6	6.3	6.0	4.4	3.5	3.6	2.0	1.8	3.1	4.8	6.2	6.0
1962	5.5	4.8	4.9	4.8	2.6	3.2	2.2	3.0	5.3	6.0	6.5	6.1
1963	6.1	6.2	5.7	3.3	3.1	3.8	2.2	2.1	3.4	6.9	6.1	6.6
1964	6.6	5.8	4.8	5.4	3.9	2.7	3.0	2.3	2.9	4.3	6.2	5.8
1965	5.8	5.0	5.1	4.7	3.6	3.2	2.3	2.2	2.2	6.0	6.2	6.3
1966	6.5	5.1	5.6	4.6	3.5	2.9	2.5	2.2	3.7	4.7	4.8	6.2
1967	5.8	4.5	4.7	4.2	2.7	2.5	2.1	1.8	4.7	5.8	6.2	6.1
1968	5.2	6.0	5.4	4.1	2.8	2.2	2.6	2.4	3.9	4.8	6.3	5.5
1969	4.5	6.3	6.2	5.7	3.9	2.5	2.3	2.1	4.0	5.6	6.9	7.4
1970	6.8	6.2	6.1	5.1	3.1	2.4	2.2	2.7	2.7	5.2	6.1	6.7
1971	6.2	5.8	6.7	4.7	3.6	2.7	2.2	4.7	3.1	4.4	6.5	5.8
1972	6.5	5.9	5.7	6.2	3.3	3.5	3.5	2.6	3.0	3.7	6.1	6.8
1973	6.9	6.3	6.3	4.5	3.9	3.6	3.1	2.9	3.7	4.7	6.6	7.1
1974	6.4	6.6	6.6	6.1	4.3	3.4	3.1	2.3	3.4	5.1	6.4	6.7
1975	5.7	5.8	5.6	3.6	3.5	2.9	2.2	2.2	1.7	5.0	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	99.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121115

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 4

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	34	.	.	.	.	.	.	.	.	.	34
1.00 - 1.49	564	54	.	.	.	.	.	.	.	.	618
1.50 - 1.99	501	424	.	.	.	.	.	.	.	.	925
2.00 - 2.49	3	102	.	.	.	.	.	.	.	.	105
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1102	580	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.58 LARGEST HS(M) = 2.49 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 985

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	121	116	29	1	.	.	.	.	.	.	267
1.00 - 1.49	896	778	188	15	3	.	.	.	.	.	1880
1.50 - 1.99	1707	1997	78	3	.	.	.	.	.	.	3791
2.00 - 2.49	107	1625	58	.	.	.	.	.	.	.	1790
2.50 - 2.99	.	244	63	3	.	.	.	.	.	.	310
3.00 - 3.49	.	35	49	.	.	.	.	.	.	.	84
3.50 - 3.99	.	.	20	.	.	.	.	.	.	.	20
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2831	4795	485	22	3	0	0	0	0	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 4761

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	8	.	1	.	.	.	.	.	12
0.50 - 0.99	25	385	881	150	34	27	1	5	11	.	1519
1.00 - 1.49	63	982	4346	2229	913	369	75	17	5	.	8999
1.50 - 1.99	92	662	4787	4469	3112	1125	196	30	1	.	14474
2.00 - 2.49	22	331	1302	3788	4322	2500	460	18	1	.	12744
2.50 - 2.99	.	198	323	1317	4435	4440	1069	83	13	.	11878
3.00 - 3.49	.	20	179	366	2412	5627	1898	121	.	.	10573
3.50 - 3.99	.	.	162	128	1023	4330	2534	188	1	.	8366
4.00 - 4.49	.	.	30	83	328	2695	2760	169	5	.	6070
4.50 - 4.99	.	.	3	39	109	1143	2671	191	.	.	4156
5.00 +	.	.	.	1	30	547	4002	1409	.	.	5989
TOTAL	202	2581	12013	12578	16718	22804	15616	2231	37	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.44 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 49568

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	22	90	13	.	.	.	.	.	.	.	130
1.00 - 1.49	3	138	145	35	.	5	.	.	.	.	326
1.50 - 1.99	30	157	270	138	53	6	.	.	.	.	654
2.00 - 2.49	.	109	208	203	169	42	.	.	.	.	731
2.50 - 2.99	.	88	224	186	215	100	.	.	.	.	813
3.00 - 3.49	.	17	193	145	275	210	32	.	.	.	872
3.50 - 3.99	.	1	94	140	213	236	53	.	.	.	737
4.00 - 4.49	.	.	20	56	176	150	68	.	.	.	470
4.50 - 4.99	.	.	.	32	78	85	49	.	.	.	244
5.00 +	.	.	.	3	39	131	71	.	.	.	244
TOTAL	55	600	1172	938	1218	965	273	0	0	0	

MEAN HS(M) = 2.99 LARGEST HS(M) = 7.44 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 3066

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	29	.	.	.	.	.	.	.	.	51
0.50 - 0.99	3	25	5	.	.	.	.	.	.	.	33
1.00 - 1.49	1	5	1	.	.	.	.	.	.	.	7
1.50 - 1.99	.	.	1	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	26	59	7	0	0	0	0	0	0	0	

MEAN HS(M) = 0.55 LARGEST HS(M) = 1.64 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 56

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

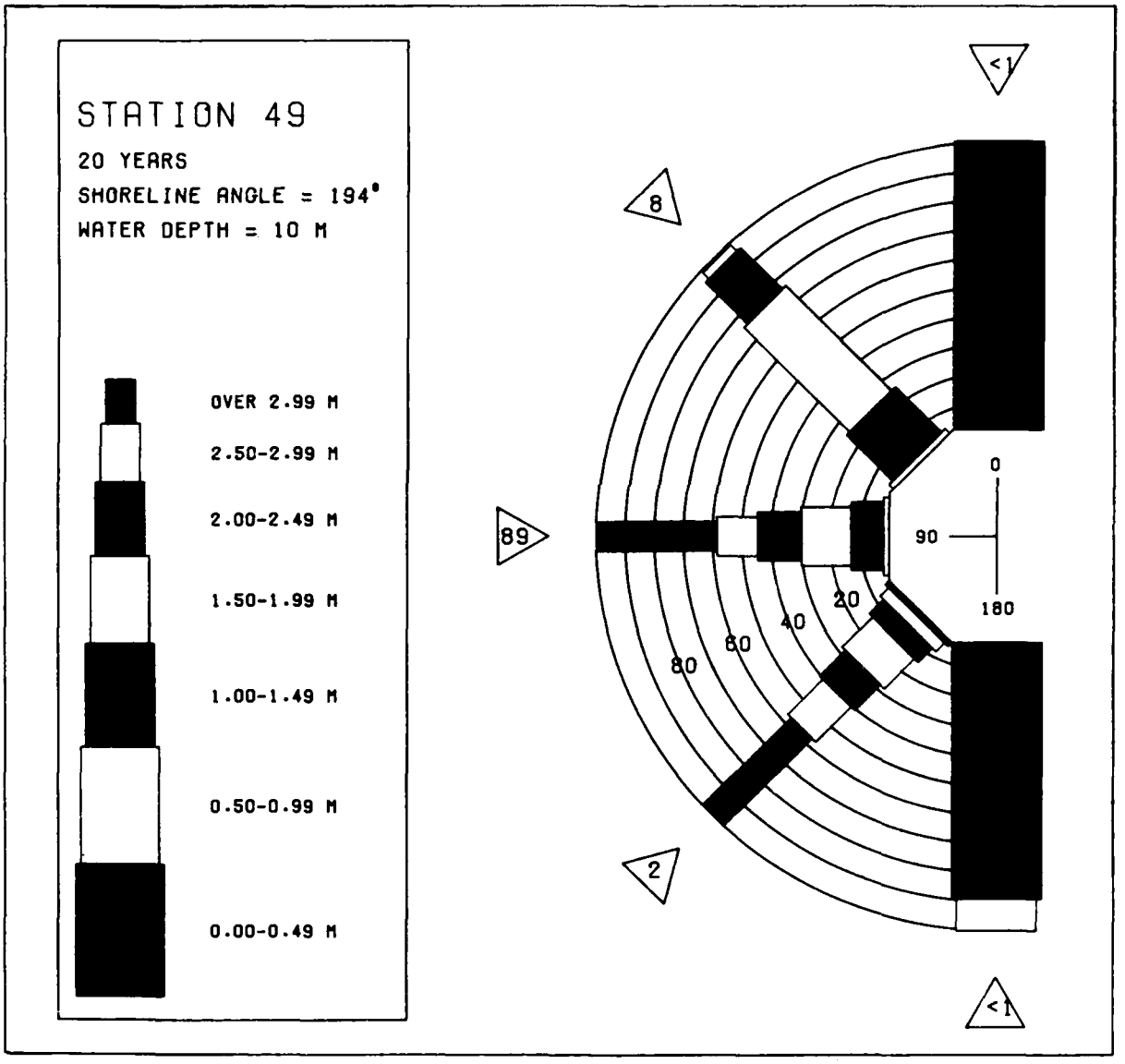
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 49 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	2	3	.	.	.	.	.	.	.	.	5
0.50 - 0.99	20	61	93	15	3	2	.	.	1	.	195
1.00 - 1.49	152	195	468	228	91	37	7	1	.	.	1179
1.50 - 1.99	233	323	513	461	316	113	19	3	.	.	1981
2.00 - 2.49	13	217	156	399	449	254	46	1	.	.	1535
2.50 - 2.99	.	53	61	150	465	454	106	8	1	.	1298
3.00 - 3.49	.	7	42	51	268	583	188	12	.	.	1151
3.50 - 3.99	.	.	27	26	123	456	258	18	.	.	908
4.00 - 4.49	.	.	5	14	50	284	282	16	.	.	651
4.50 - 4.99	.	.	.	7	18	122	272	19	.	.	438
5.00 +					7	67	407	140	.	.	621
TOTAL	420	859	1365	1351	1790	2372	1585	218	2	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.44 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.4	3.5	2.8	2.4	2.1	1.7	1.6	1.6	2.3	3.1	3.5	2.6
1957	2.6	3.0	3.4	2.8	2.2	1.6	1.6	1.4	1.9	2.8	3.7	4.4	2.6
1958	4.9	4.2	3.5	3.4	2.2	1.5	1.9	1.6	1.9	2.8	3.5	4.2	3.0
1959	3.8	3.7	3.1	3.0	2.0	1.6	1.9	1.6	2.1	3.0	3.5	4.1	2.8
1960	3.7	4.2	2.6	2.8	2.1	1.7	1.7	1.7	1.5	2.9	4.0	4.2	2.8
1961	4.4	3.9	3.4	2.7	2.3	2.1	1.4	1.2	1.8	2.8	3.4	3.9	2.7
1962	3.1	3.4	2.9	2.6	1.7	1.6	1.6	1.7	1.8	3.3	4.2	4.3	2.7
1963	3.3	3.9	3.2	2.3	1.9	2.1	1.6	1.2	2.0	3.5	3.7	3.9	2.7
1964	4.6	3.5	3.1	2.9	1.9	1.8	1.9	1.8	1.8	2.4	3.6	3.8	2.8
1965	4.0	3.1	2.9	2.8	2.1	2.2	1.7	1.3	1.8	3.0	3.3	4.5	2.7
1966	4.5	3.3	3.4	2.2	2.4	1.7	1.8	1.7	1.9	2.5	2.8	4.0	2.7
1967	3.7	3.0	2.8	2.4	1.6	1.5	1.5	1.4	2.2	3.0	3.8	4.0	2.6
1968	3.3	3.9	3.4	2.7	1.7	1.6	1.5	1.5	1.5	2.9	3.7	3.5	2.6
1969	3.1	4.7	3.7	3.3	2.3	1.8	1.6	1.5	2.0	3.0	3.7	5.3	3.0
1970	3.8	4.8	3.8	2.8	2.1	1.7	1.8	1.7	1.6	2.7	3.5	4.3	2.9
1971	3.4	3.5	3.7	3.2	2.3	2.0	1.4	1.8	2.0	2.4	3.7	3.7	2.8
1972	4.3	3.7	3.8	3.3	2.2	2.3	2.0	1.7	1.8	2.3	4.7	3.7	3.0
1973	4.4	4.1	4.1	3.0	2.5	2.2	2.2	2.1	2.4	2.8	3.6	4.8	3.2
1974	3.7	4.0	3.9	3.2	2.6	2.2	1.6	1.7	1.8	2.6	4.2	4.6	3.0
1975	3.5	3.4	3.1	2.3	2.2	1.5	1.5	1.4	1.1	2.7	3.6	3.4	2.5
MEAN	3.8	3.7	3.4	2.8	2.1	1.8	1.7	1.6	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.8	6.6	5.5	3.8	3.0	2.5	2.4	2.4	4.7	4.7	5.6
1957	4.3	5.0	5.4	4.7	3.6	2.6	3.0	2.0	3.7	5.6	5.7	6.4
1958	6.8	6.4	5.9	6.3	3.8	2.2	3.6	2.9	3.3	5.3	6.1	6.4
1959	6.2	6.1	5.0	6.2	3.8	2.5	2.5	2.7	3.1	6.0	6.7	6.2
1960	6.5	6.3	4.4	4.2	3.4	2.9	2.6	2.5	2.2	6.3	6.3	6.4
1961	6.6	6.3	6.0	4.3	3.4	3.5	2.0	1.9	3.0	4.7	5.8	5.9
1962	5.4	4.9	5.0	5.5	2.5	3.0	2.2	2.9	5.3	6.0	6.1	6.2
1963	5.9	6.1	5.6	3.9	3.2	2.7	2.3	2.1	2.3	6.8	5.8	6.5
1964	7.0	5.8	4.7	5.7	3.9	2.7	3.0	2.3	2.9	4.3	6.2	5.6
1965	5.6	4.9	5.3	4.8	3.4	3.3	2.3	2.2	2.2	6.0	6.1	6.2
1966	6.5	5.1	5.6	4.6	3.5	2.9	2.6	2.3	3.7	4.6	4.9	6.2
1967	5.6	4.4	5.0	3.9	2.7	2.5	2.1	1.8	4.8	6.1	6.1	7.0
1968	5.1	6.0	5.4	4.3	2.7	2.2	2.4	2.4	3.9	5.0	6.2	5.7
1969	4.5	6.4	6.5	5.7	4.1	2.6	2.2	2.2	3.8	5.6	6.9	7.4
1970	6.7	6.3	6.1	5.1	3.0	2.5	2.3	2.5	2.7	5.0	6.1	6.8
1971	6.0	5.6	6.1	4.6	3.6	2.8	2.3	4.4	2.3	4.4	6.4	5.8
1972	6.3	5.9	5.7	6.1	3.2	3.5	3.3	2.7	2.8	4.2	6.1	6.8
1973	6.8	6.2	6.2	4.8	4.0	3.7	3.1	2.9	3.7	4.5	6.5	6.9
1974	6.7	6.3	6.6	6.1	4.0	3.3	3.0	2.3	3.4	5.1	6.3	6.7
1975	5.6	6.2	5.4	3.4	3.7	2.6	2.1	2.3	1.7	4.8	6.4	5.9

20 YR. STATISTICS FOR PACIFIC STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121206

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	138	13	.	.	.	.	.	.	.	.	151
1.50 - 1.99	66	106	.	.	.	.	.	.	.	.	172
2.00 - 2.49	.	22	.	.	.	.	.	.	.	.	22
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	218	144	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.69 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 214

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	118	35	3	.	.	.	.	.	.	.	156
1.00 - 1.49	1091	388	11	.	.	.	.	.	.	.	1490
1.50 - 1.99	2390	1820	11	.	.	.	.	.	.	.	4221
2.00 - 2.49	193	1926	29	.	.	.	.	.	.	.	2148
2.50 - 2.99	.	352	49	.	.	.	.	.	.	.	401
3.00 - 3.49	.	59	58	.	.	.	.	.	.	.	117
3.50 - 3.99	.	.	10	.	.	.	.	.	.	.	10
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3792	4580	171	0	0	0	0	0	0	0	

MEAN HS(M) = 1.84 LARGEST HS(M) = 3.84 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 4998

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	8	1	2	1	.	.	.	.	12
0.50 - 0.99	49	414	888	152	32	27	5	3	11	.	1581
1.00 - 1.49	165	1213	4252	2215	949	371	73	18	5	.	9261
1.50 - 1.99	200	864	4395	4161	3047	1161	198	32	1	.	14059
2.00 - 2.49	29	448	1225	3603	4164	2535	482	18	1	.	12505
2.50 - 2.99	.	203	254	1252	4250	4426	1170	92	13	.	11660
3.00 - 3.49	.	22	145	270	2171	5516	1829	128	.	.	10081
3.50 - 3.99	.	.	152	85	835	4117	2597	193	1	.	7980
4.00 - 4.49	.	.	29	56	231	2351	2703	177	6	.	5553
4.50 - 4.99	.	.	1	30	58	917	2614	201	.	.	3821
5.00 +	.	.	.	.	11	347	1521	1370	.	.	5249
TOTAL	443	3167	11341	11832	15748	21769	15192	2232	38	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47805

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	23	123	44	1	.	.	.	.	.	.	191
1.00 - 1.49	6	239	407	119	23	11	.	.	.	.	805
1.50 - 1.99	41	201	412	311	165	15	.	.	.	.	1145
2.00 - 2.49	6	167	318	412	403	179	6	.	.	.	1491
2.50 - 2.99	.	92	231	254	530	352	46	.	.	.	1505
3.00 - 3.49	.	15	177	201	438	456	147	.	.	.	1434
3.50 - 3.99	.	1	82	135	313	468	136	.	.	.	1135
4.00 - 4.49	.	.	8	39	130	290	162	.	.	.	629
4.50 - 4.99	.	.	1	22	85	172	142	.	.	.	422
5.00 +	.	.	.	1	23	159	159	22	.	.	364
TOTAL	76	838	1680	1495	2110	2102	798	22	0	0	

MEAN HS(M) = 2.87 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 5348

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	32	.	.	.	.	.	.	.	.	54
0.50 - 0.99	1	25	5	.	.	.	.	.	.	.	31
1.00 - 1.49	3	8	13	.	.	.	.	.	.	.	24
1.50 - 1.99	1	1	1	.	.	.	.	.	.	.	3
2.00 - 2.49	.	5	3	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	27	71	22	0	0	0	0	0	0	0	

MEAN HS(M) = 0.76 LARGEST HS(M) = 2.38 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 74

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

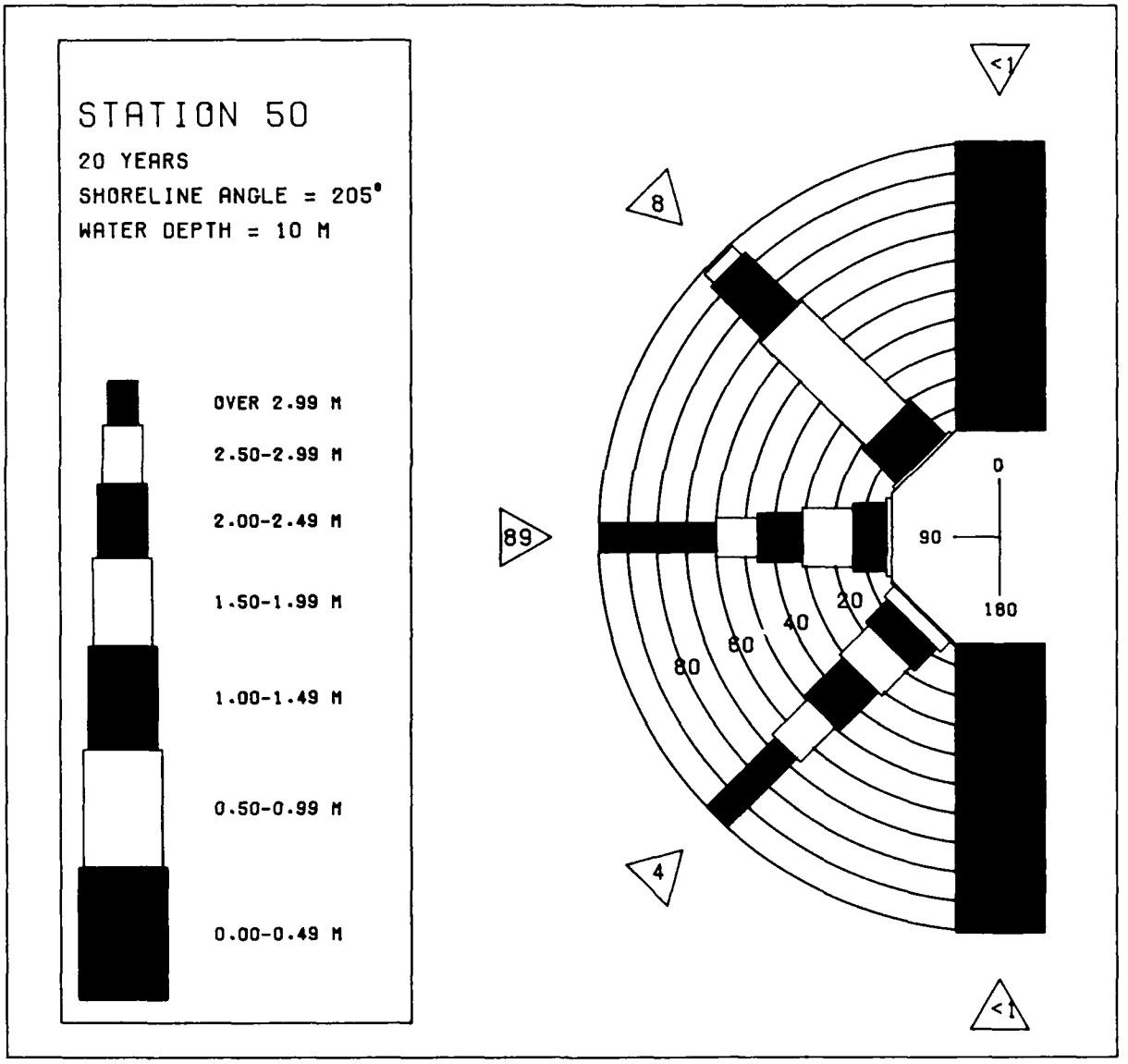
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 50 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	3	3									6
0.50 - 0.99	20	59	94	15	3	2			1		194
1.00 - 1.49	140	186	468	233	97	38	7	1			1170
1.50 - 1.99	270	299	482	447	321	117	19	3			1958
2.00 - 2.49	22	257	157	401	456	271	48	1			1613
2.50 - 2.99		65	53	150	478	477	121	9	1		1354
3.00 - 3.49		9	38	47	260	597	197	12			1160
3.50 - 3.99			24	22	114	458	273	19			910
4.00 - 4.49			3	9	36	264	286	17			615
4.50 - 4.99				5	14	109	275	20			423
5.00 +					3	50	368	139			560
TOTAL	455	878	1319	1329	1782	2383	1594	221	2	0	

MEAN HS(M) = 2.75 LARGEST HS(M) = 7.21 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	3.4	3.5	2.8	2.4	2.1	1.7	1.6	1.6	2.3	3.1	3.5	2.6
1957	2.6	2.9	3.4	2.8	2.2	1.6	1.6	1.4	1.9	2.8	3.7	4.3	2.6
1958	4.8	4.1	3.5	3.4	2.2	1.5	2.0	1.7	1.9	2.8	3.4	4.1	2.9
1959	3.7	3.6	3.0	3.1	2.0	1.6	1.9	1.7	2.1	2.9	3.5	4.0	2.8
1960	3.6	4.1	2.5	2.8	2.1	1.8	1.7	1.7	1.6	2.8	4.0	4.1	2.7
1961	4.2	3.8	3.3	2.7	2.3	2.1	1.4	1.2	1.8	2.8	3.3	3.6	2.7
1962	3.1	3.3	2.9	2.6	1.7	1.8	1.6	1.7	1.8	3.3	4.1	4.1	2.7
1963	3.2	3.7	3.2	2.5	1.9	2.1	1.6	1.3	2.0	3.5	3.7	3.8	2.7
1964	4.5	3.4	3.0	3.0	2.0	1.8	2.0	1.8	1.8	2.4	3.6	3.7	2.7
1965	3.9	3.1	2.9	2.8	2.2	2.2	1.7	1.3	1.8	3.0	3.2	4.5	2.7
1966	4.4	3.3	3.3	2.2	2.5	1.7	1.9	1.7	1.9	2.5	2.8	3.9	2.7
1967	3.6	3.0	2.7	2.4	1.6	1.5	1.5	1.4	2.2	3.0	3.8	3.9	2.5
1968	3.2	3.7	3.3	2.4	1.6	1.6	1.6	1.6	1.5	2.9	3.6	3.4	2.5
1969	3.0	4.7	3.7	3.3	2.3	1.8	1.8	1.6	2.0	3.0	3.6	5.2	3.0
1970	3.7	4.8	3.8	2.8	2.1	1.7	1.8	1.7	1.6	2.6	3.5	4.3	2.9
1971	3.3	3.5	3.6	3.2	2.3	2.0	1.4	1.8	2.0	2.4	3.7	3.7	2.7
1972	4.2	3.6	3.7	3.3	2.2	2.3	2.0	1.7	1.8	2.3	4.6	3.6	3.0
1973	4.3	4.0	4.1	3.0	2.5	2.2	2.2	2.1	2.3	2.8	3.5	4.7	3.2
1974	3.6	4.0	3.8	3.1	2.6	2.2	1.7	1.7	1.8	2.6	4.1	4.5	3.0
1975	3.5	3.3	3.1	2.3	2.2	1.6	1.5	1.5	1.1	2.6	3.5	3.3	2.4
MEAN	3.7	3.7	3.3	2.8	2.1	1.9	1.7	1.6	1.8	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.8	6.6	5.6	3.9	3.0	2.6	2.4	2.5	4.7	4.5	5.5
1957	4.3	4.6	5.2	4.7	3.6	2.6	3.2	2.0	3.7	5.6	5.7	6.2
1958	6.7	6.3	5.9	6.1	3.8	2.5	3.7	3.0	3.3	5.4	6.0	6.0
1959	6.2	6.1	4.9	6.2	3.7	2.5	2.5	2.7	3.2	6.0	6.7	6.2
1960	6.3	6.2	4.3	4.2	3.4	2.8	2.6	2.5	2.2	6.3	6.2	6.4
1961	6.5	6.0	5.9	4.3	3.4	3.6	2.1	2.0	3.0	4.7	5.8	6.0
1962	5.3	5.0	5.0	5.6	2.4	3.1	2.3	2.9	5.2	6.0	5.9	6.1
1963	5.3	6.0	5.6	3.6	3.2	3.8	2.4	2.2	3.3	6.8	5.8	6.3
1964	6.9	5.8	4.6	5.7	3.9	2.7	3.0	2.3	2.9	4.4	6.2	5.3
1965	5.5	4.9	5.2	4.8	3.5	3.3	2.4	2.2	2.4	6.0	6.1	6.2
1966	6.5	5.1	5.4	4.5	3.5	2.9	2.6	2.4	3.7	4.5	4.8	6.1
1967	5.4	4.3	5.1	3.9	2.7	2.5	2.1	1.9	4.8	6.1	6.1	6.9
1968	5.0	5.7	5.4	4.3	2.8	2.2	2.4	2.4	3.8	5.0	6.0	5.6
1969	4.2	6.3	6.5	5.6	4.0	2.7	2.2	2.2	3.8	5.7	6.8	7.2
1970	6.5	6.2	6.1	5.0	3.0	2.5	2.3	2.6	2.7	5.0	6.1	6.6
1971	6.0	5.4	5.8	4.8	3.5	2.8	2.4	4.5	2.3	4.4	6.3	5.8
1972	6.3	5.8	5.5	6.2	3.2	3.5	3.3	2.7	2.7	4.3	6.1	6.7
1973	6.7	6.2	6.2	4.8	4.0	3.8	3.1	2.9	3.6	4.4	6.5	6.8
1974	6.2	6.3	6.4	6.1	4.1	3.3	3.1	2.4	3.4	5.1	6.3	6.6
1975	5.7	6.2	5.3	3.5	3.7	2.7	2.2	2.3	1.7	4.9	6.4	5.8

20 YR. STATISTICS FOR PACIFIC STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.7
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.6
LARGEST WAVE HS . . . . . (METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES)	95.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121215

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	5	.	.	.	.	.	.	.	.	8
0.50 - 0.99	479	167	.	.	.	.	.	.	.	.	646
1.00 - 1.49	1464	1380	8	.	.	.	.	.	.	.	2852
1.50 - 1.99	284	1023	17	.	.	.	.	.	.	.	1324
2.00 - 2.49	.	77	10	.	.	.	.	.	.	.	87
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2230	2652	35	0	0	0	0	0	0	0	

MEAN HS(M) = 1.34 LARGEST HS(M) = 2.31 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 2876

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	29	6	8	5	.	.	.	.	.	49
0.50 - 0.99	46	710	1440	325	59	68	1	1	.	.	2650
1.00 - 1.49	135	1827	6040	2686	990	390	95	1	.	.	12164
1.50 - 1.99	164	790	3757	4253	2830	1076	154	.	.	.	13024
2.00 - 2.49	3	422	518	2178	3886	1947	205	.	.	.	9159
2.50 - 2.99	.	104	207	424	2125	3307	467	.	.	.	6634
3.00 - 3.49	.	1	114	100	893	2626	913	.	.	.	4647
3.50 - 3.99	.	.	59	53	277	1651	990	.	.	.	3030
4.00 - 4.49	.	.	10	25	71	773	1204	.	.	.	2083
4.50 - 4.99	.	.	.	3	23	282	747	.	.	.	1055
5.00 +	.	.	.	.	1	94	720	.	.	.	815
TOTAL	349	3883	12151	10055	11155	12219	5496	2	0	0	

MEAN HS(M) = 2.24 LARGEST HS(M) = 6.69 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 32341

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	25	152	133	37	6	3	.	3	15	.	374
1.00 - 1.49	5	302	749	638	485	172	20	20	1	.	2392
1.50 - 1.99	41	232	889	1220	1124	472	130	27	1	.	4136
2.00 - 2.49	1	177	345	860	1182	1211	405	42	.	.	4223
2.50 - 2.99	.	171	349	385	1353	2008	908	106	13	.	5293
3.00 - 3.49	.	53	326	309	922	2149	1283	155	.	.	5197
3.50 - 3.99	.	5	242	217	686	1978	1558	183	6	.	4875
4.00 - 4.49	.	.	73	229	455	1420	1663	176	.	.	4016
4.50 - 4.99	.	.	11	107	270	746	1510	268	.	.	2912
5.00 +	.	.	.	11	140	631	2541	1184	.	.	4507
TOTAL	72	1092	3117	4013	6623	10790	10018	2164	36	0	

MEAN HS(M) = 3.33 LARGEST HS(M) = 7.76 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 22184

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	34	.	.	.	.	.	.	.	.	35
1.50 - 1.99	10	42	25	.	.	.	.	.	.	.	77
2.00 - 2.49	3	73	68	18	5	10	.	.	.	.	177
2.50 - 2.99	1	83	114	39	11	1	.	.	.	.	249
3.00 - 3.49	.	51	138	75	65	15	.	.	.	.	344
3.50 - 3.99	.	11	99	124	59	1	.	.	.	.	294
4.00 - 4.49	.	.	32	77	68	47	.	.	.	.	224
4.50 - 4.99	.	.	.	34	83	51	1	.	.	.	169
5.00 +	.	.	.	1	77	70	17	.	.	.	165
TOTAL	15	294	476	368	368	195	18	0	0	0	

MEAN HS(M) = 3.54 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1025

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	6	.	.	.	.	.	.	.	.	.	6
1.50 - 1.99	3	8	.	.	.	.	.	.	.	.	11
2.00 - 2.49	1	3	.	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	11	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.66 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 14

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

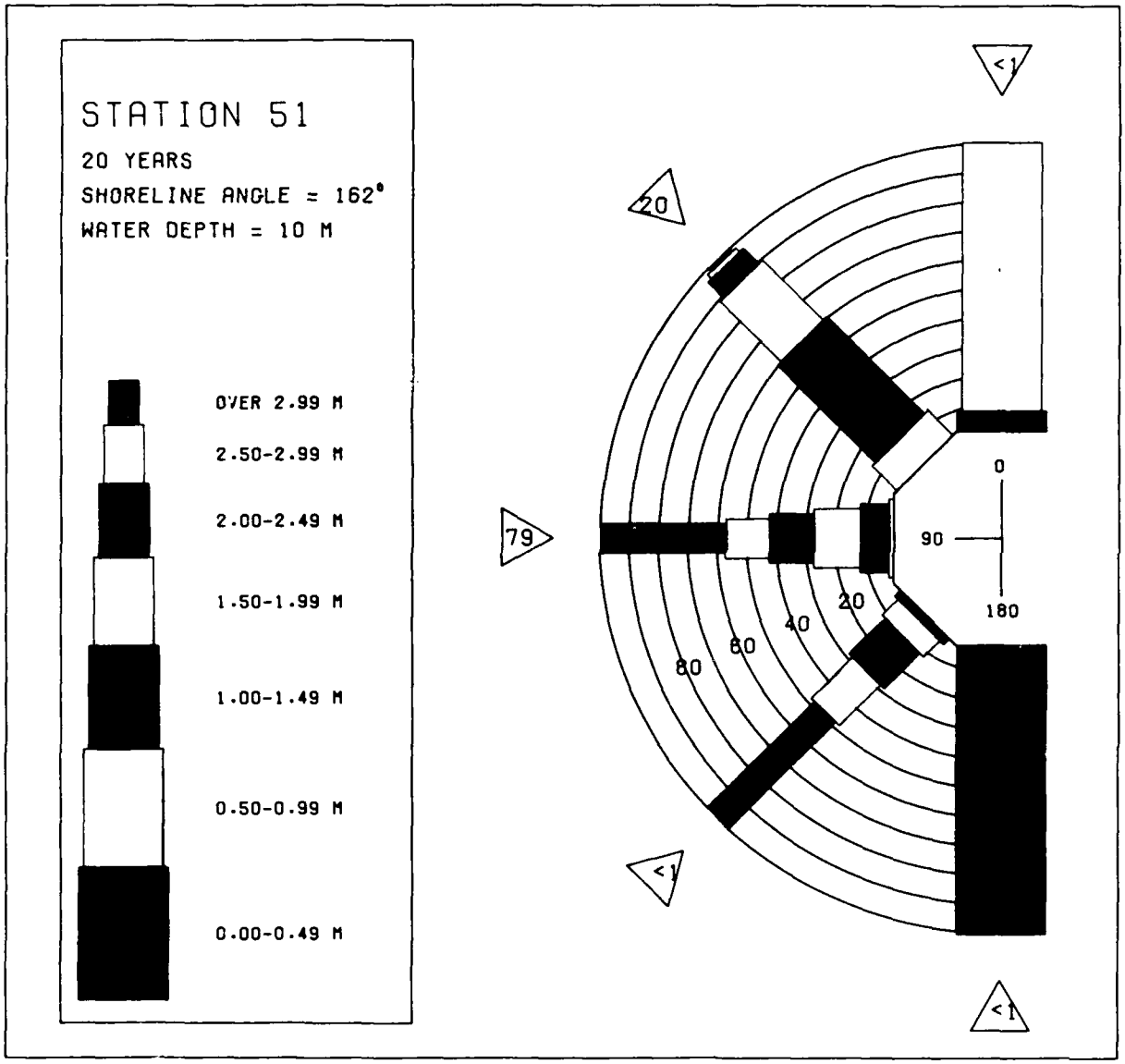
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 51 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		3									3
0.50 - 0.99	55	103	157	36	6	7			1		365
1.00 - 1.49	161	354	679	332	147	56	11	2			1742
1.50 - 1.99	50	209	469	547	395	154	28	2			1854
2.00 - 2.49	1	75	94	305	507	316	61	4			1363
2.50 - 2.99		35	67	84	349	531	137	10	1		1214
3.00 - 3.49		10	58	48	188	479	219	15			1017
3.50 - 3.99		1	40	39	102	363	254	18			817
4.00 - 4.49			11	33	59	224	286	17			630
4.50 - 4.99			1	14	37	107	226	26			411
5.00 +				1	21	79	327	118	2	0	546
TOTAL	267	790	1576	1439	1811	2316	1549	212	2	0	

MEAN HS(M) = 2.63 LARGEST HS(M) = 7.76 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 51 (42.83N/ 124.56W TO 42.73N/ 124.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.7	3.2	3.3	2.5	2.2	1.9	1.4	1.4	1.5	2.2	3.0	3.5	2.5
1957	3.6	3.9	3.3	2.6	2.1	1.5	1.3	1.2	1.8	2.7	3.5	4.2	2.5
1958	5.0	4.3	3.3	2.2	2.0	1.4	1.7	1.5	1.7	2.6	3.3	4.6	2.9
1959	3.6	3.6	2.9	2.7	1.9	1.5	1.6	1.4	2.0	2.8	3.3	3.9	2.6
1960	3.7	4.2	2.5	2.7	2.0	1.5	1.4	1.5	1.4	2.7	3.8	4.1	2.6
1961	4.4	3.9	3.4	2.4	2.2	1.8	1.2	1.0	1.5	2.6	3.2	3.5	2.6
1962	3.1	3.3	2.7	2.4	1.6	1.6	1.2	1.5	1.7	3.2	4.0	4.4	2.6
1963	3.3	4.3	2.9	2.2	1.7	1.8	1.4	1.0	1.9	3.4	3.6	4.1	2.6
1964	4.5	3.3	2.9	2.6	1.7	1.7	1.7	1.6	1.6	2.3	3.5	3.8	2.6
1965	3.9	3.9	2.7	2.7	1.9	1.9	1.5	1.2	1.5	2.9	3.5	4.3	2.6
1966	4.3	3.2	3.3	1.9	2.1	1.6	1.6	1.5	1.8	2.4	2.8	4.2	2.6
1967	3.7	2.9	2.7	2.1	1.4	1.3	1.3	1.2	2.0	2.9	3.5	3.9	2.4
1968	3.6	4.1	3.3	2.1	1.5	1.5	1.3	1.4	1.4	2.8	3.7	3.6	2.5
1969	3.0	4.6	3.4	3.2	2.1	1.7	1.4	1.3	1.8	2.9	3.5	5.4	2.9
1970	4.0	4.6	3.6	2.6	1.9	1.5	1.6	1.4	1.5	2.5	3.5	4.2	2.7
1971	3.4	3.5	3.6	2.9	2.0	1.9	1.1	1.6	1.9	2.2	3.5	3.5	2.6
1972	4.0	3.7	3.7	3.0	1.9	2.0	1.7	1.4	1.6	2.1	4.5	3.8	2.8
1973	4.5	4.0	3.6	2.6	2.3	2.0	2.0	1.8	2.2	2.6	3.6	4.8	3.0
1974	3.9	3.9	3.8	3.0	2.4	1.9	1.5	1.4	1.6	2.4	3.9	4.5	2.8
1975	3.4	3.4	3.0	2.0	2.0	1.3	1.3	1.3	0.9	2.6	3.4	3.4	2.3
MEAN	3.8	3.7	3.2	2.6	1.9	1.7	1.5	1.4	1.7	2.6	3.5	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 51 (42.83N/ 124.56W TO 42.73N/ 124.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.4	6.0	4.9	3.4	2.9	2.2	2.1	2.2	4.2	4.6	5.5
1957	4.5	6.1	5.5	4.6	3.4	2.6	2.2	2.0	3.5	4.9	5.2	6.5
1958	6.8	6.5	5.3	6.2	3.3	2.1	3.2	2.6	3.0	4.7	5.9	6.7
1959	6.2	6.1	4.7	5.5	3.8	2.4	2.2	2.3	3.2	5.9	6.5	6.1
1960	6.9	6.8	4.4	4.0	3.1	2.7	2.2	2.3	2.0	5.7	6.0	6.2
1961	6.6	6.4	6.0	4.0	3.1	3.2	1.7	1.6	2.8	4.5	5.5	5.2
1962	5.6	5.0	4.8	4.9	2.7	2.6	2.0	2.7	5.0	5.7	6.0	7.3
1963	6.2	6.5	5.1	3.1	3.1	3.3	2.0	1.7	3.1	6.6	5.4	7.1
1964	6.7	5.6	4.7	5.0	3.5	2.9	2.8	2.1	2.7	3.9	5.6	5.9
1965	5.7	4.6	4.8	4.3	3.0	2.8	2.0	2.0	1.9	6.0	6.2	6.2
1966	6.8	4.6	5.6	4.5	3.2	2.8	2.3	2.1	3.4	4.5	4.6	6.3
1967	5.7	4.4	4.4	3.5	2.5	2.1	1.8	1.6	4.3	6.0	5.6	7.1
1968	5.5	6.1	5.2	3.9	2.4	2.3	2.4	1.9	3.5	4.5	6.3	5.6
1969	4.7	6.7	6.0	5.4	3.9	2.4	2.1	1.9	3.4	5.1	6.6	7.8
1970	7.1	6.2	6.2	5.0	2.7	2.1	2.2	2.2	2.4	4.7	6.2	6.9
1971	6.5	5.8	6.1	4.3	3.5	2.6	1.8	3.9	3.0	3.9	6.4	5.2
1972	6.5	5.8	5.7	6.0	2.8	3.0	3.3	2.4	2.8	3.5	6.1	6.9
1973	7.1	6.2	6.1	4.4	3.8	3.5	3.0	2.5	3.6	4.5	6.3	6.9
1974	7.7	6.2	6.7	5.6	3.7	3.1	2.5	2.3	3.0	4.8	6.0	6.6
1975	5.2	5.8	5.2	3.0	3.5	2.1	1.9	2.0	1.4	4.3	5.9	6.6

20 YR. STATISTICS FOR PACIFIC STATION 51 (42.83N/ 124.56W TO 42.73N/ 124.51W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.6
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.3
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.4
LARGEST WAVE HS . . . . . (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	90.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121115

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 7

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	123	78	3	.	.	.	.	.	.	.	204
0.50 - 0.99	918	1170	56	.	.	.	.	.	.	.	2144
1.00 - 1.49	982	1892	34	.	.	.	.	.	.	.	2908
1.50 - 1.99	106	393	37	.	.	.	.	.	.	.	536
2.00 - 2.49	.	11	5	.	.	.	.	.	.	.	16
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2129	3544	135	0	0	0	0	0	0	0	

MEAN HS(M) = 1.07 LARGEST HS(M) = 2.21 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3398

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	46	35	6	3	8	.	.	.	.	101
0.50 - 0.99	37	1302	2772	768	198	107	35	18	3	.	5240
1.00 - 1.49	59	1560	7958	4958	2523	934	119	10	.	.	18121
1.50 - 1.99	78	682	2392	4729	5010	2334	373	8	.	.	15606
2.00 - 2.49	10	491	484	1483	4040	4101	881	63	.	.	11553
2.50 - 2.99	.	107	306	390	2091	4710	1483	119	.	.	9206
3.00 - 3.49	.	20	200	165	841	3162	2070	142	.	.	6600
3.50 - 3.99	.	.	82	102	282	1947	2063	207	.	.	4683
4.00 - 4.49	.	.	5	35	94	874	1692	237	.	.	2937
4.50 - 4.99	.	.	.	13	27	236	968	333	.	.	1577
5.00 +	.	.	.	1	6	114	775	530	3	0	1426
TOTAL	187	4208	14234	12650	15115	18527	10459	1667	3	0	

MEAN HS(M) = 2.23 LARGEST HS(M) = 7.09 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 45049

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	11	41	23	.	.	.	.	.	5	.	80
1.00 - 1.49	11	119	155	53	8	5	8	.	3	.	362
1.50 - 1.99	58	157	272	234	167	49	15	10	5	.	967
2.00 - 2.49	11	201	277	253	301	354	124	13	17	.	1551
2.50 - 2.99	.	215	309	248	450	653	436	20	10	.	2341
3.00 - 3.49	.	77	398	231	345	722	583	54	6	.	2416
3.50 - 3.99	.	22	326	294	335	578	686	41	11	.	2293
4.00 - 4.49	.	.	128	311	357	552	665	23	.	.	2036
4.50 - 4.99	.	.	18	162	306	325	693	15	.	.	1519
5.00 +	.	.	.	32	263	568	1119	306	.	.	2288
TOTAL	91	832	1906	1818	2532	3806	4329	482	57	0	

MEAN HS(M) = 3.62 LARGEST HS(M) = 7.98 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 9283

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	.	.	.	.	.	.	.	.	10
0.50 - 0.99	1	8	3	.	.	.	.	.	.	.	12
1.00 - 1.49	11	49	20	5	.	.	.	.	.	.	85
1.50 - 1.99	10	106	42	10	.	3	.	.	.	.	171
2.00 - 2.49	.	104	128	27	10	5	.	.	.	.	274
2.50 - 2.99	.	30	97	49	41	1	.	.	.	.	218
3.00 - 3.49	.	.	82	73	51	1	.	.	.	.	209
3.50 - 3.99	.	.	17	23	25	10	.	.	.	.	75
4.00 - 4.49	.	.	3	11	23	8	.	.	.	.	45
4.50 - 4.99	.	.	.	1	34	39	10	.	.	.	84
5.00 +	.	.	.	.	.	.	.	.	.	.	.
TOTAL	22	307	392	201	184	67	10	0	0	0	

MEAN HS(M) = 3.22 LARGEST HS(M) = 6.77 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 702

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.65 LARGEST HS(M) = 0.65 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

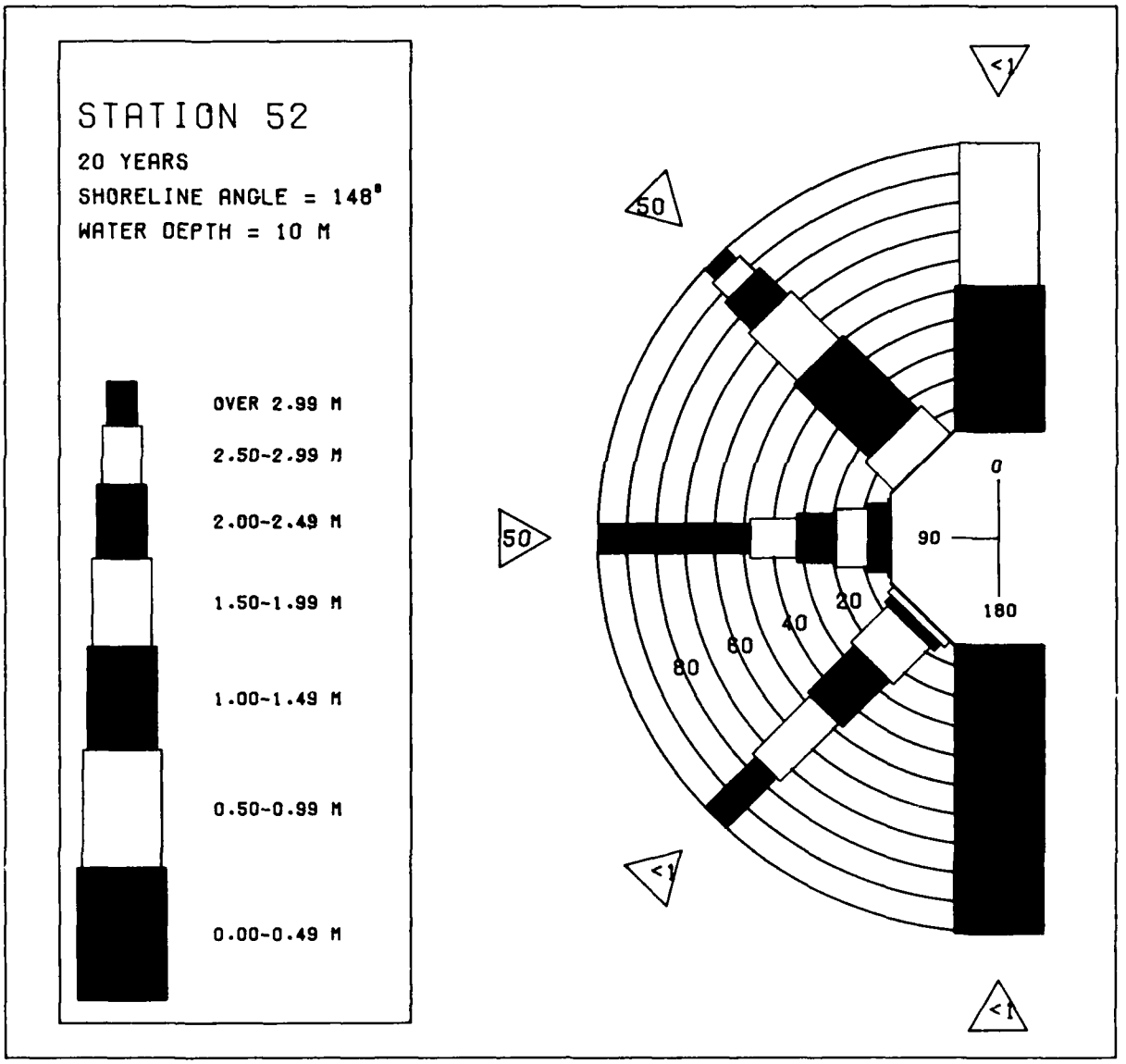
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 52 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	13	12	3								28
0.50 - 0.99	97	252	205	76	19	10	3	1	.	.	743
1.00 - 1.49	105	356	815	501	253	93	12	1	.	.	2138
1.50 - 1.99	25	128	272	496	517	238	38	1	.	.	1715
2.00 - 2.49	3	81	80	174	434	445	100	7	1	.	1325
2.50 - 2.99	.	42	74	66	255	536	191	14	1	.	1179
3.00 - 3.49	.	12	69	44	122	388	265	19	.	.	919
3.50 - 3.99	.	2	49	47	66	252	274	24	1	.	715
4.00 - 4.49	.	.	15	37	47	143	235	26	.	.	503
4.50 - 4.99	.	.	2	18	35	56	166	34	.	.	311
5.00 +	.	.	.	3	30	72	190	83	.	.	378
TOTAL	243	887	1664	1462	1778	2233	1474	210	3	0	

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.98 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 52 (42.73N/ 124.51W TO 42.61N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.6	3.0	3.0	2.2	1.9	1.7	1.2	1.2	1.4	1.9	2.7	3.3	2.2
1957	2.4	2.7	3.0	2.3	1.9	1.4	1.2	1.1	1.7	2.5	3.1	3.9	2.3
1958	4.8	4.2	3.1	2.9	1.7	1.2	1.5	1.3	1.6	2.3	3.0	4.0	2.6
1959	3.6	3.3	2.8	2.4	1.7	1.4	1.4	1.2	1.8	2.5	2.9	3.6	2.4
1960	3.3	3.9	2.3	2.4	1.9	1.2	1.2	1.3	1.2	2.3	2.5	3.8	2.4
1961	4.2	3.7	3.2	2.1	2.0	1.6	1.0	0.9	1.5	2.6	2.8	3.1	2.4
1962	2.8	3.2	2.4	2.2	1.4	1.4	1.0	1.4	1.5	2.9	3.6	4.2	2.3
1963	3.0	4.2	2.6	2.0	1.5	1.6	1.2	0.9	1.7	3.1	3.3	3.9	2.4
1964	4.3	3.1	2.6	2.3	1.5	1.6	1.5	1.4	1.4	2.1	3.2	3.6	2.4
1965	3.6	2.6	2.4	2.4	1.6	1.6	1.3	1.0	1.3	2.7	3.2	4.0	2.3
1966	4.3	2.9	3.0	1.7	1.8	1.5	1.4	1.3	1.6	2.1	2.7	4.0	2.4
1967	3.5	3.7	2.4	1.9	1.3	1.1	1.1	1.1	1.8	2.7	3.1	3.6	2.2
1968	3.5	2.9	3.2	1.9	1.4	1.4	1.1	1.3	1.2	2.5	3.5	3.4	2.4
1969	2.8	4.2	3.2	2.9	1.9	1.6	1.1	1.2	1.6	2.6	3.1	3.1	2.6
1970	3.9	4.3	3.3	2.4	1.6	1.3	1.4	1.2	1.3	2.3	3.1	3.9	2.5
1971	3.3	3.3	3.3	2.6	1.7	1.7	0.9	1.4	1.7	2.0	3.2	3.1	2.3
1972	3.7	3.5	3.6	2.7	1.7	1.8	1.5	1.3	1.3	1.8	4.1	3.7	2.5
1973	4.3	3.7	3.5	2.4	2.0	1.8	1.8	1.5	2.0	2.3	3.3	4.6	2.8
1974	3.8	3.6	3.6	2.7	2.1	1.6	1.3	1.2	1.4	2.1	3.5	4.1	2.6
1975	3.1	3.2	2.8	1.8	1.7	1.1	1.2	1.1	0.7	2.4	3.1	3.2	2.1
MEAN	3.6	3.5	3.0	2.3	1.7	1.5	1.3	1.2	1.5	2.4	3.2	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 52 (42.73N/ 124.51W TO 42.61N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.3	5.0	4.3	2.7	2.8	2.1	1.9	2.1	3.7	4.2	5.1
1957	4.2	6.5	5.3	4.1	3.2	2.4	2.0	1.9	3.3	4.2	4.4	6.1
1958	6.7	6.5	5.0	5.8	2.6	2.0	2.9	2.5	2.5	4.5	5.4	6.7
1959	6.2	6.1	4.5	4.8	3.5	2.1	2.0	2.0	3.3	5.3	5.9	5.7
1960	6.4	6.5	4.6	3.6	2.8	2.5	2.1	2.2	1.8	4.9	5.8	5.9
1961	6.6	6.4	5.9	3.6	3.0	2.8	1.5	1.5	2.6	4.2	4.8	4.9
1962	5.4	4.9	4.7	4.5	2.6	2.1	1.8	2.3	4.4	4.9	5.8	7.1
1963	5.6	6.5	4.7	2.9	2.9	2.8	1.9	1.4	2.7	6.0	4.7	7.1
1964	6.4	5.3	4.5	4.6	3.1	3.0	2.5	1.9	2.4	3.4	5.3	6.4
1965	5.2	4.2	4.7	3.9	2.5	2.5	1.7	1.8	1.8	5.8	6.2	6.0
1966	6.8	4.1	5.3	4.2	2.8	2.7	2.0	1.9	3.1	4.1	4.3	5.9
1967	5.5	4.1	3.9	3.2	2.3	2.0	1.5	1.5	3.8	5.6	5.1	7.1
1968	6.3	6.0	4.9	3.5	2.1	2.3	2.2	2.0	3.1	4.2	5.7	5.9
1969	4.7	6.3	5.6	4.9	3.6	2.1	1.9	1.7	2.9	4.5	6.4	7.7
1970	7.0	6.1	5.8	4.6	2.3	1.8	2.0	1.7	2.4	4.4	6.1	6.4
1971	6.9	6.4	6.1	3.9	3.2	2.3	1.4	3.0	2.7	3.5	5.6	4.6
1972	6.7	5.4	5.5	4.7	2.5	2.3	3.0	2.1	2.3	3.0	5.6	6.9
1973	6.9	6.1	5.7	4.0	3.5	3.3	2.7	2.1	3.4	4.0	5.6	6.9
1974	8.0	5.3	6.8	4.9	3.3	2.8	2.2	2.1	2.7	4.3	5.3	6.3
1975	5.1	5.5	5.1	2.7	3.4	1.7	1.8	1.8	1.2	4.3	5.2	6.4

20 YR. STATISTICS FOR PACIFIC STATION 52 (42.73N/ 124.51W TO 42.61N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	8.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	95.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011515

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.07 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 7

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	85	71	1	6	3	.	.	.	.	.	166
0.50 - 0.99	544	768	205	8	5	1	.	.	.	.	1531
1.00 - 1.49	930	2337	1295	104	6	.	.	.	.	.	4672
1.50 - 1.99	183	1006	521	109	44	.	.	.	.	.	1863
2.00 - 2.49	1	246	99	104	51	5	.	.	.	.	506
2.50 - 2.99	.	34	68	49	37	1	.	.	.	.	189
3.00 - 3.49	.	.	27	15	46	35	.	.	.	.	123
3.50 - 3.99	.	.	5	1	13	18	.	.	.	.	37
4.00 - 4.49	.	.	.	.	5	8	.	.	.	.	13
4.50 - 4.99	.	.	.	.	.	5	.	.	.	.	5
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1743	4462	2221	396	207	76	0	0	0	0	

MEAN HS(M) = 1.38 LARGEST HS(M) = 4.64 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 5333

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	20	.	.	.	.	.	.	.	.	23
0.50 - 0.99	32	576	1071	215	58	66	3	1	8	.	2030
1.00 - 1.49	39	1158	5867	2686	1177	492	83	27	5	.	11534
1.50 - 1.99	56	571	4457	5568	3581	1302	174	23	3	.	15735
2.00 - 2.49	11	313	915	3220	4967	2729	477	13	3	.	12648
2.50 - 2.99	.	181	376	1009	3805	4645	1161	78	23	.	11278
3.00 - 3.49	.	44	273	398	2149	5077	1755	119	5	.	9820
3.50 - 3.99	.	1	219	193	968	4129	2443	176	8	.	8137
4.00 - 4.49	.	.	63	128	369	2568	2681	160	13	.	5982
4.50 - 4.99	.	.	1	58	181	1172	2662	253	.	.	4327
5.00 +	.	.	.	3	65	660	3319	1396	.	.	5943
TOTAL	141	2864	13242	13478	17320	22840	15258	2246	68	0	

MEAN HS(M) = 2.80 LARGEST HS(M) = 7.78 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 51132

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	11	20	29	.	.	.	.	.	.	.	60
1.00 - 1.49	8	78	58	5	1	.	.	.	.	.	150
1.50 - 1.99	29	78	119	25	22	13	.	.	.	.	286
2.00 - 2.49	8	80	116	71	58	3	.	.	.	.	336
2.50 - 2.99	.	124	210	77	104	25	.	.	.	.	540
3.00 - 3.49	.	18	167	152	124	87	3	.	.	.	551
3.50 - 3.99	.	1	95	133	143	102	10	.	.	.	484
4.00 - 4.49	.	.	35	99	169	90	30	.	.	.	423
4.50 - 4.99	.	.	3	29	95	90	23	.	.	.	240
5.00 +				3	54	123	51				231
TOTAL	56	399	832	594	770	533	117	0	0	0	

MEAN HS(M) = 3.27 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1945

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 0.99	1	8	.	.	.	.	.	.	.	.	9
1.00 - 1.49	1										1
1.50 - 1.99	1	10	1	.	.	.	.	.	.	.	12
2.00 - 2.49	.	6	1	.	.	.	.	.	.	.	7
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	4	24	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.46 LARGEST HS(M) = 2.09 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 21

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

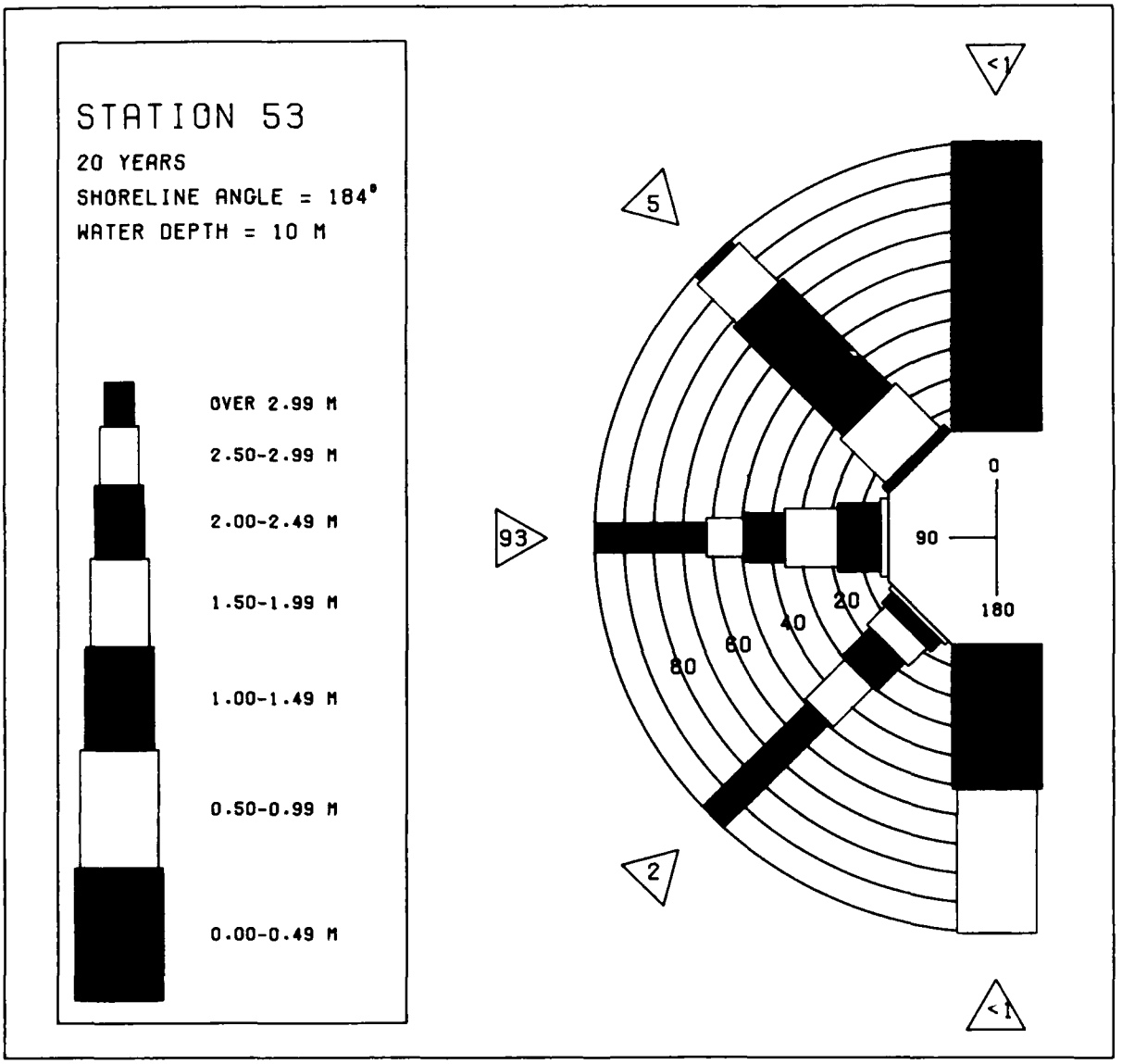
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 53 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	9	1	1	.	.	.	.	.	.	19
0.50 - 0.99	59	137	130	22	6	6	.	.	.	.	360
1.00 - 1.49	98	357	722	279	118	49	8	2	.	.	1633
1.50 - 1.99	27	166	510	570	364	131	17	2	.	.	1787
2.00 - 2.49	2	64	113	339	507	273	47	1	.	.	1346
2.50 - 2.99	.	34	65	113	394	467	116	7	2	.	1198
3.00 - 3.49	.	6	45	56	232	520	175	11	.	.	1046
3.50 - 3.99	.	.	31	32	112	425	245	17	.	.	862
4.00 - 4.49	.	.	9	22	54	266	271	16	1	.	639
4.50 - 4.99	.	.	.	8	27	126	268	25	.	.	454
5.00 +	.	.	.	.	11	78	387	139	3	0	615
TOTAL	196	773	1626	1441	1825	2341	1534	220	3	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.78 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.4	3.5	2.6	2.3	1.9	1.4	1.4	1.6	2.2	3.1	3.5	2.5
1957	2.6	3.0	3.3	2.7	2.2	1.5	1.3	1.2	1.9	2.8	3.5	4.3	2.5
1958	5.0	4.3	3.5	3.3	2.1	1.4	1.7	1.5	1.8	2.7	3.4	4.2	2.9
1959	3.7	3.7	3.1	2.9	1.9	1.5	1.6	1.4	2.0	2.9	3.5	4.1	2.7
1960	3.6	4.2	2.5	2.8	2.1	1.4	1.4	1.6	1.4	2.7	4.0	4.2	2.7
1961	4.4	3.9	3.4	2.5	2.3	1.9	1.2	1.1	1.5	2.6	3.2	3.6	2.6
1962	3.0	3.4	2.9	2.6	1.6	1.6	1.2	1.6	1.7	3.3	4.1	4.3	2.6
1963	3.3	4.1	3.1	2.3	1.8	1.9	1.4	1.0	2.0	3.5	3.7	3.9	2.7
1964	4.6	3.5	3.0	2.8	1.8	1.7	1.8	1.6	1.7	2.4	3.6	3.9	2.7
1965	4.0	3.0	2.8	2.7	1.9	1.9	1.5	1.2	1.5	3.0	3.5	4.5	2.6
1966	4.5	3.2	3.4	2.0	2.2	1.7	1.7	1.5	1.9	2.4	3.8	4.1	2.6
1967	3.7	3.1	2.7	2.3	1.4	1.2	1.7	1.2	2.1	3.1	3.7	4.0	2.5
1968	3.5	4.0	3.4	2.3	1.6	1.5	1.3	1.5	1.4	2.9	3.7	3.5	2.5
1969	3.1	4.7	3.8	3.3	2.2	1.8	1.3	1.4	1.8	3.0	3.6	5.4	3.0
1970	3.9	4.9	3.7	2.8	1.9	1.5	1.6	1.4	1.5	2.6	3.4	4.4	2.8
1971	3.4	3.4	3.6	3.1	2.0	2.0	1.1	1.7	1.9	2.3	3.6	3.6	2.7
1972	4.3	3.7	3.8	3.2	2.0	2.1	1.8	1.5	1.6	2.2	4.6	3.8	2.9
1973	4.5	4.1	4.1	2.9	2.3	2.0	2.0	1.8	2.3	2.7	3.6	4.8	3.1
1974	3.9	4.0	4.0	3.1	2.4	1.9	1.4	1.4	1.7	2.5	4.0	4.5	2.9
1975	3.5	3.4	3.1	2.1	2.0	1.3	1.3	1.3	0.8	2.6	3.5	3.4	2.4
MEAN	3.8	3.8	3.3	2.7	2.0	1.7	1.5	1.4	1.7	2.7	3.6	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.8	5.8	5.4	3.4	3.2	2.5	2.3	2.4	4.6	4.6	5.6
1957	4.2	5.7	5.5	4.8	3.6	2.6	2.1	2.1	3.8	5.2	5.5	6.7
1958	6.9	6.4	5.9	6.1	3.3	2.2	3.6	3.1	3.0	5.3	6.1	6.4
1959	6.2	6.1	5.1	6.1	3.7	2.5	2.4	2.3	3.2	6.0	6.7	6.1
1960	6.2	6.2	4.7	4.1	3.4	2.8	2.2	2.4	2.0	5.8	6.3	6.3
1961	6.6	6.4	6.2	4.7	3.5	3.4	1.7	1.8	2.9	4.6	5.8	5.7
1962	5.4	5.2	5.4	5.7	2.5	2.6	2.1	2.6	3.2	6.0	6.0	6.3
1963	5.1	6.1	5.5	3.7	3.2	3.4	2.0	1.7	3.2	6.6	5.7	6.7
1964	7.0	5.6	4.6	5.8	3.7	2.9	3.0	2.3	2.7	4.2	6.4	6.0
1965	5.5	5.0	5.7	4.9	3.0	2.9	2.1	2.1	2.2	6.1	6.2	6.2
1966	6.6	4.9	5.7	4.6	3.4	2.9	2.5	2.2	3.7	4.5	4.9	6.2
1967	5.6	4.5	5.0	3.9	2.6	2.2	1.8	1.6	4.7	6.0	6.1	7.1
1968	5.2	6.1	5.4	4.4	2.7	2.2	2.4	2.3	3.8	5.0	6.1	6.2
1969	4.7	6.7	6.7	5.9	3.9	2.5	2.1	1.9	3.5	5.5	7.0	7.8
1970	6.9	6.4	6.2	5.2	2.8	2.6	2.2	2.1	2.8	4.9	6.1	6.9
1971	6.2	5.5	6.1	4.8	3.5	2.9	1.8	3.9	3.2	4.4	6.5	5.6
1972	6.7	5.8	5.7	5.8	3.0	3.2	3.2	2.6	2.6	3.8	6.2	6.8
1973	6.7	6.1	6.3	4.8	4.1	3.5	2.7	2.5	3.7	4.3	6.4	6.8
1974	7.1	6.3	6.7	6.0	4.0	3.1	2.6	2.2	3.3	5.0	6.3	6.7
1975	5.7	6.4	5.8	3.2	3.9	1.9	1.9	2.1	1.4	4.5	6.4	6.3

20 YR. STATISTICS FOR PACIFIC STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	89.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	167	32	.	.	.	.	.	.	.	.	199
1.00 - 1.49	1264	287	.	.	.	.	.	.	.	.	1551
1.50 - 1.99	939	458	1	.	.	.	.	.	.	.	1398
2.00 - 2.49	102	71	.	.	.	.	.	.	.	.	173
2.50 - 2.99	1	8	.	.	.	.	.	.	.	.	9
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2473	856	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.64 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 1950

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	29	1	.	1	.	.	.	.	.	46
0.50 - 0.99	136	547	429	41	6	13	5	.	.	.	1177
1.00 - 1.49	616	1856	2000	289	66	6	1	.	.	.	4834
1.50 - 1.99	499	1694	1748	301	92	5	.	.	.	.	4339
2.00 - 2.49	56	708	325	225	46	.	.	.	.	.	1360
2.50 - 2.99	1	174	165	114	70	22	.	.	.	.	546
3.00 - 3.49	.	25	56	44	61	17	.	.	.	.	203
3.50 - 3.99	.	1	20	11	5	11	.	.	.	.	48
4.00 - 4.49	.	.	3	.	6	8	.	.	.	.	17
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1323	5034	4746	1026	352	83	6	0	0	0	

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.49 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 7360

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	41	359	746	165	63	51	5	1	13	.	1435
1.00 - 1.49	11	727	3359	2272	1101	487	68	25	.	.	8047
1.50 - 1.99	39	453	3396	4981	3335	1237	188	37	3	.	13469
2.00 - 2.49	3	231	1014	3338	5022	2363	528	34	1	.	13134
2.50 - 2.99	.	147	340	978	3898	4671	1232	90	22	.	11578
3.00 - 3.49	.	25	248	434	2123	5080	1882	126	3	.	9921
3.50 - 3.99	.	1	191	191	824	4113	2635	184	3	.	8142
4.00 - 4.49	.	.	51	133	361	2400	2737	186	15	.	5883
4.50 - 4.99	.	.	5	53	154	995	2566	263	.	.	4036
5.00 +	.	.	.	3	71	540	3447	1374	.	.	5435
TOTAL	94	1939	9330	12548	16952	22737	15288	2317	60	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47524

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	6	13	.	.	.	.	.	.	.	19
1.00 - 1.49	.	49	25	.	.	.	.	.	.	.	74
1.50 - 1.99	13	41	100	6	11	6	.	.	.	.	177
2.00 - 2.49	6	87	94	65	30	5	.	.	.	.	287
2.50 - 2.99	.	112	154	82	97	20	.	.	.	.	465
3.00 - 3.49	.	5	183	131	88	29	1	.	.	.	437
3.50 - 3.99	.	1	104	114	159	85	11	.	.	.	474
4.00 - 4.49	.	.	27	87	147	104	13	.	.	.	378
4.50 - 4.99	.	.	5	18	90	66	22	.	.	.	201
5.00 +	.	.	1	3	46	99	41	1	0	0	191
TOTAL	19	301	706	506	668	414	88	1	0	0	

MEAN HS(M) = 3.39 LARGEST HS(M) = 7.79 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 1594

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	.	8	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	16	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.85 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 12

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

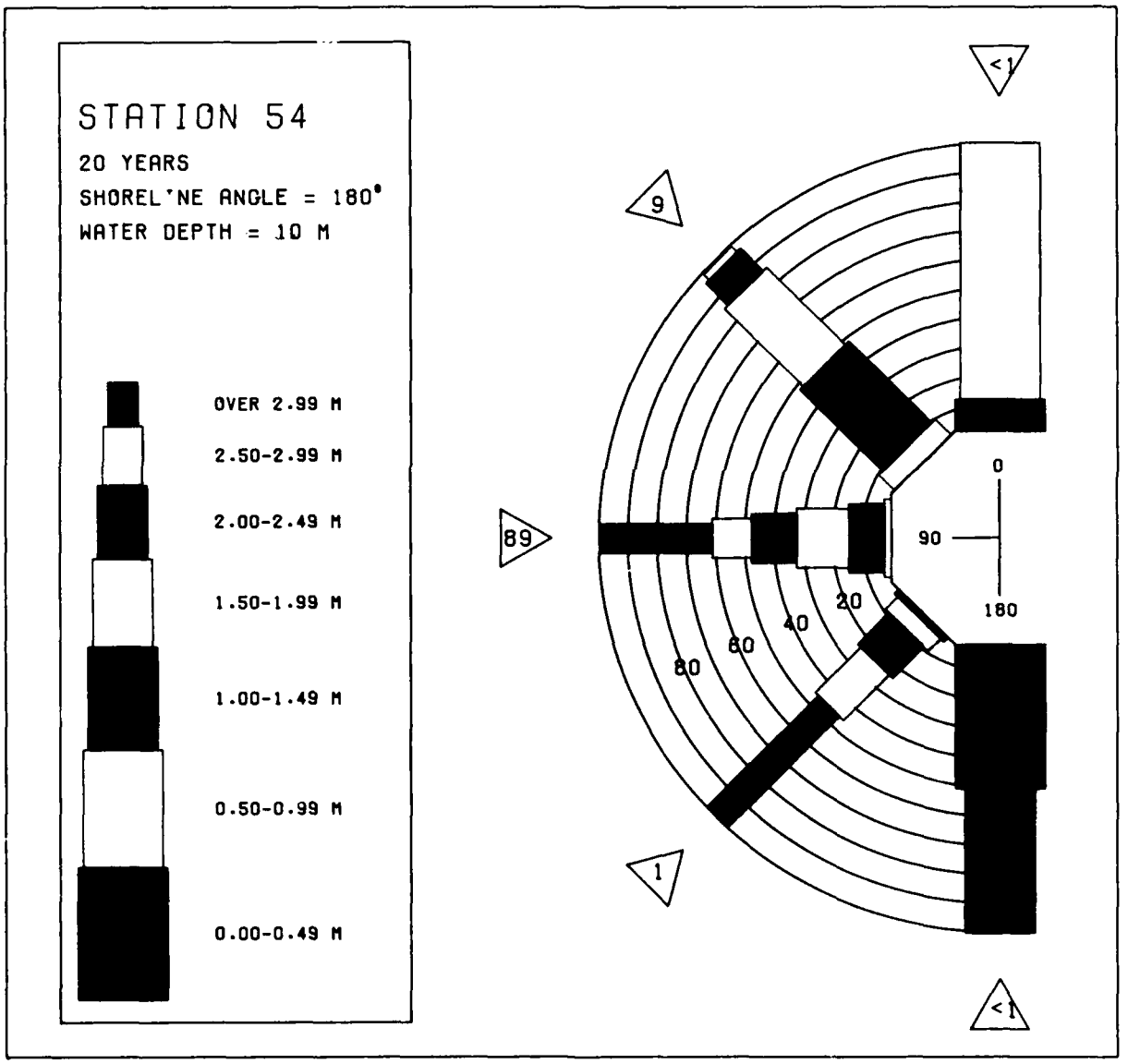
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 54 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1	3									4
0.50 - 0.99	34	93	118	20	7	6	1	.	1	.	280
1.00 - 1.49	189	292	538	256	116	49	7	2	.	.	1449
1.50 - 1.99	149	265	524	528	343	124	18	3	.	.	1954
2.00 - 2.49	16	110	143	362	509	296	52	3	.	.	1491
2.50 - 2.99	.	44	66	117	406	491	123	9	2	.	1258
3.00 - 3.49	.	5	48	91	227	512	188	12	.	.	1053
3.50 - 3.99	.	.	31	31	98	421	264	18	.	.	863
4.00 - 4.49	.	.	8	22	51	251	275	18	1	.	626
4.50 - 4.99	.	.	1	7	24	106	258	26	.	.	422
5.00 +					11	63	348	137			559
TOTAL	389	812	1477	1404	1792	2319	1534	228	4	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.79 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.3	3.4	2.5	2.3	2.0	1.5	1.5	1.5	2.2	3.0	3.5	2.5
1957	2.6	3.0	3.2	2.8	2.2	1.5	1.5	1.3	1.9	2.8	3.5	4.3	2.5
1958	5.0	4.2	3.5	3.2	2.1	1.4	1.8	1.6	1.8	2.7	3.4	4.1	2.9
1959	3.7	3.7	3.0	2.9	1.9	1.6	1.7	1.5	2.1	2.9	3.4	4.0	2.7
1960	3.9	4.2	2.5	2.7	2.1	1.6	1.5	1.6	1.4	2.6	3.9	4.1	2.7
1961	4.3	3.7	3.4	2.5	2.3	2.0	1.3	1.1	1.6	2.6	3.2	3.5	2.6
1962	3.0	3.4	2.8	2.5	1.6	1.7	1.5	1.6	1.7	3.2	4.0	4.3	2.6
1963	3.2	4.1	3.1	2.2	1.9	2.0	1.5	1.1	2.0	3.4	3.6	3.9	2.7
1964	4.6	3.4	2.9	2.9	1.8	1.8	1.8	1.6	1.7	2.3	3.5	3.9	2.7
1965	3.9	3.0	2.8	2.7	2.0	2.1	1.6	1.2	1.6	2.9	3.5	4.5	2.6
1966	4.5	3.2	3.3	2.1	2.3	1.7	1.8	1.6	1.8	2.3	2.8	4.1	2.6
1967	3.6	3.0	2.7	2.6	1.5	1.4	1.5	1.3	2.1	3.0	3.7	3.9	2.5
1968	3.4	3.9	3.4	2.2	1.6	1.6	1.5	1.5	1.4	2.8	3.7	3.5	2.5
1969	3.1	4.7	3.7	3.1	2.3	1.8	1.5	1.5	1.8	2.9	3.5	5.4	2.9
1970	3.9	4.8	3.7	2.8	2.0	1.6	1.7	1.5	1.5	2.5	3.4	4.3	2.8
1971	3.4	3.4	3.4	3.1	2.2	2.0	1.3	1.7	1.9	2.3	3.5	3.5	2.6
1972	4.2	3.6	3.7	3.2	2.1	2.2	1.9	1.6	1.5	2.2	4.5	3.8	2.9
1973	4.5	4.0	4.1	3.0	2.4	2.2	2.1	1.9	2.2	2.6	3.5	4.8	3.1
1974	3.9	3.9	3.8	3.1	2.5	2.0	1.6	1.5	1.7	2.4	4.0	4.4	2.9
1975	3.4	3.4	3.0	2.1	2.1	1.4	1.4	1.4	0.9	2.6	3.4	3.3	2.4
MEAN	3.8	3.7	3.3	2.7	2.1	1.8	1.6	1.5	1.7	2.7	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.8	5.5	5.2	3.7	2.9	2.4	2.3	2.4	4.3	4.5	5.5
1957	4.0	5.9	5.4	4.7	3.6	2.8	2.6	2.1	3.7	5.2	5.4	6.6
1958	6.9	6.4	5.9	6.1	3.4	2.2	3.6	3.3	2.9	5.0	6.0	5.9
1959	6.0	6.0	4.9	6.0	3.6	2.4	2.5	2.8	3.2	5.9	6.7	6.1
1960	6.5	6.5	4.9	4.1	3.4	2.8	2.5	2.3	2.1	6.1	6.3	6.2
1961	7.0	6.1	6.1	4.1	3.6	3.4	2.1	1.7	2.8	4.9	5.5	5.5
1962	5.5	5.5	5.1	5.8	2.9	2.9	2.4	2.7	5.1	6.0	5.9	6.8
1963	5.4	6.2	5.2	5.5	3.1	3.6	2.2	1.9	3.2	6.4	5.6	6.7
1964	6.7	5.5	4.6	5.7	3.8	2.9	3.2	2.2	2.7	4.1	6.4	6.1
1965	5.5	4.7	5.3	4.8	3.2	3.2	2.3	2.3	2.2	6.1	6.2	6.1
1966	6.7	4.8	5.6	4.6	3.3	2.9	2.5	2.4	3.6	4.4	4.7	6.1
1967	5.6	4.4	4.8	3.9	2.9	2.6	2.0	1.8	4.6	6.0	6.0	7.1
1968	5.1	6.1	5.3	4.3	2.7	2.2	2.5	2.3	3.7	4.9	6.1	6.2
1969	4.8	6.6	6.7	5.5	4.1	2.5	2.2	2.1	3.4	5.4	6.9	7.7
1970	7.0	6.4	6.1	5.1	2.8	2.3	2.2	2.4	2.9	4.8	6.1	6.8
1971	6.9	5.4	5.7	4.7	3.5	2.8	2.4	3.7	3.3	4.3	6.4	5.4
1972	6.3	5.7	5.9	6.1	3.1	3.6	3.1	2.6	2.3	3.9	6.1	6.8
1973	7.0	6.3	6.4	4.7	3.9	4.5	2.8	2.9	3.7	4.3	5.9	6.8
1974	7.8	6.1	6.7	6.0	3.9	3.3	3.2	2.2	3.3	5.2	6.1	6.6
1975	5.3	6.4	5.4	3.3	3.7	2.5	2.2	2.4	1.6	4.4	6.3	6.2

20 YR. STATISTICS FOR PACIFIC STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	105.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	224	65	.	.	.	.	.	.	.	.	289
1.00 - 1.49	1504	455	.	.	.	.	.	.	.	.	1959
1.50 - 1.99	894	636	3	.	.	.	.	.	.	.	1533
2.00 - 2.49	83	102	.	.	.	.	.	.	.	.	185
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2705	1261	3	0	0	0	0	0	0	0	

MEAN HS(M) = 1.46 LARGEST HS(M) = 2.68 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 2322

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	37	1			1		.	.	.	56
0.50 - 0.99	121	691	638	109	22	18	3	.	.	.	1602
1.00 - 1.49	415	1998	3162	879	207	17	1	.	.	.	6679
1.50 - 1.99	308	1471	2549	1964	499	18	.	.	.	.	6809
2.00 - 2.49	23	588	438	1066	894	3	.	.	.	.	3012
2.50 - 2.99	1	150	200	193	496	32	.	.	.	.	1072
3.00 - 3.49	.	22	77	65	270	29	.	.	.	.	463
3.50 - 3.99	.	.	34	10	51	37	.	.	.	.	132
4.00 - 4.49	.	.	3	.	10	17	.	.	.	.	30
4.50 - 4.99	.	.	.	.	.	3	.	.	.	.	3
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	885	4957	7101	4287	2449	175	4	0	0	0	

MEAN HS(M) = 1.68 LARGEST HS(M) = 4.60 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 11617

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		1	1								2
0.50 - 0.99	35	256	595	123	53	47	6	1	13	.	1128
1.00 - 1.49	13	583	2464	1827	1030	503	73	27	1	.	6521
1.50 - 1.99	35	395	2571	3420	3071	1285	191	34	1	.	11003
2.00 - 2.49	5	229	857	2390	4190	3006	550	35	1	.	11263
2.50 - 2.99	.	152	318	802	3362	4988	1273	92	22	.	11009
3.00 - 3.49	.	23	248	417	1815	5001	1906	136	3	.	9549
3.50 - 3.99	.	3	193	205	770	3952	2669	179	5	.	7976
4.00 - 4.49	.	.	70	148	390	2323	2749	203	13	.	5896
4.50 - 4.99	.	.	5	58	165	977	2511	256	.	.	3972
5.00 +	.	.		6	75	581	3324	1351	.	.	5337
TOTAL	88	1642	7322	9394	14921	22663	15251	2314	59	0	

MEAN HS(M) = 2.97 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 43068

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	10	.	.	.	.	.	.	.	11
1.00 - 1.49	.	41	10	.	.	.	.	.	.	.	51
1.50 - 1.99	6	30	46	1	8	6	.	.	.	.	97
2.00 - 2.49	8	83	92	54	27	1	.	.	.	.	265
2.50 - 2.99	.	112	135	73	68	17	.	.	.	.	405
3.00 - 3.49	.	8	174	128	87	18	.	.	.	.	415
3.50 - 3.99	.	.	118	109	147	47	5	.	.	.	426
4.00 - 4.49	.	.	23	78	135	92	11	.	.	.	339
4.50 - 4.99	.	.	5	25	94	70	18	.	.	.	212
5.00 +	.	.	1	5	54	77	42	.	.	.	179
TOTAL	14	275	614	473	620	328	76	0	0	0	

MEAN HS(M) = 3.48 LARGEST HS(M) = 7.49 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1416

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	3	13	.	.	.	.	.	.	.	.	16
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	21	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.87 LARGEST HS(M) = 2.34 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 17

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

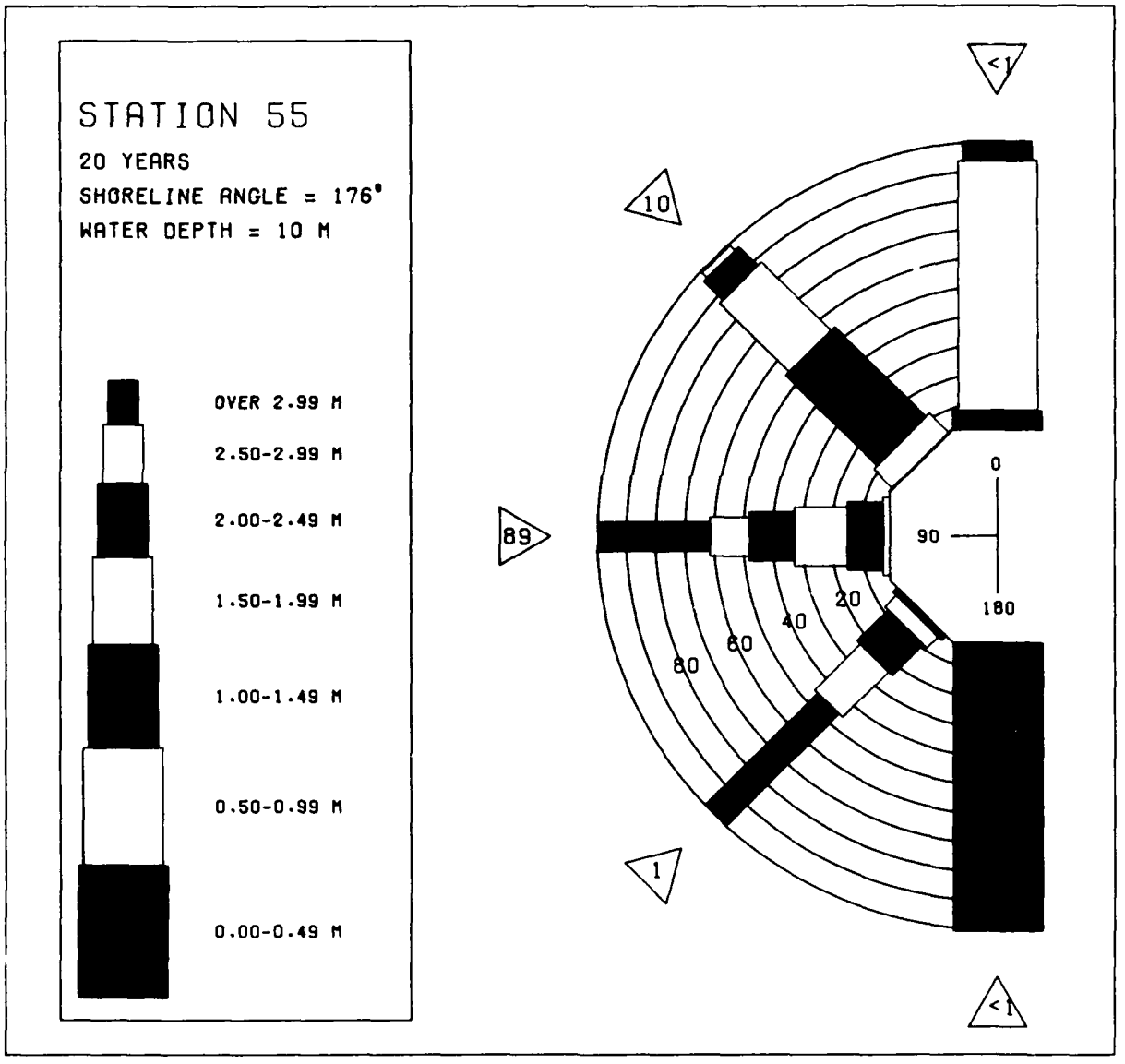
HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 55 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	3	.	.	.	.	.	.	.	.	4
0.50 - 0.99	38	101	124	23	7	6	.	.	1	.	300
1.00 - 1.49	193	307	563	270	123	52	7	2	.	.	1517
1.50 - 1.99	124	254	517	538	357	131	19	3	.	.	1943
2.00 - 2.49	12	101	138	351	511	301	55	3	.	.	1472
2.50 - 2.99	.	41	65	106	392	503	127	9	2	.	1245
3.00 - 3.49	.	5	49	61	217	504	190	13	.	.	1039
3.50 - 3.99	.	.	34	32	96	403	267	17	.	.	849
4.00 - 4.49	.	.	9	22	53	243	276	20	1	.	624
4.50 - 4.99	.	.	1	8	26	105	253	25	.	.	418
5.00 +	.	.	.	1	13	65	336	135	.	.	550
TOTAL	368	812	1500	1412	1795	2313	1530	227	4	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 55 (42.35N/ 124.43W TO 42.25N/ 124.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.3	3.3	2.5	2.3	2.0	1.5	1.5	1.5	2.1	3.0	3.4	2.5
1957	2.6	3.0	3.5	2.7	2.2	1.5	1.4	1.3	1.3	2.8	3.4	4.3	2.5
1958	5.0	4.2	3.5	3.2	2.1	1.4	1.8	1.6	1.8	2.6	3.3	4.1	2.9
1959	3.7	3.7	3.0	2.9	1.9	1.6	1.7	1.5	2.0	2.8	3.3	4.0	2.7
1960	3.6	4.2	2.5	2.7	2.1	1.6	1.5	1.6	1.4	2.6	3.8	4.1	2.6
1961	4.3	3.7	3.4	2.4	2.2	1.9	1.3	1.1	1.6	2.5	3.1	3.5	2.6
1962	3.0	3.4	3.8	3.5	1.6	1.6	1.4	1.6	1.7	3.2	4.0	4.3	2.6
1963	3.2	4.1	3.0	2.2	1.8	1.9	1.5	1.1	1.9	3.4	3.5	3.9	2.6
1964	4.6	3.4	2.9	2.8	1.8	1.8	1.8	1.6	1.7	2.3	3.2	3.9	2.7
1965	3.9	3.9	2.8	2.7	2.0	2.0	1.6	1.2	1.6	2.9	3.5	4.5	2.6
1966	4.5	3.2	3.3	2.0	2.3	1.7	1.8	1.6	1.5	2.3	2.8	4.1	2.6
1967	3.6	3.0	2.7	2.2	1.5	1.4	1.4	1.3	2.1	3.0	3.6	3.9	2.5
1968	3.5	3.9	3.4	2.2	1.6	1.5	1.4	1.5	1.4	2.8	3.7	3.5	2.5
1969	3.0	4.7	3.7	3.1	2.2	1.8	1.5	1.4	1.8	2.9	3.5	5.4	2.9
1970	3.9	4.8	3.7	2.8	2.0	1.6	1.7	1.5	1.5	2.5	3.4	4.3	2.8
1971	3.4	3.4	3.4	3.1	2.1	1.9	1.2	1.6	1.9	2.3	3.5	3.5	2.6
1972	4.1	3.6	3.7	3.1	2.1	2.1	1.8	1.5	1.5	2.1	4.2	5.8	2.8
1973	4.5	4.0	4.0	2.9	2.4	2.1	2.1	1.9	2.2	2.6	3.5	4.8	3.1
1974	3.9	3.9	3.8	3.1	2.5	2.0	1.5	1.5	1.6	2.4	3.9	4.4	2.9
1975	3.3	3.4	3.0	2.1	2.1	1.4	1.4	1.4	0.8	2.6	3.3	3.3	2.3
MEAN	3.8	3.7	3.3	2.7	2.0	1.7	1.6	1.5	1.7	2.6	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 55 (42.35N/ 124.43W TO 42.25N/ 124.45W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.8	5.5	5.1	3.6	2.9	2.3	2.3	2.4	4.2	4.5	5.5
1957	4.0	6.0	5.4	4.7	3.6	2.8	2.5	2.0	3.6	5.1	5.3	6.5
1958	6.9	6.5	5.8	6.1	3.3	2.2	2.5	2.3	2.9	5.0	5.9	5.9
1959	6.0	6.1	4.8	6.0	3.6	2.4	2.5	2.7	3.2	5.9	6.6	6.1
1960	6.6	6.6	4.9	4.1	3.3	2.8	2.5	2.3	2.1	6.0	6.3	6.2
1961	7.0	6.2	6.1	4.0	3.5	3.4	2.0	1.7	2.8	4.8	5.4	5.5
1962	5.5	5.2	5.1	5.7	2.5	2.9	2.4	2.7	5.1	6.0	5.9	6.9
1963	5.4	6.2	5.1	3.5	3.1	3.5	2.2	1.9	3.1	6.3	5.5	6.8
1964	6.6	5.5	4.6	5.6	3.8	2.9	3.1	2.2	2.7	4.1	6.3	6.2
1965	5.5	4.7	5.2	4.7	3.1	3.2	2.2	2.2	2.1	6.1	6.2	6.1
1966	6.7	4.7	5.6	4.5	3.3	2.8	2.4	2.4	3.6	4.4	4.7	6.1
1967	5.6	4.4	4.8	3.8	3.9	2.5	2.0	1.8	4.5	6.0	5.9	7.1
1968	5.1	6.1	5.3	4.2	2.7	2.2	2.5	2.3	3.6	4.8	6.1	6.2
1969	4.5	6.5	6.6	5.5	4.1	2.5	2.1	2.0	3.4	5.3	6.9	7.6
1970	7.0	6.4	6.1	5.1	2.7	2.3	2.1	2.4	2.8	4.7	6.1	6.8
1971	6.0	5.4	5.7	4.6	3.5	2.8	2.3	3.6	3.2	4.3	6.3	5.3
1972	6.3	5.7	5.9	6.0	3.0	3.5	3.1	2.5	2.3	3.8	6.1	6.7
1973	7.0	6.3	6.3	4.6	3.8	4.4	2.7	2.8	3.7	4.3	5.8	6.8
1974	7.8	6.1	6.7	5.9	3.9	3.2	2.2	2.1	3.2	5.2	6.0	6.7
1975	5.2	6.3	5.4	3.3	3.7	2.4	2.1	2.3	1.5	4.3	6.2	6.2

20 YR. STATISTICS FOR PACIFIC STATION 55 (42.35N/ 124.43W TO 42.25N/ 124.45W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	104.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.35 LARGEST HS(M) = 0.46 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 2

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	27	23	.	.	.	.	.	.	.	.	50
0.50 - 0.99	537	268	.	.	.	.	.	.	.	.	805
1.00 - 1.49	1716	1329	8	.	.	.	.	.	.	.	3053
1.50 - 1.99	371	761	3	.	.	.	.	.	.	.	1135
2.00 - 2.49	11	116	.	.	.	.	.	.	.	.	127
2.50 - 2.99	.	10	.	.	.	.	.	.	.	.	10
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2662	2507	11	0	0	0	0	0	0	0	

MEAN HS(M) = 1.31 LARGEST HS(M) = 2.80 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 3031

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	42	10	1	6	.	.	.	.	.	81
0.50 - 0.99	65	978	1456	340	87	85	29	3	1	.	3045
1.00 - 1.49	119	2014	6180	2722	1091	462	68	.	.	.	12656
1.50 - 1.99	121	831	3507	4464	2835	1105	99	.	.	.	12962
2.00 - 2.49	5	415	597	2104	3908	2034	200	.	.	.	9263
2.50 - 2.99	.	109	196	405	2024	3311	398	1	.	.	6444
3.00 - 3.49	.	1	102	148	725	2600	826	.	.	.	4402
3.50 - 3.99	.	1	47	51	193	1451	1100	.	.	.	2843
4.00 - 4.49	.	.	10	13	65	624	1112	.	.	.	1824
4.50 - 4.99	.	.	.	.	10	208	684	.	.	.	902
5.00 +	.	.	.	.	1	78	479	.	.	.	558
TOTAL	333	4391	12105	10248	10939	11964	4995	4	1	0	

MEAN HS(M) = 2.17 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 32149

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	27	100	189	47	20	3	.	1	11	.	398
1.00 - 1.49	5	294	836	641	545	157	8	30	1	.	2517
1.50 - 1.99	29	164	886	1139	1216	530	172	25	3	.	4164
2.00 - 2.49	11	145	424	812	1415	1403	477	59	10	.	4756
2.50 - 2.99	.	148	314	391	1259	2239	1045	94	11	.	5501
3.00 - 3.49	.	41	289	311	888	2055	1363	172	3	.	5122
3.50 - 3.99	.	6	222	220	614	1883	1644	181	15	.	4785
4.00 - 4.49	.	.	73	200	376	1409	1745	244	.	.	4047
4.50 - 4.99	.	.	15	85	191	602	1461	272	.	.	2626
5.00 +	.	.	1	13	128	516	2239	1204	.	.	4101
TOTAL	72	898	3249	3859	6652	10797	10154	2282	54	0	

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.3 NUMBER OF CASES = 22242

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	13	1	.	.	.	.	.	.	.	14
1.50 - 1.99	6	23	17	.	.	.	.	.	.	.	46
2.00 - 2.49	5	92	53	10	13	6	.	.	.	.	132
2.50 - 2.99	.	114	95	54	30	1	.	.	.	.	294
3.00 - 3.49	.	39	167	104	66	6	.	.	.	.	382
3.50 - 3.99	.	5	106	100	70	13	.	.	.	.	294
4.00 - 4.49	.	.	34	44	83	27	.	.	.	.	188
4.50 - 4.99	.	.	1	39	92	53	3	.	.	.	188
5.00 +	.	.	.	5	42	47	15	.	.	.	109
TOTAL	11	290	474	356	396	153	18	0	0	0	

MEAN HS(M) = 3.51 LARGEST HS(M) = 7.42 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1005

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	6	1	.	.	.	.	.	.	.	.	7
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	9	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.91 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 11

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

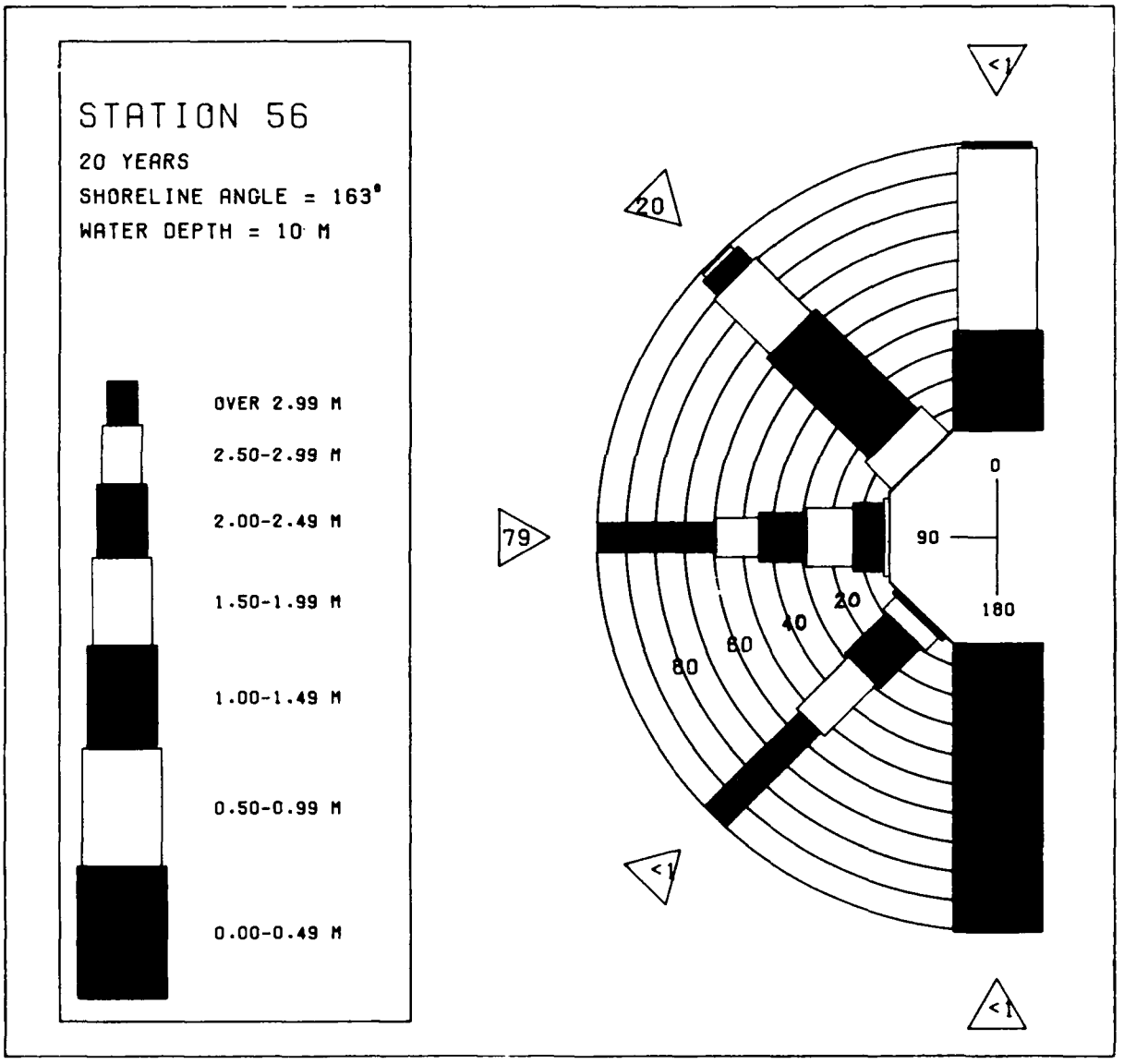
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 56 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	5	6	1								12
0.50 - 0.99	63	135	164	38	10	8	2	.	1	.	421
1.00 - 1.49	184	365	702	336	163	61	7	3	.	.	1821
1.50 - 1.99	53	178	441	560	405	163	27	2	.	.	1829
2.00 - 2.49	3	78	107	292	533	344	67	5	1	.	1430
2.50 - 2.99	.	38	60	85	331	555	144	9	1	.	1223
3.00 - 3.49	.	8	55	56	168	466	219	17	.	.	989
3.51 - 3.99	.	1	37	37	87	334	274	18	1	.	789
4.00 - 4.49	.	.	11	25	52	206	285	24	.	.	603
4.50 - 4.99	.	.	1	12	29	86	214	27	.	.	369
5.00 +				1	17	64	273	120	.	.	475
TOTAL	308	809	1579	1442	1795	2287	1512	225	4	0	

MEAN HS(M) = 2.57 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.2	2.4	2.1	1.8	1.4	1.4	1.5	2.1	2.9	3.4	2.4
1957	2.5	2.6	3.1	2.6	2.1	1.5	1.3	1.2	1.8	2.7	3.3	4.1	2.4
1958	5.0	4.2	3.3	3.1	2.0	1.3	1.6	1.5	1.7	2.5	3.2	4.0	2.8
1959	3.6	3.6	2.9	2.7	1.8	1.5	1.6	1.3	2.0	2.7	3.2	3.8	2.6
1960	3.5	4.1	2.4	2.6	2.0	1.4	1.4	1.5	1.3	2.5	3.7	4.0	2.5
1961	4.3	3.6	3.3	2.3	2.1	1.8	1.2	1.0	1.5	2.4	3.0	3.3	2.5
1962	2.9	3.3	2.7	2.4	1.5	1.5	1.2	1.5	1.6	3.1	3.8	4.3	2.5
1963	3.2	4.2	2.9	2.1	1.7	1.8	1.3	1.0	1.9	3.3	3.5	3.9	2.6
1964	4.5	3.3	2.8	2.6	1.7	1.9	1.7	1.5	1.6	2.2	3.4	3.8	2.6
1965	3.8	2.8	2.6	2.6	1.8	1.9	1.5	1.1	1.5	2.8	3.4	4.3	2.5
1966	4.4	3.1	3.2	1.9	2.1	1.7	1.7	1.5	1.7	2.2	2.8	4.1	2.5
1967	3.6	2.9	2.6	2.0	1.4	1.3	1.3	1.2	2.0	2.9	3.4	3.8	2.4
1968	3.5	3.9	3.3	2.1	1.5	1.5	1.3	1.4	1.3	2.7	3.6	3.5	2.5
1969	3.0	4.5	3.5	3.0	2.1	1.7	1.3	1.3	1.7	2.8	3.4	5.3	2.8
1970	3.9	4.6	3.6	2.6	1.9	1.5	1.5	1.4	1.4	2.4	3.3	4.1	2.7
1971	3.3	3.3	3.4	2.9	2.0	1.9	1.1	1.5	1.8	2.2	3.4	3.3	2.5
1972	4.0	3.6	3.7	3.0	1.9	2.0	1.7	1.4	1.4	2.0	4.4	3.7	2.7
1973	4.4	3.9	3.8	2.7	2.3	2.0	1.9	1.7	2.1	2.5	3.4	4.7	3.0
1974	3.9	3.8	3.7	3.0	2.3	1.8	1.4	1.4	1.6	2.3	3.8	4.3	2.8
1975	3.2	3.3	2.9	2.0	1.9	1.3	1.3	1.3	0.8	2.5	3.2	3.2	2.3
MEAN	3.7	3.6	3.1	2.5	1.9	1.6	1.4	1.4	1.6	2.5	3.4	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.7	5.1	4.7	3.4	2.8	2.2	2.1	2.3	4.0	4.4	5.3
1957	4.1	6.1	5.4	4.5	3.5	2.7	2.2	2.0	3.4	4.8	5.0	6.4
1958	6.8	6.5	5.4	6.0	3.0	2.0	3.3	3.0	2.8	4.6	5.7	5.9
1959	6.0	6.0	4.6	5.7	3.6	2.3	2.3	2.5	3.2	5.6	6.4	6.1
1960	6.7	6.6	4.8	3.9	3.6	2.7	2.3	2.2	1.9	5.7	6.2	6.1
1961	7.0	6.3	6.0	3.9	3.3	3.2	1.8	1.6	2.7	4.5	5.2	5.1
1962	5.5	5.1	4.9	5.4	2.3	2.6	2.2	2.6	4.9	5.6	5.8	7.2
1963	5.5	6.4	4.9	3.2	3.0	3.3	2.0	1.7	3.0	6.1	5.2	6.9
1964	6.5	5.4	4.5	5.2	3.5	2.9	2.9	2.1	2.6	3.8	5.9	6.3
1965	5.5	4.5	4.9	4.4	2.9	2.6	2.0	2.0	2.0	6.0	6.3	6.0
1966	6.7	4.4	5.5	4.5	3.1	2.8	2.3	2.2	3.4	4.3	4.5	5.9
1967	5.6	4.3	4.4	3.6	2.7	2.3	1.8	1.6	4.3	6.0	5.6	7.0
1968	5.0	6.1	5.0	4.0	2.5	2.2	2.4	2.2	3.4	4.5	6.0	6.2
1969	4.6	6.4	6.4	5.3	4.0	2.4	2.1	1.9	3.2	5.0	6.9	7.5
1970	7.0	6.5	6.0	5.0	2.6	2.1	2.1	2.2	2.7	4.6	6.1	6.7
1971	6.0	5.4	5.7	4.3	3.3	2.6	2.0	3.4	3.0	4.0	6.2	5.1
1972	6.3	5.6	5.8	5.7	2.8	3.2	3.1	2.4	2.2	3.5	6.0	6.7
1973	7.1	6.3	6.1	4.4	3.7	4.2	2.6	2.6	3.6	4.2	5.6	6.8
1974	7.8	5.8	6.7	5.6	3.7	3.1	2.9	2.1	3.0	4.9	5.7	6.5
1975	5.0	6.0	5.1	3.1	3.5	2.2	2.0	2.1	1.4	4.1	5.8	6.2

20 YR. STATISTICS FOR PACIFIC STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	100.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	124	.	.	.	.	.	.	.	.	.	124
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	124	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.13 LARGEST HS(M) = 0.33 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 73

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	598	198	10	.	.	.	.	.	.	.	806
0.50 - 0.99	1374	2537	90	.	.	.	.	.	.	.	4001
1.00 - 1.49	323	1021	56	.	.	.	.	.	.	.	1400
1.50 - 1.99	10	277	11	.	.	.	.	.	.	.	298
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2305	4041	167	0	0	0	0	0	0	0	

MEAN HS(M) = 0.85 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 3810

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	87	100	17	1	11	3	.	.	.	225
0.50 - 0.99	47	1502	6719	2084	804	304	83	27	10	.	11580
1.00 - 1.49	53	1103	6143	7043	4922	1918	246	15	1	.	21444
1.50 - 1.99	68	639	1322	2739	5337	4459	922	65	10	.	15561
2.00 - 2.49	11	395	602	819	2631	5600	2156	186	13	.	12413
2.50 - 2.99	.	124	503	350	1242	3524	2811	196	5	.	8755
3.00 - 3.49	.	27	304	249	568	2221	2587	299	10	.	6265
3.50 - 3.99	.	.	71	87	236	1163	1889	390	.	.	3836
4.00 - 4.49	.	.	22	25	126	367	1238	316	.	.	2094
4.50 - 4.99	.	.	1	1	25	172	657	237	.	.	1093
5.00 +	.	.	.	1	6	63	487	301	.	.	858
TOTAL	185	3877	15787	13415	15898	19802	13076	2032	52	0	

MEAN HS(M) = 2.00 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 49186

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	23	22	.	.	.	.	.	.	.	45
1.00 - 1.49	6	61	75	8	.	6	.	.	.	.	156
1.50 - 1.99	70	123	152	39	49	25	.	6	.	.	464
2.00 - 2.49	15	391	176	106	99	102	22	.	.	.	911
2.50 - 2.99	1	302	306	171	167	167	90	5	.	.	1209
3.00 - 3.49	.	169	443	260	208	263	147	13	.	.	1503
3.50 - 3.99	.	22	350	340	323	265	183	3	.	.	1486
4.00 - 4.49	.	.	188	263	311	244	184	13	.	.	1203
4.50 - 4.99	.	.	23	116	249	224	138	3	.	.	753
5.00 +	.	.	1	37	177	306	314	56	.	.	891
TOTAL	92	1091	1736	1340	1583	1602	1078	99	0	0	

MEAN HS(M) = 3.54 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 5056

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	5	3	5	.	.	.	.	.	.	.	13
1.50 - 1.99	51	30	6	5	.	.	.	.	.	.	92
2.00 - 2.49	1	87	11	.	.	.	.	.	.	.	99
2.50 - 2.99	.	104	41	5	3	5	.	.	.	.	158
3.00 - 3.49	.	35	44	11	1	.	.	.	.	.	91
3.50 - 3.99	.	3	11	3	.	.	.	.	.	.	17
4.00 - 4.49	.	.	3	.	.	.	.	.	.	.	3
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	60	262	121	24	4	5	0	0	0	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 4.38 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 285

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

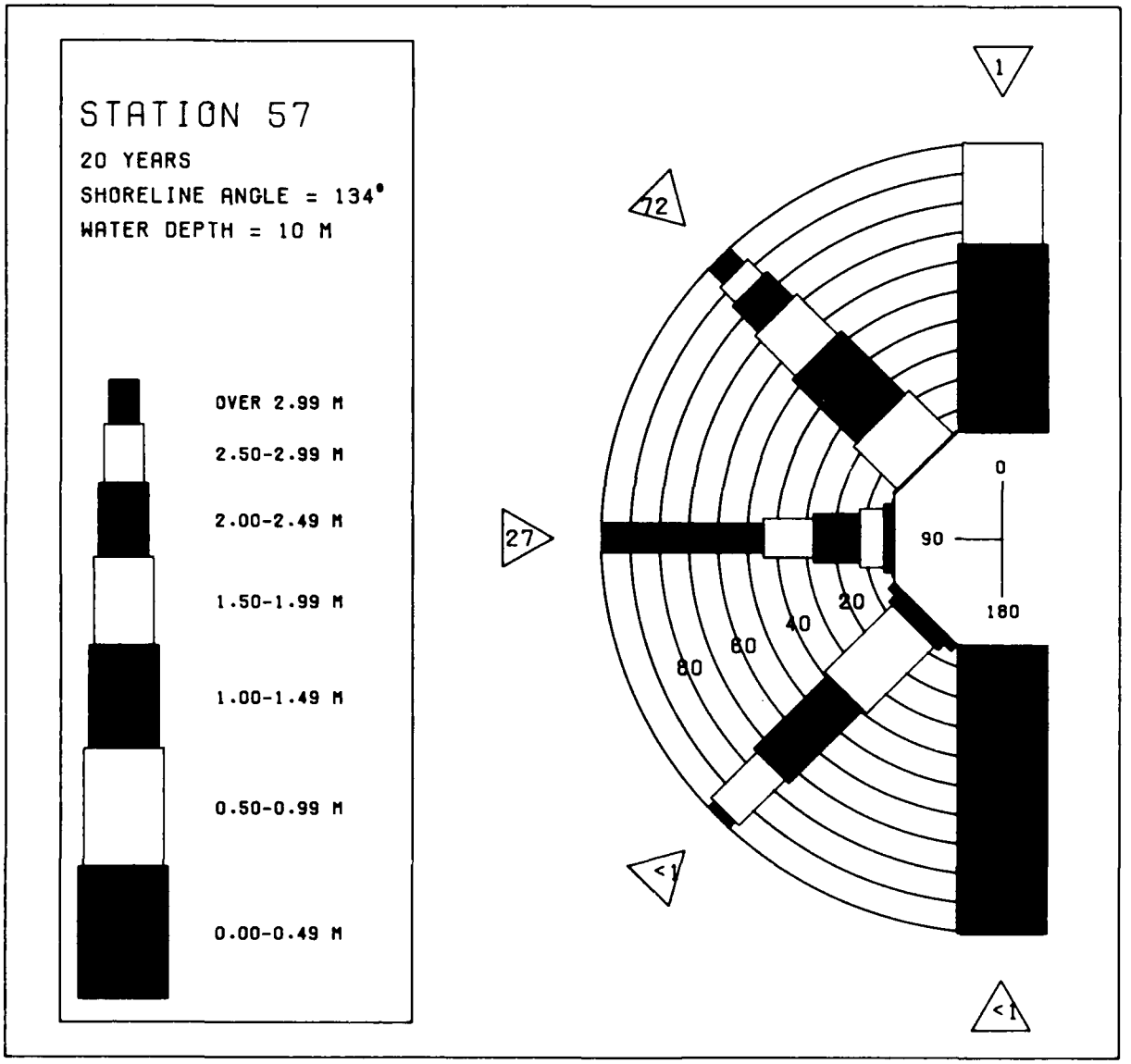
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 57 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT, LON, START= 42.10N/124.35W LAT, LON, END= 42.00N/124.21W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	73	28	11	1	1	.	.	.	.	.	114
0.50 - 0.99	142	406	683	208	80	30	8	2	1	.	1560
1.00 - 1.49	38	219	627	705	492	192	24	1	.	.	2298
1.50 - 1.99	20	107	149	278	538	448	92	7	1	.	1640
2.00 - 2.49	2	88	79	92	273	570	217	18	1	.	1340
2.50 - 2.99	.	53	85	52	141	369	290	20	.	.	1010
3.00 - 3.49	.	23	79	52	77	248	273	31	1	.	784
3.50 - 3.99	.	2	43	43	55	142	207	39	.	.	531
4.00 - 4.49	.	.	21	28	43	61	142	33	.	.	328
4.50 - 4.99	.	.	2	11	27	39	79	24	.	.	182
5.00 +	.	.	.	3	18	36	80	35	.	.	172
TOTAL	275	926	1779	1473	1744	2136	1412	210	4	0	

MEAN HS(M) = 2.06 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 57 (42.10N/ 124.35W TO 42.00N/ 124.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	2.6	2.5	1.8	1.5	1.4	1.0	1.0	1.1	1.6	2.3	2.9	1.9
1957	2.2	2.4	2.6	2.0	1.7	1.2	0.9	0.9	1.5	2.2	2.6	3.5	2.0
1958	4.3	3.8	2.6	2.5	1.4	1.0	1.2	1.1	1.3	1.6	2.5	3.5	2.3
1959	3.2	2.9	2.4	2.0	1.4	1.2	1.1	0.9	1.6	2.2	2.4	3.1	2.0
1960	3.0	3.6	2.0	2.0	1.7	1.0	1.0	1.1	0.9	2.0	2.9	3.4	2.0
1961	3.7	3.2	2.9	1.8	1.6	1.3	0.8	0.7	1.1	1.9	2.5	2.7	2.0
1962	2.6	2.8	2.1	1.9	1.2	1.1	0.7	1.1	1.3	2.4	3.1	3.8	2.0
1963	2.7	3.9	2.2	1.8	1.3	1.3	0.9	0.7	1.5	2.7	2.9	3.5	2.1
1964	4.0	2.6	2.2	1.9	1.3	1.4	1.2	1.1	1.2	1.8	2.8	3.3	2.0
1965	3.2	3.3	2.1	2.0	1.3	1.3	1.0	0.9	1.0	2.3	2.8	3.4	2.0
1966	3.7	2.9	2.6	1.9	1.4	1.3	1.2	1.0	1.4	1.7	2.4	3.6	2.0
1967	3.2	2.3	2.1	1.5	1.0	0.9	0.9	0.9	1.6	2.3	2.5	3.2	1.9
1968	3.2	3.6	2.8	1.5	1.2	1.2	1.0	1.1	1.0	2.1	3.1	3.1	2.1
1969	2.5	3.6	2.7	2.4	1.6	1.4	0.9	0.9	1.3	2.2	2.6	4.6	2.2
1970	3.6	3.6	2.9	2.0	1.4	1.1	1.2	1.0	1.1	1.9	2.8	3.4	2.2
1971	2.9	2.9	2.9	2.2	1.4	1.4	0.7	1.2	1.4	1.7	2.7	2.6	2.0
1972	3.1	3.0	2.2	2.2	1.4	1.5	1.2	1.0	1.0	1.5	3.5	3.3	2.2
1973	3.8	3.2	3.0	2.0	1.7	1.5	1.5	1.2	1.7	1.9	2.9	4.1	2.4
1974	3.5	3.0	3.1	2.4	1.7	1.3	1.1	1.0	1.2	1.8	2.9	3.5	2.2
1975	2.6	2.8	2.4	1.5	1.4	0.9	1.0	0.9	0.6	2.1	2.6	2.9	1.8
MEAN	3.2	3.0	2.6	1.9	1.4	1.2	1.0	1.0	1.2	2.0	2.7	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 57 (42.10N/ 124.35W TO 42.00N/ 124.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.8	4.9	4.0	3.4	2.3	2.2	1.6	1.5	1.8	3.0	3.8	4.5
1957	4.3	6.0	4.8	3.8	3.0	2.3	1.8	1.7	3.3	4.0	4.3	5.4
1958	6.5	6.4	4.5	5.3	2.1	1.5	2.2	2.1	2.0	3.8	4.7	5.6
1959	5.3	5.8	3.9	4.1	3.1	1.9	1.6	1.7	3.2	4.5	5.2	5.3
1960	6.3	6.3	4.2	3.3	3.4	2.2	1.9	1.8	1.5	4.3	5.4	5.7
1961	6.5	6.0	5.3	3.1	2.5	2.3	1.3	1.2	2.2	3.7	4.1	4.8
1962	5.1	4.6	4.0	3.7	2.2	1.8	1.5	2.0	3.8	4.4	5.3	7.3
1963	5.4	6.3	4.2	3.0	2.9	2.3	1.6	1.1	2.3	5.3	4.2	6.9
1964	6.2	4.7	4.3	3.6	2.6	2.7	2.1	1.5	2.1	3.2	4.4	6.4
1965	4.8	3.5	3.7	3.0	2.2	2.2	1.4	1.6	1.4	4.9	6.3	6.1
1966	6.2	4.9	4.7	3.8	2.3	2.4	1.6	1.5	2.7	3.7	4.0	5.6
1967	5.4	3.7	3.8	2.6	2.2	1.8	1.2	1.3	3.0	4.8	4.2	6.4
1968	5.7	5.7	4.5	2.8	1.9	2.1	2.0	1.7	2.5	3.7	5.1	5.3
1969	4.5	5.4	4.7	4.6	3.3	1.8	1.7	1.3	2.5	3.6	5.7	7.2
1970	7.0	5.4	5.2	4.1	2.0	1.5	1.8	1.5	1.9	4.1	5.2	5.7
1971	6.1	4.9	5.3	3.2	2.7	2.2	1.2	2.3	2.3	3.1	4.9	4.2
1972	6.1	4.8	5.1	4.1	2.0	2.1	2.7	1.7	1.9	2.5	4.8	6.3
1973	6.8	5.2	4.8	3.4	3.1	3.2	2.4	1.7	3.0	3.6	4.7	6.4
1974	7.8	4.9	6.3	4.1	2.7	2.5	2.2	1.9	2.1	3.8	4.5	5.9
1975	4.5	5.0	4.6	2.4	2.8	1.6	1.6	1.5	1.1	4.0	4.6	6.2

20 YR. STATISTICS FOR PACIFIC STATION 57 (42.10N/ 124.35W TO 42.00N/ 124.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	.	.	.	.	.	.	.	.	.	18
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.17 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 11

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	165	155	5	.	1	3	.	1	.	.	330
0.50 - 0.99	564	1374	590	49	11	5	.	.	.	.	2593
1.00 - 1.49	544	2436	4269	289	18	.	.	.	.	.	7556
1.50 - 1.99	88	723	1820	711	155	6	.	.	.	.	3503
2.00 - 2.49	3	128	244	511	165	6	.	.	.	.	1057
2.50 - 2.99	.	20	83	164	150	41	.	.	.	.	458
3.00 - 3.49	.	.	29	47	154	49	.	.	.	.	279
3.50 - 3.99	.	.	5	5	54	65	.	.	.	.	129
4.00 - 4.49	.	.	.	.	10	25	.	.	.	.	35
4.50 - 4.99	.	.	.	.	1	8	13	.	.	.	22
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	1364	4836	7040	1781	719	209	13	1	0	0	

MEAN HS(M) = 1.43 LARGEST HS(M) = 5.45 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 9344

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	11	.	.	1	.	.	.	.	.	20
0.50 - 0.99	58	333	927	234	73	78	15	3	5	.	1726
1.00 - 1.49	13	778	3995	2838	1492	448	83	23	1	.	9671
1.50 - 1.99	22	371	2696	5355	3918	1486	220	22	1	.	14091
2.00 - 2.49	3	207	778	2539	5311	3172	523	47	6	.	12586
2.50 - 2.99	.	136	284	708	3617	5152	1261	88	15	.	11261
3.00 - 3.49	.	22	261	398	1789	4883	1930	148	1	.	9432
3.50 - 3.99	.	5	176	179	744	3865	2532	227	22	.	7750
4.00 - 4.49	.	.	49	136	350	2241	2854	501	1	.	6031
4.50 - 4.99	.	.	8	66	152	1069	2393	254	1	.	3943
5.00 +	.	.	.	8	66	528	3193	1355	1	.	5151
TOTAL	96	1860	9185	12461	17512	22923	15004	2368	53	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.77 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47633

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	1	15	.	.	.	.	.	.	.	17
1.00 - 1.49	.	37	30	.	.	.	.	.	.	.	67
1.50 - 1.99	13	58	58	8	1	.	.	.	.	.	138
2.00 - 2.49	5	85	92	39	37	10	.	.	.	.	268
2.50 - 2.99	.	95	152	58	75	8	.	.	.	.	388
3.00 - 3.49	.	10	160	140	54	29	.	.	.	.	393
3.50 - 3.99	.	.	82	124	164	71	10	.	.	.	451
4.00 - 4.49	.	.	20	70	135	78	10	.	.	.	313
4.50 - 4.99	.	.	1	17	75	41	17	.	.	.	151
5.00 +	.	.	1	5	54	92	34	.	.	.	186
TOTAL	19	286	611	461	595	329	71	0	0	0	

MEAN HS(M) = 3.38 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1398

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	10	.	.	.	.	.	.	.	.	20
0.50 - 0.99	6	20	.	.	.	.	.	.	.	.	26
1.00 - 1.49	1	10	.	.	.	.	.	.	.	.	11
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	40	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.71 LARGEST HS(M) = 1.63 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 36

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

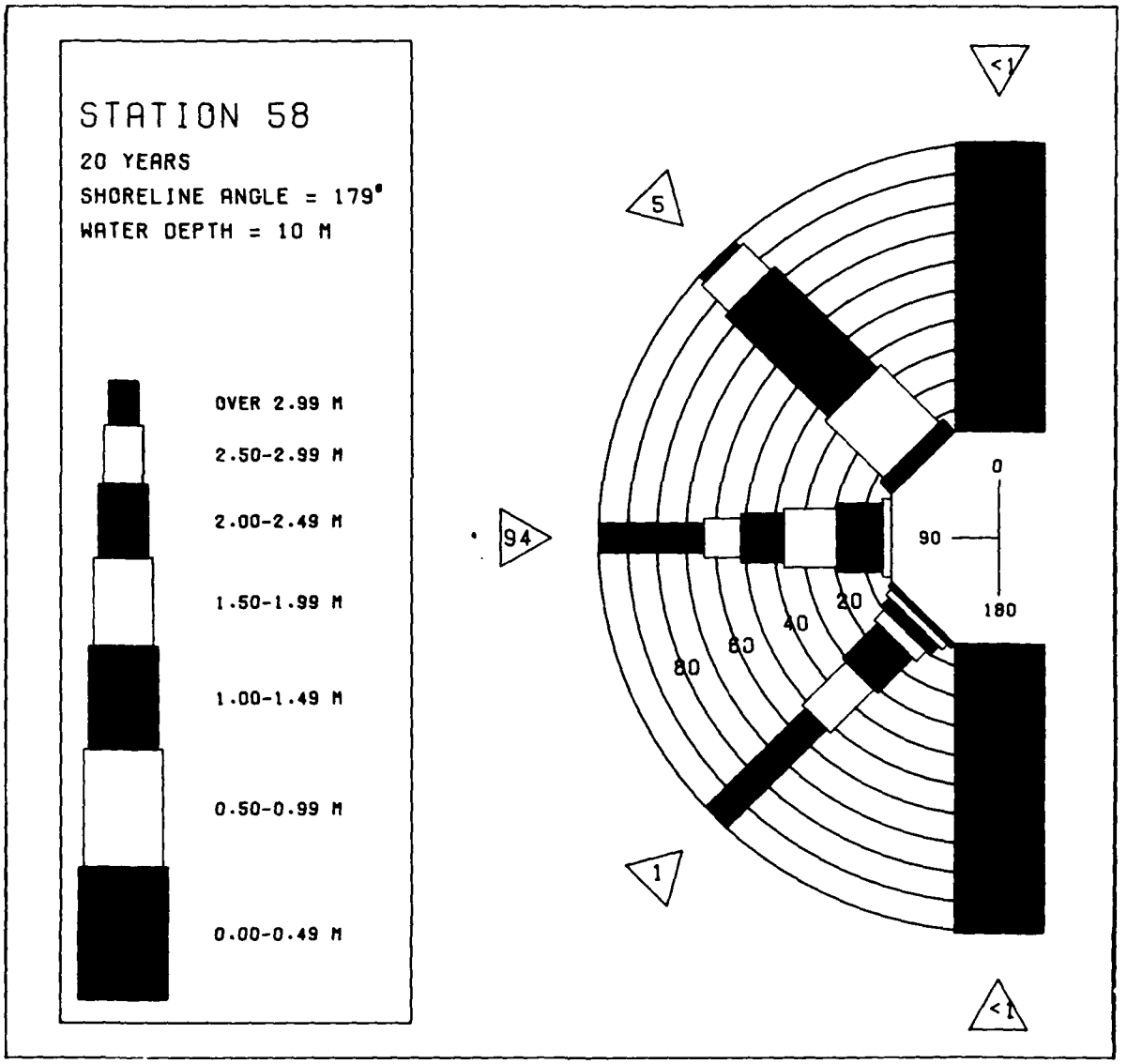
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 58 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	19	17	1	.	.	.	.	.	.	.	37
0.50 - 0.99	63	172	153	28	8	8	1	.	.	.	433
1.00 - 1.49	55	326	829	312	151	44	8	2	.	.	1727
1.50 - 1.99	12	115	457	607	407	149	22	2	.	.	1771
2.00 - 2.49	1	42	111	309	551	318	52	4	.	.	1388
2.50 - 2.99	.	25	52	93	384	520	126	8	1	.	1209
3.00 - 3.49	.	3	45	58	199	496	193	14	.	.	1008
3.50 - 3.99	.	.	26	30	96	400	254	22	2	.	830
4.00 - 4.49	.	.	7	20	49	234	286	20	.	.	616
4.50 - 4.99	.	.	1	8	22	111	242	25	.	.	409
5.00 +	.	.	.	1	12	62	322	135	.	.	532
TOTAL	150	700	1682	1466	1879	2342	1506	232	3	0	

MEAN HS(M) = 2.61 LARGEST HS(M) = 7.77 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.4	3.3	2.5	2.2	1.9	1.3	1.4	1.5	2.1	2.9	3.4	2.4
1957	2.6	3.1	3.2	2.7	2.2	1.5	1.3	1.1	1.9	2.7	3.4	4.2	2.5
1958	5.0	4.1	3.5	3.1	2.1	1.3	1.7	1.5	1.7	2.6	3.3	4.0	2.8
1959	3.6	3.6	3.0	2.8	1.8	1.5	1.5	1.3	2.0	2.8	3.3	3.9	2.6
1960	3.6	4.2	2.4	2.7	2.0	1.4	1.3	1.5	1.3	2.5	3.8	4.1	2.6
1961	4.3	3.7	3.3	2.4	2.2	1.9	1.1	1.0	1.5	2.5	3.1	3.4	2.5
1962	2.9	3.4	2.8	2.4	1.5	1.5	1.1	1.5	1.7	2.2	3.9	4.2	2.5
1963	3.2	4.0	3.0	2.1	1.7	1.8	1.3	0.9	1.9	2.3	3.5	3.9	2.6
1964	4.6	3.4	3.0	2.7	1.7	1.7	1.8	1.5	1.6	2.3	3.5	3.9	2.6
1965	3.7	3.9	2.7	2.6	1.9	1.8	1.4	1.1	1.5	2.8	3.4	4.4	2.5
1966	4.5	3.2	3.3	2.0	2.2	1.7	1.6	1.5	1.8	2.2	2.8	4.1	2.6
1967	3.6	3.1	2.6	2.2	1.3	1.2	1.3	1.2	2.1	3.0	3.7	3.9	2.4
1968	3.4	3.9	3.4	2.1	1.5	1.4	1.3	1.4	1.4	2.7	3.6	3.4	2.5
1969	3.0	4.7	3.6	3.1	2.2	1.7	1.3	1.3	1.7	2.9	3.5	5.4	2.9
1970	3.8	4.8	3.6	2.8	1.9	1.5	1.5	1.4	1.4	2.5	3.3	4.2	2.7
1971	3.4	3.3	3.4	3.0	1.9	1.9	1.0	1.6	1.9	2.2	3.5	3.5	2.5
1972	4.2	3.6	2.7	3.0	2.0	2.0	1.7	1.4	1.5	2.2	4.5	3.7	2.8
1973	4.5	4.1	4.0	2.9	2.3	2.0	1.8	1.7	2.2	2.5	3.5	4.7	3.0
1974	3.9	3.9	3.9	3.0	2.4	1.8	1.4	1.3	1.6	2.4	3.9	4.4	2.8
1975	3.4	3.4	3.0	2.1	2.0	1.2	1.3	1.2	0.8	2.5	3.3	3.2	2.3
MEAN	3.7	3.7	3.3	2.6	2.0	1.6	1.4	1.3	1.6	2.6	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.8	5.1	5.0	3.1	3.0	2.2	2.2	2.3	4.2	4.3	5.4
1957	4.1	6.4	5.0	4.7	3.6	2.5	2.3	2.0	3.6	5.1	5.2	6.6
1958	7.0	6.4	6.0	6.1	3.1	2.0	3.3	3.3	2.8	4.9	6.2	5.8
1959	6.2	6.0	5.0	6.0	3.5	2.3	2.2	2.3	3.0	5.8	6.5	6.1
1960	6.1	6.4	4.6	4.1	3.3	2.7	2.2	2.3	2.0	5.8	6.4	6.2
1961	7.0	5.6	6.2	4.2	3.3	3.3	1.7	1.7	2.7	4.5	5.3	5.5
1962	5.2	5.1	5.2	5.0	2.3	2.4	2.0	2.4	4.9	5.9	6.1	6.3
1963	5.1	6.1	5.3	3.6	3.1	3.2	2.0	1.6	3.1	6.2	5.4	6.5
1964	6.6	5.4	4.6	5.7	3.6	2.8	2.9	2.2	2.6	4.0	6.3	6.2
1965	5.2	4.8	5.2	4.4	2.9	2.6	2.0	2.0	2.3	6.0	6.2	6.1
1966	6.6	4.7	5.6	4.5	3.3	2.8	2.2	2.2	3.7	4.3	4.9	6.2
1967	5.4	4.2	4.9	3.8	2.5	2.1	1.8	1.8	4.5	6.0	6.1	7.0
1968	5.1	6.1	5.4	4.3	2.4	2.1	2.6	2.3	3.6	4.8	5.9	5.5
1969	4.5	6.6	6.6	5.7	4.1	2.4	2.1	1.8	3.3	5.3	6.9	7.8
1970	6.9	6.3	6.1	5.2	2.7	2.2	2.1	2.0	2.7	4.7	6.1	6.9
1971	6.0	5.2	5.7	4.9	3.3	2.7	1.7	1.6	3.0	4.3	6.2	5.4
1972	6.1	5.9	5.8	6.0	3.4	3.0	3.1	2.4	2.3	3.8	6.2	6.6
1973	6.8	6.1	6.4	4.5	3.8	4.5	2.5	2.4	3.7	4.2	5.9	6.8
1974	7.0	6.1	6.7	5.6	3.7	2.9	2.5	2.1	3.3	4.9	6.1	6.3
1975	5.3	6.1	5.4	3.3	3.8	1.9	1.8	1.9	1.4	4.3	6.2	6.2

20 YR. STATISTICS FOR PACIFIC STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.3
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	41	20	.	.	.	.	.	.	.	.	61
1.00 - 1.49	241	41	.	.	.	.	.	.	.	.	282
1.50 - 1.99	6	29	.	.	.	.	.	.	.	.	35
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	288	92	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.23 LARGEST HS(M) = 2.28 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 224

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	11	1	.	.	.	.	.	.	.	20
0.50 - 0.99	145	176	27	8	3	3	.	1	.	.	363
1.00 - 1.49	1360	1225	165	13	.	.	.	.	.	.	2763
1.50 - 1.99	1784	3004	152	6	.	.	.	.	.	.	4946
2.00 - 2.49	63	1507	130	.	1	.	.	.	.	.	1701
2.50 - 2.99	.	229	130	8	.	.	.	.	.	.	367
3.00 - 3.49	.	22	85	5	.	.	.	.	.	.	112
3.50 - 3.99	.	.	23	6	.	.	.	.	.	.	29
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3360	6174	712	47	4	3	0	1	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 6029

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	3	3	1	1	.	.	.	.	.	20
0.50 - 0.99	29	436	869	155	49	39	18	1	5	.	1601
1.00 - 1.49	58	1009	4455	2058	1033	367	54	20	1	.	9055
1.50 - 1.99	53	578	4746	5041	3225	1252	179	45	1	.	15090
2.00 - 2.49	23	231	1185	3620	5109	2085	438	39	1	.	13531
2.50 - 2.99	.	136	266	1163	4440	4779	1161	85	18	.	12048
3.00 - 3.49	.	15	184	359	2255	5244	1877	116	3	.	10053
3.50 - 3.99	.	1	131	133	788	4176	2494	244	11	.	7979
4.00 - 4.49	.	.	32	82	260	2520	2908	215	10	.	6027
4.50 - 4.99	.	.	6	41	106	1001	2510	213	1	.	3878
5.00 +	.	.	.	.	27	439	3345	1430	1	.	5242
TOTAL	163	2419	11877	12655	17292	22703	14984	2378	52	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.73 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 49421

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	29	18	18	.	.	.	.	.	.	.	65
1.00 - 1.49	3	106	145	20	3	6	.	.	.	.	283
1.50 - 1.99	18	109	256	90	71	18	.	.	.	.	562
2.00 - 2.49	3	135	268	140	155	51	.	.	.	.	752
2.50 - 2.99	.	92	231	177	164	82	1	.	.	.	747
3.00 - 3.49	.	11	167	186	208	172	35	.	.	.	779
3.50 - 3.99	.	.	80	124	232	195	27	.	.	.	658
4.00 - 4.49	.	.	18	66	114	131	61	.	.	.	390
4.50 - 4.99	.	.	3	27	75	99	37	.	.	.	241
5.00 +	.	.	.	3	30	85	44	.	.	.	162
TOTAL	53	471	1186	833	1052	839	205	0	0	0	

MEAN HS(M) = 2.98 LARGEST HS(M) = 7.45 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2728

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	8	.	.	.	.	.	.	.	.	11
0.50 - 0.99	3	23	.	.	.	.	.	.	.	.	26
1.00 - 1.49	.	3	.	.	.	.	.	.	.	.	3
1.50 - 1.99	.	6	6	.	.	.	.	.	.	.	12
2.00 - 2.49	.	5	3	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	45	9	0	0	0	0	0	0	0	

MEAN HS(M) = 1.13 LARGEST HS(M) = 2.42 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 38

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

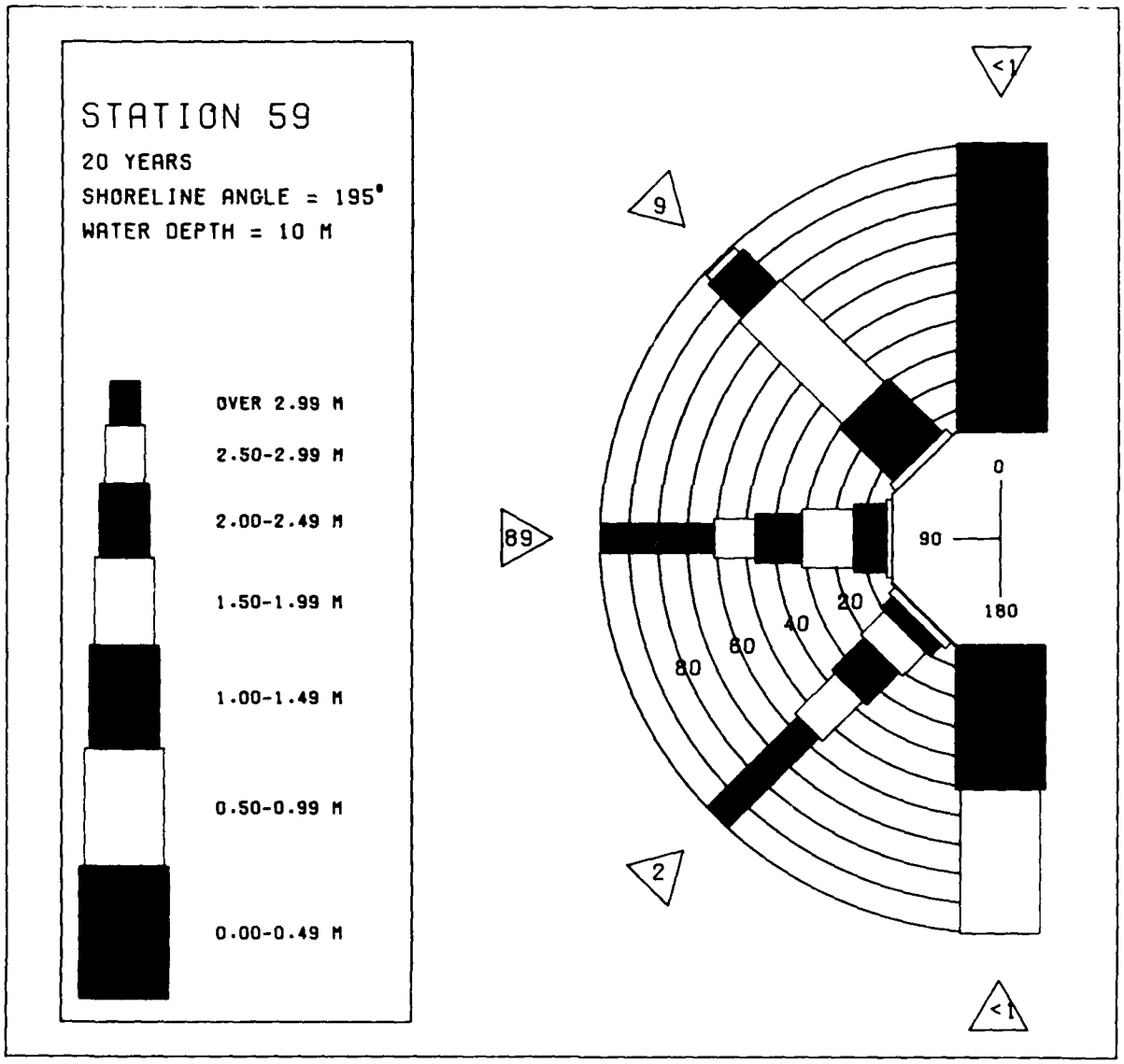
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 59 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3						.	.	.	4
0.50 - 0.99	24	67	91	16	5	4	1	.	.	.	208
1.00 - 1.49	166	238	476	209	103	37	5	2	.	.	1236
1.50 - 1.99	186	372	516	513	329	127	17	1	.	.	2061
2.00 - 2.49	9	188	158	376	526	293	43	3	.	.	1596
2.50 - 2.99	.	45	62	135	460	486	116	8	1	.	1313
3.00 - 3.49	.	4	43	55	246	541	191	11	.	.	1091
3.50 - 3.99	.	.	23	26	102	437	252	24	1	.	865
4.00 - 4.49	.	.	5	14	37	265	297	21	1	.	640
4.50 - 4.99	.	.	1	6	18	110	254	21	.	.	410
5.00 +					5	52	338	143	.	.	538
TOTAL	386	917	1375	1350	1831	2352	1514	234	3	0	

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.73 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 59 (41.86N/ 124.21W TO 41.78N/ 124.26W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.4	3.4	2.6	2.4	2.0	1.6	1.6	1.6	2.2	3.0	3.4	2.5
1957	2.7	3.1	3.2	2.8	2.3	1.6	1.6	1.4	1.9	2.8	3.5	4.3	2.6
1958	4.9	4.0	3.6	3.2	2.2	1.5	1.9	1.7	1.8	2.6	3.4	4.0	2.9
1959	3.6	3.7	3.0	3.0	2.0	1.6	1.8	1.6	2.1	2.9	3.4	4.0	2.7
1960	3.6	4.1	2.5	2.7	2.1	1.7	1.6	1.7	1.5	2.6	3.9	4.1	2.7
1961	4.2	3.6	3.3	2.5	2.2	2.0	1.4	1.2	1.7	2.6	3.2	3.5	2.6
1962	3.0	3.4	2.9	2.5	1.9	1.7	1.6	1.6	1.8	2.3	4.0	4.1	2.6
1963	3.2	3.9	3.2	3.2	1.9	2.1	1.6	1.2	2.0	3.4	3.5	3.8	2.7
1964	4.6	3.5	3.1	3.0	1.9	1.8	2.0	1.7	1.8	2.3	3.5	3.9	2.7
1965	3.7	3.0	2.8	2.7	2.2	2.1	1.7	1.3	1.7	2.9	3.4	4.5	2.7
1966	4.4	3.2	3.4	2.2	2.4	1.8	1.9	1.7	1.9	2.3	2.8	4.0	2.7
1967	3.5	3.1	2.7	2.3	1.5	1.5	1.5	1.4	2.1	3.0	3.8	3.9	2.5
1968	3.3	3.8	3.4	2.3	1.6	1.6	1.6	1.6	1.5	2.8	3.6	3.4	2.5
1969	3.1	4.7	3.7	3.2	2.1	1.8	1.6	1.5	1.8	3.0	3.6	5.3	3.0
1970	3.7	4.8	3.7	3.0	2.5	1.7	1.8	1.9	1.5	2.6	3.4	4.3	2.8
1971	3.3	3.3	3.4	3.1	2.5	2.0	1.4	1.7	2.0	2.4	3.6	3.6	2.7
1972	4.3	3.6	3.6	3.2	2.2	2.2	2.0	1.6	1.6	2.3	4.6	3.6	2.9
1973	4.4	4.1	4.2	3.1	2.4	2.2	2.1	2.0	2.3	2.6	3.5	4.7	3.1
1974	3.8	3.9	3.9	3.1	2.6	2.2	1.6	1.6	1.7	2.5	3.9	4.4	2.9
1975	3.4	3.3	3.1	2.2	2.1	1.5	1.5	1.4	0.9	2.6	3.3	3.2	2.4
MEAN	3.7	3.7	3.3	2.7	2.1	1.8	1.7	1.6	1.8	2.7	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 59 (41.86N/ 124.21W TO 41.78N/ 124.26W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.8	5.7	5.2	5.3	3.4	3.1	2.5	2.4	2.4	4.3	4.3	5.4
1957	4.2	6.0	4.9	4.7	3.7	2.6	2.8	2.0	3.7	5.3	5.4	6.5
1958	6.8	6.3	6.1	6.1	3.4	2.2	3.4	3.4	2.9	5.2	6.2	5.8
1959	6.2	6.0	5.0	6.2	3.5	2.3	3.4	2.6	3.2	5.9	6.6	6.1
1960	6.1	6.3	4.5	4.1	3.4	2.7	2.5	2.4	2.1	5.9	6.5	6.7
1961	6.9	5.6	6.1	4.3	3.4	3.4	2.0	1.8	2.8	4.8	5.4	5.7
1962	5.4	5.1	5.3	5.2	2.4	2.8	2.2	2.7	5.0	6.0	6.1	6.2
1963	4.9	6.0	5.5	3.7	3.2	3.5	2.2	2.0	3.2	6.2	5.6	6.4
1964	6.7	5.6	4.5	5.5	4.0	2.7	3.1	2.2	2.7	4.2	6.4	6.1
1965	5.3	4.9	5.3	4.6	3.4	3.1	2.3	2.2	2.4	6.0	6.1	6.2
1966	6.5	4.8	5.6	4.5	3.3	2.8	2.4	2.4	3.8	4.3	5.0	6.2
1967	5.3	4.4	5.1	4.0	2.7	2.5	2.0	2.0	4.7	6.0	6.2	6.9
1968	5.1	6.1	5.6	4.6	2.5	2.5	2.8	2.4	3.7	4.9	5.9	5.4
1969	4.4	6.5	6.7	5.8	4.2	2.5	2.1	2.1	3.4	5.5	6.9	7.7
1970	6.7	6.3	6.1	5.5	2.8	2.5	2.2	2.3	2.9	4.9	6.1	6.8
1971	6.0	5.1	5.5	5.0	3.5	2.8	2.3	3.8	3.3	4.5	6.3	5.6
1972	6.4	5.7	5.7	6.2	3.5	3.4	3.1	2.6	2.4	4.0	6.2	6.5
1973	6.7	6.1	6.4	4.8	3.9	4.7	2.8	2.8	3.7	4.2	6.0	6.8
1974	6.4	6.3	6.5	5.9	3.9	3.2	3.0	2.3	3.4	5.1	6.2	6.3
1975	5.6	6.2	5.5	3.5	4.0	2.5	2.1	2.4	1.6	4.4	6.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 59 (41.86N/ 124.21W TO 41.78N/ 124.26W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	91.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	232	.	.	.	.	.	.	.	.	.	232
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	232	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.14 LARGEST HS(M) = 0.50 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 136

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1309	627	18	.	.	.	.	.	.	.	1954
0.50 - 0.99	1394	3016	325	.	.	.	.	.	.	.	4735
1.00 - 1.49	292	917	102	.	.	.	.	.	.	.	1311
1.50 - 1.99	22	172	22	.	.	.	.	.	.	.	216
2.00 - 2.49	.	6	1	.	.	.	.	.	.	.	7
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3017	4738	468	0	0	0	0	0	0	0	

MEAN HS(M) = 0.74 LARGEST HS(M) = 2.48 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 4810

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	87	325	35	8	37	3	.	.	.	495
0.50 - 0.99	66	1096	9286	4760	2101	629	128	23	.	.	18089
1.00 - 1.49	70	752	3620	6062	7292	3663	561	41	1	.	22062
1.50 - 1.99	78	595	934	1464	3744	6091	1863	164	10	.	14943
2.00 - 2.49	11	477	708	559	1623	4156	3151	331	20	.	11032
2.50 - 2.99	.	198	564	331	793	2599	2784	383	.	.	7652
3.00 - 3.49	.	44	237	213	426	1459	1928	426	1	.	4734
3.50 - 3.99	.	3	107	136	225	662	1312	308	.	.	2753
4.00 - 4.49	.	.	8	42	99	225	651	183	.	.	1208
4.50 - 4.99	.	.	.	6	47	99	386	99	.	.	637
5.00 +	.	.	.	.	20	47	207	210	.	.	484
TOTAL	225	3252	15789	13608	16378	19663	12971	2171	32	0	

MEAN HS(M) = 1.78 LARGEST HS(M) = 7.71 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 49167

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	18	30	.	.	.	.	.	.	.	54
1.00 - 1.49	39	70	27	1	.	1	.	.	.	.	138
1.50 - 1.99	77	201	83	11	27	6	.	.	.	.	405
2.00 - 2.49	80	504	207	56	25	17	1	.	.	.	890
2.50 - 2.99	3	408	313	148	143	41	32	.	.	.	1088
3.00 - 3.49	.	212	439	253	188	136	56	1	.	.	1284
3.50 - 3.99	.	53	316	289	266	138	63	3	.	.	1128
4.00 - 4.49	.	1	106	208	224	126	73	1	.	.	739
4.50 - 4.99	.	.	15	73	254	196	54	.	.	.	592
5.00 +	.	.	3	13	70	189	152	13	.	.	440
TOTAL	205	1467	1539	1052	1197	850	431	17	0	0	

MEAN HS(M) = 3.36 LARGEST HS(M) = 7.86 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 3968

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT, LON, START= 41.78N/124.26W LAT, LON, END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	22	1	5	.	.	.	.	.	.	.	28
1.50 - 1.99	88	17	1	.	.	.	.	.	.	.	106
2.00 - 2.49	111	94	3	.	.	.	.	.	.	.	208
2.50 - 2.99	10	102	.	.	.	.	.	.	.	.	112
3.00 - 3.49	.	44	.	.	.	.	.	.	.	.	44
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	1	.	.	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	240	259	10	0	0	0	0	0	0	0	

MEAN HS(M) = 2.25 LARGEST HS(M) = 4.05 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 302

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT, LON, START= 41.78N/124.26W LAT, LON, END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	.	.	.	.	.	.	.	.	.	20
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	20	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.32 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 12

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT, LON, START= 41.78N/124.26W LAT, LON, END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

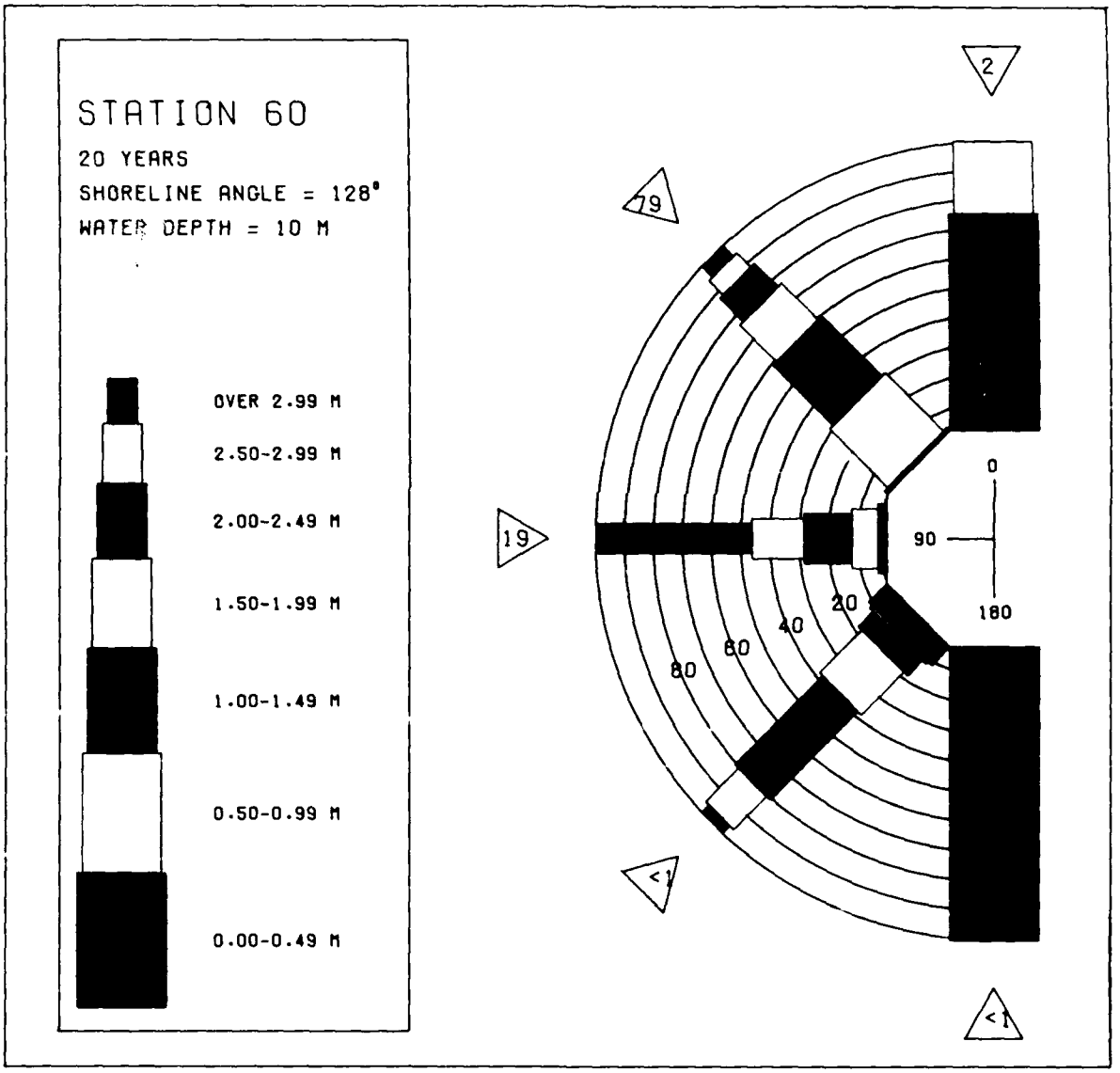
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 60 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	156	71	34	3		3					267
0.50 - 0.99	147	413	964	476	210	67	12	2	.	.	2286
1.00 - 1.49	42	174	375	606	729	366	56	4	.	.	2352
1.50 - 1.99	26	98	104	147	377	609	186	16	1	.	1564
2.00 - 2.49	20	108	92	61	164	217	315	33	2	.	1212
2.50 - 2.99	1	71	87	48	93	264	281	38	.	.	883
3.00 - 3.49	.	30	67	46	61	159	198	42	.	.	603
3.50 - 3.99	.	5	42	42	49	80	137	31	.	.	386
4.00 - 4.49	.	.	11	25	32	35	72	18	.	.	193
4.50 - 4.99	.	.	1	8	30	29	44	9	.	.	121
5.00 +				1	9	23	35	22	.	.	90
TOTAL	392	970	1777	1463	1754	2047	1336	215	3	0	

MEAN HS(M) = 1.80 LARGEST HS(M) = 7.86 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 60 (41.78N/ 124.26W TO 41.71N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	2.3	2.1	1.6	1.3	1.2	0.8	0.8	1.0	1.4	2.0	2.5	1.7
1957	2.0	2.1	2.3	1.7	1.4	1.0	0.8	0.8	1.3	2.0	2.2	3.0	1.7
1958	3.9	3.6	2.3	2.2	1.2	0.9	1.0	0.9	1.1	1.6	2.2	3.2	2.0
1959	2.9	2.6	2.1	1.7	1.5	1.1	0.9	0.7	1.4	1.9	2.1	2.7	1.8
1960	2.7	3.3	1.7	1.8	1.5	0.9	0.8	0.9	0.8	1.6	2.6	3.0	1.8
1961	3.4	2.9	2.6	1.5	1.4	1.1	0.7	0.6	0.9	1.6	2.1	2.4	1.8
1962	2.3	2.6	1.8	1.6	1.0	0.9	0.6	1.0	1.1	2.1	2.7	3.5	1.8
1963	2.4	3.7	2.0	1.6	1.1	1.1	0.8	0.6	1.2	2.3	2.6	3.1	1.9
1964	3.6	2.3	2.0	1.5	1.0	1.3	1.0	0.9	1.0	1.6	2.4	3.1	1.8
1965	2.8	1.9	1.8	1.7	1.1	1.1	0.9	0.8	0.8	2.0	2.5	2.9	1.7
1966	3.5	2.2	2.3	1.3	1.2	1.2	1.0	0.8	1.2	1.4	2.1	2.2	1.8
1967	2.9	2.0	1.9	1.3	0.9	0.8	0.7	0.7	1.3	2.0	2.1	2.8	1.6
1968	2.9	3.3	2.2	1.3	1.1	1.0	0.8	0.9	0.8	1.8	2.8	2.8	1.8
1969	2.2	3.1	2.2	1.3	1.3	1.2	0.7	0.8	1.1	1.9	2.6	4.2	1.9
1970	3.4	3.1	2.5	1.7	1.1	0.9	1.0	0.8	1.0	1.6	2.5	3.0	1.9
1971	2.6	2.6	2.6	1.9	1.2	1.2	0.6	1.0	1.2	1.4	2.3	2.3	1.7
1972	2.7	2.7	2.9	1.9	1.2	1.2	1.0	0.8	0.9	1.2	3.0	3.0	1.9
1973	3.5	2.9	2.5	1.7	1.5	1.3	1.2	0.9	1.5	1.6	2.6	3.7	2.1
1974	3.3	2.6	2.8	2.1	1.5	1.1	1.0	0.8	1.0	1.5	2.5	3.1	1.9
1975	2.3	2.5	2.1	1.3	1.2	0.8	0.9	0.8	0.5	1.8	2.2	2.5	1.6
MEAN	2.9	2.7	2.3	1.7	1.2	1.1	0.9	0.8	1.1	1.7	2.4	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 60 (41.78N/ 124.26W TO 41.71N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	4.7	3.5	2.9	1.7	1.9	1.3	1.2	1.5	3.1	3.3	4.0
1957	4.8	5.9	4.0	3.3	2.8	2.0	1.4	1.5	2.1	3.6	3.9	4.9
1958	5.9	9.3	4.6	3.4	2.7	1.6	1.7	1.6	1.6	3.3	4.1	5.4
1959	5.0	5.4	3.5	3.5	2.7	1.9	1.3	1.4	3.4	3.8	4.5	4.3
1960	5.8	6.0	3.9	2.9	2.5	1.9	1.7	1.6	1.3	3.8	5.1	5.3
1961	5.9	4.7	4.8	2.7	2.4	1.9	1.1	1.0	1.9	3.2	3.8	4.2
1962	4.7	4.5	3.6	2.8	2.0	1.6	1.2	1.7	3.4	3.9	4.9	6.4
1963	5.6	6.3	3.8	3.1	2.9	1.9	1.4	1.0	1.9	5.1	4.0	6.7
1964	6.2	4.1	4.0	2.8	2.0	2.5	1.8	1.2	1.8	3.0	3.8	6.1
1965	4.5	3.2	3.0	2.7	1.8	1.8	1.2	1.4	1.2	4.2	5.4	5.6
1966	5.6	5.0	4.1	3.4	1.9	2.1	1.4	1.2	1.3	3.2	4.0	5.4
1967	4.9	3.2	4.9	2.1	1.8	1.6	1.0	1.2	2.4	4.1	3.7	5.4
1968	6.5	5.2	4.0	2.5	1.7	1.9	1.6	1.4	2.1	3.6	4.4	5.6
1969	4.0	4.9	3.9	4.5	2.9	1.6	1.5	1.1	2.2	3.0	5.2	7.7
1970	6.8	4.8	4.5	3.6	1.9	1.3	1.6	1.2	1.6	3.7	4.5	5.4
1971	6.2	4.2	4.9	3.2	2.3	2.1	1.1	1.7	2.0	2.9	4.4	4.6
1972	5.7	4.7	4.7	4.7	1.7	1.6	2.4	1.3	1.6	2.0	4.4	6.3
1973	6.4	4.5	4.1	2.9	2.7	3.0	1.9	1.3	2.7	3.1	4.8	6.3
1974	7.9	4.5	5.8	4.0	2.3	2.2	1.9	1.6	1.7	3.3	4.5	4.7
1975	4.2	5.0	4.4	2.1	2.3	1.3	1.4	1.3	1.0	3.8	4.2	6.2

20 YR. STATISTICS FOR PACIFIC STATION 60 (41.78N/ 124.26W TO 41.71N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	581	11	.	.	.	.	.	.	.	.	592
0.50 - 0.99	667	68	.	.	.	.	.	.	.	.	735
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1251	79	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.50 LARGEST HS(M) = 1.06 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 779

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	39	71	20	1	.	6	.	.	.	.	137
0.50 - 0.99	325	2051	2482	509	150	131	22	1	.	.	5671
1.00 - 1.49	347	2311	8511	3721	1557	492	77	.	.	.	17016
1.50 - 1.99	66	569	2568	4784	3636	1315	102	.	.	.	13040
2.00 - 2.49	5	196	424	1714	4127	2481	294	.	.	.	9231
2.50 - 2.99	.	39	164	388	1962	3321	390	.	.	.	6264
3.00 - 3.49	.	.	82	131	593	2780	929	.	.	.	4515
3.50 - 3.99	.	.	15	46	205	1581	1341	.	.	.	3188
4.00 - 4.49	.	.	5	1	47	689	1235	.	.	.	1977
4.50 - 4.99	.	.	.	1	6	217	746	1	.	.	971
5.00 +	.	.	.	.	.	63	521	.	.	.	584
TOTAL	782	5237	14271	11296	12283	13076	5647	2	0	0	

MEAN HS(M) = 2.07 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 36598

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	46	82	130	54	18	6	1	15	1	.	353
1.00 - 1.49	3	273	660	633	588	181	49	27	1	.	2415
1.50 - 1.99	10	152	602	896	1160	660	195	13	1	.	3689
2.00 - 2.49	8	171	311	610	1232	1461	554	70	11	.	4428
2.50 - 2.99	.	135	256	308	1125	2073	1134	123	5	.	5159
3.00 - 3.49	.	46	330	309	653	1757	1305	234	8	.	4642
3.50 - 3.99	.	5	171	251	636	1587	1469	249	13	.	4381
4.00 - 4.49	.	1	92	189	374	1088	1509	239	.	.	3492
4.50 - 4.99	.	.	10	94	165	570	1261	273	1	.	2343
5.00 +	.	.	.	3	123	436	1746	1167	.	.	3528
TOTAL	67	865	2566	3347	6074	9790	9273	2410	41	0	

MEAN HS(M) = 3.23 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 20145

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	8	.	.	.	.	.	.	.	.	8
1.00 - 1.49	.	15	3	.	.	.	.	.	.	.	18
1.50 - 1.99	10	27	34	1	1	.	.	.	.	.	73
2.00 - 2.49	8	82	42	13	8	.	.	.	.	.	153
2.50 - 2.99	1	102	107	35	34	.	.	.	.	.	279
3.00 - 3.49	.	53	138	87	47	3	.	.	.	.	328
3.50 - 3.99	.	15	73	82	63	13	.	.	.	.	246
4.00 - 4.49	.	.	29	35	77	44	.	.	.	.	185
4.50 - 4.99	.	.	3	23	53	23	.	.	.	.	102
5.00 +	.	.	.	6	30	30	5	.	.	.	71
TOTAL	19	302	429	282	313	113	5	0	0	0	

MEAN HS(M) = 3.36 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 867

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	5	.	.	.	.	.	.	.	.	.	5
2.00 - 2.49	1	3	.	.	.	.	.	.	.	.	4
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	4	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.83 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 9

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

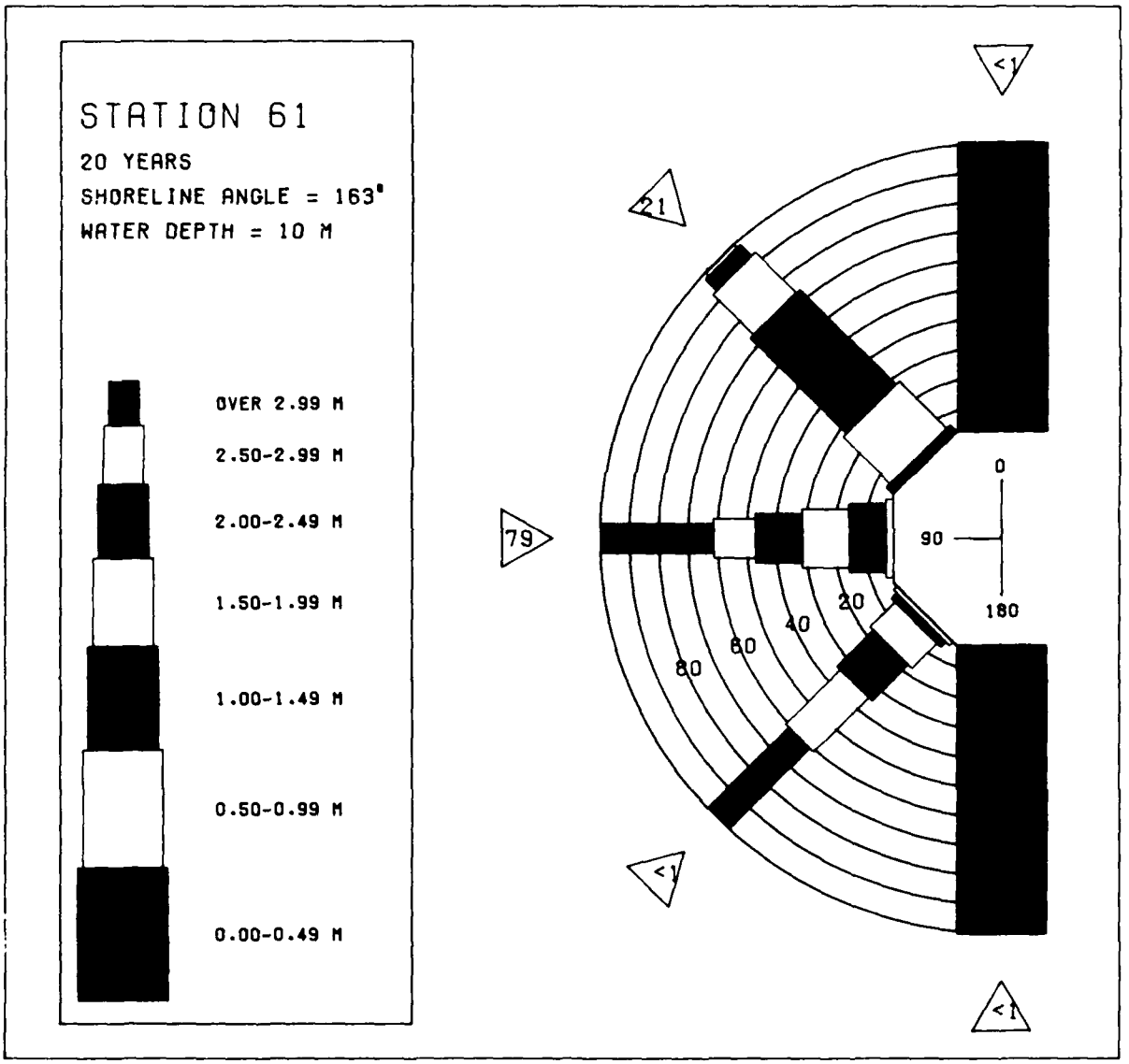
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.15 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 7

PHASE 3 ST. 61 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.71N/124.15W LAT. LON. END= 41.58N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	8	2								73
0.50 - 0.99	103	221	261	56	16	11	2	1			673
1.00 - 1.49	35	260	917	435	214	67	12	2			1942
1.50 - 1.99	9	74	320	568	479	197	29	1			1677
2.00 - 2.49	2	45	77	233	536	394	83	7	1		1378
2.50 - 2.99	.	27	52	73	312	539	152	12			1167
3.00 - 3.49	.	9	55	52	129	454	223	23			945
3.50 - 3.99	.	2	26	37	90	318	281	24	1		779
4.00 - 4.49	.	.	12	22	49	182	274	23			562
4.50 - 4.99	.	.	1	11	22	78	200	27			339
5.00 +				1	15	53	232	116	2	0	417
TOTAL	212	646	1723	1488	1862	2295	1488	236	2	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.2	3.0	2.3	2.0	1.7	1.2	1.2	1.4	2.0	2.7	3.2	2.3
1957	2.5	2.9	3.1	2.6	2.0	1.4	1.2	1.0	1.8	2.6	3.2	4.0	2.4
1958	4.9	4.2	3.3	3.0	1.8	1.2	1.5	1.4	1.6	2.4	3.2	3.9	2.7
1959	3.5	3.6	2.8	2.6	1.7	1.4	1.4	1.1	1.9	2.6	3.1	3.7	2.5
1960	3.5	4.0	2.3	2.5	1.9	1.3	1.2	1.4	1.2	2.4	3.6	3.9	2.4
1961	4.2	3.6	3.2	2.2	2.1	1.8	1.0	0.9	1.3	2.2	2.9	3.2	2.4
1962	2.9	3.3	2.7	2.3	1.4	1.4	1.0	1.4	1.6	3.0	3.7	4.2	2.4
1963	3.1	4.1	2.8	2.1	1.6	1.7	1.2	0.8	1.8	3.2	3.4	3.8	2.5
1964	4.5	3.2	2.8	2.5	1.5	1.6	1.6	1.4	1.4	2.2	3.3	3.8	2.5
1965	3.6	2.7	2.6	2.4	1.8	1.7	1.3	1.0	1.3	2.7	3.3	4.2	2.4
1966	4.3	3.0	3.2	1.8	2.0	1.6	1.5	1.3	1.7	2.0	2.7	4.0	2.4
1967	3.5	2.9	2.5	1.9	1.2	1.4	1.2	1.1	1.9	2.8	3.4	3.7	2.3
1968	3.4	3.8	3.2	1.9	1.5	1.3	1.2	1.3	1.3	2.2	3.5	3.4	2.4
1969	2.9	4.5	3.4	2.9	2.0	1.6	1.2	1.2	1.5	2.7	3.3	5.3	2.7
1970	3.9	4.5	3.5	2.6	1.8	1.4	1.4	1.2	1.4	2.3	3.2	4.1	2.6
1971	3.2	3.1	3.3	2.8	1.7	1.8	0.9	1.5	1.7	2.1	3.3	3.2	2.4
1972	3.9	3.5	3.6	2.8	1.9	1.9	1.6	1.3	1.3	2.0	4.2	3.7	2.6
1973	4.3	3.9	3.8	2.7	2.2	1.9	1.7	1.5	2.0	2.3	3.3	4.6	2.9
1974	3.9	3.7	3.7	3.0	2.3	1.7	1.3	1.1	1.5	2.2	3.6	4.2	2.7
1975	3.2	3.2	2.8	1.9	1.8	1.2	1.3	1.1	0.7	2.4	3.1	3.1	2.2
MEAN	3.6	3.5	3.1	2.5	1.8	1.5	1.3	1.2	1.5	2.4	3.3	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.5	5.8	5.6	4.6	2.9	2.8	1.9	2.0	2.1	3.7	4.1	5.1
1957	4.7	6.3	4.8	4.4	3.5	2.5	2.1	1.9	3.3	4.6	4.8	6.1
1958	6.8	6.4	5.5	6.0	2.8	1.9	3.0	3.0	2.6	4.3	5.8	6.1
1959	6.4	6.0	4.6	5.6	3.4	2.4	2.0	2.2	3.3	5.3	6.2	5.9
1960	6.2	6.6	4.7	3.8	3.0	2.5	2.1	2.1	1.8	5.7	6.0	6.4
1961	6.8	5.4	5.9	3.9	3.0	3.1	1.6	1.5	2.5	4.6	5.0	4.9
1962	5.2	5.1	4.9	4.9	2.1	2.2	1.8	2.3	4.6	5.4	5.8	6.3
1963	5.4	6.4	4.8	3.9	3.4	3.0	1.8	1.5	2.9	6.0	5.0	6.6
1964	6.4	5.1	4.5	4.8	3.2	2.8	2.8	2.0	2.4	3.6	6.0	6.1
1965	5.2	4.3	4.9	4.1	2.7	2.6	1.8	1.9	2.0	5.8	6.3	5.9
1966	6.6	4.5	5.3	4.4	3.0	2.6	2.0	2.0	3.4	4.0	4.5	5.9
1967	5.4	4.0	4.3	3.5	2.4	2.1	1.6	1.5	4.1	6.0	5.7	6.9
1968	5.7	6.1	5.1	4.1	2.2	2.1	2.5	2.2	3.3	4.4	5.7	5.2
1969	4.4	6.3	6.3	5.2	3.9	2.2	1.8	1.6	3.0	4.8	6.7	7.8
1970	7.0	6.5	6.0	5.0	2.5	2.0	2.0	1.9	2.6	4.4	5.9	6.7
1971	6.1	5.1	5.6	4.4	3.2	2.6	1.6	3.2	2.8	3.9	6.1	5.0
1972	6.0	6.1	5.7	4.2	3.1	2.8	2.9	2.2	1.9	3.3	6.0	6.6
1973	6.9	6.2	6.0	4.4	3.4	4.2	5.4	2.2	3.5	3.9	5.4	6.6
1974	7.7	5.6	6.6	5.2	3.7	2.8	2.5	1.9	3.0	4.7	5.5	6.4
1975	5.1	5.6	5.1	2.9	3.5	1.8	1.7	2.0	1.2	4.0	5.6	6.3

20 YR. STATISTICS FOR PACIFIC STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	313	94	.	.	.	.	.	.	.	.	407
1.00 - 1.49	1928	501	.	.	.	.	.	.	.	.	2429
1.50 - 1.99	1018	670	.	.	.	.	.	.	.	.	1688
2.00 - 2.49	77	171	.	.	.	.	.	.	.	.	248
2.50 - 2.99	.	15	.	.	.	.	.	.	.	.	15
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3336	1456	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 2802

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	42	6	1	.	3	.	.	.	.	60
0.50 - 0.99	70	763	838	186	58	32	5	1	.	.	1953
1.00 - 1.49	244	2022	4514	1712	540	95	3	.	.	.	9130
1.50 - 1.99	196	1040	3758	3499	1704	181	1	.	.	.	10079
2.00 - 2.49	23	441	568	1870	2811	251	3	.	.	.	5967
2.50 - 2.99	1	128	183	306	1733	366	6	.	.	.	2743
3.00 - 3.49	.	18	90	99	556	489	.	.	.	.	1252
3.50 - 3.99	.	1	30	34	100	313	17	.	.	.	495
4.00 - 4.49	.	.	3	3	10	107	11	.	.	.	134
4.50 - 4.99	.	.	.	.	.	27	5	.	.	.	32
5.00 +	.	.	.	.	.	27	.	.	.	.	27
TOTAL	542	4455	9690	7710	7512	1911	51	1	0	0	

MEAN HS(M) = 1.83 LARGEST HS(M) = 5.74 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 18643

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	1	.	.	.	.	1
0.50 - 0.99	37	136	424	77	22	37	5	3	1	.	742
1.00 - 1.49	10	357	1649	1117	906	371	73	34	.	.	4517
1.50 - 1.99	10	304	1586	2169	2275	1391	234	17	3	.	7989
2.00 - 2.49	5	172	574	1437	2585	3040	588	54	6	.	8461
2.50 - 2.99	.	123	272	624	2183	4834	1332	106	8	.	9484
3.00 - 3.49	.	30	299	349	1180	4469	2029	176	.	.	8532
3.50 - 3.99	.	.	133	213	773	3492	2700	263	22	.	7596
4.00 - 4.49	.	.	70	136	391	1933	2801	522	.	.	5553
4.50 - 4.99	.	.	10	77	147	893	2364	275	1	.	3767
5.00 +	.	.	.	3	85	511	2823	1288	.	.	4710
TOTAL	62	1122	5017	6204	10547	20972	14949	2438	41	0	

MEAN HS(M) = 3.09 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 35875

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	6	.	.	.	.	.	.	.	6
1.00 - 1.49	.	27	10	.	.	.	.	.	.	.	37
1.50 - 1.99	5	34	23	5	3	.	.	.	.	.	70
2.00 - 2.49	8	97	70	15	10	1	.	.	.	.	201
2.50 - 2.99	.	83	119	80	56	10	.	.	.	.	348
3.00 - 3.49	.	39	154	133	58	13	.	.	.	.	397
3.50 - 3.99	.	3	75	109	100	47	.	.	.	.	334
4.00 - 4.49	.	.	30	63	124	66	.	.	.	.	283
4.50 - 4.99	.	.	6	22	63	27	.	.	.	.	118
5.00 +	.	.	.	.	32	42	20	.	.	.	94
TOTAL	13	283	493	427	446	206	20	0	0	0	

MEAN HS(M) = 3.40 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 1115

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	3	1	.	.	.	.	.	.	.	.	4
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 1.85 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 5

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

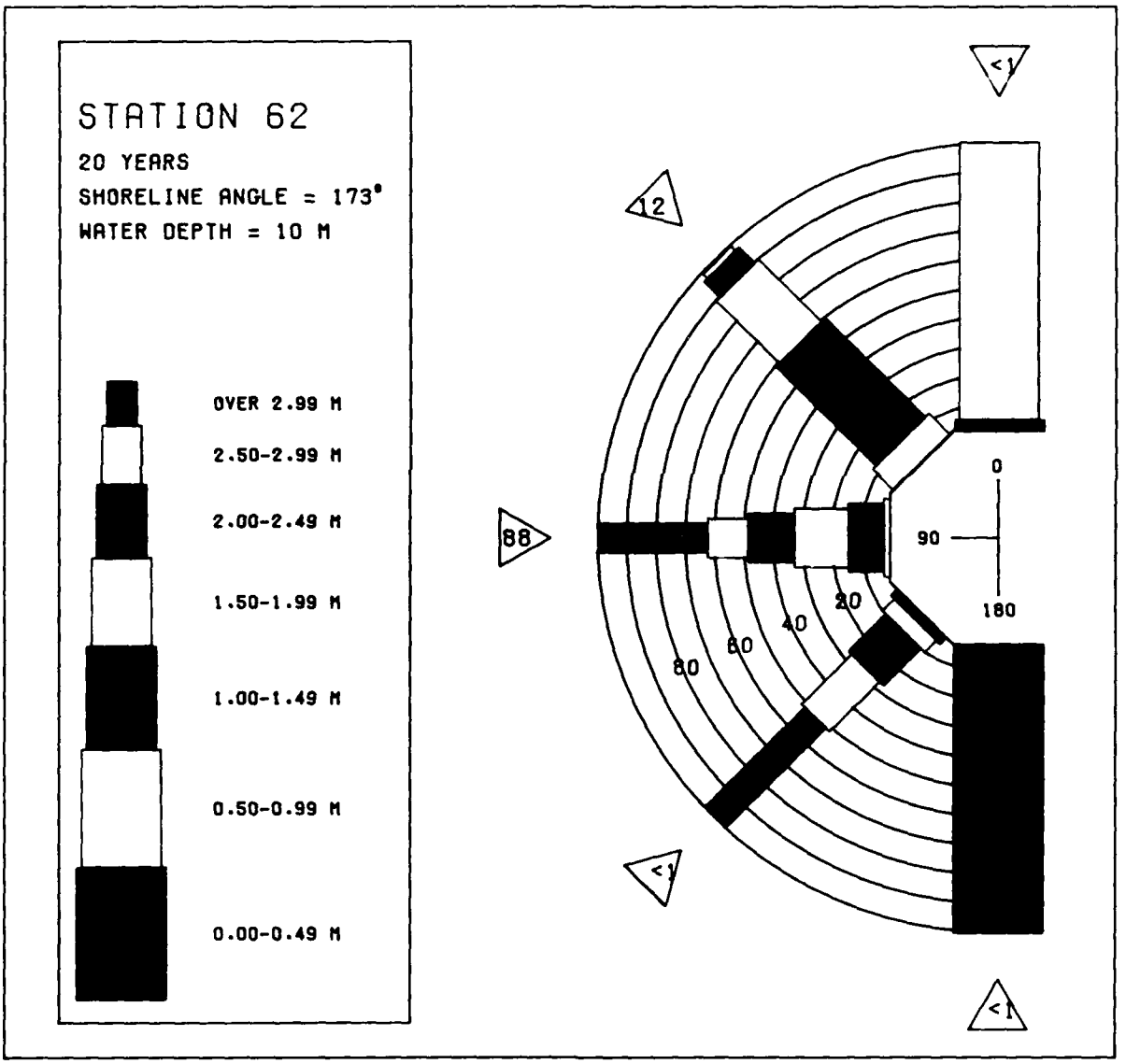
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 62 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49		4									4
0.50 - 0.99	42	99	126	26	8	7	1	.	.	.	309
1.00 - 1.49	218	290	617	283	144	46	7	3	.	.	1608
1.50 - 1.99	123	205	506	567	398	157	23	1	.	.	1980
2.00 - 2.49	11	88	121	332	540	329	59	5	.	.	1485
2.50 - 2.99	.	35	57	101	397	523	133	10	.	.	1256
3.00 - 3.49	.	8	54	58	179	467	202	17	.	.	1015
3.50 - 3.99	.	.	23	35	97	307	271	26	2	.	839
4.00 - 4.49	.	.	10	20	52	210	281	22	.	.	595
4.50 - 4.99	.	.	1	9	21	94	236	27	.	.	388
5.00 +	.	.	.	.	11	58	284	128	.	.	481
TOTAL	394	729	1515	1431	1847	2306	1497	239	2	0	

MEAN HS(M) = 2.61 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.3	3.2	2.5	2.2	2.0	1.5	1.5	1.5	2.1	2.8	3.3	2.4
1957	2.6	3.0	3.2	2.7	2.1	1.5	1.4	1.3	1.8	2.7	3.3	4.1	2.5
1958	4.9	4.2	3.4	3.2	2.0	1.4	1.7	1.5	1.7	2.5	3.3	3.9	2.8
1959	3.6	3.7	2.9	2.8	1.9	1.5	1.6	1.4	2.0	2.8	3.3	3.9	2.6
1960	3.6	4.1	2.4	2.6	2.0	1.5	1.4	1.6	1.3	2.5	3.8	4.0	2.6
1961	4.3	3.6	3.3	2.4	2.2	1.9	1.3	1.0	1.5	2.4	3.0	3.4	2.5
1962	2.9	3.4	2.8	2.4	1.6	1.6	1.4	1.6	1.7	3.1	3.9	4.3	2.6
1963	3.1	4.1	3.0	2.2	1.8	1.9	1.4	1.1	1.9	3.3	3.5	3.8	2.6
1964	4.6	3.3	3.0	2.8	1.8	1.7	1.8	1.6	1.6	2.2	3.4	3.9	2.6
1965	3.7	2.9	2.7	2.6	2.0	2.0	1.5	1.2	1.6	2.8	3.4	4.4	2.6
1966	4.4	3.2	3.3	2.6	2.3	1.7	1.8	1.6	1.8	2.2	3.8	4.0	2.6
1967	3.6	3.0	2.6	2.1	1.4	1.4	1.5	1.3	2.0	2.9	3.6	3.8	2.4
1968	3.4	3.8	3.3	2.2	1.6	1.5	1.5	1.4	1.4	2.7	3.6	3.4	2.5
1969	2.9	4.6	3.6	3.0	2.2	1.7	1.5	1.4	1.7	2.8	3.4	5.3	2.8
1970	3.9	4.6	3.6	2.8	2.0	1.6	1.7	1.5	1.5	2.4	3.3	4.2	2.7
1971	3.3	3.2	3.4	3.0	2.0	1.9	1.2	1.6	1.8	2.3	3.4	3.4	2.5
1972	4.0	3.6	3.7	3.0	2.1	2.1	1.8	1.5	1.5	2.1	4.4	3.7	2.8
1973	4.4	4.0	4.0	3.0	2.4	2.1	2.0	1.8	2.1	2.5	3.4	4.7	3.0
1974	3.9	3.8	3.8	3.1	2.6	2.0	1.5	1.4	1.6	2.3	3.8	4.3	2.8
1975	3.3	3.3	3.0	2.1	2.0	1.4	1.5	1.3	0.8	2.5	3.2	3.2	2.3
MEAN	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.4	5.8	5.8	4.9	3.3	2.9	2.2	2.3	2.3	3.9	4.2	5.2
1957	4.4	6.2	4.8	4.6	3.6	2.6	2.4	2.0	3.4	5.0	5.1	6.2
1958	6.9	6.5	5.9	6.1	3.2	2.2	3.2	3.2	2.7	4.6	6.0	6.1
1959	6.3	6.0	4.8	5.9	3.5	2.7	2.3	2.5	3.2	5.5	6.5	6.2
1960	6.2	6.5	4.7	4.0	3.3	2.7	2.4	2.3	1.9	5.9	6.2	6.3
1961	6.8	5.5	6.0	4.1	3.3	3.3	2.0	1.6	2.7	4.9	5.1	5.2
1962	5.2	5.1	5.1	5.3	2.5	2.6	2.3	2.7	4.8	5.7	5.9	6.2
1963	5.4	6.2	4.9	4.3	3.5	3.4	2.1	2.0	3.0	6.2	5.3	6.6
1964	6.5	5.2	4.7	5.1	3.6	2.9	3.1	2.2	2.6	3.9	6.3	6.1
1965	5.3	4.5	5.0	4.3	3.1	3.2	2.3	2.2	2.1	6.0	6.2	6.1
1966	6.6	4.6	5.4	4.5	3.1	2.7	2.3	2.3	3.5	4.1	4.7	6.0
1967	5.4	4.3	4.5	3.7	2.7	2.5	2.0	1.7	4.4	6.0	5.9	6.9
1968	5.2	6.1	5.3	4.4	2.5	2.2	2.7	2.2	3.5	4.6	5.8	5.2
1969	4.4	6.5	6.5	5.4	4.0	2.4	2.0	2.0	3.2	5.1	6.7	7.8
1970	7.0	6.4	6.1	5.3	2.7	2.3	2.3	2.3	2.8	4.5	6.0	6.9
1971	6.1	5.2	5.6	4.7	3.4	2.7	2.2	2.4	3.1	4.1	6.1	5.3
1972	6.0	6.2	5.8	4.3	3.3	3.2	2.1	2.4	2.0	3.6	6.1	6.6
1973	6.8	6.1	6.2	4.8	3.6	4.5	2.6	2.6	3.6	4.0	5.5	6.6
1974	7.4	5.9	6.6	5.6	4.0	3.2	3.0	2.1	3.1	5.1	5.8	6.6
1975	5.3	5.9	5.3	3.3	3.7	2.3	2.2	2.7	1.4	4.1	5.9	6.3

20 YR. STATISTICS FOR PACIFIC STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	212	51	.	.	.	.	.	.	.	.	263
1.00 - 1.49	1442	136	.	.	.	.	.	.	.	.	1578
1.50 - 1.99	761	179	.	.	.	.	.	.	.	.	940
2.00 - 2.49	51	63	.	.	.	.	.	.	.	.	114
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2466	434	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1697

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	37	.	1	.	3	.	.	.	.	49
0.50 - 0.99	118	672	527	83	20	23	1	.	.	.	1444
1.00 - 1.49	550	2147	3256	604	121	18	.	.	.	.	6696
1.50 - 1.99	485	1493	2710	1144	207	13	.	.	.	.	6052
2.00 - 2.49	66	568	432	788	167	8	.	.	.	.	2029
2.50 - 2.99	.	154	162	179	131	39	.	.	.	.	665
3.00 - 3.49	.	29	73	75	121	15	.	.	.	.	313
3.50 - 3.99	.	1	15	15	23	11	.	.	.	.	65
4.00 - 4.49	.	.	3	.	5	13	.	.	.	.	21
4.50 - 4.99	.	.	.	.	.	3	.	.	.	.	3
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1227	5101	7178	2889	795	146	1	0	0	0	

MEAN HS(M) = 1.60 LARGEST HS(M) = 4.64 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 10147

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCUPRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	5	.	1	.	.	.	.	.	.	7
0.50 - 0.99	42	227	629	154	49	39	8	5	1	.	1154
1.00 - 1.49	15	552	2753	1971	1199	419	77	32	.	.	7018
1.50 - 1.99	11	371	2517	4532	3629	1463	217	18	3	.	12781
2.00 - 2.49	6	188	805	2703	5160	3138	537	54	3	.	12594
2.50 - 2.99	1	114	275	783	3925	5029	1269	97	13	.	11506
3.00 - 3.49	.	18	297	373	1783	5011	1955	171	.	.	9608
3.50 - 3.99	.	1	131	210	817	3588	2602	273	23	.	8045
4.00 - 4.49	.	.	54	121	369	2173	2876	207	.	.	5800
4.50 - 4.99	.	.	3	56	128	963	2431	242	1	.	3824
5.00 +	.	.	.	1	73	521	3064	1358	.	.	5017
TOTAL	75	1472	7469	10904	17132	22765	15036	2457	44	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 45231

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	10	.	.	.	.	.	.	.	0
0.50 - 0.99	.	30	25	.	.	.	.	.	.	.	20
1.00 - 1.49	.	44	44	8	3	.	.	.	.	.	55
1.50 - 1.99	5	107	92	44	17	1	.	.	.	.	104
2.00 - 2.49	6	92	142	83	78	17	.	.	.	.	267
2.50 - 2.99	.	29	159	155	78	22	.	.	.	.	412
3.00 - 3.49	.	1	85	121	165	68	3	.	.	.	446
3.50 - 3.99	.	.	35	54	123	66	3	.	.	.	440
4.00 - 4.49	.	.	8	18	73	35	15	.	.	.	261
4.50 - 4.99	.	.	.	3	32	63	29	.	.	.	149
5.00 +											127
TOTAL	11	313	600	486	569	275	47	0	0	0	

MEAN HS(M) = 3.35 LARGEST HS(M) = 6.78 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 1358

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	3	.	.	.	.	.	.	.	.	.	3
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	5	4	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 7

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

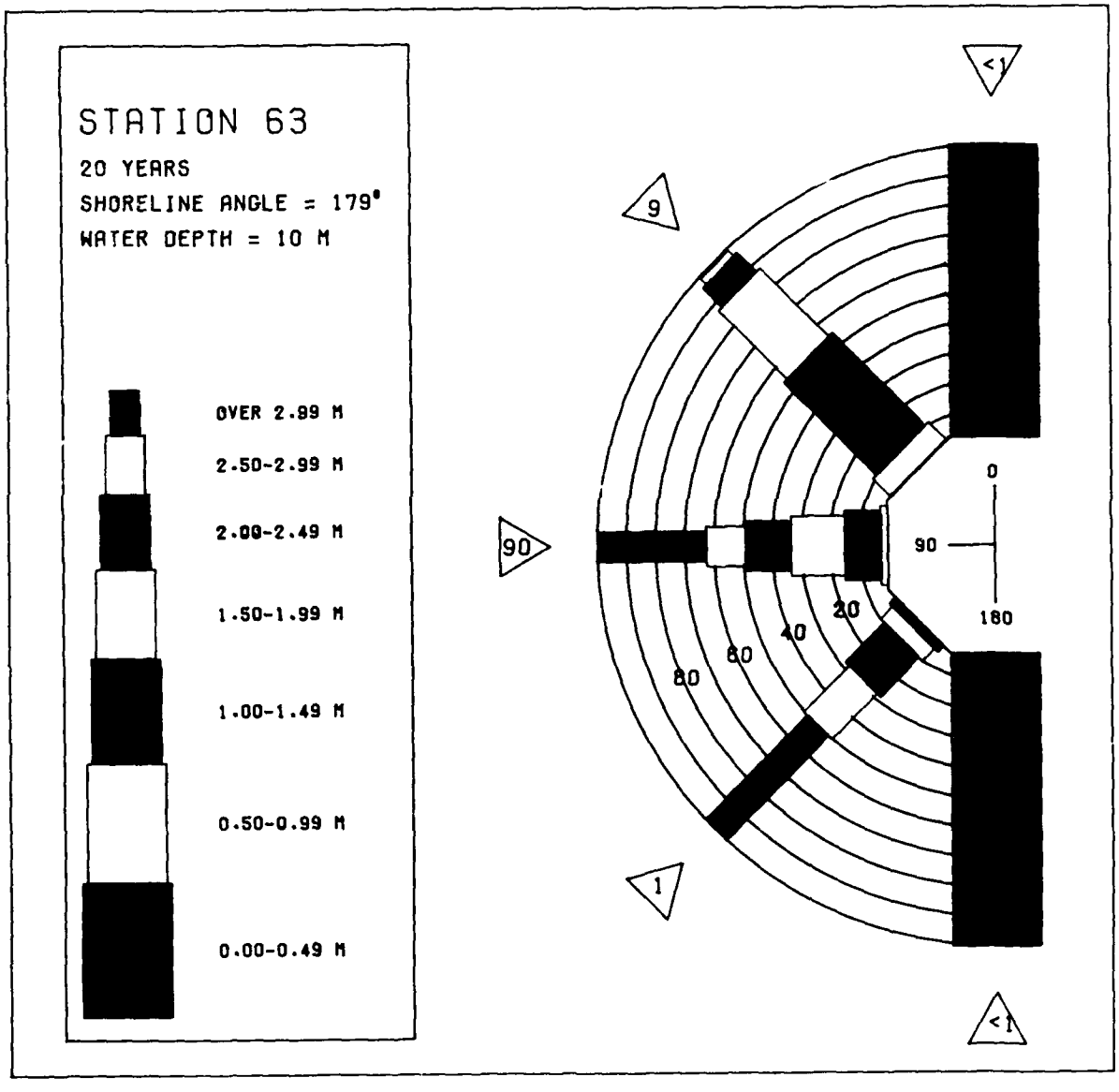
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 63 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.48N/124.08W LAT. LON. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49		3						.	.	.	3
0.50 - 0.99	37	96	116	23	7	6	1	.	.	.	286
1.00 - 1.49	201	286	603	257	132	43	7	3	.	.	1532
1.50 - 1.99	126	208	527	568	383	149	21	1	.	.	1983
2.00 - 2.49	13	93	133	353	534	314	53	5	.	.	1498
2.50 - 2.99	.	36	58	104	413	508	126	9	1	.	1255
3.00 - 3.49	.	7	53	60	198	505	195	17	.	.	1035
3.50 - 3.99	.	.	23	34	100	406	260	27	2	.	852
4.00 - 4.49	.	.	9	17	49	225	287	20	.	.	607
4.50 - 4.99	.	.	1	7	20	100	244	24	.	.	396
5.00 +					10	58	309	135	3	0	512
TOTAL	377	729	1523	1423	1846	2314	1503	241	3	0	

MEAN HS(M) = 2.64 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 63 (41.48N/ 124.08W TO 41.35N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.3	3.2	2.5	2.2	2.0	1.5	1.5	1.5	2.1	2.9	3.3	2.5
1957	2.6	3.0	3.2	2.8	2.2	1.5	1.5	1.3	1.8	2.7	3.4	4.2	2.5
1958	4.9	4.1	3.5	3.2	2.0	1.4	1.7	1.6	1.7	2.6	3.4	4.0	2.8
1959	3.6	3.7	3.0	2.9	1.9	1.6	1.7	1.5	2.0	2.8	3.3	3.9	2.6
1960	3.6	4.2	2.4	2.6	2.0	1.5	1.5	1.6	1.4	2.5	3.8	4.0	2.6
1961	4.3	3.7	3.3	2.4	2.2	2.0	1.3	1.1	1.6	2.5	3.1	3.4	2.6
1962	2.9	3.4	2.9	2.4	1.6	1.6	1.4	1.6	1.7	3.2	3.9	4.3	2.6
1963	3.2	4.1	3.1	2.2	1.8	2.0	1.5	1.1	1.9	3.3	3.5	3.8	2.6
1964	4.6	3.4	3.0	2.9	1.8	1.7	1.9	1.6	1.7	2.2	3.4	3.9	2.7
1965	3.7	2.9	2.7	2.7	2.0	2.0	1.6	1.2	1.6	2.8	3.4	4.4	2.6
1966	4.5	3.2	3.3	2.0	2.3	1.7	1.8	1.6	1.8	2.2	2.8	4.0	2.6
1967	3.6	3.0	2.7	2.2	1.4	1.4	1.5	1.3	2.1	2.9	3.7	3.8	2.5
1968	3.4	3.8	3.4	2.2	1.6	1.5	1.5	1.5	1.4	2.7	3.6	3.4	2.5
1969	3.0	4.9	3.9	3.1	2.2	1.8	1.3	1.4	1.7	2.9	3.4	5.4	2.9
1970	3.8	4.7	3.7	2.9	2.0	1.6	1.7	1.5	1.5	2.5	3.3	4.2	2.8
1971	3.3	3.2	3.4	3.1	2.1	1.9	1.2	1.6	1.9	2.3	3.4	3.4	2.6
1972	4.1	3.6	3.7	3.1	2.1	2.1	1.9	1.5	1.5	2.1	4.4	3.7	2.8
1973	4.4	4.0	4.0	3.0	2.4	2.2	2.0	1.9	2.2	2.5	3.4	4.7	3.1
1974	3.9	3.9	3.8	3.2	2.6	2.0	1.6	1.5	1.6	2.3	3.8	4.4	2.9
1975	3.3	3.3	3.0	2.1	2.1	1.5	1.5	1.3	0.8	2.5	3.2	3.2	2.3
MEAN	3.7	3.7	3.2	2.7	2.0	1.8	1.6	1.5	1.7	2.6	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 63 (41.48N/ 124.08W TO 41.35N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.3	5.8	6.0	5.0	3.4	2.9	2.2	2.4	2.3	4.0	4.2	5.2
1957	4.3	6.2	4.8	4.6	3.7	2.6	2.5	2.0	3.5	5.1	5.2	6.3
1958	6.9	6.4	6.0	6.1	3.3	2.2	2.3	3.2	2.7	4.7	6.1	6.1
1959	6.3	6.0	4.9	6.0	3.5	2.7	2.3	2.6	3.2	5.6	6.3	6.2
1960	6.2	6.4	4.7	4.0	3.4	2.8	2.4	2.3	2.0	6.0	6.2	6.3
1961	6.8	5.4	6.0	4.2	3.4	3.4	2.0	1.6	2.8	5.0	5.2	5.3
1962	5.2	5.1	5.1	5.4	2.6	2.7	2.3	2.7	4.8	5.8	6.0	6.2
1963	5.3	6.2	5.0	4.4	3.5	3.5	2.1	2.1	3.1	6.3	5.4	6.5
1964	6.6	5.3	4.8	5.2	3.7	2.9	3.2	2.2	2.6	4.0	6.3	6.1
1965	5.3	4.6	5.1	4.4	3.2	3.2	2.5	2.2	2.2	6.0	6.1	6.1
1966	6.6	4.7	5.5	4.5	3.2	2.7	2.3	2.3	3.6	4.2	4.7	6.1
1967	2.4	4.3	4.7	3.8	2.8	2.5	2.0	1.7	4.2	6.0	6.0	6.9
1968	5.0	6.1	5.4	4.5	2.5	2.1	2.7	2.3	3.2	4.7	5.8	5.2
1969	4.4	6.5	6.6	5.5	4.1	2.4	2.0	2.0	3.2	5.2	6.7	7.8
1970	6.9	6.4	6.1	5.3	2.8	2.3	2.3	2.3	2.8	4.6	6.0	7.0
1971	6.0	5.2	5.6	4.8	3.5	2.7	2.2	3.5	3.1	4.2	6.1	5.4
1972	6.1	6.3	5.8	4.3	3.4	3.2	3.1	2.5	2.1	3.6	6.2	6.6
1973	6.8	6.1	6.3	4.9	3.7	4.6	2.7	2.7	3.6	4.1	5.6	6.6
1974	7.1	6.0	6.6	5.7	4.1	3.3	3.1	2.2	3.2	5.2	5.9	6.6
1975	5.3	6.0	5.4	3.4	3.8	2.3	2.3	2.8	1.4	4.2	6.1	6.3

20 YR. STATISTICS FOR PACIFIC STATION 63 (41.48N/ 124.08W TO 41.35N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	92.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	61	10	.	.	.	.	.	.	.	.	71
1.00 - 1.49	766	152	.	.	.	.	.	.	.	.	918
1.50 - 1.99	467	477	.	.	.	.	.	.	.	.	944
2.00 - 2.49	.	58	.	.	.	.	.	.	.	.	58
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1294	697	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.44 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1165

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	23	3	3	.	.	.	.	.	.	29
0.50 - 0.99	102	268	39	5	8	1	.	.	.	.	423
1.00 - 1.49	903	1255	453	68	6	.	.	.	.	.	2685
1.50 - 1.99	1683	2862	248	39	8	5	.	.	.	.	4845
2.00 - 2.49	95	1931	157	18	.	.	.	.	.	.	2201
2.50 - 2.99	.	333	171	23	5	.	.	.	.	.	532
3.00 - 3.49	.	39	102	18	1	.	.	.	.	.	160
3.50 - 3.99	.	.	29	10	.	.	.	.	.	.	39
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2783	6711	1202	184	28	6	0	0	0	0	

MEAN HS(M) = 1.76 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 6389

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	11	.	.	.	3	.	.	.	.	19
0.50 - 0.99	15	422	970	183	66	44	23	5	1	.	1729
1.00 - 1.49	20	795	4320	2337	1367	402	88	35	.	.	9364
1.50 - 1.99	22	385	4248	5236	4838	1428	266	49	.	.	15472
2.00 - 2.49	13	155	884	3595	5520	3660	807	54	8	.	14696
2.50 - 2.99	.	111	251	906	4204	5562	1622	109	10	.	12775
3.00 - 3.49	.	30	162	309	1856	5504	2193	224	29	.	10307
3.50 - 3.99	.	1	106	107	590	3563	2855	304	6	.	7932
4.00 - 4.49	.	.	23	56	231	1741	2712	249	1	.	5013
4.50 - 4.99	.	.	1	17	63	761	2397	268	1	.	3508
5.00 +	.	.	.	.	10	306	2263	1281	1	.	3861
TOTAL	70	1904	10976	12746	17745	23374	15226	2579	57	0	

MEAN HS(M) = 2.73 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49509

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	20	3	.	.	.	.	.	.	24
1.00 - 1.49	.	39	85	15	11	.	.	.	.	.	150
1.50 - 1.99	5	18	82	35	25	8	.	.	.	.	173
2.00 - 2.49	.	107	123	83	131	35	.	.	.	.	479
2.50 - 2.99	.	63	130	121	135	70	5	.	.	.	524
3.00 - 3.49	.	25	118	88	150	95	17	.	.	.	493
3.50 - 3.99	.	.	49	34	100	66	23	.	.	.	272
4.00 - 4.49	.	.	15	10	18	30	17	.	.	.	90
4.50 - 4.99	.	.	3	10	8	20	11	.	.	.	52
5.00 +	.	.	.	1	17	1	3	.	.	.	22
TOTAL	5	253	625	400	595	325	76	0	0	0	

MEAN HS(M) = 2.81 LARGEST HS(M) = 6.07 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1347

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	6	8	.	.	.	.	.	.	.	.	14
1.00 - 1.49	1	3	.	.	.	.	.	.	.	.	4
1.50 - 1.99	3	6	1	.	.	.	.	.	.	.	10
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	3	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	27	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 30

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

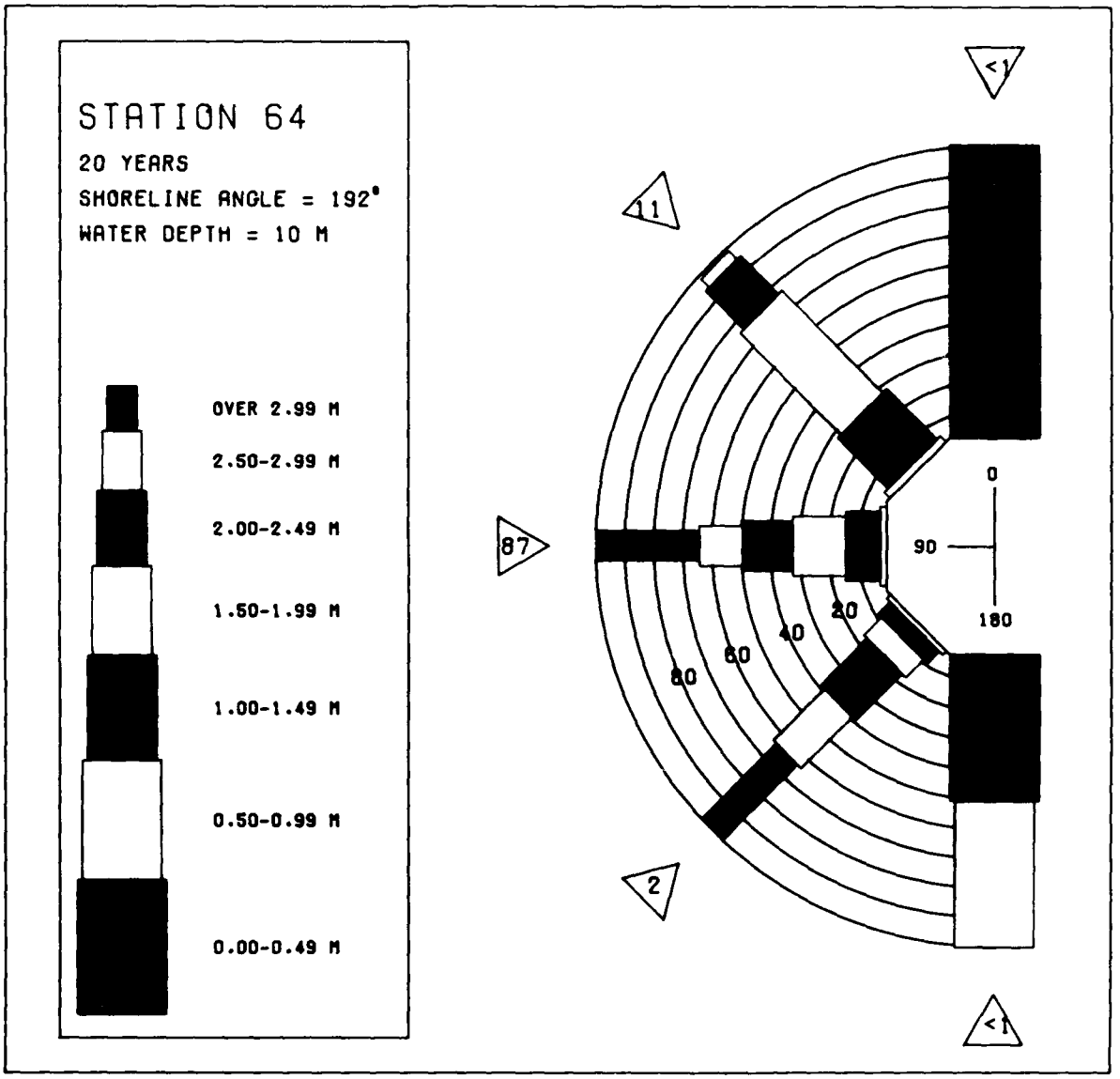
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 64 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49		2	1								3
0.50 - 0.99	18	71	103	19	7	4	2	.	.	.	224
1.00 - 1.49	169	224	485	242	138	40	8	3	.	.	1309
1.50 - 1.99	218	375	458	531	387	144	26	4	.	.	2143
2.00 - 2.49	10	226	116	369	565	369	80	5	.	.	1740
2.50 - 2.99	.	50	55	105	434	563	162	10	1	.	1380
3.00 - 3.49	.	9	38	41	200	560	221	22	2	.	1093
3.50 - 3.99	.	.	18	15	69	402	287	30	.	.	821
4.00 - 4.49	.	.	3	6	24	177	272	24	.	.	506
4.50 - 4.99	.	.	.	2	7	78	240	26	.	.	353
5.00 +	.	.	.	.	2	39	226	128	3	0	386
TOTAL	415	957	1277	1330	1833	2367	1524	252	3	0	

MEAN HS(M) = 2.60 LARGEST HS(M) = 7.27 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 64 (41.35N/ 124.08W TO 41.23N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.4	3.1	2.5	2.3	2.0	1.6	1.6	1.6	2.1	2.7	3.0	2.4
1957	2.6	3.0	3.0	2.8	2.1	1.5	1.6	1.4	1.8	2.5	3.2	4.0	2.5
1958	4.5	3.8	3.5	3.0	2.1	1.5	1.9	1.7	1.7	2.5	3.3	3.6	2.8
1959	3.3	3.7	2.8	2.9	1.9	1.5	1.8	1.6	2.0	2.7	3.3	3.8	2.6
1960	3.6	3.8	2.4	2.5	1.9	1.7	1.6	1.7	1.5	2.5	3.8	3.8	2.6
1961	3.9	3.4	3.0	2.5	2.2	2.1	1.4	1.2	1.7	2.5	3.1	3.4	2.5
1962	2.7	3.3	2.9	2.3	1.6	1.7	1.6	1.6	1.8	2.1	3.7	3.5	2.5
1963	3.0	3.3	3.1	2.2	1.8	2.1	1.6	1.2	1.9	3.3	3.3	3.6	2.5
1964	4.4	3.3	3.0	3.0	1.9	1.7	2.0	1.7	1.8	2.1	3.4	3.6	2.7
1965	3.5	2.9	2.8	2.6	2.2	2.2	1.7	1.3	1.7	2.6	3.3	4.4	2.6
1966	4.2	3.1	3.2	2.1	2.4	1.7	1.9	1.8	1.8	2.1	2.7	3.8	2.6
1967	3.4	3.1	2.6	2.3	1.5	1.5	1.6	1.4	2.1	2.8	3.8	3.7	2.5
1968	3.0	3.3	3.1	2.3	1.6	1.6	1.6	1.5	1.5	2.6	3.4	3.3	2.4
1969	2.9	4.5	3.6	3.0	2.2	1.8	1.7	1.5	1.7	2.8	3.4	5.1	2.9
1970	3.6	4.6	3.6	3.0	2.0	1.7	1.8	1.6	1.6	2.5	3.2	4.1	2.8
1971	3.0	2.8	3.2	3.0	2.1	1.9	1.4	1.7	1.9	2.3	3.5	3.4	2.5
1972	4.1	3.4	3.1	3.1	2.2	2.2	2.0	1.6	1.6	2.3	4.3	3.4	2.8
1973	4.2	3.9	4.1	3.1	2.4	2.2	2.1	2.0	2.2	2.4	3.4	4.3	3.0
1974	3.3	3.7	3.8	3.1	2.7	2.2	1.6	1.6	1.7	2.4	3.7	4.2	2.8
1975	3.2	3.2	3.0	2.3	2.1	1.6	1.6	1.4	0.9	2.5	3.2	2.9	2.3
MEAN	3.5	3.5	3.2	2.7	2.1	1.8	1.7	1.6	1.7	2.5	3.4	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 64 (41.35N/ 124.08W TO 41.23N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.9	5.7	5.0	5.0	3.5	2.9	2.4	2.5	2.5	3.9	4.1	5.0
1957	4.4	5.3	4.8	4.4	3.4	2.6	2.8	2.1	3.2	5.2	5.1	6.2
1958	6.4	5.9	6.1	6.0	3.3	2.3	3.4	3.3	2.6	4.6	6.1	5.4
1959	6.3	6.0	4.9	6.0	3.1	2.4	2.2	2.7	3.2	5.2	6.4	5.9
1960	6.1	5.9	4.6	3.8	3.4	2.8	2.4	2.5	2.1	6.0	6.4	6.1
1961	6.3	5.2	5.7	4.1	3.2	3.5	2.1	1.7	2.7	4.9	5.1	5.5
1962	4.9	4.9	5.3	4.9	2.5	2.7	2.4	2.6	4.6	5.9	5.8	5.8
1963	4.7	4.7	5.3	4.4	3.2	3.7	3.3	2.1	3.1	6.6	5.3	6.3
1964	7.1	5.3	4.9	5.3	3.8	2.7	3.1	2.2	2.8	4.0	6.3	6.0
1965	5.1	4.9	5.2	4.2	3.3	3.1	2.3	2.1	2.3	5.5	6.1	6.3
1966	6.1	4.7	4.8	3.7	3.2	2.5	2.3	2.4	3.7	4.0	4.8	6.1
1967	5.1	4.8	4.9	4.0	2.8	2.6	2.1	1.9	4.5	6.0	6.2	6.7
1968	4.5	4.7	5.3	4.6	2.5	2.1	2.9	2.3	3.5	4.8	5.2	6.3
1969	4.3	6.3	6.6	5.8	3.7	2.4	2.1	2.1	3.1	5.1	6.5	7.3
1970	5.9	6.3	6.2	5.5	2.9	2.5	2.3	2.2	3.1	4.8	5.8	7.0
1971	5.9	4.6	5.6	5.0	3.5	2.7	2.3	3.6	3.2	4.3	6.1	5.4
1972	6.3	5.8	4.7	4.3	3.7	3.4	3.1	2.5	2.2	3.9	6.1	6.2
1973	6.5	6.1	6.4	5.0	3.8	4.4	2.8	2.8	3.5	3.8	5.8	6.5
1974	6.1	6.0	6.2	5.7	4.1	3.4	3.1	2.3	3.4	5.2	6.1	6.3
1975	5.5	5.8	5.8	3.3	4.0	2.8	2.3	2.5	1.6	4.3	5.9	5.5

20 YR. STATISTICS FOR PACIFIC STATION 64 (41.35N/ 124.08W TO 41.23N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	25	3	.	.	.	.	.	.	.	.	28
1.00 - 1.49	595	58	.	.	.	.	.	.	.	.	653
1.50 - 1.99	716	470	.	.	.	.	.	.	.	.	1186
2.00 - 2.49	11	160	.	.	.	.	.	.	.	.	171
2.50 - 2.99	.	15	.	.	.	.	.	.	.	.	15
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1347	706	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 2.97 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1203

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	15	.	.	.	.	.	.	.	.	15
0.50 - 0.99	92	165	10	.	3	.	.	.	.	.	270
1.00 - 1.49	824	994	147	3	1	.	.	.	.	.	1969
1.50 - 1.99	2132	2527	126	8	.	.	.	.	.	.	4793
2.00 - 2.49	188	2546	94	.	.	.	.	.	.	.	2828
2.50 - 2.99	.	610	126	5	.	.	.	.	.	.	741
3.00 - 3.49	.	87	133	17	.	.	.	.	.	.	237
3.50 - 3.99	.	.	39	11	.	.	.	.	.	.	50
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	3236	6944	675	44	4	0	0	0	0	0	

MEAN HS(M) = 1.87 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 6378

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	15	3	.	2	1	.	.	.	.	34
0.50 - 0.99	23	470	975	177	65	46	23	5	1	.	1785
1.00 - 1.49	58	855	4236	2310	1332	395	87	37	.	.	9310
1.50 - 1.99	37	455	4122	4851	3694	1408	260	47	.	.	14874
2.00 - 2.49	30	191	1001	3668	5473	3653	816	54	8	.	14894
2.50 - 2.99	1	123	248	942	4183	5472	1618	119	10	.	12716
3.00 - 3.49	.	20	160	301	1976	5586	2215	222	29	.	10509
3.50 - 3.99	.	1	107	107	574	3973	2857	306	8	.	7933
4.00 - 4.49	.	.	17	58	227	1748	2736	253	.	.	5039
4.50 - 4.99	.	.	1	17	51	770	2351	265	3	.	3458
5.00 +					6	289	2262	1281			3838
TOTAL	149	2128	10882	12434	17581	23343	15225	2589	59	0	

MEAN HS(M) = 2.74 LARGEST HS(M) = 7.11 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49340

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	6	29	5	.	.	.	.	.	.	40
1.00 - 1.49	.	49	102	15	17	.	.	.	.	.	183
1.50 - 1.99	5	13	92	65	65	15	3	.	.	.	258
2.00 - 2.49	1	99	126	111	160	54	5	.	.	.	556
2.50 - 2.99	.	53	131	123	172	100	20	.	.	.	599
3.00 - 3.49	.	25	99	83	155	116	32	.	.	.	510
3.50 - 3.99	.	.	44	18	66	47	25	.	.	.	200
4.00 - 4.49	.	.	13	8	17	29	22	.	.	.	89
4.50 - 4.99	.	.	1	5	17	10	6	.	.	.	39
5.00 +	.	.	.	.	11	1	3	.	.	.	15
TOTAL	6	245	637	433	680	372	116	0	0	0	

MEAN HS(M) = 2.68 LARGEST HS(M) = 5.75 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1469

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	8	10	.	.	.	.	.	.	.	.	18
1.00 - 1.49	1	6	1	.	.	.	.	.	.	.	8
1.50 - 1.99	3	11	.	.	.	.	.	.	.	.	14
2.00 - 2.49	.	10	6	.	.	.	.	.	.	.	16
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	29	38	7	0	0	0	0	0	0	0	

MEAN HS(M) = 1.24 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 47

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

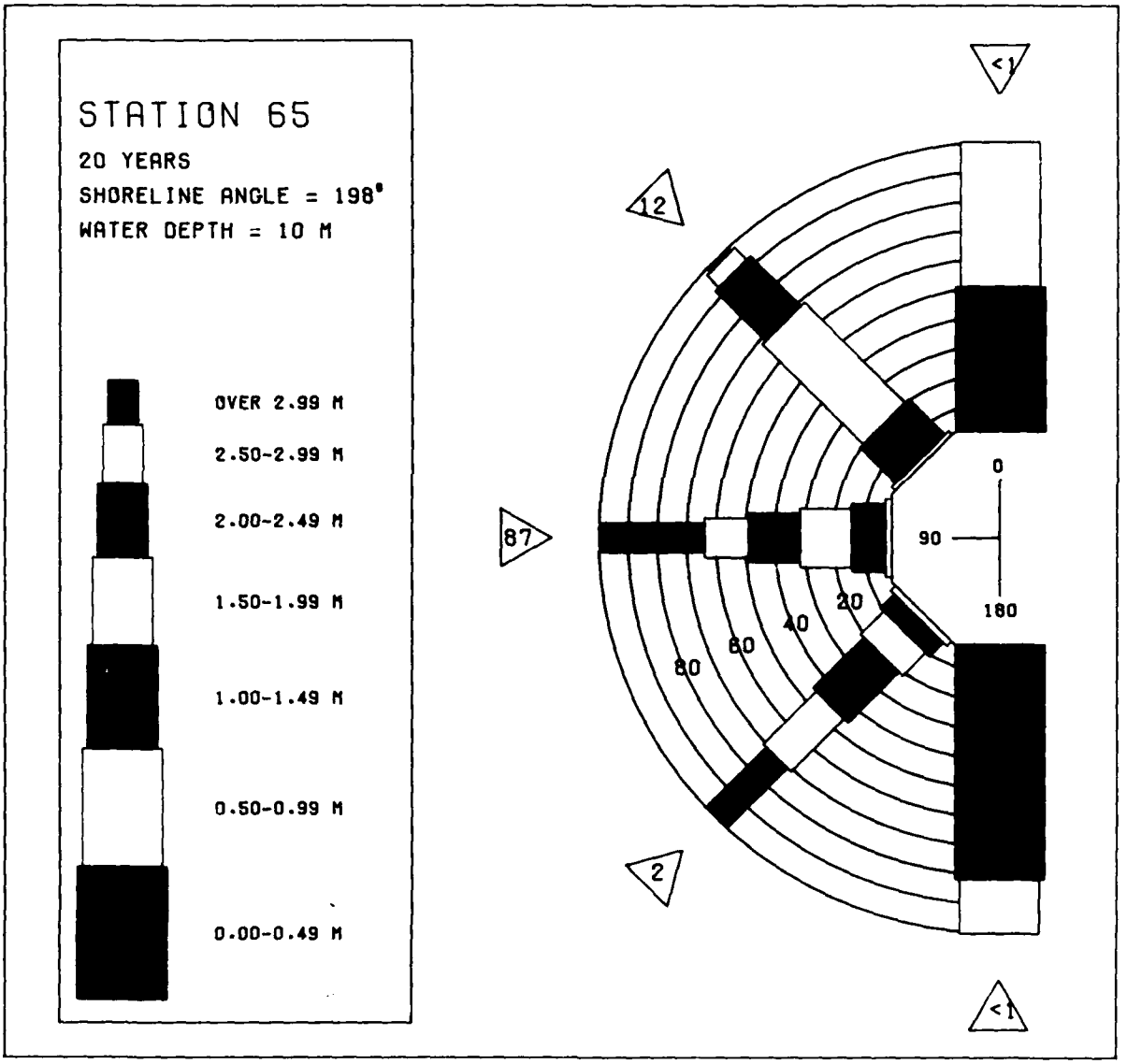
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.21 LARGEST HS(M) = 0.23 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 3

PHASE 3 ST. 65 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.23N/124.11W LAT. LON. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	2	2	1	.	.	.	.	.	.	.	5
0.50 - 0.99	15	65	101	18	6	4	2	.	.	.	211
1.00 - 1.49	148	196	448	232	135	39	8	3	.	.	1209
1.50 - 1.99	289	347	434	492	375	142	26	4	.	.	2109
2.00 - 2.49	23	300	122	377	563	370	82	5	.	.	1842
2.50 - 2.99	.	80	50	107	435	557	163	11	1	.	1404
3.00 - 3.49	.	13	39	40	213	570	224	22	2	.	1123
3.50 - 3.99	.	.	19	13	64	402	288	30	.	.	816
4.00 - 4.49	.	.	3	6	24	177	275	25	.	.	510
4.50 - 4.99	.	.	.	2	6	78	235	26	.	.	347
5.00 +	.	.	.	.	1	29	226	128	.	.	384
TOTAL	477	1003	1217	1287	1822	2368	1529	254	3	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.11 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.4	3.1	2.5	2.3	2.1	1.7	1.6	1.6	2.1	2.7	3.0	2.4
1957	2.6	3.0	3.0	2.8	2.2	1.6	1.7	1.5	1.8	2.5	3.2	4.0	2.5
1958	4.5	3.7	3.5	3.0	2.1	1.5	1.9	1.7	1.8	2.5	3.3	3.6	2.8
1959	3.2	3.7	2.8	3.0	1.9	1.6	1.8	1.7	2.0	2.7	3.3	3.8	2.6
1960	3.5	3.8	2.4	2.5	1.9	1.8	1.6	1.8	1.5	2.5	3.8	3.8	2.6
1961	3.9	3.4	3.0	2.5	2.2	2.1	1.5	1.2	1.7	2.5	3.1	3.4	2.5
1962	2.7	3.2	2.9	2.3	1.7	1.7	1.7	1.7	1.8	3.4	3.7	3.5	2.5
1963	2.9	3.2	3.1	2.2	1.9	2.2	1.6	1.3	1.9	3.3	3.3	3.5	2.5
1964	4.3	3.3	3.1	3.0	1.9	1.7	2.1	1.7	1.8	2.1	3.4	3.6	2.7
1965	3.4	2.9	2.8	2.6	2.3	2.2	1.7	1.3	1.8	2.6	3.2	4.4	2.6
1966	4.1	3.1	3.2	2.2	2.5	1.7	1.9	1.8	1.8	2.1	2.7	3.8	2.6
1967	3.3	3.1	2.6	2.3	1.5	1.5	1.7	1.4	2.1	2.8	3.8	3.7	2.5
1968	2.9	3.3	3.1	2.4	1.6	1.6	1.7	1.6	1.5	2.6	3.3	3.2	2.4
1969	2.9	4.5	3.6	3.0	2.2	1.8	1.8	1.6	1.7	2.8	3.4	5.1	2.9
1970	3.5	4.6	3.6	3.0	2.1	1.7	1.8	1.7	1.6	2.2	3.2	4.1	2.8
1971	3.0	2.8	3.2	3.0	2.2	2.0	1.4	1.7	1.9	2.3	3.5	3.4	2.5
1972	4.1	3.4	3.1	3.1	2.3	2.3	2.0	1.7	1.6	2.3	4.3	3.4	2.8
1973	4.2	3.9	4.1	3.2	2.4	2.2	2.2	2.1	2.2	2.5	3.3	4.3	3.0
1974	3.2	3.7	3.8	3.1	2.7	2.3	1.7	1.6	1.7	2.4	3.7	4.2	2.8
1975	3.2	3.2	3.1	2.3	2.2	1.7	1.7	1.5	1.0	2.5	3.2	2.9	2.4
MEAN	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.6	1.7	2.5	3.4	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.7	5.6	5.0	5.1	3.6	3.0	2.5	2.6	2.5	4.0	4.0	5.0
1957	4.4	5.2	4.8	4.4	3.5	2.7	3.0	2.1	3.3	5.3	5.1	6.2
1958	6.4	5.9	6.2	6.1	3.4	2.4	3.5	3.4	2.6	4.6	6.1	5.3
1959	6.3	6.1	4.9	6.1	3.1	2.5	2.4	2.8	2.5	5.3	6.4	5.9
1960	6.1	5.8	4.6	3.8	3.4	2.8	2.5	2.5	2.3	6.0	6.3	6.1
1961	6.3	5.1	5.7	4.2	3.2	3.5	2.2	1.8	2.7	4.9	5.1	5.6
1962	5.0	4.9	5.3	4.9	2.6	2.8	2.6	2.6	4.6	6.0	5.7	5.9
1963	4.7	4.6	5.3	4.4	3.2	3.7	2.4	2.2	3.1	6.6	5.3	6.2
1964	7.1	5.4	4.9	5.3	3.9	2.8	3.1	2.4	2.9	4.0	6.2	6.0
1965	5.1	4.9	5.2	4.3	3.4	3.2	2.5	2.2	3.4	5.5	6.1	6.3
1966	6.1	4.7	4.8	3.7	3.2	2.6	2.4	2.5	3.8	4.0	4.9	6.1
1967	5.0	4.8	5.0	4.0	2.9	2.7	2.2	2.0	4.5	6.0	6.2	6.6
1968	4.5	4.7	5.3	4.7	4.6	2.2	3.0	2.3	3.5	4.8	5.2	6.3
1969	4.3	6.3	6.6	5.8	3.8	2.5	2.2	2.2	3.1	5.1	6.6	7.1
1970	5.7	6.2	6.2	5.5	3.0	2.6	2.4	2.3	3.1	4.8	5.8	6.9
1971	5.9	4.5	5.6	5.0	3.6	2.8	2.4	3.7	3.2	4.3	6.1	5.4
1972	6.3	5.8	4.7	4.3	3.7	3.5	3.3	2.5	2.2	4.1	6.1	6.2
1973	6.4	6.0	6.4	5.0	3.9	4.4	3.0	2.9	3.5	3.8	5.8	6.4
1974	5.7	6.0	6.2	5.8	4.1	3.4	3.2	2.4	3.4	5.2	6.1	6.3
1975	5.5	5.9	5.9	3.3	4.1	3.0	2.5	2.6	1.7	4.3	6.0	5.5

20 YR. STATISTICS FOR PACIFIC STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	96.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	236	128	.	.	.	.	.	.	.	.	364
1.00 - 1.49	1901	1016	1	.	.	.	.	.	.	.	2918
1.50 - 1.99	742	2186	1	.	.	.	.	.	.	.	2929
2.00 - 2.49	.	239	6	.	.	.	.	.	.	.	245
2.50 - 2.99	.	6	1	.	.	.	.	.	.	.	7
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2879	3581	9	0	0	0	0	0	0	0	

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 3785

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	20	3	.	6	.	.	.	.	.	64
0.50 - 0.99	47	643	929	148	66	10	10	1	.	.	1854
1.00 - 1.49	258	1878	4329	1729	547	61	1	.	.	.	8803
1.50 - 1.99	217	1158	3348	3528	1707	90	.	.	.	.	10048
2.00 - 2.49	27	639	597	1907	2866	131	6	.	.	.	6173
2.50 - 2.99	.	136	268	331	1728	203	1	.	.	.	2666
3.00 - 3.49	.	8	100	106	528	302	1	.	.	.	1045
3.50 - 3.99	.	1	46	34	114	241	15	.	.	.	451
4.00 - 4.49	.	.	6	15	34	111	8	.	.	.	174
4.50 - 4.99	.	.	.	1	3	53	18	.	.	.	75
5.00 +	.	.	.	.	.	41	17	.	.	.	58
TOTAL	549	4498	9643	7802	7593	1249	76	1	0	0	

MEAN HS(M) = 1.84 LARGEST HS(M) = 5.87 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 18376

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	126	349	88	27	39	18	1	1	.	649
1.00 - 1.49	7	207	1444	1249	1168	402	97	35	.	.	4602
1.50 - 1.99	6	88	1036	2421	2708	1635	306	51	.	.	8251
2.00 - 2.49	8	56	234	1180	2905	3928	937	65	11	.	9324
2.50 - 2.99	.	66	126	381	1947	5727	1743	127	11	.	10122
3.00 - 3.49	.	37	147	200	917	4899	2373	223	20	.	8846
3.50 - 3.99	.	3	88	111	431	3258	2902	294	5	.	7092
4.00 - 4.49	.	.	30	37	188	1415	2647	263	1	.	4581
4.50 - 4.99	.	.	3	22	65	552	2166	278	.	.	3086
5.00 +	.	.	.	.	20	244	1861	1185	3	.	3313
TOTAL	14	583	3458	5689	10376	22099	15050	2546	52	0	

MEAN HS(M) = 2.97 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 35008

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	3	.	.	.	.	.	.	.	4
1.00 - 1.49	.	44	17	1	.	.	.	.	.	.	62
1.50 - 1.99	11	30	49	5	3	.	.	.	.	.	98
2.00 - 2.49	3	112	109	32	27	5	.	.	.	.	288
2.50 - 2.99	.	116	162	94	97	3	.	.	.	.	472
3.00 - 3.49	.	41	138	107	88	34	.	.	.	.	408
3.50 - 3.99	.	.	130	54	164	63	5	.	.	.	416
4.00 - 4.49	.	1	47	30	92	54	5	.	.	.	229
4.50 - 4.99	.	.	3	13	25	20	18	.	.	.	79
5.00 +	.	.	1	3	15	27	15	1	.	.	62
TOTAL	14	345	659	339	511	206	43	1	0	0	

MEAN HS(M) = 3.20 LARGEST HS(M) = 7.18 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1252

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	5	.	.	.	.	.	.	.	.	.	5
1.00 - 1.49	6	1	.	.	.	.	.	.	.	.	7
1.50 - 1.99	5	3	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	16	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.54 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 19

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

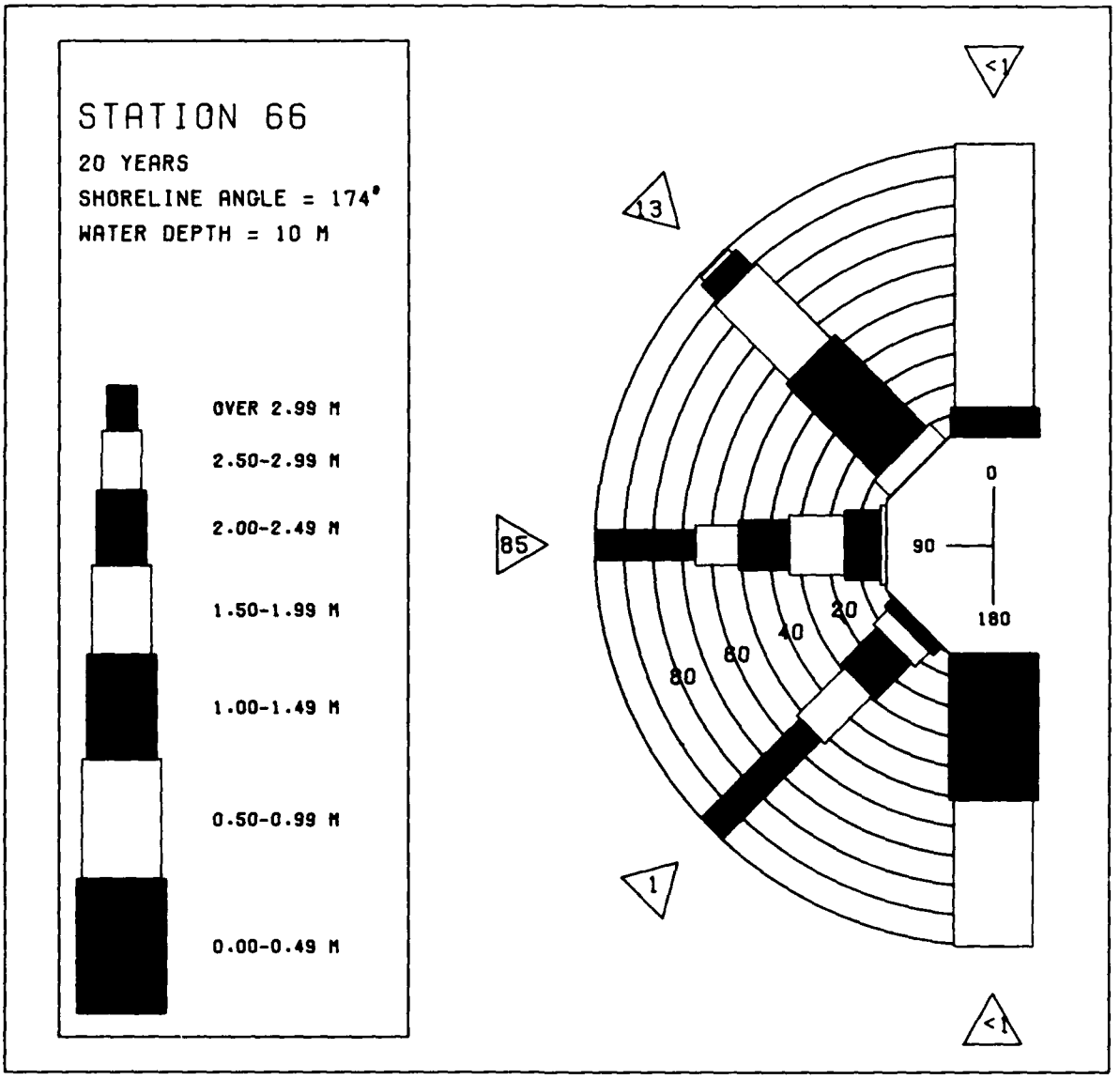
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 66 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49		4	2								6
0.50 - 0.99	28	90	128	23	9	4	2	.	.	.	284
1.00 - 1.49	216	314	579	298	171	46	9	3	.	.	1636
1.50 - 1.99	98	346	443	595	441	172	30	5	.	.	2130
2.00 - 2.49	3	105	94	312	579	406	94	6	1	.	1600
2.50 - 2.99	.	32	55	80	377	593	174	12	1	.	1324
3.00 - 3.49	.	8	38	41	153	523	237	25	2	.	1027
3.50 - 3.99	.	.	26	20	71	356	292	29	.	.	794
4.00 - 4.49	.	.	8	8	31	158	266	26	.	.	497
4.50 - 4.99	.	.	.	3	9	62	220	27	.	.	321
5.00 +	.	.	.	.	3	31	189	119	.	.	341
TOTAL	345	899	1373	1380	1844	2351	1513	251	4	0	

MEAN HS(M) = 2.52 LARGEST HS(M) = 7.72 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.1	3.3	3.0	2.4	2.2	1.9	1.5	1.5	1.5	2.0	2.6	3.0	2.3
1957	2.6	3.0	2.9	2.7	2.1	1.5	1.5	1.3	1.8	2.5	3.1	3.9	2.4
1958	4.5	3.8	3.4	2.9	2.0	1.4	1.8	1.6	1.7	2.4	3.2	3.6	2.7
1959	3.3	3.7	2.7	2.8	1.8	1.5	1.7	1.5	1.9	2.6	3.2	3.7	2.5
1960	3.5	3.8	2.3	2.5	1.9	1.6	1.4	1.6	1.4	2.4	3.7	3.8	2.5
1961	4.0	3.4	3.0	2.3	2.1	1.9	1.3	1.1	1.6	2.4	3.0	3.3	2.4
1962	2.6	3.2	2.8	2.2	1.8	1.6	1.2	1.6	1.7	3.0	3.6	3.5	2.4
1963	2.9	3.4	3.0	2.1	1.8	2.0	1.5	1.1	1.8	3.2	3.3	3.6	2.5
1964	4.3	3.2	2.9	2.8	1.8	1.6	1.9	1.6	1.7	2.0	3.3	3.6	2.6
1965	3.4	2.8	2.7	2.5	2.0	2.0	1.6	1.2	1.6	2.5	3.3	4.3	2.5
1966	4.1	3.1	3.1	2.0	2.3	1.6	1.8	1.6	1.7	2.0	2.7	3.8	2.5
1967	3.4	3.0	2.6	2.1	1.4	1.4	1.5	1.3	2.0	2.8	3.6	3.6	2.4
1968	3.0	3.3	3.1	2.2	1.5	1.4	1.5	1.5	1.4	2.5	3.3	3.3	2.3
1969	2.8	4.4	3.5	2.9	2.1	1.7	1.5	1.4	1.6	2.8	3.3	5.1	2.8
1970	3.7	4.5	3.5	2.8	1.9	1.6	1.7	1.5	1.5	2.4	3.5	4.0	2.7
1971	3.0	2.8	3.2	2.9	2.0	1.8	1.2	1.6	1.8	2.2	3.3	3.3	2.4
1972	4.0	3.4	3.1	3.0	2.1	2.1	1.9	1.5	1.5	2.2	4.1	3.5	2.7
1973	4.2	3.8	3.9	3.0	2.3	2.0	1.9	1.8	2.1	2.3	3.3	4.3	2.9
1974	3.4	3.6	3.7	3.0	2.5	2.0	1.5	1.4	1.6	2.3	3.6	4.1	2.7
1975	3.1	3.2	3.0	2.1	2.0	1.5	1.5	1.3	0.9	2.4	3.1	2.9	2.2
MEAN	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.2	5.8	4.8	4.8	3.2	2.8	2.3	2.3	2.4	3.7	4.0	5.0
1957	4.2	5.6	4.6	4.3	3.3	2.4	2.6	2.0	3.1	4.9	4.9	6.2
1958	6.5	5.7	6.1	5.9	3.1	2.1	3.2	2.2	2.5	4.5	5.9	5.4
1959	6.3	6.0	4.7	5.9	3.1	2.3	3.1	2.5	3.0	5.1	6.4	5.7
1960	6.2	5.9	4.7	3.7	3.2	2.7	2.2	2.4	1.9	5.7	6.4	6.0
1961	6.4	5.3	5.7	4.0	3.0	3.3	2.0	1.6	2.6	4.6	5.0	5.2
1962	4.7	4.9	5.1	4.6	2.3	2.5	2.1	2.5	4.5	5.6	5.9	5.6
1963	4.9	5.0	5.1	4.1	3.2	3.4	2.0	1.8	3.0	6.6	5.1	6.4
1964	7.0	5.1	4.8	5.0	3.6	2.4	2.9	2.0	2.5	3.7	6.2	6.1
1965	5.0	4.7	5.0	4.0	3.1	2.9	2.0	2.0	2.2	5.4	6.1	6.2
1966	6.0	4.5	4.7	3.6	3.1	2.5	2.2	2.3	3.6	4.0	4.7	6.0
1967	5.3	4.5	4.7	3.8	2.7	2.4	1.9	1.7	4.3	6.0	6.0	6.8
1968	4.5	4.7	5.1	4.4	3.2	1.9	2.8	2.2	3.3	4.5	5.2	6.2
1969	4.2	6.3	6.5	5.6	3.5	2.3	2.0	2.0	3.0	4.8	6.3	7.7
1970	6.1	6.3	6.1	5.2	2.7	2.4	2.1	2.1	2.9	4.5	5.6	6.8
1971	6.4	4.6	5.7	4.7	3.4	2.6	2.0	3.4	3.0	4.1	6.1	5.1
1972	6.5	5.4	4.7	4.1	3.5	3.2	3.1	2.3	2.1	3.7	6.0	6.3
1973	6.7	6.1	6.1	4.7	3.6	4.2	2.5	2.5	3.5	3.7	5.6	6.8
1974	7.2	5.8	6.4	5.7	3.9	3.2	2.8	2.0	3.2	4.9	6.0	6.3
1975	5.2	5.6	5.6	3.0	3.8	2.5	2.0	2.2	1.5	4.0	5.6	5.6

20 YR. STATISTICS FOR PACIFIC STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.16 LARGEST HS(M) = 0.24 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	47	.	.	.	.	.	.	.	.	65
0.50 - 0.99	371	485	.	.	.	.	.	.	.	.	856
1.00 - 1.49	1632	2731	53	.	.	.	.	.	.	.	4416
1.50 - 1.99	321	1632	83	.	.	.	.	.	.	.	2036
2.00 - 2.49	.	97	8	.	.	.	.	.	.	.	105
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2342	4993	144	0	0	0	0	0	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.77 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 4375

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	27	17	3	3	10	.	1	.	.	61
0.50 - 0.99	22	696	1481	232	111	25	35	.	.	.	2602
1.00 - 1.49	111	1656	6232	2749	1540	374	59	.	.	.	12721
1.50 - 1.99	85	639	3394	5542	4305	1274	143	11	.	.	15393
2.00 - 2.49	11	405	564	1784	4900	2891	296	1	.	.	10852
2.50 - 2.99	.	118	149	385	2221	4286	670	1	.	.	7830
3.00 - 3.49	.	5	133	147	722	3136	1120	6	.	.	5269
3.50 - 3.99	.	1	27	46	220	1827	1350	5	.	.	3476
4.00 - 4.49	.	.	3	23	54	812	1408	.	.	.	2300
4.50 - 4.99	.	.	1	.	3	246	828	.	.	.	1078
5.00 +	.	.	.	.	1	82	566	.	.	.	649
TOTAL	229	3547	12101	10911	14080	14963	6475	25	0	0	

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 36447

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	51	56	32	10	3	.	3	1	.	162
1.00 - 1.49	3	184	369	429	301	92	34	5	1	.	1418
1.50 - 1.99	.	82	497	778	766	400	135	17	1	.	2666
2.00 - 2.49	3	135	270	520	985	1291	491	66	10	.	3771
2.50 - 2.99	.	143	239	272	971	1772	1047	99	8	.	4551
3.00 - 3.49	.	51	244	234	578	1663	1216	265	37	.	4288
3.50 - 3.99	.	1	186	162	527	1279	1469	254	13	.	3891
4.00 - 4.49	.	.	104	150	284	793	1184	309	6	.	2830
4.50 - 4.99	.	.	8	65	138	443	1120	302	.	.	2076
5.00 +	.	.	.	15	112	328	1365	1173	.	.	2993
TOTAL	12	647	1963	2657	4672	8064	8061	2493	77	0	

MEAN HS(M) = 3.32 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.6 NUMBER OF CASES = 16763

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	13	6	.	.	.	.	.	.	.	24
1.50 - 1.99	10	39	32	3	.	.	.	.	.	.	84
2.00 - 2.49	1	95	85	15	3	.	.	.	.	.	199
2.50 - 2.99	.	80	121	27	29	.	.	.	.	.	257
3.00 - 3.49	.	18	142	58	34	1	.	.	.	.	253
3.50 - 3.99	.	1	100	71	68	13	.	.	.	.	253
4.00 - 4.49	.	.	27	27	97	20	1	.	.	.	172
4.50 - 4.99	.	.	1	32	58	23	.	.	.	.	114
5.00 +	.	.	.	5	27	44	3	.	.	.	79
TOTAL	16	247	514	238	316	101	4	0	0	0	

MEAN HS(M) = 3.35 LARGEST HS(M) = 6.16 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 851

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.95 LARGEST HS(M) = 0.95 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

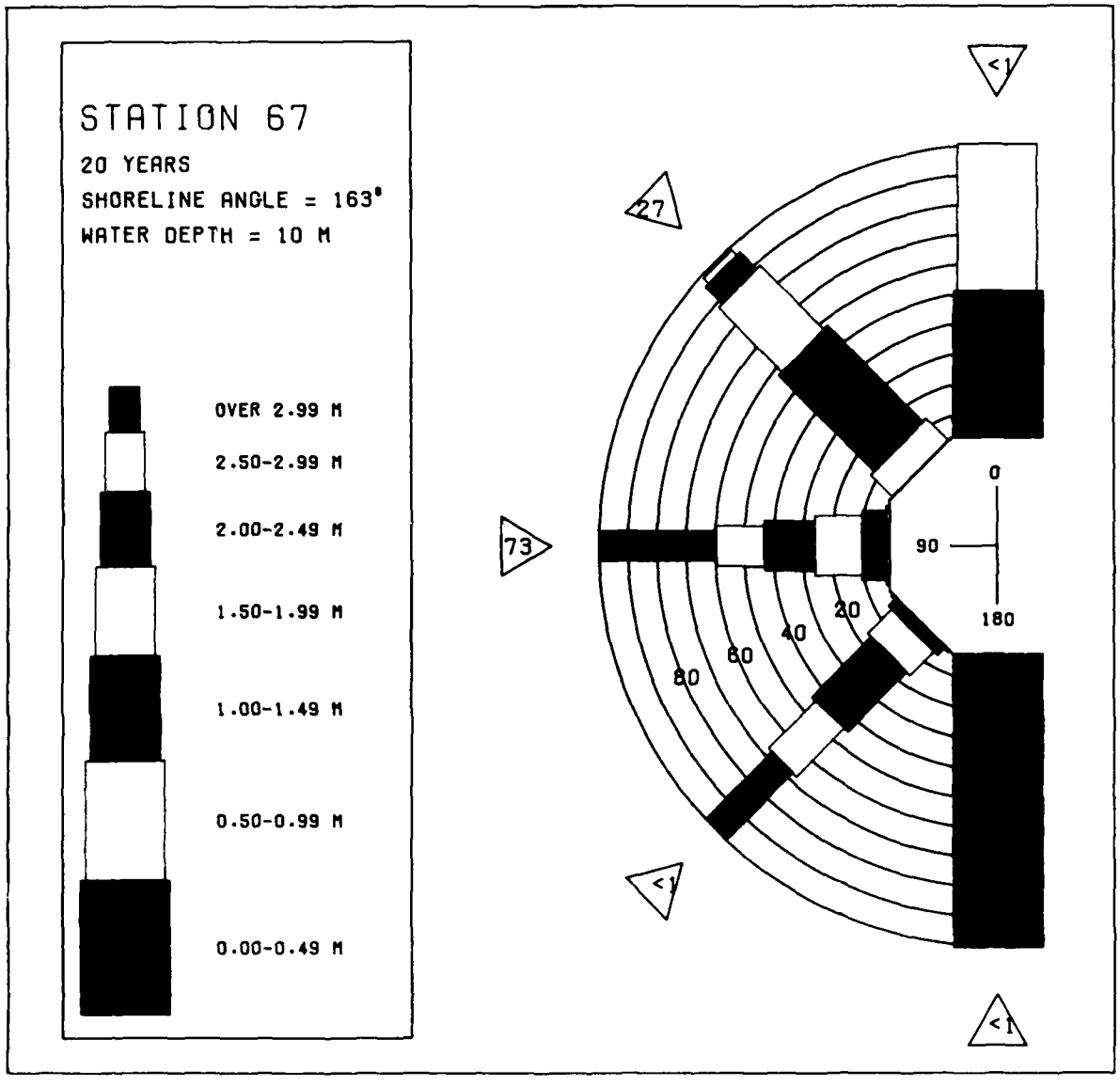
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	0	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 67 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2	7	1	.	1	.	.	.	.	.	11
0.50 - 0.99	40	123	153	26	12	2	3	.	.	.	359
1.00 - 1.49	175	458	666	317	184	46	9	.	.	.	1855
1.50 - 1.99	41	239	399	632	507	167	27	2	.	.	2014
2.00 - 2.49	1	73	92	232	588	418	78	5	1	.	1489
2.50 - 2.99	.	34	61	68	322	605	171	10	.	.	1271
3.00 - 3.49	.	7	52	43	133	480	233	27	3	.	978
3.50 - 3.99	.	.	31	28	81	312	281	26	1	.	760
4.00 - 4.49	.	.	13	20	43	162	259	30	.	.	527
4.50 - 4.99	.	.	1	9	20	71	194	30	.	.	325
5.00 +	.	.	.	2	14	45	193	117	5	0	371
TOTAL	259	941	1469	1377	1904	2309	1448	248	5	0	

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.5	3.3	2.9	2.3	2.1	1.9	1.4	1.4	1.4	2.0	2.6	3.0	2.3
1957	2.7	3.1	3.0	2.6	2.1	1.5	1.4	1.2	1.8	2.6	3.1	3.9	2.4
1958	4.8	4.1	3.3	3.0	1.9	1.3	1.7	1.5	1.6	2.3	3.0	3.7	2.7
1959	3.4	3.7	2.7	2.7	1.8	1.5	1.5	1.3	1.9	2.6	3.1	3.6	2.5
1960	3.5	4.0	2.3	2.5	1.9	1.4	1.4	1.5	1.3	2.2	3.6	3.8	2.4
1961	4.1	3.5	3.1	2.3	2.0	1.9	1.2	1.1	1.4	2.3	2.9	3.2	2.4
1962	2.8	3.3	2.8	2.2	1.5	1.5	1.3	1.5	1.7	3.0	3.6	4.0	2.4
1963	3.0	4.0	2.9	2.1	1.7	1.8	1.3	1.0	1.8	3.1	3.3	3.7	2.5
1964	4.3	3.1	2.9	2.6	1.7	1.6	1.9	1.5	1.5	2.1	3.2	3.8	2.5
1965	3.4	2.7	2.6	2.5	1.9	1.9	1.4	1.2	1.5	2.6	3.3	4.2	2.4
1966	4.2	3.1	3.2	1.9	2.1	1.6	1.6	1.5	1.7	2.0	2.7	3.9	2.5
1967	3.4	3.1	2.6	2.1	1.3	1.3	1.4	1.2	2.0	2.8	3.5	3.7	2.3
1968	3.4	3.8	3.2	2.1	1.5	1.4	1.4	1.4	1.3	2.5	3.4	3.3	2.4
1969	2.8	4.4	3.5	2.9	2.1	1.7	1.4	1.3	1.5	2.7	3.3	5.2	2.7
1970	3.6	4.5	3.5	2.8	1.8	1.5	1.6	1.4	1.4	2.3	3.1	4.0	2.6
1971	3.2	3.0	3.2	2.8	1.9	1.8	1.1	1.5	1.7	2.1	3.3	3.2	2.4
1972	3.9	3.4	3.3	2.8	2.0	2.0	1.8	1.4	1.4	2.1	4.2	3.6	2.6
1973	4.3	4.0	3.8	2.9	2.2	1.9	1.8	1.7	2.0	2.2	3.3	4.5	2.9
1974	3.9	3.6	3.7	2.9	2.4	1.9	1.5	1.4	1.5	2.2	3.5	4.1	2.7
1975	3.2	3.3	3.0	2.1	1.9	1.4	1.5	1.2	0.8	2.4	3.0	3.0	2.2
MEAN	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.7	5.6	4.3	4.4	3.0	2.9	2.2	2.1	2.3	3.5	3.9	4.8
1957	4.0	6.5	4.7	4.2	3.5	2.5	2.6	1.9	3.2	4.6	4.4	5.9
1958	6.9	6.1	5.9	6.0	2.9	2.1	3.1	2.9	2.5	4.5	5.9	5.8
1959	5.5	6.0	4.6	5.6	3.2	2.3	2.0	2.4	2.9	5.1	5.9	5.9
1960	6.5	6.5	4.7	3.8	2.9	2.5	2.0	2.3	1.8	3.9	5.9	6.2
1961	6.7	5.4	5.9	4.2	2.8	3.1	1.9	1.5	2.4	4.1	4.8	4.8
1962	4.9	5.2	4.8	4.2	2.2	2.4	2.1	2.3	4.2	5.2	5.8	6.9
1963	5.4	6.2	5.0	3.3	3.1	2.8	1.9	1.5	2.8	6.0	4.8	6.6
1964	7.1	4.7	4.7	4.8	3.4	2.7	2.6	2.0	2.4	3.5	5.9	6.1
1965	4.8	4.5	4.7	3.7	2.8	2.6	2.0	2.1	2.1	5.4	6.2	6.1
1966	6.0	4.5	5.1	4.2	2.9	2.4	2.1	2.2	3.5	3.9	4.7	5.8
1967	5.4	4.3	4.5	3.5	2.5	2.1	1.8	1.6	4.0	6.0	5.8	6.9
1968	5.1	6.0	5.3	4.2	3.1	2.1	2.8	2.3	3.2	4.3	5.4	5.0
1969	4.1	6.3	6.3	5.5	3.8	2.3	1.9	1.8	2.7	4.7	6.6	7.8
1970	7.0	6.3	6.1	5.1	2.6	2.3	2.0	2.0	2.7	4.5	5.3	6.7
1971	6.1	4.7	5.4	4.8	3.1	2.6	1.8	3.1	3.0	3.7	6.1	5.0
1972	5.6	5.4	5.4	4.3	3.5	2.9	2.9	2.1	2.1	3.3	6.0	6.5
1973	6.7	6.1	6.1	4.5	3.4	4.1	2.2	2.3	3.5	3.8	5.3	7.2
1974	7.0	5.5	6.7	4.8	3.7	2.9	2.4	1.9	3.2	4.9	5.5	6.1
1975	4.9	5.2	5.6	2.9	3.8	2.3	1.9	1.9	1.4	3.8	5.2	6.3

20 YR. STATISTICS FOR PACIFIC STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	84.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121118

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	5	.	.	.	.	.	.	.	.	10
0.50 - 0.99	23	3	.	.	.	.	.	.	.	.	26
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	28	8	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.68 LARGEST HS(M) = 0.99 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 22

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	15	.	.	.	.	.	.	.	.	15
0.50 - 0.99	112	249	34	1	6	.	.	1	.	.	403
1.00 - 1.49	1589	1757	253	11	.	.	.	.	.	.	3610
1.50 - 1.99	1233	3726	231	23	.	.	.	.	.	.	5212
2.00 - 2.49	54	1625	212	1	1	.	.	.	.	.	1893
2.50 - 2.99	.	274	203	15	.	.	.	.	.	.	491
3.00 - 3.49	.	17	83	10	.	.	.	.	.	.	110
3.50 - 3.99	.	.	30	5	.	.	.	.	.	.	35
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2988	7661	1046	66	7	0	0	1	0	0	

MEAN HS(M) = 1.70 LARGEST HS(M) = 3.92 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6887

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	11	3	.	.	.	.	.	.	.	27
0.50 - 0.99	17	359	882	135	51	22	32	3	1	.	1502
1.00 - 1.49	59	930	4339	1860	1110	254	43	5	1	.	8607
1.50 - 1.99	51	518	4536	5282	3735	1202	203	25	1	.	15553
2.00 - 2.49	13	213	973	3663	5651	3138	523	66	5	.	14245
2.50 - 2.99	.	157	270	913	4524	5355	1392	61	15	.	12687
3.00 - 3.49	.	34	219	280	1972	5684	1954	181	10	.	10334
3.50 - 3.99	.	1	128	107	722	4053	2667	256	32	.	7966
4.00 - 4.49	.	.	32	71	183	2239	2772	258	13	.	5428
4.50 - 4.99	.	.	5	30	66	1006	2508	292	6	.	3913
5.00 +	.	.	.	1	20	325	2763	1432	.	.	4541
TOTAL	140	2220	11395	12345	18034	23143	14863	2579	84	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49584

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	30	20	3	.	.	.	.	.	.	54
1.00 - 1.49	1	82	188	32	17	1	.	.	.	.	321
1.50 - 1.99	1	89	186	97	63	58	1	.	.	.	494
2.00 - 2.49	.	87	169	124	123	23	.	.	.	.	526
2.50 - 2.99	.	53	138	130	135	95	1	.	.	.	552
3.00 - 3.49	.	5	87	85	184	126	23	.	.	.	510
3.50 - 3.99	.	1	35	80	154	95	35	.	.	.	400
4.00 - 4.49	.	.	6	18	47	77	29	.	.	.	177
4.50 - 4.99	.	.	.	5	13	46	23	.	.	.	87
5.00 +	.	.	.	.	18	35	13	.	.	.	66
TOTAL	3	346	829	574	754	556	125	0	0	0	

MEAN HS(M) = 2.73 LARGEST HS(M) = 6.43 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1879

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	71	.	.	.	.	.	.	.	.	100
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	32	72	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.26 LARGEST HS(M) = 0.64 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 62

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

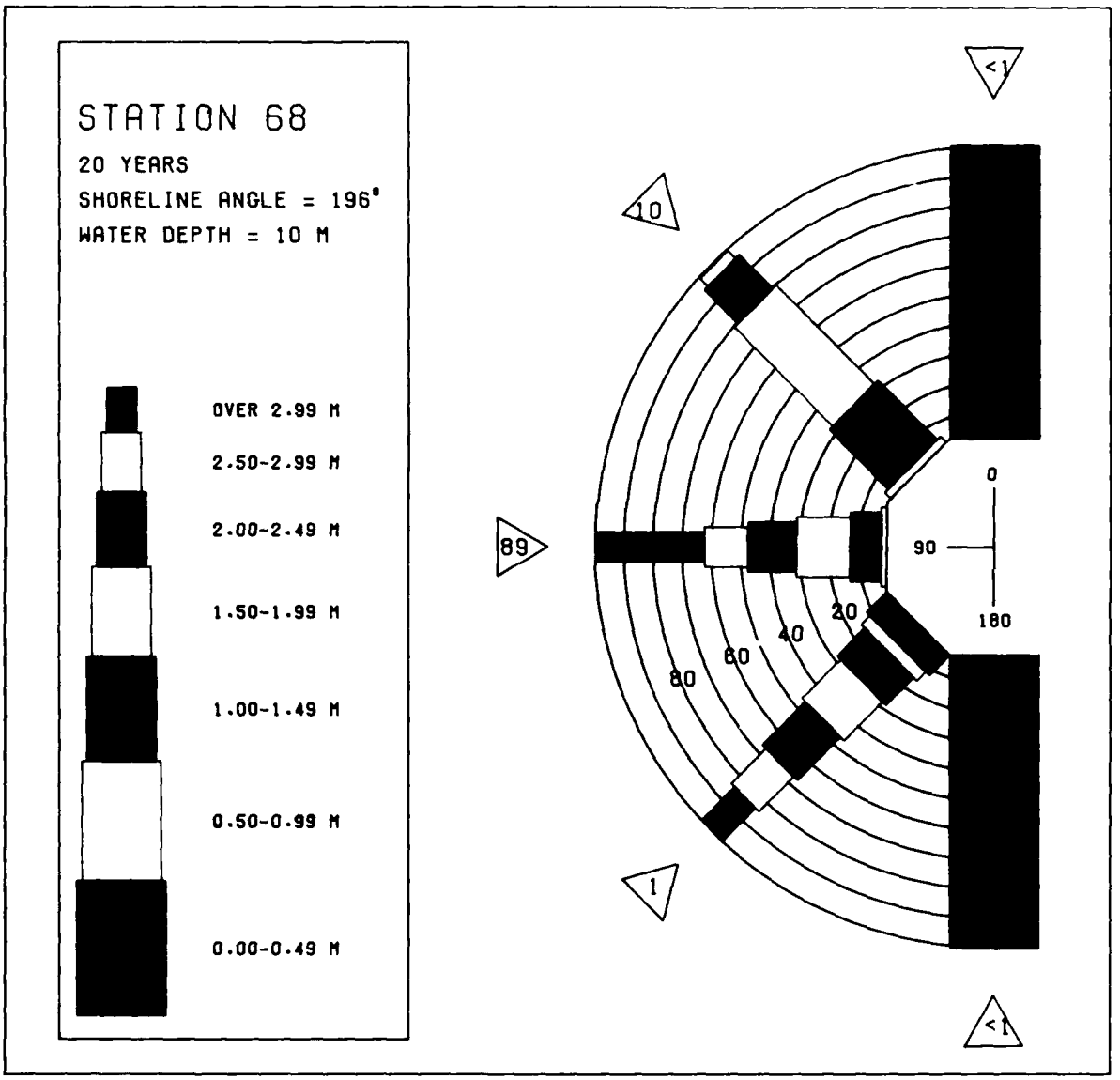
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 68 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	10	1								14
0.50 - 0.99	12	64	93	14	5	2	3	.	.	.	196
1.00 - 1.49	165	277	478	190	112	25	4	.	.	.	1251
1.50 - 1.99	128	433	495	540	379	126	20	2	.	.	2123
2.00 - 2.49	6	192	135	379	577	316	52	6	.	.	1663
2.50 - 2.99	.	48	61	105	465	545	139	6	1	.	1370
3.00 - 3.49	.	5	39	37	215	581	197	18	1	.	1093
3.50 - 3.99	.	.	19	19	87	414	270	25	3	.	837
4.00 - 4.49	.	.	3	9	23	217	280	25	1	.	558
4.50 - 4.99	.	.	.	3	8	105	253	29	.	.	398
5.00 +	.	.	.	.	3	36	277	143	.	.	459
TOTAL	317	1029	1324	1296	1874	2367	1495	254	6	0	

MEAN HS(M) = 2.66 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 68 (40.98N/ 124.11W TO 40.86N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	3.5	3.1	2.5	2.4	2.1	1.6	1.6	1.6	2.1	2.8	3.2	2.5
1957	2.7	3.2	3.1	2.8	2.3	1.6	1.6	1.4	1.8	2.7	3.3	4.1	2.6
1958	4.7	3.8	3.5	3.1	2.1	1.5	1.9	1.7	1.7	2.5	3.3	3.7	2.8
1959	3.3	3.8	2.9	3.0	1.9	1.6	1.8	1.6	2.0	2.8	3.3	3.9	2.7
1960	3.6	4.0	2.4	2.6	2.0	1.7	1.6	1.7	1.5	2.4	3.8	3.9	2.6
1961	4.0	3.5	3.1	2.5	2.2	2.1	1.4	1.2	1.6	2.6	3.1	3.4	2.6
1962	2.9	3.4	3.0	2.4	1.7	1.7	1.6	1.7	1.8	3.2	3.9	3.9	2.6
1963	3.0	3.7	3.2	2.1	1.9	2.1	1.5	1.2	2.0	3.3	3.4	3.6	2.6
1964	4.4	3.3	3.2	3.0	1.9	1.7	2.1	1.7	1.7	2.2	3.4	3.8	2.7
1965	3.5	2.9	2.8	2.7	2.2	2.2	1.7	1.3	1.7	2.7	3.1	4.4	2.6
1966	4.3	3.2	3.4	2.2	2.4	1.7	1.9	1.8	1.9	2.2	2.7	3.9	2.6
1967	3.4	3.3	2.6	2.3	1.5	1.5	1.6	1.3	2.2	3.0	3.8	3.8	2.5
1968	3.2	3.7	3.3	2.4	1.6	1.6	1.6	1.5	1.5	2.7	3.5	3.2	2.5
1969	2.9	4.6	3.6	3.1	2.3	1.9	1.6	1.5	1.7	2.9	3.5	5.2	2.9
1970	3.6	4.7	3.7	3.1	2.1	1.7	1.8	1.6	1.6	2.5	3.2	4.2	2.8
1971	3.2	3.0	3.3	3.1	2.1	2.0	1.3	1.7	1.9	2.3	3.5	3.5	2.6
1972	4.2	3.5	3.3	3.0	2.3	2.2	2.0	1.6	1.6	2.3	4.4	3.5	2.8
1973	4.2	4.2	4.1	3.2	2.5	2.2	2.0	2.0	2.2	2.4	3.3	4.5	3.1
1974	3.7	3.8	3.9	3.1	2.7	2.2	1.7	1.6	1.7	2.4	3.7	4.3	2.9
1975	3.4	3.3	3.2	2.3	2.1	1.6	1.7	1.4	0.9	2.5	3.2	3.0	2.4
MEAN	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.6	1.7	2.6	3.4	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 68 (40.98N/ 124.11W TO 40.86N/ 124.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.4	4.7	5.0	3.4	3.2	2.5	2.4	2.6	4.0	4.0	4.9
1957	4.6	6.1	4.9	4.6	3.7	2.9	3.1	2.0	3.3	5.2	4.9	6.0
1958	6.7	6.0	6.1	6.1	3.3	2.3	3.5	3.3	2.8	4.7	6.1	5.6
1959	5.6	6.1	4.7	6.3	3.3	2.5	2.3	2.3	2.2	5.4	6.3	6.3
1960	6.0	6.1	4.6	4.1	3.5	2.7	2.3	2.5	2.0	6.0	6.0	6.1
1961	6.5	5.4	6.1	4.6	3.1	3.5	2.2	1.7	2.7	4.7	5.4	5.5
1962	5.5	4.9	5.1	4.6	2.6	2.7	2.4	2.5	4.6	5.8	6.0	6.1
1963	4.9	5.6	5.5	3.8	3.3	3.2	2.3	2.0	3.0	6.2	5.3	6.4
1964	7.2	5.2	5.2	5.4	3.9	2.8	3.2	2.2	2.7	3.9	6.3	6.1
1965	4.9	5.0	5.2	4.1	3.5	3.1	2.3	2.4	2.4	5.8	6.0	6.3
1966	6.1	4.7	5.4	4.4	3.2	2.5	2.4	2.4	3.9	4.0	5.2	6.1
1967	5.2	4.8	5.1	4.0	2.8	2.4	2.1	1.9	4.5	6.0	6.2	6.6
1968	4.9	5.5	5.8	4.8	2.4	2.1	3.1	2.4	3.5	4.8	5.6	5.0
1969	4.3	6.5	6.5	6.0	4.1	2.5	2.1	2.0	2.9	5.3	6.7	7.7
1970	6.4	6.2	6.2	5.7	3.0	2.7	2.3	2.2	3.0	4.6	5.7	6.8
1971	6.0	4.8	5.4	5.4	3.4	2.7	2.3	3.6	3.4	4.3	6.2	5.5
1972	6.3	6.0	5.4	4.7	4.0	3.4	3.1	2.4	2.4	3.8	6.3	6.4
1973	6.4	6.0	6.4	5.0	3.8	4.5	2.7	2.7	3.7	3.9	5.7	6.5
1974	6.1	6.0	6.5	5.3	4.1	3.4	2.9	2.2	3.6	5.4	6.1	6.1
1975	5.5	5.8	5.9	3.2	4.2	2.9	2.3	2.4	1.6	4.3	5.9	6.2

20 YR. STATISTICS FOR PACIFIC STATION 68 (40.98N/ 124.11W TO 40.86N/ 124.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	18	3	.	.	.	.	.	.	.	.	21
1.00 - 1.49	157	27	.	.	.	.	.	.	.	.	184
1.50 - 1.99	15	18	.	.	.	.	.	.	.	.	33
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	190	49	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.05 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 142

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	53	83	6	.	.	.	.	.	.	.	142
1.00 - 1.49	1115	900	37	.	.	.	.	.	.	.	2052
1.50 - 1.99	2416	3437	70	1	.	.	.	.	.	.	5924
2.00 - 2.49	172	3360	114	.	.	.	.	.	.	.	3646
2.50 - 2.99	.	771	253	3	.	.	.	.	.	.	1027
3.00 - 3.49	.	87	150	8	.	.	.	.	.	.	245
3.50 - 3.99	.	3	56	10	.	.	.	.	.	.	69
4.00 - 4.49	.	.	6	.	.	.	.	.	.	.	6
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3756	8649	692	22	0	0	0	0	0	0	

MEAN HS(M) = 1.92 LARGEST HS(M) = 4.15 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 7674

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	10	3	.	5	.	.	.	.	.	33
0.50 - 0.99	22	347	807	124	54	22	32	5	1	.	1414
1.00 - 1.49	104	954	3795	1704	1013	239	51	3	1	.	7864
1.50 - 1.99	102	631	3949	4339	3412	1149	174	23	1	.	13780
2.00 - 2.49	35	313	1088	3583	5154	3004	574	71	5	.	13827
2.50 - 2.99	.	189	256	937	4421	5047	1338	53	15	.	12256
3.00 - 3.49	.	23	215	282	2126	5592	1666	188	10	.	10402
3.50 - 3.99	.	1	114	92	610	4017	2604	260	32	.	7730
4.00 - 4.49	.	.	22	65	157	2087	2748	261	13	.	5353
4.50 - 4.99	.	.	1	18	29	949	2429	284	6	.	3716
5.00 +	.	.	.	.	1	296	2703	1433	.	.	4433
TOTAL	263	2473	10257	11147	16977	22407	14619	2581	84	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.62 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47248

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	1	44	30	1	.	.	.	.	.	.	76
1.00 - 1.49	3	106	241	53	20	20	.	.	.	.	443
1.50 - 1.99	.	75	260	191	116	41	.	.	.	.	683
2.00 - 2.49	3	114	304	220	304	118	3	.	.	.	1066
2.50 - 2.99	.	73	205	213	272	234	32	.	.	.	1029
3.00 - 3.49	.	15	135	100	331	297	71	.	.	.	949
3.50 - 3.99	.	1	56	82	260	217	63	.	.	.	679
4.00 - 4.49	.	.	15	23	92	131	75	.	.	.	336
4.50 - 4.99	.	.	.	8	39	83	68	.	.	.	198
5.00 +	.	.	.	1	27	53	61	3	.	.	145
TOTAL	7	428	1246	892	1461	1194	373	3	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.37 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3290

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	15	.	.	.	.	.	.	.	.	32
0.50 - 0.99	5	47	.	.	.	.	.	.	.	.	52
1.00 - 1.49	.	8	15	.	.	.	.	.	.	.	23
1.50 - 1.99	3	11	5	.	.	.	.	.	.	.	19
2.00 - 2.49	.	3	6	.	.	.	.	.	.	.	9
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	25	84	26	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 2.24 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 82

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

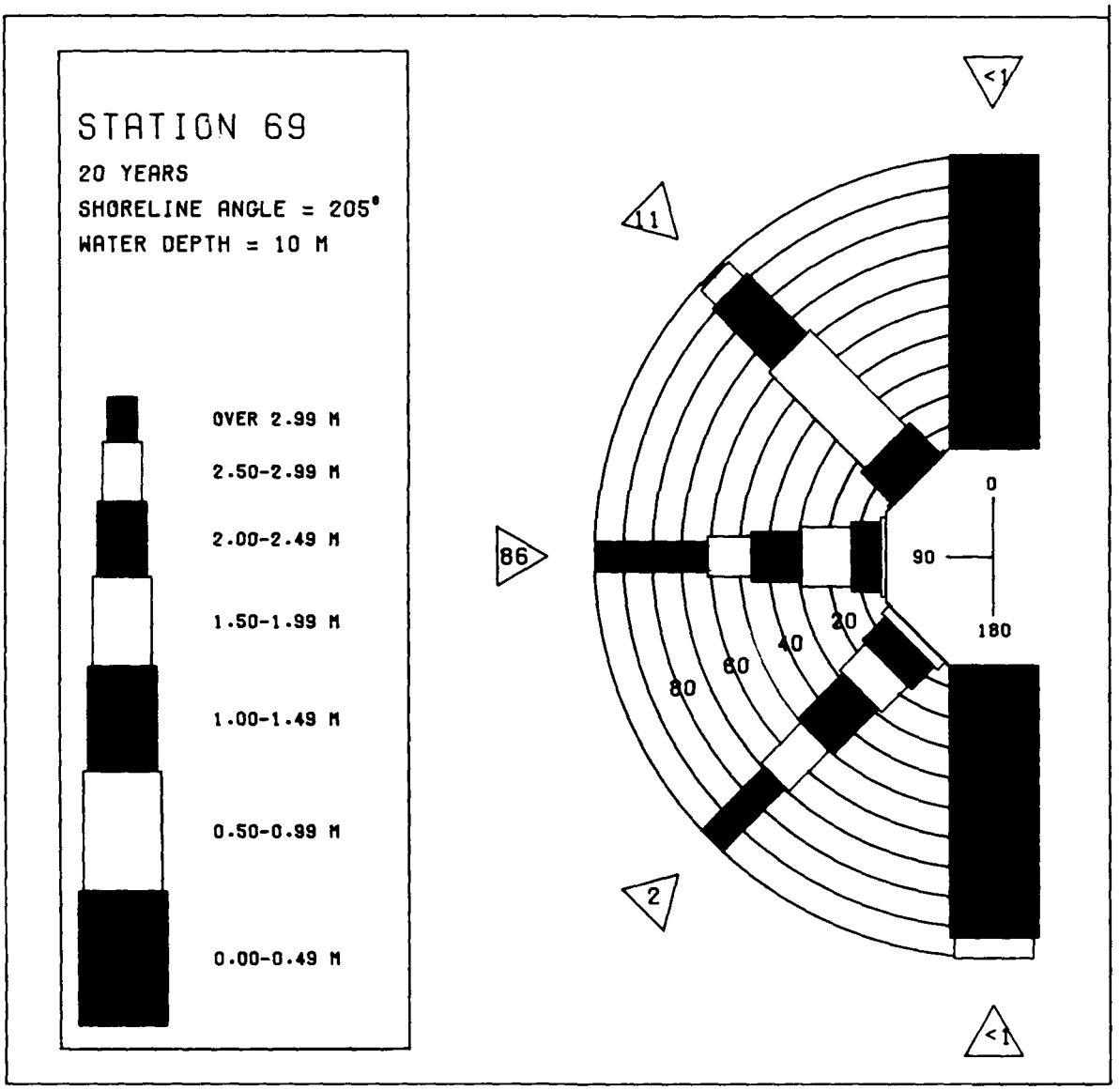
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 69 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.66N/124.16W LAT. LON. END= 40.75N/124.25W
SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49		3	1								5
0.50 - 0.99	10	52	84	12	5	2	3				168
1.00 - 1.49	136	199	408	175	103	26	5				1054
1.50 - 1.99	253	417	428	453	352	119	17	2			2041
2.00 - 2.49	21	379	151	380	545	312	57	7			1852
2.50 - 2.99		103	71	115	469	528	137	5	1		1429
3.00 - 3.49		12	50	39	245	588	203	18	1		1156
3.50 - 3.99			22	18	87	423	266	26	3		845
4.00 - 4.49			4	8	24	221	282	26	1		566
4.50 - 4.99				2	6	103	249	28			388
5.00 +					2	34	276	143			455
TOTAL	423	1165	1219	1202	1838	2356	1495	255	6	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.62 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 69 (40.86N/ 124.16W TO 40.75N/ 124.25W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	3.5	3.2	2.5	2.4	2.2	1.7	1.7	1.6	2.2	2.8	3.1	2.5
1957	2.7	3.2	3.1	2.9	2.3	1.7	1.7	1.5	1.9	2.7	3.3	4.1	2.6
1958	4.7	3.8	3.5	3.2	2.2	1.5	2.0	1.7	1.8	2.5	3.3	3.7	2.8
1959	3.3	3.8	2.9	3.1	2.0	1.7	1.9	1.7	2.1	2.8	3.3	3.9	2.7
1960	3.6	4.0	2.4	2.6	2.0	1.8	1.7	1.8	1.5	2.4	3.6	3.9	2.6
1961	4.0	3.5	3.1	2.6	2.2	2.1	1.5	1.3	1.7	2.6	3.2	3.4	2.6
1962	2.9	3.4	3.0	2.4	1.7	1.7	1.8	1.7	1.9	3.2	3.9	3.8	2.6
1963	3.0	3.6	3.2	2.2	1.9	2.2	1.7	1.3	2.0	3.3	3.4	3.6	2.6
1964	4.4	3.3	3.2	3.1	2.0	1.8	2.2	1.7	1.8	2.2	3.4	3.8	2.7
1965	3.5	3.0	2.8	2.7	2.3	2.3	1.8	1.4	1.8	2.7	3.2	4.4	2.7
1966	4.3	3.2	3.4	2.2	2.5	1.8	2.0	1.9	1.9	2.2	2.8	3.8	2.7
1967	3.4	3.3	2.7	2.4	1.9	1.6	1.8	1.4	2.2	3.0	3.9	3.8	2.6
1968	3.2	3.6	3.3	2.4	1.7	1.7	1.8	1.6	1.5	2.7	3.5	3.3	2.5
1969	2.9	4.6	3.6	3.1	2.3	1.9	1.8	1.7	1.8	2.9	3.5	5.2	2.9
1970	3.6	4.7	3.7	3.1	2.1	1.8	1.9	1.7	1.7	2.5	3.2	4.2	2.9
1971	3.2	3.0	3.3	3.1	2.2	2.0	1.5	1.7	1.9	2.4	3.6	3.5	2.6
1972	4.2	3.5	3.3	3.1	2.4	2.3	2.1	1.7	1.7	2.3	4.4	3.5	2.9
1973	4.2	4.2	4.2	3.3	2.5	2.3	2.2	2.1	2.2	2.5	3.4	4.5	3.1
1974	3.6	3.8	3.9	3.2	2.8	2.4	1.8	1.7	1.7	2.4	3.7	4.3	2.9
1975	3.4	3.4	3.2	2.3	2.2	1.8	1.7	1.5	1.0	2.5	3.2	3.0	2.4
MEAN	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.4	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 69 (40.86N/ 124.16W TO 40.75N/ 124.25W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.8	5.5	4.7	5.1	3.4	3.2	2.6	2.6	2.6	4.1	4.0	4.9
1957	4.6	6.0	4.9	4.6	3.6	3.0	3.4	2.1	3.4	5.3	5.0	5.9
1958	6.6	6.0	6.2	6.1	3.4	2.4	3.6	3.3	2.8	4.7	6.1	5.4
1959	5.6	6.1	4.9	6.3	3.2	2.5	2.5	2.8	3.2	5.5	6.3	6.3
1960	6.0	6.1	4.6	4.1	3.4	2.8	2.4	2.5	2.3	6.0	6.0	6.1
1961	6.5	5.3	6.0	4.6	3.1	3.5	2.3	1.8	2.7	4.8	5.4	5.6
1962	5.5	4.9	5.2	4.6	2.7	2.8	2.8	2.6	4.7	5.9	6.1	6.0
1963	4.9	5.3	5.5	3.8	3.3	3.4	2.6	2.3	3.0	6.3	5.4	6.3
1964	7.1	5.2	5.2	5.4	3.9	2.8	2.3	2.5	2.9	4.0	6.3	6.1
1965	4.9	5.1	5.2	4.2	3.7	3.3	2.6	2.5	2.5	5.8	6.0	6.3
1966	6.1	4.8	5.5	4.3	3.6	2.6	2.5	2.6	3.9	4.0	5.3	6.1
1967	5.1	4.9	5.2	4.0	2.9	2.6	2.3	2.1	4.6	6.0	6.2	6.6
1968	4.8	5.4	5.8	4.8	2.5	2.3	3.2	2.4	3.6	4.8	5.6	5.0
1969	4.3	6.5	6.5	6.0	4.1	2.8	2.3	2.2	2.9	5.3	6.7	7.6
1970	6.2	6.2	6.2	5.8	3.1	2.8	2.4	2.3	3.0	4.6	5.7	6.8
1971	6.0	4.7	5.5	5.4	3.5	2.8	2.5	3.7	3.5	4.3	6.2	5.5
1972	6.4	6.0	5.2	4.7	4.0	3.5	3.2	2.4	2.4	4.0	6.3	6.4
1973	6.4	6.1	6.4	5.0	3.9	4.5	3.1	2.9	3.6	3.9	5.8	6.5
1974	6.1	6.0	6.5	5.3	4.1	3.5	3.2	2.4	3.7	5.5	6.1	6.1
1975	5.6	5.8	5.9	3.3	4.2	3.2	2.6	2.7	1.8	4.3	5.9	6.0

20 YR. STATISTICS FOR PACIFIC STATION 69 (40.86N/ 124.16W TO 40.75N/ 124.25W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	93.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	6	1	.	.	.	.	.	.	.	.	7
1.00 - 1.49	258	30	.	.	.	.	.	.	.	.	288
1.50 - 1.99	138	140	.	.	.	.	.	.	.	.	278
2.00 - 2.49	1	56	.	.	.	.	.	.	.	.	57
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	403	232	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.57 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 374

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	54	75	6	.	.	.	.	.	.	.	135
1.00 - 1.49	893	744	25	.	.	.	.	.	.	.	1662
1.50 - 1.99	2633	3112	65	.	.	.	.	.	.	.	5810
2.00 - 2.49	237	3680	94	.	.	.	.	.	.	.	4011
2.50 - 2.99	.	924	243	1	.	.	.	.	.	.	1173
3.00 - 3.49	.	118	167	6	.	.	.	.	.	.	291
3.50 - 3.99	.	8	66	11	.	.	.	.	.	.	85
4.00 - 4.49	.	.	10	.	.	.	.	.	.	.	10
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3817	8669	681	18	0	0	0	0	0	0	

MEAN HS(M) = 1.97 LARGEST HS(M) = 4.18 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 7712

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	10	3	.	.	.	.	.	.	.	33
0.50 - 0.99	22	347	807	145	54	22	32	6	1	.	1413
1.00 - 1.49	111	954	3672	1573	999	239	51	3	1	.	7703
1.50 - 1.99	106	651	3759	4154	3359	1139	176	23	1	.	13368
2.00 - 2.49	35	331	1146	3511	5097	2992	578	71	5	.	13766
2.50 - 2.99	.	203	260	971	4358	5039	1334	53	15	.	12233
3.00 - 3.49	.	22	213	282	2178	5576	1971	184	10	.	10436
3.50 - 3.99	.	1	112	92	595	4021	2618	266	37	.	7739
4.00 - 4.49	.	.	22	63	150	2073	2754	260	11	.	5333
4.50 - 4.99	.	.	1	18	27	932	2416	285	6	.	3685
5.00 +	.	.	.	.	1	284	2677	1430	.	.	4392
TOTAL	274	2524	10002	10890	16818	22322	14607	2580	84	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.59 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 46835

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	46	32	1	.	.	.	.	.	.	80
1.00 - 1.49	3	109	254	70	37	22	.	.	.	.	495
1.50 - 1.99	.	77	282	198	131	44	.	.	.	.	732
2.00 - 2.49	3	111	309	246	311	124	3	.	.	.	1107
2.50 - 2.99	.	77	195	215	280	258	37	.	.	.	1062
3.00 - 3.49	.	15	142	100	352	319	70	.	.	.	998
3.50 - 3.99	.	1	53	77	249	225	82	.	.	.	687
4.00 - 4.49	.	.	13	23	94	133	73	.	.	.	336
4.50 - 4.99	.	.	.	8	41	88	66	.	.	.	203
5.00 +	.	.	.	1	22	53	63	3	.	.	142
TOTAL	7	436	1280	939	1517	1266	394	3	0	0	

MEAN HS(M) = 2.80 LARGEST HS(M) = 6.32 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 3429

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	23	.	.	.	.	.	.	.	.	40
0.50 - 0.99	3	42	1	.	.	.	.	.	.	.	46
1.00 - 1.49	.	8	15	.	.	.	.	.	.	.	23
1.50 - 1.99	3	11	6	.	.	.	.	.	.	.	20
2.00 - 2.49	.	1	8	.	.	.	.	.	.	.	9
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	23	85	30	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 2.32 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 85

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

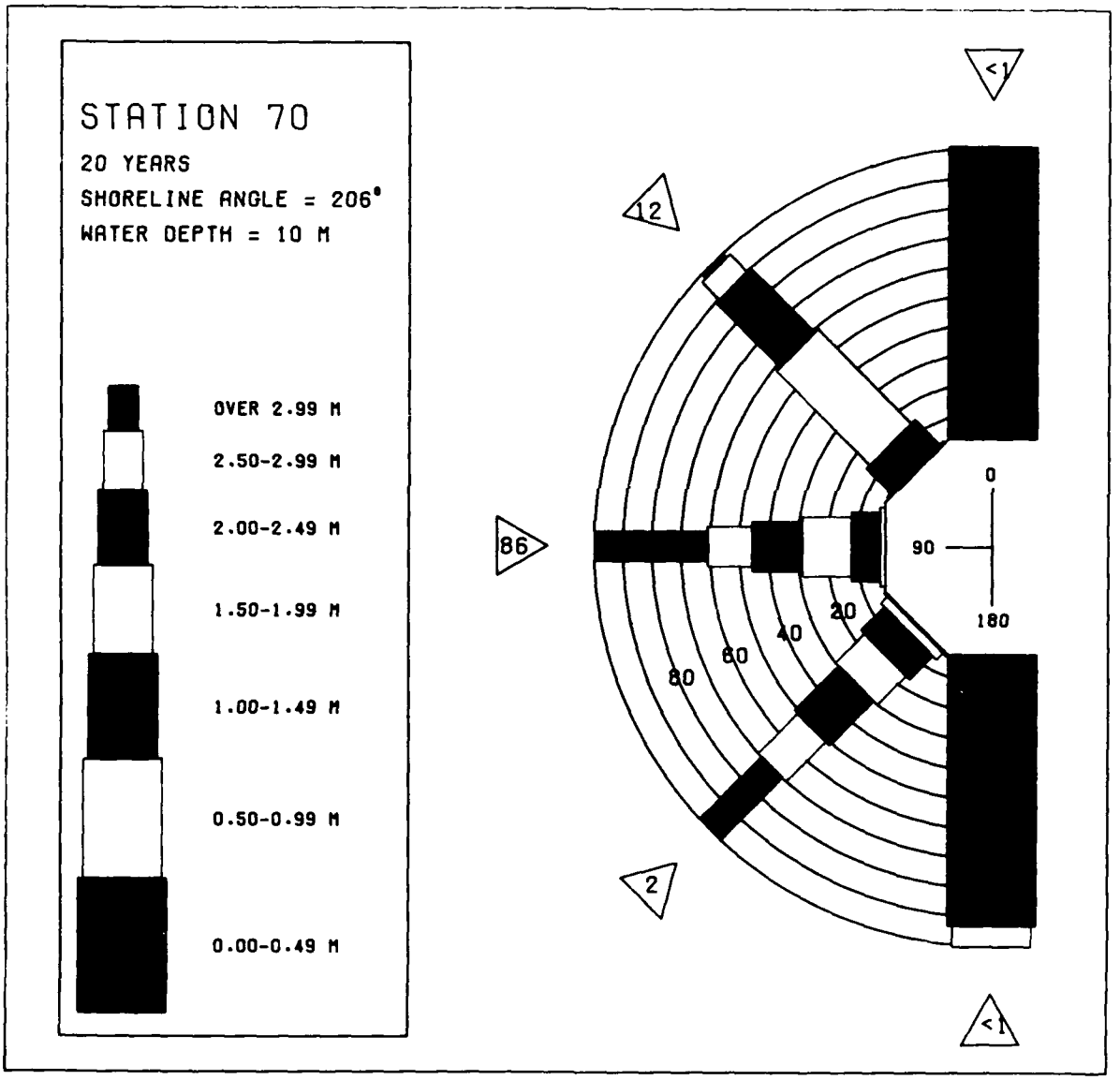
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.61 LARGEST HS(M) = 0.61 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 70 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.75N/124.25W LAT. LON. END= 40.65N/124.31W
SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	4	1	.	.	.	.	.	.	.	6
0.50 - 0.99	9	51	84	12	5	2	3	.	.	.	166
1.00 - 1.49	126	184	396	174	103	26	5	.	.	.	1014
1.50 - 1.99	288	399	411	435	349	118	17	2	.	.	2019
2.00 - 2.49	27	418	155	375	540	311	58	7	.	.	1891
2.50 - 2.99	.	120	70	118	463	529	137	5	1	.	1443
3.00 - 3.49	.	15	52	39	253	569	204	18	1	.	1171
3.50 - 3.99	.	1	23	18	84	424	270	26	3	.	849
4.00 - 4.49	.	.	4	8	24	220	282	26	1	.	565
4.50 - 4.99	.	.	.	2	6	102	246	28	.	.	386
5.00 +	.	.	.	.	2	33	274	143	.	.	452
TOTAL	451	1192	1196	1181	1829	2354	1498	255	6	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.59 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 70 (40.75N/ 124.25W TO 40.65N/ 124.31W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	3.5	3.2	2.5	2.4	2.2	1.8	1.7	1.6	2.2	2.8	3.1	2.5
1957	2.7	3.2	3.1	2.9	2.3	1.7	1.7	1.5	1.9	2.7	3.3	4.1	2.6
1958	4.6	3.8	3.5	3.2	2.2	1.5	2.0	1.7	1.8	2.5	3.3	3.6	2.8
1959	3.3	3.8	2.9	3.1	2.0	1.7	1.9	1.7	2.1	2.8	3.3	3.9	2.7
1960	3.6	4.0	2.4	2.6	2.0	1.8	1.7	1.8	1.5	2.4	3.8	3.9	2.6
1961	3.9	3.5	3.1	2.6	2.2	2.2	1.6	1.3	1.7	2.6	3.2	3.4	2.6
1962	2.9	3.4	3.0	2.4	1.8	1.8	1.8	1.7	1.9	3.2	3.9	3.8	2.6
1963	3.0	3.6	3.2	2.2	1.9	2.2	1.7	1.4	2.0	3.3	3.4	3.6	2.6
1964	4.4	3.3	3.2	3.1	2.0	1.8	2.2	1.8	1.8	2.2	3.4	3.8	2.7
1965	3.5	3.0	2.8	2.7	2.4	2.3	1.8	1.4	1.8	2.7	3.2	4.4	2.7
1966	4.3	3.2	3.4	2.3	2.5	1.8	2.0	1.9	1.9	2.2	2.7	3.8	2.7
1967	3.4	3.3	2.7	2.4	1.6	1.6	1.8	1.4	2.2	3.0	3.9	3.8	2.6
1968	3.2	3.6	3.3	2.4	1.7	1.7	1.8	1.6	1.5	2.7	3.5	3.3	2.5
1969	4.9	4.6	3.6	3.1	2.3	1.9	1.8	1.7	1.8	2.9	3.5	5.2	2.9
1970	3.6	4.7	3.7	3.1	2.2	1.8	1.9	1.7	1.7	2.6	3.2	4.2	2.9
1971	3.2	3.0	3.3	3.1	2.3	2.0	1.5	1.7	2.0	2.4	3.6	3.5	2.6
1972	4.2	3.5	3.3	3.1	2.4	2.4	2.1	1.7	1.7	2.4	4.4	3.5	2.9
1973	4.2	4.2	4.2	3.3	2.5	2.3	2.2	2.2	2.2	2.5	3.4	4.5	3.1
1974	3.6	3.8	3.9	3.2	2.8	2.4	1.8	1.7	1.8	2.5	3.7	4.3	3.0
1975	3.4	3.3	3.2	2.3	2.2	1.8	1.8	1.5	1.0	2.5	3.2	3.0	2.4
MEAN	3.6	3.6	3.2	2.8	2.2	1.9	1.8	1.7	1.8	2.6	3.4	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 70 (40.75N/ 124.25W TO 40.65N/ 124.31W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.8	5.4	4.7	5.0	3.4	3.2	2.6	2.6	2.6	4.1	4.0	4.8
1957	4.6	6.0	4.9	4.6	3.6	3.0	3.4	2.2	3.5	5.3	5.0	5.9
1958	6.6	6.0	6.2	6.1	3.4	2.4	3.6	3.3	2.8	4.7	6.1	5.4
1959	5.6	6.1	4.9	6.3	3.2	2.5	2.6	2.8	3.3	5.5	6.3	6.3
1960	6.0	6.1	4.6	4.1	3.4	2.8	2.5	2.5	2.4	6.0	6.0	6.1
1961	6.5	5.3	6.0	4.6	3.1	3.5	2.4	1.9	2.8	4.8	5.4	5.6
1962	5.5	4.9	5.2	4.6	2.8	2.8	2.9	2.6	4.7	5.9	6.1	6.0
1963	4.9	5.3	5.5	3.8	3.3	3.4	2.6	2.4	3.0	6.3	5.3	6.3
1964	7.1	5.2	5.2	5.5	3.9	2.8	3.3	2.6	2.9	4.0	6.3	6.1
1965	4.9	5.1	5.2	4.2	3.8	3.3	2.6	2.5	2.6	5.8	6.0	6.3
1966	6.1	4.8	5.5	4.3	3.2	2.6	2.5	2.6	3.9	4.0	5.3	6.1
1967	5.0	4.9	5.3	4.0	2.9	2.7	2.4	2.2	4.6	6.0	6.2	6.6
1968	4.8	5.4	5.8	4.8	2.5	2.4	3.2	2.4	3.6	4.8	5.6	5.0
1969	4.3	6.5	6.5	6.0	4.0	2.8	2.4	2.3	2.9	5.3	6.7	7.6
1970	6.2	6.2	6.2	5.8	3.1	2.8	2.4	2.3	3.0	4.6	5.7	6.7
1971	6.0	4.7	5.5	5.4	3.5	2.9	2.5	3.7	3.6	4.3	6.2	5.5
1972	6.4	6.1	5.2	4.7	4.0	3.6	3.3	2.4	2.4	4.0	6.3	6.4
1973	6.4	6.1	6.5	5.0	3.9	4.5	3.2	2.9	3.6	3.9	5.8	6.5
1974	6.1	6.0	6.5	5.4	4.1	3.5	3.3	2.5	3.7	5.5	6.1	6.1
1975	5.6	5.8	5.9	3.3	4.2	3.2	2.6	2.7	1.8	4.3	5.9	5.9

20 YR. STATISTICS FOR PACIFIC STATION 70 (40.75N/ 124.25W TO 40.65N/ 124.31W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	7.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	93.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	20	3	.	.	.	.	.	.	.	.	23
1.00 - 1.49	386	83	.	.	.	.	.	.	.	.	469
1.50 - 1.99	203	239	.	.	.	.	.	.	.	.	442
2.00 - 2.49	.	70	.	.	.	.	.	.	.	.	70
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	609	396	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.54 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 590

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	11	.	.	.	.	.	.	.	.	11
0.50 - 0.99	51	107	11	.	.	.	.	1	.	.	170
1.00 - 1.49	929	958	102	1	.	.	.	.	.	.	1990
1.50 - 1.99	2303	3341	107	3	.	.	.	.	.	.	5754
2.00 - 2.49	184	3300	121	.	.	.	.	.	.	.	3605
2.50 - 2.99	.	747	256	5	.	.	.	.	.	.	1008
3.00 - 3.49	.	78	164	8	.	.	.	.	.	.	250
3.50 - 3.99	.	3	63	10	.	.	.	.	.	.	76
4.00 - 4.49	.	.	1	.	.	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3467	8545	825	27	0	0	0	1	0	0	

MEAN HS(M) = 1.92 LARGEST HS(M) = 4.11 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 7527

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	11	10	3	.	5	.	.	.	.	29
0.50 - 0.99	18	335	817	124	56	22	32	3	1	.	1408
1.00 - 1.49	75	852	3714	1700	997	234	51	3	1	.	7627
1.50 - 1.99	59	564	4959	4390	3427	1153	172	23	1	.	13748
2.00 - 2.49	23	249	1149	3644	5208	2950	544	65	5	.	13837
2.50 - 2.99	.	164	270	1004	4496	5039	1324	54	15	.	12366
3.00 - 3.49	.	27	210	282	2166	5669	1928	177	10	.	10469
3.50 - 3.99	.	1	114	99	675	4058	2590	266	32	.	7835
4.00 - 4.49	.	.	30	68	188	2195	2741	258	13	.	5493
4.50 - 4.99	.	.	5	27	47	997	2498	282	6	.	3862
5.00 +	.	.	.	.	10	345	2787	1447	.	.	4589
TOTAL	175	2203	10278	11341	17270	22667	14667	2578	84	0	

MEAN HS(M) = 2.84 LARGEST HS(M) = 7.74 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47516

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	34	15	.	.	.	.	.	.	.	50
1.00 - 1.49	3	83	203	29	6	15	.	.	.	.	339
1.50 - 1.99	.	75	200	121	77	29	.	.	.	.	502
2.00 - 2.49	1	111	268	174	210	70	1	.	.	.	835
2.50 - 2.99	.	78	203	176	212	171	22	.	.	.	862
3.00 - 3.49	.	15	133	130	284	225	42	.	.	.	829
3.50 - 3.99	.	1	65	94	266	152	46	.	.	.	624
4.00 - 4.49	.	.	10	30	92	107	49	.	.	.	288
4.50 - 4.99	.	.	1	6	41	77	49	.	.	.	174
5.00 +	.	.	.	1	29	54	71	.	.	.	155
TOTAL	5	397	1098	761	1217	900	280	0	0	0	

MEAN HS(M) = 2.91 LARGEST HS(M) = 6.59 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 2736

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	6	.	.	.	.	.	.	.	.	21
0.50 - 0.99	3	46	.	.	.	.	.	.	.	.	49
1.00 - 1.49	1	11	6	.	.	.	.	.	.	.	18
1.50 - 1.99	5	6	8	.	.	.	.	.	.	.	19
2.00 - 2.49	.	5	3	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	74	17	0	0	0	0	0	0	0	

MEAN HS(M) = 0.99 LARGEST HS(M) = 2.43 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 71

PHASE 3 ST. 71 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

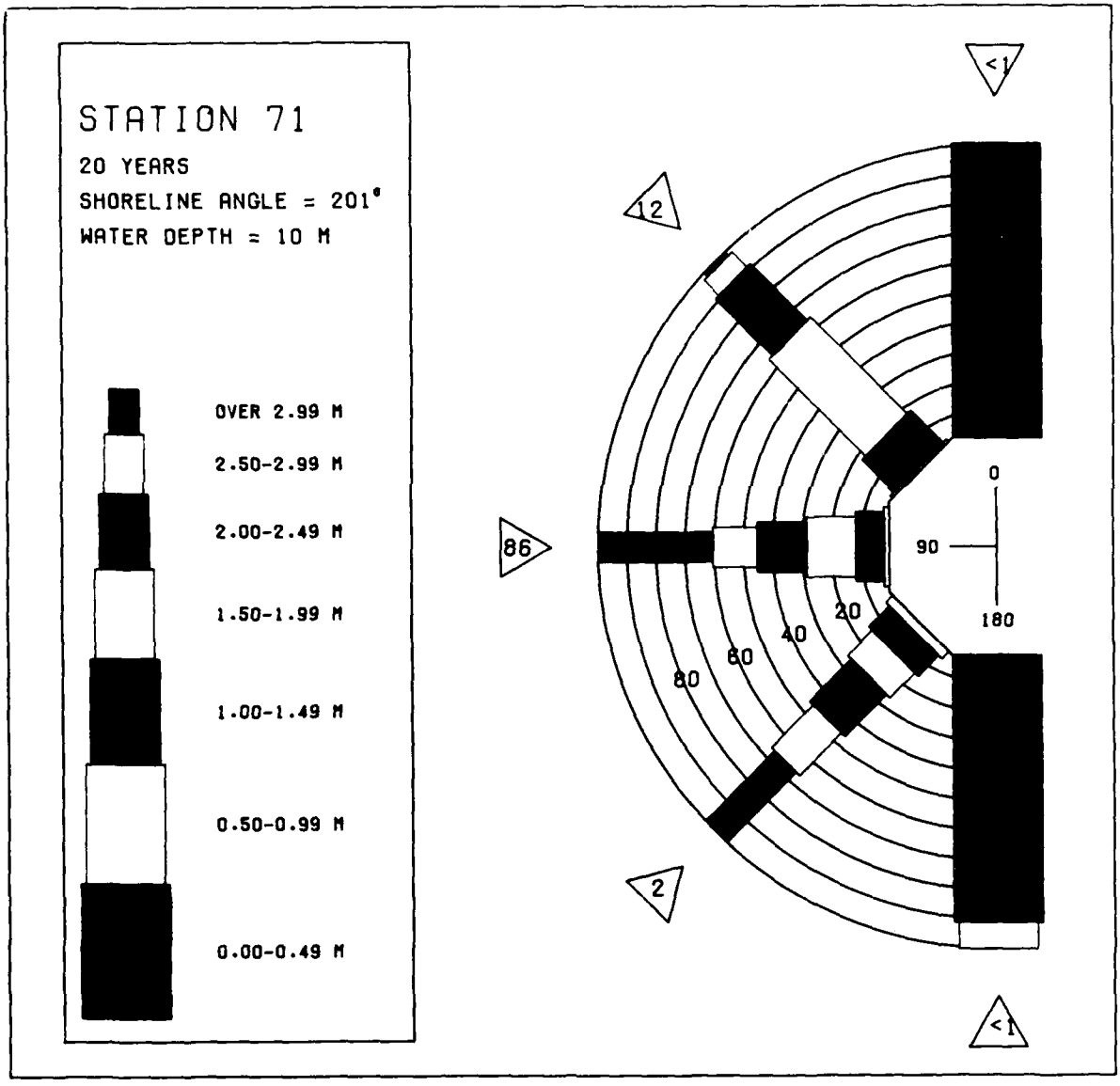
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 71 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	1	.	.	.	.	.	.	.	5
0.50 - 0.99	9	52	84	12	5	2	3	.	.	.	167
1.00 - 1.49	139	199	402	173	103	24	5	.	.	.	1042
1.50 - 1.99	257	422	427	451	350	118	17	2	.	.	2044
2.00 - 2.49	21	373	154	381	541	302	54	6	.	.	1832
2.50 - 2.99	.	99	73	118	470	521	134	5	1	.	1421
3.00 - 3.49	.	12	50	42	245	589	197	17	1	.	1153
3.50 - 3.99	.	.	24	20	94	421	263	26	3	.	851
4.00 - 4.49	.	.	4	9	28	230	279	25	1	.	576
4.50 - 4.99	.	.	.	3	8	107	254	28	.	.	400
5.00 +	.	.	.	.	3	40	285	144	.	.	472
TOTAL	427	1160	1219	1209	1844	2354	1491	253	6	0	

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.74 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.5	3.2	2.5	2.4	2.2	1.7	1.7	1.6	2.2	2.8	3.2	2.5
1957	2.8	3.2	3.1	2.9	2.3	1.7	1.7	1.5	1.9	2.7	3.3	4.1	2.6
1958	4.7	3.9	3.5	3.2	2.2	1.5	2.0	1.7	1.8	2.5	3.3	3.7	2.8
1959	3.3	3.8	2.9	3.1	2.0	1.7	1.9	1.7	2.1	2.8	3.4	3.9	2.7
1960	3.6	4.0	2.4	2.7	2.0	1.8	1.7	1.8	1.5	2.4	3.8	3.9	2.6
1961	4.0	3.5	3.1	2.6	2.2	2.1	1.5	1.3	1.7	2.6	3.2	3.5	2.6
1962	2.9	3.4	3.0	2.4	1.7	1.7	1.8	1.7	1.9	3.2	3.9	3.9	2.6
1963	3.0	3.7	3.2	2.2	1.9	2.2	1.7	1.3	2.0	3.3	3.4	3.7	2.6
1964	4.4	3.3	3.2	3.0	2.0	1.8	2.2	1.7	1.8	2.2	3.4	3.8	2.7
1965	3.5	3.0	2.8	2.7	2.3	2.3	1.8	1.4	1.8	2.7	3.2	4.5	2.7
1966	4.3	3.2	3.5	2.3	2.5	1.8	2.0	1.9	1.9	2.2	2.8	3.9	2.7
1967	3.4	3.3	2.7	2.4	1.9	1.9	1.7	1.4	1.2	3.0	3.9	3.8	2.6
1968	3.3	3.7	3.3	2.4	1.7	1.7	1.8	1.6	1.5	2.7	3.5	3.3	2.5
1969	3.0	4.6	3.6	3.1	2.3	1.9	1.8	1.7	1.8	2.9	3.6	5.2	3.0
1970	3.7	4.7	3.7	3.1	2.1	1.8	1.9	1.7	1.7	2.6	3.2	4.2	2.9
1971	3.2	3.0	3.3	3.1	2.2	2.0	1.5	1.7	1.9	2.4	3.6	3.5	2.6
1972	4.2	3.5	3.3	3.1	2.4	2.3	2.1	1.7	1.7	2.3	4.4	3.5	2.9
1973	4.3	4.2	4.2	3.3	2.5	2.3	2.2	2.1	2.2	2.5	3.4	4.6	3.1
1974	3.7	3.8	3.9	3.2	2.8	2.3	1.8	1.7	1.8	2.5	3.8	4.3	3.0
1975	3.4	3.4	3.2	2.3	2.2	1.8	1.7	1.5	1.0	2.5	3.2	3.0	2.4
MEAN	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.5	4.7	5.0	3.4	3.2	2.6	2.6	2.6	4.0	4.0	4.9
1957	4.9	6.1	5.0	4.6	3.7	3.0	3.4	2.1	3.4	5.3	5.0	6.0
1958	6.7	4.0	6.2	6.1	3.4	2.4	3.5	3.3	2.8	4.7	6.1	5.5
1959	5.6	6.1	4.9	6.3	3.3	2.5	2.5	2.8	3.2	5.5	6.3	6.3
1960	6.0	6.1	4.6	4.1	3.4	2.8	2.4	2.5	2.3	6.0	6.0	6.1
1961	6.5	5.3	6.1	4.6	3.1	3.5	2.3	1.8	2.7	4.8	5.4	5.6
1962	5.5	5.0	5.2	4.7	2.7	2.8	2.8	2.6	4.7	5.9	6.1	6.1
1963	4.9	5.5	5.5	3.8	3.3	3.3	2.6	2.3	3.0	6.3	5.3	6.4
1964	7.2	5.2	5.2	5.4	3.9	2.8	3.3	2.5	2.9	4.0	6.3	6.1
1965	4.6	5.1	5.2	4.2	2.7	3.2	2.6	2.5	2.5	5.8	6.1	6.3
1966	6.1	4.8	5.4	4.3	3.2	2.5	2.5	2.6	3.9	4.0	5.3	6.1
1967	5.2	4.9	5.2	4.0	2.9	2.6	2.3	2.1	4.6	6.0	6.2	6.7
1968	4.9	5.5	5.8	4.8	2.5	2.3	3.2	2.4	3.6	4.8	5.7	5.0
1969	4.3	6.5	6.5	6.0	4.1	2.8	2.3	2.2	2.9	5.3	6.7	7.7
1970	6.4	6.2	6.2	5.7	3.1	2.7	2.4	2.3	3.0	4.7	5.7	6.8
1971	6.0	4.8	5.4	5.4	3.5	2.8	2.4	3.7	3.5	4.3	6.2	5.6
1972	6.4	6.0	5.3	4.7	4.0	3.5	3.2	2.4	2.4	4.0	6.3	6.4
1973	6.4	6.1	6.4	5.0	3.9	4.6	3.1	2.9	3.7	4.0	5.8	6.6
1974	6.1	6.1	6.5	5.4	4.1	3.5	3.2	2.4	3.6	5.5	6.1	6.1
1975	5.6	5.8	5.9	3.2	4.2	3.2	2.5	2.7	1.8	4.3	5.9	6.1

20 YR. STATISTICS FOR PACIFIC STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	91.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.05 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 2

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	5	.	.	.	.	.	.	.	.	13
1.00 - 1.49	609	189	.	.	.	.	.	.	.	.	798
1.50 - 1.99	771	1158	.	.	.	.	.	.	.	.	1929
2.00 - 2.49	3	231	.	.	.	.	.	.	.	.	234
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1391	1584	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.65 LARGEST HS(M) = 2.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 1741

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	61	169	63	5	6	6	.	.	.	.	310
1.00 - 1.49	614	1088	427	59	11	.	.	.	.	.	2199
1.50 - 1.99	1926	3350	280	44	11	.	.	.	.	.	5611
2.00 - 2.49	181	3487	319	17	.	.	.	.	.	.	4004
2.50 - 2.99	.	756	417	11	1	.	.	.	.	.	1185
3.00 - 3.49	.	87	212	5	.	.	.	.	.	.	304
3.50 - 3.99	.	.	44	11	.	.	.	.	.	.	55
4.00 - 4.49	.	.	3	3	.	.	.	.	.	.	6
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2782	8943	1765	155	29	6	0	0	0	0	

MEAN HS(M) = 1.92 LARGEST HS(M) = 4.21 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 8005

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	15	3	.	3	5	.	.	.	29
0.50 - 0.99	17	249	812	133	58	34	30	6	3	.	1342
1.00 - 1.49	34	631	3281	2007	1167	321	44	23	1	.	7509
1.50 - 1.99	34	460	3482	4175	3862	1283	287	37	.	.	13620
2.00 - 2.49	17	198	1040	3487	5598	3624	934	73	27	.	14998
2.50 - 2.99	.	162	287	936	4171	5710	1567	107	13	.	12953
3.00 - 3.49	.	35	162	302	2044	5763	2340	220	35	.	10901
3.50 - 3.99	.	.	77	119	552	3790	2684	296	23	.	7541
4.00 - 4.49	.	.	27	42	207	1786	2614	263	18	.	4957
4.50 - 4.99	.	.	.	6	37	670	2443	263	18	.	3437
5.00 +	.	.	.	.	8	266	2183	1418	1	.	3876
TOTAL	102	1738	9183	11210	17734	23250	15126	2711	139	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 47456

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	5	41	3	.	.	.	.	.	.	49
0.50 - 0.99	8	54	71	13	25	.	.	.	.	.	171
1.00 - 1.49	5	23	88	37	59	23	.	.	.	.	235
1.50 - 1.99	1	75	118	106	142	65	1	.	.	.	508
2.00 - 2.49	.	46	90	90	147	61	8	.	.	.	442
2.50 - 2.99	.	23	65	54	73	87	23	.	.	.	330
3.00 - 3.49	.	1	18	10	51	37	20	.	.	.	137
3.50 - 3.99	.	1	1	8	6	27	11	.	.	.	54
4.00 - 4.49	.	.	.	1	1	20	.	.	.	.	22
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	228	492	322	509	320	63	0	0	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 4.97 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 1154

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	25	.	.	.	.	.	.	.	.	25
0.50 - 0.99	1	11	8	.	.	.	.	.	.	.	20
1.00 - 1.49	3	8	17	.	.	.	.	.	.	.	28
1.50 - 1.99	8	23	13	.	.	.	.	.	.	.	44
2.00 - 2.49	.	8	1	.	.	.	.	.	.	.	9
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	75	39	0	0	0	0	0	0	0	

MEAN HS(M) = 1.24 LARGEST HS(M) = 2.27 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 78

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

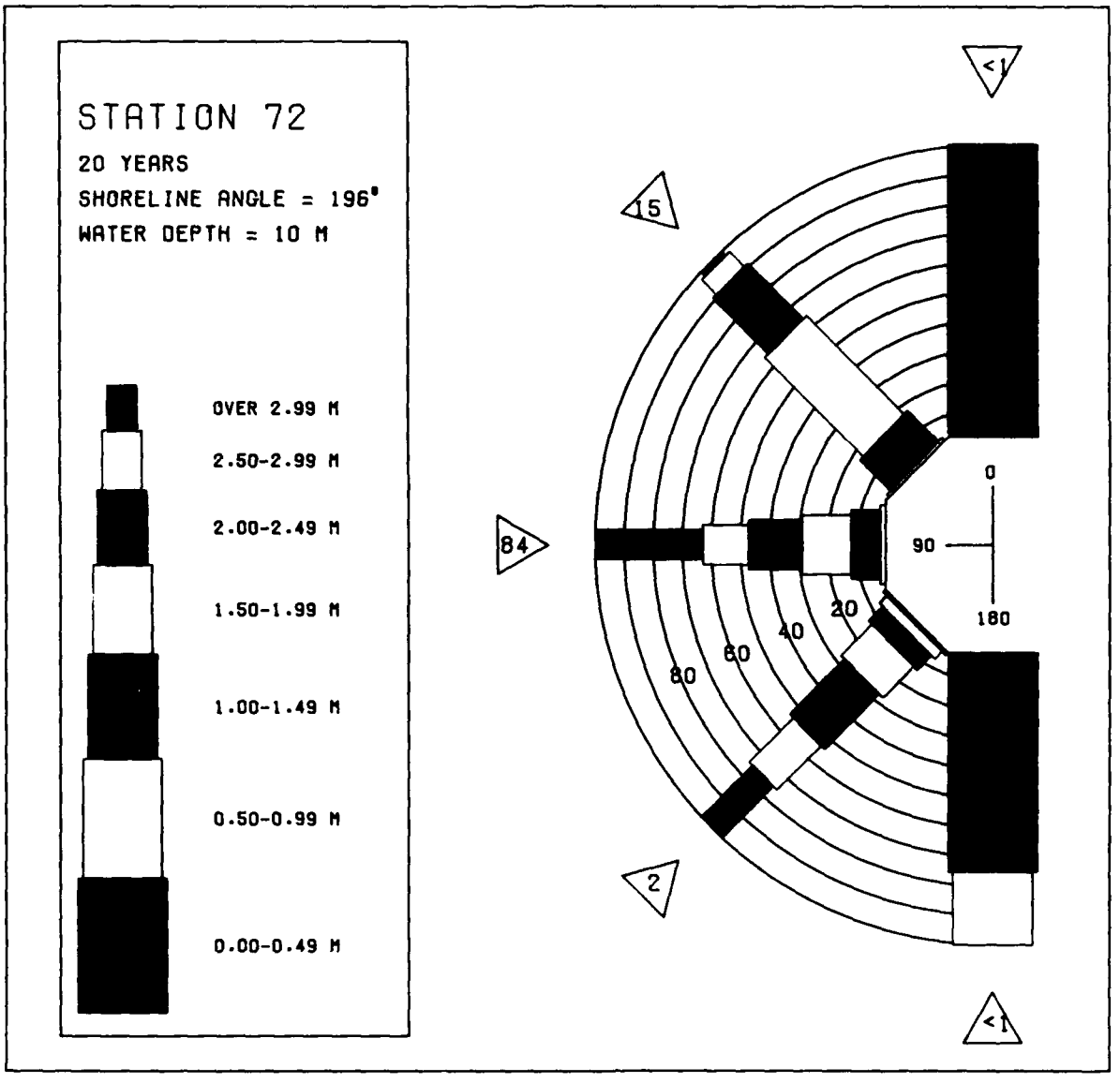
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 72 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		3	1	.	.	.	.	.	.	.	4
0.50 - 0.99	8	44	92	14	6	4	3	.	.	.	171
1.00 - 1.49	126	197	379	208	120	32	4	2	.	.	1068
1.50 - 1.99	274	501	386	425	393	130	28	3	.	.	2140
2.00 - 2.49	20	400	148	361	574	368	93	7	.	.	1973
2.50 - 2.99	.	96	79	103	432	577	157	10	1	.	1455
3.00 - 3.49	.	14	43	36	212	585	236	22	3	.	1151
3.50 - 3.99	.	.	14	14	60	382	270	29	2	.	771
4.00 - 4.49	.	.	3	5	21	181	262	26	1	.	499
4.50 - 4.99	.	.	.	.	3	69	244	26	1	.	343
5.00 +	.	.	.	.	.	26	218	141	.	.	385
TOTAL	428	1255	1145	1166	1821	2354	1515	266	10	0	

MEAN HS(M) = 2.63 LARGEST HS(M) = 7.12 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.5	3.0	2.5	2.4	2.2	1.7	1.7	1.6	2.1	2.6	2.9	2.4
1957	2.8	3.2	2.9	2.8	2.2	1.7	1.7	1.5	1.9	2.5	3.2	3.9	2.5
1958	4.4	3.7	3.5	3.0	2.1	1.6	2.0	1.7	1.8	2.4	3.2	3.4	2.7
1959	3.1	3.8	2.7	3.0	2.0	1.6	1.9	1.7	2.0	2.7	3.3	3.7	2.6
1960	3.6	3.8	2.4	2.5	2.0	1.8	1.7	1.8	1.5	2.3	3.7	3.7	2.6
1961	3.8	3.3	2.9	2.5	2.1	2.2	1.6	1.3	1.7	2.5	3.1	3.4	2.5
1962	2.6	3.3	3.0	2.2	1.7	1.7	1.8	1.7	1.8	2.0	3.7	3.3	2.5
1963	2.9	3.1	3.2	2.2	1.9	2.2	1.7	1.3	1.9	2.2	3.2	3.5	2.5
1964	4.3	3.6	3.2	3.0	2.0	1.7	2.2	1.7	1.8	2.6	3.3	3.9	2.7
1965	3.3	3.9	2.8	2.6	2.4	2.3	1.8	1.4	1.8	2.5	3.1	4.3	2.6
1966	4.0	3.3	3.4	2.2	2.5	1.7	2.0	1.9	1.9	2.1	2.7	3.7	2.6
1967	3.3	3.3	2.6	2.4	1.6	1.6	1.8	1.4	2.2	2.9	3.8	3.6	2.5
1968	3.0	3.3	3.1	2.4	1.6	1.7	1.8	1.6	1.5	2.6	3.3	3.2	2.4
1969	2.9	4.5	3.6	3.0	2.3	1.9	1.9	1.7	1.7	2.8	3.4	5.0	2.9
1970	3.5	4.6	3.7	3.2	2.1	1.8	1.9	1.7	1.7	2.5	3.1	4.1	2.8
1971	3.0	2.7	3.2	3.0	2.1	2.0	1.5	1.7	1.9	2.3	3.5	3.4	2.5
1972	4.2	3.4	2.9	3.0	2.4	2.3	2.1	1.7	1.7	2.4	4.3	3.4	2.8
1973	4.1	4.1	4.1	3.3	2.5	2.3	2.1	2.1	2.2	2.3	3.3	4.3	3.1
1974	3.3	3.6	3.8	3.1	2.7	2.4	1.8	1.7	1.8	2.5	3.6	4.1	2.9
1975	3.3	3.3	3.2	2.4	2.2	1.8	1.8	1.5	1.1	2.4	3.1	2.8	2.4
MEAN	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

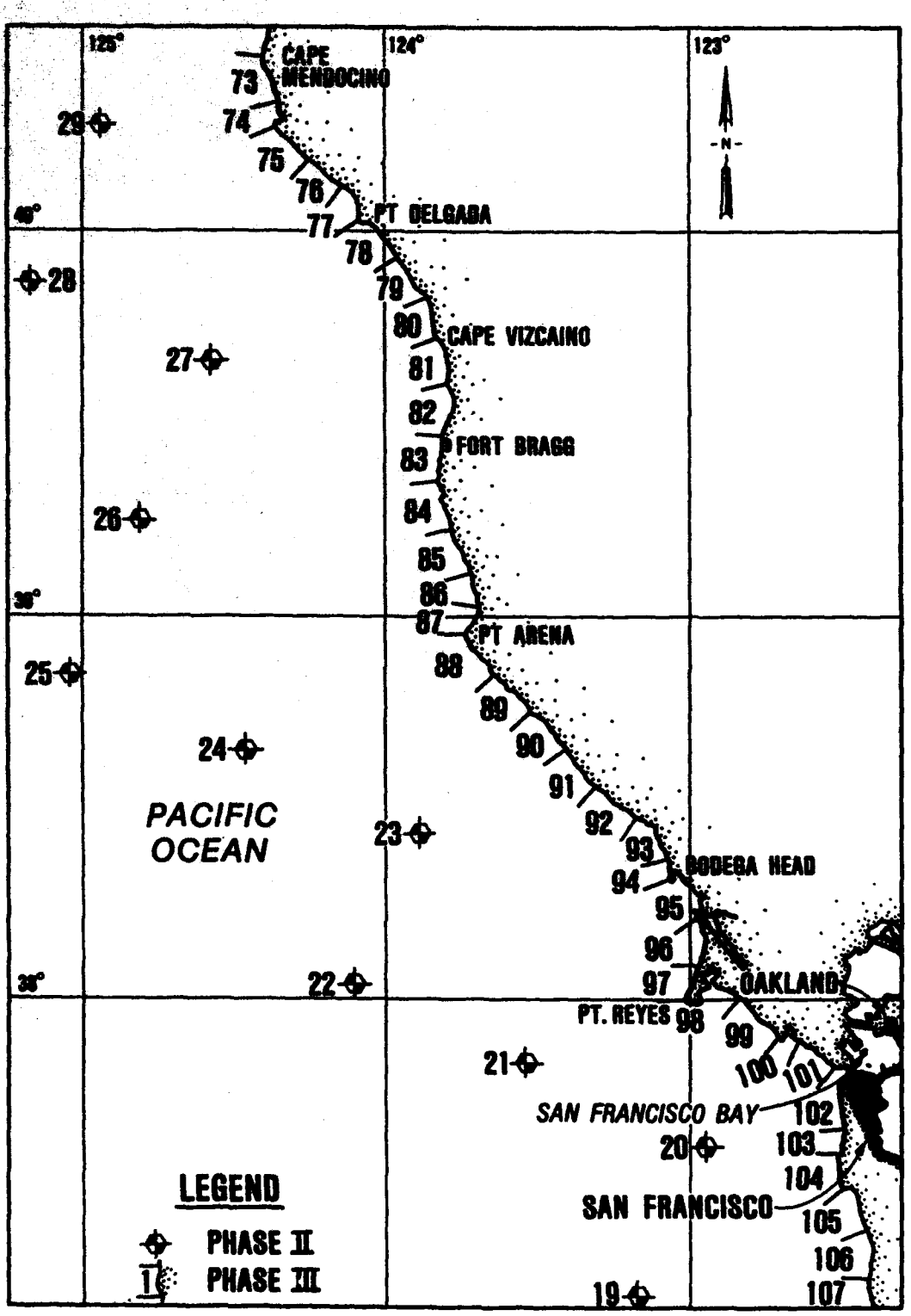
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.5	5.2	4.8	4.8	3.5	3.2	2.6	2.7	2.7	3.5	4.0	4.7
1957	4.7	6.0	4.9	4.4	3.3	3.1	3.3	2.1	3.3	5.2	4.7	6.2
1958	6.3	5.6	6.2	6.2	3.4	2.4	3.6	3.2	2.9	5.0	6.1	5.1
1959	5.8	6.1	4.9	6.2	2.9	2.6	2.5	2.9	3.3	5.6	6.2	6.1
1960	5.9	5.8	4.4	3.9	3.2	3.7	2.5	2.4	2.5	5.9	6.2	6.0
1961	6.5	5.6	5.9	4.6	3.0	3.5	2.4	1.9	2.6	4.7	5.8	5.4
1962	5.3	4.9	5.2	4.5	3.7	3.8	2.6	2.5	4.1	5.7	6.0	6.0
1963	5.1	4.5	5.8	5.6	3.2	3.4	2.6	2.3	3.0	6.4	5.1	6.2
1964	7.0	5.1	5.1	5.5	4.0	3.7	3.4	2.4	3.0	3.7	6.3	5.9
1965	5.2	5.3	5.2	4.1	3.6	3.2	2.5	2.4	2.7	5.2	6.0	6.3
1966	6.0	4.8	6.0	3.8	3.1	2.8	2.6	2.7	4.0	3.9	5.1	6.1
1967	5.3	5.0	5.1	3.8	2.8	2.7	2.2	2.1	4.5	6.0	6.2	6.4
1968	4.3	5.1	5.6	4.9	2.5	2.3	3.3	2.5	3.5	4.7	5.1	5.0
1969	4.4	6.4	6.4	6.0	4.1	2.6	2.4	2.2	2.7	5.0	6.6	7.1
1970	5.5	6.4	6.2	5.9	3.2	2.9	2.5	2.3	3.0	4.8	5.1	6.8
1971	6.0	4.4	5.5	5.5	3.4	2.9	2.3	3.6	3.6	4.1	6.2	5.5
1972	6.2	6.1	4.5	4.5	4.2	3.4	3.4	2.3	2.7	3.9	6.2	6.2
1973	6.4	6.1	6.4	5.1	3.9	4.5	3.0	2.9	3.5	3.7	5.8	6.6
1974	6.0	5.7	6.4	5.4	4.0	3.6	3.4	2.4	3.7	5.5	6.2	6.3
1975	5.4	5.5	6.0	3.4	4.7	3.2	2.6	2.7	1.7	4.3	5.8	4.8

20 YR. STATISTICS FOR PACIFIC STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

Appendix D: Sta 73 through 105


125°
124°
123°
CAPE MENDOCINO
73
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25
24
23
22
21
20
19
40°
39°
38°
PT DELGADA
CAPE VIZCAINO
FORT BRAGG
PT ARENA
BODEGA HEAD
OAKLAND
PT. REYES
SAN FRANCISCO BAY
SAN FRANCISCO
PACIFIC OCEAN
N
LEGEND
PHASE II
PHASE III

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	.	.	.	.	.	.	.	.	.	15
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.15 LARGEST HS(M) = 0.27 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 9

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	23	54	.	.	.	.	.	.	.	.	77
0.50 - 0.99	422	874	10	.	.	.	.	.	.	.	1306
1.00 - 1.49	1560	3244	189	.	.	.	.	.	.	.	4993
1.50 - 1.99	313	1671	174	.	.	.	.	.	.	.	2158
2.00 - 2.49	.	112	23	.	.	.	.	.	.	.	135
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2318	5955	396	0	0	0	0	0	0	0	

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5071

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	17	34	5	5	10	.	10	.	.	81
0.50 - 0.99	22	699	1666	309	162	53	39	.	.	.	2950
1.00 - 1.49	51	1553	6538	3601	2104	549	58	.	.	.	14454
1.50 - 1.99	68	559	3008	5651	5326	1798	292	17	3	.	16722
2.00 - 2.49	11	393	552	1593	5119	3875	672	10	.	.	12225
2.50 - 2.99	.	121	258	379	2197	5001	1091	5	.	.	9052
3.00 - 3.49	.	6	100	201	677	3413	1711	20	.	.	6128
3.50 - 3.99	.	.	20	49	225	1755	1889	3	.	.	3941
4.00 - 4.49	.	.	3	15	66	689	1678	1	.	.	2452
4.50 - 4.99	.	.	.	.	8	225	1047	3	.	.	1283
5.00 +	.	.	.	.	3	121	602	3	.	.	729
TOTAL	152	3348	12179	11803	15892	17489	9079	72	3	0	

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 40939

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	5	68	39	5	.	.	5	5	.	128
1.00 - 1.49	6	65	165	383	254	63	54	30	.	.	1020
1.50 - 1.99	8	18	88	391	610	407	157	27	5	.	1711
2.00 - 2.49	13	58	87	280	740	1286	593	77	17	.	3151
2.50 - 2.99	.	90	97	100	434	1510	1009	143	35	.	3418
3.00 - 3.49	.	41	88	88	258	1122	1047	272	20	.	2936
3.50 - 3.99	.	13	61	44	215	734	990	285	5	.	2347
4.00 - 4.49	.	1	34	10	100	414	852	304	15	.	1730
4.50 - 4.99	.	.	3	15	23	114	583	330	8	.	1076
5.00 +	.	.	.	.	8	82	492	1086	1	.	1669
TOTAL	28	291	691	1350	2647	5732	5777	2559	111	0	

MEAN HS(M) = 3.19 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 13.1 NUMBER OF CASES = 11236

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	6	39	6	.	.	.	.	.	.	.	51
1.50 - 1.99	17	68	39	1	1	1	.	.	.	.	127
2.00 - 2.49	11	142	92	18	6	.	.	.	.	.	269
2.50 - 2.99	.	159	181	34	20	.	.	.	.	.	394
3.00 - 3.49	.	25	189	88	44	1	.	.	.	.	347
3.50 - 3.99	.	.	150	95	77	13	.	.	.	.	335
4.00 - 4.49	.	.	32	77	99	25	1	.	.	.	234
4.50 - 4.99	.	.	1	42	42	29	3	.	.	.	117
5.00 +	.	.	.	17	30	27	13	.	.	.	87
TOTAL	34	433	690	372	319	96	17	0	0	0	

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.08 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 1159

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	3	.	.	.	.	.	.	.	.	8
0.50 - 0.99	1	6	.	.	.	.	.	.	.	.	7
1.00 - 1.49	3	6	.	.	.	.	.	.	.	.	9
1.50 - 1.99	5	8	.	.	.	.	.	.	.	.	13
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	23	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.08 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 24

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

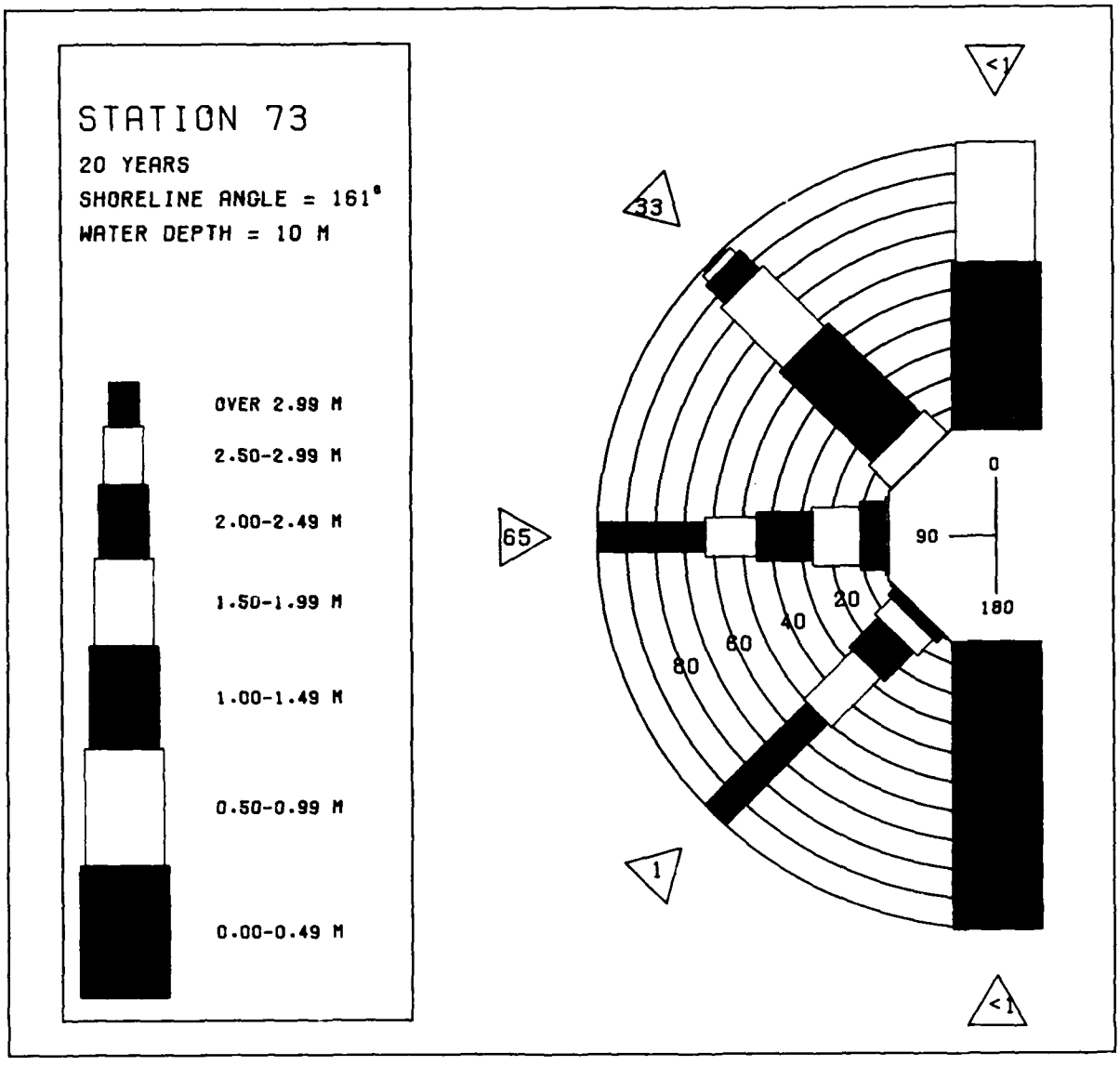
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 73 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
.00 - 0.49	4	7	3	.	.	1	.	1	.	.	16
0.50 - 0.99	44	158	174	34	16	5	3	.	.	.	434
1.00 - 1.49	162	490	690	398	235	61	11	3	.	.	2050
1.50 - 1.99	41	232	331	604	593	220	45	4	.	.	2070
2.00 - 2.49	3	70	75	189	586	516	126	8	1	.	1574
2.50 - 2.99	.	37	53	51	265	621	210	14	3	.	1284
3.00 - 3.49	.	7	37	37	98	453	275	29	2	.	938
3.50 - 3.99	.	1	23	18	51	250	267	28	.	.	658
4.00 - 4.49	.	.	7	10	26	112	253	30	1	.	439
4.50 - 4.99	.	.	.	5	7	36	163	33	.	.	244
5.00 +	.	.	.	1	4	23	110	109	.	.	247
TOTAL	254	1002	1393	1347	1881	2328	1483	259	7	0	

MEAN HS(M) = 2.36 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.1	3.2	2.7	2.2	2.1	1.8	1.3	1.3	1.4	1.8	2.4	2.7	2.2
1957	2.6	3.0	2.8	2.5	2.0	1.4	1.3	1.2	1.7	2.3	2.8	3.6	2.3
1958	4.4	3.7	3.2	2.8	1.9	1.3	1.6	1.5	1.6	2.1	2.9	3.4	2.5
1959	3.1	3.6	2.5	2.6	1.7	1.4	1.5	1.3	1.8	2.4	3.0	3.4	2.4
1960	3.4	3.6	3.2	2.3	1.8	1.4	1.3	1.5	1.3	2.1	3.4	3.5	2.3
1961	3.8	3.2	2.8	2.2	1.9	1.9	1.2	1.0	1.4	2.2	2.8	3.0	2.3
1962	2.4	3.1	2.7	2.0	1.4	1.4	1.3	1.5	1.6	2.7	2.4	3.3	2.2
1963	2.7	3.4	2.8	2.0	1.6	1.8	1.3	1.0	1.8	3.0	3.0	3.5	2.3
1964	4.1	3.0	2.9	2.5	1.6	1.5	1.9	1.4	1.5	1.9	3.1	3.5	2.4
1965	3.1	2.6	2.6	2.3	1.9	1.8	1.4	1.2	1.5	2.3	3.1	4.0	2.3
1966	3.9	3.0	3.1	1.8	2.0	1.5	1.6	1.5	1.7	1.8	2.6	3.7	2.4
1967	3.2	3.0	2.5	2.0	1.3	1.3	1.4	1.1	2.0	2.6	3.4	3.4	2.3
1968	3.0	3.3	3.0	2.0	1.4	1.3	1.4	1.4	1.3	2.3	3.2	3.2	2.2
1969	2.7	4.2	3.3	2.7	1.9	1.6	1.4	1.2	1.4	2.6	3.1	4.8	2.6
1970	3.6	4.3	3.3	2.8	1.8	1.5	1.6	1.4	1.4	2.2	2.9	3.8	2.6
1971	2.9	2.5	2.5	2.7	1.9	1.7	1.7	1.5	1.7	2.0	3.1	3.1	2.3
1972	3.8	3.2	2.7	2.7	2.0	1.9	1.7	1.4	1.4	2.0	3.9	3.4	2.5
1973	4.0	3.9	3.6	2.8	2.1	1.8	1.6	1.6	2.0	2.0	3.2	4.2	2.7
1974	3.4	3.3	3.5	2.8	2.3	1.9	1.4	1.3	1.5	2.2	3.3	3.9	2.6
1975	3.0	3.1	2.9	2.1	1.9	1.3	1.4	1.2	0.8	2.2	2.8	2.6	2.1
MEAN	3.3	3.3	2.9	2.4	1.8	1.6	1.4	1.3	1.5	2.2	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.8	5.4	4.2	4.2	3.0	2.9	2.1	2.1	2.4	3.3	3.7	4.5
1957	4.1	6.2	4.4	3.9	3.2	2.6	2.4	1.8	3.0	4.5	4.3	6.0
1958	6.4	5.4	6.0	5.9	2.8	2.2	3.1	2.8	2.5	4.6	5.8	4.8
1959	5.4	5.0	4.5	5.4	2.8	2.3	2.1	2.4	2.9	4.7	5.7	5.6
1960	5.7	5.6	4.4	3.5	2.8	2.4	2.0	2.2	1.8	5.1	6.0	5.5
1961	6.3	5.5	5.6	4.1	2.7	3.1	1.8	1.6	2.2	4.0	3.0	4.8
1962	4.6	5.0	4.7	4.0	2.4	2.4	2.1	2.2	3.7	5.0	5.9	5.3
1963	5.3	5.2	5.0	3.1	3.3	2.7	1.9	1.5	2.7	6.4	4.5	6.4
1964	7.0	4.4	4.6	4.8	3.3	2.5	3.0	1.9	2.5	3.2	5.7	5.4
1965	5.0	4.8	4.6	3.6	2.8	2.5	2.0	2.0	2.1	4.7	6.2	6.0
1966	5.7	4.2	5.3	3.5	2.8	2.2	2.1	2.2	3.5	3.6	4.5	5.7
1967	5.4	4.3	4.4	3.3	2.4	2.1	1.8	1.4	3.9	6.0	5.7	6.7
1968	5.1	4.8	5.1	4.3	3.1	1.9	2.8	2.2	3.0	4.1	4.8	4.7
1969	4.0	6.3	6.2	5.6	3.4	2.2	1.8	1.8	2.4	4.3	5.9	7.7
1970	5.9	6.2	6.2	5.3	2.7	2.4	2.2	2.0	2.6	4.5	4.9	6.8
1971	5.7	4.2	5.5	4.8	2.9	2.3	1.7	2.9	3.1	3.5	6.0	4.8
1972	6.2	5.3	4.5	4.4	3.6	2.9	2.9	2.0	2.3	3.3	6.0	6.2
1973	6.4	6.1	5.9	4.5	3.3	3.9	2.2	2.3	3.3	3.4	5.2	6.6
1974	7.4	5.2	6.5	5.2	3.6	3.0	2.6	1.8	3.2	4.8	5.4	6.1
1975	4.7	4.9	5.3	3.0	4.1	2.3	2.0	1.9	1.3	3.7	5.1	5.1

20 YR. STATISTICS FOR PACIFIC STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121200

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	35	.	.	.	.	.	.	.	.	.	35
0.50 - 0.99	152	56	.	.	.	.	.	.	.	.	208
1.00 - 1.49	1033	140	.	.	.	.	.	.	.	.	1173
1.50 - 1.99	364	65	.	.	.	.	.	.	.	.	429
2.00 - 2.49	6	25	.	.	.	.	.	.	.	.	31
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	1590	286	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.31 LARGEST HS(M) = 2.28 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 1099

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1	22	11	3	.	.	.	.	.	.	37
0.50 - 0.99	82	586	574	51	27	6	.	.	.	.	1326
1.00 - 1.49	816	2715	2794	581	193	1	.	.	.	.	7100
1.50 - 1.99	990	3107	2720	677	177	32	1	.	.	.	7703
2.00 - 2.49	200	1362	881	410	152	41	3	.	.	.	3049
2.50 - 2.99	3	366	331	183	189	83	1	.	.	.	1156
3.00 - 3.49	.	47	116	75	88	56	1	.	.	.	383
3.50 - 3.99	.	5	27	18	29	22	.	.	.	.	101
4.00 - 4.49	.	.	1	1	1	15	10	.	.	.	28
4.50 - 4.99	.	.	.	.	3	5	.	.	.	.	8
5.00 +					3						3
TOTAL	2092	8210	7455	1999	862	261	15	0	0	0	

MEAN HS(M) = 1.69 LARGEST HS(M) = 5.20 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 12227

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	3	2	.	.	.	5	.	.	.	8
0.50 - 0.99	6	130	525	109	63	34	11	10	8	.	895
1.00 - 1.49	30	359	2152	1704	1124	343	44	15	.	.	5771
1.50 - 1.99	13	184	1976	4757	3947	1298	248	29	8	.	12462
2.00 - 2.49	11	140	583	2710	5687	3369	744	54	11	.	13309
2.50 - 2.99	.	147	284	708	3894	5480	1483	97	10	.	12103
3.00 - 3.49	.	56	201	318	1714	5309	1931	165	37	.	9731
3.50 - 3.99	.	1	92	184	732	3639	2571	551	20	.	7420
4.00 - 4.49	.	.	46	66	263	1943	2837	339	3	.	5397
4.50 - 4.99	.	.	5	32	95	903	2265	275	11	.	3586
5.00 +					23	412	2551	1486	1		4473
TOTAL	60	1017	5867	10588	17544	22735	14745	2621	109	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 44022

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	32	34	.	.	.	.	.	.	.	67
1.50 - 1.99	17	34	63	1	1	1	.	.	.	.	117
2.00 - 2.49	10	104	100	34	20	3	.	.	.	.	271
2.50 - 2.99	.	102	148	61	46	11	.	.	.	.	368
3.00 - 3.49	.	25	167	87	77	29	1	.	.	.	385
3.50 - 3.99	.	.	83	58	116	20	1	.	.	.	278
4.00 - 4.49	.	.	37	25	75	35	8	.	.	.	180
4.50 - 4.99	.	.	1	13	30	34	15	.	.	.	93
5.00 +	.	.	.	5	17	23	15	.	.	.	60
TOTAL	28	298	633	284	382	156	39	0	0	0	

MEAN HS(M) = 3.16 LARGEST HS(M) = 7.09 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 1077

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	3	.	.	.	.	.	.	.	.	3
1.00 - 1.49	5	1	.	.	.	.	.	.	.	.	6
1.50 - 1.99	6	3	.	.	.	.	.	.	.	.	9
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	11	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.58 LARGEST HS(M) = 2.85 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 15

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

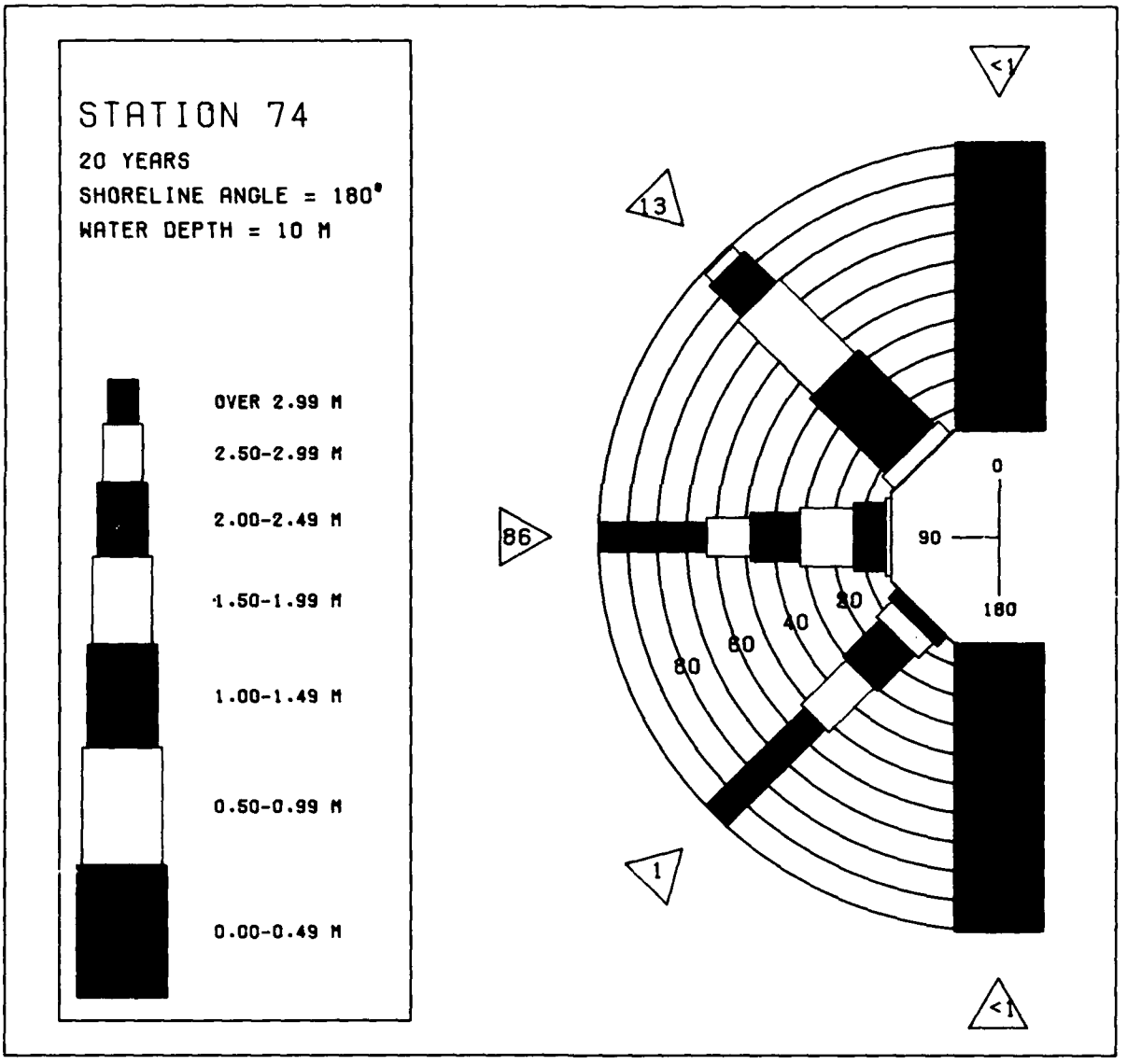
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 74 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.33N/124.35W LAT. LON. END= 40.01N/124.35W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	3	2	1								6
0.50 - 0.99	24	77	110	16	9	4	1	1	.	.	242
1.00 - 1.49	188	324	498	228	131	34	4	1	.	.	1408
1.50 - 1.99	139	339	476	543	412	133	24	2	.	.	2068
2.00 - 2.49	22	163	156	315	586	341	74	5	1	.	1663
2.50 - 2.99	.	61	76	95	413	557	148	9	1	.	1360
3.00 - 3.49	.	13	48	48	188	539	199	16	3	.	1054
3.50 - 3.99	.	.	20	26	87	368	257	25	2	.	785
4.00 - 4.49	.	.	8	9	34	199	285	23	.	.	558
4.50 - 4.99	.	.	.	4	13	94	228	27	1	.	367
5.00 +	.	.	.	.	4	43	256	148	.	.	451
TOTAL	376	979	1393	1284	1877	2312	1476	257	8	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.4	2.9	2.5	2.3	2.1	1.5	1.5	1.5	2.0	2.6	3.0	2.4
1957	2.8	3.2	3.0	2.8	2.2	1.7	1.6	1.4	1.8	2.6	3.1	3.9	2.5
1958	4.7	4.0	3.4	3.1	2.0	1.4	1.8	1.6	1.7	2.3	3.2	3.6	2.7
1959	3.3	3.9	2.7	2.9	1.9	1.7	1.6	1.5	2.0	2.7	3.2	3.7	2.6
1960	3.7	4.1	2.4	2.5	2.1	1.6	1.5	1.6	1.4	2.2	3.7	3.9	2.5
1961	4.0	3.6	3.1	2.4	2.1	2.1	1.3	1.1	1.5	2.4	3.0	3.3	2.5
1962	2.8	3.4	3.0	2.3	1.7	1.6	1.6	1.6	1.8	3.0	3.8	3.9	2.5
1963	3.0	3.9	3.1	2.2	1.8	2.0	1.5	1.2	1.9	3.2	3.3	3.6	2.6
1964	4.4	3.2	3.1	2.9	1.9	1.7	2.2	1.6	1.6	2.1	3.3	3.9	2.7
1965	3.4	2.8	2.7	2.6	2.2	2.1	1.6	1.3	1.6	2.6	3.3	4.4	2.6
1966	4.2	3.3	3.5	2.1	2.3	1.7	1.8	1.7	1.8	3.0	3.7	4.0	2.6
1967	3.5	3.3	2.7	2.2	1.5	1.5	1.6	1.3	2.1	2.9	3.7	3.7	2.5
1968	3.3	3.8	3.3	2.5	1.6	1.6	1.7	1.5	1.4	2.5	3.5	3.4	2.5
1969	2.9	4.5	3.6	3.0	2.2	1.8	1.6	1.5	1.6	2.8	3.3	5.2	2.9
1970	3.9	4.6	3.6	3.1	2.1	1.7	1.8	1.6	1.6	2.4	3.2	4.0	2.8
1971	3.2	2.9	3.3	3.0	2.0	2.0	1.3	1.6	1.8	2.2	3.4	3.3	2.5
1972	4.1	3.5	3.2	3.0	2.3	2.2	2.0	1.5	1.5	2.2	4.3	3.6	2.8
1973	4.4	4.3	4.0	3.2	2.5	2.2	2.0	1.9	2.2	2.2	3.4	4.5	3.1
1974	3.8	3.6	3.9	3.1	2.7	2.2	1.7	1.5	1.6	2.3	3.6	4.2	2.9
1975	3.3	3.5	3.2	2.3	2.2	1.6	1.7	1.3	0.9	2.4	3.1	3.0	2.4
MEAN	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.0	5.6	5.0	4.7	3.3	3.2	2.3	2.6	2.5	3.4	3.8	4.7
1957	4.5	6.7	5.0	4.6	3.6	2.7	3.2	2.3	3.2	5.0	4.6	6.1
1958	6.8	6.1	6.1	6.1	3.2	5.7	3.4	2.1	2.7	4.5	6.1	5.6
1959	6.1	6.0	4.8	6.1	3.2	5.7	2.2	2.2	3.4	5.4	6.2	6.3
1960	6.1	6.2	4.7	4.0	3.4	2.8	2.4	2.5	2.1	5.6	6.5	6.1
1961	6.5	5.7	5.9	4.7	3.2	3.3	2.3	1.7	2.6	4.6	5.5	5.0
1962	5.3	5.3	5.1	4.3	2.7	2.7	2.5	2.6	4.1	5.4	6.2	6.2
1963	4.9	5.9	5.6	4.3	3.3	3.3	2.2	2.0	2.9	6.5	5.0	6.3
1964	7.2	4.8	5.2	5.2	3.8	2.8	3.4	2.2	2.9	3.4	6.2	6.3
1965	4.9	5.0	5.1	4.2	3.7	3.0	2.4	2.5	2.3	5.4	6.1	6.2
1966	6.0	4.7	6.4	4.2	3.2	2.5	2.6	2.5	2.9	3.7	4.8	6.1
1967	5.3	4.9	4.7	3.8	3.0	2.4	2.2	2.1	4.2	6.1	6.2	6.7
1968	4.7	6.4	5.7	5.0	2.9	2.5	3.3	2.6	3.3	4.5	5.4	5.0
1969	4.3	6.5	6.5	6.0	3.9	2.5	2.2	2.2	2.7	4.9	6.6	7.7
1970	6.7	6.3	6.2	5.7	3.1	2.6	2.6	2.2	2.9	4.7	5.2	7.0
1971	6.0	4.5	5.6	5.4	3.7	2.8	2.2	3.1	3.3	4.0	6.1	5.4
1972	6.4	6.0	5.1	4.5	4.1	3.3	3.1	2.3	2.3	3.6	6.3	6.3
1973	6.5	6.2	6.4	5.0	3.7	4.5	2.9	3.0	3.6	3.9	5.5	6.9
1974	7.1	6.4	6.7	6.0	4.2	3.4	3.3	2.2	3.5	5.3	5.9	6.3
1975	5.2	5.6	5.9	3.3	4.7	3.0	2.5	2.4	1.5	4.0	5.7	5.9

20 YR. STATISTICS FOR PACIFIC STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121200

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	160	.	.	.	.	.	.	.	.	.	160
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	160	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 94

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	386	207	6	.	.	.	.	.	.	.	599
0.50 - 0.99	1757	3415	349	.	.	.	.	.	.	.	5521
1.00 - 1.49	681	2250	349	.	.	.	.	.	.	.	3280
1.50 - 1.99	61	578	71	.	.	.	.	.	.	.	710
2.00 - 2.49	.	88	3	.	.	.	.	.	.	.	91
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2885	6543	778	0	0	0	0	0	0	0	

MEAN HS(M) = 0.96 LARGEST HS(M) = 2.76 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 5968

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	39	128	23	18	8	3	.	.	.	222
0.50 - 0.99	5	987	5701	1933	1045	203	25	23	5	.	9927
1.00 - 1.49	17	696	5740	7450	6228	1820	388	13	3	.	22355
1.50 - 1.99	46	374	886	2056	6587	5831	1208	63	15	.	17066
2.00 - 2.49	6	323	395	532	2332	6553	2457	183	25	.	12806
2.50 - 2.99	.	152	251	241	857	4099	3141	345	5	.	9091
3.00 - 3.49	.	25	94	87	337	1937	2741	396	6	.	5623
3.50 - 3.99	.	1	37	32	162	735	1872	402	.	.	3241
4.00 - 4.49	.	.	10	10	61	313	915	349	.	.	1658
4.50 - 4.99	.	.	.	.	5	77	432	311	.	.	825
5.00 +	.	.	.	.	.	29	242	280	.	.	551
TOTAL	74	2597	13242	12364	17632	21605	13424	2368	59	0	

MEAN HS(M) = 1.96 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 48740

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	8	11	.	.	.	.	.	.	.	19
1.00 - 1.49	13	68	35	1	3	.	.	.	.	.	120
1.50 - 1.99	73	176	107	25	35	6	.	.	.	.	422
2.00 - 2.49	25	313	131	59	82	68	30	.	.	.	708
2.50 - 2.99	3	285	287	162	88	162	51	.	.	.	1038
3.00 - 3.49	.	131	407	162	133	124	61	6	.	.	1024
3.50 - 3.99	.	27	282	298	162	78	68	13	.	.	833
4.00 - 4.49	.	.	106	160	140	99	41	1	.	.	547
4.50 - 4.99	.	.	25	56	107	83	66	6	.	.	343
5.00 +	.	.	1	20	85	140	109	.	1	.	356
TOTAL	114	1008	1392	853	835	760	426	26	1	0	

MEAN HS(M) = 3.28 LARGEST HS(M) = 6.56 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 3185

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	5	3	5	.	.	.	.	.	.	.	13
1.50 - 1.99	32	32	10	.	.	.	.	.	.	.	74
2.00 - 2.49	63	107	37	1	.	.	.	.	.	.	208
2.50 - 2.99	13	104	51	3	1	.	.	.	.	.	172
3.00 - 3.49	.	95	39	1	6	.	.	.	.	.	141
3.50 - 3.99	.	20	29	5	.	.	.	.	.	.	54
4.00 - 4.49	.	1	.	1	.	.	.	.	.	.	2
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	116	362	171	11	7	0	0	0	0	0	

MEAN HS(M) = 2.63 LARGEST HS(M) = 4.32 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 397

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	11	.	.	.	.	.	.	.	.	.	11
1.50 - 1.99	23	.	.	.	.	.	.	.	.	.	23
2.00 - 2.49	5	.	.	.	.	.	.	.	.	.	5
2.50 - 2.99	1	.	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	3	.	.	.	.	.	.	.	.	3
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	45	4	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.60 LARGEST HS(M) = 3.18 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 31

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

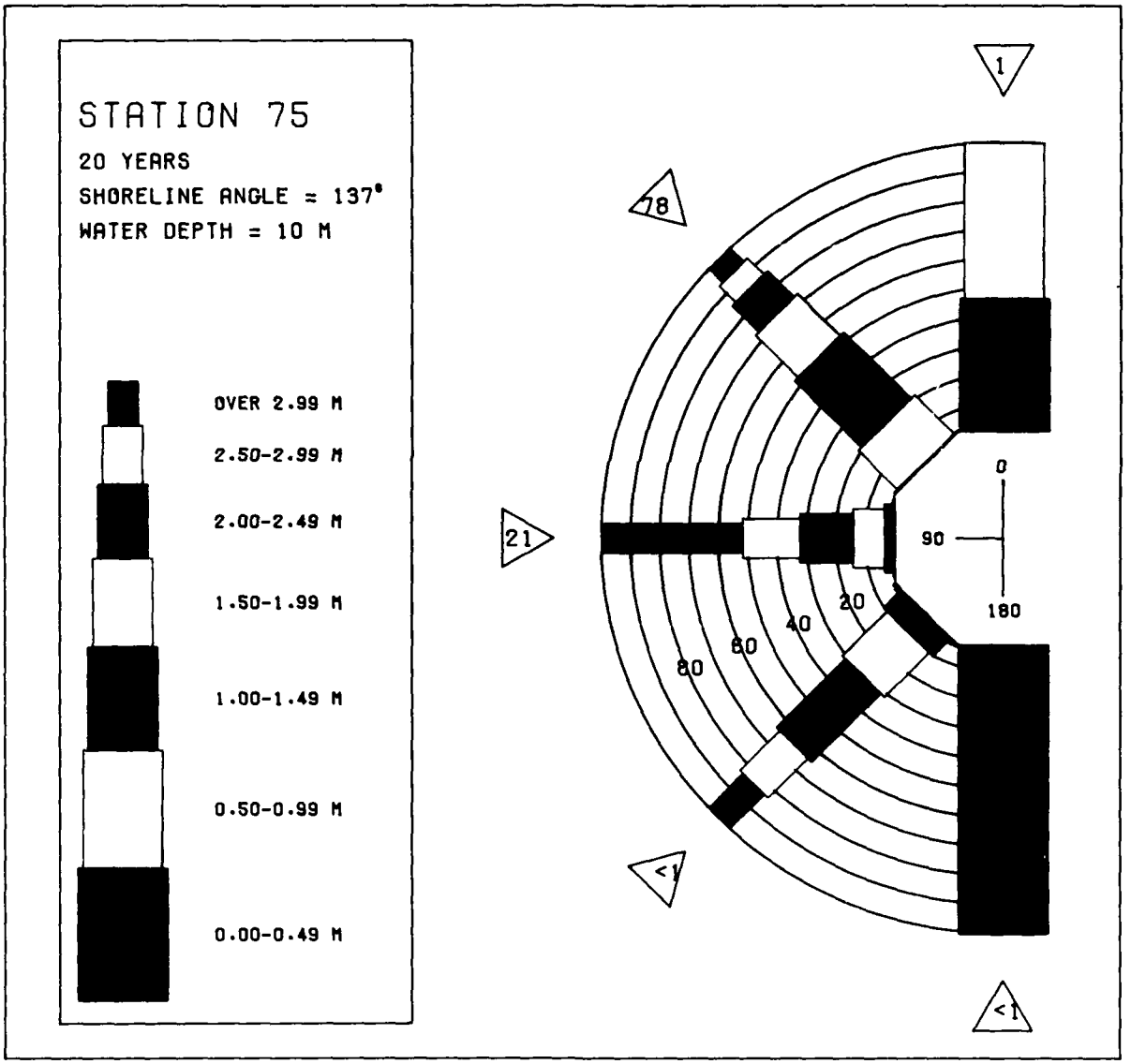
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	.	.	.	.	.	.	.	.	.	18
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.25 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 11

PHASE 3 ST. 75 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	57	24	13	2	1	.	.	.	.	.	97
0.50 - 0.99	176	441	606	193	104	20	2	2	.	.	1544
1.00 - 1.49	72	301	613	745	623	182	38	1	.	.	2575
1.50 - 1.99	23	116	107	208	662	583	120	6	1	.	1826
2.00 - 2.49	10	83	56	59	241	662	248	18	2	.	1379
2.50 - 2.99	1	54	59	40	94	426	319	34	.	.	1027
3.00 - 3.49	.	25	54	25	47	206	280	40	.	.	677
3.50 - 3.99	.	4	34	24	32	81	194	41	.	.	410
4.00 - 4.49	.	.	11	17	20	41	95	35	.	.	219
4.50 - 4.99	.	.	2	5	11	16	49	31	.	.	114
5.00 +	.	.	.	2	8	16	35	28	.	.	89
TOTAL	339	1048	1555	1320	1843	2233	1380	236	3	0	

MEAN HS(M) = 1.93 LARGEST HS(M) = 7.04 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.6	2.0	1.7	1.6	1.5	0.9	1.0	1.0	1.4	1.9	2.3	1.7
1957	2.2	2.5	2.3	2.0	1.6	1.2	0.9	0.9	1.5	2.0	2.2	3.0	1.9
1958	3.9	3.6	2.5	2.4	1.4	1.0	1.2	1.1	1.2	1.6	2.3	3.0	2.1
1959	2.9	3.0	2.1	2.0	1.4	1.2	1.0	0.9	1.5	1.9	2.2	3.7	1.9
1960	2.9	3.4	1.8	1.9	1.6	1.0	1.0	1.1	0.9	1.6	2.2	3.0	1.9
1961	3.4	2.9	2.5	1.7	1.5	1.4	0.9	0.7	1.0	1.6	2.2	3.4	1.9
1962	2.1	2.8	2.2	1.7	1.3	1.0	0.9	1.2	1.3	2.2	2.8	3.3	1.9
1963	2.5	3.6	2.3	1.7	1.3	1.3	1.0	0.7	1.4	2.4	2.5	3.0	2.0
1964	3.5	2.4	2.3	1.9	1.2	1.3	1.4	1.1	1.1	1.6	2.5	3.2	2.0
1965	2.7	2.1	2.0	1.9	1.4	1.4	1.0	0.9	1.0	2.0	2.6	3.2	1.9
1966	3.4	2.5	2.5	1.5	1.5	1.3	1.2	1.1	1.3	1.4	2.1	3.3	1.9
1967	2.9	2.5	2.1	1.5	1.3	1.0	1.0	0.8	1.6	2.2	2.5	3.6	1.8
1968	2.8	3.2	2.6	1.5	1.2	1.1	1.0	1.1	1.0	2.0	2.8	2.8	1.9
1969	3.3	3.4	2.6	2.3	1.5	1.4	1.0	0.9	1.1	1.7	2.3	3.3	2.1
1970	3.5	3.5	2.6	2.1	1.4	1.1	1.2	1.0	1.3	1.7	2.6	3.0	2.1
1971	2.6	2.4	2.5	2.1	1.4	1.4	0.8	1.1	1.3	1.6	2.4	2.5	1.8
1972	3.0	2.7	2.6	2.1	1.5	1.4	1.3	1.0	0.9	1.5	3.1	3.0	2.0
1973	3.6	3.3	2.9	2.2	1.7	1.4	1.2	1.2	1.6	1.6	2.7	3.7	2.2
1974	3.2	2.7	3.0	2.3	1.8	1.4	1.1	0.9	1.1	1.7	2.6	3.1	2.1
1975	2.3	2.8	2.4	1.5	1.4	1.0	1.1	0.9	0.5	1.8	2.2	2.4	1.7
MEAN	2.9	2.9	2.4	1.9	1.4	1.2	1.1	1.0	1.2	1.8	2.5	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.0	5.4	3.4	3.2	2.2	2.3	1.5	1.6	1.8	3.5	3.1	3.7
1957	3.7	6.8	3.8	3.2	2.9	2.0	1.8	1.4	3.3	3.3	3.7	5.2
1958	7.1	6.4	4.3	5.2	2.1	1.6	2.2	2.0	1.8	3.5	4.6	4.9
1959	4.7	5.5	3.6	3.9	2.5	2.0	1.6	1.8	3.4	3.7	4.4	4.5
1960	5.4	5.7	3.8	3.0	2.4	1.9	1.6	1.8	1.3	3.9	5.3	4.6
1961	5.6	4.9	4.6	3.1	2.2	2.2	1.4	1.1	1.8	3.1	3.7	4.1
1962	3.8	4.8	3.6	2.9	1.8	1.9	1.6	1.7	2.7	4.0	5.0	6.0
1963	6.1	6.1	3.9	3.3	3.1	2.1	1.5	1.1	2.1	5.4	3.8	6.3
1964	5.9	5.8	3.9	3.5	2.5	2.4	2.3	1.7	1.8	2.6	4.2	6.0
1965	4.2	5.7	3.4	3.0	2.0	2.1	1.8	1.7	1.5	4.1	6.6	5.5
1966	4.9	5.1	4.4	3.2	2.1	1.8	1.6	1.5	2.6	2.9	3.9	4.5
1967	4.7	5.5	5.1	3.6	2.1	1.6	1.4	1.2	2.7	4.8	4.2	5.2
1968	5.8	5.5	3.9	3.5	1.7	1.8	2.3	1.8	2.3	3.0	4.3	4.5
1969	3.7	5.5	4.6	4.2	2.7	1.8	1.5	1.2	1.8	3.3	4.1	7.0
1970	6.4	5.5	4.9	3.9	2.1	1.8	1.7	1.5	1.8	3.7	4.4	5.6
1971	5.5	3.7	4.7	3.6	2.5	2.0	1.3	1.9	2.2	2.7	4.7	4.2
1972	5.4	4.1	4.4	4.1	2.6	2.1	2.3	1.4	1.5	2.3	4.6	6.2
1973	6.0	4.9	4.4	3.4	2.7	2.1	1.8	1.7	2.7	3.2	4.2	5.9
1974	6.4	4.6	5.9	4.4	2.8	2.4	2.2	1.5	2.2	4.1	4.0	5.0
1975	4.5	4.3	4.7	2.2	3.2	1.7	1.5	1.4	1.0	3.6	3.8	5.3

20 YR. STATISTICS FOR PACIFIC STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	1.9
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.0
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	72.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121209

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	242	.	.	.	.	.	.	.	.	.	242
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	242	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.37 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 142

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1454	1048	83	.	.	.	.	.	.	.	2585
0.50 - 0.99	1572	5020	823	.	.	.	.	.	.	.	7415
1.00 - 1.49	386	1572	282	.	.	.	.	.	.	.	2240
1.50 - 1.99	49	410	35	.	.	.	.	.	.	.	494
2.00 - 2.49	.	32	6	.	.	.	.	.	.	.	38
2.50 - 2.99	.	6	.	.	.	.	.	.	.	.	6
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3461	8083	1229	0	0	0	0	0	0	0	

MEAN HS(M) = 0.79 LARGEST HS(M) = 2.98 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 7473

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	39	383	56	25	29	3	6	.	.	544
0.50 - 0.99	11	544	8326	5338	2573	497	92	27	3	.	17411
1.00 - 1.49	47	429	2611	5097	9072	4577	792	32	8	.	22665
1.50 - 1.99	104	439	530	975	3372	7695	2429	176	34	.	15754
2.00 - 2.49	11	511	509	396	1189	4300	3803	357	8	.	11084
2.50 - 2.99	.	167	319	186	515	2150	2754	523	3	.	6617
3.00 - 3.49	.	46	164	80	229	929	1570	453	.	.	3471
3.50 - 3.99	.	.	53	39	128	385	795	321	.	.	1721
4.00 - 4.49	.	.	15	15	41	131	408	200	.	.	810
4.50 - 4.99	.	.	.	8	1	37	181	87	.	.	314
5.00 +	.	.	.	3	3	32	119	102	.	.	259
TOTAL	176	2175	12910	12193	17148	20762	12946	2284	56	0	

MEAN HS(M) = 1.69 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 47156

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	6	6	13	.	.	.	.	.	.	.	25
1.00 - 1.49	44	87	15	1	1	.	.	.	.	.	148
1.50 - 1.99	94	282	92	8	5	1	.	.	.	.	482
2.00 - 2.49	61	410	186	59	46	11	11	.	.	.	784
2.50 - 2.99	13	383	364	152	78	49	11	.	.	.	1050
3.00 - 3.49	.	200	501	189	107	65	11	5	.	.	1078
3.50 - 3.99	.	35	296	215	154	41	32	.	.	.	773
4.00 - 4.49	.	.	97	150	131	77	27	.	.	.	482
4.50 - 4.99	.	.	20	44	94	51	29	.	1	.	239
5.00 +	.	.	3	17	66	118	75	.	.	.	279
TOTAL	219	1403	1587	835	682	413	196	5	1	0	

MEAN HS(M) = 3.15 LARGEST HS(M) = 6.57 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 3130

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	42	5	5	.	.	.	.	.	.	.	52
1.50 - 1.99	102	30	3	.	.	.	.	.	.	.	135
2.00 - 2.49	118	106	8	.	.	.	.	.	.	.	232
2.50 - 2.99	29	136	5	.	.	.	.	.	.	.	170
3.00 - 3.49	.	53	10	.	.	.	.	.	.	.	63
3.50 - 3.99	.	1	1	.	.	.	.	.	.	.	2
4.00 - 4.49	.	1	.	.	.	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	300	333	32	0	0	0	0	0	0	0	

MEAN HS(M) = 2.28 LARGEST HS(M) = 4.05 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 394

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	56	.	.	.	.	.	.	.	.	.	56
0.50 - 0.99	22	.	.	.	.	.	.	.	.	.	22
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	6	.	.	.	.	.	.	.	.	.	6
2.00 - 2.49	11	.	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	100	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.68 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 60

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

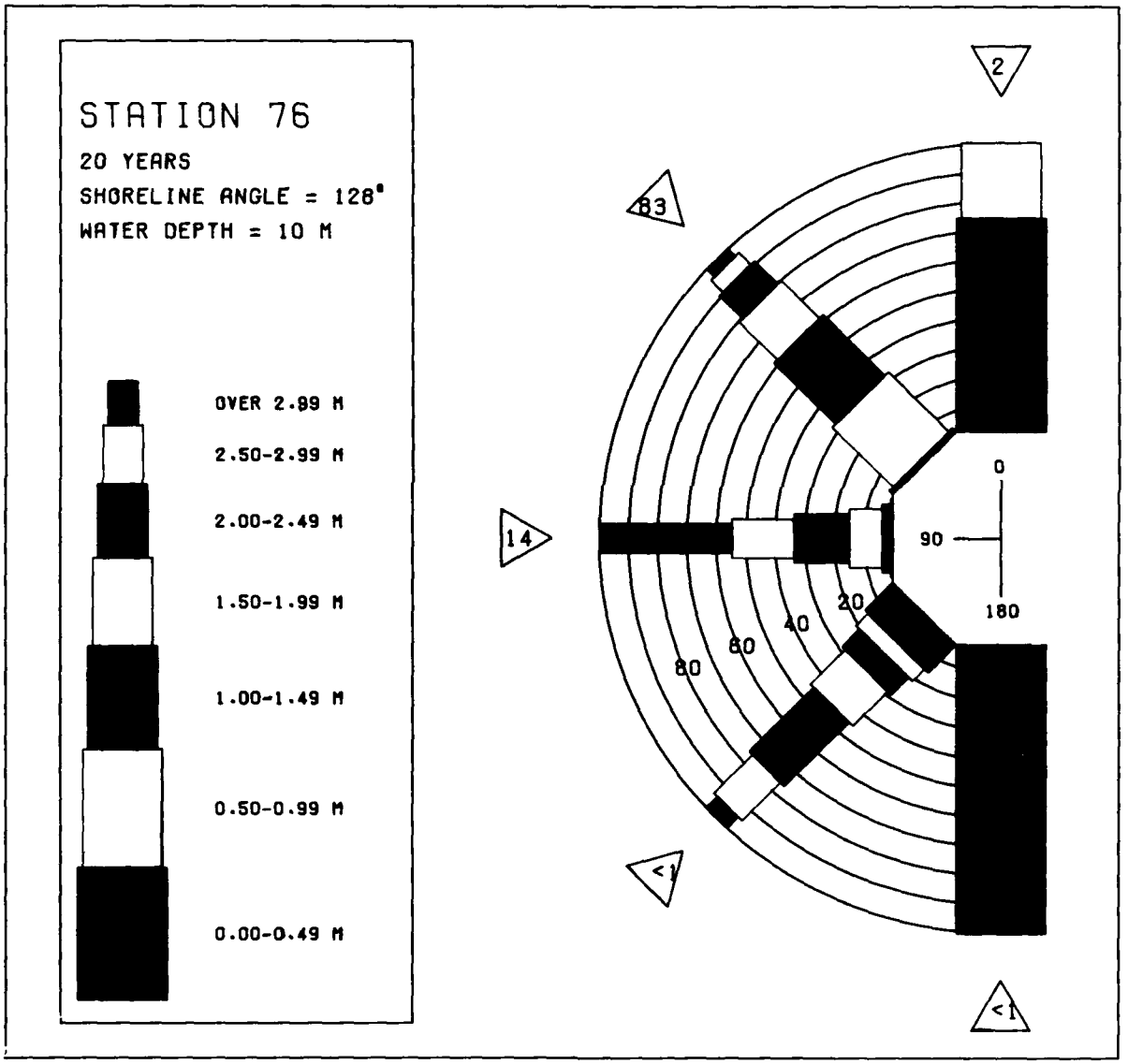
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 76 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	176	108	46	5	2	2	.	.	.	.	339
0.50 - 0.99	161	557	916	533	257	48	9	2	.	.	2484
1.00 - 1.49	52	209	291	509	907	457	79	3	.	.	2507
1.50 - 1.99	35	116	66	98	337	769	242	17	3	.	1683
2.00 - 2.49	20	106	71	45	123	431	381	35	.	.	1212
2.50 - 2.99	4	69	68	33	59	220	276	52	.	.	781
3.00 - 3.49	.	29	67	27	33	99	158	45	.	.	458
3.50 - 3.99	.	3	35	25	28	42	82	32	.	.	247
4.00 - 4.49	.	.	11	16	17	20	43	20	.	.	127
4.50 - 4.99	.	.	2	5	9	8	21	8	.	.	53
5.00 +	.	.	.	2	7	12	19	10	.	.	53
TOTAL	448	1197	1573	1298	1779	2112	1310	224	3	0	

MEAN HS(M) = 1.65 LARGEST HS(M) = 6.68 MEAN TP(SEC)= 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 76 (40.16N/ 124.25W TO 40.10N/ 124.13W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	2.2	1.7	1.5	1.3	1.2	0.8	0.8	0.9	1.2	1.6	2.0	1.5
1957	1.9	2.1	2.0	1.7	1.4	1.0	0.7	0.7	1.3	1.8	1.8	2.6	1.6
1958	3.5	3.4	2.2	2.0	1.2	0.8	1.0	0.9	1.0	1.3	1.9	2.7	1.8
1959	2.6	2.6	1.8	1.6	1.2	1.0	0.8	0.7	1.3	1.7	1.8	2.3	1.6
1960	2.6	2.5	1.5	1.6	1.4	0.8	0.8	0.8	0.7	1.3	2.3	2.6	1.6
1961	3.1	2.6	2.3	1.4	1.3	1.1	0.7	0.6	0.8	1.3	1.9	2.1	1.6
1962	1.9	2.5	1.9	1.4	0.9	0.8	0.7	1.0	1.1	1.9	2.4	3.0	1.6
1963	2.2	3.4	2.0	1.5	1.0	1.1	0.8	0.6	1.2	2.1	2.2	2.7	1.7
1964	3.1	2.0	2.0	1.5	1.0	1.2	1.2	0.9	0.9	1.4	2.2	2.9	1.7
1965	2.5	1.8	1.7	1.6	1.1	1.1	0.8	0.7	0.8	1.7	2.3	2.7	1.6
1966	3.0	2.2	2.2	1.2	1.1	1.1	1.0	0.9	1.1	1.2	1.9	2.9	1.6
1967	2.6	2.0	1.9	1.3	0.9	0.8	0.8	0.7	1.3	1.8	2.0	2.5	1.5
1968	2.6	2.9	2.3	1.2	1.0	0.9	0.9	0.9	0.8	1.5	2.5	2.5	1.7
1969	2.0	2.9	2.1	2.0	1.2	1.1	0.8	0.6	1.0	1.7	1.9	3.8	1.8
1970	3.2	3.0	2.2	1.7	1.1	0.9	0.9	0.8	0.9	1.4	2.3	2.6	1.8
1971	2.3	2.2	2.2	1.8	1.2	1.2	0.6	0.9	1.1	1.3	2.0	2.1	1.6
1972	2.5	2.4	2.3	1.7	1.2	1.1	1.0	0.8	0.7	1.2	2.7	2.7	1.7
1973	3.3	2.9	2.4	1.7	1.4	1.2	1.0	0.9	1.3	1.3	2.4	3.3	1.9
1974	3.0	2.3	2.6	2.0	1.4	1.1	0.9	0.7	0.9	1.4	2.2	2.7	1.8
1975	2.0	2.4	2.0	1.3	1.1	0.8	0.9	0.7	0.4	1.6	1.9	2.2	1.4
MEAN	2.6	2.5	2.1	1.6	1.2	1.0	0.8	0.8	1.0	1.5	2.1	2.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 76 (40.16N/ 124.25W TO 40.10N/ 124.13W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.8	5.0	2.8	2.7	1.8	1.9	1.2	1.3	1.4	3.5	2.8	3.3
1957	3.4	6.5	3.4	2.8	2.6	1.7	1.4	1.2	3.3	3.1	3.2	4.8
1958	5.2	6.4	4.1	4.7	1.7	1.3	1.7	1.6	1.4	3.0	3.8	4.5
1959	4.4	5.6	3.1	3.2	2.3	1.7	1.4	1.4	3.4	3.2	3.8	3.8
1960	5.2	5.6	3.5	2.6	2.3	1.6	1.4	1.5	1.1	3.3	5.0	4.1
1961	5.1	4.5	4.1	2.6	2.0	1.8	1.1	0.9	1.6	2.7	3.4	3.8
1962	3.6	4.5	3.1	2.4	1.7	1.6	1.3	1.4	2.6	3.8	4.6	5.9
1963	6.1	5.9	3.3	3.3	2.9	1.7	1.3	0.9	1.7	4.7	3.6	5.8
1964	5.2	3.4	3.6	2.8	2.2	2.2	1.9	1.4	1.5	2.5	3.5	5.9
1965	4.2	3.4	2.8	2.6	1.7	1.8	1.5	1.4	1.1	3.5	6.6	5.5
1966	4.6	5.2	3.5	2.7	1.7	1.6	1.3	1.3	2.0	2.6	3.8	4.4
1967	4.5	3.0	5.2	2.1	1.8	1.4	1.1	1.0	2.1	2.9	3.5	4.5
1968	5.9	5.2	3.6	2.7	1.8	1.7	1.8	1.5	1.8	2.9	3.9	4.3
1969	3.5	5.2	3.7	3.7	2.3	1.5	1.3	1.0	1.5	2.9	3.6	6.7
1970	6.1	4.5	3.8	3.1	1.8	1.4	1.4	1.3	1.4	3.3	4.0	5.0
1971	5.4	3.4	4.4	3.1	2.2	1.8	1.0	1.5	1.9	2.6	4.0	3.8
1972	5.2	3.7	4.0	4.2	2.0	1.7	2.0	1.4	1.1	1.8	4.0	6.3
1973	6.1	4.2	3.6	2.9	2.4	2.6	1.5	1.3	2.4	3.1	4.0	5.6
1974	6.4	4.3	5.5	4.0	2.2	2.0	2.2	1.3	1.6	3.4	3.7	4.5
1975	4.1	4.1	4.2	1.9	2.5	1.5	1.2	1.1	0.8	3.6	3.6	4.7

20 YR. STATISTICS FOR PACIFIC STATION 76 (40.16N/ 124.25W TO 40.10N/ 124.13W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	70.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121300

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1854	333	.	.	.	.	.	.	.	.	2187
0.50 - 0.99	604	491	.	.	.	.	.	.	.	.	1095
1.00 - 1.49	11	5	.	.	.	.	.	.	.	.	16
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2469	829	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.43 LARGEST HS(M) = 1.31 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1929

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	32	242	99	17	11	6	3	.	.	.	410
0.50 - 0.99	164	3247	3963	1144	580	148	8	15	.	.	9269
1.00 - 1.49	169	1870	7654	5898	3459	942	140	15	.	.	20147
1.50 - 1.99	23	482	1640	4238	6584	2703	610	20	.	.	16300
2.00 - 2.49	.	265	345	903	4180	5256	978	37	.	.	11964
2.50 - 2.99	.	61	150	275	1688	4328	1603	109	.	.	8714
3.00 - 3.49	.	10	61	130	544	3355	2019	169	.	.	6288
3.50 - 3.99	.	.	29	20	186	1700	2279	193	.	.	4407
4.00 - 4.49	.	.	1	5	87	614	1762	224	.	.	2693
4.50 - 4.99	.	.	.	.	.	183	999	294	.	.	1476
5.00 +	.	.	.	.	.	41	542	670	.	.	1253
TOTAL	388	6177	13942	12630	17319	19776	10940	1749	0	0	

MEAN HS(M) = 2.10 LARGEST HS(M) = 6.94 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 48479

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	5	.	.	.	.	.	.	.	.	11
0.50 - 0.99	17	23	39	3	.	.	.	3	6	.	91
1.00 - 1.49	10	95	109	53	39	20	23	3	3	.	355
1.50 - 1.99	20	107	203	102	207	249	133	15	3	.	1039
2.00 - 2.49	20	160	159	143	374	749	347	47	18	.	2017
2.50 - 2.99	.	138	198	183	268	789	619	82	20	.	2307
3.00 - 3.49	.	53	201	126	251	615	600	119	6	.	1972
3.50 - 3.99	.	3	177	119	246	417	385	102	6	.	1455
4.00 - 4.49	.	.	73	102	140	309	439	53	.	.	1116
4.50 - 4.99	.	.	10	73	77	188	340	65	.	.	753
5.00 +	.	.	1	11	47	165	456	222	1	.	903
TOTAL	73	584	1170	915	1649	3512	3342	711	63	0	

MEAN HS(M) = 3.20 LARGEST HS(M) = 7.54 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 7048

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	3	.	.	.	.	.	.	.	9
0.50 - 0.99	8	5	.	.	.	.	.	.	.	.	13
1.00 - 1.49	11	27	5	.	.	.	.	.	.	.	43
1.50 - 1.99	20	68	15	.	.	.	.	.	.	.	103
2.00 - 2.49	20	66	75	6	.	.	.	.	.	.	167
2.50 - 2.99	3	111	102	35	5	.	.	.	.	.	256
3.00 - 3.49	.	83	138	53	32	1	.	.	.	.	307
3.50 - 3.99	.	11	66	47	46	1	.	.	.	.	171
4.00 - 4.49	.	.	17	23	37	1	.	.	.	.	78
4.50 - 4.99	.	.	6	.	34	11	.	.	.	.	51
5.00 +	.	.	.	1	18	10	.	.	.	.	29
TOTAL	68	371	427	165	172	24	0	0	0	0	

MEAN HS(M) = 3.01 LARGEST HS(M) = 6.44 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 730

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	27	1	6	.	.	.	.	.	.	.	34
0.50 - 0.99	30	.	.	.	.	.	.	.	.	.	30
1.00 - 1.49	15	.	.	.	.	.	.	.	.	.	15
1.50 - 1.99	10	.	.	.	.	.	.	.	.	.	10
2.00 - 2.49	8	.	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	90	1	6	0	0	0	0	0	0	0	

MEAN HS(M) = 0.88 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 59

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

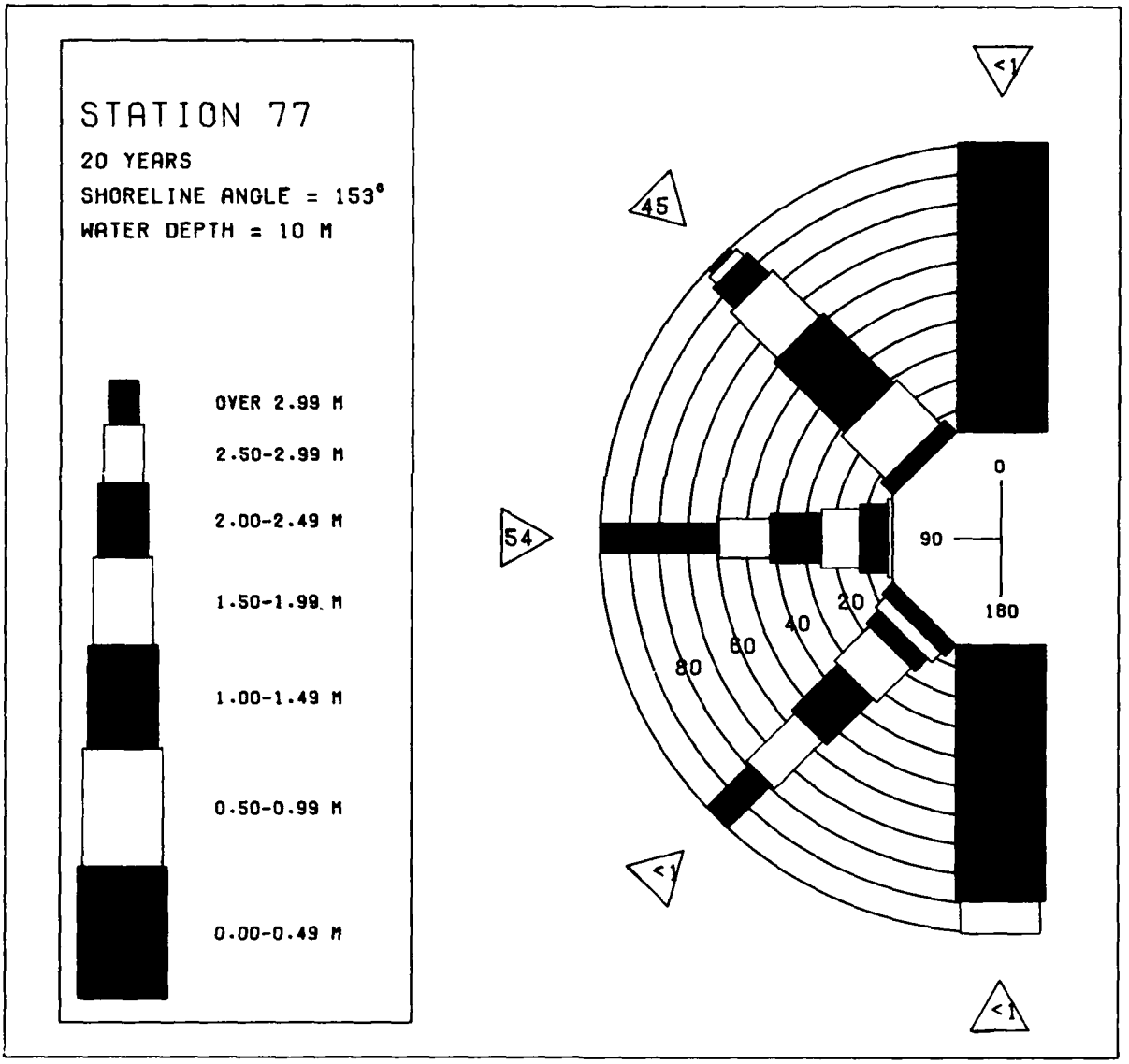
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	77	.	.	.	.	.	.	.	.	.	77
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	77	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.33 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 45

PHASE 3 ST. 77 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	200	58	10	1	1	.	.	.	.	.	270
0.50 - 0.99	82	376	400	114	58	14	.	1	.	.	1045
1.00 - 1.49	21	199	776	595	349	96	16	1	.	.	2053
1.50 - 1.99	7	65	186	434	679	295	74	3	.	.	1743
2.00 - 2.49	4	49	58	105	455	600	132	8	1	.	1412
2.50 - 2.99	.	31	45	49	196	562	222	19	2	.	1126
3.00 - 3.49	.	14	40	30	82	297	261	28	.	.	852
3.50 - 3.99	.	1	27	18	47	212	266	29	.	.	600
4.00 - 4.49	.	.	9	13	26	92	220	27	.	.	387
4.50 - 4.99	.	.	1	7	11	38	133	35	.	.	225
5.00 +	.	.	.	1	6	21	99	89	1	0	216
TOTAL	314	793	1552	1367	1910	2327	1423	240	3	0	

MEAN HS(M) = 2.18 LARGEST HS(M) = 7.54 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 77 (40.10N/ 124.13W TO 40.01N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.2	2.9	2.4	2.0	1.8	1.6	1.0	1.1	1.2	1.6	2.2	2.6	2.0
1957	2.5	2.7	2.6	2.3	1.9	1.4	1.0	0.9	1.7	2.3	2.6	3.4	2.1
1958	4.3	3.9	2.9	2.7	1.7	1.0	1.4	1.2	1.3	1.9	2.6	3.4	2.4
1959	3.1	3.5	2.4	2.4	1.6	1.3	1.1	0.9	1.7	2.3	2.7	3.2	2.2
1960	3.3	3.8	2.0	2.2	1.8	1.1	1.0	1.2	0.9	1.8	3.2	3.4	2.1
1961	3.7	3.2	2.8	2.0	1.7	1.6	0.9	0.8	1.1	1.9	2.5	2.8	2.1
1962	2.5	3.1	2.5	1.9	1.2	1.1	0.8	1.3	1.4	2.6	3.3	3.6	2.1
1963	2.8	3.8	2.6	1.9	1.4	1.5	1.0	0.7	1.6	2.8	2.9	3.4	2.2
1964	4.0	2.8	2.7	2.2	1.3	1.4	1.7	1.2	1.5	1.9	2.9	3.4	2.2
1965	3.0	2.5	2.3	2.5	1.6	1.5	1.4	1.0	1.2	2.3	2.9	3.8	2.1
1966	3.8	2.9	3.0	1.7	1.7	1.4	1.3	1.2	1.5	1.6	2.4	3.6	2.2
1967	3.2	2.9	2.4	1.7	1.1	1.1	1.1	0.9	1.8	2.5	3.1	3.2	2.1
1968	3.1	3.5	3.0	1.8	1.3	1.2	1.3	1.2	1.2	2.1	3.2	3.1	2.2
1969	2.5	3.9	3.1	2.7	1.8	1.5	1.1	0.8	1.3	2.5	2.7	4.8	2.4
1970	3.7	4.2	3.1	2.5	1.6	1.3	1.3	1.0	1.3	2.0	2.8	3.4	2.4
1971	3.0	2.9	2.9	2.5	1.5	1.6	0.8	1.3	1.2	1.8	2.8	2.8	2.1
1972	3.0	2.9	2.8	2.4	1.8	1.6	1.4	1.1	1.0	1.8	3.7	3.3	2.3
1973	4.1	3.9	3.4	2.6	1.9	1.6	1.3	1.3	1.8	1.8	2.9	4.1	2.5
1974	3.5	3.2	3.4	2.7	2.1	1.6	1.2	0.9	1.3	1.9	3.1	3.6	2.4
1975	2.7	3.1	2.7	1.8	1.6	1.1	1.2	0.9	0.5	2.1	2.6	2.7	1.9
MEAN	3.3	3.3	2.7	2.2	1.6	1.4	1.1	1.0	1.3	2.1	2.8	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 77 (40.10N/ 124.13W TO 40.01N/ 124.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.8	4.0	3.7	2.6	2.8	1.7	1.8	2.2	3.5	3.5	4.1
1957	4.1	6.9	4.4	3.7	3.3	2.1	2.3	1.6	3.1	4.0	4.4	5.7
1958	6.5	6.4	5.4	5.9	2.5	2.0	2.7	2.5	2.2	4.1	5.6	5.3
1959	5.5	5.5	4.2	4.8	2.7	2.2	1.8	2.1	3.2	4.5	5.2	5.4
1960	6.1	5.9	4.1	3.4	2.6	2.0	1.7	1.9	1.5	4.8	5.7	5.3
1961	6.2	5.3	5.2	3.8	2.4	2.7	1.7	1.3	2.0	3.8	4.2	4.4
1962	4.3	5.2	4.3	3.6	1.9	2.1	1.8	1.9	3.2	4.3	5.5	6.1
1963	6.0	6.2	4.9	3.4	3.3	2.5	1.8	1.1	2.5	6.2	4.2	6.4
1964	6.8	4.1	4.3	4.4	3.1	2.4	2.8	1.8	2.2	2.8	5.1	6.0
1965	4.4	4.3	4.1	3.4	2.6	2.4	1.9	1.9	1.8	4.8	6.4	5.4
1966	5.3	5.0	5.4	3.7	2.5	2.0	1.8	1.8	3.2	3.3	4.1	5.4
1967	5.0	4.1	4.8	3.2	2.3	1.9	1.6	1.3	3.4	5.9	5.1	6.1
1968	5.4	6.0	4.7	4.2	2.0	1.8	2.7	2.1	2.9	3.7	4.8	4.8
1969	4.0	6.1	5.6	5.3	3.2	2.1	1.7	1.5	2.2	3.9	4.9	7.5
1970	6.7	6.3	6.1	4.7	2.4	2.2	2.0	1.7	2.1	4.1	4.8	6.4
1971	5.5	4.1	5.2	4.5	2.9	2.2	1.4	2.5	2.8	3.1	5.7	4.6
1972	5.8	5.0	4.8	4.1	3.3	2.6	2.6	1.7	1.9	2.9	5.6	6.1
1973	6.4	5.8	5.4	4.1	3.0	3.6	2.1	2.0	3.1	3.3	4.8	6.3
1974	6.5	5.0	6.6	4.9	3.3	2.8	2.5	1.6	2.8	4.8	5.0	5.9
1975	4.8	4.7	5.2	2.5	4.0	2.0	1.8	1.5	1.1	3.7	4.4	5.9

20 YR. STATISTICS FOR PACIFIC STATION 77 (40.10N/ 124.13W TO 40.01N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	162	.	.	.	.	.	.	.	.	.	162
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	162	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.34 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 95

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	436	241	8	.	.	.	.	.	.	.	685
0.50 - 0.99	1767	3620	402	.	.	.	.	.	.	.	5789
1.00 - 1.49	643	2137	337	.	.	.	.	.	.	.	3117
1.50 - 1.99	56	556	73	.	.	.	.	.	.	.	685
2.00 - 2.49	.	77	3	.	.	.	.	.	.	.	80
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2902	6634	823	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6057

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	41	145	25	27	8	3	3	.	.	252
0.50 - 0.99	6	966	6028	2118	1107	224	29	29	5	.	10512
1.00 - 1.49	15	662	5444	7462	6675	2036	419	13	3	.	22729
1.50 - 1.99	47	374	828	1904	6316	6139	1283	66	22	.	16980
2.00 - 2.49	6	331	398	501	2168	6437	2565	203	22	.	12671
2.50 - 2.99	.	148	261	239	814	3928	3314	357	1	.	9062
3.00 - 3.49	.	27	104	87	304	1777	2599	400	6	.	5304
3.50 - 3.99	.	3	44	30	157	674	1728	420	.	.	3056
4.00 - 4.49	.	.	11	10	59	292	833	350	.	.	1555
4.50 - 4.99	.	.	.	.	3	61	386	292	.	.	742
5.00 +	.	.	.	.	.	23	229	244	.	.	496
TOTAL	74	2552	13263	12376	17651	21599	13408	2377	59	0	

MEAN HS(M) = 1.93 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 48739

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	4	13	.	.	.	.	.	.	.	19
1.00 - 1.49	17	73	34	1	3	.	.	.	.	.	128
1.50 - 1.99	77	184	102	25	32	5	.	.	.	.	425
2.00 - 2.49	30	338	148	56	75	59	30	.	.	.	736
2.50 - 2.99	3	289	308	164	88	147	51	.	.	.	1050
3.00 - 3.49	.	133	407	164	143	112	51	5	.	.	1015
3.50 - 3.99	.	23	287	219	152	70	63	8	.	.	822
4.00 - 4.49	.	.	112	164	143	99	34	.	.	.	552
4.50 - 4.99	.	.	25	56	104	80	63	.	1	.	329
5.00 +	.	.	3	15	80	138	99	.	1	.	335
TOTAL	127	1046	1439	864	820	710	391	13	1	0	

MEAN HS(M) = 3.26 LARGEST HS(M) = 6.47 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 3178

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	.	.	.	.	.	.	.	.	4
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	18	3	5	.	.	.	.	.	.	.	26
1.50 - 1.99	44	30	8	.	.	.	.	.	.	.	82
2.00 - 2.49	53	94	37	1	.	.	.	.	.	.	185
2.50 - 2.99	8	111	35	1	1	.	.	.	.	.	156
3.00 - 3.49	1	61	32	.	1	.	.	.	.	.	95
3.50 - 3.99	.	11	11	.	.	.	.	.	.	.	22
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	128	311	128	2	2	0	0	0	0	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 3.83 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 342

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	.	.	.	.	.	.	.	.	.	15
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.16 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 9

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

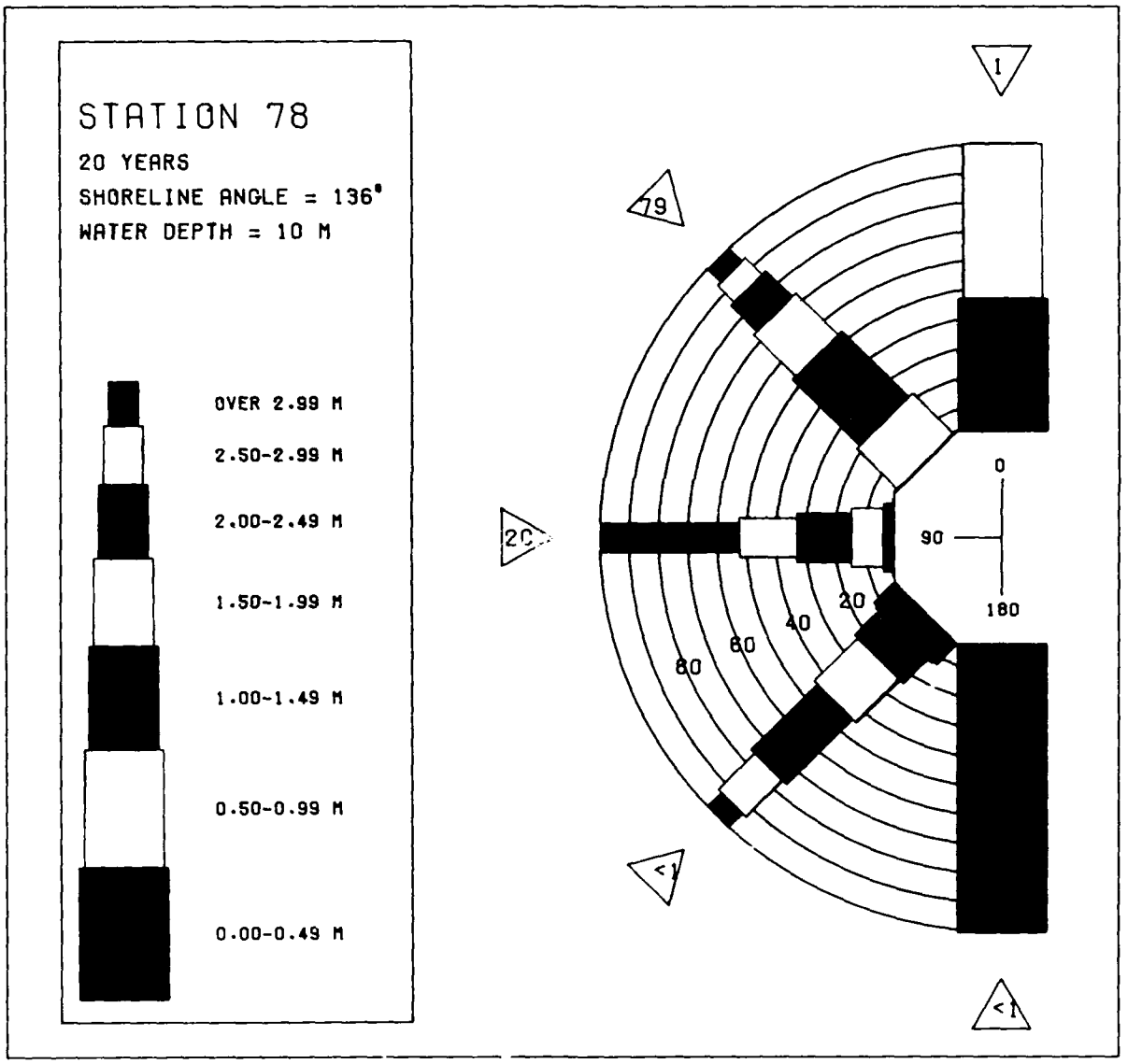
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 78 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	61	28	15	2	2	.	.	.	.	.	108
0.50 - 0.99	177	459	644	211	110	22	2	2	.	.	1627
1.00 - 1.49	69	287	582	746	667	203	41	1	.	.	2596
1.50 - 1.99	22	114	101	193	635	614	128	6	2	.	1815
2.00 - 2.49	9	84	58	55	226	649	261	20	2	.	1364
2.50 - 2.99	1	55	60	40	90	407	336	35	.	.	1024
3.00 - 3.49	.	22	54	25	45	189	255	40	.	.	640
3.50 - 3.99	.	3	34	24	30	74	179	42	.	.	386
4.00 - 4.49	.	.	12	17	20	39	86	35	.	.	209
4.50 - 4.99	.	.	2	5	10	14	45	29	.	.	105
5.00 +	.	.	.	1	8	16	32	24	.	.	81
TOTAL	339	1052	1562	1319	1843	2227	1375	234	4	0	

MEAN HS(M) = 1.90 LARGEST HS(M) = 6.99 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1957	2.1	2.4	2.3	2.0	1.6	1.2	0.9	0.9	1.4	2.0	2.2	2.9	1.8
1958	3.8	3.6	2.5	2.3	1.4	0.9	1.2	1.1	1.2	1.6	2.2	3.0	2.1
1959	2.8	2.9	2.0	2.0	1.4	1.2	1.0	0.9	1.5	1.9	2.2	2.7	1.9
1960	2.8	3.3	1.8	1.9	1.6	1.0	1.0	1.0	0.9	1.6	2.7	2.9	1.9
1961	3.3	2.8	2.5	1.7	1.5	1.4	0.8	0.7	1.0	1.6	2.1	2.4	1.8
1962	2.1	2.8	2.2	1.6	1.1	1.0	0.9	1.1	1.2	2.2	2.7	3.2	1.8
1963	2.5	3.5	2.3	1.7	1.2	1.3	0.9	0.7	1.4	2.4	2.5	3.0	1.9
1964	3.5	2.3	2.3	1.9	1.2	1.3	1.4	1.1	1.1	1.6	2.5	3.1	1.9
1965	2.7	2.1	2.0	1.9	1.4	1.4	1.0	0.9	0.9	2.0	2.6	3.1	1.8
1966	3.3	2.5	2.5	1.7	1.4	1.2	1.2	1.1	1.3	1.4	2.1	3.2	1.9
1967	2.8	2.4	2.1	1.5	1.0	1.0	1.0	0.8	1.5	2.1	2.4	2.8	1.8
1968	2.8	3.1	2.6	1.5	1.2	1.1	1.1	1.1	1.0	1.8	2.8	2.8	1.9
1969	2.2	3.3	2.5	2.3	1.5	1.3	1.0	0.8	1.1	2.0	2.3	4.2	2.0
1970	3.4	3.5	2.6	2.1	1.4	1.1	1.2	1.0	1.1	1.7	2.5	3.0	2.0
1971	2.6	3.4	2.5	2.1	1.3	1.4	0.8	1.1	1.3	1.5	2.4	2.4	1.8
1972	2.9	3.7	2.5	2.0	1.5	1.4	1.2	1.0	0.9	1.4	3.1	3.0	2.0
1973	3.6	3.2	2.8	2.1	1.6	1.4	1.2	1.2	1.5	1.5	2.7	3.6	2.2
1974	3.2	2.7	2.9	2.3	1.8	1.4	1.1	0.9	1.1	1.6	2.6	3.1	2.1
1975	2.3	2.7	2.3	1.5	1.4	1.0	1.1	0.9	0.5	1.8	2.2	2.4	1.7
MEAN	2.9	2.8	2.4	1.9	1.4	1.2	1.0	1.0	1.1	1.7	2.4	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.0	5.3	3.3	3.2	2.2	2.3	1.5	1.6	1.8	3.5	3.1	3.6
1957	3.7	6.8	3.8	3.2	2.9	1.9	1.8	1.4	3.2	3.3	3.7	5.2
1958	6.0	6.4	4.2	5.2	2.0	1.6	2.1	2.0	1.7	3.4	4.5	4.8
1959	4.7	5.5	3.6	3.8	2.5	1.9	1.6	1.8	3.3	3.6	4.3	4.5
1960	5.4	5.7	3.7	3.0	2.4	1.8	1.5	1.7	1.3	3.8	5.3	4.6
1961	5.5	4.8	4.5	3.1	2.2	2.1	1.4	1.1	1.8	3.1	3.7	4.0
1962	3.8	4.8	3.6	2.9	1.7	1.9	1.6	1.6	2.7	3.9	4.9	6.0
1963	6.1	6.0	3.8	3.2	3.0	2.0	1.5	1.0	2.0	3.3	3.8	6.2
1964	5.9	3.7	3.8	3.4	2.5	2.4	2.3	1.6	1.8	2.5	4.1	5.9
1965	4.2	3.6	3.3	2.9	1.9	2.1	1.7	1.7	1.4	4.0	6.5	5.5
1966	4.9	5.0	4.4	3.1	2.0	1.8	1.6	1.5	2.5	2.9	3.8	4.5
1967	4.7	3.5	5.1	2.5	2.1	1.6	1.4	1.2	2.6	4.7	4.1	5.1
1968	5.7	5.5	3.9	3.4	1.9	1.8	2.3	1.8	2.2	3.0	4.2	4.4
1969	3.7	5.4	4.5	4.2	2.7	1.7	1.5	1.2	1.8	3.1	4.1	7.0
1970	6.4	5.4	4.8	3.8	2.1	1.8	1.7	1.5	1.8	3.6	4.4	5.5
1971	5.4	3.7	4.7	3.5	2.5	2.0	1.3	1.9	2.2	2.7	4.6	4.1
1972	5.4	4.0	4.3	4.1	2.6	2.1	2.2	1.4	1.4	2.3	4.6	6.2
1973	5.9	4.8	4.3	3.4	2.6	3.0	1.8	1.6	2.7	3.2	4.1	5.9
1974	6.4	4.6	5.9	4.4	2.7	2.3	2.2	1.4	2.1	4.0	3.9	4.9
1975	4.4	4.3	4.6	2.2	3.1	1.7	1.5	1.4	1.0	3.5	3.8	5.2

20 YR. STATISTICS FOR PACIFIC STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.9
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	148	.	.	.	.	.	.	.	.	.	148
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	148	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.39 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 87

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	273	90	3	.	.	.	.	.	.	.	371
0.50 - 0.99	1658	2879	213	.	.	.	.	.	.	.	4750
1.00 - 1.49	831	2491	331	.	.	.	.	.	.	.	3653
1.50 - 1.99	85	677	75	.	.	.	.	.	.	.	837
2.00 - 2.49	.	104	6	.	.	.	.	.	.	.	110
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2852	6246	628	0	0	0	0	0	0	0	

MEAN HS(M) = 1.02 LARGEST HS(M) = 2.88 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5689

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	51	100	20	13	6	3	3	.	.	196
0.50 - 0.99	3	1007	4842	1521	855	181	10	17	5	.	8441
1.00 - 1.49	22	826	6498	7178	5248	1435	316	20	.	.	21543
1.50 - 1.99	32	376	1083	2635	7094	5066	1004	58	8	.	17356
2.00 - 2.49	5	338	367	627	2857	6913	2156	142	29	.	13434
2.50 - 2.99	.	148	246	285	1028	4510	2907	306	6	.	9436
3.00 - 3.49	.	23	106	82	367	2233	2943	347	8	.	6109
3.50 - 3.99	.	.	37	17	179	930	2094	376	.	.	3633
4.00 - 4.49	.	.	3	10	56	362	1146	355	.	.	1932
4.50 - 4.99	.	.	.	.	6	88	508	330	.	.	932
5.00 +	.	.	.	.	.	29	287	376	.	.	692
TOTAL	62	2769	13282	12375	17703	21753	13374	2330	56	0	

MEAN HS(M) = 2.03 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 48938

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	6	15	1	3	.	.	.	.	.	21
1.00 - 1.49	13	61	59	1	3	.	.	.	3	.	140
1.50 - 1.99	20	165	119	27	56	17	6	1	.	.	411
2.00 - 2.49	17	301	140	65	123	97	30	3	.	.	776
2.50 - 2.99	.	256	268	160	116	231	111	6	.	.	1148
3.00 - 3.49	.	126	403	131	245	136	88	11	.	.	1095
3.50 - 3.99	.	20	258	209	201	104	85	18	.	.	895
4.00 - 4.49	.	.	106	143	143	123	69	8	.	.	589
4.50 - 4.99	.	.	32	56	98	99	83	11	.	.	380
5.00 +	.	.	1	22	75	133	142	10	1	.	384
TOTAL	100	935	1406	863	961	942	611	63	4	0	

MEAN HS(M) = 3.27 LARGEST HS(M) = 6.86 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 3462

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	.	.	.	.	.	.	.	.	4
0.50 - 0.99	5	.	.	.	.	.	.	.	.	.	5
1.00 - 1.49	6	5	8	.	.	.	.	.	.	.	19
1.50 - 1.99	29	34	5	.	.	.	.	.	.	.	68
2.00 - 2.49	23	63	39	1	.	.	.	.	.	.	126
2.50 - 2.99	3	98	27	3	1	.	.	.	.	.	102
3.00 - 3.49	.	32	27	.	1	.	.	.	.	.	60
3.50 - 3.99	.	.	10	.	.	.	.	.	.	.	10
4.00 - 4.49	.	.	.	.	1	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	.	1	.	.	.	.	1
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	69	203	116	4	3	2	0	0	0	0	

MEAN HS(M) = 2.41 LARGEST HS(M) = 5.13 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 239

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.09 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 4

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

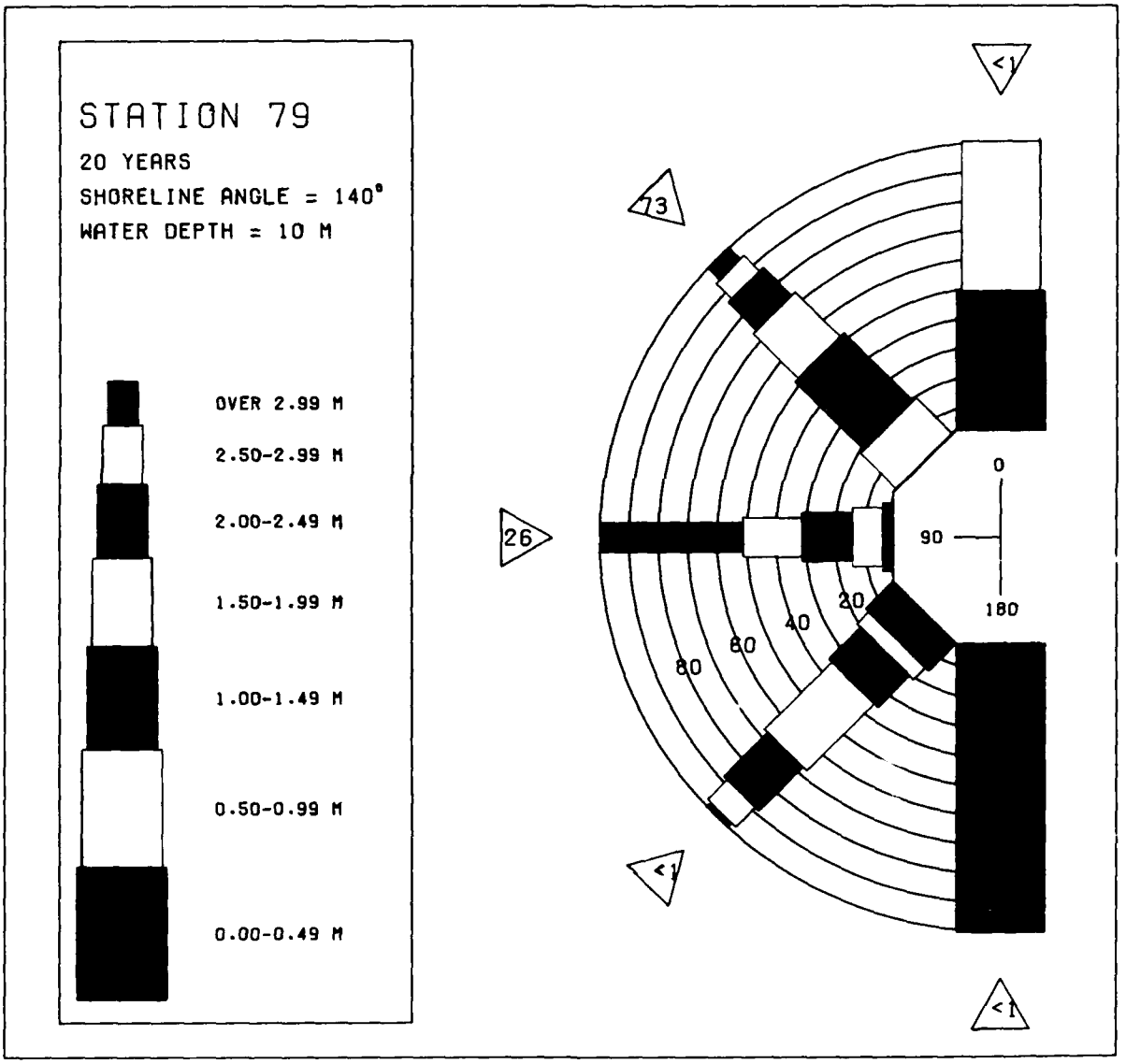
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 79 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	43	14	10	2	1	.	.	.	.	.	70
0.50 - 0.99	166	389	507	152	85	18	1	1	.	.	1319
1.00 - 1.49	87	338	689	718	525	143	31	2	.	.	2533
1.50 - 1.99	21	125	128	266	715	508	101	5	.	.	1869
2.00 - 2.49	4	80	55	69	298	701	218	14	2	.	1441
2.50 - 2.99	.	47	54	45	114	474	301	31	.	.	1066
3.00 - 3.49	.	18	54	26	51	236	303	35	.	.	723
3.50 - 3.99	.	2	30	22	38	103	218	39	.	.	452
4.00 - 4.49	.	.	10	15	20	48	121	36	.	.	250
4.50 - 4.99	.	.	3	5	10	18	59	34	.	.	129
5.00 +	.	.	.	2	7	16	42	38	.	.	105
TOTAL	321	1013	1540	1322	1864	2265	1395	235	2	0	

MEAN HS(M) = 2.00 LARGEST HS(M) = 7.20 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 79 (39.91N/ 123.91W TO 39.83N/ 123.86W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	2.6	2.1	1.8	1.6	1.5	1.0	1.1	1.1	1.5	2.0	2.3	1.8
1957	2.2	2.6	2.4	2.1	1.7	1.3	1.0	0.9	1.5	2.1	2.3	3.0	1.9
1958	4.0	3.6	2.6	2.4	1.5	1.0	1.3	1.1	1.2	1.7	2.4	3.1	2.2
1959	2.9	3.1	2.1	2.1	1.5	1.3	1.1	1.0	1.6	2.0	2.3	2.8	2.0
1960	3.0	3.5	1.8	2.0	1.7	1.1	1.0	1.1	0.9	1.6	2.8	3.1	2.0
1961	3.4	2.9	2.6	1.8	1.6	1.5	0.9	0.8	1.1	1.7	2.3	2.5	1.9
1962	2.2	2.9	2.3	1.7	1.2	1.4	0.9	1.2	1.3	2.3	2.9	3.3	1.9
1963	2.6	3.6	2.4	1.8	1.3	1.4	1.0	0.8	1.4	2.5	2.6	3.1	2.0
1964	3.6	2.5	2.4	2.0	1.3	1.4	1.5	1.2	1.2	1.6	2.6	3.2	2.0
1965	2.8	2.2	2.1	2.0	1.5	1.5	1.1	1.0	1.0	2.0	2.6	3.3	1.9
1966	3.4	2.6	2.6	1.5	1.5	1.3	1.2	1.2	1.3	1.5	2.2	3.3	2.0
1967	2.9	2.6	2.2	1.6	1.1	1.1	1.1	0.9	1.6	2.2	2.6	2.9	1.9
1968	2.9	3.2	2.7	1.6	1.2	1.2	1.2	1.1	1.0	1.9	2.9	2.9	2.0
1969	2.3	3.5	2.7	2.4	1.6	1.4	1.1	0.9	1.2	2.1	2.4	4.4	2.2
1970	2.5	3.7	2.7	2.2	1.5	1.2	1.2	1.0	1.2	1.8	2.6	3.1	2.1
1971	2.7	2.5	2.6	2.2	1.5	1.5	0.8	1.2	1.4	1.6	2.3	2.5	1.9
1972	3.1	2.8	2.6	2.1	1.6	1.5	1.3	1.0	1.0	1.5	3.3	3.1	2.1
1973	3.7	3.4	3.0	2.3	1.7	1.5	1.3	1.3	1.6	1.6	2.8	3.8	2.3
1974	3.3	2.8	3.1	2.4	1.9	1.5	1.2	1.0	1.2	1.7	2.7	3.2	2.2
1975	2.4	2.8	2.5	1.6	1.5	1.1	1.2	0.9	0.6	1.9	2.3	2.5	1.8
MEAN	3.0	3.0	2.5	2.0	1.5	1.3	1.1	1.0	1.2	1.8	2.5	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 79 (39.91N/ 123.91W TO 39.83N/ 123.86W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.1	5.4	3.5	3.4	2.4	2.4	1.6	1.7	1.9	3.5	3.2	3.8
1957	3.7	6.9	4.0	3.4	3.0	2.1	1.9	1.5	3.2	3.4	3.9	5.3
1958	6.2	6.3	4.5	5.3	2.2	1.7	2.3	2.1	1.9	3.6	4.8	5.0
1959	4.8	5.5	3.7	4.1	2.6	2.1	1.7	1.9	3.3	3.9	4.6	4.8
1960	5.3	5.8	3.8	3.1	2.4	2.0	1.6	1.8	1.4	4.1	5.4	4.8
1961	5.7	5.0	4.7	3.3	2.3	2.3	1.5	1.2	1.9	3.3	3.8	4.2
1962	3.9	4.9	3.8	3.1	1.8	2.0	1.7	1.8	2.8	4.0	5.1	6.0
1963	6.1	6.1	4.1	3.1	3.1	2.2	1.6	1.1	2.2	5.6	3.9	6.2
1964	6.1	3.8	3.9	3.7	2.7	2.4	2.5	1.7	1.9	2.5	4.4	6.0
1965	4.2	3.7	3.6	3.1	2.1	2.2	1.8	1.8	1.6	4.2	6.3	5.5
1966	5.0	4.9	4.7	3.3	2.2	1.9	1.7	1.6	2.7	3.0	3.8	4.7
1967	4.7	3.7	5.0	2.7	2.2	1.7	1.5	1.4	2.8	5.1	4.4	5.4
1968	5.6	5.6	4.1	3.7	1.9	1.9	2.4	1.9	2.4	3.1	4.4	4.5
1969	3.8	5.6	4.8	4.5	2.8	1.9	1.6	1.3	1.9	3.3	4.3	7.2
1970	6.5	5.8	5.1	4.1	2.2	1.9	1.8	1.6	1.9	3.7	4.5	5.7
1971	5.5	3.8	4.9	3.8	2.7	2.0	1.4	2.1	2.3	2.7	5.0	4.2
1972	5.5	4.2	4.5	4.1	2.8	2.2	2.3	1.4	1.6	2.4	4.9	6.2
1973	5.9	5.0	4.6	3.6	2.8	3.2	1.9	1.8	2.8	3.2	4.2	6.0
1974	6.4	4.7	6.1	4.5	2.9	2.5	2.2	1.5	2.3	4.3	4.2	5.1
1975	4.4	4.3	4.8	2.3	3.4	1.8	1.6	1.5	1.0	3.5	3.8	5.4

20 YR. STATISTICS FOR PACIFIC STATION 79 (39.91N/ 123.91W TO 39.83N/ 123.86W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	73.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	280	5	.	.	.	.	.	.	.	.	285
0.50 - 0.99	658	119	.	.	.	.	.	.	.	.	777
1.00 - 1.49	10	3	.	.	.	.	.	.	.	.	13
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	948	127	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.61 LARGEST HS(M) = 1.17 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 630

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	32	27	3	.	6	.	3	.	.	76
0.50 - 0.99	441	1640	1545	256	169	35	11	.	.	.	4097
1.00 - 1.49	687	3519	6947	2796	1288	183	1	.	.	.	15421
1.50 - 1.99	176	1552	3600	5142	3624	521	10	5	.	.	14630
2.00 - 2.49	11	539	646	1644	4618	2077	23	.	.	.	9558
2.50 - 2.99	.	208	213	362	2156	3204	18	.	.	.	6161
3.00 - 3.49	.	15	71	177	585	2590	25	.	.	.	3463
3.50 - 3.99	.	3	20	39	148	1384	15	.	.	.	1609
4.00 - 4.49	.	.	1	8	49	586	80	.	.	.	724
4.50 - 4.99	.	.	.	.	13	148	51	.	.	.	212
5.00 +	.	.	.	.	.	27	20	.	.	.	47
TOTAL	1320	7508	13070	10427	12650	10761	254	8	0	0	

MEAN HS(M) = 1.93 LA GEST HS(M) = 6.17 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 32745

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	47	131	65	41	34	1	13	5	.	337
1.00 - 1.49	6	136	667	759	852	338	68	13	1	.	2840
1.50 - 1.99	6	75	518	860	1694	1230	427	27	8	.	4845
2.00 - 2.49	8	99	147	518	1367	2397	876	73	6	.	5491
2.50 - 2.99	.	83	159	321	1062	3074	1668	111	29	.	6507
3.00 - 3.49	.	34	148	176	728	2501	2376	213	8	.	6184
3.50 - 3.99	.	1	88	78	388	1685	2477	261	1	.	4979
4.00 - 4.49	.	.	51	25	181	1086	2616	285	6	.	4250
4.50 - 4.99	.	.	1	34	42	463	1878	254	.	.	2672
5.00 +	.	.	.	6	22	219	1904	1255	1	.	3407
TOTAL	20	476	1910	2842	6397	13027	14291	2485	65	0	

MEAN HS(M) = 3.16 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 12.8 NUMBER OF CASES = 24286

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	6	27	5	.	.	.	.	.	.	.	38
1.50 - 1.99	13	68	35	.	.	.	.	.	.	.	116
2.00 - 2.49	5	68	75	22	11	1	.	.	.	.	182
2.50 - 2.99	.	61	118	39	30	.	.	.	.	.	248
3.00 - 3.49	.	22	133	68	44	1	.	.	.	.	268
3.50 - 3.99	.	3	59	46	75	13	1	.	.	.	197
4.00 - 4.49	.	.	23	18	68	6	.	.	.	.	115
4.50 - 4.99	.	.	3	13	32	10	.	.	.	.	58
5.00 +	.	.	.	1	5	18	.	.	.	.	24
TOTAL	24	250	451	207	265	49	1	0	0	0	

MEAN HS(M) = 3.09 LARGEST HS(M) = 5.83 MEAN TP(SEC) = 9.3 NUMBER OF CASES = 741

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	1	.	.	.	.	.	.	.	.	16
0.50 - 0.99	8	1	.	.	.	.	.	.	.	.	9
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	23	2	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.38 LARGEST HS(M) = 0.80 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 16

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

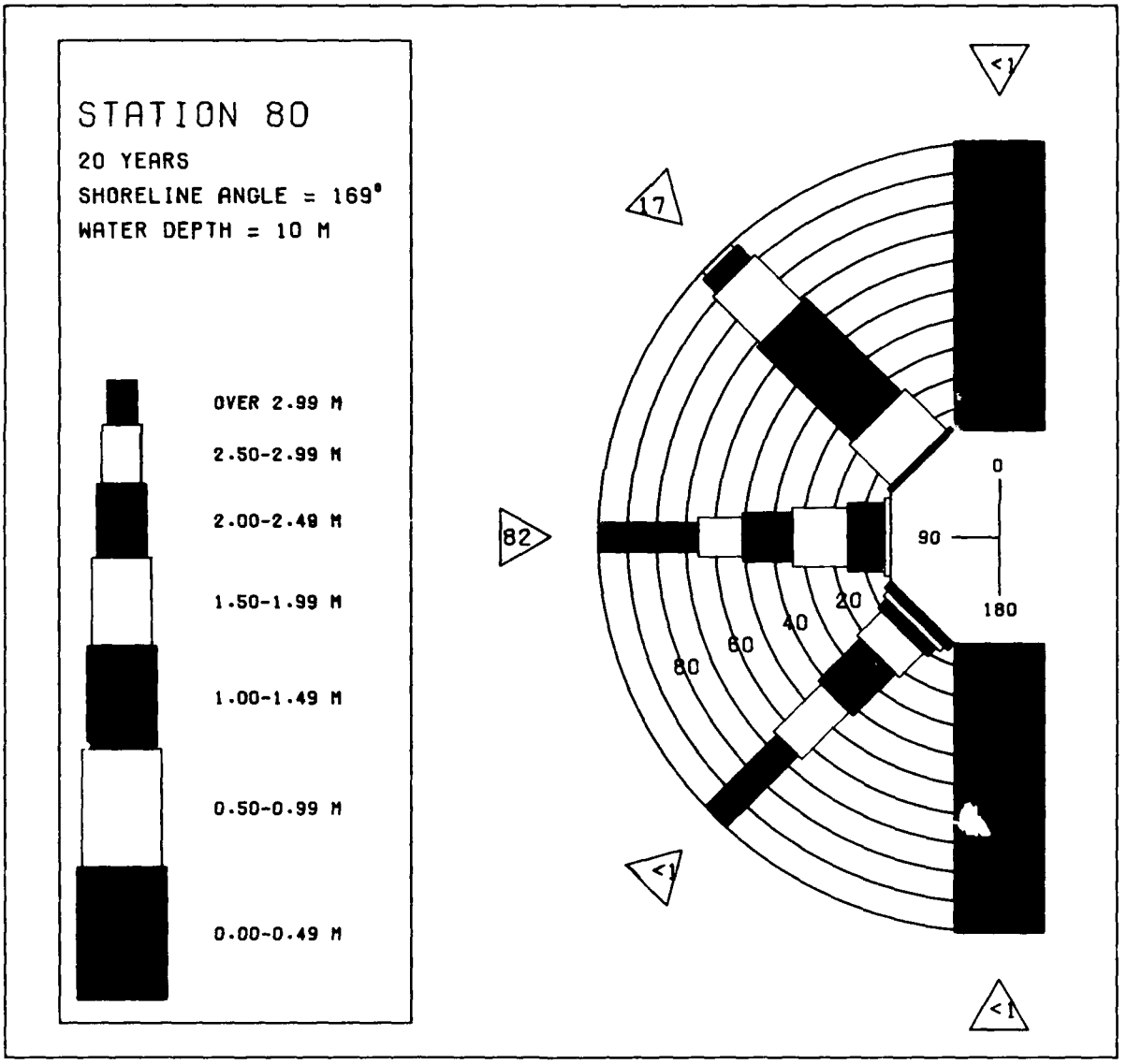
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 80 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	30	4	2								36
0.50 - 0.99	110	181	167	32	21	7	1	1	.	.	520
1.00 - 1.49	71	369	761	355	214	52	7	1	.	.	1829
1.50 - 1.99	19	169	415	600	531	175	43	3	.	.	1955
2.00 - 2.49	2	70	86	218	601	447	90	5	.	.	1519
2.50 - 2.99	.	35	49	72	324	627	168	11	2	.	1288
3.00 - 3.49	.	7	35	42	135	509	240	21	.	.	989
3.50 - 3.99	.	.	16	16	61	308	249	26	.	.	676
4.00 - 4.49	.	.	7	5	29	168	269	28	.	.	506
4.50 - 4.99	.	.	.	4	8	62	193	25	.	.	292
5.00 +	.	.	.	.	2	26	192	125	.	.	345
TOTAL	232	834	1538	1344	1926	2381	1452	246	2	0	

MEAN HS(M) = 2.44 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 80 (39.83N/ 123.86W TO 39.71N/ 123.85W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.2	2.7	2.3	2.1	1.9	1.3	1.4	1.3	1.9	2.4	2.8	2.2
1957	2.7	3.1	2.8	2.6	2.1	1.6	1.3	1.1	1.8	2.4	2.9	3.7	2.3
1958	4.5	4.0	3.2	3.0	1.9	1.3	1.6	1.4	1.5	2.1	3.0	3.5	2.6
1959	3.3	3.7	2.6	2.7	1.8	1.5	1.4	1.2	1.8	2.5	3.0	3.5	2.4
1960	3.5	4.0	2.2	2.4	2.0	1.4	1.3	1.5	1.2	2.0	3.5	3.6	2.4
1961	3.9	3.4	2.9	2.3	1.9	1.9	1.2	1.0	1.3	2.2	2.8	3.1	2.3
1962	2.6	3.3	2.8	2.2	1.5	1.4	1.3	1.5	1.6	2.8	3.6	3.7	2.3
1963	3.0	3.8	3.0	2.1	1.6	1.8	1.3	1.0	1.8	3.1	3.1	3.5	2.4
1964	4.3	3.0	3.0	2.7	1.6	1.6	2.0	1.5	1.5	2.0	3.1	3.7	2.5
1965	3.2	2.8	2.6	2.5	2.0	1.9	1.4	1.2	1.3	2.5	3.1	4.1	2.4
1966	4.0	3.1	3.2	2.0	2.0	1.6	1.6	1.5	1.7	1.9	2.5	3.8	2.4
1967	3.4	3.3	2.5	2.0	1.3	1.3	1.4	1.1	2.0	2.8	3.4	3.5	2.3
1968	3.2	3.6	3.2	2.1	1.5	1.4	1.5	1.4	1.3	2.3	3.4	3.3	2.4
1969	2.7	4.2	3.4	3.0	2.0	1.7	1.4	1.2	1.4	2.7	3.1	5.0	2.7
1970	3.8	4.5	3.4	2.9	1.9	1.5	1.6	1.3	1.4	2.2	3.0	3.8	2.6
1971	3.2	2.8	3.1	2.9	1.9	1.8	1.0	1.5	1.7	2.1	3.2	3.1	2.4
1972	3.9	3.3	3.0	2.7	2.1	1.9	1.7	1.3	1.3	2.0	4.1	3.5	2.6
1973	4.2	4.1	3.8	3.0	2.2	2.0	1.6	1.7	2.0	2.1	3.2	4.3	2.9
1974	3.6	3.5	3.7	3.0	2.5	2.0	1.4	1.2	1.5	2.3	3.4	3.9	2.7
1975	3.0	3.3	3.0	2.1	1.9	1.4	1.5	1.2	0.7	2.3	2.9	2.9	2.2
MEAN	3.5	3.5	3.0	2.5	1.9	1.6	1.4	1.3	1.5	2.3	3.1	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 80 (39.83N/ 123.86W TO 39.71N/ 123.85W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.2	5.9	4.5	4.2	3.0	3.2	2.0	2.1	2.5	3.4	3.7	4.4
1957	4.4	6.8	4.7	4.2	3.6	2.5	2.7	1.9	3.1	4.5	4.8	6.1
1958	6.5	6.0	6.0	6.2	2.9	2.2	2.0	2.9	2.4	4.4	6.2	5.5
1959	5.9	6.0	4.6	5.5	2.9	2.5	2.0	2.5	2.9	5.0	5.7	6.0
1960	6.1	6.1	4.2	3.8	3.0	2.4	2.0	2.1	1.7	5.4	6.0	5.8
1961	6.2	5.6	5.6	4.2	2.8	3.0	2.0	1.4	2.3	4.4	4.8	4.6
1962	4.8	5.3	4.8	4.0	3.3	2.5	2.1	2.1	2.6	4.9	5.7	6.0
1963	5.4	6.0	5.6	4.0	3.3	2.9	2.1	1.5	2.7	6.3	4.7	6.2
1964	7.2	4.3	4.8	4.9	3.6	2.8	2.2	2.1	2.5	3.1	5.6	6.0
1965	4.6	4.8	4.6	3.9	3.1	2.8	2.1	2.2	2.1	5.2	5.9	6.0
1966	5.5	5.1	6.2	4.0	2.8	2.3	2.2	2.1	3.6	3.5	4.5	6.0
1967	5.2	4.6	4.1	3.6	2.7	2.2	1.9	1.9	3.8	6.0	5.6	6.5
1968	4.7	6.2	5.3	4.8	2.3	2.2	3.1	2.3	3.2	4.2	5.2	4.9
1969	4.2	6.4	6.4	5.9	3.5	2.4	2.1	1.7	2.5	4.4	5.4	7.7
1970	6.8	6.3	6.2	5.4	2.8	2.5	2.3	2.0	2.5	4.3	5.1	6.8
1971	6.0	4.3	5.5	5.1	3.3	2.4	1.8	2.9	2.1	3.6	6.1	5.2
1972	5.9	5.7	5.1	4.3	3.8	2.9	2.8	1.9	2.1	3.3	6.2	6.1
1973	6.3	6.2	6.1	4.7	3.4	4.2	2.5	2.3	3.4	3.6	5.2	6.5
1974	6.1	5.4	6.6	5.2	3.8	3.1	2.8	2.0	3.1	5.5	5.6	6.1
1975	4.8	5.3	5.5	2.9	4.5	2.6	2.1	2.1	1.2	3.7	5.0	6.1

20 YR. STATISTICS FOR PACIFIC STATION 80 (39.83N/ 123.86W TO 39.71N/ 123.85W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121200

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	203	5	.	.	.	.	.	.	.	.	208
0.50 - 0.99	730	181	.	.	.	.	.	.	.	.	911
1.00 - 1.49	968	669	.	.	.	.	.	.	.	.	1637
1.50 - 1.99	162	201	.	.	.	.	.	.	.	.	363
2.00 - 2.49	1	11	.	.	.	.	.	.	.	.	12
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2064	1067	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.33 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1833

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	13	25	3	.	6	.	3	.	.	50
0.50 - 0.99	35	1113	1409	260	154	51	13	.	.	.	3035
1.00 - 1.49	284	3247	6408	2813	1560	304	17	3	.	.	14636
1.50 - 1.99	241	1972	3844	5277	4159	953	27	5	.	.	16478
2.00 - 2.49	25	775	768	1733	4825	2578	111	.	.	.	10815
2.50 - 2.99	.	272	239	419	2311	3898	263	.	.	.	7402
3.00 - 3.49	.	29	96	203	648	2908	354	.	.	.	4241
3.50 - 3.99	.	5	24	54	188	1699	438	.	.	.	2413
4.00 - 4.49	.	.	1	15	66	701	492	.	.	.	1275
4.50 - 4.99	.	.	.	1	11	212	287	.	.	.	511
5.00 +	.	.	.	.	.	32	142	.	.	.	174
TOTAL	585	7426	12822	10778	13922	13342	2144	11	0	0	

MEAN HS(M) = 2.06 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 35683

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	30	77	35	34	15	.	11	5	.	207
1.00 - 1.49	6	109	415	515	508	193	47	15	1	.	1809
1.50 - 1.99	5	75	448	612	1062	788	412	20	8	.	3430
2.00 - 2.49	8	94	152	450	1132	1921	802	54	6	.	4619
2.50 - 2.99	.	88	154	277	932	2345	1423	114	29	.	5362
3.00 - 3.49	.	32	143	140	626	2166	2065	213	8	.	5393
3.50 - 3.99	.	1	99	78	354	1359	2113	273	1	.	4277
4.00 - 4.49	.	.	56	20	174	893	2152	277	6	.	3578
4.50 - 4.99	.	.	1	34	58	410	1618	261	.	.	2382
5.00 +	.	.	.	8	22	219	1719	1235	1	.	3204
TOTAL	19	430	1545	2169	4902	10308	12351	2473	65	0	

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 12.9 NUMBER OF CASES = 20046

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	27	6	.	.	.	.	.	.	.	36
1.50 - 1.99	17	44	39	.	.	.	.	.	.	.	100
2.00 - 2.49	8	82	80	6	3	1	.	.	.	.	180
2.50 - 2.99	.	85	121	49	22	.	.	.	.	.	277
3.00 - 3.49	.	39	148	71	42	.	.	.	.	.	300
3.50 - 3.99	.	8	90	61	75	10	.	.	.	.	244
4.00 - 4.49	.	.	27	32	97	18	1	.	.	.	175
4.50 - 4.99	.	.	6	20	39	15	.	.	.	.	80
5.00 +	.	.	.	1	17	22	.	.	.	.	40
TOTAL	28	285	517	240	295	66	1	0	0	0	

MEAN HS(M) = 3.23 LARGEST HS(M) = 6.23 MEAN TP(SEC) = 9.3 NUMBER OF CASES = 848

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	10	.	.	.	.	.	.	.	.	.	10
1.50 - 1.99	3	.	.	.	.	.	.	.	.	.	3
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.00 LARGEST HS(M) = 1.65 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 11

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

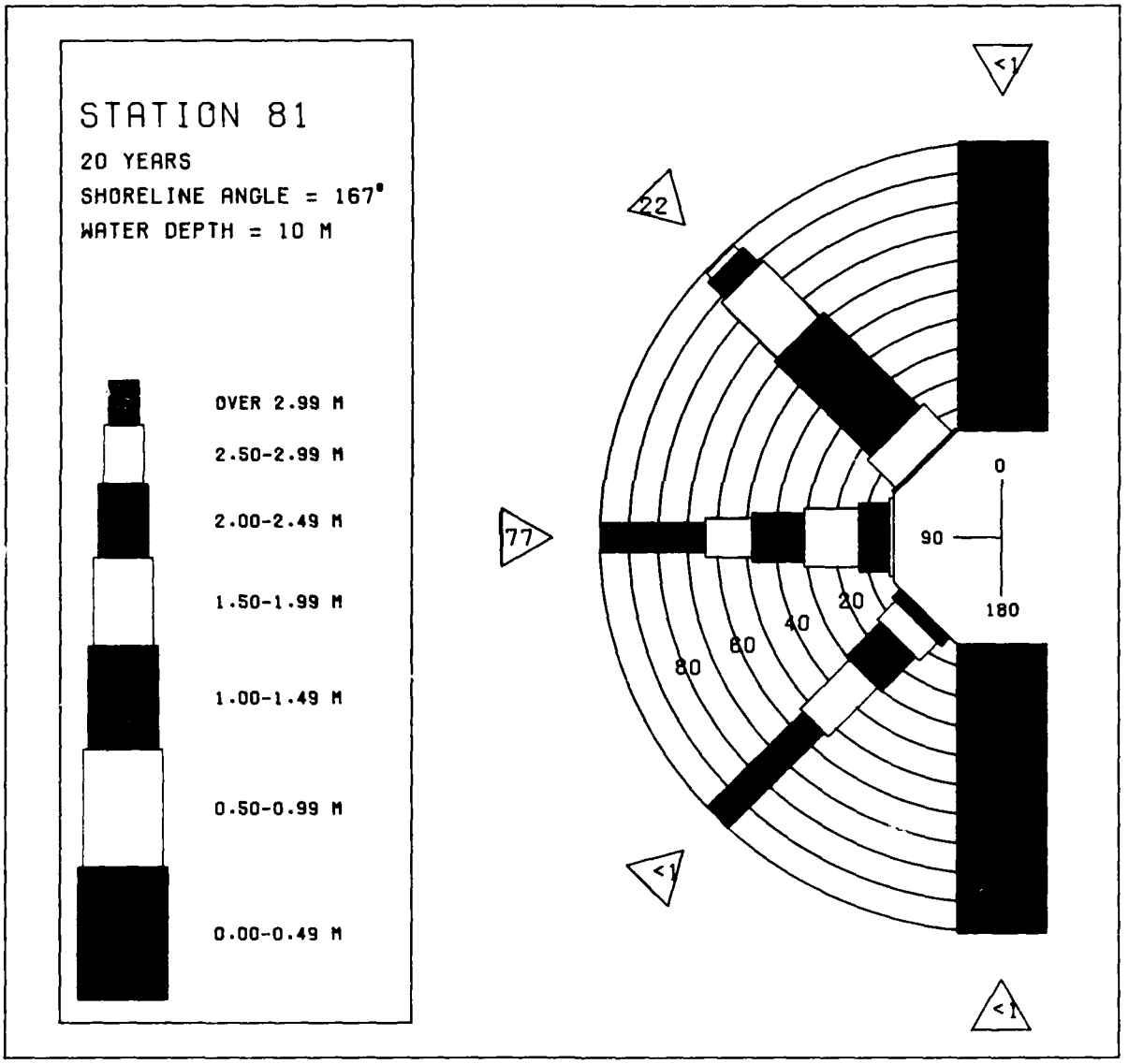
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 81 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	21	2	2	.	.	.	.	.	.	.	25
0.50 - 0.99	76	132	148	29	18	6	1	1	.	.	411
1.00 - 1.49	127	405	683	332	206	49	6	1	.	.	1809
1.50 - 1.99	42	229	433	586	522	174	43	2	.	.	2033
2.00 - 2.49	4	96	100	219	596	450	91	5	.	.	1561
2.50 - 2.99	.	44	51	74	326	624	168	11	2	.	1300
3.00 - 3.49	.	10	39	41	131	507	241	21	.	.	990
3.50 - 3.99	.	1	21	19	61	306	255	27	.	.	690
4.00 - 4.49	.	.	8	6	33	161	264	27	.	.	499
4.50 - 4.99	.	.	.	5	10	63	190	26	.	.	294
5.00 +	.	.	.	1	3	27	186	123	.	.	340
TOTAL	270	919	1485	1314	1906	2367	1445	244	2	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.68 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 81 (39.71N/ 123.85W TO 39.60N/ 123.80W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.2	2.7	2.3	2.1	2.0	1.3	1.4	1.3	1.9	2.4	2.8	2.2
1957	2.7	3.1	2.8	2.6	2.1	1.6	1.4	1.2	1.8	2.4	2.9	3.7	2.4
1958	4.5	4.0	3.2	3.0	1.9	1.3	1.6	1.5	1.5	2.1	3.0	3.5	2.6
1959	3.3	3.7	2.6	3.7	1.9	1.6	1.5	1.3	1.9	2.5	3.0	3.5	2.4
1960	3.5	4.0	2.9	3.4	2.0	1.5	1.4	1.5	1.2	2.0	3.5	3.9	2.4
1961	3.9	3.4	2.9	2.3	2.0	1.9	1.2	1.0	1.4	2.2	2.8	3.1	2.3
1962	2.6	3.3	2.8	2.2	1.5	1.4	1.3	1.5	1.6	2.8	3.6	3.7	2.4
1963	3.0	3.8	3.0	2.1	1.7	1.9	1.4	1.0	1.8	3.1	3.1	3.5	2.4
1964	4.3	3.0	3.0	2.7	1.7	1.6	2.0	1.5	1.5	2.0	3.1	3.7	2.5
1965	3.2	2.8	2.6	2.5	2.0	2.0	1.4	1.2	1.4	2.5	3.1	4.1	2.4
1966	4.0	3.2	3.2	2.0	2.1	1.6	1.6	1.5	1.7	1.9	2.6	3.8	2.4
1967	3.4	3.2	2.5	2.0	1.4	1.4	1.5	1.2	2.0	2.8	3.4	3.5	2.4
1968	3.2	3.6	3.2	2.1	1.5	1.5	1.6	1.4	1.3	2.3	3.4	3.3	2.4
1969	2.7	4.2	3.4	3.0	2.0	1.8	1.9	1.3	1.5	2.7	3.1	3.0	2.7
1970	3.8	4.5	3.4	2.9	1.9	1.5	1.6	1.4	1.5	2.2	3.0	3.8	2.6
1971	3.2	2.8	3.1	2.9	1.9	1.8	1.1	1.5	1.7	2.1	3.1	3.1	2.4
1972	3.8	3.3	3.0	2.7	2.1	1.9	1.8	1.4	1.3	2.0	4.1	3.5	2.6
1973	4.3	4.1	3.8	3.0	2.3	2.0	1.7	1.7	2.0	2.1	3.2	4.3	2.9
1974	3.6	3.4	3.6	3.0	2.5	2.0	1.5	1.3	1.5	2.2	3.4	3.9	2.7
1975	3.0	3.3	3.0	2.1	2.0	1.4	1.5	1.2	0.8	2.3	2.8	2.9	2.2
MEAN	3.5	3.5	3.0	2.5	1.9	1.7	1.5	1.4	1.5	2.3	3.1	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 81 (39.71N/ 123.85W TO 39.60N/ 123.80W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	6.0	4.5	4.3	3.0	3.1	2.0	2.2	2.5	3.4	3.7	4.4
1957	4.3	6.9	4.7	4.2	3.5	2.6	2.7	2.0	3.1	4.5	4.8	6.0
1958	6.5	6.1	6.0	6.2	2.9	2.2	3.0	2.9	2.4	4.4	6.1	5.5
1959	5.9	6.0	4.6	5.5	2.9	2.6	2.1	2.5	3.0	4.9	5.7	5.9
1960	6.2	6.1	4.2	3.8	3.1	2.5	2.1	2.2	1.7	5.3	6.0	5.7
1961	6.2	5.6	5.5	4.2	2.9	3.0	2.1	1.5	2.3	4.4	4.8	4.6
1962	4.7	5.4	4.7	4.0	2.4	2.5	2.2	2.2	3.6	4.8	5.7	6.0
1963	5.6	6.1	5.5	4.0	3.4	2.9	2.2	1.6	2.7	6.3	4.7	6.3
1964	7.2	4.3	4.8	4.9	3.6	2.9	3.3	2.1	2.6	3.1	5.6	6.0
1965	4.6	4.8	4.6	3.9	3.1	2.9	2.2	2.3	2.2	5.2	6.0	5.9
1966	5.5	5.2	6.1	4.0	2.9	2.3	2.3	2.1	3.6	3.5	4.5	5.9
1967	5.2	4.5	4.2	3.6	2.8	2.3	2.0	2.0	3.7	6.0	5.6	6.5
1968	4.8	6.2	5.2	4.8	2.4	2.4	3.1	2.3	3.2	4.2	5.2	5.0
1969	4.2	6.4	6.4	5.8	3.5	2.4	2.2	1.7	2.5	4.3	5.4	7.7
1970	6.8	6.3	6.2	5.4	2.8	2.5	2.3	2.0	2.5	4.3	5.0	6.8
1971	6.0	4.3	5.5	5.0	3.3	2.4	1.9	2.9	3.1	3.5	6.1	5.1
1972	5.9	5.6	5.1	4.2	3.7	3.0	2.8	2.0	2.1	3.3	6.2	6.1
1973	6.4	6.1	6.1	4.7	3.5	4.2	2.5	2.4	3.4	3.6	5.2	6.5
1974	6.2	5.4	6.6	5.2	3.8	3.1	2.9	2.0	3.1	5.5	5.5	6.1
1975	4.9	5.3	5.4	3.0	4.5	2.7	2.2	2.2	1.3	3.8	5.0	6.1

20 YR. STATISTICS FOR PACIFIC STATION 81 (39.71N/ 123.85W TO 39.60N/ 123.80W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.5
LARGEST WAVE HS . . . . . (METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES)	82.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121200

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	56	5	.	.	.	.	.	.	.	.	61
0.50 - 0.99	42	15	.	.	.	.	.	.	.	.	57
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	99	20	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.48 LARGEST HS(M) = 1.03 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 71

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	15	17	.	.	.	.	.	.	.	33
0.50 - 0.99	169	559	554	46	22	5	23	.	.	.	1378
1.00 - 1.49	1216	3634	2345	552	140	.	1	.	.	.	7888
1.50 - 1.99	617	4668	2323	578	140	11	.	.	.	.	8337
2.00 - 2.49	22	1439	963	429	198	27	.	.	.	.	3078
2.50 - 2.99	.	244	402	195	239	102	1	.	.	.	1183
3.00 - 3.49	.	17	97	37	131	100	3	.	.	.	385
3.50 - 3.99	.	1	11	13	49	51	.	.	.	.	125
4.00 - 4.49	.	.	3	6	5	17	.	.	.	.	31
4.50 - 4.99	.	.	.	.	3	11	10	.	.	.	24
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2025	10577	6715	1856	927	324	38	0	0	0	

MEAN HS(M) = 1.68 LARGEST HS(M) = 4.98 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 13142

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	1	.	.	8	1	3	.	.	13
0.50 - 0.99	.	70	451	169	61	54	1	5	5	.	816
1.00 - 1.49	3	284	2412	1996	1517	383	27	13	1	.	6636
1.50 - 1.99	3	97	2190	5219	4354	1647	410	63	3	.	13986
2.00 - 2.49	11	82	378	2476	5934	3790	1036	42	13	.	13762
2.50 - 2.99	.	65	124	458	3952	6615	1529	124	35	.	12902
3.00 - 3.49	.	22	80	164	1396	5489	2318	236	5	.	9710
3.50 - 3.99	.	3	58	70	465	3501	2691	270	11	.	7069
4.00 - 4.49	.	.	17	20	119	1555	2554	239	1	.	4505
4.50 - 4.99	.	.	.	1	13	554	2290	254	5	.	3027
5.00 +	.	.	.	1	3	152	2070	1317	3	.	3546
TOTAL	17	624	5711	10574	17814	23748	14836	2566	82	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 94422

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	3	6	.	.	.	.	.	.	.	9
1.00 - 1.49	8	25	25	.	3	.	.	.	.	.	61
1.50 - 1.99	6	46	32	8	13	6	.	.	.	.	111
2.00 - 2.49	3	114	94	54	54	1	.	.	.	.	320
2.50 - 2.99	.	63	100	65	49	22	.	.	.	.	299
3.00 - 3.49	.	11	97	49	65	35	1	.	.	.	258
3.50 - 3.99	.	.	34	30	54	13	5	.	.	.	136
4.00 - 4.49	.	.	13	15	22	15	5	.	.	.	70
4.50 - 4.99	.	.	.	3	8	8	5	.	.	.	24
5.00 +	.	.	.	.	1	6	.	.	.	.	7
TOTAL	17	262	401	224	269	106	16	0	0	0	

MEAN HS(M) = 2.79 LARGEST HS(M) = 5.39 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 771

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	3	6	.	.	.	.	.	.	.	.	9
1.00 - 1.49	1	11	.	.	.	.	.	.	.	.	12
1.50 - 1.99	8	11	.	.	.	.	.	.	.	.	19
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	36	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.47 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 32

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

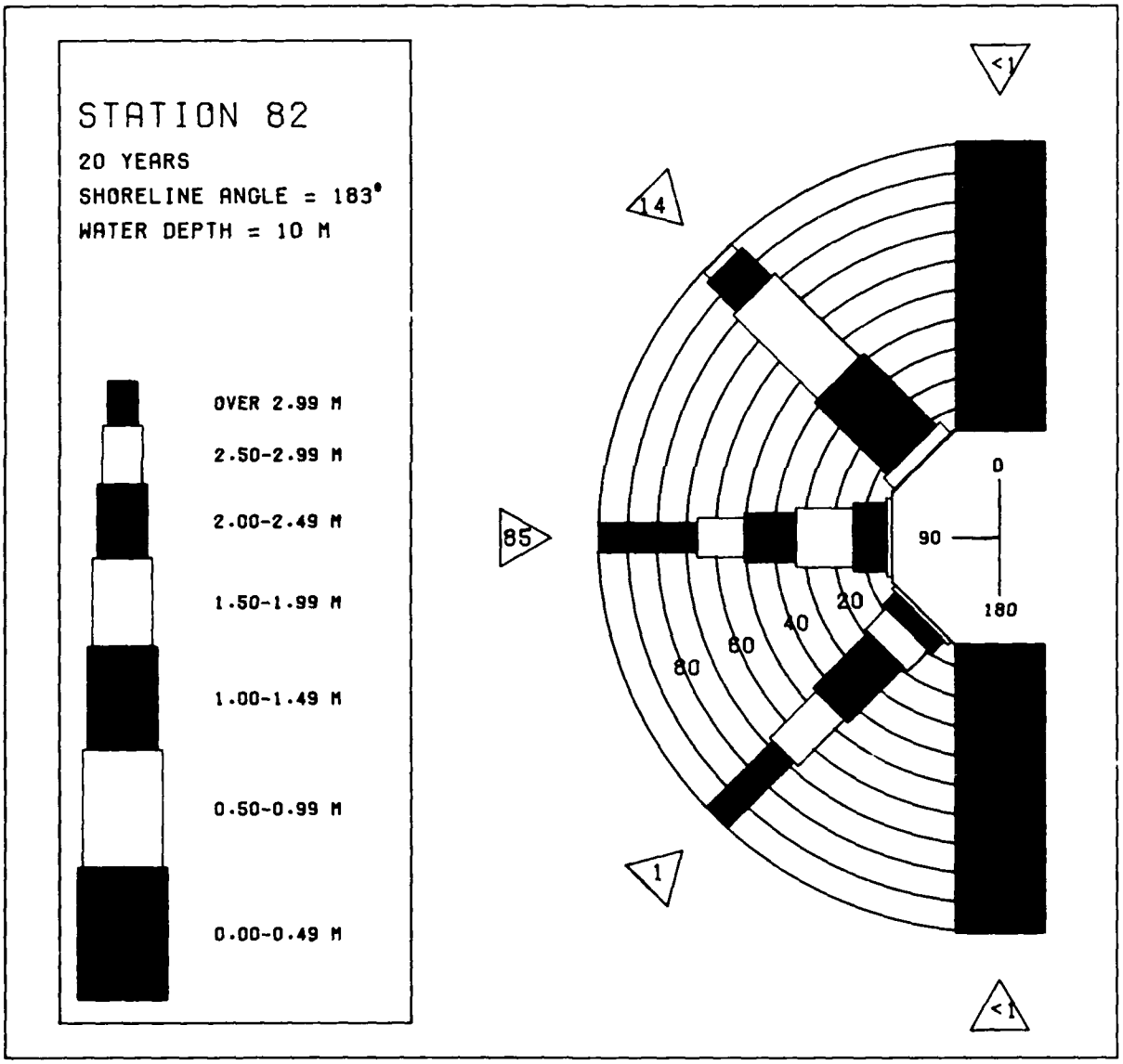
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.07 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1

PHASE 3 ST. 82 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	6	2	1	.	.	.	.	.	.	.	9
0.50 - 0.99	21	65	101	21	8	5	2	.	.	.	223
1.00 - 1.49	123	395	478	254	166	38	2	1	.	.	1457
1.50 - 1.99	63	482	454	580	450	166	41	6	.	.	2242
2.00 - 2.49	3	164	143	296	618	381	103	4	1	.	1713
2.50 - 2.99	.	37	62	71	424	674	153	12	3	.	1436
3.00 - 3.49	.	5	27	25	159	562	232	23	.	.	1033
3.50 - 3.99	.	.	10	11	56	356	268	27	1	.	730
4.00 - 4.49	.	.	3	4	14	158	255	23	.	.	457
4.50 - 4.99	.	.	.	.	2	57	221	25	.	.	305
5.00 +	.	.	.	.	.	15	207	131	.	.	353
TOTAL	216	1150	1279	1262	1897	2412	1485	252	5	0	

MEAN HS(M) = 2.53 LARGEST HS(M) = 7.20 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.1	3.3	2.7	2.3	2.3	2.1	1.5	1.6	1.5	1.9	2.5	2.7	2.3
1957	2.8	3.2	2.8	2.7	2.1	1.7	1.5	1.4	1.9	2.3	3.0	3.6	2.4
1958	4.3	3.7	3.3	3.1	2.1	1.5	1.8	1.6	1.6	2.2	3.0	3.5	2.6
1959	3.3	3.8	2.7	2.8	2.0	1.7	1.6	1.5	1.9	2.5	3.0	3.6	2.5
1960	3.5	3.9	2.2	2.4	2.0	1.7	1.5	1.6	1.4	2.1	3.5	3.6	2.5
1961	3.8	3.3	3.0	2.4	1.9	2.0	1.4	1.1	1.5	2.3	2.8	3.2	2.4
1962	2.6	3.2	3.0	2.3	1.6	1.5	1.5	1.6	1.7	2.8	3.7	3.3	2.4
1963	3.0	3.2	3.2	2.1	1.8	2.0	1.5	1.2	1.8	3.1	3.1	3.4	2.4
1964	4.3	3.1	3.2	2.9	1.8	1.6	1.6	1.7	1.7	2.0	3.2	3.5	2.6
1965	3.1	3.0	2.8	2.5	2.2	2.2	1.5	1.4	1.6	2.4	3.1	4.1	2.5
1966	3.9	3.2	3.2	2.1	2.2	1.7	1.8	1.7	1.8	2.1	2.6	3.7	2.5
1967	3.4	3.5	2.5	2.2	1.5	1.5	1.6	1.3	2.2	2.8	3.5	3.6	2.5
1968	3.0	3.3	3.2	2.4	1.6	1.6	1.8	1.5	1.4	2.4	3.4	3.4	2.4
1969	2.8	4.3	3.6	3.1	2.1	1.9	1.7	1.4	1.6	2.8	3.2	5.0	2.8
1970	3.7	4.6	3.7	3.1	2.0	1.7	1.8	1.5	1.6	2.3	3.0	3.8	2.7
1971	3.2	2.7	3.1	3.0	2.0	1.9	1.4	1.7	1.8	2.2	3.2	3.4	2.5
1972	4.0	3.3	2.8	2.8	2.2	2.1	1.9	1.5	1.5	2.1	4.2	3.4	2.6
1973	4.2	4.1	3.9	3.1	2.4	2.2	2.0	1.9	2.1	2.2	3.2	4.1	3.0
1974	3.3	3.6	3.6	3.2	2.7	2.2	1.7	1.5	1.6	2.5	3.5	4.0	2.8
1975	3.0	3.3	3.1	2.2	2.1	1.6	1.7	1.4	0.9	2.4	2.9	2.9	2.3
MEAN	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.7	4.9	4.2	3.2	3.5	2.1	2.5	2.9	3.4	3.9	4.4
1957	4.7	6.9	4.8	4.6	3.5	2.6	2.8	1.9	3.5	4.7	5.6	6.2
1958	6.2	6.1	6.1	6.5	3.0	2.5	3.2	3.0	2.6	4.9	6.1	5.5
1959	6.2	6.1	4.9	5.5	2.8	2.6	2.2	2.6	3.1	5.1	5.8	6.1
1960	5.9	6.1	4.1	3.8	3.0	2.3	2.1	2.3	2.9	5.8	5.6	5.7
1961	6.3	5.3	6.0	4.2	2.8	3.0	2.1	1.6	2.3	4.6	4.6	4.9
1962	4.7	5.2	4.9	4.1	2.4	2.5	2.5	2.4	3.6	4.9	5.8	5.3
1963	5.4	4.9	6.0	4.0	3.1	3.1	2.2	1.8	2.9	6.2	5.0	6.1
1964	7.2	4.4	5.1	5.3	4.1	2.5	3.7	2.3	2.7	3.3	5.7	5.9
1965	5.1	5.8	4.6	3.9	3.2	3.2	2.3	2.2	2.4	5.1	5.5	5.7
1966	5.3	4.7	6.4	3.7	3.2	2.4	2.2	2.1	3.8	3.7	4.9	6.0
1967	5.4	5.7	4.0	3.7	2.6	2.4	2.6	2.1	4.0	6.0	5.5	6.5
1968	4.2	4.8	5.0	5.4	3.5	2.2	2.2	2.4	3.6	4.5	5.3	6.2
1969	4.4	6.4	6.4	6.0	3.2	2.6	2.4	1.9	2.5	4.7	5.9	7.2
1970	5.7	6.2	6.1	5.9	2.9	3.0	2.3	2.1	2.6	4.4	5.1	6.8
1971	6.1	4.3	5.5	5.4	3.2	2.7	2.0	3.4	3.4	3.7	6.2	6.0
1972	6.0	5.8	4.6	4.2	3.9	3.2	3.0	2.1	2.4	3.5	6.1	6.1
1973	6.2	6.1	6.4	4.9	3.4	4.3	2.8	2.6	3.4	3.7	5.6	6.3
1974	6.1	5.5	6.4	5.6	3.9	3.3	3.0	2.1	3.2	5.5	6.0	6.2
1975	5.4	5.7	6.0	3.1	4.8	2.9	2.5	2.4	1.4	3.9	5.0	5.2

20 YR. STATISTICS FOR PACIFIC STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	46	3	.	.	.	.	.	.	.	.	49
0.50 - 0.99	29	3	.	.	.	.	.	.	.	.	32
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	75	6	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.45 LARGEST HS(M) = 0.95 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 48

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	15	11	.	.	.	.	.	.	.	27
0.50 - 0.99	155	494	432	30	17	3	11	.	.	.	1142
1.00 - 1.49	1247	3283	1880	438	100	.	1	.	.	.	6949
1.50 - 1.99	713	4986	1810	400	88	6	.	.	.	.	8003
2.00 - 2.49	25	1656	898	333	121	18	.	.	.	.	3051
2.50 - 2.99	.	254	446	148	154	87	1	.	.	.	1090
3.00 - 3.49	.	13	99	27	94	73	3	.	.	.	309
3.50 - 3.99	.	1	13	6	22	22	.	.	.	.	64
4.00 - 4.49	.	.	3	6	1	8	.	.	.	.	18
4.50 - 4.99	.	.	.	.	1	8	6	.	.	.	15
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2141	10702	5592	1388	598	225	22	0	0	0	

MEAN HS(M) = 1.69 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 7.7 NUMBER OF CASES = 12096

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	6	.	.	8	.	3	.	.	17
0.50 - 0.99	.	87	521	177	59	53	13	5	5	.	920
1.00 - 1.49	6	331	2695	1990	1490	362	25	13	1	.	6913
1.50 - 1.99	5	121	2677	5213	4322	1608	405	63	3	.	14417
2.00 - 2.49	11	102	475	2712	5944	3754	1009	41	13	.	14061
2.50 - 2.99	.	102	128	537	4127	6526	1519	114	34	.	13087
3.00 - 3.49	.	30	106	169	1497	5593	2282	236	6	.	9919
3.50 - 3.99	.	1	63	80	508	3619	2698	268	11	.	7248
4.00 - 4.49	.	.	15	23	118	1599	2573	241	1	.	4570
4.50 - 4.99	.	.	1	1	23	571	2209	260	5	.	3070
5.00 +	.	.	.	1	3	155	2125	1324	3	.	3611
TOTAL	22	774	6687	10903	18091	23848	14858	2568	82	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 45510

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	5	5	.	.	.	.	.	.	.	0
0.50 - 0.99	6	25	27	1	3	.	.	.	.	.	11
1.00 - 1.49	6	47	41	10	15	6	.	.	.	.	62
1.50 - 1.99	1	107	87	54	61	1	.	.	.	.	125
2.00 - 2.49	.	59	107	58	56	27	4	.	.	.	311
2.50 - 2.99	.	11	80	42	68	35	1	.	.	.	307
3.00 - 3.49	.	.	35	27	42	15	5	.	.	.	237
3.50 - 3.99	.	.	8	10	27	13	6	.	.	.	124
4.00 - 4.49	.	.	.	3	5	11	3	.	.	.	64
4.50 - 4.99	.	.	.	.	.	5	.	.	.	.	22
5.00 +											5
TOTAL	14	254	390	205	277	113	15	0	0	0	

MEAN HS(M) = 2.75 LARGEST HS(M) = 5.32 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 756

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	6	.	.	.	.	.	.	.	.	9
1.00 - 1.49	3	15	.	.	.	.	.	.	.	.	18
1.50 - 1.99	6	8	.	.	.	.	.	.	.	.	14
2.00 - 2.49	.	6	.	.	.	.	.	.	.	.	6
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	12	35	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 30

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

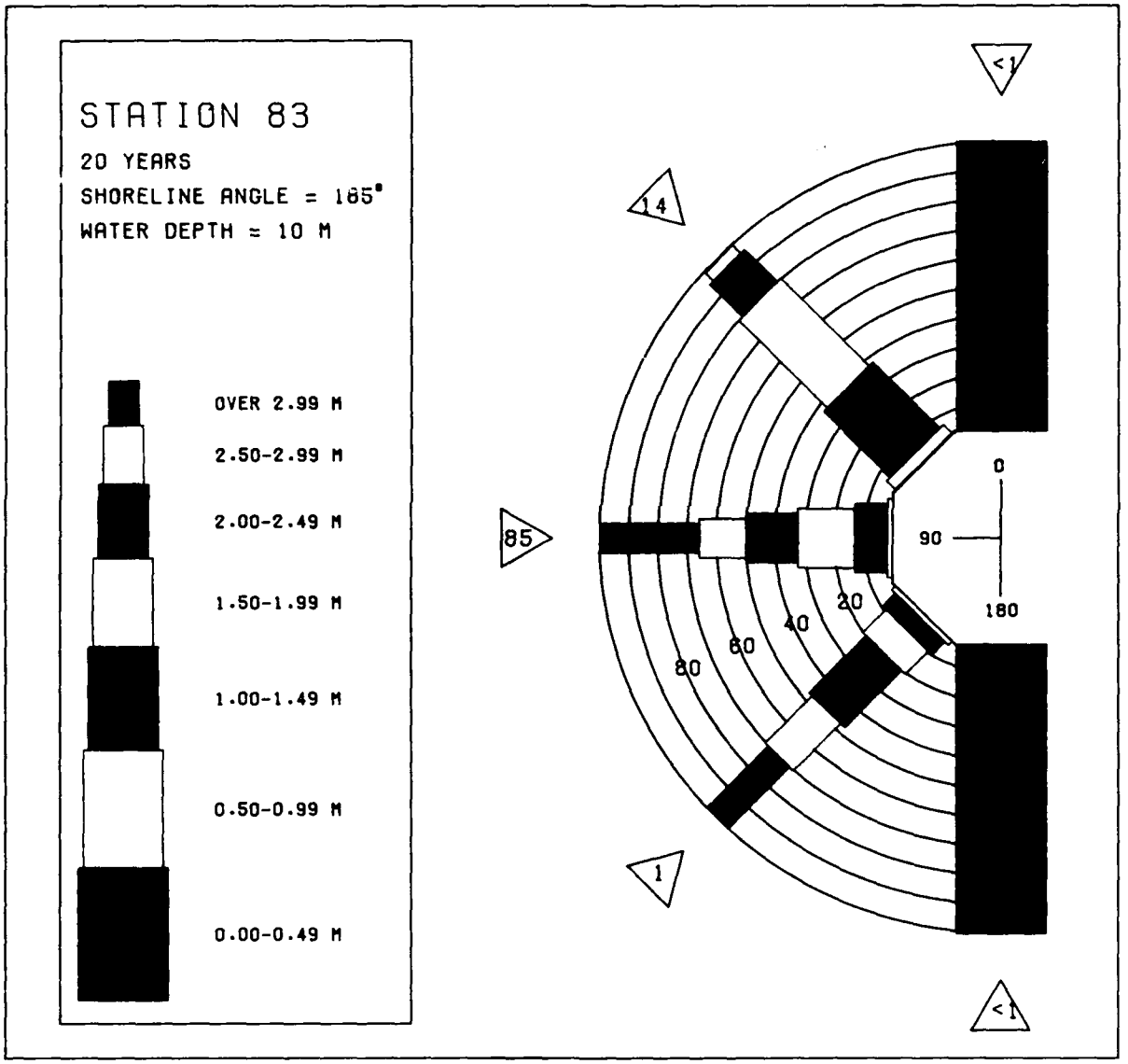
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 83 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	4	1	1	.	.	.	.	.	.	.	6
0.50 - 0.99	18	59	95	20	7	5	2	.	.	.	206
1.00 - 1.49	126	365	460	242	159	36	2	1	.	.	1391
1.50 - 1.99	73	516	452	542	442	162	40	6	.	.	2253
2.00 - 2.49	3	187	146	310	612	377	100	4	1	.	1740
2.50 - 2.99	.	41	68	74	433	664	152	11	3	.	1446
3.00 - 3.49	.	5	28	23	165	570	228	23	.	.	1042
3.50 - 3.99	.	.	11	11	57	365	270	26	1	.	741
4.00 - 4.49	.	.	2	4	14	142	258	24	.	.	464
4.50 - 4.99	.	.	.	.	3	59	221	26	.	.	309
5.00 +						16	212	132	5	0	360
TOTAL	224	1174	1263	1246	1892	2416	1485	253	5	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 7.16 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.1	3.4	2.7	2.4	2.3	2.1	1.5	1.6	1.5	2.0	2.5	2.8	2.3
1957	2.8	3.2	2.8	2.7	2.1	1.7	1.5	1.4	1.9	2.4	3.0	3.6	2.4
1958	4.3	3.7	3.3	3.1	2.1	1.5	1.8	1.6	1.6	2.2	3.1	3.5	2.7
1959	3.3	3.8	2.7	2.8	2.0	1.7	1.7	1.5	1.9	2.5	3.1	3.6	2.5
1960	3.5	3.9	2.2	2.4	2.0	1.7	1.7	1.7	1.4	2.1	3.5	3.6	2.5
1961	3.8	3.3	3.0	2.4	1.9	2.0	1.4	1.1	1.5	2.4	2.9	3.3	2.4
1962	2.6	3.2	3.0	2.3	1.6	1.5	1.6	1.6	1.8	2.8	3.7	3.3	2.4
1963	3.0	3.2	3.2	2.1	1.8	2.0	1.5	1.2	1.8	3.1	3.2	3.4	2.5
1964	4.3	3.1	3.2	2.9	1.8	1.7	2.2	1.7	1.7	2.0	3.2	3.5	2.6
1965	3.1	3.0	2.8	2.5	2.3	2.2	1.6	1.4	1.6	2.4	3.1	4.1	2.5
1966	3.9	3.2	3.2	2.2	2.2	1.7	1.8	1.7	1.8	2.1	2.6	3.7	2.5
1967	3.4	3.5	2.5	2.2	1.5	1.5	1.6	1.3	2.2	2.9	3.5	3.6	2.5
1968	3.0	3.3	3.2	2.4	1.6	1.6	1.8	1.5	1.4	2.4	3.4	3.4	2.4
1969	4.8	4.3	3.6	3.2	2.1	1.9	1.7	1.5	1.6	2.8	3.2	5.0	2.8
1970	3.7	4.6	3.7	3.2	2.0	1.7	1.8	1.6	1.6	2.3	3.1	3.8	2.8
1971	3.2	2.7	3.1	3.0	2.0	1.9	1.4	1.7	1.8	2.2	3.3	3.4	2.5
1972	4.0	3.3	2.8	2.8	2.2	2.1	1.9	1.5	1.5	2.2	4.2	3.4	2.7
1973	4.2	4.1	3.9	3.1	2.4	2.2	2.0	2.0	2.1	2.2	3.3	4.1	3.0
1974	3.3	3.6	3.6	3.2	2.8	2.2	1.8	1.5	1.7	2.5	3.5	4.0	2.8
1975	3.0	3.3	3.2	2.3	2.1	1.7	1.7	1.4	0.9	2.4	3.0	2.9	2.3
MEAN	3.4	3.5	3.1	2.7	2.1	1.8	1.7	1.5	1.7	2.4	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.7	4.9	4.2	3.3	3.5	2.2	2.5	2.9	3.4	3.9	4.4
1957	4.7	6.9	4.8	4.6	3.5	2.6	2.9	1.9	3.5	4.8	5.6	6.2
1958	6.2	6.1	6.1	6.5	3.1	2.5	3.2	3.1	2.6	4.9	6.1	5.5
1959	6.2	6.1	4.9	5.5	2.8	2.6	2.3	2.6	3.1	5.1	5.9	6.1
1960	5.9	6.1	4.1	3.8	3.1	2.3	2.2	2.3	2.0	5.8	5.6	5.8
1961	6.3	5.3	6.0	4.2	2.8	3.0	2.1	1.6	2.3	4.7	4.7	4.9
1962	4.7	5.2	5.0	4.1	2.5	2.5	2.5	2.4	3.7	4.9	5.9	5.3
1963	5.5	4.8	6.0	4.1	3.1	3.1	2.2	1.9	2.9	6.2	5.1	6.1
1964	7.2	4.4	5.2	5.3	4.2	2.6	3.7	2.3	2.7	3.3	5.7	5.9
1965	5.1	5.9	4.6	3.9	3.3	3.2	2.3	2.2	2.4	5.1	5.5	5.7
1966	5.3	4.7	6.4	3.7	3.2	2.4	2.3	2.2	3.8	3.8	5.0	6.0
1967	5.4	5.7	4.0	3.7	2.7	2.5	2.0	2.1	4.0	6.0	5.5	6.5
1968	4.2	4.8	5.0	5.4	2.5	2.3	2.2	2.4	3.7	4.5	5.3	6.2
1969	4.4	6.4	6.4	6.0	3.2	2.6	2.4	1.9	2.5	4.8	5.9	7.2
1970	5.7	6.2	6.1	5.9	2.9	2.5	2.4	2.2	2.6	4.4	5.2	6.8
1971	6.1	4.3	5.5	5.4	3.2	2.7	2.1	2.4	3.4	3.7	6.2	6.0
1972	6.0	5.8	4.6	4.3	3.9	3.2	3.0	2.2	2.5	3.5	6.1	6.1
1973	6.2	6.1	6.4	5.0	3.4	4.3	2.9	2.6	3.4	3.7	5.6	6.3
1974	6.0	5.5	6.4	5.6	3.9	3.4	3.0	2.1	3.2	5.5	6.0	6.2
1975	5.4	5.7	6.0	3.2	4.8	2.9	2.5	2.5	1.5	3.9	5.0	5.2

20 YR. STATISTICS FOR PACIFIC STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	29	.	.	.	.	.	.	.	.	32
0.50 - 0.99	265	282	.	.	.	.	.	.	.	.	547
1.00 - 1.49	1629	3062	44	.	.	.	.	.	.	.	4735
1.50 - 1.99	515	3672	87	.	.	.	.	.	.	.	4274
2.00 - 2.49	.	299	42	.	.	.	.	.	.	.	341
2.50 - 2.99	.	1	5	.	.	.	.	.	.	.	6
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2412	7345	178	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.79 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5809

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	22	1	.	10	3	.	.	.	37
0.50 - 0.99	1	568	1172	284	171	70	22	3	.	.	2291
1.00 - 1.49	66	1652	5005	2873	1966	431	39	6	.	.	12038
1.50 - 1.99	112	1144	3482	5527	4651	1534	231	13	.	.	16894
2.00 - 2.49	20	835	951	1829	5280	3668	296	3	.	.	12882
2.50 - 2.99	.	171	338	369	2701	5188	624	3	.	.	9394
3.00 - 3.49	.	27	114	131	859	3557	1201	8	1	.	5898
3.50 - 3.99	.	.	23	56	220	1947	1206	.	.	.	3452
4.00 - 4.49	.	.	3	5	70	766	1269	.	.	.	2113
4.50 - 4.99	.	.	.	.	8	224	872	.	.	.	1104
5.00 +	.	.	.	.	.	54	530	.	.	.	584
TOTAL	200	4397	11110	11075	16126	17449	6200	39	1	0	

MEAN HS(M) = 2.26 LARGEST HS(M) = 6.62 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 38989

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	1	.	.	4
0.50 - 0.99	.	18	75	27	13	.	.	1	6	.	140
1.00 - 1.49	3	30	177	253	239	88	20	10	.	.	820
1.50 - 1.99	3	27	135	366	467	634	361	51	10	.	2054
2.00 - 2.49	13	34	63	208	718	1437	860	56	20	.	3409
2.50 - 2.99	.	53	47	70	597	1788	1250	162	22	.	3989
3.00 - 3.49	.	17	66	58	248	1302	1435	256	1	.	3333
3.50 - 3.99	.	1	49	17	150	800	1538	273	5	.	2833
4.00 - 4.49	.	.	29	8	35	270	1368	273	1	.	1984
4.50 - 4.99	.	.	1	6	10	82	665	301	6	.	1371
5.00 +	.	.	.	.	1	30	662	1105	1	.	1799
TOTAL	19	183	642	1013	2478	6431	8459	2489	72	0	

MEAN HS(M) = 3.21 LARGEST HS(M) = 7.37 MEAN TP(SEC) = 13.3 NUMBER OF CASES = 12754

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	3	.	.	.	.	.	.	.	3
1.00 - 1.49	1	32	.	.	.	.	.	.	.	.	33
1.50 - 1.99	25	65	29	1	.	.	.	.	.	.	120
2.00 - 2.49	8	143	83	17	3	5	.	.	.	.	259
2.50 - 2.99	.	66	160	51	27	.	.	.	.	.	304
3.00 - 3.49	.	20	152	102	37	3	.	.	.	.	314
3.50 - 3.99	.	1	82	61	77	20	.	.	.	.	241
4.00 - 4.49	.	.	34	54	30	13	.	.	.	.	131
4.50 - 4.99	.	.	5	20	20	6	.	.	.	.	51
5.00 +	.	.	1	.	.	13	3	.	.	.	17
TOTAL	34	327	549	306	194	60	3	0	0	0	

MEAN HS(M) = 3.05 LARGEST HS(M) = 5.93 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 872

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	8	.	.	.	.	.	.	.	.	13
1.50 - 1.99	3	5	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	16	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 16

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

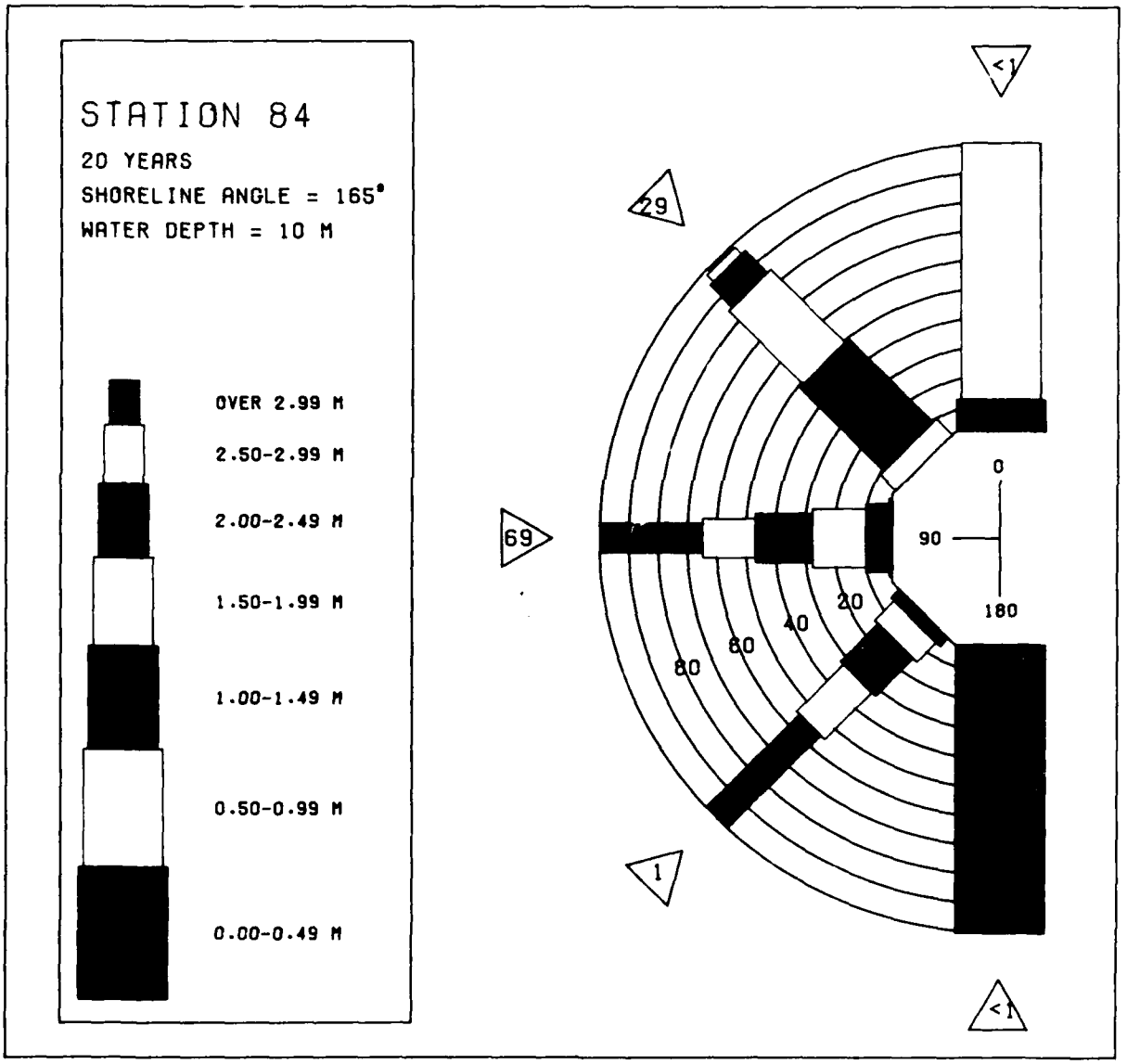
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 84 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	3	2	.	.	1	.	.	.	.	6
0.50 - 0.99	26	86	125	31	18	7	2	.	.	.	295
1.00 - 1.49	170	478	522	312	220	52	5	1	.	.	1760
1.50 - 1.99	66	491	373	589	531	216	59	6	1	.	2332
2.00 - 2.49	4	131	114	205	600	511	115	5	2	.	1687
2.50 - 2.99	.	29	55	49	332	697	187	16	2	.	1367
3.00 - 3.49	.	6	33	29	114	486	263	26	.	.	957
3.50 - 3.99	.	.	15	13	44	276	274	27	.	.	649
4.00 - 4.49	.	.	6	6	13	105	263	27	.	.	420
4.50 - 4.99	.	.	.	2	3	31	183	30	.	.	249
5.00 +	.	.	.	.	.	9	119	110	.	.	238
TOTAL	266	1224	1245	1236	1875	2391	1470	248	5	0	

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.37 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.2	2.5	2.2	2.1	2.0	1.4	1.5	1.4	1.8	2.3	2.6	2.2
1957	2.7	3.0	2.7	2.6	2.0	1.6	1.4	1.3	1.8	2.3	2.8	3.4	2.3
1958	4.1	3.7	3.1	2.9	2.0	1.4	1.7	1.5	1.5	2.1	2.9	3.3	2.5
1959	3.2	3.6	2.6	2.6	1.9	1.6	1.5	1.4	1.9	2.3	2.8	3.4	2.4
1960	3.4	3.8	2.1	2.3	1.9	1.6	1.5	1.5	1.3	2.0	2.3	3.4	2.3
1961	3.7	3.2	2.8	2.1	1.8	1.9	1.3	1.1	1.4	2.2	2.7	3.1	2.3
1962	2.4	3.1	2.8	2.1	1.5	1.4	1.5	1.5	1.7	2.6	3.5	3.2	2.3
1963	2.9	3.2	3.0	2.0	1.7	1.9	1.4	1.2	1.7	2.9	3.0	3.3	2.3
1964	4.1	2.9	3.0	2.7	1.7	1.6	2.1	1.6	1.6	1.9	3.0	3.4	2.5
1965	3.0	2.8	2.7	2.4	2.1	2.0	1.4	1.3	1.5	2.2	3.0	3.9	2.4
1966	3.8	3.1	3.0	2.0	2.1	1.6	1.7	1.6	1.7	1.9	2.5	3.5	2.4
1967	3.3	3.3	2.4	2.0	1.4	1.4	1.5	1.2	2.1	2.7	3.2	3.4	2.3
1968	2.9	3.2	3.0	2.6	1.5	1.5	1.7	1.4	1.4	2.3	3.2	3.3	2.3
1969	2.6	4.1	3.3	2.9	1.9	1.8	1.6	1.4	1.5	2.6	3.0	4.8	2.6
1970	3.7	4.4	3.5	2.9	1.9	1.6	1.7	1.5	1.5	2.2	2.9	3.6	2.6
1971	3.0	2.6	2.9	2.8	1.9	1.8	1.3	1.6	1.7	2.0	3.0	3.2	2.3
1972	3.7	3.2	2.7	2.6	2.1	2.0	1.8	1.4	1.4	2.0	3.9	3.3	2.5
1973	4.0	3.9	3.7	2.8	2.2	2.1	1.8	1.8	2.0	2.1	3.1	3.9	2.8
1974	3.3	3.4	3.4	3.0	2.5	2.0	1.6	1.4	1.5	2.3	3.3	3.8	2.6
1975	2.8	3.2	3.0	2.1	2.0	1.6	1.6	1.3	0.9	2.3	2.7	2.7	2.2
MEAN	3.3	3.3	2.9	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.0	5.7	4.5	3.4	3.0	3.2	2.0	2.3	2.7	3.5	3.7	4.2
1957	4.3	6.8	4.5	4.3	3.3	2.4	2.5	1.8	3.2	4.4	5.2	5.9
1958	6.2	5.8	5.8	6.4	2.8	2.3	3.0	2.8	2.5	4.6	6.1	5.1
1959	6.1	5.9	4.6	5.1	2.7	2.5	2.1	2.5	3.0	4.7	5.5	5.7
1960	5.8	5.8	4.0	3.6	2.8	2.2	2.0	2.2	1.8	5.3	5.5	5.3
1961	6.2	5.1	5.7	3.9	2.6	2.8	2.0	1.5	2.2	4.2	4.4	4.5
1962	4.3	5.1	4.6	3.8	2.2	2.4	2.3	2.3	3.4	4.5	5.6	5.1
1963	5.8	5.6	5.7	3.7	3.2	2.8	2.0	1.7	2.7	6.2	4.6	6.1
1964	7.2	4.1	4.8	4.9	3.7	2.3	2.5	2.2	2.5	3.0	5.3	5.9
1965	4.9	5.4	4.3	3.7	3.0	2.3	2.1	2.1	2.2	4.8	5.1	5.3
1966	5.1	4.3	6.2	3.5	3.0	2.3	2.1	2.0	3.5	3.5	4.5	5.9
1967	5.2	5.3	3.7	3.4	2.5	2.3	1.9	1.8	3.7	6.0	5.1	6.5
1968	4.6	4.6	4.7	5.0	2.4	2.1	3.0	2.2	3.4	4.1	5.0	5.7
1969	4.2	6.3	6.1	5.9	3.0	2.4	2.2	1.8	2.4	4.4	5.4	7.4
1970	5.7	6.3	6.1	5.4	2.7	2.8	2.2	2.0	2.4	4.1	4.8	6.5
1971	6.0	4.1	5.3	5.0	3.0	2.5	1.9	3.0	3.1	3.4	5.8	5.6
1972	6.0	5.3	4.5	4.1	3.6	3.0	2.8	2.0	2.2	3.2	6.2	6.1
1973	6.3	5.8	5.9	4.6	3.2	4.0	2.6	2.4	3.2	3.5	5.1	6.2
1974	6.2	5.1	6.4	5.4	3.6	3.1	2.6	2.0	2.9	5.0	5.5	5.8
1975	5.1	5.3	5.5	2.9	4.4	2.6	2.3	2.1	1.4	3.6	4.6	4.9

20 YR. STATISTICS FOR PACIFIC STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	17	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.23 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 10

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	35	35	.	.	.	.	.	.	.	.	70
0.50 - 0.99	451	983	.	.	.	.	.	.	.	.	1434
1.00 - 1.49	1476	4758	169	.	.	.	.	.	.	.	6403
1.50 - 1.99	191	2289	282	.	.	.	.	.	.	.	2762
2.00 - 2.49	1	160	59	.	.	.	.	.	.	.	220
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2154	8225	510	0	0	0	0	0	0	0	

MEAN HS(M) = 1.32 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6369

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	6	32	3	.	11	.	8	.	.	61
0.50 - 0.99	.	588	1817	501	314	106	20	6	.	.	3352
1.00 - 1.49	32	1259	6177	4231	2760	627	136	18	.	.	15240
1.50 - 1.99	56	523	2614	5737	6319	2582	600	13	6	.	18450
2.00 - 2.49	8	431	590	1262	5337	5691	1069	46	.	.	14434
2.50 - 2.99	.	90	225	232	2168	5898	1842	118	.	.	10593
3.00 - 3.49	.	10	88	119	617	3708	2224	142	.	.	6908
3.50 - 3.99	.	.	25	35	205	1671	2334	169	.	.	4439
4.00 - 4.49	.	.	1	1	37	588	2075	198	.	.	2900
4.50 - 4.99	.	.	.	.	3	128	1076	272	.	.	1479
5.00 +	.	.	.	.	.	18	492	571	.	.	1081
TOTAL	97	2907	11569	12121	17780	21028	11868	1561	6	0	

MEAN HS(M) = 2.28 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 46153

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	13	37	2	.	.	.	.	6	.	61
1.00 - 1.49	5	22	41	35	104	29	3	6	1	.	246
1.50 - 1.99	13	37	53	44	131	304	112	46	1	.	741
2.00 - 2.49	13	68	65	68	208	651	331	35	30	.	1469
2.50 - 2.99	1	71	61	61	188	728	504	99	8	.	1721
3.00 - 3.49	.	23	116	54	107	453	530	138	.	.	1421
3.50 - 3.99	.	.	73	18	82	342	484	133	1	.	1148
4.00 - 4.49	.	.	34	15	25	87	395	88	1	.	645
4.50 - 4.99	.	.	1	10	18	32	268	106	6	.	441
5.00 +	.	.	1	5	1	37	148	297	.	.	489
TOTAL	32	235	482	315	874	2663	2775	953	54	0	

MEAN HS(M) = 3.12 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 13.0 NUMBER OF CASES = 4924

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	34	1	.	.	.	.	.	.	.	38
1.50 - 1.99	30	75	25	.	.	.	.	.	.	.	130
2.00 - 2.49	6	142	88	8	3	.	.	.	.	.	247
2.50 - 2.99	.	123	165	41	15	.	.	.	.	.	344
3.00 - 3.49	.	44	159	95	30	3	.	.	.	.	331
3.50 - 3.99	.	1	107	88	67	13	.	.	.	.	296
4.00 - 4.49	.	.	35	82	37	13	.	.	.	.	167
4.50 - 4.99	.	.	8	32	23	11	.	.	.	.	74
5.00 +	.	.	1	6	.	17	.	.	.	.	24
TOTAL	39	419	589	352	195	57	0	0	0	0	

MEAN HS(M) = 3.13 LARGEST HS(M) = 6.17 MEAN TP(SEC) = 9.0 NUMBER OF CASES = 977

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	3	5	.	.	.	.	.	.	.	.	8
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	5	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.13 LARGEST HS(M) = 1.48 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 7

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

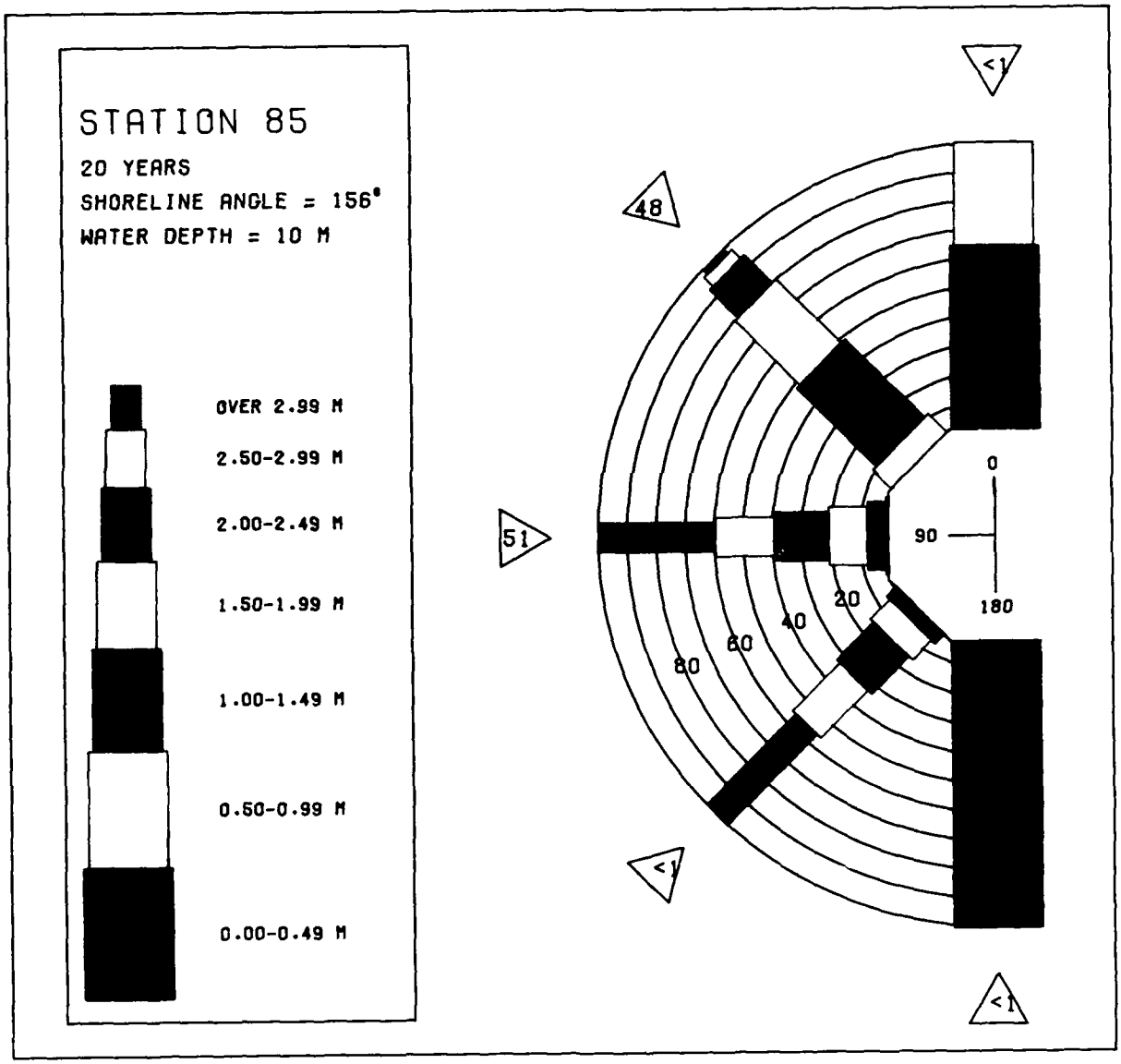
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 85 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2	4	3		1						13
0.50 - 0.99	45	158	185	50	31	10	2				481
1.00 - 1.49	152	607	638	426	286	65	14	2			2190
1.50 - 1.99	29	292	297	578	645	288	71	5			2205
2.00 - 2.49	3	80	80	133	554	634	140	8	3		1635
2.50 - 2.99		28	45	33	239	662	234	21			1262
3.00 - 3.49			36	27	75	416	275	28			864
3.50 - 3.99			20	14	38	202	291	30			595
4.00 - 4.49			7	9	10	68	247	28			369
4.50 - 4.99			1	4	4	17	134	37			197
5.00 +				1		7	64	86			158
TOTAL	234	1176	1312	1275	1882	2370	1462	245	3	0	

MEAN HS(M) = 2.26 LARGEST HS(M) = 7.36 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 85 (39.21N/ 123.78W TO 39.10N/ 123.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.0	2.4	2.1	2.0	1.9	1.3	1.4	1.3	1.7	2.2	2.5	2.1
1957	2.6	2.8	2.6	2.4	1.9	1.5	1.3	1.2	1.7	2.2	2.6	3.3	2.2
1958	4.0	3.6	2.9	2.8	1.8	1.5	1.6	1.4	1.4	1.8	2.7	3.2	2.4
1959	3.0	3.5	2.4	2.4	1.8	1.5	1.4	1.3	1.8	2.2	2.7	3.5	2.3
1960	3.2	3.6	2.0	2.2	1.8	1.4	1.3	1.4	1.6	1.8	3.1	3.6	2.3
1961	3.5	3.0	2.7	2.1	1.7	1.7	1.2	1.0	1.3	2.0	2.5	2.9	2.1
1962	2.3	3.0	2.6	2.0	1.4	1.3	1.3	1.4	1.5	2.5	3.3	3.1	2.1
1963	2.8	3.2	2.8	1.9	1.6	1.7	1.3	1.0	1.6	2.7	2.8	3.2	2.2
1964	4.0	2.8	2.8	2.5	1.5	1.5	1.9	1.5	1.5	1.8	2.8	3.7	2.3
1965	2.9	2.7	2.5	2.2	1.9	1.8	1.3	1.3	1.3	2.1	2.8	3.7	2.2
1966	3.6	2.9	2.8	1.9	1.9	1.8	1.5	1.3	1.6	1.8	2.4	3.4	2.2
1967	3.2	3.1	2.3	1.9	1.3	1.3	1.4	1.3	1.9	2.3	3.0	3.1	2.2
1968	2.8	3.1	2.9	2.0	1.4	1.4	1.5	1.3	1.3	2.4	3.1	3.4	2.2
1969	2.5	3.9	3.1	2.8	1.8	1.6	1.4	1.2	1.4	2.5	2.8	4.7	2.5
1970	3.6	4.3	3.3	2.7	1.7	1.5	1.5	1.3	1.4	2.0	2.8	3.4	2.5
1971	2.9	2.5	2.8	2.6	1.7	1.7	1.2	1.4	1.6	1.9	2.9	3.0	2.2
1972	3.5	3.0	2.5	2.4	1.9	1.8	1.6	1.3	1.3	1.9	2.7	3.2	2.3
1973	3.9	3.7	3.4	2.6	2.0	1.9	1.6	1.6	1.9	1.9	3.0	3.8	2.6
1974	3.2	3.2	3.3	2.8	2.3	1.9	1.5	1.3	1.4	2.1	3.1	3.6	2.5
1975	2.7	3.0	2.8	2.0	1.8	1.4	1.4	1.2	0.8	2.1	2.6	2.6	2.0
MEAN	3.2	3.2	2.8	2.3	1.8	1.6	1.4	1.3	1.5	2.1	2.8	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 85 (39.21N/ 123.78W TO 39.10N/ 123.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.7	5.5	4.2	3.6	2.8	3.0	1.8	2.2	2.5	3.5	3.6	4.1
1957	4.1	6.5	4.2	4.0	3.1	2.2	2.2	1.7	3.0	4.1	4.9	5.7
1958	6.2	5.5	5.4	6.2	2.6	2.1	2.8	2.6	2.3	4.3	6.0	4.9
1959	6.1	5.5	4.4	4.7	2.7	2.3	1.9	2.3	3.2	4.4	5.2	5.4
1960	5.6	5.6	3.9	3.3	2.7	2.1	1.9	2.1	1.7	4.9	5.3	4.9
1961	6.1	5.0	5.5	3.7	2.4	2.6	1.8	1.4	2.1	3.9	4.2	4.2
1962	4.0	5.1	4.3	3.6	2.0	2.2	2.1	2.1	3.1	4.2	5.4	5.0
1963	5.9	5.7	5.2	3.4	3.1	2.5	1.8	1.4	2.5	5.6	4.3	6.1
1964	7.1	4.0	4.5	4.6	3.3	2.3	2.2	2.1	2.3	2.6	4.9	6.0
1965	4.8	5.0	4.0	3.5	2.7	2.6	2.0	1.9	2.0	4.5	4.8	5.0
1966	5.0	4.0	5.8	3.4	2.8	2.1	1.9	1.9	3.3	3.4	4.1	5.5
1967	5.1	4.9	3.7	3.2	2.4	2.0	1.7	1.5	3.4	5.7	4.8	6.2
1968	4.8	4.5	4.4	4.7	2.2	1.8	2.8	2.1	3.1	3.8	4.7	5.4
1969	4.1	6.2	5.6	5.6	2.9	2.5	2.0	1.6	2.2	4.1	5.0	7.4
1970	5.4	6.3	6.1	5.0	3.5	2.6	2.1	1.9	2.2	3.6	4.5	6.2
1971	5.8	4.0	5.4	4.6	3.8	2.3	1.7	1.8	2.9	3.2	5.4	7.3
1972	5.9	4.9	4.3	4.1	3.4	2.7	2.7	1.9	2.1	3.0	5.9	6.1
1973	6.2	5.4	5.5	4.3	2.9	3.7	2.4	2.2	3.1	3.4	4.8	6.2
1974	6.2	4.9	6.3	5.2	3.4	2.9	2.3	1.8	2.7	4.7	5.1	5.5
1975	4.9	4.9	5.2	2.7	4.1	2.3	2.0	1.9	1.2	3.4	4.3	4.6

20 YR. STATISTICS FOR PACIFIC STATION 85 (39.21N/ 123.78W TO 39.10N/ 123.70W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	13	.	.	.	.	.	.	.	.	18
0.50 - 0.99	234	212	.	.	.	.	.	.	.	.	446
1.00 - 1.49	1213	2746	29	.	.	.	.	.	.	.	3988
1.50 - 1.99	355	2174	1	.	.	.	.	.	.	.	2530
2.00 - 2.49	.	27	.	.	.	.	.	.	.	.	27
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1807	5172	30	0	0	0	0	0	0	0	

MEAN HS(M) = 1.40 LARGEST HS(M) = 2.12 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 4099

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	29	.	.	.	1	.	.	.	.	33
0.50 - 0.99	1	631	888	244	80	63	11	3	.	.	1921
1.00 - 1.49	140	2178	4416	2493	1338	280	25	1	1	.	10872
1.50 - 1.99	224	3092	3619	5155	3824	910	51	20	.	.	16895
2.00 - 2.49	27	1119	1221	1909	5181	2224	65	.	.	.	11746
2.50 - 2.99	.	172	458	432	2811	4125	54	.	.	.	8052
3.00 - 3.49	.	23	106	121	848	3117	71	8	.	.	4294
3.50 - 3.99	.	.	32	58	217	1731	59	.	.	.	2097
4.00 - 4.49	.	.	5	6	66	740	92	.	.	.	909
4.50 - 4.99	.	.	.	1	8	278	112	.	.	.	399
5.00 +	.	.	.	.	1	71	111	.	.	.	183
TOTAL	392	7218	10774	10419	14374	13540	651	32	1	0	

MEAN HS(M) = 2.12 LARGEST HS(M) = 6.63 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 33565

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	35	70	22	17	.	.	11	1	.	156
0.50 - 0.99	8	94	294	305	443	154	18	15	.	.	1334
1.00 - 1.49	10	83	359	583	881	942	350	34	3	.	3245
1.50 - 1.99	6	109	130	357	953	1914	804	58	6	.	4337
2.00 - 2.49	.	63	111	193	894	2414	1565	107	1	.	5348
2.50 - 2.99	.	22	100	95	521	2039	2243	176	15	.	5211
3.00 - 3.49	.	1	95	49	254	1567	2590	210	6	.	4772
3.50 - 3.99	.	.	32	34	70	859	2330	278	6	.	3610
4.00 - 4.49	.	.	5	25	41	331	2085	270	1	.	2758
4.50 - 4.99	.	.	.	3	17	112	1950	1360	5	.	3447
5.00 +	.	.	.	.	.	.	.	.	.	.	
TOTAL	24	407	1196	1669	4091	10333	13935	2519	44	0	

MEAN HS(M) = 3.35 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 13.1 NUMBER OF CASES = 20020

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	6	18	5	.	.	.	.	.	.	.	29
1.50 - 1.99	22	65	27	3	3	.	.	.	.	.	120
2.00 - 2.49	5	119	90	5	20	.	.	.	.	.	239
2.50 - 2.99	.	61	124	32	44	1	.	.	.	.	262
3.00 - 3.49	.	15	133	63	34	10	.	.	.	.	255
3.50 - 3.99	.	.	73	39	35	5	1	.	.	.	153
4.00 - 4.49	.	.	25	53	44	8	1	.	.	.	131
4.50 - 4.99	.	.	1	22	22	3	.	.	.	.	48
5.00 +	.	.	.	1	6	15	10	.	.	.	32
TOTAL	33	278	478	218	208	42	12	0	0	0	

MEAN HS(M) = 3.05 LARGEST HS(M) = 5.88 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 753

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	3	.	.	.	.	.	.	.	.	4
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	3	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.11 LARGEST HS(M) = 1.17 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 3

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

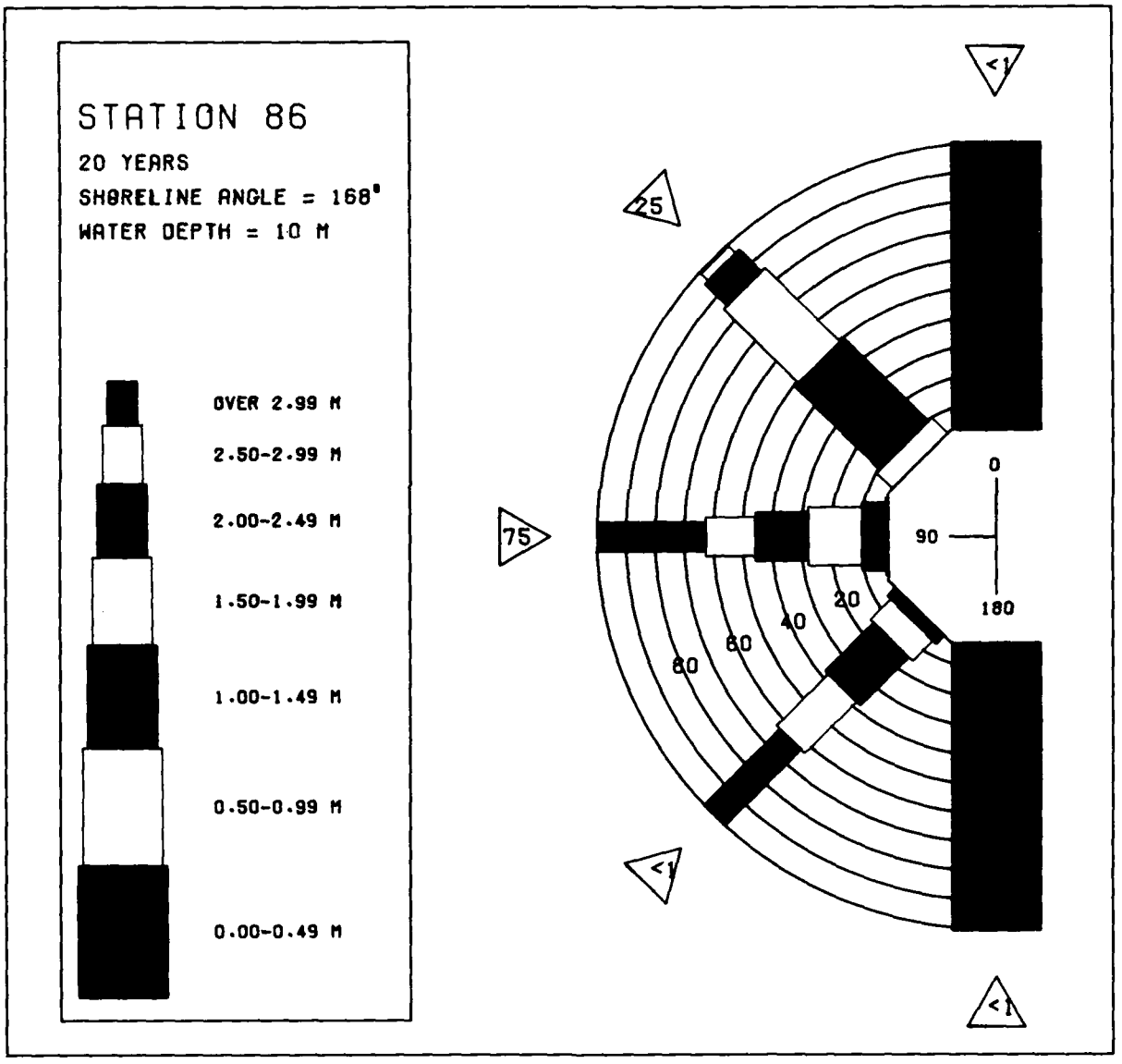
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 86 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. STAP = 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
SHORELINE ANGL = 168.0 (DEG AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	2	.	.	.	.	.	.	.	3
0.50 - 0.99	23	87	95	26	9	6	1	1	.	.	248
1.00 - 1.49	137	504	474	280	178	43	4	1	.	.	1621
1.50 - 1.99	61	541	400	574	470	185	40	5	.	.	2276
2.00 - 2.49	3	137	144	227	615	413	86	5	.	.	1630
2.50 - 2.99	.	29	69	65	375	654	162	10	.	.	1364
3.00 - 3.49	.	6	34	28	140	516	231	18	1	.	974
3.50 - 3.99	.	.	20	14	50	330	265	21	.	.	700
4.00 - 4.49	.	.	6	9	18	161	242	27	.	.	463
4.50 - 4.99	.	.	.	4	7	61	219	27	.	.	318
5.00 +	.	.	.	.	2	20	207	136	1	0	365
TOTAL	224	1305	1244	1227	1864	2389	1457	251	1	0	

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.41 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 86 (39.10N/ 123.70W TO 39.01N/ 123.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.2	2.6	2.2	2.2	2.1	1.5	1.6	1.4	1.9	2.4	2.6	2.3
1957	2.8	3.3	2.9	2.6	2.2	1.7	1.4	1.3	1.8	2.3	3.0	3.5	2.4
1958	4.4	4.0	3.1	3.0	2.0	1.5	1.8	1.6	1.6	2.1	2.9	3.6	2.6
1959	3.4	3.7	2.7	2.7	2.0	1.7	1.5	1.4	1.9	2.3	2.9	3.4	2.5
1960	3.5	4.0	2.2	2.4	2.1	1.6	1.5	1.6	1.4	2.0	3.4	3.6	2.4
1961	4.0	3.4	3.0	2.3	1.9	1.9	1.3	1.1	1.4	2.2	2.7	3.2	2.4
1962	2.7	3.1	2.9	2.2	1.6	1.4	1.5	1.6	1.7	2.7	3.6	3.6	2.4
1963	3.1	3.8	3.2	2.1	1.7	1.9	1.4	1.5	1.7	3.0	3.2	3.4	2.5
1964	4.3	3.0	3.1	2.7	1.7	1.7	2.1	1.7	1.6	2.1	3.1	3.7	2.6
1965	3.2	3.0	2.7	2.5	2.1	2.1	1.5	1.4	1.5	2.5	3.1	4.0	2.5
1966	3.9	3.2	3.1	2.1	2.1	1.7	1.7	1.6	1.8	2.0	2.6	3.7	2.5
1967	3.5	3.5	2.5	2.1	1.5	1.5	1.5	1.3	2.1	2.8	3.2	3.5	2.4
1968	3.1	3.6	3.3	2.3	1.6	1.6	1.8	1.5	1.4	2.3	3.5	3.4	2.4
1969	2.7	4.2	3.4	3.1	2.0	1.9	1.6	1.4	1.5	2.8	3.1	5.0	2.7
1970	4.0	4.6	3.7	3.0	1.9	1.7	1.7	1.5	1.6	2.2	3.1	3.8	2.7
1971	3.3	5.9	3.2	2.9	2.0	1.8	1.4	1.6	1.8	2.1	3.1	3.3	2.4
1972	3.9	3.4	2.9	2.5	2.0	2.0	1.8	1.5	1.4	2.0	4.1	3.4	2.6
1973	4.3	4.2	3.7	2.9	2.3	2.1	1.9	1.9	2.0	2.1	3.2	4.2	2.9
1974	3.5	3.6	3.6	3.1	2.6	2.0	1.7	1.5	1.6	2.4	3.3	3.8	2.7
1975	2.8	3.4	3.2	2.1	1.9	1.6	1.6	1.3	0.9	2.3	2.8	3.0	2.3
MEAN	3.5	3.6	3.1	2.5	2.0	1.8	1.6	1.5	1.6	2.3	3.1	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 86 (39.10N/ 123.70W TO 39.01N/ 123.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.1	5.5	4.8	3.8	3.3	3.4	2.0	2.6	2.9	3.3	3.9	4.2
1957	4.6	7.2	4.9	4.6	3.7	2.5	2.4	2.1	3.5	4.4	5.8	6.3
1958	6.5	6.5	5.9	6.6	2.9	2.4	3.0	2.9	2.5	5.0	6.1	5.6
1959	5.8	5.8	4.8	5.2	2.7	2.5	2.3	2.4	2.9	4.9	6.6	5.9
1960	6.3	6.1	4.1	3.7	2.8	2.5	2.1	2.3	1.9	5.6	5.5	5.6
1961	6.2	5.6	5.9	4.0	2.6	2.7	1.9	1.6	2.1	4.1	4.4	4.9
1962	4.4	5.0	4.6	3.9	2.3	2.3	2.3	2.2	3.4	4.5	5.9	6.1
1963	5.7	5.8	6.0	3.6	3.2	2.7	2.0	1.9	2.8	6.2	4.9	6.1
1964	7.4	4.3	4.8	5.0	3.8	2.7	3.7	2.4	2.5	3.2	5.4	5.5
1965	4.9	5.9	4.3	3.7	3.0	3.1	2.2	2.3	2.3	5.3	5.1	5.5
1966	5.4	4.4	6.3	3.9	3.3	2.4	2.1	2.1	2.5	3.9	4.7	6.0
1967	5.5	6.0	5.6	3.5	2.2	2.5	1.6	1.8	3.7	5.7	5.1	6.6
1968	5.0	6.2	5.2	5.6	2.5	2.2	3.1	2.5	3.6	4.2	5.7	5.2
1969	4.5	6.4	5.9	6.0	3.2	2.6	2.3	1.8	2.5	4.6	5.7	7.4
1970	6.6	6.3	6.2	5.6	2.8	3.0	2.4	2.0	2.5	4.2	5.3	6.5
1971	6.1	4.6	5.5	5.1	2.8	2.7	2.0	3.2	3.2	4.0	5.8	6.0
1972	6.1	5.7	4.9	4.0	3.4	2.8	3.1	2.1	2.3	3.2	6.3	6.1
1973	6.5	6.3	5.9	4.8	3.3	4.1	2.7	2.6	3.4	3.7	5.4	6.5
1974	6.1	5.2	6.6	5.1	3.7	3.0	2.7	2.0	2.9	5.7	5.9	5.9
1975	4.3	5.6	5.6	2.9	4.6	2.7	2.3	2.1	1.6	4.0	4.4	6.1

20 YR. STATISTICS FOR PACIFIC STATION 86 (39.10N/ 123.70W TO 39.01N/ 123.70W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	47	172	34	1	.	.	.	.	.	.	254
1.00 - 1.49	889	1505	239	5	.	.	.	.	.	.	2638
1.50 - 1.99	1803	5561	477	6	.	.	.	.	.	.	7847
2.00 - 2.49	92	4683	744	11	1	.	.	.	.	.	5531
2.50 - 2.99	.	768	877	29	.	.	.	.	.	.	1674
3.00 - 3.49	.	70	439	49	1	.	.	.	.	.	559
3.50 - 3.99	.	.	65	22	.	.	.	.	.	.	87
4.00 - 4.49	.	.	8	1	.	.	.	.	.	.	9
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	2834	12762	2883	124	2	0	0	0	0	0	

MEAN HS(M) = 1.96 LARGEST HS(M) = 4.23 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 10882

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	22	1	.	.	.	.	.	.	23
0.50 - 0.99	.	196	552	147	35	39	13	10	.	.	992
1.00 - 1.49	25	557	2828	1754	1069	217	27	15	5	.	6507
1.50 - 1.99	106	441	2847	3971	3566	1391	248	44	1	.	12615
2.00 - 2.49	39	414	901	3372	5340	2970	704	54	6	.	13800
2.50 - 2.99	.	270	273	934	4770	5521	1307	82	1	.	13158
3.00 - 3.49	.	54	184	191	2058	5989	1959	162	11	.	10608
3.50 - 3.99	.	1	83	90	672	4264	2551	179	8	.	7848
4.00 - 4.49	.	.	18	47	135	2219	5518	246	10	.	5193
4.50 - 4.99	.	.	3	3	20	840	2369	256	1	.	3492
5.00 +					5	253	2946	1546	5	.	4755
TOTAL	170	1933	7711	10519	17670	23704	14642	2594	48	0	

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 46186

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	11	8	3	1	.	.	.	.	.	23
1.00 - 1.49	8	66	116	13	13	1	.	.	.	.	217
1.50 - 1.99	6	82	154	49	61	8	.	.	.	.	360
2.00 - 2.49	5	80	135	87	121	29	3	.	.	.	460
2.50 - 2.99	.	30	100	87	155	56	1	.	.	.	429
3.00 - 3.49	.	5	78	68	97	90	1	.	.	.	339
3.50 - 3.99	.	1	27	20	68	80	15	.	.	.	211
4.00 - 4.49	.	.	1	23	18	42	34	.	.	.	118
4.50 - 4.99	.	.	.	.	6	29	27	.	.	.	62
5.00 +	.	.	.	.	1	18	3	.	.	.	22
TOTAL	19	275	619	350	541	353	84	0	0	0	

MEAN HS(M) = 2.66 LARGEST HS(M) = 5.75 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1326

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	6	6	.	.	.	.	.	.	.	15
1.00 - 1.49	5	1	15	.	.	.	.	.	.	.	21
1.50 - 1.99	5	18	5	.	.	.	.	.	.	.	28
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	33	26	0	0	0	0	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 2.28 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 45

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

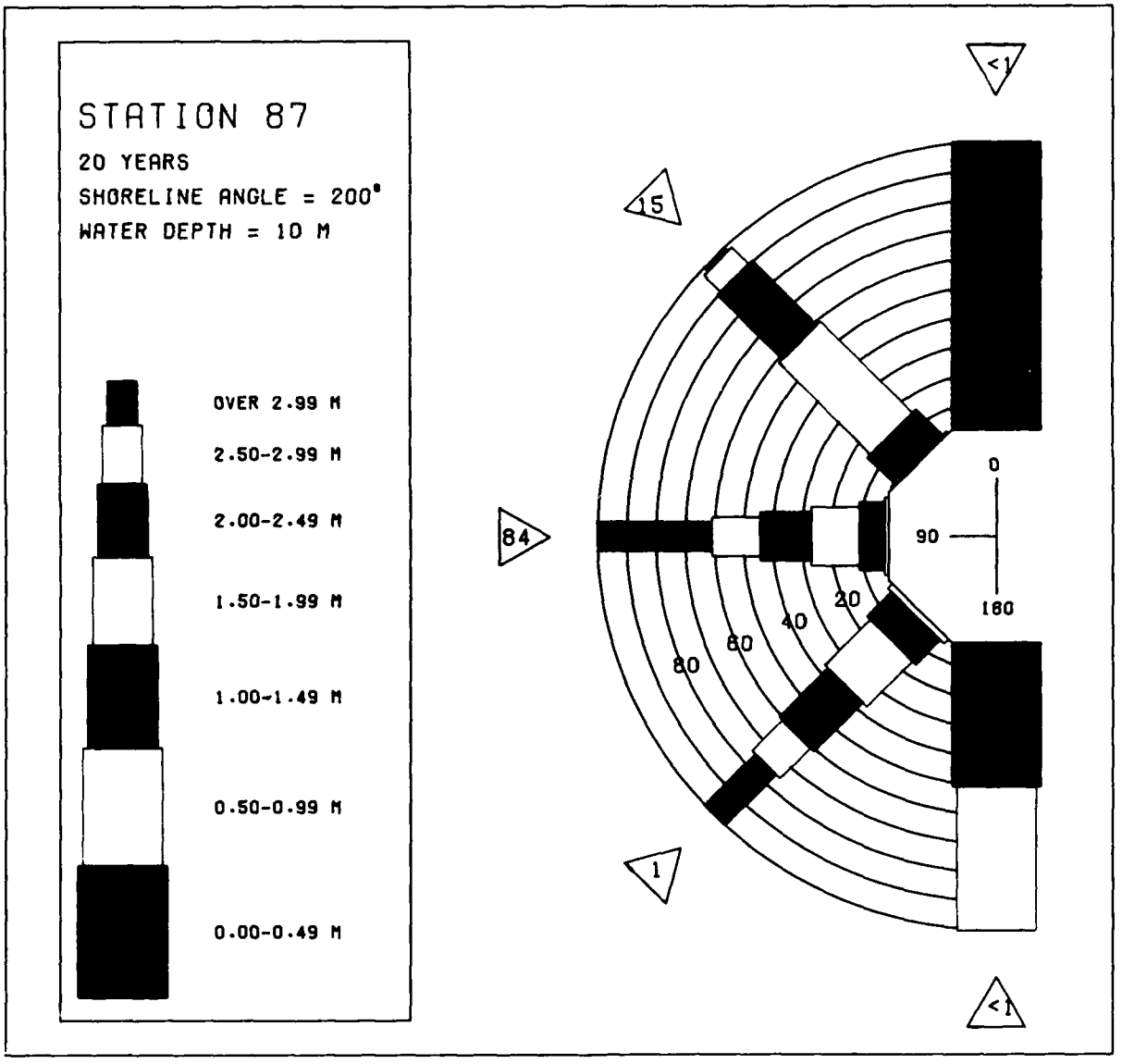
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.13 LARGEST HS(M) = 0.13 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1

PHASE 3 ST. 87 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49			2								2
0.50 - 0.99	5	38	60	15	3	3	1	1	.	.	126
1.00 - 1.49	92	213	319	178	108	21	2	1	.	.	934
1.50 - 1.99	192	610	348	402	362	135	24	4	.	.	2081
2.00 - 2.49	13	518	178	347	546	299	70	5	.	.	1976
2.50 - 2.99	.	106	125	105	492	557	130	8	.	.	1523
3.00 - 3.49	.	13	70	30	215	607	196	16	1	.	1148
3.50 - 3.99	.	.	17	13	74	434	256	17	.	.	811
4.00 - 4.49	.	.	2	7	15	226	255	24	1	.	530
4.50 - 4.99	.	.	.	.	2	86	239	25	.	.	352
5.00 +						27	295	154			476
TOTAL	302	1498	1121	1097	1817	2399	1468	255	2	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.36 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 87 (39.01N/ 123.70W TO 38.95N/ 123.73W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.3	3.4	2.8	2.4	2.4	2.3	1.7	1.9	1.6	2.0	2.6	2.8	2.4
1957	3.0	3.4	3.0	2.8	2.3	1.9	1.8	1.6	1.9	2.4	3.2	3.7	2.6
1958	4.4	3.8	3.3	3.2	2.2	1.7	2.0	1.8	1.7	2.2	3.1	3.7	2.8
1959	3.5	3.9	2.9	3.0	2.2	1.9	1.9	1.7	2.1	2.5	3.1	3.7	2.7
1960	3.6	4.2	3.3	2.6	2.2	1.9	1.8	1.8	1.6	2.2	3.6	3.7	2.6
1961	4.1	3.5	3.1	2.5	2.0	2.1	1.6	1.3	1.7	2.5	2.9	3.4	2.6
1962	2.8	3.3	3.2	2.4	1.8	1.7	1.9	1.8	1.9	2.9	3.9	3.5	2.6
1963	3.2	3.6	3.4	2.2	1.9	2.3	1.7	1.5	1.9	3.2	3.3	3.5	2.6
1964	4.5	3.2	3.4	3.1	2.0	1.9	2.4	1.9	1.9	2.2	3.3	3.8	2.8
1965	3.3	3.3	3.0	2.6	2.5	2.4	1.7	1.6	1.8	2.6	3.1	4.2	2.7
1966	4.0	3.3	3.3	2.4	2.4	1.9	1.9	1.9	1.9	2.2	2.7	3.8	2.7
1967	3.6	3.8	2.6	2.3	1.7	1.7	1.8	1.5	2.3	3.0	3.5	3.7	2.6
1968	3.1	3.6	3.4	2.6	1.8	1.8	2.1	1.6	1.6	2.5	3.7	3.4	2.6
1969	2.8	4.4	3.6	3.4	2.2	2.1	2.0	1.8	1.7	2.9	3.4	5.1	3.0
1970	3.8	4.8	3.9	3.4	2.1	1.9	2.0	1.7	1.8	2.4	3.2	4.0	2.9
1971	3.4	3.0	3.3	3.2	2.3	2.0	1.7	1.8	1.9	2.3	3.3	3.6	2.7
1972	4.1	3.5	3.0	2.8	2.3	2.3	2.1	1.7	1.7	2.2	4.4	3.4	2.8
1973	4.3	4.3	4.0	3.3	2.6	2.5	2.2	2.2	2.2	2.4	3.3	4.3	3.1
1974	3.5	3.8	3.8	3.3	3.0	2.4	2.0	1.8	1.7	2.7	3.6	4.0	3.0
1975	3.0	3.5	3.4	2.4	2.3	1.9	1.9	1.6	1.1	2.5	3.1	3.2	2.5
MEAN	3.6	3.7	3.2	2.8	2.2	2.0	1.9	1.7	1.8	2.5	3.3	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 87 (39.01N/ 123.70W TO 38.95N/ 123.73W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.4	5.2	5.4	4.2	3.6	3.7	2.4	2.8	3.2	3.4	4.1	4.4
1957	5.0	6.9	5.3	5.1	4.0	3.0	3.0	2.2	3.8	4.9	6.2	6.5
1958	6.4	6.1	6.2	6.6	3.2	2.7	3.3	3.2	2.8	5.3	6.1	5.9
1959	6.0	6.1	5.1	5.7	3.1	2.8	2.7	2.8	3.3	5.4	6.0	6.3
1960	6.1	6.1	4.0	4.0	3.2	2.7	2.5	2.5	2.4	6.0	5.9	6.0
1961	6.3	5.7	6.1	4.2	3.6	3.0	2.4	1.7	2.5	4.7	4.6	5.3
1962	4.7	4.9	4.9	4.2	3.8	2.6	2.7	2.6	3.7	4.9	6.1	6.0
1963	5.9	5.1	6.0	4.1	3.1	3.3	2.7	2.5	3.0	6.2	5.4	6.1
1964	7.4	4.4	5.2	5.6	4.5	2.9	4.0	2.7	2.9	3.5	5.9	5.9
1965	4.9	6.4	4.6	4.0	3.6	3.4	2.8	2.6	2.8	5.6	5.5	6.0
1966	5.8	4.9	6.4	4.1	3.7	2.6	3.6	2.6	3.7	3.9	5.3	6.1
1967	5.6	6.0	4.2	3.9	3.0	2.7	3.4	2.5	4.0	6.0	5.5	6.5
1968	4.5	6.1	5.6	6.1	3.7	2.6	3.4	2.6	4.0	4.6	6.0	5.6
1969	4.8	6.5	6.4	6.0	3.5	2.9	2.7	2.3	2.6	5.1	6.1	7.1
1970	6.4	6.2	6.2	6.2	3.2	3.3	3.6	2.3	2.7	4.4	5.6	6.8
1971	6.2	4.8	5.6	5.6	3.6	3.0	2.5	3.7	3.6	4.4	6.1	6.0
1972	6.2	6.0	5.0	4.4	3.8	3.3	3.4	2.4	2.6	3.6	6.3	6.2
1973	6.3	6.2	6.6	5.3	3.7	4.5	3.5	3.0	3.6	3.9	5.9	6.5
1974	6.1	5.6	6.5	5.2	4.1	3.8	3.5	2.4	3.2	6.0	6.2	6.2
1975	4.6	6.1	6.1	3.4	5.0	3.5	2.9	2.8	1.8	4.4	4.8	6.1

20 YR. STATISTICS FOR PACIFIC STATION 87 (39.01N/ 123.70W TO 38.95N/ 123.73W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	89.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012006

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	30	.	.	.	.	.	.	.	.	.	30
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	30	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.23 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 18

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	75	68	.	.	.	.	.	.	.	.	143
0.50 - 0.99	864	2547	251	.	.	.	.	.	.	.	3662
1.00 - 1.49	1266	5331	869	.	.	.	.	.	.	.	7466
1.50 - 1.99	145	1199	316	.	.	.	.	.	.	.	1660
2.00 - 2.49	.	114	27	.	.	.	.	.	.	.	141
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2350	9260	1463	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.17 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 7644

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	82	5	8	15	3	10	.	.	129
0.50 - 0.99	3	804	3004	1247	561	169	22	6	8	.	5824
1.00 - 1.49	17	781	6855	6317	4642	1536	272	51	1	.	19472
1.50 - 1.99	32	400	1505	3697	6995	4536	1026	88	5	.	18284
2.00 - 2.49	5	325	439	627	3788	7334	1909	157	3	.	14587
2.50 - 2.99	.	99	145	160	1083	5229	2772	337	.	.	9725
3.00 - 3.49	.	8	63	59	378	2558	2960	325	.	.	6318
3.50 - 3.99	.	.	11	10	65	956	2583	275	1	.	3901
4.00 - 4.49	.	.	.	.	17	239	1461	398	3	.	2118
4.50 - 4.99	.	.	.	.	3	46	528	398	1	.	976
5.00 +	.	.	.	.	.	.	195	497	.	.	692
TOTAL	57	2423	11104	12122	17540	22585	13731	2442	22	0	

MEAN HS(M) = 2.11 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47957

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	8	25	.	.	.	.	.	.	.	33
1.00 - 1.49	5	35	50	3	34	3	.	.	.	.	100
1.50 - 1.99	41	90	53	27	66	41	41	.	5	.	344
2.00 - 2.49	22	143	68	44	73	121	65	8	8	.	552
2.50 - 2.99	.	90	107	63	56	124	99	22	5	.	565
3.00 - 3.49	.	18	140	75	56	49	212	37	5	.	592
3.50 - 3.99	.	10	104	42	39	44	94	18	3	.	354
4.00 - 4.49	.	.	42	46	22	30	104	22	3	.	269
4.50 - 4.99	.	.	8	25	30	29	47	.	1	.	140
5.00 +	.	.	.	5	3	50	20	10	.	.	68
TOTAL	68	395	567	330	359	471	682	117	30	0	

MEAN HS(M) = 2.98 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 1782

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	20	18	1	.	.	.	.	.	.	.	39
1.50 - 1.99	47	83	20	.	.	.	.	.	.	.	150
2.00 - 2.49	8	200	90	10	.	.	.	.	.	.	308
2.50 - 2.99	.	186	142	29	8	.	.	.	.	.	365
3.00 - 3.49	.	53	215	42	3	.	.	.	.	.	313
3.50 - 3.99	.	5	147	109	18	.	.	.	.	.	279
4.00 - 4.49	.	.	66	102	30	6	.	.	.	.	204
4.50 - 4.99	.	.	8	5	27	5	.	.	.	.	45
5.00 +	.	.	.	3	10	5	.	.	.	.	18
TOTAL	75	545	689	300	96	16	0	0	0	0	

MEAN HS(M) = 3.04 LARGEST HS(M) = 5.59 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 1015

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	5	11	.	.	.	.	.	.	.	.	16
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	22	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 23

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

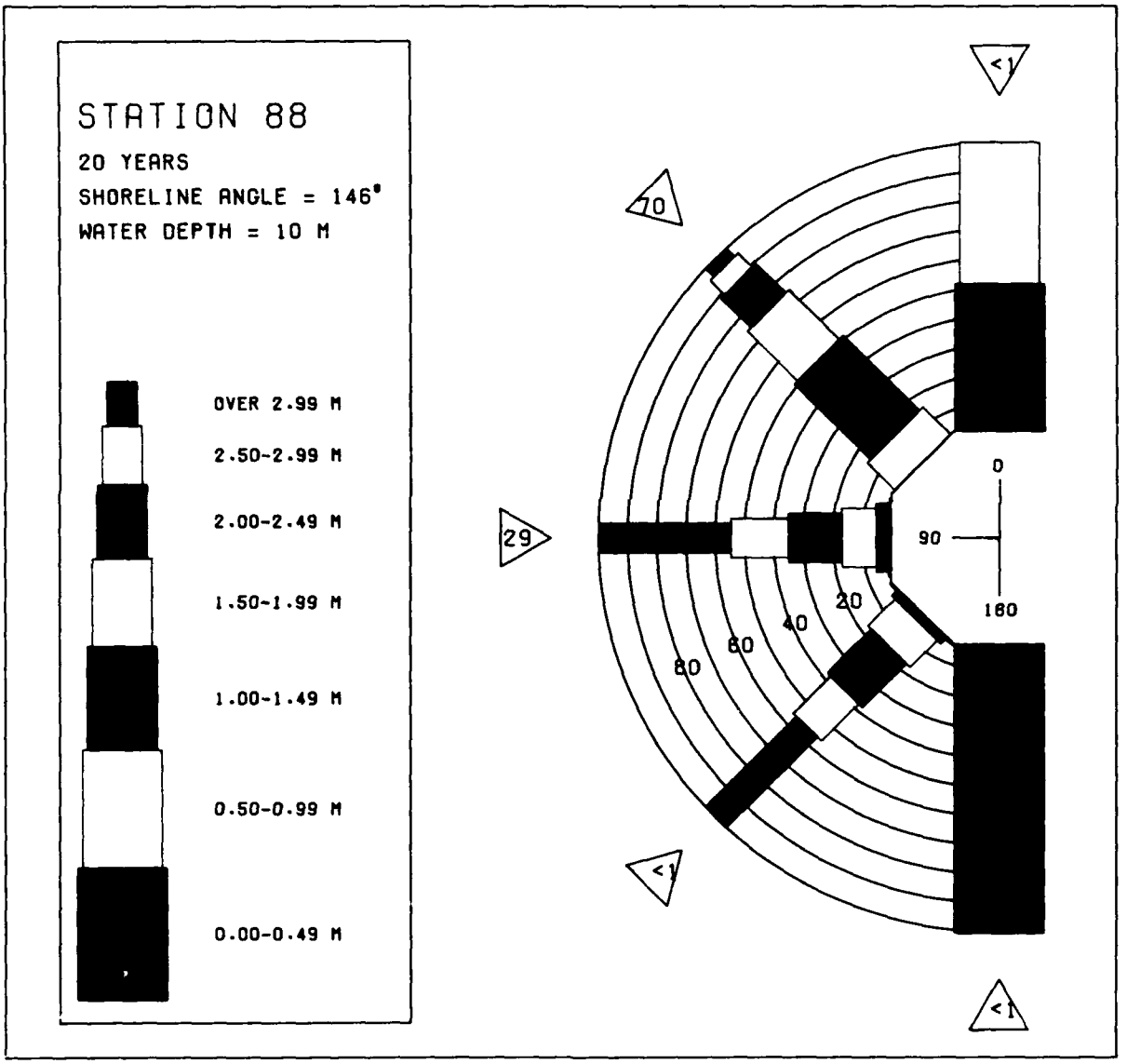
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 88 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	10	8	8	1	.	.	.	1	.	.	28
0.50 - 0.99	86	336	328	124	56	16	2	.	.	.	948
1.00 - 1.49	131	617	674	622	467	154	27	5	.	.	2707
1.50 - 1.99	27	178	189	172	704	457	106	8	1	.	2074
2.00 - 2.49	3	78	62	68	386	745	197	16	1	.	1556
2.50 - 2.99	.	37	39	25	114	535	267	26	.	.	1063
3.00 - 3.49	.	8	41	17	43	257	317	36	.	.	719
3.50 - 3.99	.	1	26	16	12	100	267	29	.	.	451
4.00 - 4.49	.	.	10	14	7	27	156	42	.	.	256
4.50 - 4.99	.	.	1	3	6	8	57	39	.	.	114
5.00 +	.	.	.	.	1	3	21	50	.	.	75
TOTAL	257	1263	1378	1271	1796	2303	1437	252	2	0	

MEAN HS(M) = 2.03 LARGEST HS(M) = 7.04 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 88 (38.95N/ 123.73W TO 38.83N/ 123.63W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	2.7	2.0	1.8	1.7	1.7	1.1	1.3	1.1	1.5	2.0	2.2	1.8
1957	2.4	2.6	2.3	2.2	1.7	1.4	1.1	1.0	1.6	2.0	2.3	2.9	1.9
1958	3.6	3.5	2.6	2.5	1.6	1.1	1.4	1.3	1.3	1.7	2.4	3.0	2.2
1959	2.8	3.2	2.6	2.1	1.6	1.4	1.2	1.1	1.6	2.0	2.3	2.8	2.0
1960	2.9	3.3	1.8	2.0	1.7	1.2	1.2	1.2	1.0	1.6	2.7	2.9	2.0
1961	3.3	2.9	2.5	1.8	1.5	1.5	1.0	0.8	1.1	1.7	2.2	2.6	1.9
1962	2.1	2.8	2.4	1.8	1.2	1.1	1.1	1.3	1.4	2.2	2.9	2.9	1.9
1963	2.7	3.1	2.5	1.8	1.4	1.5	1.1	0.9	1.4	2.3	2.5	2.9	2.0
1964	3.6	2.5	2.6	2.2	1.4	1.4	1.7	1.3	1.3	1.6	2.5	3.0	2.1
1965	2.7	2.5	2.3	2.0	1.7	1.6	1.1	1.1	1.1	1.9	2.6	3.3	2.0
1966	3.3	2.7	2.5	1.7	1.6	1.3	1.3	1.3	1.4	1.6	2.2	3.1	2.0
1967	2.9	2.9	2.1	1.7	1.3	1.2	1.2	1.0	1.7	2.3	2.6	2.9	2.0
1968	2.5	2.9	2.6	1.8	1.3	1.3	1.4	1.2	1.1	1.9	2.8	2.9	2.0
1969	2.3	3.5	2.8	2.6	1.6	1.5	1.3	1.0	1.2	2.2	2.4	4.3	2.2
1970	3.4	3.9	3.0	2.5	1.5	1.3	1.4	1.1	1.3	1.8	2.6	3.0	2.2
1971	2.7	2.4	2.5	2.3	1.5	1.5	1.1	1.3	1.4	1.7	2.5	2.7	2.0
1972	3.2	2.8	2.3	2.1	1.6	1.6	1.4	1.2	1.1	1.6	3.3	3.0	2.1
1973	3.6	3.5	3.0	2.3	1.8	1.7	1.4	1.4	1.6	1.7	2.7	3.4	2.3
1974	2.9	2.8	2.9	2.5	2.1	1.6	1.3	1.1	1.2	1.9	2.7	3.2	2.2
1975	2.3	2.8	2.6	1.7	1.5	1.2	1.2	1.0	0.6	1.9	2.2	2.4	1.8
MEAN	2.9	2.9	2.5	2.1	1.6	1.4	1.3	1.1	1.3	1.8	2.5	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 88 (38.95N/ 123.73W TO 38.83N/ 123.63W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.1	4.9	3.7	3.4	2.7	2.8	1.6	1.9	2.4	3.4	3.3	3.7
1957	3.8	6.5	4.0	3.8	2.9	2.1	2.1	1.7	2.9	3.5	4.7	5.3
1958	6.0	5.3	4.8	5.8	2.3	2.1	2.4	2.3	2.0	3.9	5.8	4.6
1959	5.3	4.8	3.6	4.1	2.4	2.2	1.8	2.1	3.2	4.0	4.7	4.8
1960	6.1	5.5	3.6	3.1	2.5	1.8	1.7	1.9	1.5	4.3	4.7	4.4
1961	5.6	4.7	5.0	3.2	2.3	2.2	1.6	1.3	1.9	3.2	3.8	4.0
1962	3.4	4.7	3.7	3.2	1.9	1.9	1.9	1.9	2.6	4.2	5.0	4.6
1963	6.8	5.7	5.0	3.0	2.9	2.3	1.7	1.4	2.3	4.4	3.8	6.1
1964	6.9	3.7	4.2	4.1	3.4	2.2	3.0	2.0	2.1	2.5	4.3	5.6
1965	4.8	4.7	3.5	3.1	2.3	2.5	1.8	1.8	1.9	4.1	5.5	4.7
1966	4.6	4.0	5.2	3.1	2.6	2.0	1.9	1.9	2.8	3.0	3.6	5.0
1967	4.8	5.0	4.0	2.8	2.3	1.8	1.7	1.4	3.0	4.6	4.0	5.4
1968	4.2	4.4	4.3	4.4	2.1	1.9	2.7	2.0	2.9	3.3	4.4	4.7
1969	3.8	5.4	4.8	5.5	2.6	2.2	2.0	1.5	2.0	3.7	4.3	7.0
1970	5.3	6.0	5.7	4.7	2.4	2.4	2.1	1.8	2.0	3.4	4.3	5.7
1971	5.3	3.7	4.7	4.1	2.7	2.3	1.7	2.3	2.6	3.2	4.7	5.4
1972	5.6	4.4	3.8	4.4	2.8	2.3	2.4	1.7	1.8	2.6	5.4	6.0
1973	5.7	5.0	4.8	4.1	3.0	3.5	2.3	2.1	2.8	3.3	4.4	6.2
1974	5.9	4.6	5.9	5.0	3.1	2.8	2.1	1.7	2.3	4.6	4.7	5.0
1975	4.1	4.5	4.4	2.4	3.6	2.1	1.7	1.5	1.2	3.3	3.6	4.1

20 YR. STATISTICS FOR PACIFIC STATION 88 (38.95N/ 123.73W TO 38.83N/ 123.63W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	75.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	56	.	.	.	.	.	.	.	.	.	56
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	56	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.10 LARGEST HS(M) = 0.36 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 33

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	261	357	41	.	.	.	.	.	.	.	659
0.50 - 0.99	1454	5920	1194	.	.	.	.	.	.	.	8568
1.00 - 1.49	716	3437	1074	.	.	.	.	.	.	.	5227
1.50 - 1.99	66	619	154	.	.	.	.	.	.	.	839
2.00 - 2.49	.	44	5	.	.	.	.	.	.	.	49
2.50 - 2.99	.	3	1	.	.	.	.	.	.	.	4
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2497	10380	2469	0	0	0	0	0	0	0	

MEAN HS(M) = 0.96 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8973

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	20	179	17	32	26	8	10	.	.	292
0.50 - 0.99	3	569	5261	3148	1459	354	49	22	10	.	10875
1.00 - 1.49	20	352	3663	7222	7768	2968	595	66	.	.	22654
1.50 - 1.99	39	236	636	1382	5604	7891	1788	128	13	.	17717
2.00 - 2.49	10	272	241	261	1591	6543	3210	353	11	.	12392
2.50 - 2.99	.	41	142	87	520	2987	3430	395	3	.	7605
3.00 - 3.49	.	23	41	18	106	987	2768	390	5	.	4338
3.50 - 3.99	.	1	3	3	15	260	1382	509	3	.	2176
4.00 - 4.49	.	.	.	.	1	54	504	364	1	.	924
4.50 - 4.99	.	.	.	.	.	11	154	174	.	.	339
5.00 +	.	.	.	.	.	.	46	160	.	.	206
TOTAL	73	1514	10166	12138	17096	22080	13934	2471	46	0	

MEAN HS(M) = 1.83 LARGEST HS(M) = 6.80 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 46492

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	8	17	.	.	.	.	.	.	.	25
1.00 - 1.49	54	80	5	3	11	1	.	.	.	.	154
1.50 - 1.99	89	167	39	18	22	17	15	.	.	.	366
2.00 - 2.49	37	331	138	41	50	52	3	.	.	.	612
2.50 - 2.99	.	177	256	85	37	46	17	1	.	.	619
3.00 - 3.49	.	99	252	94	51	30	34	8	.	.	598
3.50 - 3.99	.	23	210	102	34	23	20	3	5	.	420
4.00 - 4.49	.	1	75	66	26	6	41	.	.	.	218
4.50 - 4.99	.	.	10	30	35	20	3	.	.	.	98
5.00 +	.	.	1	13	22	39	3	.	.	.	78
TOTAL	179	887	1033	452	271	214	136	12	5	0	

MEAN HS(M) = 2.91 LARGEST HS(M) = 6.91 MEAN TP(SEC) = 9.0 NUMBER OF CASES = 1882

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	5	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	15	.	.	.	.	.	.	.	.	15
1.00 - 1.49	17	13	3	.	.	.	.	.	.	.	33
1.50 - 1.99	78	114	22	.	.	.	.	.	.	.	214
2.00 - 2.49	25	292	58	6	.	.	.	.	.	.	381
2.50 - 2.99	.	203	106	11	.	.	.	.	.	.	320
3.00 - 3.49	.	54	191	32	1	.	.	.	.	.	278
3.50 - 3.99	.	1	150	97	3	.	.	.	.	.	251
4.00 - 4.49	.	.	47	87	34	1	.	.	.	.	169
4.50 - 4.99	.	.	1	10	23	1	.	.	.	.	35
5.00 +	.	.	.	.	17	3	.	.	.	.	20
TOTAL	120	697	578	243	78	5	0	0	0	0	

MEAN HS(M) = 2.91 LARGEST HS(M) = 5.51 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 1016

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	3	.	.	.	.	.	.	.	.	13
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	20	.	.	.	.	.	.	.	.	.	20
1.50 - 1.99	15	5	.	.	.	.	.	.	.	.	20
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	48	12	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.19 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 37

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

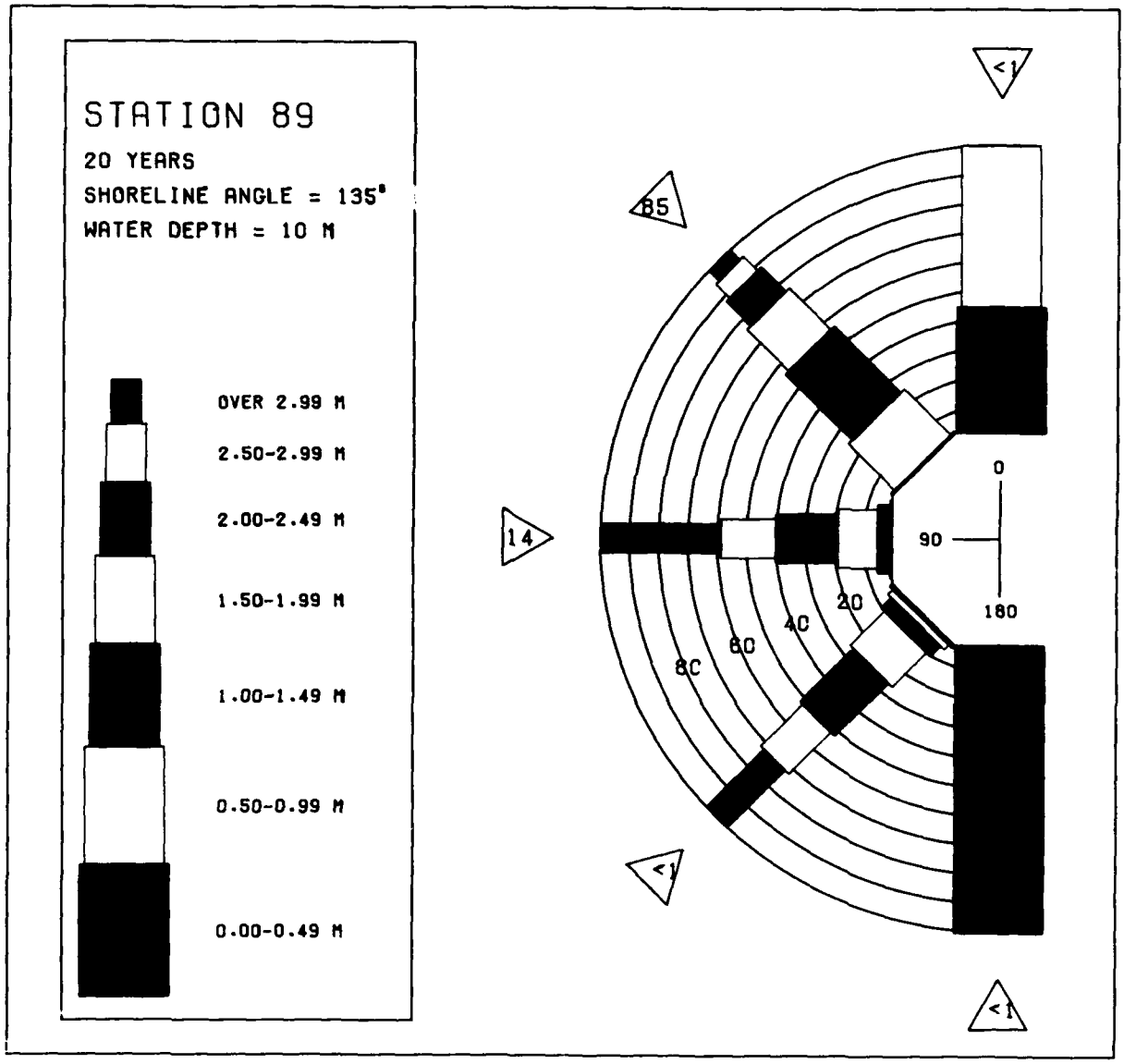
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.17 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 5

PHASE 3 ST. 89 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	33	38	22	1	3	2	.	1	.	.	100
0.50 - 0.99	146	651	647	314	145	35	4	2	1	.	1945
1.00 - 1.49	82	368	474	722	778	297	59	6	.	.	2806
1.50 - 1.99	28	114	85	140	562	790	180	12	1	.	1912
2.00 - 2.49	7	94	44	30	162	657	321	25	1	.	1341
2.50 - 2.99	.	42	50	18	55	303	344	39	.	.	851
3.00 - 3.49	.	17	51	14	15	101	280	39	.	.	517
3.50 - 3.99	.	2	36	20	5	28	140	51	.	.	282
4.00 - 4.49	.	.	12	15	6	6	54	36	.	.	129
4.50 - 4.99	.	.	1	4	5	3	15	17	.	.	45
5.00 +	.	.	.	1	3	4	4	16	.	.	28
TOTAL	296	1346	1422	1279	1739	2226	1401	244	3	0	

MEAN HS(M) = 1.75 LARGEST HS(M) = 6.91 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.3	1.7	1.6	1.4	1.4	0.9	1.0	0.9	1.3	1.7	2.0	1.6
1957	2.1	2.2	2.0	1.9	1.5	1.2	0.9	0.8	1.4	1.7	2.0	2.5	1.7
1958	2.2	2.2	2.3	2.2	1.4	1.0	1.2	1.1	1.1	1.4	2.0	2.7	1.9
1959	2.5	2.8	1.9	1.8	1.4	1.2	1.0	0.9	1.4	1.7	2.0	2.5	1.7
1960	2.6	3.0	1.5	1.7	1.5	1.0	1.0	1.0	0.8	1.4	1.9	2.6	1.7
1961	2.0	2.5	2.2	1.5	1.3	1.3	0.8	0.7	0.9	1.4	1.9	2.2	1.7
1962	1.8	2.5	2.0	1.5	1.0	0.9	0.9	1.1	1.2	1.9	2.5	2.7	1.7
1963	2.4	3.0	2.2	1.6	1.2	1.2	0.9	0.7	1.2	2.0	2.2	2.6	1.8
1964	3.2	2.2	2.2	1.8	1.1	1.2	1.4	1.1	1.1	1.4	2.2	2.8	1.8
1965	2.5	2.1	2.0	1.7	1.4	1.4	0.9	0.9	0.9	1.6	2.3	2.9	1.7
1966	3.0	2.3	2.1	1.4	1.3	1.1	1.1	1.0	1.2	1.3	1.9	2.8	1.7
1967	2.6	2.4	1.9	1.4	1.0	1.0	0.9	0.8	1.5	1.9	2.2	2.5	1.7
1968	2.3	2.6	2.3	1.5	1.1	1.0	1.2	1.0	1.0	1.6	2.4	2.7	1.7
1969	2.0	3.0	2.3	2.2	1.3	1.3	1.0	0.8	1.0	1.9	2.0	2.8	1.9
1970	2.9	3.3	2.6	2.1	1.3	1.1	1.1	0.9	1.1	1.5	2.3	2.6	1.9
1971	2.3	2.1	2.2	2.0	1.2	1.3	0.8	1.1	1.2	1.4	2.1	2.3	1.7
1972	2.7	2.5	2.0	1.7	1.4	1.3	1.1	0.9	0.8	1.3	2.8	2.7	1.8
1973	3.3	3.0	2.5	1.9	1.5	1.4	1.2	1.1	1.4	1.4	2.4	3.1	2.0
1974	2.7	2.4	2.5	2.2	1.7	1.3	1.1	0.9	1.0	1.6	2.3	2.8	1.9
1975	2.0	2.4	2.2	1.4	1.3	0.9	1.0	0.8	0.5	1.6	1.8	2.1	1.5
MEAN	2.6	2.6	2.1	1.7	1.3	1.2	1.0	0.9	1.1	1.6	2.2	2.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	4.6	3.1	2.9	2.2	2.4	1.3	1.6	2.0	3.4	2.9	3.3
1957	3.7	5.9	3.4	3.2	2.6	1.8	1.7	1.5	3.0	2.9	4.0	4.8
1958	2.2	5.6	4.1	5.1	1.9	1.9	2.0	1.9	1.6	3.3	4.8	4.1
1959	4.7	5.1	3.0	3.5	2.2	1.9	1.6	1.8	3.3	3.2	4.0	4.1
1960	5.5	5.3	3.3	2.7	2.1	1.6	1.4	1.7	1.3	3.6	4.4	4.0
1961	5.0	4.2	4.4	2.7	2.0	1.9	1.2	1.1	1.7	2.7	3.5	3.6
1962	2.8	4.5	3.6	2.7	1.7	1.6	1.6	1.6	2.3	3.9	4.5	4.6
1963	6.9	5.8	4.1	2.8	2.7	1.9	1.4	1.1	1.9	3.8	3.3	5.2
1964	6.1	3.4	3.6	3.3	2.8	1.9	2.5	1.7	1.7	2.6	3.7	5.6
1965	4.4	3.9	3.1	2.7	1.9	2.1	1.6	1.5	1.4	2.5	3.9	4.8
1966	4.5	3.8	4.3	2.7	2.2	1.7	1.6	1.6	2.2	2.6	3.4	4.2
1967	4.3	4.2	4.3	2.4	1.9	1.5	1.4	1.1	2.5	3.9	3.3	4.7
1968	4.4	4.1	3.6	3.6	1.8	1.6	2.2	1.7	2.4	2.7	3.8	4.6
1969	3.6	4.6	4.0	4.5	2.3	1.8	1.6	1.2	1.7	3.0	3.7	6.8
1970	5.1	5.4	4.7	4.0	2.0	2.0	1.7	1.5	1.7	3.0	3.8	5.1
1971	5.3	3.3	4.2	3.4	2.4	2.0	1.4	1.8	2.1	2.6	4.0	4.4
1972	4.6	3.9	3.5	4.6	2.3	1.8	2.1	1.4	1.4	2.2	4.5	5.7
1973	5.2	4.4	3.9	3.5	2.4	2.9	2.6	1.7	2.4	3.2	4.0	5.5
1974	5.9	4.3	5.5	4.5	2.6	2.3	2.1	1.4	1.9	3.8	3.9	4.5
1975	3.8	3.7	3.9	2.0	3.0	1.6	1.4	1.3	1.1	3.4	2.9	3.5

20 YR. STATISTICS FOR PACIFIC STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	96.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	46	.	.	.	.	.	.	.	.	.	46
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	46	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.25 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 27

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	186	260	23	.	.	.	.	.	.	.	469
0.50 - 0.99	1336	5258	965	.	.	.	.	.	.	.	7559
1.00 - 1.49	840	3829	1066	.	.	.	.	.	.	.	5735
1.50 - 1.99	71	687	195	.	.	.	.	.	.	.	953
2.00 - 2.49	.	56	6	.	.	.	.	.	.	.	62
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2433	1009	2255	0	0	0	0	0	0	0	

MEAN HS(M) = 1.00 LARGEST HS(M) = 2.68 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8641

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	148	13	27	16	8	10	.	.	234
0.50 - 0.99	3	643	4727	2659	1197	297	30	22	10	.	9648
1.00 - 1.49	23	419	4293	7351	7149	2559	518	53	.	.	22365
1.50 - 1.99	32	239	758	1716	6151	7351	1617	123	11	.	17998
2.00 - 2.49	8	268	266	287	1935	6911	2908	231	10	.	12824
2.50 - 2.99	.	41	150	106	588	3420	3376	366	.	.	8047
3.00 - 3.49	.	6	37	20	142	1264	2970	378	3	.	4820
3.50 - 3.99	.	1	6	3	22	337	1649	451	5	.	2474
4.00 - 4.49	.	.	.	.	3	77	621	417	1	.	1119
4.50 - 4.99	.	.	.	.	.	10	224	213	.	.	447
5.00 +	.	.	.	.	.	1	63	219	.	.	283
TOTAL	66	1627	10445	12155	17214	22245	13984	2483	40	0	

MEAN HS(M) = 1.88 LARGEST HS(M) = 6.88 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 46923

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	10	15	.	.	.	.	.	.	.	25
1.00 - 1.49	44	65	8	3	34	1	.	.	.	.	155
1.50 - 1.99	82	152	39	17	23	17	29	.	1	.	360
2.00 - 2.49	32	282	124	46	32	39	3	1	1	.	559
2.50 - 2.99	.	162	236	80	37	53	30	3	3	.	604
3.00 - 3.49	.	90	263	87	51	37	44	6	.	.	578
3.50 - 3.99	.	18	183	87	32	30	23	6	5	.	384
4.00 - 4.49	.	3	83	66	20	8	47	.	.	.	227
4.50 - 4.99	.	.	8	23	44	22	5	.	.	.	102
5.00 +	.	.	.	18	18	26	3	.	.	.	78
TOTAL	158	783	959	427	291	246	184	15	10	0	

MEAN HS(M) = 2.92 LARGEST HS(M) = 6.89 MEAN TP(SEC) = 9.3 NUMBER OF CASES = 1814

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	5	.	.	.	.	.	.	.	.	5
1.00 - 1.49	13	11	3	.	.	.	.	.	.	.	27
1.50 - 1.99	54	116	20	.	.	.	.	.	.	.	190
2.00 - 2.49	27	304	61	6	.	.	.	.	.	.	398
2.50 - 2.99	.	191	111	17	.	.	.	.	.	.	319
3.00 - 3.49	.	59	189	41	3	.	.	.	.	.	292
3.50 - 3.99	.	1	145	92	10	.	.	.	.	.	248
4.00 - 4.49	.	.	37	78	30	1	.	.	.	.	146
4.50 - 4.99	.	.	1	13	23	3	.	.	.	.	40
5.00 +					15	3					18
TOTAL	94	690	567	247	81	7	0	0	0	0	

MEAN HS(M) = 2.93 LARGEST HS(M) = 5.61 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 996

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	3	.	.	.	.	.	.	.	.	9
0.50 - 0.99	.	8	.	.	.	.	.	.	.	.	8
1.00 - 1.49	20	1	.	.	.	.	.	.	.	.	21
1.50 - 1.99	15	1	.	.	.	.	.	.	.	.	16
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	41	17	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.25 LARGEST HS(M) = 2.56 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 37

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

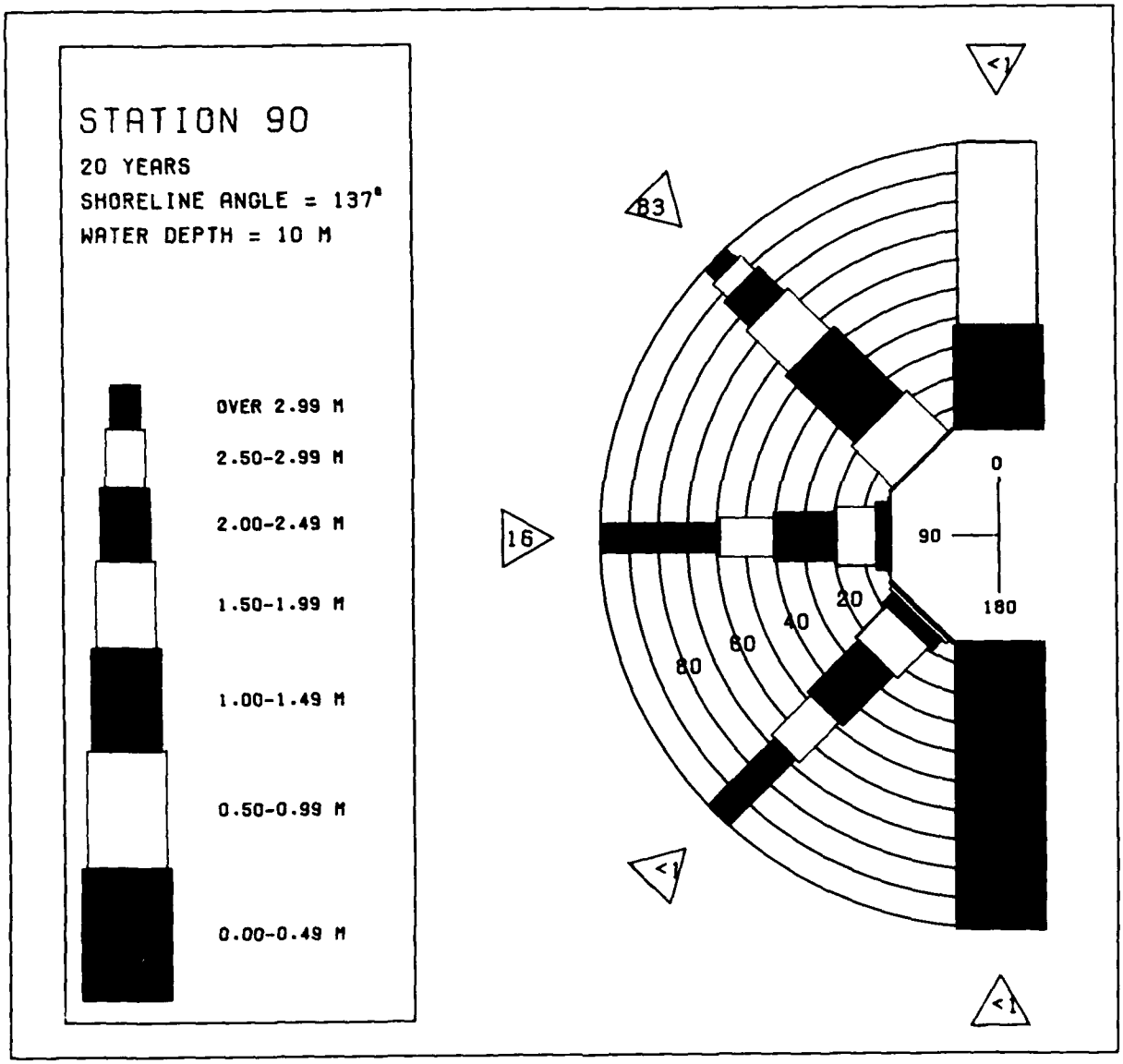
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 90 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.73N/123.51W LAT. LON. END= 38.63N/123.41W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	23	27	17	1	2	1	.	1	.	.	72
0.50 - 0.99	133	592	576	265	119	29	3	2	1	.	1720
1.00 - 1.49	94	432	537	735	718	256	51	5	.	.	2828
1.50 - 1.99	25	119	101	173	617	736	164	12	1	.	1948
2.00 - 2.49	6	91	46	34	196	695	291	23	1	.	1383
2.50 - 2.99	.	39	49	20	62	347	340	36	.	.	893
3.00 - 3.49	.	15	49	14	19	130	301	38	.	.	566
3.50 - 3.99	.	2	33	18	6	36	167	45	1	.	308
4.00 - 4.49	.	.	12	14	5	8	66	41	.	.	146
4.50 - 4.99	.	.	1	3	6	3	22	21	.	.	56
5.00 +	.	.	.	1	3	4	6	21	.	.	35
TOTAL	281	1317	1421	1278	1753	2245	1411	245	4	0	

MEAN HS(M) = 1.80 LARGEST HS(M) = 6.89 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 90 (38.73N/ 123.51W TO 38.63N/ 123.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.4	1.8	1.6	1.5	1.4	0.9	1.1	1.0	1.3	1.8	2.0	1.6
1957	2.1	2.3	2.1	1.9	1.6	1.2	0.9	0.9	1.4	1.8	2.0	2.6	1.7
1958	3.3	3.3	2.4	2.2	1.4	1.0	1.2	1.1	1.1	1.4	2.1	2.7	1.9
1959	2.6	2.9	2.0	1.9	1.4	1.2	1.0	0.9	1.4	1.7	2.0	2.5	1.8
1960	2.7	3.0	1.6	1.8	1.5	1.1	1.0	1.0	0.9	1.4	2.4	2.7	1.8
1961	3.0	2.6	2.3	1.6	1.4	1.3	0.9	0.7	1.0	1.5	2.0	2.3	1.7
1962	1.9	2.6	2.1	1.6	1.1	0.9	0.9	1.1	1.2	1.9	2.6	2.7	1.7
1963	2.4	3.0	2.2	1.6	1.2	1.3	0.9	0.8	1.3	2.1	2.3	2.7	1.8
1964	3.3	2.2	2.3	1.9	1.2	1.2	1.5	1.2	1.1	1.4	2.3	2.8	1.9
1965	2.5	2.2	2.3	1.8	1.4	1.4	1.0	0.9	1.0	1.7	2.4	2.9	1.8
1966	3.1	2.4	2.6	1.4	1.4	1.2	1.1	1.1	1.3	1.4	2.0	2.8	1.8
1967	2.7	2.5	1.9	1.5	1.0	1.0	1.0	0.8	1.5	2.0	2.3	2.6	1.7
1968	2.4	2.6	2.4	1.5	1.1	1.1	1.2	1.1	1.0	1.6	2.5	2.7	1.8
1969	2.1	3.1	2.4	2.3	1.4	1.3	1.1	0.9	1.1	2.0	2.1	3.9	2.0
1970	3.2	3.4	2.6	2.1	1.3	1.1	1.2	1.0	1.1	1.5	2.4	2.7	2.0
1971	2.4	2.2	2.2	2.0	1.3	1.3	0.9	1.1	1.5	1.5	2.2	2.4	1.7
1972	2.8	2.5	2.1	1.8	1.4	1.3	1.2	1.0	0.9	1.4	2.9	2.8	1.8
1973	3.4	3.1	2.6	2.0	1.5	1.5	1.2	1.2	1.4	1.5	2.5	3.1	2.1
1974	2.7	2.5	2.6	2.2	1.8	1.4	1.1	0.9	1.1	1.6	2.4	2.9	1.9
1975	2.1	2.5	2.3	1.5	1.3	1.0	1.1	0.9	0.5	1.7	1.9	2.1	1.6
MEAN	2.7	2.7	2.2	1.8	1.4	1.2	1.1	1.0	1.1	1.6	2.2	2.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 90 (38.73N/ 123.51W TO 38.63N/ 123.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	4.7	3.2	3.0	2.3	2.4	1.4	1.6	2.0	3.4	3.0	3.4
1957	3.7	6.0	3.5	3.3	2.7	1.9	1.8	1.6	3.0	3.0	4.1	4.9
1958	5.4	5.5	4.1	5.2	2.0	1.9	2.0	2.0	1.7	3.4	5.0	4.2
1959	4.8	5.1	3.1	3.6	2.3	1.9	1.6	1.8	3.3	3.4	4.1	4.2
1960	5.6	5.4	3.4	5.8	2.2	1.6	1.5	1.8	1.3	3.7	4.4	4.1
1961	3.4	4.3	4.5	5.8	2.0	1.9	2.3	1.1	1.7	2.7	3.5	3.7
1962	2.9	4.5	3.6	2.8	1.7	1.6	1.6	1.6	2.3	4.0	4.6	4.6
1963	6.9	5.8	4.2	2.8	2.7	2.0	1.5	1.2	2.0	3.9	3.4	5.4
1964	6.3	3.4	3.7	3.5	2.9	2.0	2.6	1.8	1.8	2.6	3.8	5.6
1965	4.5	4.0	3.1	2.8	2.0	2.2	1.6	1.6	1.5	3.6	5.8	4.8
1966	4.5	3.8	4.5	2.8	2.2	1.8	1.6	1.7	2.4	2.7	3.4	4.4
1967	4.4	4.3	4.3	2.5	2.0	1.6	1.4	1.2	2.6	4.0	3.5	4.9
1968	4.4	4.1	3.7	3.9	1.9	1.7	2.3	1.8	2.3	2.8	3.9	4.6
1969	3.6	4.7	4.1	4.7	2.3	1.9	1.7	1.2	1.7	3.2	3.8	6.9
1970	5.1	5.6	4.9	4.1	2.1	2.0	1.8	1.6	1.8	3.1	3.9	5.2
1971	5.3	3.4	4.3	3.5	2.5	2.0	1.4	1.9	2.2	2.7	4.2	4.6
1972	4.8	4.0	3.5	4.6	2.4	1.9	2.2	1.5	1.5	2.2	4.7	5.9
1973	5.3	4.5	4.1	3.6	2.5	3.0	2.0	1.8	2.5	3.3	4.0	5.7
1974	5.9	4.4	5.5	4.6	2.7	2.4	2.1	1.5	2.0	4.0	4.0	4.6
1975	3.9	3.8	4.0	2.0	3.1	1.7	1.5	1.3	1.1	3.4	3.1	3.7

20 YR. STATISTICS FOR PACIFIC STATION 90 (38.73N/ 123.51W TO 38.63N/ 123.41W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	1.8
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	0.9
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.6
LARGEST WAVE HS . . . . . (METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES)	97.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	63013121

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	44	.	.	.	.	.	.	.	.	.	44
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	44	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.10 LARGEST HS(M) = 0.27 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 26

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	157	217	17	.	.	.	.	.	.	.	391
0.50 - 0.99	1288	4969	860	.	.	.	.	.	.	.	7117
1.00 - 1.49	894	4002	1052	.	.	.	.	.	.	.	5948
1.50 - 1.99	80	710	195	.	.	.	.	.	.	.	985
2.00 - 2.49	.	56	10	.	.	.	.	.	.	.	66
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2419	9957	2134	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.02 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8483

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	145	11	22	18	8	10	.	.	.	229
0.50 - 0.99	3	670	4515	2416	1098	278	29	20	10	.	9039
1.00 - 1.49	18	436	4572	7359	6856	2395	473	51	.	.	22160
1.50 - 1.99	35	272	853	1928	6374	7041	1529	126	11	.	18169
2.00 - 2.49	6	268	282	321	2111	7036	2784	217	10	.	13035
2.50 - 2.99	.	46	155	107	616	3696	3347	354	.	.	8321
3.00 - 3.49	.	11	32	25	176	1360	3016	354	3	.	4977
3.50 - 3.99	.	1	8	1	25	371	1781	431	3	.	2621
4.00 - 4.49	.	.	.	1	5	97	711	439	3	.	1256
4.50 - 4.99	.	.	.	.	1	10	241	236	.	.	488
5.00 +	.	.	.	.	.	1	70	246	.	.	317
TOTAL	62	1719	10562	12169	17284	22303	13989	2484	40	0	

MEAN HS(M) = 1.91 LARGEST HS(M) = 6.92 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47132

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	10	15	.	.	.	.	.	.	.	25
1.00 - 1.49	37	54	8	3	29	1	.	.	.	.	132
1.50 - 1.99	87	155	41	18	29	18	30	.	1	.	379
2.00 - 2.49	29	239	111	44	32	41	3	1	.	.	500
2.50 - 2.99	.	162	222	82	39	51	30	10	3	.	599
3.00 - 3.49	.	83	246	82	54	39	53	8	.	.	565
3.50 - 3.99	.	17	188	87	32	34	25	6	5	.	394
4.00 - 4.49	.	1	85	59	20	10	49	.	.	.	224
4.50 - 4.99	.	.	8	25	42	22	6	.	.	.	103
5.00 +	.	.	.	18	15	3	3	.	.	.	75
TOTAL	153	722	924	418	292	255	199	24	10	0	

MEAN HS(M) = 2.93 LARGEST HS(M) = 6.88 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 1769

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	5	.	.	.	.	.	.	.	.	5
1.00 - 1.49	10	11	3	.	.	.	.	.	.	.	24
1.50 - 1.99	53	114	18	.	.	.	.	.	.	.	185
2.00 - 2.49	22	289	65	6	.	.	.	.	.	.	382
2.50 - 2.99	.	191	114	17	.	.	.	.	.	.	323
3.00 - 3.49	.	54	198	42	3	.	.	.	.	.	297
3.50 - 3.99	.	3	145	90	10	.	.	.	.	.	248
4.00 - 4.49	.	.	35	88	32	1	.	.	.	.	156
4.50 - 4.99	.	.	3	11	23	3	.	.	.	.	40
5.00 +					17	3					20
TOTAL	85	670	581	254	85	7	0	0	0	0	

MEAN HS(M) = 2.95 LARGEST HS(M) = 5.66 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 993

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	3	.	.	.	.	.	.	.	.	9
0.50 - 0.99	.	5	.	.	.	.	.	.	.	.	5
1.00 - 1.49	16	5	.	.	.	.	.	.	.	.	20
1.50 - 1.99	13	5	.	.	.	.	.	.	.	.	18
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	34	22	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.26 LARGEST HS(M) = 2.57 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 35

PHASE 3 ST. 91 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

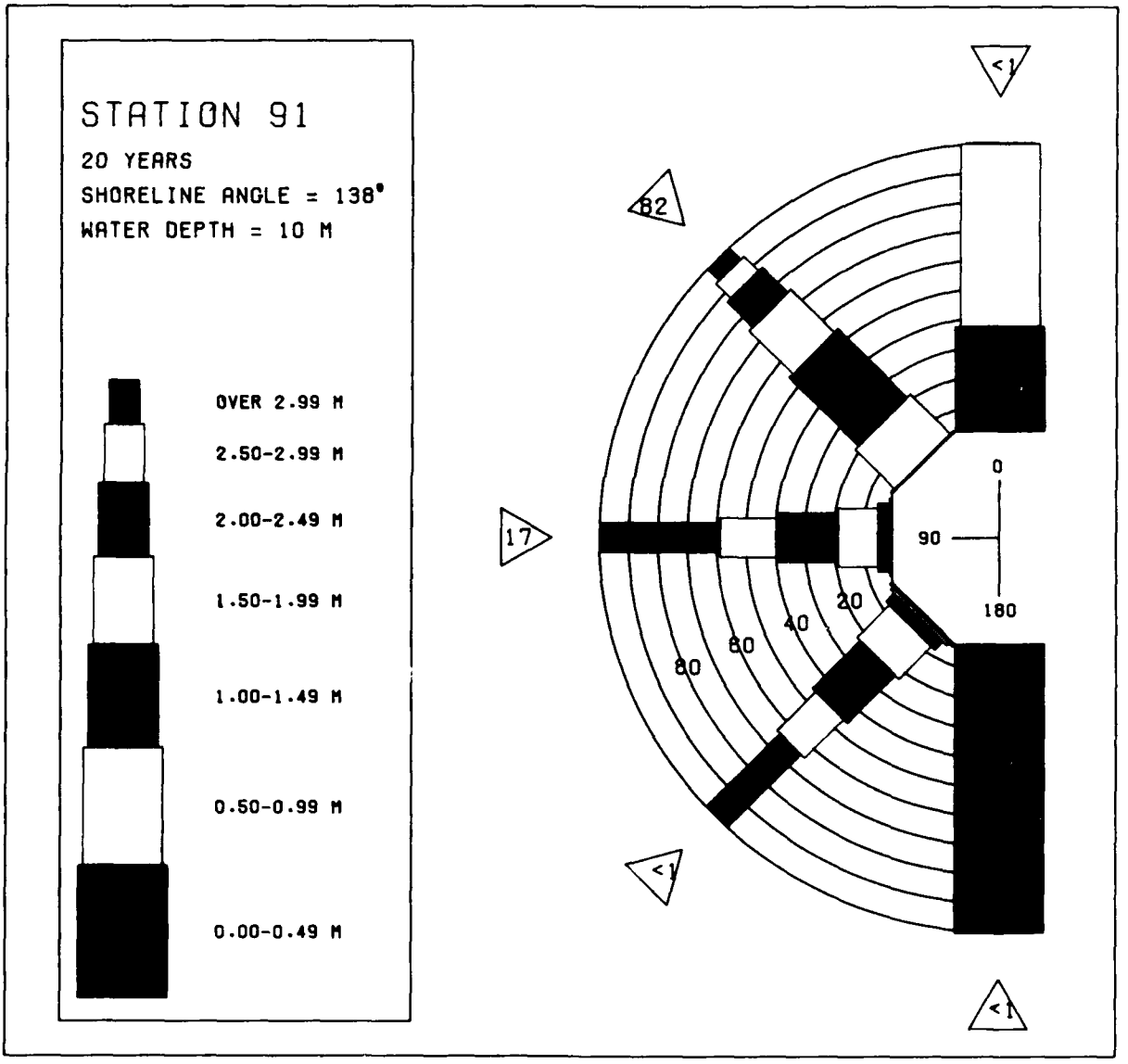
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 91 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.63N/123.41W LAT. LON. END= 38.53N/123.30W
SHORELINE ANGLE = 138.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	24	16	1	2	1	.	1	.	.	65
0.50 - 0.99	129	566	539	241	109	27	2	2	1	.	1616
1.00 - 1.49	97	451	563	736	688	239	47	5	.	.	2826
1.50 - 1.99	27	125	110	194	640	706	156	12	1	.	1971
2.00 - 2.49	5	85	46	37	214	707	278	21	1	.	1394
2.50 - 2.99	.	40	49	20	65	374	337	36	.	.	921
3.00 - 3.49	.	15	47	15	23	139	306	36	.	.	581
3.50 - 3.99	.	2	34	17	6	40	180	43	.	.	322
4.00 - 4.49	.	.	12	15	5	10	76	43	.	.	161
4.50 - 4.99	.	.	1	3	6	3	24	23	.	.	60
5.00 +	.	.	.	1	3	4	7	24	3	0	39
TOTAL	278	1308	1417	1280	1761	2250	1413	246	3	0	

MEAN HS(M) = 1.83 LARGEST HS(M) = 6.92 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 91 (38.63N/ 123.41W TO 38.53N/ 123.30W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.4	1.8	1.6	1.5	1.5	1.0	1.1	1.0	1.3	1.8	2.1	1.6
1957	2.2	2.3	2.1	1.9	1.6	1.2	0.9	0.9	1.4	1.8	2.1	2.6	1.8
1958	3.4	3.3	2.4	2.3	1.4	1.0	1.2	1.1	1.1	1.5	2.1	2.8	2.0
1959	2.6	2.9	2.0	1.9	1.5	1.2	1.0	0.9	1.4	1.8	2.1	2.6	1.8
1960	2.7	3.1	1.9	1.8	1.5	1.1	1.0	1.1	0.9	1.4	2.4	2.7	1.9
1961	3.1	2.6	2.3	1.6	1.4	1.3	0.9	0.7	1.0	1.5	2.0	2.3	1.7
1962	1.9	2.6	2.1	1.6	1.1	0.9	0.9	1.1	1.2	2.0	2.6	2.8	1.7
1963	2.5	3.0	2.3	1.6	1.2	1.3	1.0	0.8	1.3	2.1	2.3	2.7	1.8
1964	3.3	2.3	2.3	1.9	1.2	1.2	1.5	1.2	1.1	1.5	2.3	2.8	1.9
1965	2.5	2.2	2.1	1.8	1.5	1.4	1.0	0.9	1.0	1.7	2.4	3.0	1.8
1966	3.1	2.4	2.2	1.5	1.4	1.2	1.1	1.1	1.3	1.4	2.0	2.9	1.8
1967	2.7	2.5	2.0	1.5	1.1	1.0	1.0	0.8	1.6	2.0	2.3	2.6	1.8
1968	2.4	2.7	2.4	1.6	1.2	1.1	1.3	1.1	1.0	1.7	2.5	2.7	1.8
1969	2.1	3.1	2.5	2.3	1.4	1.4	1.1	0.9	1.1	2.0	2.2	4.0	2.0
1970	3.3	3.5	2.7	2.2	1.4	1.2	1.2	1.0	1.1	1.6	2.4	2.7	2.0
1971	2.4	2.2	2.3	2.1	1.3	1.4	0.9	1.2	1.3	1.5	2.2	2.4	1.8
1972	2.8	2.5	2.1	1.8	1.4	1.4	1.2	1.0	0.9	1.4	3.0	2.8	1.9
1973	3.4	3.2	2.7	2.0	1.6	1.5	1.2	1.2	1.4	1.5	2.5	3.2	2.1
1974	2.8	2.6	2.6	2.3	1.8	1.4	1.2	1.0	1.1	1.7	2.4	3.0	2.0
1975	2.1	2.5	2.3	1.5	1.3	1.0	1.1	0.9	0.5	1.7	1.9	2.2	1.6
MEAN	2.7	2.7	2.2	1.8	1.4	1.2	1.1	1.0	1.1	1.6	2.3	2.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 91 (38.63N/ 123.41W TO 38.53N/ 123.30W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	4.7	3.3	3.0	2.4	2.5	1.4	1.7	2.1	3.4	3.0	3.4
1957	3.7	6.1	3.6	3.4	2.7	1.9	1.8	1.6	3.0	3.1	4.2	5.0
1958	5.5	5.5	4.2	5.3	2.1	2.0	2.1	2.1	1.7	3.5	5.1	4.2
1959	4.9	5.0	3.2	3.7	2.3	2.0	1.7	1.9	3.3	3.4	4.2	4.3
1960	5.7	5.4	3.4	2.8	2.2	1.6	1.5	1.8	1.4	3.8	4.5	4.1
1961	5.1	4.4	4.6	2.8	2.0	2.0	1.3	1.1	1.7	2.8	3.6	3.7
1962	3.0	4.5	3.5	2.8	1.7	1.7	1.7	1.6	2.4	4.0	4.7	4.6
1963	6.9	5.8	4.3	5.8	2.7	2.0	1.5	1.2	2.0	4.0	3.4	5.5
1964	6.3	3.5	3.8	3.5	3.0	2.0	2.6	1.8	1.9	2.6	3.8	5.6
1965	4.5	4.1	3.1	2.8	2.0	2.3	1.6	1.6	1.6	3.7	5.8	4.8
1966	4.5	3.8	4.6	2.8	2.3	1.8	1.6	1.7	2.5	2.7	3.5	4.5
1967	4.5	4.4	4.2	2.5	2.1	1.6	1.4	1.2	2.6	4.1	3.5	4.9
1968	4.4	4.2	3.8	3.8	1.9	1.7	2.4	1.8	2.5	2.9	4.0	4.6
1969	3.6	4.8	4.2	4.8	2.4	1.9	1.7	1.2	1.8	3.2	3.9	6.9
1970	5.9	5.7	5.0	4.2	2.5	2.1	1.8	1.6	1.8	3.1	4.0	5.2
1971	5.3	3.4	4.3	3.6	2.5	2.1	1.5	1.9	2.2	2.8	4.2	4.7
1972	4.9	4.1	3.6	4.6	2.4	2.0	2.2	1.5	1.5	2.3	4.7	6.0
1973	5.4	4.6	4.2	3.7	2.6	3.1	2.0	1.8	2.5	3.3	4.1	5.8
1974	5.9	4.4	5.6	4.6	2.7	2.5	2.1	1.5	2.0	4.1	4.1	4.6
1975	3.9	3.9	4.1	2.1	3.2	1.8	1.5	1.3	1.1	3.4	3.1	3.7

20 YR. STATISTICS FOR PACIFIC STATION 91 (38.63N/ 123.41W TO 38.53N/ 123.30W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	1.8
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	0.9
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.6
LARGEST WAVE HS . . . . . (METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	72.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	69121203

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	138	.	.	.	.	.	.	.	.	.	138
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	138	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.10 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 81

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	550	1586	196	.	.	.	.	.	.	.	2332
0.50 - 0.99	2210	8949	2441	.	.	.	.	.	.	.	13600
1.00 - 1.49	444	2796	925	.	.	.	.	.	.	.	4165
1.50 - 1.99	20	621	147	.	.	.	.	.	.	.	788
2.00 - 2.49	.	46	5	.	.	.	.	.	.	.	51
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3224	13998	3714	0	0	0	0	0	0	0	

MEAN HS(M) = 0.84 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 12239

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	17	342	54	23	53	10	1	.	.	501
0.50 - 0.99	23	145	5357	6488	3810	975	66	42	5	.	16911
1.00 - 1.49	53	196	1374	4002	8954	7316	1180	92	17	.	23184
1.50 - 1.99	63	395	400	451	2315	8018	3557	265	20	.	15484
2.00 - 2.49	10	164	248	177	633	3401	4187	491	17	.	9348
2.50 - 2.99	.	78	112	41	193	982	2760	675	5	.	4846
3.00 - 3.49	.	17	22	10	22	272	975	562	6	.	1886
3.50 - 3.99	.	.	1	6	3	68	431	285	1	.	795
4.00 - 4.49	.	.	.	3	.	23	169	164	.	.	359
4.50 - 4.99	.	.	.	.	.	5	25	32	.	.	62
5.00 +	.	.	.	.	.	.	18	27	.	.	45
TOTAL	150	1032	7856	11232	15953	21113	13378	2636	71	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 6.31 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 42928

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	1	1	.	.	.	.	.	.	9
0.50 - 0.99	25	18	13	.	.	.	.	.	.	.	56
1.00 - 1.49	95	104	1	8	11	1	.	.	.	.	220
1.50 - 1.99	131	367	61	25	8	13	.	.	.	.	605
2.00 - 2.49	29	414	152	20	15	8	10	.	.	.	648
2.50 - 2.99	1	244	299	90	25	22	10	1	.	.	692
3.00 - 3.49	.	126	326	135	41	13	10	.	3	.	656
3.50 - 3.99	.	27	164	136	41	6	8	.	.	.	382
4.00 - 4.49	.	.	42	44	25	10	3	.	.	.	124
4.50 - 4.99	.	.	8	27	27	13	.	.	.	.	75
5.00 +	.	.	1	3	17	27	11	.	.	.	58
TOTAL	289	1302	1066	489	210	113	52	1	3	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 6.30 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 2078

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	15	.	.	.	.	.	.	.	.	25
0.50 - 0.99	5	20	.	.	.	.	.	.	.	.	25
1.00 - 1.49	75	49	8	.	.	.	.	.	.	.	132
1.50 - 1.99	155	154	20	.	.	.	.	.	.	.	329
2.00 - 2.49	29	278	34	.	.	.	.	.	.	.	341
2.50 - 2.99	.	198	73	6	.	.	.	.	.	.	277
3.00 - 3.49	.	58	191	10	.	.	.	.	.	.	259
3.50 - 3.99	.	1	102	53	1	.	.	.	.	.	157
4.00 - 4.49	.	.	37	27	8	.	.	.	.	.	72
4.50 - 4.99	.	.	.	8	10	.	.	.	.	.	18
5.00 +	.	.	.	5	3	.	.	.	.	.	8
TOTAL	274	773	465	109	22	0	0	0	0	0	

MEAN HS(M) = 2.53 LARGEST HS(M) = 5.34 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 968

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	126	1	.	.	.	.	.	.	.	.	127
0.50 - 0.99	34	8	.	.	.	.	.	.	.	.	42
1.00 - 1.49	3	10	.	.	.	.	.	.	.	.	13
1.50 - 1.99	.	1	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	163	20	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.42 LARGEST HS(M) = 1.81 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 109

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

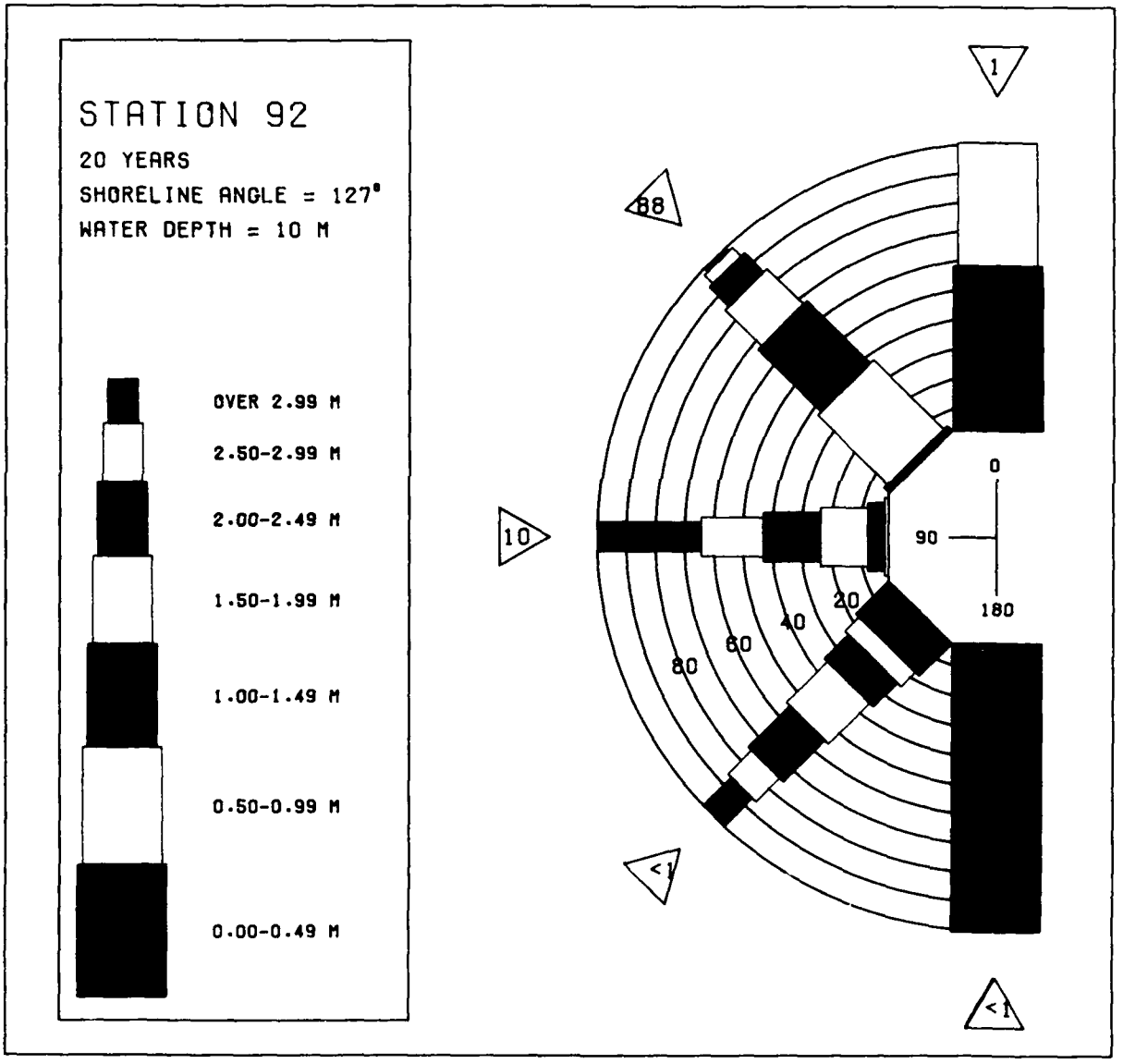
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 92 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	83	162	53	5	2	5	1	.	.	.	311
0.50 - 0.99	229	914	781	648	381	97	6	4	.	.	3060
1.00 - 1.49	67	315	231	401	896	731	118	9	1	.	2749
1.50 - 1.99	37	154	62	47	232	805	355	26	2	.	1718
2.00 - 2.49	3	92	43	19	64	341	419	49	1	.	1034
2.50 - 2.99	.	52	48	13	21	100	277	67	.	.	579
3.00 - 3.49	.	20	54	15	6	28	98	56	1	.	278
3.50 - 3.99	.	2	26	19	4	7	43	28	.	.	129
4.00 - 4.49	.	.	8	7	3	3	17	16	.	.	54
4.50 - 4.99	.	.	.	3	3	1	2	3	.	.	12
5.00 +	.	.	.	.	2	2	3	2	.	.	9
TOTAL	422	1711	1306	1177	1614	2118	1339	260	5	0	

MEAN HS(M) = 1.46 LARGEST HS(M) = 6.31 MEAN TP(SEC)= 10.6 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.3	2.0	1.4	1.3	1.2	1.2	0.7	0.9	0.8	1.0	1.4	1.7	1.3
1957	1.8	1.8	1.8	1.5	1.3	1.0	0.7	0.7	1.2	1.5	1.5	2.0	1.4
1958	2.8	2.9	1.9	1.8	1.1	0.8	1.0	0.9	0.8	1.1	1.6	2.3	1.6
1959	2.2	2.5	1.6	1.4	1.2	1.0	0.8	0.7	1.2	1.4	1.5	2.0	1.5
1960	2.3	2.5	1.5	1.4	1.2	0.8	0.8	0.8	0.7	1.1	1.9	2.2	1.4
1961	2.7	2.2	1.7	1.3	1.1	1.0	0.7	0.6	0.8	1.1	1.5	1.8	1.4
1962	1.6	2.5	1.7	1.2	0.9	0.6	0.7	0.9	1.0	1.5	2.1	2.3	1.4
1963	2.1	2.7	1.8	1.4	1.0	1.0	0.7	0.6	1.0	1.7	1.9	2.2	1.5
1964	2.7	1.8	1.9	1.5	1.0	1.1	1.2	1.0	0.9	1.2	1.8	2.4	1.5
1965	2.1	1.7	1.7	1.5	1.1	1.2	0.8	0.8	0.7	1.2	1.9	2.3	1.4
1966	2.6	2.0	1.8	1.2	1.1	1.0	0.9	0.8	1.0	1.1	1.6	2.4	1.4
1967	2.3	2.0	1.6	1.2	0.9	0.8	0.7	0.7	1.3	1.6	1.7	2.0	1.4
1968	2.0	2.2	2.0	1.2	0.9	0.9	1.0	0.9	0.8	1.3	2.0	2.3	1.5
1969	1.8	2.5	1.9	1.4	1.1	1.1	0.8	0.6	0.9	1.6	1.5	2.3	1.6
1970	2.9	2.7	2.1	1.7	1.1	0.9	0.9	0.7	0.9	1.2	1.9	2.2	1.6
1971	2.0	1.8	1.8	1.6	1.0	1.1	0.7	0.9	1.0	1.2	1.7	2.0	1.4
1972	2.2	2.0	1.8	1.4	1.1	1.1	0.9	0.8	0.7	1.0	2.3	2.3	1.5
1973	2.8	2.6	2.1	1.5	1.2	1.2	1.0	1.0	1.2	1.2	2.0	2.6	1.7
1974	2.4	2.0	2.1	1.8	1.4	1.1	1.0	0.8	0.8	1.3	1.8	2.4	1.6
1975	1.6	2.1	1.9	1.1	1.0	0.8	0.9	0.7	0.4	1.3	1.4	1.7	1.2
MEAN	2.2	2.2	1.8	1.4	1.1	1.0	0.9	0.8	0.9	1.3	1.8	2.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.4	4.3	2.4	2.3	1.9	2.0	1.1	1.5	1.6	3.2	2.6	2.7
1957	3.5	5.4	3.1	2.6	2.5	1.4	1.3	1.2	2.8	2.7	3.4	4.2
1958	4.5	4.9	3.8	4.5	1.6	1.6	1.6	1.5	1.3	2.8	3.9	3.7
1959	4.0	5.2	2.6	2.9	2.0	1.7	1.5	1.5	3.2	2.7	3.4	3.4
1960	5.0	4.9	2.8	2.2	1.8	1.2	1.3	1.5	1.0	2.9	3.9	3.7
1961	4.4	3.7	3.7	2.1	1.7	1.6	1.0	0.9	1.3	2.2	3.1	3.1
1962	2.5	4.2	3.7	2.1	1.6	1.2	1.2	1.3	2.0	4.3	3.8	4.3
1963	6.3	5.7	3.3	3.4	2.3	1.6	1.3	1.0	1.5	4.0	2.9	4.2
1964	5.2	4.9	3.0	2.6	2.5	1.9	2.0	1.6	1.5	2.1	3.0	5.2
1965	4.4	3.2	4.6	2.5	1.7	1.8	1.3	1.2	1.1	2.9	5.4	5.0
1966	4.4	3.6	3.5	2.2	1.7	1.5	1.3	1.3	1.9	2.2	3.0	3.6
1967	4.1	3.6	4.7	2.0	1.7	1.3	1.1	1.1	1.9	3.0	2.6	3.8
1968	4.1	3.7	3.2	3.0	1.7	1.6	1.8	1.6	1.9	2.2	3.3	4.4
1969	3.3	3.7	3.1	3.6	1.9	1.6	1.3	0.9	1.4	2.5	3.0	5.9
1970	4.6	4.5	3.7	3.0	1.8	1.6	1.6	1.3	1.4	2.4	3.3	4.3
1971	4.9	2.9	3.8	2.8	1.9	1.7	1.2	1.5	1.6	2.1	3.3	3.7
1972	3.9	3.6	3.0	3.9	1.8	1.5	1.7	1.3	1.1	1.7	3.7	4.6
1973	4.8	3.9	3.1	2.8	2.0	2.5	1.6	1.5	2.0	3.2	3.8	4.5
1974	6.3	3.9	4.9	3.8	2.0	1.6	1.7	1.4	1.5	3.2	3.7	4.1
1975	3.2	3.4	3.1	1.6	2.3	1.2	1.2	1.3	1.0	2.4	2.3	3.0

20 YR. STATISTICS FOR PACIFIC STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	73.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.06 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	118	160	6	.	.	.	.	.	.	.	284
0.50 - 0.99	853	3206	422	.	.	.	.	.	.	.	4481
1.00 - 1.49	1127	5276	983	.	.	.	.	.	.	.	7386
1.50 - 1.99	121	1428	318	.	.	.	.	.	.	.	1867
2.00 - 2.49	.	99	25	.	.	.	.	.	.	.	124
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2219	10469	1754	0	0	0	0	0	0	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8445

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	20	107	8	10	6	6	1	.	.	158
0.50 - 0.99	1	641	3025	1493	703	210	20	8	1	.	6102
1.00 - 1.49	10	626	5242	6339	4777	1928	272	59	10	.	19263
1.50 - 1.99	29	330	1293	3608	7022	4832	1081	99	17	.	18311
2.00 - 2.49	10	414	448	633	3675	7267	2031	167	6	.	14651
2.50 - 2.99	.	97	168	160	1007	4964	2920	323	1	.	9660
3.00 - 3.49	.	13	66	49	311	2373	2902	335	.	.	6049
3.50 - 3.99	.	.	11	6	65	891	2575	308	1	.	3857
4.00 - 4.49	.	.	.	1	8	205	1409	434	1	.	2058
4.50 - 4.99	.	.	.	.	.	29	470	412	3	.	914
5.00 +	.	.	.	.	.	.	188	580	.	.	768
TOTAL	50	2141	10380	12297	17578	22705	13874	2726	40	0	

MEAN HS(M) = 2.10 LARGEST HS(M) = 6.79 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47821

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	5	6	.	.	.	.	.	.	.	11
1.00 - 1.49	25	42	17	10	41	1	.	.	.	.	136
1.50 - 1.99	47	85	34	34	53	42	35	.	8	.	338
2.00 - 2.49	10	133	65	41	42	53	27	5	6	.	382
2.50 - 2.99	.	71	47	65	56	63	61	18	30	.	411
3.00 - 3.49	.	23	128	61	58	51	128	17	8	.	474
3.50 - 3.99	.	5	65	25	42	49	70	8	6	.	270
4.00 - 4.49	.	.	29	32	15	35	75	22	5	.	213
4.50 - 4.99	.	.	11	10	3	22	32	.	1	.	79
5.00 +	.	.	.	3	.	18	27	8	.	.	56
TOTAL	82	364	402	281	310	334	455	78	64	0	

MEAN HS(M) = 2.92 LARGEST HS(M) = 6.65 MEAN TP(SEC) = 11.0 NUMBER OF CASES = 1403

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	5	.	.	.	.	.	.	.	.	8
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	20	18	.	.	.	.	.	.	.	.	38
1.50 - 1.99	34	83	37	.	.	.	.	.	.	.	154
2.00 - 2.49	8	155	71	5	.	.	.	.	.	.	239
2.50 - 2.99	.	111	138	32	3	.	.	.	.	.	284
3.00 - 3.49	.	35	152	58	11	.	.	.	.	.	256
3.50 - 3.99	.	1	83	80	5	1	.	.	.	.	170
4.00 - 4.49	.	.	23	34	22	11	.	.	.	.	90
4.50 - 4.99	.	.	3	8	10	.	.	.	.	.	21
5.00 +	.	.	.	.	3	3	.	.	.	.	6
TOTAL	68	408	507	217	54	15	0	0	0	0	

MEAN HS(M) = 2.86 LARGEST HS(M) = 5.73 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 752

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	.	.	.	.	.	.	.	.	4
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.32 LARGEST HS(M) = 0.83 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 5

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

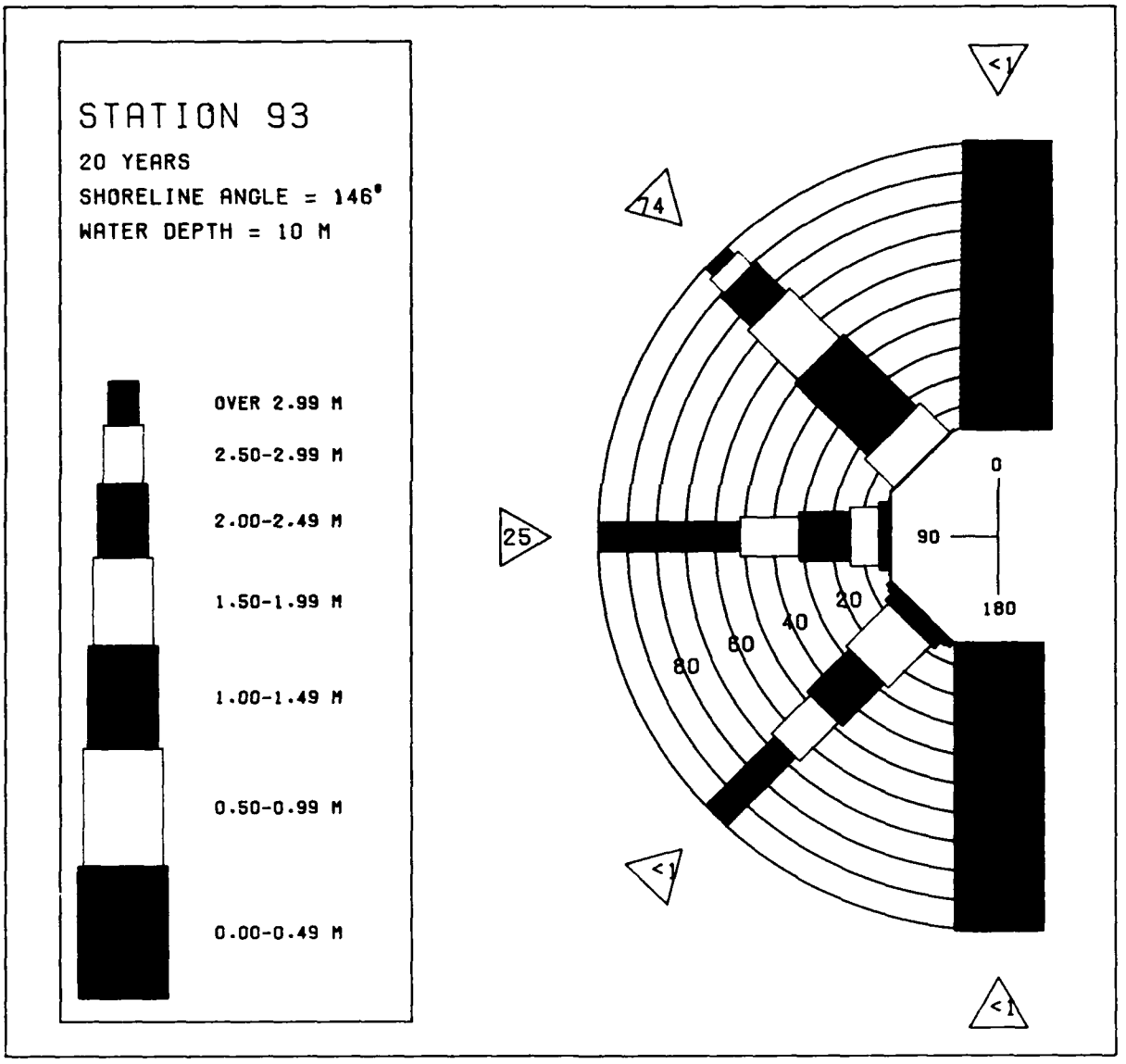
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 93 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	12	18	11		1						42
0.50 - 0.99	86	385	345	149	70	21	2	.	.	.	1058
1.00 - 1.49	118	626	624	635	481	193	27	5	1	.	2710
1.50 - 1.99	23	192	168	364	707	487	111	9	2	.	2063
2.00 - 2.49	2	80	61	67	371	732	205	17	1	.	1536
2.50 - 2.99	.	28	37	25	106	502	298	34	3	.	1033
3.00 - 3.49	.	7	34	16	38	242	303	35	.	.	675
3.50 - 3.99	.	.	16	11	11	94	264	31	.	.	427
4.00 - 4.49	.	.	5	6	4	25	148	45	.	.	233
4.50 - 4.99	.	.	1	1	1	5	50	41	.	.	99
5.00 +	.	.	.	.	.	2	21	58	.	.	81
TOTAL	241	1336	1302	1274	1790	2303	1429	275	7	0	

MEAN HS(M) = 1.99 LARGEST HS(M) = 6.79 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 93 (38.43N/ 123.16W TO 38.36N/ 123.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.7	2.6	2.0	1.8	1.7	1.7	1.1	1.3	1.1	1.4	1.9	2.2	1.8
1957	2.4	2.6	2.2	2.1	1.7	1.4	1.0	1.0	1.6	1.8	2.2	2.7	1.9
1958	3.5	3.4	2.5	2.5	1.6	1.2	1.4	1.3	1.2	1.5	2.3	2.9	2.1
1959	2.8	3.2	2.2	2.1	1.6	1.4	1.1	1.1	1.6	1.9	2.2	2.8	2.0
1960	2.9	3.3	1.6	1.9	1.6	1.2	1.2	1.2	1.0	1.5	2.6	3.9	1.9
1961	3.4	2.8	2.4	1.8	1.4	1.5	1.0	0.8	1.1	1.6	2.1	3.5	1.9
1962	2.1	2.7	2.4	1.8	1.3	1.0	1.1	1.3	1.4	2.1	2.0	3.8	1.9
1963	2.6	3.0	2.5	1.7	1.4	1.5	1.1	0.9	1.4	2.3	2.5	3.8	2.0
1964	3.6	2.5	2.9	2.2	1.3	1.4	1.6	1.4	1.3	1.6	2.5	3.9	2.1
1965	2.7	2.5	2.3	2.0	1.7	1.7	1.1	1.1	1.1	1.8	2.4	3.2	2.0
1966	3.3	2.6	2.4	1.7	1.6	1.3	1.3	1.2	1.4	1.6	2.1	3.0	2.0
1967	2.9	2.9	2.1	1.7	1.2	1.1	1.1	1.0	1.7	2.3	2.5	2.8	1.9
1968	2.4	2.8	2.7	1.9	1.3	1.3	1.5	1.2	1.1	1.8	2.8	2.9	2.0
1969	2.3	3.4	2.7	2.6	1.5	1.6	1.3	1.0	1.2	2.2	2.4	4.2	2.2
1970	3.4	3.8	2.9	2.5	1.5	1.3	1.4	1.1	1.3	1.7	2.5	2.6	2.3
1971	2.7	2.4	2.5	2.3	1.7	1.5	1.1	1.3	1.4	1.7	2.4	2.7	1.9
1972	3.1	2.6	2.5	1.9	1.6	1.6	1.3	1.2	1.1	1.5	3.3	2.9	2.0
1973	3.6	3.4	2.9	2.3	1.8	1.7	1.4	1.5	1.6	1.6	2.6	3.3	2.3
1974	2.8	2.8	2.8	2.5	2.1	1.6	1.3	1.1	1.2	1.9	2.6	3.1	2.2
1975	2.2	2.7	2.5	1.6	1.5	1.2	1.2	1.0	0.6	1.8	2.1	2.4	1.7
MEAN	2.9	2.9	2.4	2.0	1.5	1.4	1.2	1.1	1.3	1.8	2.5	2.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 93 (38.43N/ 123.16W TO 38.36N/ 123.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.1	4.8	3.5	3.2	3.0	2.9	1.6	2.4	2.5	3.3	3.4	3.4
1957	4.0	6.6	4.2	3.8	3.0	2.0	1.9	1.7	2.9	3.5	5.0	5.6
1958	6.0	5.3	4.8	6.0	2.3	2.1	2.4	2.3	1.9	4.1	6.0	4.7
1959	5.4	5.1	3.8	4.0	2.4	2.3	2.0	2.1	3.1	3.6	5.0	4.9
1960	5.6	5.4	3.4	3.2	2.5	1.7	1.9	1.9	1.5	4.5	4.6	4.5
1961	5.8	4.6	4.9	3.1	2.1	2.3	1.6	1.3	1.7	3.2	3.8	4.1
1962	3.2	4.7	3.7	3.1	1.8	1.7	1.8	1.8	2.6	4.3	5.0	4.5
1963	6.6	6.0	5.2	3.1	2.7	2.2	1.6	1.5	2.2	5.5	3.7	6.0
1964	6.8	3.6	4.0	4.1	3.0	2.4	3.1	2.1	2.2	2.6	4.3	5.3
1965	4.2	5.0	3.4	3.2	2.5	2.6	1.8	1.7	1.9	4.1	4.8	4.8
1966	4.6	3.8	5.3	3.0	2.8	1.9	1.7	1.8	2.8	3.0	3.5	5.1
1967	5.0	5.5	4.1	2.7	2.4	1.8	1.5	1.4	2.9	4.4	4.1	5.4
1968	3.9	4.4	4.1	4.7	2.2	2.2	2.7	2.1	3.0	3.3	4.6	4.8
1969	3.9	5.3	4.7	5.6	2.5	2.3	2.0	1.3	2.0	3.8	4.3	6.6
1970	5.2	6.0	5.9	4.6	2.4	2.5	2.2	1.8	2.1	3.2	4.3	5.5
1971	5.5	3.8	4.8	4.3	2.4	2.3	1.7	2.0	2.5	3.0	4.7	5.8
1972	6.0	4.8	3.7	3.7	2.8	2.3	2.3	1.8	1.8	2.5	5.7	6.0
1973	5.7	5.1	4.8	4.1	2.6	2.5	2.3	2.2	2.7	5.2	4.3	6.2
1974	6.1	4.6	5.8	4.9	3.0	2.5	2.1	1.8	2.3	4.8	5.0	4.8
1975	3.6	4.6	4.1	2.4	3.6	1.8	1.7	1.8	1.3	3.4	3.2	4.2

20 YR. STATISTICS FOR PACIFIC STATION 93 (38.43N/ 123.16W TO 38.36N/ 123.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012012

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 3

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	46	51	22	.	.	1	.	.	.	.	120
0.50 - 0.99	352	1529	898	78	42	5	13	.	.	.	2917
1.00 - 1.49	973	4887	4224	987	222	17	1	.	.	.	11311
1.50 - 1.99	261	3607	3302	1428	236	37	39	.	.	.	8910
2.00 - 2.49	11	994	1054	812	489	100	1	.	.	.	3461
2.50 - 2.99	.	135	325	294	383	116	3	.	.	.	1286
3.00 - 3.49	.	10	56	68	195	87	3	.	.	.	439
3.50 - 3.99	.	.	5	11	100	49	6	.	.	.	171
4.00 - 4.49	.	.	1	.	42	41	13	.	.	.	97
4.50 - 4.99	.	.	.	.	1	5	3	.	.	.	9
5.00 +	.	.	.	.	.	6	.	.	.	.	6
TOTAL	1643	11213	9917	3698	1710	464	82	0	0	0	

MEAN HS(M) = 1.60 LARGEST HS(M) = 5.05 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 16805

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	1	.	.	.	.	7
0.50 - 0.99	.	85	427	254	82	78	13	6	1	.	946
1.00 - 1.49	3	140	1452	2518	1945	521	37	13	.	.	6629
1.50 - 1.99	11	77	693	4260	4796	2320	403	73	11	.	12644
2.00 - 2.49	10	95	140	1617	5422	4431	1095	87	32	.	12929
2.50 - 2.99	.	85	106	366	3228	6100	1699	140	20	.	11744
3.00 - 3.49	.	34	106	107	980	4883	2322	236	44	.	8712
3.50 - 3.99	.	1	39	56	266	3042	2588	301	15	.	6308
4.00 - 4.49	.	.	6	6	65	1264	2496	278	11	.	4126
4.50 - 4.99	.	.	.	1	18	422	2070	256	1	.	2768
5.00 +	.	.	.	.	.	85	1777	1459	11	.	3332
TOTAL	24	517	2975	9185	16802	23147	14500	2849	146	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 41018

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	10	18	8	6	1	.	.	.	.	.	43
1.50 - 1.99	8	44	51	13	8	.	.	.	.	.	124
2.00 - 2.49	8	92	63	51	37	6	.	.	.	.	257
2.50 - 2.99	.	29	65	51	78	5	.	.	.	.	228
3.00 - 3.49	.	6	58	53	29	18	.	.	.	.	164
3.50 - 3.99	.	.	17	27	27	8	3	.	.	.	82
4.00 - 4.49	.	.	11	11	3	10	5	.	.	.	40
4.50 - 4.99	.	.	.	.	.	5	6	.	.	.	11
5.00 +	.	.	.	.	.	5	1	.	.	.	6
TOTAL	29	189	273	212	183	57	15	0	0	0	

MEAN HS(M) = 2.69 LARGEST HS(M) = 5.76 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 571

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	.	.	.	.	.	.	.	.	4
0.50 - 0.99	5	6	.	.	.	.	.	.	.	.	11
1.00 - 1.49	.	11	3	.	.	.	.	.	.	.	14
1.50 - 1.99	5	15	3	.	.	.	.	.	.	.	23
2.00 - 2.49	.	3	1	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	38	7	0	0	0	0	0	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 36

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

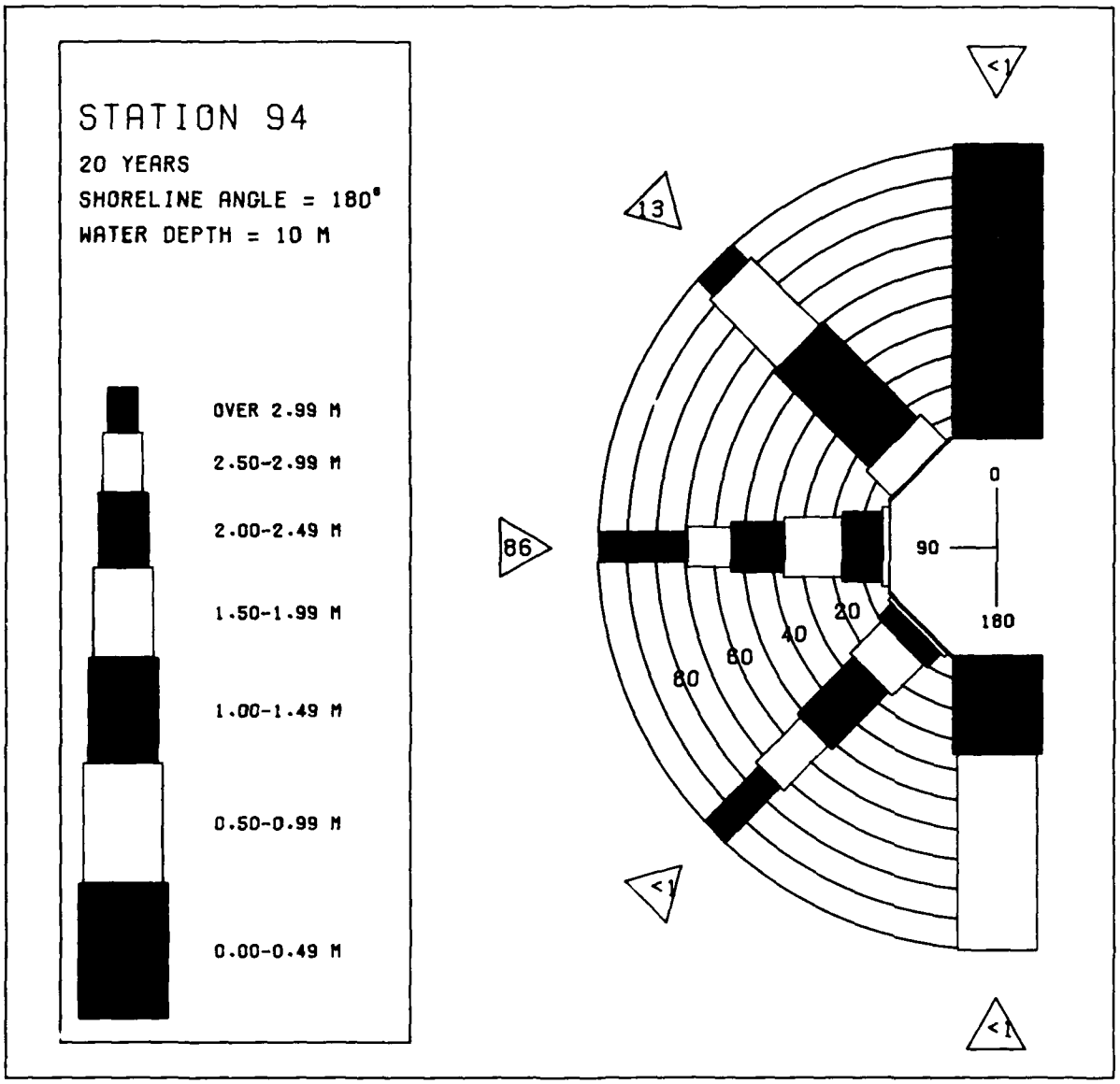
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 94 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	5	2	.	.	.	.	.	.	.	12
0.50 - 0.99	36	162	132	33	12	8	2	.	.	.	385
1.00 - 1.49	98	505	568	351	216	53	3	1	.	.	1795
1.50 - 1.99	28	374	405	570	504	235	44	7	1	.	2168
2.00 - 2.49	3	118	125	248	594	453	109	8	1	.	1661
2.50 - 2.99	.	24	52	71	369	622	170	14	2	.	1324
3.00 - 3.49	.	5	22	24	120	498	232	23	4	.	928
3.50 - 3.99	.	.	6	9	39	310	259	30	1	.	654
4.00 - 4.49	.	.	2	1	11	131	251	27	1	.	424
4.50 - 4.99	.	.	.	.	2	43	208	25	.	.	278
5.00 +	.	.	.	.	.	9	177	145	1	.	332
TOTAL	170	1193	1314	1307	1867	2362	1455	280	13	0	

MEAN HS(M) = 2.43 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.2	2.4	2.2	2.1	2.1	1.4	1.6	1.3	1.8	2.4	2.6	2.2
1957	2.9	3.1	2.7	2.6	2.0	1.8	1.3	1.2	1.9	2.1	2.8	3.3	2.3
1958	4.0	3.7	2.9	3.0	2.0	1.4	1.8	1.6	1.5	1.9	2.9	3.4	2.5
1959	3.3	3.7	2.7	2.6	2.0	1.7	1.5	1.3	1.9	2.3	2.8	3.4	2.4
1960	3.4	3.9	2.0	2.3	2.0	1.5	1.5	1.5	1.3	1.9	3.3	3.4	2.3
1961	4.0	3.4	2.9	2.2	1.7	1.9	1.3	1.0	1.3	2.1	2.6	3.1	2.3
1962	2.5	3.1	2.9	2.2	1.6	1.2	1.4	1.5	1.7	2.5	3.7	3.2	2.3
1963	3.1	3.2	3.1	2.0	1.7	1.9	1.4	1.1	1.7	2.8	3.0	3.3	2.4
1964	4.3	3.0	3.3	2.8	1.7	1.6	2.2	1.7	1.6	2.0	3.0	3.4	2.6
1965	3.1	3.2	2.8	2.4	2.2	2.1	1.4	1.3	1.4	2.2	2.8	3.9	2.4
1966	3.6	3.2	3.0	2.1	2.0	1.6	1.6	1.6	1.8	2.1	2.5	3.5	2.4
1967	3.5	3.6	2.4	2.1	1.5	1.4	1.4	1.2	2.1	2.8	3.1	3.4	2.4
1968	2.8	3.2	3.2	2.4	1.6	1.6	1.9	1.4	1.4	2.3	3.4	3.4	2.4
1969	2.6	4.1	3.3	3.2	1.9	1.9	1.6	1.3	1.5	2.7	3.1	4.9	2.7
1970	3.8	4.5	3.7	3.2	1.9	1.7	1.7	1.4	1.6	2.1	3.0	3.6	2.7
1971	3.3	2.8	3.1	3.0	1.9	1.8	1.4	1.6	1.8	2.1	3.0	3.3	2.4
1972	3.8	3.2	2.7	2.4	2.1	2.0	1.7	1.5	1.4	1.9	4.1	3.2	2.5
1973	4.1	4.1	3.7	2.9	2.5	2.2	1.8	1.8	1.9	2.1	3.1	3.8	2.8
1974	3.1	3.4	3.3	3.1	2.7	2.1	1.7	1.4	1.4	2.4	3.3	3.7	2.6
1975	2.7	3.2	3.0	2.0	1.9	1.5	1.5	1.3	0.8	2.3	2.7	2.9	2.1
MEAN	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.3	4.5	3.8	3.8	3.7	2.0	3.0	3.1	3.1	4.1	4.1
1957	5.2	6.9	5.3	4.8	3.6	2.5	2.4	2.0	3.7	4.5	6.1	6.6
1958	6.3	6.1	6.1	6.6	2.9	2.5	3.0	3.0	2.5	5.1	6.1	5.8
1959	6.2	5.8	4.9	5.2	2.8	2.8	2.4	2.5	2.8	5.0	6.1	6.0
1960	6.3	6.1	3.9	3.9	3.0	2.3	2.3	2.2	1.9	5.7	5.6	5.6
1961	6.1	5.4	5.8	3.8	2.7	2.9	2.0	1.6	2.0	4.3	4.4	5.2
1962	4.2	4.9	4.6	4.0	2.2	2.1	2.3	2.3	3.3	4.4	6.1	5.1
1963	6.4	5.8	6.0	3.6	3.0	2.8	2.0	2.0	2.8	6.1	4.9	6.0
1964	7.0	4.1	5.0	5.3	3.9	2.9	4.0	2.5	2.7	3.3	5.5	6.1
1965	4.7	6.2	4.2	3.8	3.2	3.2	2.1	2.2	2.6	5.1	4.7	5.7
1966	5.5	4.7	6.4	3.6	3.5	2.3	2.2	2.2	3.6	3.7	4.7	6.1
1967	5.8	6.0	4.1	3.4	3.0	2.4	1.9	1.7	3.8	5.5	5.3	6.3
1968	4.2	4.9	5.1	6.1	2.7	2.6	3.3	2.4	3.9	4.3	5.8	5.9
1969	4.9	6.4	6.0	6.1	3.0	2.9	2.5	1.8	2.4	4.9	5.9	6.8
1970	6.0	6.2	6.3	5.9	3.0	3.2	2.7	2.2	2.5	4.0	5.3	6.5
1971	6.0	4.6	5.7	5.5	3.0	2.8	2.1	2.7	3.2	3.9	5.9	6.0
1972	6.1	5.7	4.5	4.1	3.5	2.8	2.8	2.2	2.4	3.2	6.2	6.1
1973	6.4	6.1	6.2	5.1	3.1	4.3	3.0	2.7	3.2	3.8	5.5	6.2
1974	5.0	5.5	6.4	5.7	3.8	3.2	2.7	2.1	2.9	6.1	6.2	6.0
1975	4.1	5.9	5.3	3.1	4.6	2.8	2.4	2.3	1.5	4.3	4.0	5.2

20 YR. STATISTICS FOR PACIFIC STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	.	.	.	.	.	.	.	.	.	13
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.24 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 8

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	66	136	8	.	.	.	.	.	.	.	210
0.50 - 0.99	1048	3239	333	.	.	.	.	.	.	.	4620
1.00 - 1.49	1363	6192	905	.	.	.	.	.	.	.	8460
1.50 - 1.99	114	1401	299	.	.	.	.	.	.	.	1814
2.00 - 2.49	.	80	6	.	.	.	.	.	.	.	86
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2591	11048	1551	0	0	0	0	0	0	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.40 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 8882

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	25	112	8	10	6	6	1	.	.	168
0.50 - 0.99	.	629	3239	1411	751	231	37	13	1	.	6512
1.00 - 1.49	10	583	4977	6504	5249	2044	282	54	10	.	19713
1.50 - 1.99	27	388	1218	3124	7120	5523	1173	104	20	.	18697
2.00 - 2.49	8	426	489	556	3153	7440	2248	186	6	.	14512
2.50 - 2.99	.	66	179	143	867	4517	3191	325	18	.	9306
3.00 - 3.49	.	10	58	39	219	2036	3059	342	5	.	5768
3.50 - 3.99	.	.	11	6	51	643	2416	395	3	.	3525
4.00 - 4.49	.	.	.	.	3	159	1084	460	6	.	1712
4.50 - 4.99	.	.	.	.	.	17	325	379	1	.	722
5.00 +	.	.	.	.	.	.	150	458	.	.	608
TOTAL	45	2127	10283	11991	17423	22616	13971	2717	70	0	

MEAN HS(M) = 2.05 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47500

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	5	5	.	.	.	.	.	.	.	10
1.00 - 1.49	35	47	17	8	39	1	.	.	.	.	147
1.50 - 1.99	54	107	41	35	54	44	35	.	1	.	371
2.00 - 2.49	10	162	92	41	41	65	22	5	13	.	451
2.50 - 2.99	.	116	99	70	59	68	42	15	10	.	479
3.00 - 3.49	.	53	191	68	68	49	73	23	.	.	545
3.50 - 3.99	.	8	118	47	29	32	49	5	5	.	293
4.00 - 4.49	.	1	44	41	18	30	39	15	1	.	189
4.50 - 4.99	.	.	15	15	10	25	3	1	1	.	70
5.00 +	.	.	.	3	5	20	18	.	.	.	46
TOTAL	99	499	622	348	323	334	281	64	31	0	

MEAN HS(M) = 2.86 LARGEST HS(M) = 6.61 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 1539

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	.	.	.	.	.	.	.	.	4
0.50 - 0.99	6	3	.	.	.	.	.	.	.	.	9
1.00 - 1.49	22	11	.	.	.	.	.	.	.	.	33
1.50 - 1.99	29	80	44	.	.	.	.	.	.	.	153
2.00 - 2.49	.	133	61	3	.	.	.	.	.	.	197
2.50 - 2.99	.	41	92	32	.	.	.	.	.	.	165
3.00 - 3.49	.	1	92	53	11	.	.	.	.	.	157
3.50 - 3.99	.	.	29	54	11	1	.	.	.	.	95
4.00 - 4.49	.	.	.	18	11	3	.	.	.	.	32
4.50 - 4.99	.	.	.	.	3	.	.	.	.	.	3
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	58	272	318	160	36	4	0	0	0	0	

MEAN HS(M) = 2.64 LARGEST HS(M) = 4.86 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 504

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

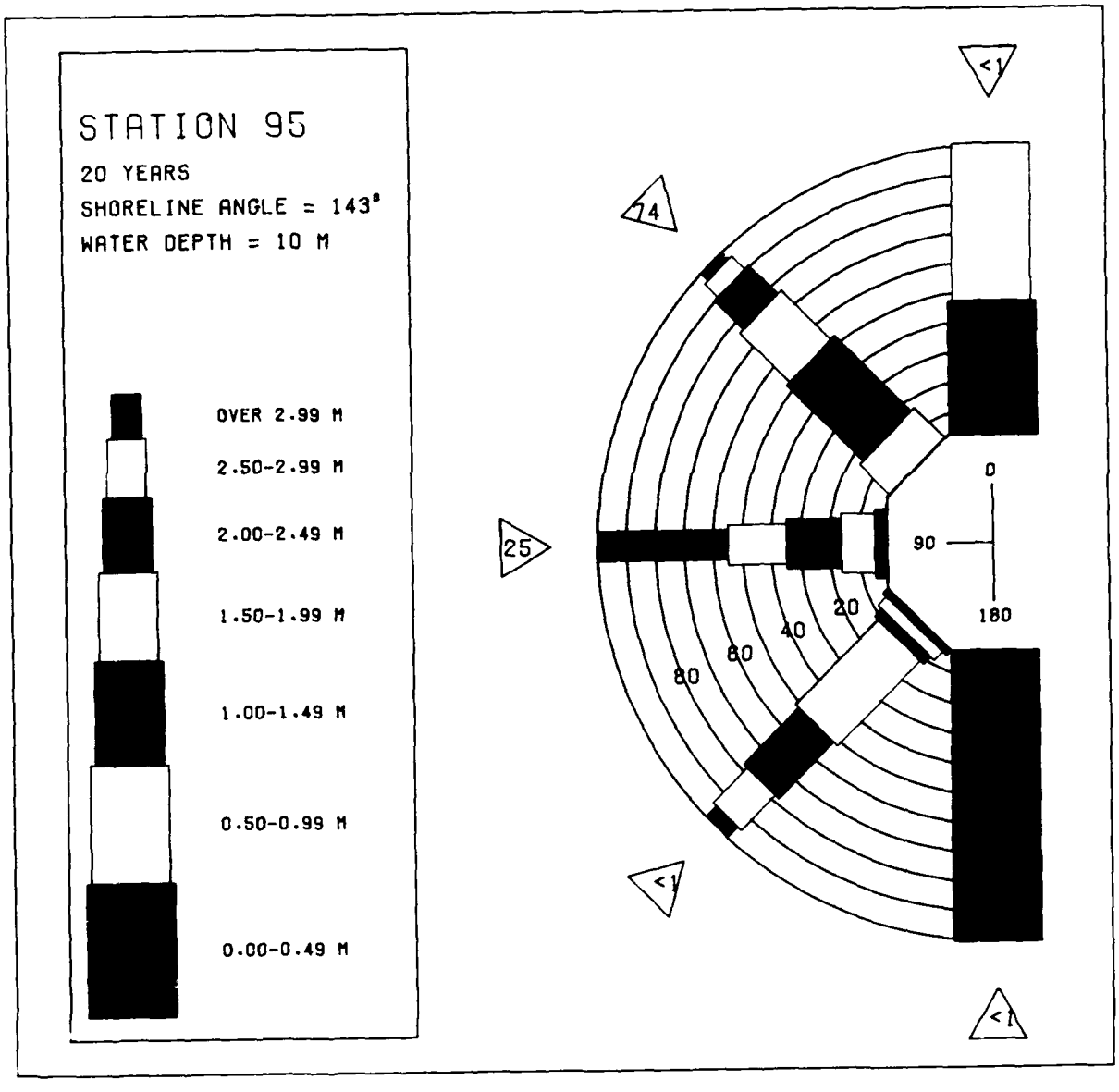
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 95 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	8	16	12	1							37
0.50 - 0.99	105	387	357	161	75	23	3	1			1112
1.00 - 1.49	143	683	590	651	528	204	28	5	1		2833
1.50 - 1.99	22	197	160	316	717	556	120	10	2		2100
2.00 - 2.49	1	80	65	60	319	750	227	19	2		1523
2.50 - 2.99		22	37	24	92	458	323	34	2		992
3.00 - 3.49		6	34	18	29	208	313	36			644
3.50 - 3.99			15	10	9	67	246	40			387
4.00 - 4.49			4	5	3	19	112	47			190
4.50 - 4.99			1	1	1	4	32	38			77
5.00 +						2	16	45			63
TOTAL	279	1391	1275	1246	1774	2291	1420	275	7	0	

MEAN HS(M) = 1.94 LARGEST HS(M) = 6.71 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.6	1.9	1.7	1.6	1.6	1.1	1.3	1.0	1.4	1.9	2.1	1.7
1957	2.3	2.5	2.2	2.0	1.6	1.4	1.0	1.0	1.5	1.8	2.2	2.6	1.9
1958	3.4	3.3	2.4	2.4	1.6	1.1	1.4	1.2	1.2	1.5	2.3	2.8	2.0
1959	2.7	3.1	2.2	2.0	1.6	1.4	1.1	1.1	1.5	1.9	2.2	2.7	2.0
1960	2.8	3.2	1.6	1.9	1.6	1.2	1.2	1.2	1.0	1.4	2.6	2.8	1.9
1961	3.3	2.8	2.4	1.7	1.4	1.5	1.0	0.8	1.1	1.6	2.0	2.4	1.8
1962	2.0	2.7	2.3	1.7	1.2	1.0	1.1	1.2	1.3	2.0	2.9	2.7	1.9
1963	2.6	3.0	2.4	1.7	1.4	1.5	1.1	0.9	1.4	2.2	2.4	2.7	1.9
1964	3.5	2.4	2.6	2.1	1.3	1.4	1.7	1.4	1.3	1.5	2.4	2.9	2.0
1965	2.6	2.4	2.2	1.9	1.7	1.6	1.1	1.1	1.1	1.7	2.3	3.1	1.9
1966	3.2	2.5	2.3	1.6	1.6	1.3	1.2	1.2	1.4	1.5	2.0	2.9	1.9
1967	2.8	2.8	2.0	1.6	1.2	1.1	1.1	0.9	1.7	2.2	2.4	2.7	1.9
1968	2.4	2.7	2.6	1.8	1.3	1.5	1.4	1.2	1.1	1.8	2.3	2.8	1.9
1969	2.2	3.3	2.6	2.5	1.5	1.5	1.2	1.0	1.2	2.1	2.3	4.1	2.1
1970	3.3	3.7	2.9	2.4	1.5	1.3	1.3	1.1	1.3	1.6	2.4	2.8	2.1
1971	2.6	2.3	2.4	2.3	1.5	1.5	1.1	1.3	1.4	1.6	2.3	2.6	1.9
1972	3.0	2.6	2.2	1.9	1.6	1.5	1.3	1.2	1.0	1.5	3.2	2.8	2.0
1973	3.4	3.3	2.9	2.2	1.7	1.7	1.4	1.4	1.5	1.6	2.6	3.2	2.2
1974	2.8	2.7	2.7	2.5	2.1	1.6	1.3	1.1	1.1	1.8	2.5	3.0	2.1
1975	2.1	2.6	2.4	1.6	1.5	1.2	1.2	1.0	0.6	1.8	2.0	2.3	1.7
MEAN	2.8	2.8	2.4	2.0	1.5	1.4	1.2	1.1	1.2	1.7	2.4	2.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	4.8	3.3	3.1	2.8	2.8	1.6	2.3	2.4	3.2	3.3	3.3
1957	3.8	6.4	4.0	3.7	2.9	2.0	1.8	1.6	2.8	3.3	4.8	5.4
1958	5.9	5.1	4.6	3.8	2.3	2.0	2.3	2.2	1.9	3.9	5.8	4.5
1959	5.2	4.9	3.7	3.9	2.3	2.2	1.9	2.0	3.1	3.7	4.8	4.7
1960	5.3	5.3	3.3	3.1	2.4	1.6	1.8	1.9	1.5	4.3	4.4	4.4
1961	5.6	4.5	4.7	3.0	2.0	2.3	1.6	1.3	1.7	3.0	3.7	3.9
1962	3.1	4.6	3.6	3.0	1.8	1.7	1.8	1.8	2.5	4.3	4.9	4.4
1963	6.6	5.9	4.9	3.0	2.7	2.1	1.6	1.5	2.2	5.4	3.6	6.0
1964	6.7	3.5	3.8	3.9	2.9	2.3	3.0	2.0	2.1	2.6	4.1	5.3
1965	4.1	4.7	3.3	3.1	2.4	2.5	1.7	1.7	1.8	3.9	4.7	4.8
1966	4.4	3.6	5.1	2.9	2.6	1.8	1.7	1.7	2.7	2.9	3.3	4.9
1967	4.8	5.3	4.0	2.6	2.3	1.8	1.5	1.3	2.8	4.2	3.9	5.1
1968	3.9	4.3	4.0	4.5	2.2	2.1	2.6	2.0	2.9	3.2	4.5	4.7
1969	3.8	5.1	4.5	5.4	2.4	2.2	1.9	1.3	1.9	3.7	4.1	6.5
1970	5.1	6.0	5.6	4.4	2.3	2.4	2.2	1.8	2.0	3.1	4.2	5.4
1971	5.2	3.7	4.6	4.1	2.4	2.2	1.6	2.0	2.4	2.8	4.5	5.5
1972	5.8	4.6	3.6	3.7	2.7	2.2	2.3	1.8	1.7	2.4	5.5	6.9
1973	5.5	4.9	4.6	3.9	2.5	3.4	2.3	2.1	2.6	3.3	4.1	6.2
1974	6.0	4.5	5.6	4.7	2.9	2.4	2.1	1.8	2.2	4.6	4.8	4.6
1975	3.4	4.4	4.0	2.3	3.4	1.8	1.6	1.7	1.3	3.2	3.0	4.1

20 YR. STATISTICS FOR PACIFIC STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.9
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012012

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	3	.	.	.	.	.	.	.	.	20
0.50 - 0.99	20	11	.	.	.	.	.	.	.	.	31
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	37	14	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.52 LARGEST HS(M) = 0.98 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 31

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	15	27	.	.	.	.	.	.	.	45
0.50 - 0.99	200	889	728	82	39	6	13	.	.	.	1957
1.00 - 1.49	1276	4009	3545	1131	347	27	3	.	.	.	10338
1.50 - 1.99	819	5561	3323	1326	431	47	39	.	.	.	11546
2.00 - 2.49	32	1841	1279	874	424	97	.	.	.	.	4548
2.50 - 2.99	.	328	568	388	436	119	3	.	.	.	1842
3.00 - 3.49	.	42	174	109	207	95	3	.	.	.	630
3.50 - 3.99	.	.	20	23	107	49	15	.	.	.	214
4.00 - 4.49	.	.	3	6	29	29	5	.	.	.	72
4.50 - 4.99	.	.	.	.	3	6	3	.	.	.	12
5.00 +	.	.	.	.	.	6	.	.	.	.	6
TOTAL	2330	12685	9667	3939	2023	481	85	0	0	0	

MEAN HS(M) = 1.70 LARGEST HS(M) = 5.05 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 18255

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	1	.	.	.	.	1
0.50 - 0.99	1	47	343	164	59	68	11	6	1	.	700
1.00 - 1.49	1	68	1105	1913	1579	444	29	11	.	.	5150
1.50 - 1.99	11	56	693	3745	4467	2222	374	78	8	.	11654
2.00 - 2.49	10	71	148	1904	5309	4313	1042	85	32	.	12914
2.50 - 2.99	.	6	88	381	3489	6137	1678	133	22	.	11993
3.00 - 3.49	.	2	54	90	1009	3118	2349	342	41	.	8928
3.50 - 3.99	.	1	37	44	246	3037	2683	304	15	.	6367
4.00 - 4.49	.	.	6	6	63	1257	2493	272	13	.	4110
4.50 - 4.99	.	.	.	1	17	405	2073	260	.	.	2756
5.00 +	.	.	.	.	.	65	1747	1456	11	.	3279
TOTAL	23	333	2474	8248	16236	23067	14479	2847	143	0	

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 12.3 NUMBER OF CASES = 39677

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	6	17	6	.	.	.	.	.	.	30
1.00 - 1.49	10	20	6	8	5	.	.	.	.	.	49
1.50 - 1.99	11	47	41	25	20	1	.	.	.	.	145
2.00 - 2.49	1	53	58	61	61	15	.	.	.	.	249
2.50 - 2.99	.	10	39	32	47	3	.	.	.	.	131
3.00 - 3.49	.	3	29	35	29	3	.	.	.	.	99
3.50 - 3.99	.	.	11	10	8	8	.	.	.	.	37
4.00 - 4.49	.	.	3	6	3	6	6	.	.	.	24
4.50 - 4.99	.	.	.	.	.	5	5	.	.	.	10
5.00 +	.	.	.	.	.	3	.	.	.	.	3
TOTAL	23	139	204	183	173	44	11	0	0	0	

MEAN HS(M) = 2.44 LARGEST HS(M) = 5.34 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 467

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	3	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.29 LARGEST HS(M) = 0.44 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 4

PHASE 3 ST. 96 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

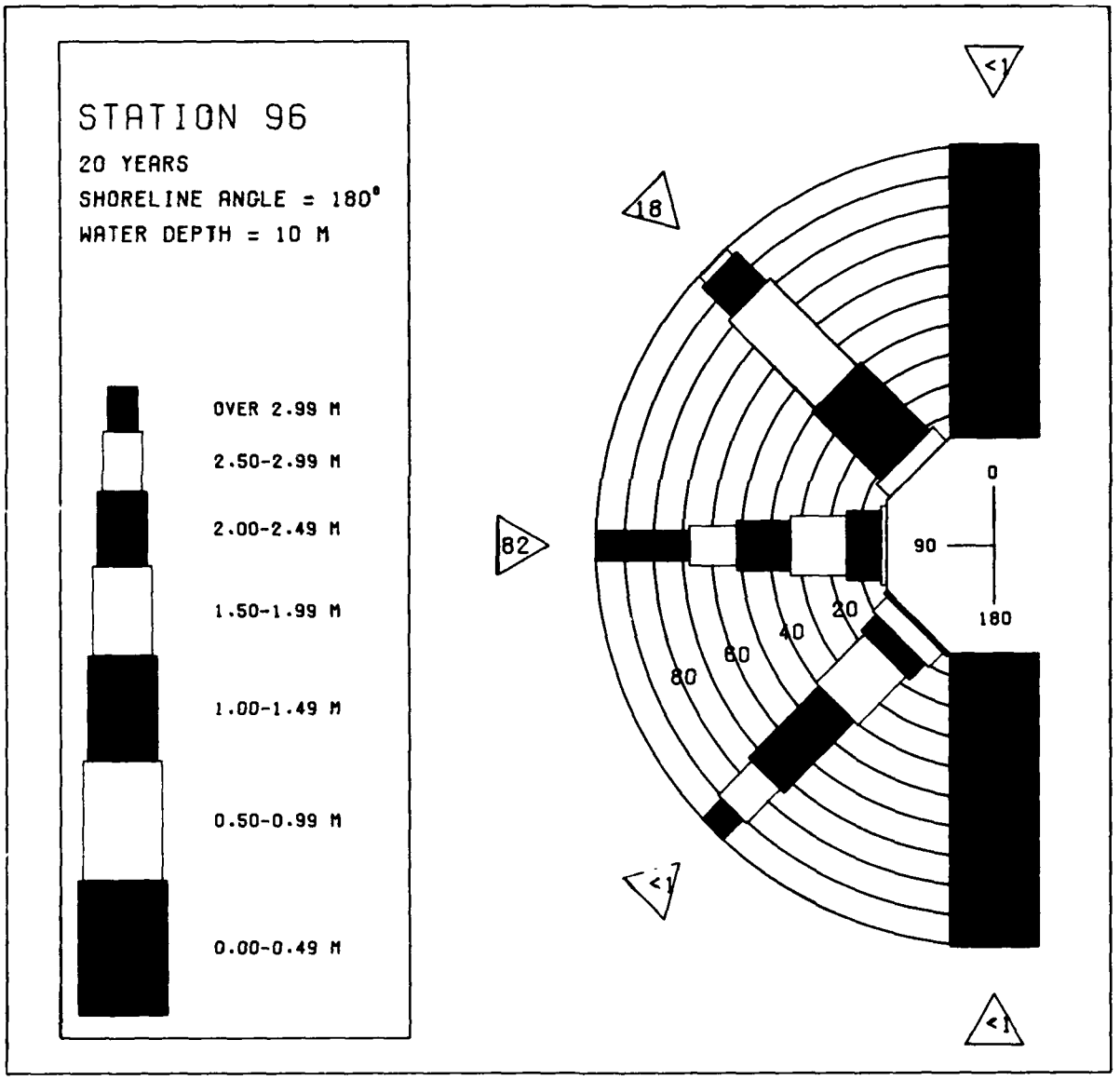
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 96 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.20N/122.96W LAT. LON. END= 38.08N/122.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2	2	2	.	.	.	.	.	.	.	6
0.50 - 0.99	22	95	109	25	9	7	2	.	.	.	269
1.00 - 1.49	128	409	465	305	193	47	3	1	.	.	1551
1.50 - 1.99	84	566	405	509	491	227	41	7	.	.	2330
2.00 - 2.49	4	196	148	284	579	442	104	8	3	.	1768
2.50 - 2.99	.	40	69	80	397	626	168	13	2	.	1395
3.00 - 3.49	.	7	25	23	124	521	235	24	4	.	963
3.50 - 3.99	.	.	7	7	36	309	269	30	1	.	659
4.00 - 4.49	.	.	1	2	9	129	250	27	1	.	419
4.50 - 4.99	.	.	.	.	2	41	208	26	.	.	277
5.00 +	.	.	.	.	.	7	174	145	1	.	327
TOTAL	240	1315	1231	1235	1840	2356	1454	281	12	0	

MEAN HS(M) = 2.47 LARGEST HS(M) = 7.01 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.2	2.5	2.2	2.2	2.2	1.5	1.7	1.4	1.8	2.4	2.6	2.2
1957	2.9	3.1	2.7	2.6	2.0	1.8	1.5	1.3	1.9	2.1	2.9	3.3	2.3
1958	4.0	3.6	2.9	3.1	2.1	1.5	1.8	1.6	1.5	2.0	3.0	3.4	2.5
1959	3.2	3.7	2.8	2.6	2.1	1.8	1.6	1.5	1.9	2.3	2.8	3.5	2.5
1960	3.4	3.9	2.0	2.3	2.0	1.6	1.6	1.6	1.3	1.9	3.3	3.4	2.4
1961	3.9	3.4	2.9	2.2	1.8	1.9	1.4	1.1	1.4	2.2	2.6	3.1	2.3
1962	3.5	3.1	2.9	2.5	1.6	1.4	1.6	1.6	1.7	2.5	3.8	3.2	2.5
1963	3.1	3.1	3.1	2.0	1.8	2.0	1.5	1.3	1.7	2.8	3.0	3.2	2.4
1964	4.3	3.5	3.3	2.9	1.8	1.7	2.2	1.8	1.7	2.0	3.0	3.4	2.6
1965	3.0	3.2	2.8	2.4	2.3	2.2	1.5	1.4	1.5	2.2	2.7	3.9	2.4
1966	3.8	3.2	3.0	2.2	2.1	1.7	1.7	1.7	1.8	2.1	2.5	3.5	2.4
1967	3.4	3.6	2.4	2.1	1.6	1.5	1.5	1.3	2.2	2.8	3.1	3.4	2.4
1968	2.8	3.2	3.2	2.5	1.7	1.7	1.9	1.5	1.5	2.3	3.4	3.3	2.4
1969	2.6	4.1	3.4	3.3	1.9	2.0	1.7	1.5	1.5	2.7	3.1	4.8	2.7
1970	3.7	4.5	3.7	3.2	2.0	1.8	1.8	1.5	1.7	2.1	3.0	3.6	2.7
1971	3.3	2.8	3.1	3.0	2.0	1.9	1.5	1.7	1.8	2.1	3.0	3.3	2.5
1972	3.8	3.2	2.7	2.5	2.1	2.1	1.7	1.6	1.5	1.9	4.1	3.1	2.5
1973	4.1	4.1	3.7	2.9	2.3	2.3	2.0	2.0	1.9	2.1	3.1	3.8	2.9
1974	3.1	3.5	3.3	3.2	2.8	2.2	1.8	1.6	1.5	2.4	3.3	3.7	2.7
1975	2.7	3.2	3.1	2.1	2.0	1.6	1.6	1.3	0.9	2.3	2.7	2.9	2.2
MEAN	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.2	4.6	3.9	3.8	3.7	2.1	3.0	3.1	3.1	4.1	4.1
1957	5.2	6.8	5.3	4.8	3.6	2.6	2.5	2.0	3.7	4.5	6.1	6.6
1958	6.3	6.0	6.1	6.6	3.0	2.6	3.0	3.0	2.5	5.1	6.1	5.8
1959	6.1	5.8	4.9	5.2	3.0	2.8	2.5	2.6	2.9	5.1	6.1	6.0
1960	6.1	6.1	3.8	4.0	3.0	2.4	2.4	2.3	1.9	5.7	5.6	5.5
1961	6.1	5.4	5.8	3.9	2.7	3.0	2.2	1.7	2.1	4.4	4.4	5.2
1962	4.2	4.8	4.6	4.0	2.4	2.2	2.4	2.4	3.3	4.4	6.1	5.1
1963	6.1	5.6	6.0	3.7	3.0	2.9	2.1	2.1	2.8	6.1	4.9	6.0
1964	7.0	4.1	5.0	5.3	4.0	3.0	4.0	2.6	2.8	3.4	5.5	6.1
1965	4.7	6.3	4.2	3.9	3.3	3.2	2.5	2.2	2.7	5.1	4.7	5.6
1966	5.5	4.8	6.4	3.6	3.6	2.4	2.5	2.3	3.6	4.7	4.7	6.2
1967	5.7	6.0	4.2	3.5	3.1	2.5	2.0	2.1	3.8	5.5	5.3	6.2
1968	4.0	4.9	5.1	6.1	2.8	2.7	3.4	2.4	3.9	4.3	5.8	5.9
1969	4.9	6.4	6.1	6.1	3.0	2.9	2.5	2.0	2.4	5.0	5.6	6.7
1970	6.0	6.2	6.3	6.0	3.1	3.2	2.8	2.3	2.6	4.0	5.3	6.5
1971	6.1	4.6	5.7	5.5	3.2	2.9	2.2	2.7	3.2	3.9	5.8	6.0
1972	6.1	5.7	4.5	4.1	3.6	2.9	2.9	2.2	2.4	3.2	6.2	6.1
1973	6.3	6.1	6.3	5.1	3.2	4.4	3.1	2.8	3.2	3.8	5.5	6.2
1974	5.0	5.4	6.4	5.7	3.9	3.3	2.2	2.2	2.9	6.1	6.2	6.0
1975	4.1	5.9	5.3	3.2	4.7	2.9	2.5	2.4	1.6	4.4	4.1	5.2

20 YR. STATISTICS FOR PACIFIC STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	15	.	.	.	.	.	.	.	.	16
0.50 - 0.99	111	212	30	.	.	.	.	.	.	.	353
1.00 - 1.49	1007	1981	196	6	.	.	.	.	.	.	3190
1.50 - 1.99	1475	5210	776	8	.	.	.	.	.	.	7469
2.00 - 2.49	54	2905	773	56	1	.	.	.	.	.	3789
2.50 - 2.99	.	484	477	73	.	.	.	.	.	.	1034
3.00 - 3.49	.	42	155	13	1	.	.	.	.	.	211
3.50 - 3.99	.	.	23	10	.	.	.	.	.	.	33
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2648	10849	2430	166	2	0	0	0	0	0	

MEAN HS(M) = 1.83 LARGEST HS(M) = 3.94 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 9415

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	20	.	1	.	.	.	.	.	21
0.50 - 0.99	13	337	751	171	66	46	27	3	1	.	1415
1.00 - 1.49	53	862	3369	2416	1519	337	15	8	.	.	8579
1.50 - 1.99	140	759	3020	4277	4269	2012	338	75	8	.	14898
2.00 - 2.49	61	860	978	3155	5388	3824	959	90	25	.	15340
2.50 - 2.99	.	439	410	912	4437	5843	1521	111	23	.	13696
3.00 - 3.49	.	102	287	285	1558	5545	2157	220	32	.	10186
3.50 - 3.99	.	.	90	68	424	3490	2677	285	32	.	7066
4.00 - 4.49	.	.	8	29	128	1601	2414	284	17	.	4481
4.50 - 4.99	.	.	5	5	37	537	2169	261	.	.	3014
5.00 +	.	.	.	.	1	140	2265	1526	11	.	3943
TOTAL	267	3359	8938	11318	17827	23376	14542	2863	149	0	

MEAN HS(M) = 2.73 LARGEST HS(M) = 6.98 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 48317

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	34	8	1	.	.	.	.	.	44
1.00 - 1.49	.	25	63	22	32	5	.	.	.	.	147
1.50 - 1.99	8	53	66	54	100	29	.	.	.	.	280
2.00 - 2.49	3	52	56	65	75	25	.	.	.	.	283
2.50 - 2.99	.	15	22	56	42	37	6	.	.	.	178
3.00 - 3.49	.	5	29	17	25	41	11	.	.	.	128
3.50 - 3.99	.	1	11	3	3	1	10	.	.	.	29
4.00 - 4.49	.	.	3	.	.	8	.	.	.	.	11
4.50 - 4.99	.	.	.	.	.	6	.	.	.	.	6
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	128	284	225	278	152	27	0	0	0	

MEAN HS(M) = 2.20 LARGEST HS(M) = 4.80 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 659

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	1	13	.	.	.	.	.	.	.	15
1.00 - 1.49	3	6	.	.	.	.	.	.	.	.	9
1.50 - 1.99	5	29	11	.	.	.	.	.	.	.	45
2.00 - 2.49	.	1	1	.	.	.	.	.	.	.	2
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	38	25	0	0	0	0	0	0	0	

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.10 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 46

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

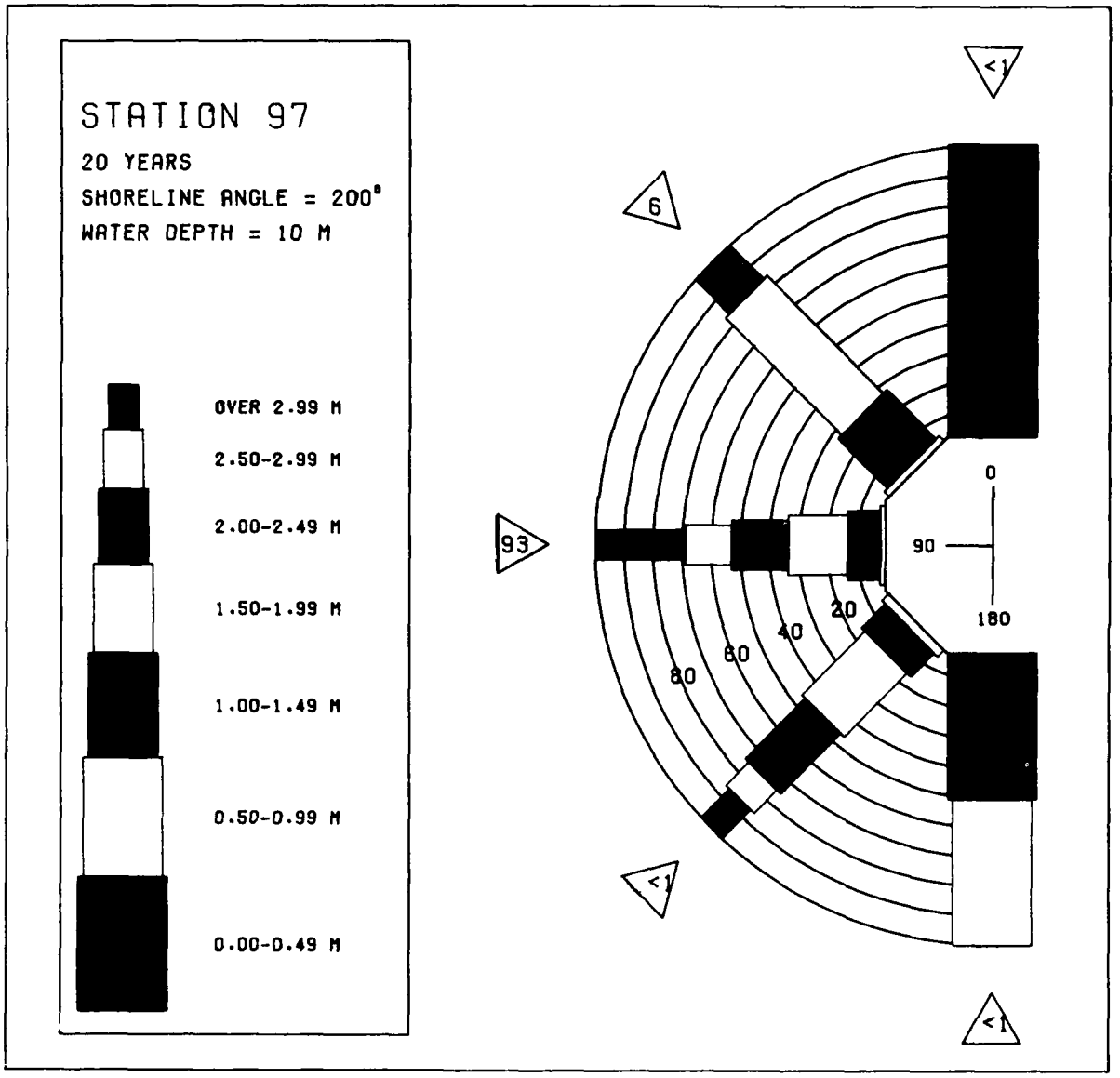
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49		1	2								3
0.50 - 0.99	12	55	82	17	6	4	2	.	.	.	178
1.00 - 1.49	106	287	362	244	155	34	1	.	.	.	1189
1.50 - 1.99	162	602	387	434	437	204	33	7	.	.	2266
2.00 - 2.49	11	382	181	327	546	385	95	9	2	.	1938
2.50 - 2.99	.	93	91	104	447	588	152	11	2	.	1488
3.00 - 3.49	.	15	47	31	158	558	216	22	3	.	1050
3.50 - 3.99	.	.	12	8	42	349	268	28	3	.	710
4.00 - 4.49	.	.	1	2	12	161	241	28	1	.	446
4.50 - 4.99	.	.	.	.	3	54	216	26	.	.	299
5.00 +	.	.	.	.	.	14	226	152	1	.	393
TOTAL	291	1435	1165	1167	1806	2351	1450	283	12	0	

MEAN HS(M) = 2.58 LARGEST HS(M) = 6.98 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.3	2.6	2.3	2.3	2.3	1.6	1.9	1.4	1.9	2.5	2.7	2.3
1957	3.0	3.2	2.8	2.7	2.1	2.0	1.7	1.5	1.9	2.2	3.0	3.4	2.5
1958	4.0	3.6	3.0	2.2	2.1	1.6	2.0	1.7	1.6	2.0	3.1	3.5	2.6
1959	3.2	3.8	2.9	2.6	2.1	1.9	1.7	1.6	2.0	2.4	2.9	3.6	2.6
1960	3.5	3.9	2.9	2.4	2.1	1.8	1.7	1.7	1.4	2.0	3.4	3.5	2.5
1961	4.0	3.4	2.9	2.4	1.8	2.1	1.6	1.2	1.6	2.3	2.7	3.2	2.4
1962	2.6	3.1	3.1	2.4	1.8	1.6	1.8	1.7	1.8	2.6	3.9	3.2	2.5
1963	3.2	3.0	3.2	2.1	1.9	2.2	1.7	1.4	1.8	2.9	3.1	3.3	2.5
1964	4.3	3.2	3.4	3.1	1.9	1.8	2.4	1.9	1.8	2.1	3.1	3.4	2.7
1965	3.1	3.5	2.9	2.5	2.5	2.4	1.7	1.5	1.6	2.3	2.8	4.0	2.6
1966	3.9	3.3	3.1	2.3	2.3	1.8	1.8	1.8	1.9	2.2	2.6	3.5	2.5
1967	3.5	3.7	2.4	2.2	1.7	1.7	1.7	1.4	2.2	2.7	3.2	3.6	2.5
1968	2.9	3.2	3.3	2.7	1.8	1.8	2.1	1.6	1.6	2.4	3.5	3.4	2.5
1969	2.6	4.2	3.5	3.4	2.0	2.1	1.9	1.7	1.6	2.8	3.2	4.9	2.8
1970	3.7	4.6	3.8	3.4	2.1	1.9	1.9	1.7	1.8	2.2	3.0	3.7	2.8
1971	3.3	2.9	3.2	3.2	2.2	2.0	1.7	1.8	1.9	2.2	3.1	3.4	2.6
1972	3.9	3.3	2.7	2.6	2.3	2.2	1.9	1.7	1.6	2.0	4.2	3.1	2.6
1973	4.1	4.2	3.9	3.1	2.4	2.5	2.2	2.2	2.0	2.2	3.2	3.9	3.0
1974	3.1	3.9	3.3	3.3	2.0	2.4	1.9	1.7	1.6	2.6	3.4	3.8	2.8
1975	2.8	3.3	3.2	2.2	2.1	1.8	1.7	1.4	1.0	2.4	2.8	3.0	2.3
MEAN	3.4	3.5	3.1	2.7	2.1	2.0	1.8	1.7	1.7	2.3	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.5	5.1	4.8	4.0	4.0	3.9	2.3	3.2	3.3	3.2	4.2	4.3
1957	5.4	6.6	5.5	5.1	3.7	2.7	2.7	2.1	3.9	4.7	6.1	6.5
1958	6.3	6.0	6.1	6.6	3.2	2.8	3.2	3.1	2.7	5.3	6.4	6.0
1959	6.1	6.0	5.1	5.5	3.2	3.0	2.7	2.8	3.1	5.3	6.1	6.2
1960	6.2	6.1	3.9	4.1	3.2	2.7	2.5	2.4	2.1	6.0	5.8	5.7
1961	6.1	5.4	5.9	4.0	2.8	3.1	2.4	1.8	2.3	4.7	4.5	5.4
1962	4.3	4.7	4.7	4.2	2.7	3.4	2.6	2.6	3.5	4.9	6.2	5.2
1963	6.0	5.1	6.0	3.9	3.0	3.2	2.4	2.3	2.9	6.1	5.1	6.0
1964	7.0	4.2	5.2	5.5	4.4	3.2	4.2	2.7	2.9	3.5	5.7	6.1
1965	4.7	6.4	4.4	4.0	3.6	3.4	2.6	2.4	3.0	5.2	4.9	5.9
1966	5.7	5.0	6.4	3.7	3.7	2.6	2.5	2.5	3.7	3.8	4.9	6.2
1967	5.8	6.0	4.3	3.7	3.2	2.7	2.2	2.4	3.9	5.7	5.5	6.2
1968	4.1	5.0	5.3	6.1	2.9	2.9	3.5	2.5	4.1	4.5	6.0	6.2
1969	5.1	6.5	6.4	6.1	3.3	3.1	2.7	2.2	2.5	5.3	5.9	6.6
1970	6.9	6.4	6.3	6.3	3.2	3.4	2.9	2.5	2.7	4.1	5.4	6.6
1971	6.2	4.7	5.8	5.8	3.7	3.0	2.5	2.8	3.4	4.1	6.1	6.0
1972	6.2	5.8	4.6	4.4	3.7	3.1	3.0	2.4	2.5	3.4	6.4	6.1
1973	6.3	6.1	6.5	5.4	3.3	4.6	3.5	2.9	3.4	3.9	5.7	6.1
1974	5.2	5.6	6.4	5.8	4.1	3.6	3.4	2.3	3.0	6.2	6.2	6.2
1975	4.3	6.1	5.5	3.4	4.9	3.3	2.8	2.6	1.6	4.6	4.3	5.4

20 YR. STATISTICS FOR PACIFIC STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10920	.	.	.	.	.	.	.	.	.	10920
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10920	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.34 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6382

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7635	13624	7421	186	.	.	.	.	.	.	28866
0.50 - 0.99	763	3685	1464	.	.	.	.	.	.	.	5912
1.00 - 1.49	177	479	95	.	.	.	.	.	.	.	751
1.50 - 1.99	3	59	8	.	.	.	.	.	.	.	70
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8578	17847	8988	186	0	0	0	0	0	0	

MEAN HS(M) = 0.37 LARGEST HS(M) = 1.88 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 20808

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	896	106	97	4450	3879	1947	275	95	27	.	11772
0.50 - 0.99	629	694	256	1042	2130	3985	2253	213	3	.	11205
1.00 - 1.49	468	1160	266	94	171	385	475	176	.	.	3195
1.50 - 1.99	138	896	388	85	35	83	73	41	.	.	1739
2.00 - 2.49	5	450	388	116	22	17	18	.	.	.	1016
2.50 - 2.99	.	59	284	100	13	5	3	.	.	.	464
3.00 - 3.49	.	3	66	37	11	3	3	.	.	.	123
3.50 - 3.99	.	.	11	15	22	5	.	.	.	.	53
4.00 - 4.49	.	.	3	5	3	6	.	.	.	.	17
4.50 - 4.99	.	.	.	.	11	1	.	.	.	.	12
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2136	3368	1759	5944	6297	6437	3100	525	30	0	

MEAN HS(M) = 0.79 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 17314

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	573	44	10	.	.	.	.	.	.	.	627
0.50 - 0.99	581	35	1	.	.	.	.	.	.	.	617
1.00 - 1.49	650	56	8	.	.	.	.	.	.	.	714
1.50 - 1.99	301	201	80	3	.	.	.	.	.	.	585
2.00 - 2.49	102	227	75	32	.	.	.	.	.	.	436
2.50 - 2.99	1	47	102	63	10	.	.	.	.	.	223
3.00 - 3.49	3	5	15	30	20	1	.	.	.	.	74
3.50 - 3.99	.	1	1	5	6	13	.	.	.	.	26
4.00 - 4.49	.	.	.	.	3	6	.	.	.	.	9
4.50 - 4.99	.	.	.	.	1	3	.	.	.	.	4
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	2211	616	292	133	41	23	0	0	0	0	

MEAN HS(M) = 1.36 LARGEST HS(M) = 5.11 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 1950

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8345	80	11	.	.	.	.	.	.	.	8436
0.50 - 0.99	1779	3	1	.	.	.	.	.	.	.	1783
1.00 - 1.49	292	.	.	.	.	.	.	.	.	.	292
1.50 - 1.99	65	1	.	.	.	.	.	.	.	.	66
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10481	87	12	0	0	0	0	0	0	0	

MEAN HS(M) = 0.30 LARGEST HS(M) = 2.08 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6186

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

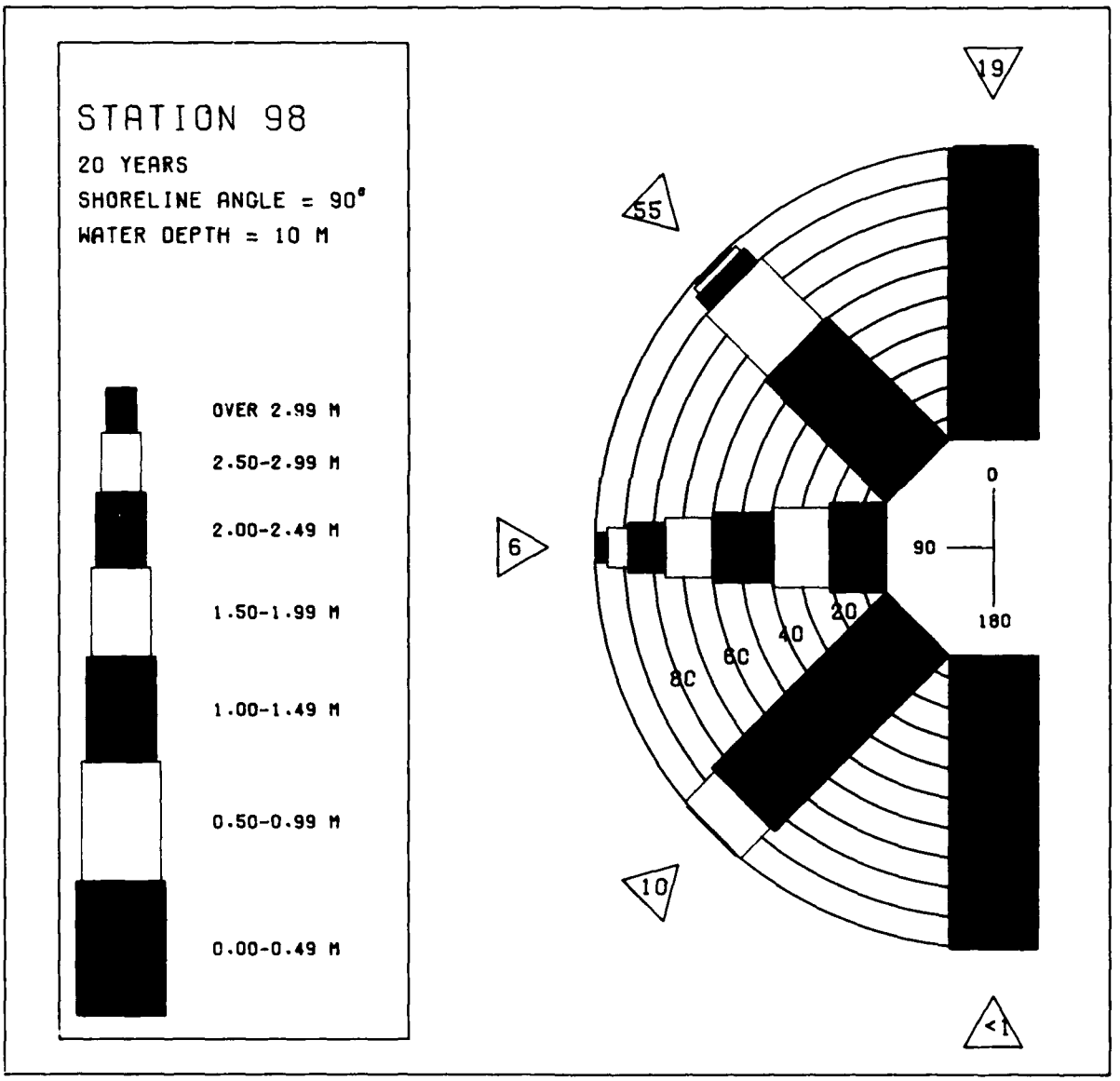
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 98 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2837	1385	754	463	387	194	27	9	2	.	6058
0.50 - 0.99	375	441	172	104	213	398	225	21	.	.	1949
1.00 - 1.49	158	169	37	9	17	38	47	17	.	.	492
1.50 - 1.99	50	116	47	2	3	8	7	4	.	.	243
2.00 - 2.49	10	68	46	14	2	1	1	.	.	.	142
2.50 - 2.99	.	10	38	16	2	.	.	.	.	.	66
3.00 - 3.49	.	.	8	6	3	.	.	.	.	.	17
3.50 - 3.99	.	.	1	2	2	1	.	.	.	.	6
4.00 - 4.49	.	.	.	.	.	1	.	.	.	.	1
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3430	2189	1103	622	630	641	307	51	2	0	

MEAN HS(M) = 0.45 LARGEST HS(M) = 5.11 MEAN TP(SEC)= 7.6 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.1	0.7	0.5	0.4	0.4	0.3	0.2	0.3	0.2	0.4	0.2	0.4	0.4
1957	0.7	0.8	0.6	0.5	0.5	0.3	0.2	0.2	0.4	0.5	0.4	0.8	0.5
1958	1.0	1.4	0.8	0.6	0.3	0.3	0.2	0.2	0.2	0.3	0.5	0.6	0.5
1959	1.1	1.2	0.4	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.5	0.5
1960	1.1	0.9	0.5	0.5	0.4	0.2	0.2	0.3	0.2	0.4	0.8	0.8	0.5
1961	0.9	0.7	0.7	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.8	0.5	0.5
1962	0.3	1.1	0.7	0.3	0.3	0.2	0.2	0.3	0.3	0.6	0.4	0.8	0.5
1963	0.6	1.3	0.7	0.7	0.4	0.3	0.2	0.2	0.3	0.5	0.7	0.6	0.5
1964	0.8	0.3	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.7	1.1	0.5
1965	1.0	0.4	0.5	0.7	0.5	0.5	0.3	0.2	0.2	0.3	0.9	1.0	0.5
1966	0.9	0.8	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.6	0.8	0.5
1967	1.0	0.3	0.7	0.5	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.7	0.5
1968	0.9	0.7	0.6	0.3	0.3	0.2	0.3	0.3	0.2	0.4	0.5	1.2	0.5
1969	1.0	1.1	0.4	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.4	1.1	0.5
1970	1.4	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.4	1.0	0.9	0.6
1971	0.6	0.4	0.6	0.5	0.4	0.4	0.2	0.3	0.3	0.3	0.6	0.9	0.5
1972	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.4	0.7	0.9	0.5
1973	1.2	1.0	0.7	0.4	0.5	0.4	0.4	0.4	0.4	0.4	1.0	1.1	0.6
1974	1.0	0.6	0.8	0.5	0.5	0.4	0.4	0.3	0.2	0.4	0.6	0.8	0.5
1975	0.4	0.8	0.7	0.4	0.4	0.3	0.4	0.3	0.1	0.4	0.4	0.4	0.4
MEAN	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.6	3.3	1.2	1.4	0.7	0.8	0.4	0.6	0.5	2.9	0.8	1.1
1957	2.7	3.9	2.1	2.0	1.7	0.6	0.4	0.5	2.2	2.5	1.1	2.7
1958	2.4	4.5	2.9	2.1	0.6	0.8	0.5	0.5	0.5	1.7	1.3	2.4
1959	3.2	5.1	0.9	0.8	0.7	0.6	0.6	0.7	2.8	0.8	0.9	2.4
1960	3.7	3.0	1.1	1.4	0.8	0.4	0.4	0.7	0.3	1.6	2.9	2.8
1961	3.7	2.2	2.4	1.2	0.9	0.6	0.3	0.3	0.5	1.1	2.7	1.8
1962	2.3	3.3	3.1	1.2	1.2	0.7	0.3	0.6	0.8	3.7	1.9	2.8
1963	4.8	5.0	2.0	2.3	1.3	0.9	0.6	0.6	0.5	2.3	2.4	2.1
1964	3.5	0.8	1.7	1.1	1.4	1.0	0.9	0.8	0.7	1.8	1.8	4.1
1965	4.1	1.9	1.8	2.4	0.9	1.3	0.6	0.4	0.7	0.9	3.9	4.9
1966	2.7	2.9	2.0	0.8	0.6	0.5	0.7	0.7	0.7	0.6	2.6	3.4
1967	3.3	1.3	3.6	1.1	0.9	0.8	0.4	0.5	0.6	1.7	1.3	2.4
1968	3.5	2.4	2.4	0.9	0.9	0.9	0.8	0.8	0.7	1.5	1.6	3.4
1969	2.8	2.9	1.2	1.8	0.7	0.8	0.4	0.4	0.6	1.3	1.8	3.0
1970	4.1	2.1	1.6	1.1	1.0	0.6	0.5	0.6	1.1	1.5	2.4	2.3
1971	3.5	1.0	1.9	1.3	1.1	0.9	0.4	0.6	0.8	1.4	2.4	2.9
1972	1.5	1.7	1.3	2.3	0.9	0.6	0.6	0.7	0.5	1.0	2.6	3.2
1973	3.2	3.0	1.2	1.1	1.2	1.0	0.8	0.8	0.7	2.9	3.1	2.9
1974	3.8	2.7	3.4	1.6	1.1	0.9	0.9	0.7	0.6	1.1	2.9	3.0
1975	2.3	2.9	2.6	0.8	1.0	0.9	0.7	0.8	0.4	1.9	1.2	1.7

20 YR. STATISTICS FOR PACIFIC STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	7.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021603

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5728	.	.	.	.	.	.	.	.	.	5728
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	5728	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.19 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 3348

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	12058	6627	1919	462	114	51	30	15	.	.	21276
0.50 - 0.99	2587	8418	6117	4467	4190	2104	227	44	.	.	28154
1.00 - 1.49	201	2000	1071	704	1543	3148	1303	42	.	.	10012
1.50 - 1.99	15	462	342	179	412	821	1059	104	.	.	3394
2.00 - 2.49	.	39	71	30	143	302	219	68	.	.	872
2.50 - 2.99	.	1	11	5	73	220	136	1	.	.	447
3.00 - 3.49	.	.	.	1	5	164	99	13	.	.	282
3.50 - 3.99	.	.	.	.	.	63	92	10	.	.	165
4.00 - 4.49	.	.	.	.	.	23	63	.	.	.	86
4.50 - 4.99	.	.	.	.	.	1	44	.	.	.	45
5.00 +											0
TOTAL	14861	17547	9531	5848	6480	6897	3272	297	0	0	

MEAN HS(M) = 0.77 LARGEST HS(M) = 4.93 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 37848

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	581	73	8	1	.	.	1	.	11	.	675
0.50 - 0.99	455	482	46	10	13	.	.	.	6	.	1012
1.00 - 1.49	371	852	111	39	54	22	25	15	.	.	1489
1.50 - 1.99	126	725	265	49	49	82	102	65	1	.	1464
2.00 - 2.49	3	520	333	121	47	56	75	75	1	.	1231
2.50 - 2.99	.	118	359	171	34	35	59	53	.	.	829
3.00 - 3.49	.	11	164	88	42	25	13	13	1	.	357
3.50 - 3.99	.	.	15	32	25	22	23	.	.	.	117
4.00 - 4.49	.	.	8	17	17	22	6	.	.	.	70
4.50 - 4.99	.	.	3	5	6	5	.	.	.	.	19
5.00 +					5	5	3				13
TOTAL	1536	2781	1312	533	292	274	307	221	20	0	

MEAN HS(M) = 1.71 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 4272

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	816	58	22	.	.	.	.	.	.	.	896
0.50 - 0.99	691	100	1	.	.	.	.	.	.	.	792
1.00 - 1.49	653	195	10	.	.	.	.	.	.	.	858
1.50 - 1.99	246	337	49	.	.	.	.	.	.	.	632
2.00 - 2.49	22	196	78	3	.	.	.	.	.	.	299
2.50 - 2.99	1	34	61	5	.	.	.	.	.	.	101
3.00 - 3.49	.	5	8	1	.	.	.	.	.	.	14
3.50 - 3.99	.	1	3	.	.	.	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2429	926	232	9	1	0	0	0	0	0	

MEAN HS(M) = 1.12 LARGEST HS(M) = 4.85 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 2109

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7132	78	3	.	.	.	.	.	.	.	7213
0.50 - 0.99	862	.	.	.	.	.	.	.	.	.	862
1.00 - 1.49	140	3	.	.	.	.	.	.	.	.	143
1.50 - 1.99	5	3	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8139	84	3	0	0	0	0	0	0	0	

MEAN HS(M) = 0.23 LARGEST HS(M) = 1.69 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 4809

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

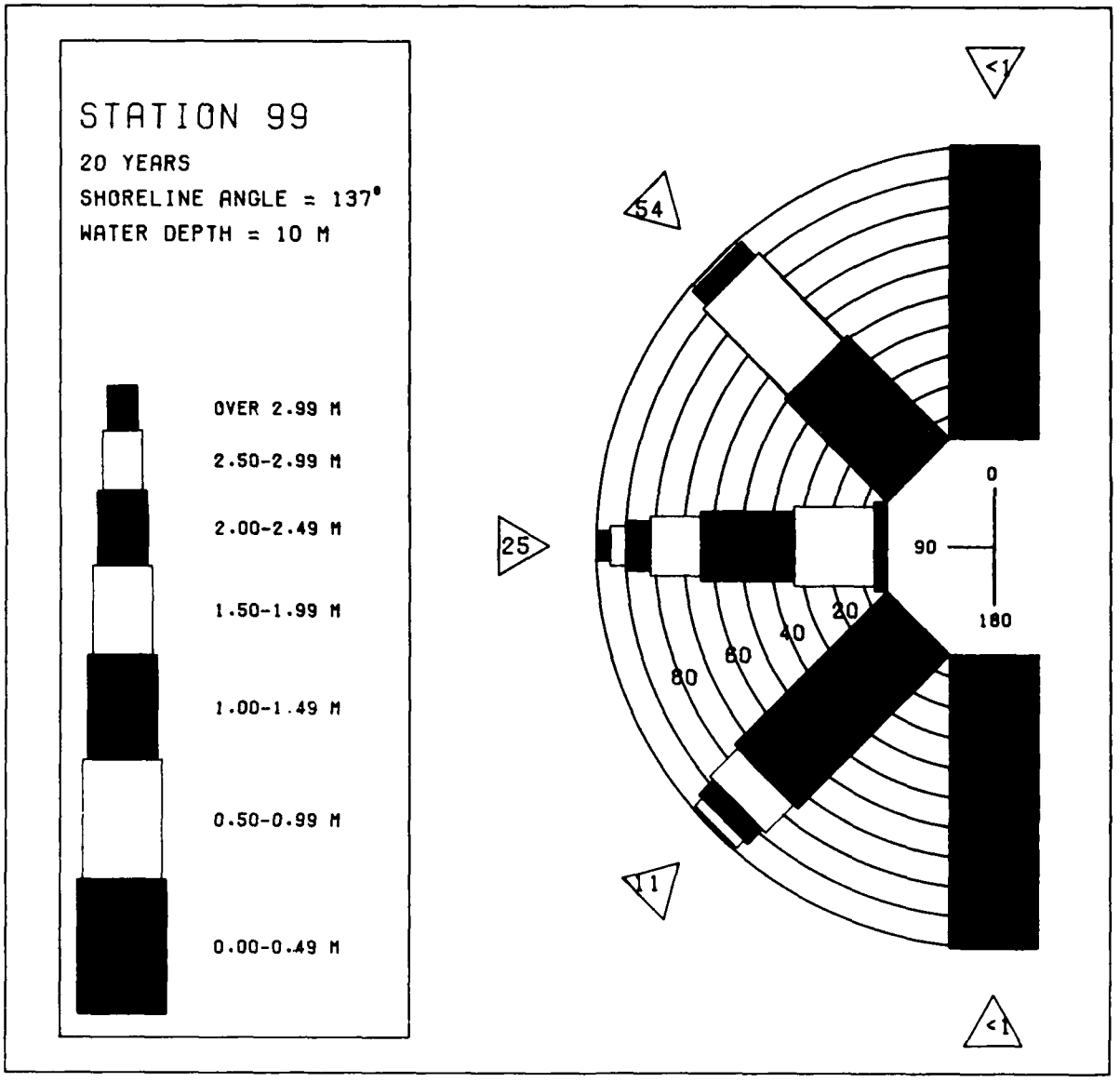
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 99 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2631	683	195	46	11	5	3	1	1	.	3576
0.50 - 0.99	459	900	616	447	420	210	22	4	.	.	3078
1.00 - 1.49	136	305	119	74	159	317	132	5	.	.	1247
1.50 - 1.99	39	152	65	22	46	90	116	16	.	.	546
2.00 - 2.49	2	75	48	15	19	35	29	14	.	.	237
2.50 - 2.99	.	15	43	18	10	25	19	5	.	.	135
3.00 - 3.49	.	1	17	9	4	18	11	2	.	.	62
3.50 - 3.99	.	.	1	3	2	8	11	1	.	.	26
4.00 - 4.49	.	.	.	1	1	4	7	.	.	.	13
4.50 - 4.99	.	.	.	.	.	.	4	.	.	.	4
5.00 +											0
TOTAL	3267	2131	1104	635	672	712	354	48	1	0	

MEAN HS(M) = 0.69 LARGEST HS(M) = 6.27 MEAN TP(SEC)= 7.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.6	1.0	0.9	0.7	0.7	0.6	0.4	0.5	0.4	0.7	0.3	0.6	0.7
1957	0.9	0.9	1.1	0.8	0.8	0.5	0.3	0.4	0.6	0.9	0.7	1.0	0.7
1958	1.4	1.8	1.0	0.9	0.5	0.5	0.4	0.4	0.3	0.4	0.7	0.9	0.8
1959	1.3	1.5	0.7	0.5	0.6	0.5	0.4	0.4	0.7	0.8	0.4	0.7	0.7
1960	1.3	1.3	0.8	0.8	0.6	0.4	0.4	0.5	0.3	0.6	1.1	1.3	0.8
1961	1.2	1.0	1.2	0.6	0.7	0.5	0.3	0.3	0.4	0.5	1.0	0.7	0.7
1962	0.7	1.3	1.0	0.5	0.5	0.3	0.4	0.4	0.5	0.9	0.7	1.2	0.7
1963	0.8	2.2	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.8	0.9	0.6	0.8
1964	1.4	0.4	1.0	0.9	0.8	0.8	0.7	0.5	0.5	0.5	0.9	1.8	0.8
1965	1.1	0.5	0.8	1.0	0.5	0.8	0.5	0.4	0.4	0.4	1.0	1.1	0.7
1966	1.3	1.1	0.9	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.8	1.1	0.7
1967	1.4	0.5	1.1	0.9	0.5	0.5	0.5	0.4	0.7	0.6	0.5	1.3	0.7
1968	1.0	1.4	1.1	0.5	0.6	0.5	0.6	0.5	0.4	0.6	0.7	1.4	0.8
1969	1.3	1.4	0.6	0.9	0.5	0.6	0.5	0.3	0.5	0.5	0.4	1.4	0.8
1970	1.9	0.8	0.9	0.8	0.6	0.5	0.5	0.5	0.3	0.7	1.1	1.2	0.8
1971	0.9	0.9	1.0	0.9	0.7	0.6	0.4	0.6	0.6	0.6	0.9	1.2	0.8
1972	0.9	0.8	1.9	0.8	0.7	0.7	0.6	0.6	0.4	0.5	1.0	1.3	0.8
1973	1.3	1.0	1.2	0.7	0.9	0.7	0.7	0.7	0.6	0.6	1.3	1.4	0.9
1974	1.8	0.9	1.3	0.9	0.9	0.7	0.7	0.6	0.4	0.6	0.8	1.1	0.9
1975	0.6	1.0	1.0	0.7	0.7	0.6	0.6	0.5	0.2	0.6	0.5	0.5	0.6
MEAN	1.2	1.1	1.0	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.8	3.5	1.8	1.8	1.2	1.4	0.7	1.1	1.1	3.3	1.3	2.2
1957	2.7	4.1	2.4	2.1	2.0	1.0	0.7	0.8	2.3	2.5	1.9	2.9
1958	4.7	5.0	2.9	2.9	2.0	1.3	1.0	1.0	0.8	1.6	1.7	3.9
1959	3.3	4.8	1.8	1.6	2.0	1.1	1.0	1.1	3.0	2.1	1.8	2.3
1960	3.6	4.9	1.6	1.6	1.4	0.7	0.8	1.2	0.6	1.8	2.9	3.8
1961	4.4	2.2	2.6	1.6	1.3	1.1	0.6	0.6	1.0	1.9	2.9	2.0
1962	2.7	3.3	3.1	1.8	1.4	1.2	0.7	1.0	1.1	4.4	2.2	4.5
1963	6.3	5.6	2.2	2.3	1.5	1.5	1.0	1.0	1.0	2.6	2.4	2.7
1964	3.9	1.4	2.1	2.0	2.0	1.7	1.5	1.3	1.2	1.7	2.5	4.8
1965	4.4	2.3	1.8	2.3	1.5	2.2	1.0	0.7	1.1	1.3	4.0	5.2
1966	3.2	2.8	2.1	1.4	1.0	0.9	1.2	1.1	1.1	1.4	2.7	3.5
1967	3.8	2.0	3.5	1.7	1.4	1.3	0.7	0.9	1.3	2.2	1.8	3.1
1968	3.4	4.1	2.7	1.8	1.5	1.6	1.3	1.1	1.2	1.8	2.1	3.6
1969	3.1	2.9	1.8	2.1	1.2	1.3	0.9	0.7	1.2	1.7	2.2	4.6
1970	4.6	2.3	2.3	2.1	1.7	0.9	0.9	1.0	1.1	1.6	2.6	3.0
1971	3.9	3.1	2.7	2.1	1.8	1.5	0.8	1.2	1.3	1.5	2.3	3.0
1972	4.1	1.9	3.2	2.3	1.6	1.1	1.0	1.1	0.8	1.0	2.5	3.5
1973	3.4	3.0	2.1	1.8	2.0	1.8	1.4	1.3	1.2	3.1	3.2	3.9
1974	4.4	2.8	4.8	2.5	1.8	1.4	1.5	1.2	0.9	2.1	3.0	3.0
1975	2.4	3.2	2.5	1.2	1.6	1.5	1.1	1.2	0.5	1.8	1.7	2.3

20 YR. STATISTICS FOR PACIFIC STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	7.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.9
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	76.5
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10920	.	.	.	.	.	.	.	.	.	10920
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10920	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.34 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6382

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7635	13624	7421	186	.	.	.	.	.	.	28866
0.50 - 0.99	763	3685	1464	.	.	.	.	.	.	.	5912
1.00 - 1.49	177	479	95	.	.	.	.	.	.	.	751
1.50 - 1.99	3	59	8	.	.	.	.	.	.	.	70
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8578	17847	8988	186	0	0	0	0	0	0	

MEAN HS(M) = 0.37 LARGEST HS(M) = 1.88 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 20808

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	966	112	99	4450	3879	1947	275	95	27	.	11850
0.50 - 0.99	674	711	256	1042	2130	3985	2253	213	3	.	11267
1.00 - 1.49	532	1165	270	94	171	385	475	176	.	.	3268
1.50 - 1.99	148	949	407	88	35	85	77	41	.	.	1830
2.00 - 2.49	5	480	408	118	22	18	18	.	.	.	1069
2.50 - 2.99	.	68	311	114	18	3	3	.	.	.	517
3.00 - 3.49	.	3	66	37	11	3	3	.	.	.	125
3.50 - 3.99	.	.	11	15	22	6	.	.	.	.	54
4.00 - 4.49	.	.	3	5	6	8	.	.	.	.	22
4.50 - 4.99	.	.	.	.	8	1	.	.	.	.	9
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2325	3488	1833	5963	6302	6441	3104	525	30	0	

MEAN HS(M) = 0.80 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 17557

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3139	119	22	.	.	.	.	.	.	.	3280
0.50 - 0.99	1266	25	1	.	.	.	.	.	.	.	1292
1.00 - 1.49	609	61	8	.	.	.	.	.	.	.	678
1.50 - 1.99	234	203	66	3	.	.	.	.	.	.	506
2.00 - 2.49	41	143	63	30	1	.	.	.	.	.	278
2.50 - 2.99	.	25	65	56	11	.	.	.	.	.	157
3.00 - 3.49	.	.	10	22	17	3	.	.	.	.	52
3.50 - 3.99	.	.	.	5	6	13	.	.	.	.	24
4.00 - 4.49	.	.	.	.	3	3	.	.	.	.	6
4.50 - 4.99	.	.	.	.	1	1	.	.	.	.	2
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	5289	576	235	116	40	20	0	0	0	0	

MEAN HS(M) = 0.78 LARGEST HS(M) = 5.01 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 3678

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	4469	5	.	.	.	.	.	.	.	.	4474
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4469	5	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.41 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 2615

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

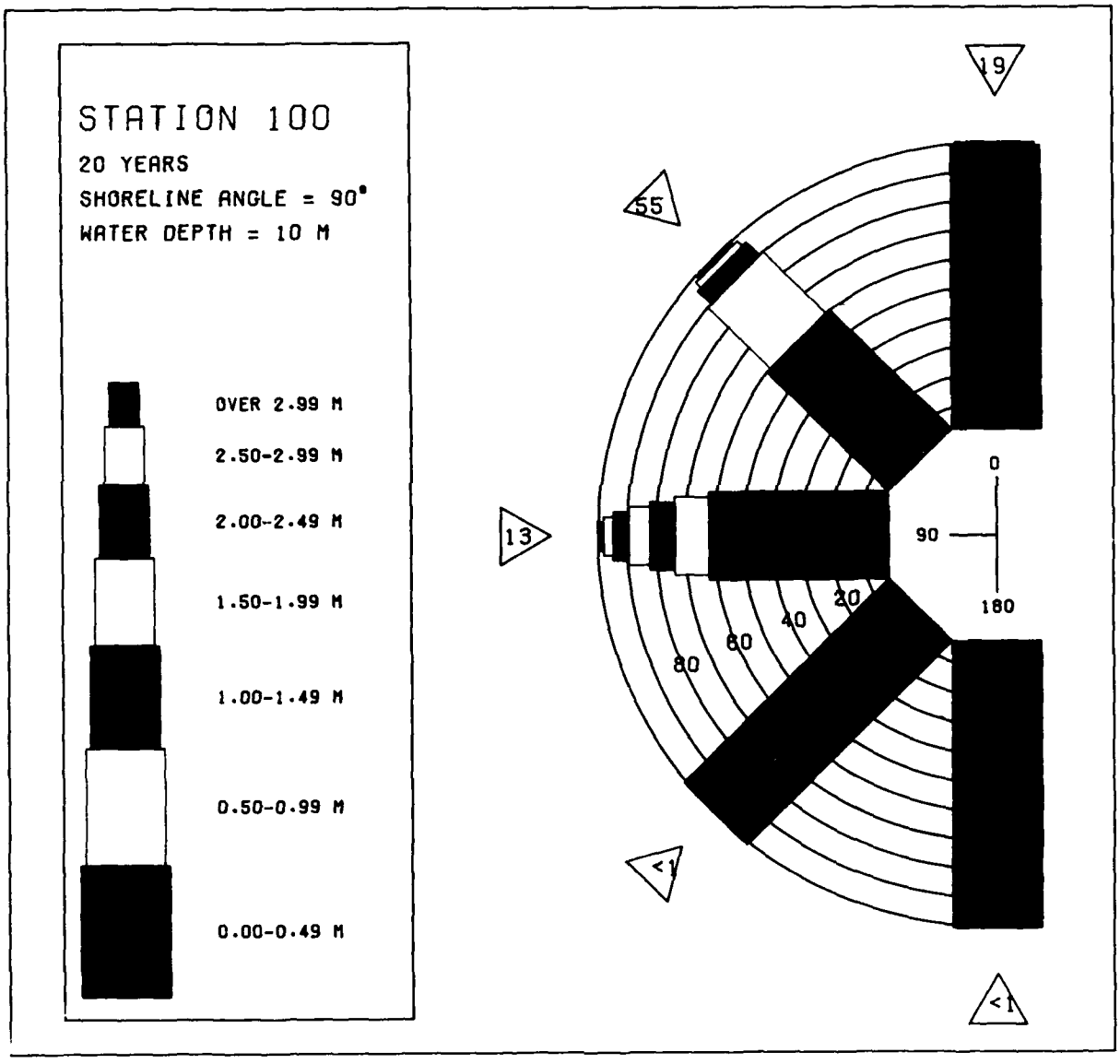
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 100 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2713	1386	754	463	387	194	27	9	2	.	5935
0.50 - 0.99	270	442	172	104	213	398	225	21	.	.	1845
1.00 - 1.49	131	170	37	9	17	38	47	17	.	.	466
1.50 - 1.99	38	121	48	9	3	8	7	4	.	.	238
2.00 - 2.49	4	62	47	14	2	1	1	.	.	.	131
2.50 - 2.99	.	9	37	17	3	.	.	.	.	.	66
3.00 - 3.49	.	.	7	5	2	.	.	.	.	.	14
3.50 - 3.99	.	.	1	2	2	2	.	.	.	.	7
4.00 - 4.49	.	.	.	.	1	1	.	.	.	.	2
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +											0
TOTAL	3156	2190	1103	623	631	642	307	51	2	0	

MEAN HS(M) = 0.43 LARGEST HS(M) = 5.01 MEAN TP(SEC)= 6.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 100 (37.88N/ 122.71W TO 37.88N/ 122.63W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.1	0.7	0.5	0.4	0.4	0.3	0.2	0.3	0.2	0.4	0.2	0.3	0.4
1957	0.7	0.8	0.6	0.5	0.5	0.3	0.2	0.2	0.4	0.5	0.5	0.7	0.5
1958	1.0	1.4	0.8	0.6	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5
1959	1.1	1.2	0.4	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.5	0.5
1960	1.1	0.9	0.5	0.5	0.4	0.2	0.2	0.3	0.2	0.4	0.8	0.8	0.5
1961	0.9	0.7	0.7	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.8	0.5	0.5
1962	0.3	1.1	0.7	0.3	0.3	0.2	0.2	0.3	0.3	0.6	0.5	0.8	0.5
1963	0.5	1.3	0.7	0.7	0.4	0.3	0.2	0.2	0.3	0.6	0.7	0.4	0.5
1964	0.8	0.3	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.6	1.1	0.5
1965	0.9	0.4	0.5	0.7	0.3	0.5	0.3	0.2	0.2	0.3	0.9	0.9	0.5
1966	1.0	0.8	0.7	0.3	0.3	0.3	0.3	0.3	0.5	0.2	0.6	0.7	0.5
1967	1.0	0.3	0.7	0.5	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.8	0.5
1968	0.9	0.7	0.6	0.3	0.3	0.2	0.3	0.3	0.2	0.4	0.5	1.2	0.5
1969	1.1	1.1	0.4	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.3	1.1	0.5
1970	1.4	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.4	0.9	0.8	0.6
1971	0.7	0.4	0.6	0.5	0.4	0.4	0.2	0.3	0.3	0.3	0.7	0.8	0.5
1972	0.5	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.7	0.8	0.5
1973	1.1	0.9	0.7	0.4	0.5	0.4	0.4	0.4	0.5	0.4	1.0	1.0	0.6
1974	1.1	0.6	0.8	0.5	0.5	0.4	0.4	0.3	0.2	0.3	0.6	0.8	0.5
1975	0.4	0.8	0.7	0.4	0.4	0.3	0.4	0.3	0.1	0.4	0.4	0.4	0.4
MEAN	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 100 (37.88N/ 122.71W TO 37.88N/ 122.63W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	2.5	3.3	1.2	1.4	0.7	0.8	0.4	0.6	0.5	2.9	0.7	1.1
1957	2.7	3.9	2.1	2.0	1.7	0.6	0.4	0.5	2.2	2.5	1.1	2.7
1958	2.3	4.4	2.9	2.1	0.6	0.8	0.5	0.5	0.5	1.7	1.2	2.4
1959	3.2	5.0	0.9	0.8	0.7	0.6	0.6	0.7	2.8	0.8	0.9	2.3
1960	3.7	3.0	1.1	1.4	0.8	0.4	0.4	0.7	0.3	1.6	2.9	2.8
1961	2.7	2.2	2.4	1.2	0.9	0.6	0.3	0.3	0.5	1.1	2.7	1.8
1962	5.3	3.3	3.1	1.5	1.2	0.7	0.3	0.6	0.8	2.7	1.8	2.7
1963	4.8	5.0	2.0	2.3	1.3	0.9	0.6	0.6	0.5	2.3	2.4	1.8
1964	3.5	0.8	1.7	1.1	1.4	1.0	0.9	0.8	0.7	1.7	1.8	4.1
1965	4.1	1.9	1.7	2.3	0.9	1.3	0.6	0.4	0.7	0.9	3.9	4.9
1966	2.7	2.8	1.9	0.8	0.6	0.5	0.7	0.7	0.7	0.6	2.6	3.4
1967	3.3	1.3	3.5	1.1	0.9	0.8	0.4	0.5	0.6	1.7	1.3	2.4
1968	3.4	2.4	2.4	0.9	0.9	0.9	0.8	0.8	0.7	1.5	1.5	3.4
1969	2.8	2.9	1.2	1.8	0.7	0.8	0.4	0.4	0.6	1.1	1.8	5.0
1970	4.1	2.1	1.6	1.1	1.0	0.6	0.5	0.6	0.7	1.1	2.4	2.3
1971	3.5	1.0	1.9	1.3	1.1	0.9	0.4	0.6	0.8	1.4	2.3	2.8
1972	1.5	1.2	1.3	2.3	0.9	0.6	0.6	0.7	0.5	0.9	2.5	3.0
1973	3.2	3.0	1.2	1.1	1.2	1.0	0.8	0.8	0.7	2.9	3.1	2.9
1974	3.8	2.7	3.4	1.6	1.1	0.9	0.9	0.7	0.6	1.1	2.9	3.0
1975	2.3	2.9	2.6	0.8	1.0	0.9	0.7	0.8	0.3	1.8	1.2	1.7

20 YR. STATISTICS FOR PACIFIC STATION100 (37.88N/ 122.71W TO 37.88N/ 122.63W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.4
MEAN PEAK WAVE PERIOD	(SECONDS)	7.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . .	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .	(DEGREES)	80.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021603

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13470	1632	41	.	.	.	.	.	.	.	15143
0.50 - 0.99	4211	6225	179	.	.	.	.	.	.	.	10615
1.00 - 1.49	646	1967	.	.	.	.	.	.	.	.	2613
1.50 - 1.99	17	196	.	.	.	.	.	.	.	.	213
2.00 - 2.49	.	15	.	.	.	.	.	.	.	.	15
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18344	10035	220	0	0	0	0	0	0	0	

MEAN HS(M) = 0.51 LARGEST HS(M) = 2.42 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 16716

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	191	607	699	126	54	37	20	11	6	.	1751
0.50 - 0.99	270	3299	6868	4603	3295	1112	109	34	13	.	19603
1.00 - 1.49	160	1247	2080	1817	3276	3933	1066	111	3	.	13693
1.50 - 1.99	73	995	679	542	1403	2857	1827	159	11	.	8546
2.00 - 2.49	1	172	188	152	574	1949	1356	280	17	.	4689
2.50 - 2.99	.	34	53	23	183	983	1214	160	.	.	2650
3.00 - 3.49	.	3	13	1	22	367	917	140	1	.	1464
3.50 - 3.99	.	.	3	1	.	92	400	99	10	.	605
4.00 - 4.49	.	.	.	.	.	23	154	77	1	.	255
4.50 - 4.99	.	.	.	1	.	.	39	70	.	.	110
5.00 +	.	.	.	.	.	.	15	25	.	.	40
TOTAL	695	6357	10583	7266	8807	11353	7117	1166	62	0	

MEAN HS(M) = 1.38 LARGEST HS(M) = 5.95 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 31233

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	497	47	6	1	.	.	.	.	.	.	551
0.50 - 0.99	347	237	25	5	6	.	.	.	.	.	620
1.00 - 1.49	253	574	59	11	10	1	.	.	.	.	908
1.50 - 1.99	135	497	162	34	8	20	.	.	.	.	856
2.00 - 2.49	3	383	285	95	20	15	.	.	.	.	801
2.50 - 2.99	.	154	319	157	37	20	11	.	.	.	698
3.00 - 3.49	.	73	135	95	34	18	8	.	1	.	364
3.50 - 3.99	.	8	94	32	29	15	6	.	.	.	184
4.00 - 4.49	.	1	39	17	15	20	6	.	.	.	98
4.50 - 4.99	.	.	3	5	8	8	.	.	.	.	24
5.00 +	.	.	.	.	6	5	.	.	.	.	11
TOTAL	1235	1974	1127	452	173	122	31	0	1	0	

MEAN HS(M) = 1.84 LARGEST HS(M) = 6.19 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 3008

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1921	106	13	.	.	.	.	.	.	.	2040
0.50 - 0.99	860	34	.	.	.	.	.	.	.	.	894
1.00 - 1.49	410	58	3	.	.	.	.	.	.	.	471
1.50 - 1.99	112	171	11	.	.	.	.	.	.	.	294
2.00 - 2.49	17	97	23	.	.	.	.	.	.	.	137
2.50 - 2.99	.	22	11	.	.	.	.	.	.	.	33
3.00 - 3.49	.	8	.	.	.	.	.	.	.	.	8
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3320	496	61	0	0	0	0	0	0	0	

MEAN HS(M) = 0.69 LARGEST HS(M) = 3.45 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 2271

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2140	.	.	.	.	.	.	.	.	.	2140
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2140	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.26 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1251

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

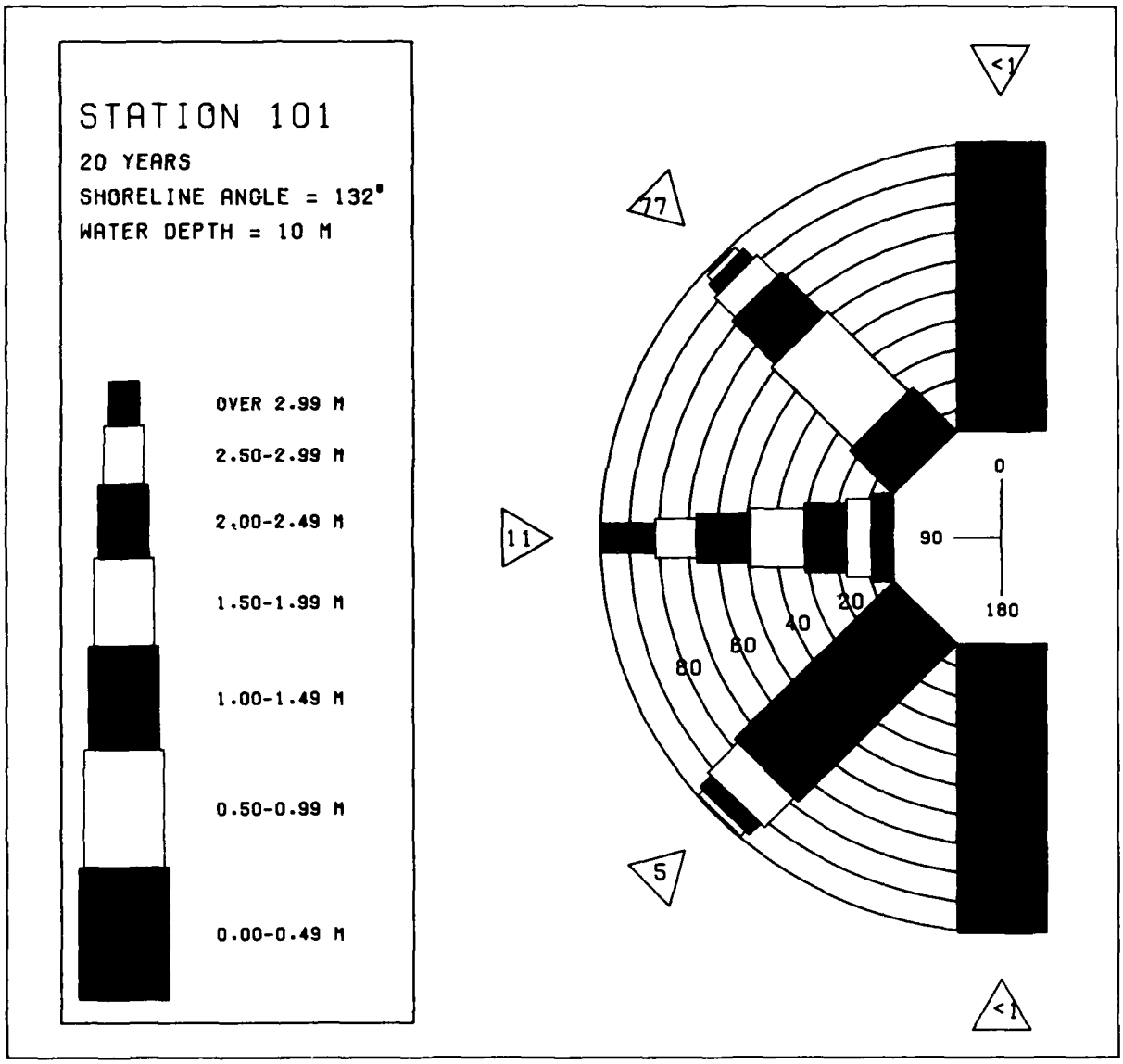
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 101 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1822	239	76	12	5	3	2	1	.	.	2160
0.50 - 0.99	568	979	707	460	330	111	10	3	1	.	3169
1.00 - 1.49	147	384	214	182	328	393	106	11	.	.	1765
1.50 - 1.99	33	186	85	57	141	287	182	15	1	.	987
2.00 - 2.49	2	66	49	24	59	196	135	28	1	.	560
2.50 - 2.99	.	21	38	18	22	100	122	16	.	.	337
3.00 - 3.49	.	8	14	9	5	38	92	14	.	.	180
3.50 - 3.99	.	.	9	3	2	10	40	9	1	.	74
4.00 - 4.49	.	.	3	1	1	4	16	7	.	.	32
4.50 - 4.99	.	.	.	.	.	.	3	7	.	.	10
5.00 +	.	.	.	.	.	.	1	2	.	.	3
TOTAL	2572	1883	1195	766	893	1142	709	113	4	0	

MEAN HS(M) = 1.01 LARGEST HS(M) = 6.19 MEAN TP(SEC)= 8.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 101 (37.88N/ 122.63W TO 37.81N/ 122.53W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.9	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	1.0
1957	1.2	1.4	1.4	1.1	1.1	0.7	0.4	0.6	0.8	1.2	0.9	1.3	1.0
1958	2.4	2.5	1.4	1.4	0.7	0.6	0.6	0.6	0.5	0.6	0.9	2.1	1.2
1959	1.8	1.6	1.2	0.8	0.9	0.7	0.5	0.5	1.0	1.2	0.7	1.2	1.0
1960	1.7	2.2	1.0	1.2	0.9	0.7	0.6	0.6	0.4	0.7	1.2	1.9	1.1
1961	2.2	1.9	1.6	0.9	0.9	0.6	0.5	0.4	0.6	0.8	1.2	1.4	1.1
1962	1.6	1.9	1.1	0.6	0.8	0.8	0.5	0.5	0.7	1.2	1.3	2.2	1.1
1963	1.8	2.5	1.1	1.2	0.8	0.7	0.6	0.5	0.7	1.3	1.4	1.6	1.2
1964	2.3	1.4	1.1	1.0	0.9	1.1	0.8	0.7	0.6	0.8	1.1	2.1	1.2
1965	2.0	0.7	1.5	1.1	0.7	1.0	0.7	0.5	0.6	0.7	1.2	1.1	1.0
1966	2.3	1.2	1.3	0.9	0.7	0.7	0.7	0.6	0.7	0.8	1.0	1.9	1.1
1967	1.8	1.1	1.3	1.1	0.7	0.7	0.6	0.5	0.9	0.9	0.6	1.6	1.0
1968	1.7	2.1	1.3	0.6	0.9	0.7	0.8	0.7	0.5	0.9	1.4	1.8	1.1
1969	1.7	1.6	0.7	1.1	0.7	0.8	0.6	0.5	0.6	0.9	0.6	2.5	1.0
1970	2.3	1.4	1.3	1.0	0.8	0.6	0.7	0.6	0.5	0.7	1.3	1.5	1.1
1971	1.3	1.8	1.3	1.1	0.9	0.9	0.6	0.7	0.7	0.9	1.1	1.2	1.1
1972	1.2	1.3	1.6	0.9	0.9	0.8	0.9	0.7	0.5	0.7	1.5	1.9	1.1
1973	2.2	1.8	1.4	0.9	1.1	0.9	1.0	0.9	1.0	0.9	1.5	2.1	1.3
1974	2.0	1.1	1.8	1.3	1.2	0.9	0.9	0.8	0.5	0.8	1.0	1.9	1.2
1975	1.2	1.5	1.3	0.8	0.9	0.7	0.8	0.6	0.4	0.8	0.8	1.2	0.9
MEAN	1.8	1.6	1.3	1.0	0.9	0.8	0.7	0.6	0.6	0.9	1.1	1.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 101 (37.88N/ 122.63W TO 37.81N/ 122.53W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	4.1	2.3	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	2.8
1957	2.7	4.6	2.5	2.9	2.6	1.7	0.9	1.1	2.3	2.5	2.3	3.4
1958	4.7	4.9	3.3	4.7	1.2	1.6	1.1	1.1	1.3	1.6	2.0	3.7
1959	4.5	4.8	2.5	3.2	2.2	1.4	1.4	1.4	3.0	3.0	2.9	2.6
1960	3.9	4.8	2.7	2.4	1.8	1.3	1.3	1.4	0.8	1.9	3.8	3.6
1961	4.6	3.8	3.3	2.2	1.6	1.3	0.9	0.7	1.1	2.3	2.9	3.1
1962	2.7	4.3	3.0	2.1	1.6	1.5	0.9	1.3	1.2	4.3	4.0	4.3
1963	6.2	5.6	2.2	2.7	1.7	1.8	1.2	1.3	1.8	4.3	2.5	3.5
1964	3.7	5.0	2.5	2.3	2.3	2.2	1.8	1.6	1.4	1.7	2.8	4.8
1965	4.4	2.4	2.8	2.3	1.9	2.6	1.3	0.9	1.6	3.2	3.9	5.2
1966	4.0	2.8	2.7	2.4	1.4	1.4	1.5	1.4	1.7	2.4	2.7	3.8
1967	4.4	2.5	3.5	2.0	1.8	1.7	1.0	1.2	1.5	2.7	2.6	3.1
1968	3.6	3.9	2.9	2.0	1.8	2.1	1.7	1.4	1.5	2.4	3.5	4.3
1969	3.4	3.6	1.9	2.4	2.0	1.6	1.2	0.9	1.4	2.2	2.4	6.0
1970	4.5	5.2	3.2	2.4	2.1	1.3	1.3	1.2	1.4	1.8	3.5	3.9
1971	3.9	3.1	4.0	2.4	2.2	1.9	1.1	1.4	1.6	1.9	3.5	3.0
1972	4.4	4.0	3.1	2.5	2.0	1.4	1.8	1.5	1.0	1.6	3.5	5.1
1973	4.4	3.3	2.3	2.2	2.4	2.6	1.7	1.6	2.1	3.2	3.2	4.3
1974	4.4	3.2	4.8	4.4	2.2	1.9	1.9	1.6	1.1	2.3	3.0	3.7
1975	3.3	3.2	2.7	1.8	2.0	1.8	1.4	1.5	0.9	1.9	2.0	3.4

20 YR. STATISTICS FOR PACIFIC STATION101 (37.88N/ 122.63W TO 37.81N/ 122.53W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	8.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.2
LARGEST WAVE HS	(METERS)	6.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	802	184	102	15	1	17	3	.	.	.	1124
0.50 - 0.99	771	2843	2970	458	104	51	.	.	.	.	7197
1.00 - 1.49	465	2604	5843	3076	845	136	.	.	.	.	13169
1.50 - 1.99	251	1134	2061	3740	3281	631	1	.	.	.	11099
2.00 - 2.49	5	393	621	1201	3723	2007	.	.	.	.	7950
2.50 - 2.99	.	126	124	328	1694	2766	5	.	.	.	5043
3.00 - 3.49	.	35	13	30	414	2157	1	.	.	.	2650
3.50 - 3.99	.	6	.	6	167	1088	.	.	.	.	1267
4.00 - 4.49	.	.	.	.	42	448	.	.	.	.	490
4.50 - 4.99	.	.	.	.	.	61	.	.	.	.	61
5.00 +	.	.	.	.	.	10	.	.	.	.	10
TOTAL	2294	7525	11734	8854	10271	9372	10	0	0	0	

MEAN HS(M) = 1.78 LARGEST HS(M) = 5.15 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 29272

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	10	34	22	13	1	8	1	.	.	90
0.50 - 0.99	.	162	1170	1178	496	140	37	23	18	.	3229
1.00 - 1.49	17	136	1014	2645	3122	1475	219	68	5	.	8700
1.50 - 1.99	22	54	374	793	2145	2910	906	107	27	.	7338
2.00 - 2.49	13	148	183	287	1165	3102	1497	140	23	.	6578
2.50 - 2.99	.	68	160	174	539	2481	1866	248	27	.	5563
3.00 - 3.49	.	17	92	66	219	2121	2392	414	44	.	5265
3.50 - 3.99	.	1	17	13	56	1213	2491	301	17	.	4109
4.00 - 4.49	.	.	10	5	10	448	2486	223	1	.	3182
4.50 - 4.99	.	.	.	1	1	100	1734	323	3	.	2159
5.00 +	.	.	.	1	.	13	1067	1262	17	.	2360
TOTAL	53	596	3054	5182	7786	14013	14700	3009	180	0	

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 12.5 NUMBER OF CASES = 28412

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	3	3	1	.	1	.	.	.	.	.	8
1.00 - 1.49	6	56	10	5	.	.	.	.	.	.	77
1.50 - 1.99	29	54	53	15	1	5	.	.	.	.	150
2.00 - 2.49	5	92	97	22	13	1	.	.	.	.	230
2.50 - 2.99	.	73	99	51	23	.	.	.	.	.	246
3.00 - 3.49	.	29	47	51	17	10	.	.	.	.	154
3.50 - 3.99	.	3	44	23	13	11	.	.	.	.	94
4.00 - 4.49	.	.	23	20	10	5	.	.	.	.	58
4.50 - 4.99	.	.	8	3	.	8	.	.	.	.	19
5.00 +						3					3
TOTAL	41	310	382	190	78	43	0	0	0	0	

MEAN HS(M) = 2.65 LARGEST HS(M) = 5.77 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 622

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	41	.	.	.	.	.	.	.	.	.	41
0.50 - 0.99	11	3	.	.	.	.	.	.	.	.	14
1.00 - 1.49	11	1	.	.	.	.	.	.	.	.	12
1.50 - 1.99	3	5	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	66	10	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.67 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 47

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

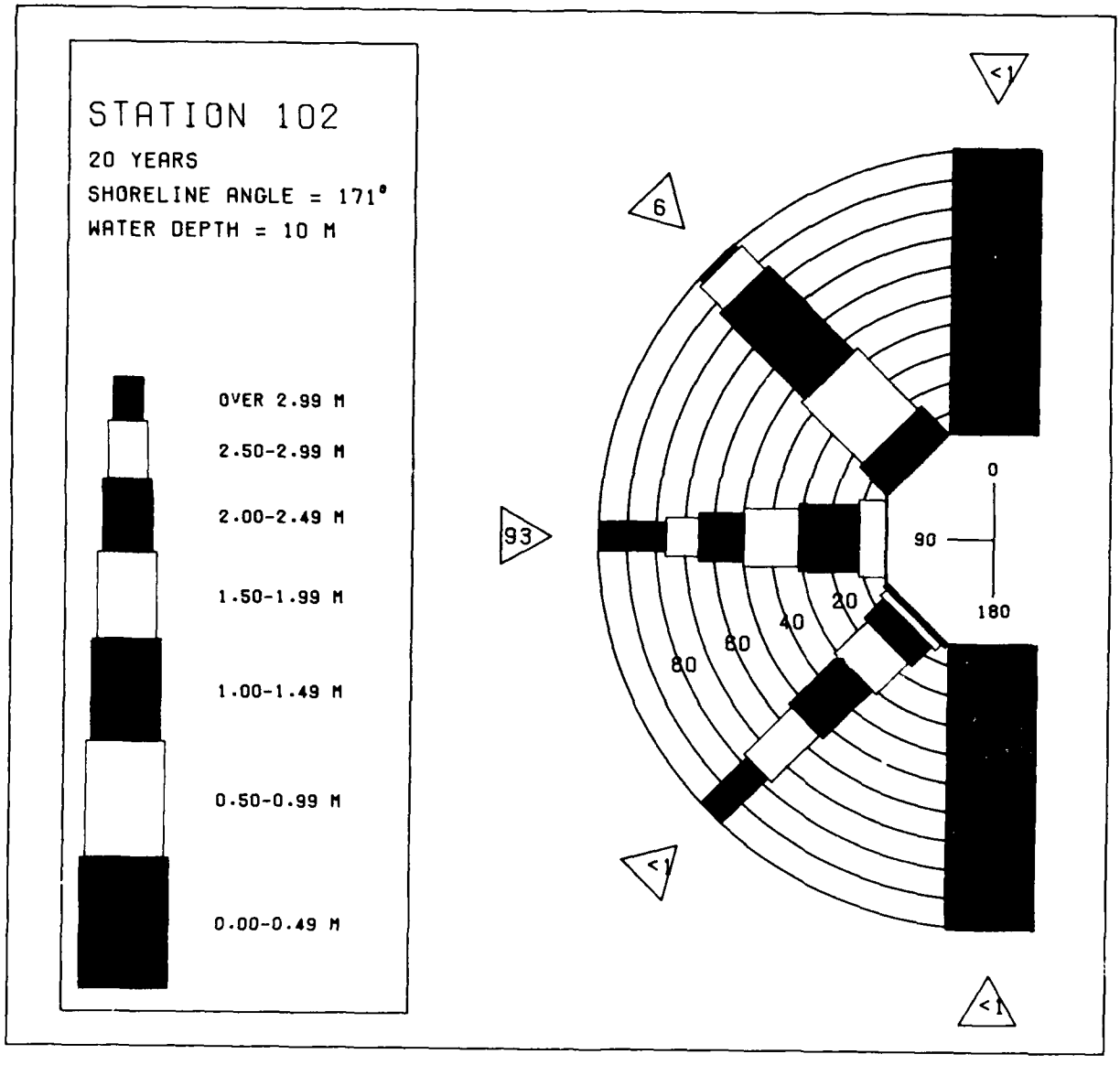
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 5

PHASE 3 ST. 102 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. ~ 0.49	85	19	13	3	1	1	1	.	.	.	123
0.50 ~ 0.99	78	301	414	163	60	20	3	2	1	.	1042
1.00 ~ 1.49	50	299	686	572	396	161	21	6	.	.	2191
1.50 ~ 1.99	29	124	248	454	542	354	90	10	2	.	1853
2.00 ~ 2.49	2	63	90	151	492	511	149	14	2	.	1474
2.50 ~ 2.99	.	27	38	55	225	524	187	24	2	.	1082
3.00 ~ 3.49	.	8	15	14	65	428	239	31	4	.	804
3.50 ~ 3.99	.	1	6	4	23	231	249	30	1	.	545
4.00 ~ 4.49	.	.	3	2	6	90	248	22	.	.	371
4.50 ~ 4.99	.	.	.	.	.	17	173	32	.	.	222
5.00 +	.	.	.	.	.	2	106	126	1	.	235
TOTAL	244	842	1513	1418	1810	2339	1466	297	13	0	

MEAN HS(M) = 2.18 LARGEST HS(M) = 7.01 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.0	2.2	1.9	1.7	1.9	1.1	1.3	1.2	1.6	2.2	2.5	1.9
1957	2.6	2.9	2.5	2.3	1.7	1.6	1.0	0.9	1.7	2.0	2.6	3.1	2.1
1958	3.8	3.5	2.6	2.9	1.6	1.2	1.4	1.3	1.3	1.7	2.8	3.3	2.3
1959	3.1	3.4	2.5	2.4	1.7	1.5	1.2	1.0	1.7	2.2	2.6	3.2	2.2
1960	3.2	3.6	1.8	2.1	1.7	1.3	1.2	1.2	1.1	1.6	2.9	3.1	2.1
1961	3.8	3.2	2.6	1.9	1.5	1.6	1.0	0.8	1.1	1.8	2.3	2.8	2.0
1962	2.3	2.9	2.8	2.1	1.3	1.0	1.0	1.4	1.4	2.4	3.5	3.1	2.1
1963	3.0	3.1	2.8	1.8	1.5	1.7	1.1	0.8	1.6	2.5	2.8	3.1	2.1
1964	3.9	2.8	3.0	2.4	1.4	1.5	1.9	1.5	1.4	1.9	2.8	3.1	2.3
1965	2.9	3.0	2.6	2.1	1.9	1.8	1.1	1.1	1.2	2.0	2.5	3.6	2.2
1966	3.6	2.9	2.7	1.9	1.7	1.4	1.3	1.2	1.5	1.9	2.6	3.3	2.1
1967	3.3	3.4	2.1	1.8	1.3	1.2	1.1	0.9	2.0	2.6	2.9	3.1	2.1
1968	2.6	3.0	3.0	2.1	1.4	1.4	1.5	1.3	1.3	2.1	3.2	3.2	2.2
1969	2.5	3.8	3.1	3.1	1.7	1.6	1.2	0.8	1.3	2.5	2.8	4.7	2.4
1970	3.6	4.3	3.3	2.7	1.8	1.4	1.3	1.0	1.4	1.8	2.7	3.3	2.4
1971	3.1	2.6	2.7	2.8	1.7	1.6	1.0	1.3	1.6	1.8	2.7	3.0	2.2
1972	3.5	3.0	2.4	2.1	1.8	1.6	1.5	1.3	1.0	1.7	3.7	2.9	2.2
1973	3.9	3.9	3.3	2.7	1.9	2.0	1.6	1.5	1.6	1.8	2.7	3.6	2.5
1974	2.9	3.1	2.9	2.8	2.5	1.8	1.5	1.2	1.3	2.1	3.0	3.5	2.4
1975	2.4	3.0	2.7	1.8	1.6	1.3	1.2	1.0	0.5	2.0	2.4	2.7	1.9
MEAN	3.1	3.2	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.0	4.8	4.4	4.0	3.1	3.6	1.8	2.8	2.8	3.4	3.8	3.8
1957	4.9	7.0	4.8	4.5	3.4	2.4	2.3	1.7	3.4	4.2	6.0	6.0
1958	6.1	6.1	5.9	6.4	2.7	2.3	2.8	2.8	2.3	4.3	6.0	5.6
1959	6.1	5.5	4.9	4.9	3.6	2.5	2.1	2.5	2.8	4.7	5.9	5.7
1960	6.2	5.8	3.6	3.7	2.6	2.0	1.9	2.0	1.7	5.2	5.1	5.3
1961	6.0	5.2	4.6	3.7	3.4	2.6	1.8	1.4	1.8	4.1	4.0	4.9
1962	3.9	5.0	4.4	3.7	3.2	2.3	2.4	2.1	3.1	4.3	5.9	5.3
1963	6.2	5.8	6.0	3.2	2.8	2.5	1.8	1.8	2.7	6.1	4.6	6.0
1964	6.9	3.9	4.7	5.0	3.3	2.8	3.8	2.4	2.5	4.6	5.2	5.8
1965	4.3	6.0	4.0	3.6	3.1	3.4	2.0	1.9	2.3	4.7	4.4	5.3
1966	4.9	4.6	6.3	3.6	3.3	2.2	2.1	2.0	3.4	3.4	4.2	6.0
1967	5.7	6.0	3.9	3.3	2.8	2.8	1.8	2.0	3.5	5.2	5.0	6.1
1968	4.1	4.7	4.9	5.8	5.6	2.7	3.2	2.3	3.7	4.1	5.6	5.6
1969	4.6	6.2	5.6	6.0	5.8	2.7	2.2	1.5	2.6	4.6	5.1	6.6
1970	5.7	6.2	6.0	5.6	3.0	3.0	2.4	2.0	2.4	3.9	4.9	6.3
1971	6.0	4.4	5.3	5.0	3.1	2.8	1.9	2.9	3.0	3.5	5.4	6.0
1972	6.0	5.8	4.2	3.5	3.3	2.5	2.8	2.1	1.9	2.9	6.2	6.0
1973	6.3	5.9	5.7	5.0	3.5	4.2	2.8	2.5	3.0	3.6	5.1	6.2
1974	4.7	5.3	6.4	5.5	3.6	2.9	3.0	2.1	2.8	5.3	6.0	5.8
1975	4.3	5.6	6.2	2.9	4.5	2.9	2.2	2.3	1.2	4.2	3.7	5.1

20 YR. STATISTICS FOR PACIFIC STATION102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	78.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022409

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	88	18	5	.	.	.	.	.	.	.	111
0.50 - 0.99	123	236	30	.	1	.	.	.	.	.	390
1.00 - 1.49	160	378	82	10	.	.	.	.	.	.	630
1.50 - 1.99	6	66	25	.	.	.	.	.	.	.	97
2.00 - 2.49	.	1	1	.	.	.	.	.	.	.	2
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	377	699	143	10	1	0	0	0	0	0	

MEAN HS(M) = 1.05 LARGEST HS(M) = 2.40 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 724

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11	77	77	17	10	10	1	.	.	.	203
0.50 - 0.99	165	2306	2874	845	273	121	35	17	18	.	6654
1.00 - 1.49	516	3223	7005	5260	2854	978	109	53	3	.	20001
1.50 - 1.99	456	1351	3266	5008	5480	3052	616	102	10	.	19341
2.00 - 2.49	42	781	1042	1995	5265	4729	1324	116	34	.	15328
2.50 - 2.99	.	254	424	691	2931	5509	1694	184	13	.	11700
3.00 - 3.49	.	97	147	174	958	4539	2169	260	35	.	8379
3.50 - 3.99	.	18	23	20	285	2975	2559	296	32	.	6208
4.00 - 4.49	.	.	8	6	85	1209	2327	272	5	.	3912
4.50 - 4.99	.	.	.	.	8	335	2113	236	.	.	2692
5.00 +	.	.	.	.	.	51	1757	1463	20	.	3291
TOTAL	1190	8107	14866	14016	18149	23508	14703	3000	170	0	

MEAN HS(M) = 2.34 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 57125

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	3	3	.	.	.	.	.	.	.	6
1.00 - 1.49	5	58	30	15	8	.	.	.	.	.	116
1.50 - 1.99	17	37	82	34	18	6	.	.	.	.	194
2.00 - 2.49	6	78	61	46	34	11	.	.	.	.	236
2.50 - 2.99	.	35	53	27	23	20	1	.	.	.	159
3.00 - 3.49	.	13	35	39	13	18	8	.	.	.	126
3.50 - 3.99	.	.	20	15	15	6	3	.	.	.	59
4.00 - 4.49	.	.	8	5	.	5	.	.	.	.	18
4.50 - 4.99	.	.	.	1	.	6	.	.	.	.	7
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	28	224	292	182	111	73	12	0	0	0	

MEAN HS(M) = 2.40 LARGEST HS(M) = 5.49 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 552

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	5	1	.	.	.	.	.	.	.	.	6
1.00 - 1.49	5	15	.	.	.	.	.	.	.	.	20
1.50 - 1.99	3	13	.	.	.	.	.	.	.	.	16
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	30	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.35 LARGEST HS(M) = 2.03 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 28

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

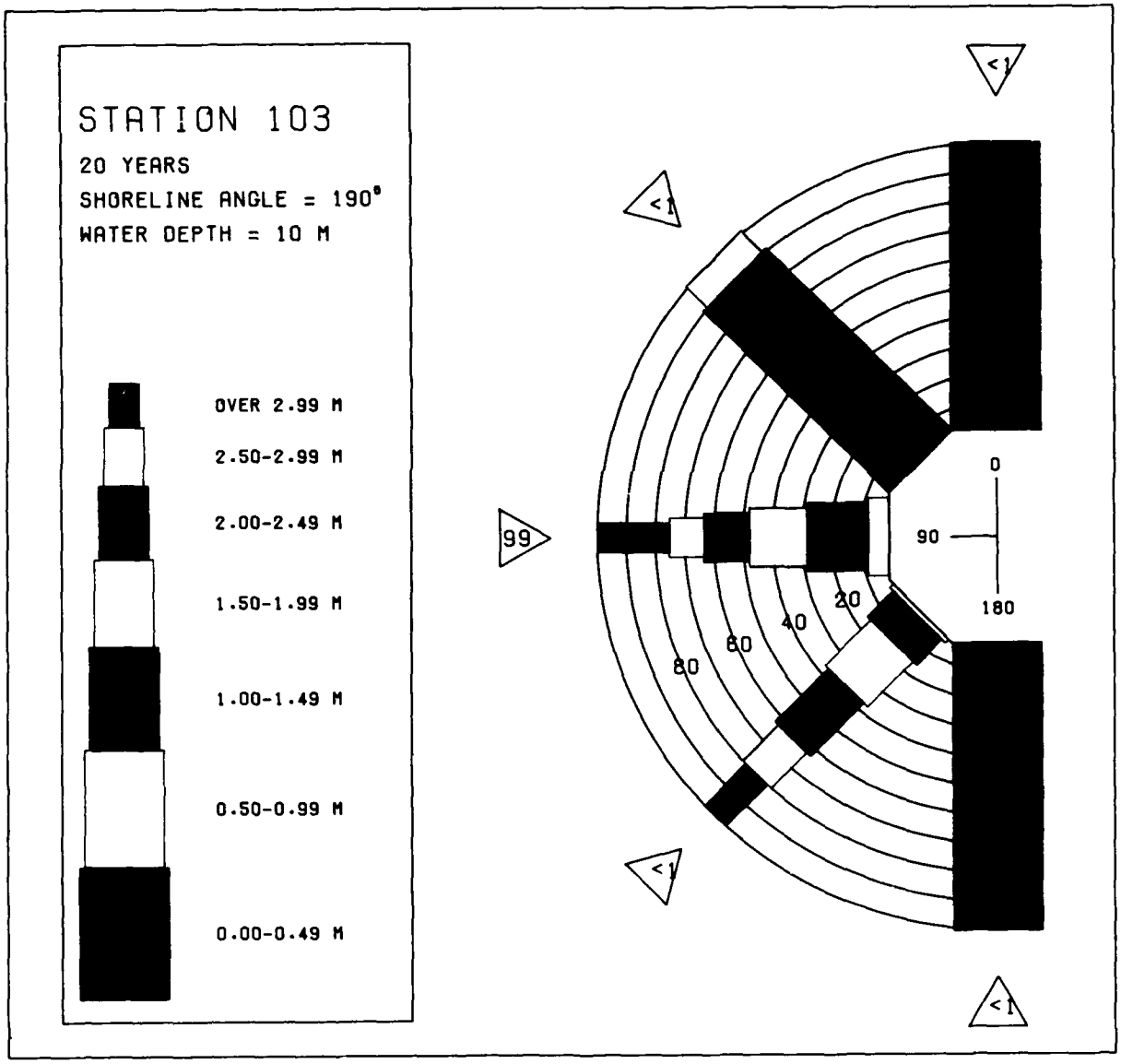
HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 103 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.66N/122.50W LAT. LON. END= 37.58N/122.51W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	9	8	1	1	.	.	.	.	.	30
0.50 - 0.99	28	254	290	84	27	12	3	1	1	.	701
1.00 - 1.49	68	367	711	528	286	97	10	5	.	.	2072
1.50 - 1.99	48	146	337	504	549	305	61	10	1	.	1961
2.00 - 2.49	4	86	110	204	529	474	132	11	3	.	1553
2.50 - 2.99	.	29	47	71	295	553	169	18	1	.	1183
3.00 - 3.49	.	11	18	21	97	455	217	26	3	.	848
3.50 - 3.99	.	1	4	3	30	298	256	29	3	.	624
4.00 - 4.49	.	.	1	1	8	121	232	27	.	.	390
4.50 - 4.99	.	.	.	.	.	34	211	23	.	.	268
5.00 +	.	.	.	.	.	5	175	146	2	.	328
TOTAL	159	903	1526	1417	1822	2355	1466	296	14	0	

MEAN HS(M) = 2.33 LARGEST HS(M) = 6.95 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.1	2.4	2.0	1.9	2.0	1.2	1.5	1.2	1.7	2.3	2.6	2.1
1957	2.8	3.1	2.6	2.5	1.8	1.7	1.2	1.2	1.7	2.0	2.8	3.3	2.2
1958	4.0	3.6	2.8	3.1	1.8	1.4	1.5	1.4	1.4	1.8	3.0	3.4	2.4
1959	3.2	3.6	2.7	2.6	1.9	1.6	1.3	1.2	1.7	2.3	2.8	3.4	2.4
1960	3.3	3.8	1.9	2.3	1.9	1.4	1.3	1.3	1.2	1.8	3.1	3.3	2.2
1961	3.9	3.3	2.7	2.0	1.6	1.7	1.1	0.8	1.2	2.0	2.4	3.0	2.2
1962	2.5	3.0	2.9	2.2	1.4	1.1	1.3	1.5	1.5	2.5	3.8	3.1	2.2
1963	3.1	3.1	3.0	1.9	1.6	1.8	1.3	1.0	1.7	2.7	2.9	3.2	2.3
1964	4.1	3.9	2.2	2.7	1.6	1.6	1.1	1.6	1.6	1.9	2.9	3.3	2.5
1965	3.0	3.2	2.7	2.3	2.1	2.0	1.3	1.2	1.3	2.1	2.7	3.8	2.3
1966	3.8	3.1	2.9	2.1	1.9	1.5	1.4	1.4	1.7	2.0	2.3	3.4	2.3
1967	3.4	3.6	2.2	2.0	1.4	1.3	1.2	1.0	2.1	2.8	3.0	3.3	2.3
1968	2.7	3.1	3.1	2.4	1.5	1.5	1.6	1.4	1.4	2.3	3.4	3.3	2.3
1969	2.5	4.0	3.3	3.3	1.9	1.8	1.4	1.1	1.4	2.7	3.0	4.8	2.6
1970	3.7	4.5	3.5	3.0	1.9	1.6	1.5	1.2	1.5	2.0	2.8	3.5	2.6
1971	3.3	2.7	2.9	3.0	1.9	1.8	1.3	1.5	1.7	1.9	2.9	3.2	2.3
1972	3.8	3.2	2.6	2.3	2.0	1.8	1.6	1.4	1.2	1.7	2.9	3.0	2.4
1973	4.0	4.1	3.6	2.9	2.1	2.1	1.7	1.7	1.8	1.9	2.8	3.8	2.7
1974	2.9	3.3	3.0	3.0	2.7	2.0	1.6	1.3	1.4	2.2	3.2	3.7	2.5
1975	2.6	3.1	2.9	1.9	1.8	1.4	1.3	1.0	0.7	2.2	2.5	2.8	2.0
MEAN	3.3	3.4	2.8	2.5	1.8	1.7	1.4	1.3	1.5	2.1	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.4	4.9	4.7	4.2	3.2	3.8	2.0	3.0	3.0	3.3	4.0	4.0
1957	5.2	6.8	5.1	4.8	3.5	2.6	2.4	1.8	3.6	4.5	6.1	6.3
1958	6.1	6.1	6.1	6.6	2.9	2.5	3.0	3.0	2.4	4.6	6.0	5.9
1959	6.1	5.9	5.5	5.3	5.8	2.7	2.3	2.7	2.9	5.1	6.0	6.0
1960	6.1	6.1	3.7	3.9	2.8	2.1	2.0	2.1	1.8	5.5	5.5	5.6
1961	6.0	5.4	4.8	3.9	2.5	2.8	1.9	1.5	2.0	4.4	4.2	5.2
1962	4.1	4.9	4.7	4.0	2.4	2.4	2.3	2.2	3.2	4.4	6.2	5.4
1963	6.0	5.5	6.1	3.5	2.9	2.7	2.0	1.9	2.8	6.1	4.9	6.0
1964	6.9	4.1	5.1	5.3	3.7	3.0	4.0	2.5	2.6	4.9	5.6	6.0
1965	4.4	6.2	4.2	3.9	3.3	3.5	2.2	2.0	2.5	5.0	4.6	5.6
1966	5.2	5.0	6.4	3.8	3.5	2.4	2.3	2.2	2.5	3.6	4.5	6.0
1967	5.9	6.0	4.2	3.5	3.0	3.0	1.9	2.1	3.7	5.5	5.4	6.2
1968	4.0	4.9	5.2	6.2	2.8	2.8	3.5	2.4	3.9	4.3	5.9	5.9
1969	4.8	6.2	6.0	6.0	3.1	2.9	2.4	1.7	2.7	4.9	5.4	6.6
1970	6.0	6.4	6.0	6.0	3.2	3.3	2.6	2.2	2.5	4.1	5.1	6.5
1971	6.0	4.6	5.6	5.4	3.3	3.1	2.1	3.1	3.2	3.7	5.7	6.0
1972	6.2	6.0	4.5	3.8	3.5	2.7	3.0	2.2	2.0	3.1	6.3	6.0
1973	6.4	6.1	6.2	5.4	3.6	4.4	3.0	2.7	3.2	3.8	5.3	6.6
1974	2.0	5.5	6.5	5.7	3.9	3.1	3.3	2.4	2.9	5.6	6.1	6.1
1975	4.5	6.0	6.2	3.1	4.8	3.1	2.3	2.5	1.2	4.5	4.0	5.3

20 YR. STATISTICS FOR PACIFIC STATION103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012100

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	37	.	.	.	.	.	.	.	.	.	37
1.00 - 1.49	15	.	.	.	.	.	.	.	.	.	15
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	53	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 1.37 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 32

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	61	35	3	.	.	.	.	.	.	105
0.50 - 0.99	193	1974	1873	212	41	27	5	1	.	.	4326
1.00 - 1.49	1016	3533	5485	2313	212	22	.	.	.	.	12581
1.50 - 1.99	1261	1786	2996	3258	607	46	.	.	.	.	9954
2.00 - 2.49	172	1103	868	1273	602	30	.	.	.	.	4068
2.50 - 2.99	6	352	431	431	391	51	.	.	.	.	1662
3.00 - 3.49	.	159	80	63	260	1	.	.	.	.	563
3.50 - 3.99	.	18	15	8	97	8	.	.	.	.	146
4.00 - 4.49	.	.	.	.	25	.	.	.	.	.	25
4.50 - 4.99	.	.	.	.	3	.	.	.	.	.	3
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2654	8986	11803	7561	2238	185	5	1	0	0	

MEAN HS(M) = 1.57 LARGEST HS(M) = 4.66 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 19551

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	29	3	3	.	.	.	.	.	.	36
0.50 - 0.99	.	140	559	489	184	77	25	17	17	.	1510
1.00 - 1.49	13	112	1005	2537	2380	795	88	54	5	.	7079
1.50 - 1.99	18	41	460	1796	5121	2903	540	100	6	.	10993
2.00 - 2.49	11	118	142	689	4594	5053	1302	109	30	.	12048
2.50 - 2.99	1	82	104	292	2399	5619	1789	183	13	.	10482
3.00 - 3.49	.	22	124	126	622	4565	2387	239	37	.	8122
3.50 - 3.99	.	1	29	25	188	2746	2688	325	27	.	6029
4.00 - 4.49	.	.	15	8	56	1060	2510	280	3	.	3932
4.50 - 4.99	.	.	.	1	1	246	1954	277	1	.	2480
5.00 +	.	.	.	1	.	37	1362	1370	17	.	2787
TOTAL	44	516	2565	5967	15550	23101	14645	2954	156	0	

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 38300

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	54	8	6	.	.	.	.	.	.	69
1.50 - 1.99	13	44	56	17	1	5	.	.	.	.	136
2.00 - 2.49	5	68	75	23	22	1	.	.	.	.	194
2.50 - 2.99	.	59	65	37	22	.	.	.	.	.	203
3.00 - 3.49	.	22	51	49	20	18	.	.	.	.	160
3.50 - 3.99	.	1	34	27	17	6	.	.	.	.	85
4.00 - 4.49	.	.	13	15	8	5	.	.	.	.	41
4.50 - 4.99	.	.	6	.	.	8	.	.	.	.	14
5.00 +	.	.	.	.	.	3	.	.	.	.	3
TOTAL	19	249	328	174	90	46	0	0	0	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 5.77 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 541

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.8	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	8	1	.	.	.	.	.	.	.	.	9
1.50 - 1.99	6	8	.	.	.	.	.	.	.	.	14
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15	9	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.46 LARGEST HS(M) = 1.86 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 16

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

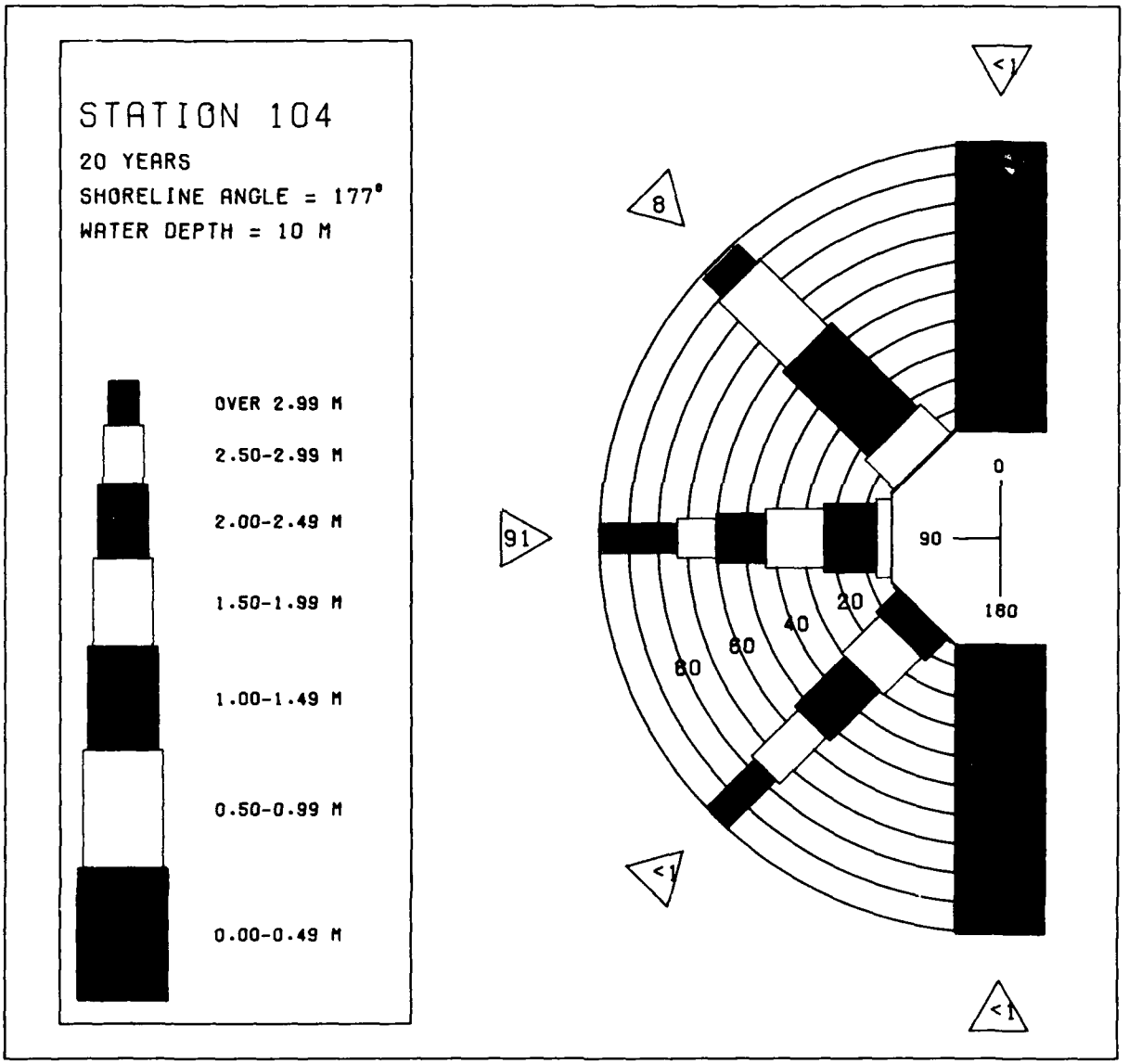
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.8	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 104 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1	6	6								13
0.50 - 0.99	23	211	243	70	22	10	3	1	1	.	584
1.00 - 1.49	105	370	658	485	255	81	8	5	.	.	1971
1.50 - 1.99	130	188	352	507	573	295	54	10	.	.	2109
2.00 - 2.49	18	129	110	198	521	508	130	10	3	.	1627
2.50 - 2.99	.	49	62	76	281	567	178	18	1	.	1232
3.00 - 3.49	.	20	25	23	90	458	238	23	3	.	880
3.50 - 3.99	.	2	7	6	30	276	268	32	2	.	623
4.00 - 4.49	.	.	2	2	9	106	251	28	.	.	398
4.50 - 4.99	.	.	.	.	.	25	195	27	.	.	247
5.00 +	.	.	.	.	.	4	136	137	1	.	278
TOTAL	277	975	1465	1367	1785	2330	1461	291	11	0	

MEAN HS(M) = 2.34 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	3.1	2.4	2.0	1.9	2.1	1.3	1.6	1.3	1.7	2.3	2.6	2.1
1957	2.7	3.0	2.6	2.5	1.9	1.7	1.3	1.3	1.7	2.0	2.7	3.3	2.2
1958	3.9	3.6	2.8	3.0	1.8	1.4	1.6	1.4	1.4	1.8	2.9	3.4	2.4
1959	4.2	3.6	2.7	2.6	1.9	1.7	1.4	1.3	1.8	2.3	2.7	3.3	2.4
1960	3.3	3.8	1.9	2.3	1.9	1.4	1.4	1.4	1.2	1.8	3.1	3.2	2.2
1961	3.9	3.3	2.7	2.1	1.7	1.8	1.2	0.9	1.2	2.0	2.4	2.9	2.2
1962	2.4	3.0	2.9	2.2	1.5	1.2	1.4	1.5	1.5	2.5	3.7	3.1	2.3
1963	3.1	3.1	2.9	1.9	1.7	1.9	1.4	1.1	1.7	2.7	2.9	3.1	2.3
1964	4.1	2.9	3.1	2.7	1.7	1.6	2.1	1.7	1.6	1.9	2.9	3.3	2.5
1965	3.0	3.1	2.7	2.3	2.2	2.0	1.3	1.3	1.3	2.1	2.6	3.8	2.3
1966	3.7	3.1	2.9	2.1	2.0	1.6	1.5	1.4	1.7	1.9	2.3	3.4	2.3
1967	3.3	3.6	2.3	2.0	1.5	1.4	1.3	1.1	2.1	2.7	3.0	3.2	2.3
1968	2.7	3.1	3.1	2.4	1.6	1.6	1.7	1.4	1.4	2.2	3.3	3.3	2.3
1969	2.6	4.0	3.3	3.3	1.9	1.8	1.4	1.3	1.4	2.6	2.9	4.8	2.6
1970	3.7	4.4	3.5	3.0	1.9	1.6	1.5	1.5	1.9	1.9	2.8	3.5	2.6
1971	3.2	2.7	2.9	3.0	1.9	1.8	1.4	1.5	1.7	1.9	2.8	3.2	2.3
1972	3.7	3.1	2.6	2.3	2.0	1.8	1.6	1.4	1.2	1.7	3.9	3.0	2.4
1973	4.0	4.0	3.6	2.9	2.1	2.2	1.8	1.7	1.8	2.0	2.8	3.7	2.7
1974	2.9	3.3	3.0	3.0	2.7	2.0	1.7	1.4	1.4	2.2	3.1	3.6	2.5
1975	2.6	3.1	2.9	1.9	1.8	1.4	1.4	1.1	0.7	2.1	2.5	2.8	2.0
MEAN	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.2	4.8	4.7	4.1	3.2	3.7	2.1	2.9	2.9	3.3	3.9	3.9
1957	5.0	7.0	4.9	4.7	3.5	2.6	2.5	2.0	3.5	4.3	6.1	6.2
1958	6.1	6.1	6.0	6.6	2.9	2.6	2.9	2.9	2.4	4.4	6.0	5.7
1959	6.1	6.7	6.0	5.1	2.9	2.9	2.4	2.8	2.9	4.9	6.1	5.9
1960	6.2	5.9	3.8	3.9	2.9	2.1	2.1	2.2	1.7	5.4	5.3	5.4
1961	6.1	5.3	4.7	3.8	2.7	2.8	2.0	1.5	2.1	4.4	4.1	5.0
1962	4.0	5.0	4.6	3.9	2.5	2.6	2.4	2.3	3.1	4.3	6.0	5.4
1963	6.1	5.8	6.1	3.5	2.9	2.8	2.1	2.0	2.7	6.1	4.7	6.0
1964	6.9	4.1	4.9	5.1	3.8	3.1	3.9	2.6	2.6	4.8	5.4	5.9
1965	4.4	6.2	4.1	3.9	3.4	3.5	2.4	2.1	2.5	4.8	4.5	5.4
1966	5.0	4.9	6.3	3.7	3.4	2.4	2.5	2.3	3.5	3.5	4.4	6.0
1967	5.8	6.0	4.1	3.4	3.0	3.1	2.0	2.3	3.6	5.4	5.2	6.2
1968	4.0	4.8	5.1	6.1	2.9	2.9	3.5	2.4	3.7	4.2	5.7	5.7
1969	4.7	6.3	5.8	6.0	3.1	2.8	2.5	1.8	2.7	4.8	5.3	6.6
1970	5.8	6.4	6.1	5.9	3.3	3.1	2.7	2.3	2.6	4.1	5.0	6.4
1971	6.1	4.5	5.4	5.3	3.5	3.2	2.2	3.0	3.0	3.7	5.5	6.0
1972	6.1	6.0	4.3	3.8	3.5	2.8	2.9	2.3	1.9	3.1	6.3	6.1
1973	6.3	6.1	6.0	5.3	3.6	4.4	3.1	2.7	3.1	3.7	5.2	6.4
1974	4.9	5.4	6.4	5.6	4.0	3.2	3.3	2.6	2.8	5.5	6.1	5.9
1975	4.5	5.8	6.2	3.1	4.7	3.2	2.4	2.6	1.2	4.5	3.9	5.2

20 YR. STATISTICS FOR PACIFIC STATION104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022409

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	5	.	.	.	.	.	.	.	.	8
0.50 - 0.99	475	323	1	.	.	.	.	.	.	.	799
1.00 - 1.49	2263	1759	.	.	.	.	.	.	.	.	4022
1.50 - 1.99	735	1998	10	.	.	.	.	.	.	.	2743
2.00 - 2.49	1	165	1	.	.	.	.	.	.	.	167
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3477	4250	12	0	0	0	0	0	0	0	

MEAN HS(M) = 1.39 LARGEST HS(M) = 2.44 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 4527

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	51	95	11	3	1	.	.	.	.	166
0.50 - 0.99	44	1714	3220	1110	515	135	29	11	.	.	6778
1.00 - 1.49	73	2433	6593	4916	3737	1411	227	35	5	.	19430
1.50 - 1.99	102	1603	2707	4062	5903	3357	746	53	.	.	18533
2.00 - 2.49	11	1088	862	1408	4863	5804	1408	119	.	.	15563
2.50 - 2.99	.	285	414	285	1540	5142	2186	183	.	.	10035
3.00 - 3.49	.	13	111	68	458	3218	2474	203	.	.	6545
3.50 - 3.99	.	1	23	10	124	1327	2450	212	.	.	4147
4.00 - 4.49	.	.	3	1	17	337	1878	232	.	.	2468
4.50 - 4.99	.	.	.	.	.	68	847	297	.	.	1212
5.00 +	.	.	.	.	.	5	325	713	.	.	1043
TOTAL	235	7188	14028	11871	17160	20805	12570	2058	5	0	

MEAN HS(M) = 2.13 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 50230

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	10	6	.	.	.	.	.	1	.	17
1.00 - 1.49	8	42	68	13	15	17	5	.	.	.	168
1.50 - 1.99	29	102	71	47	150	145	32	15	18	.	609
2.00 - 2.49	11	105	106	92	176	319	165	13	18	.	1002
2.50 - 2.99	.	97	107	83	123	304	213	65	10	.	1002
3.00 - 3.49	.	22	154	71	119	239	242	94	17	.	958
3.50 - 3.99	.	1	90	47	63	162	215	95	.	.	673
4.00 - 4.49	.	.	51	56	29	116	198	51	5	.	506
4.50 - 4.99	.	.	5	11	5	71	176	34	13	.	315
5.00 +	.	.	.	1	1	32	165	47	8	.	254
TOTAL	48	376	661	421	681	1405	1408	414	90	0	

MEAN HS(M) = 3.08 LARGEST HS(M) = 6.57 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 3239

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	6	.	.	.	.	.	.	.	.	7
1.50 - 1.99	20	49	22	.	.	.	.	.	.	.	91
2.00 - 2.49	3	58	61	.	.	.	.	.	.	.	122
2.50 - 2.99	.	77	59	13	3	.	.	.	.	.	152
3.00 - 3.49	.	20	90	39	3	.	.	.	.	.	152
3.50 - 3.99	.	5	68	46	5	.	.	.	.	.	144
4.00 - 4.49	.	.	15	20	6	11	.	.	.	.	52
4.50 - 4.99	.	.	5	3	6	.	.	.	.	.	14
5.00 +	.	.	.	.	3	.	.	.	.	.	3
TOTAL	25	215	340	121	26	11	0	0	0	0	

MEAN HS(M) = 2.98 LARGEST HS(M) = 5.21 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 440

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

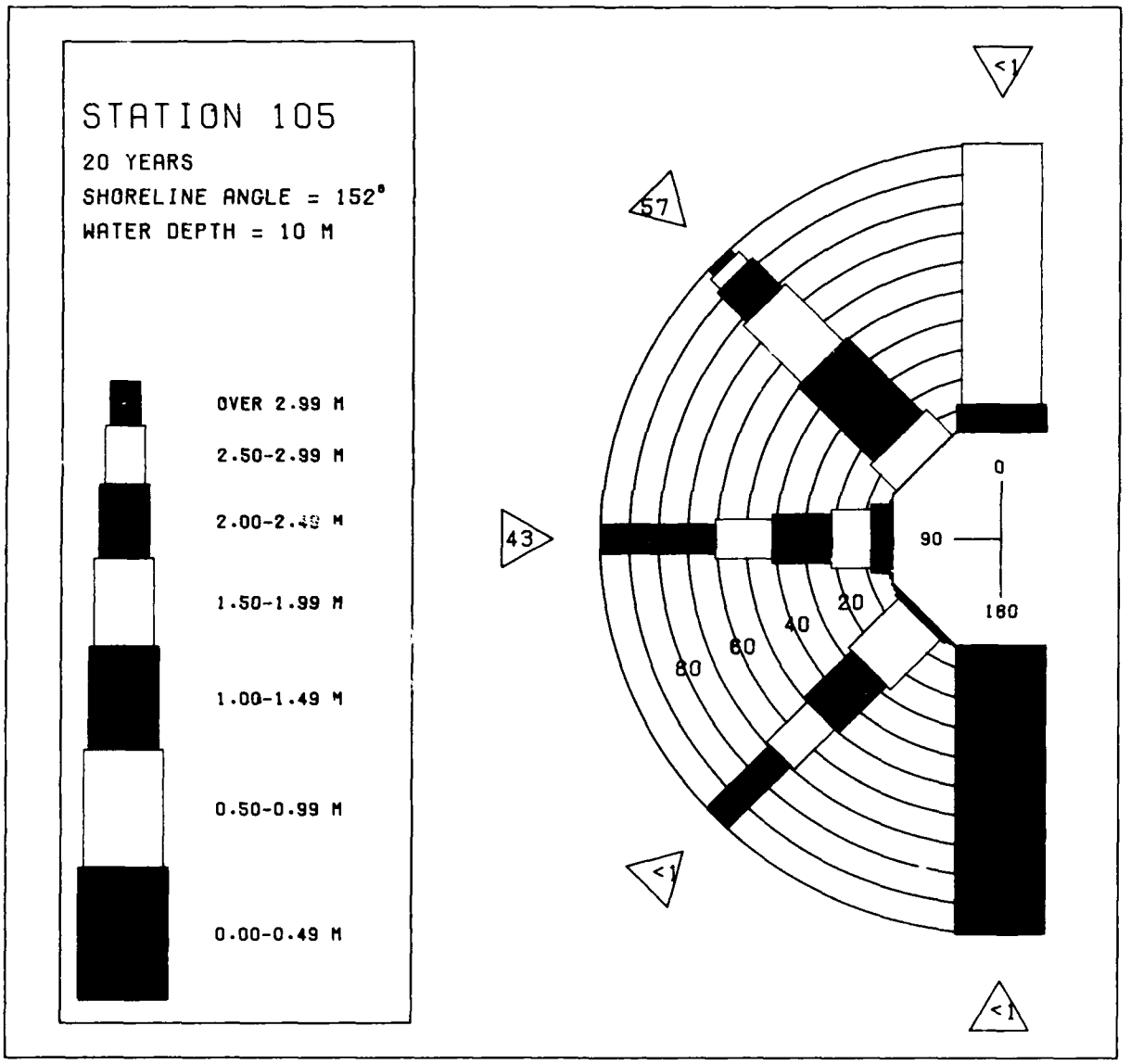
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 105 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		5	9	1							15
0.50 - 0.99	52	204	322	111	51	13	2	1	.	.	756
1.00 - 1.49	234	424	666	492	375	142	23	3	.	.	2359
1.50 - 1.99	88	375	281	411	605	350	77	6	1	.	2194
2.00 - 2.49	2	141	103	150	503	612	157	13	1	.	1682
2.50 - 2.99	.	46	58	38	166	544	240	24	1	.	1117
3.00 - 3.49	.	5	35	17	53	345	271	29	1	.	761
3.50 - 3.99	.	.	20	10	19	149	266	30	.	.	494
4.00 - 4.49	.	.	7	7	5	46	207	28	.	.	300
4.50 - 4.99	.	.	1	1	1	14	102	33	1	.	153
5.00 +						3	49	76			128
TOTAL	376	1200	1502	1238	1783	2218	1394	243	5	0	

MEAN HS(M) = 2.14 LARGEST HS(M) = 7.04 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.8	2.8	2.1	1.8	1.7	1.8	1.2	1.4	1.1	1.5	2.0	2.3	1.9
1957	2.4	2.8	2.5	2.2	1.8	1.6	1.2	1.2	1.6	1.9	2.4	2.8	2.0
1958	3.7	3.6	2.5	2.8	1.6	1.3	1.4	1.3	1.3	1.6	2.5	3.2	2.2
1959	3.0	3.3	2.4	2.2	1.7	1.6	1.3	1.2	1.7	2.1	2.3	2.9	2.1
1960	3.0	3.5	1.7	2.1	1.8	1.3	1.2	1.2	1.1	1.6	2.7	3.0	2.0
1961	3.7	3.0	2.6	1.8	1.5	1.6	1.1	0.8	1.2	1.8	2.2	2.6	2.0
1962	2.2	2.9	2.5	1.9	1.4	1.1	1.3	1.4	1.4	2.2	3.2	3.1	2.1
1963	2.8	3.5	2.7	1.8	1.6	1.7	1.2	1.0	1.5	2.4	2.7	3.0	2.2
1964	3.7	2.6	2.7	2.4	1.6	1.6	1.8	1.5	1.4	1.7	2.6	3.1	2.2
1965	2.8	2.7	2.4	2.1	1.9	1.8	1.2	1.2	1.2	2.0	2.5	3.3	2.1
1966	3.4	2.7	2.6	1.9	1.8	1.3	1.4	1.3	1.5	1.7	2.1	3.2	2.1
1967	3.1	3.1	2.2	1.8	1.4	1.3	1.3	1.0	1.8	2.4	2.5	3.0	2.1
1968	2.7	3.0	2.8	2.1	1.5	1.5	1.6	1.3	1.3	1.9	3.1	3.1	2.2
1969	2.5	3.5	2.8	2.9	1.7	1.6	1.4	1.2	1.3	2.3	2.5	4.6	2.4
1970	3.6	4.0	3.2	2.6	1.7	1.5	1.4	1.2	1.4	1.7	2.7	3.1	2.3
1971	3.0	2.5	2.6	2.5	1.7	1.7	1.3	1.4	1.5	1.8	2.4	2.8	2.1
1972	3.2	2.9	2.5	2.1	1.8	1.7	1.5	1.4	1.1	1.5	2.4	2.9	2.2
1973	3.7	3.7	3.1	2.5	2.0	2.0	1.7	1.6	1.6	1.8	2.7	3.6	2.5
1974	3.0	2.8	2.8	2.6	2.4	1.8	1.6	1.4	1.2	1.9	2.7	3.3	2.3
1975	2.3	2.9	2.6	1.7	1.7	1.3	1.3	1.1	0.7	1.9	2.2	2.6	1.9
MEAN	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

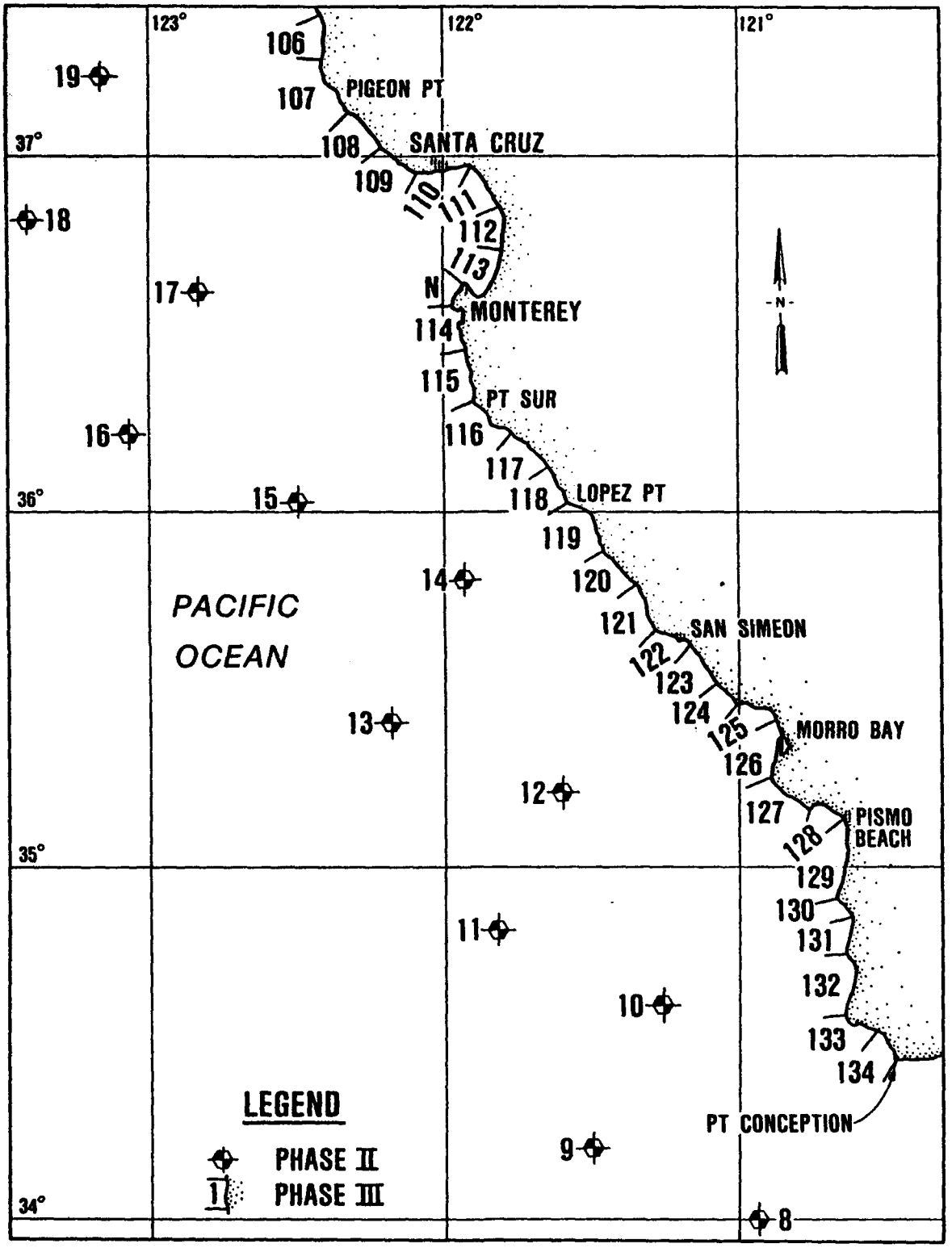
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.4	4.9	3.7	3.4	2.7	3.0	1.8	2.3	2.6	3.3	3.5	3.4
1957	3.9	7.0	4.3	4.0	3.3	2.4	2.1	1.7	2.9	3.6	5.4	5.5
1958	6.0	5.7	4.9	6.2	2.5	2.2	2.3	2.2	2.0	3.6	6.0	5.1
1959	5.0	4.8	4.3	4.1	2.5	2.3	2.2	2.3	2.9	4.1	5.4	5.0
1960	5.8	5.9	3.4	3.4	2.3	2.0	1.8	2.0	1.5	4.6	4.8	4.7
1961	6.1	4.9	4.7	3.2	2.3	2.5	1.7	1.4	1.8	3.5	3.8	4.2
1962	3.6	4.8	3.8	3.3	2.2	2.1	1.9	1.9	2.6	4.6	5.3	5.4
1963	5.9	6.4	5.2	3.1	2.6	2.5	1.9	1.8	2.3	4.7	3.9	6.0
1964	6.9	3.6	4.0	4.2	3.4	2.9	3.0	2.4	2.2	3.8	4.4	5.1
1965	4.3	5.3	3.5	3.5	3.1	2.9	2.1	1.9	2.2	4.4	4.5	5.2
1966	4.8	4.3	5.3	3.3	2.7	2.1	2.1	2.0	2.8	3.0	3.5	5.4
1967	5.3	5.6	4.0	2.8	2.6	2.4	1.8	2.1	3.0	4.7	4.1	5.4
1968	4.8	4.9	4.2	4.8	2.4	2.6	2.8	2.2	3.1	3.5	5.0	5.1
1969	4.2	5.4	4.8	5.7	2.8	2.4	2.2	1.6	2.5	4.0	4.5	6.6
1970	5.9	6.0	6.0	4.9	2.7	2.6	2.3	2.0	2.1	3.8	4.6	5.6
1971	5.8	3.9	4.9	4.5	2.9	2.5	2.0	2.6	2.6	3.0	4.9	5.9
1972	6.0	5.4	3.9	3.4	3.0	2.5	2.5	2.2	1.8	2.6	5.5	6.0
1973	6.2	5.7	4.9	4.3	3.1	3.7	2.7	2.4	2.8	3.3	4.6	6.1
1974	5.8	4.6	5.7	4.8	3.5	2.8	2.8	2.2	2.3	4.7	4.8	5.0
1975	4.2	5.0	4.1	2.8	3.9	2.7	2.1	2.2	1.4	3.6	3.2	4.8

20 YR. STATISTICS FOR PACIFIC STATION105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	74.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022406

Appendix E: Sta 106 through 134


123°
122°
121°
37°
36°
35°
34°
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
PIGEON PT
SANTA CRUZ
MONTEREY
PT SUR
LOPEZ PT
SAN SIMEON
MORRO BAY
PISMO BEACH
PT CONCEPTION
N
19
18
17
16
15
14
13
12
11
10
9
8
PACIFIC OCEAN
LEGEND
PHASE II
PHASE III

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	34	.	.	.	.	.	.	.	.	.	34
1.00 - 1.49	398	70	.	.	.	.	.	.	.	.	468
1.50 - 1.99	42	32	.	.	.	.	.	.	.	.	74
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	482	102	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.27 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 343

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	20	3	.	1	.	.	.	.	.	29
0.50 - 0.99	123	1096	1189	126	37	1	10	.	.	.	2582
1.00 - 1.49	1107	2529	4010	905	189	29	1	.	.	.	8770
1.50 - 1.99	2135	3709	2922	876	244	46	34	.	.	.	9966
2.00 - 2.49	121	2672	1158	477	236	85	3	.	.	.	4752
2.50 - 2.99	.	701	598	335	181	70	3	.	.	.	1888
3.00 - 3.49	.	123	215	99	116	70	1	.	.	.	624
3.50 - 3.99	.	1	53	15	70	49	8	.	.	.	196
4.00 - 4.49	.	.	.	1	27	18	1	.	.	.	47
4.50 - 4.99	.	.	.	.	1	3	.	.	.	.	4
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3491	10851	10148	2834	1102	371	61	0	0	0	

MEAN HS(M) = 1.71 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 16880

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	17	1	1	.	.	.	.	.	19
0.50 - 0.99	.	150	578	280	95	51	25	6	.	.	1185
1.00 - 1.49	1	147	1219	2525	1764	496	42	30	1	.	6623
1.50 - 1.99	18	99	983	3482	4579	2207	424	49	6	.	11847
2.00 - 2.49	5	111	321	2068	5104	4072	1014	66	32	.	12793
2.50 - 2.99	.	90	124	434	3667	5347	1543	138	13	.	11556
3.00 - 3.49	.	27	124	126	1221	4873	2096	232	18	.	8719
3.50 - 3.99	.	.	39	68	381	3170	2476	311	22	.	6477
4.00 - 4.49	.	.	13	13	118	1483	2354	232	3	.	4216
4.50 - 4.99	.	.	3	1	8	456	2137	234	3	.	2842
5.00 +	.	.	.	.	.	82	1814	1516	22	.	3234
TOTAL	24	624	3819	9199	16948	22238	14025	2514	120	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 40646

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	35	11	3	.	.	.	.	.	.	50
1.50 - 1.99	17	68	34	15	.	3	.	.	.	.	137
2.00 - 2.49	3	66	65	41	25	5	.	.	.	.	205
2.50 - 2.99	.	58	75	56	22	1	.	.	.	.	212
3.00 - 3.49	.	8	87	37	13	13	.	.	.	.	158
3.50 - 3.99	.	.	37	34	13	5	3	.	.	.	92
4.00 - 4.49	.	.	10	23	10	5	6	.	.	.	54
4.50 - 4.99	.	.	.	8	.	6	.	.	.	.	14
5.00 +	.	.	.	1	.	6	.	.	.	.	7
TOTAL	21	235	319	218	83	44	9	0	0	0	

MEAN HS(M) = 2.75 LARGEST HS(M) = 5.62 MEAN TP(SEC) = 9.0 NUMBER OF CASES = 554

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	3	1	.	.	.	.	.	.	.	.	4
1.50 - 1.99	5	11	.	.	.	.	.	.	.	.	16
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 2.19 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 16

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

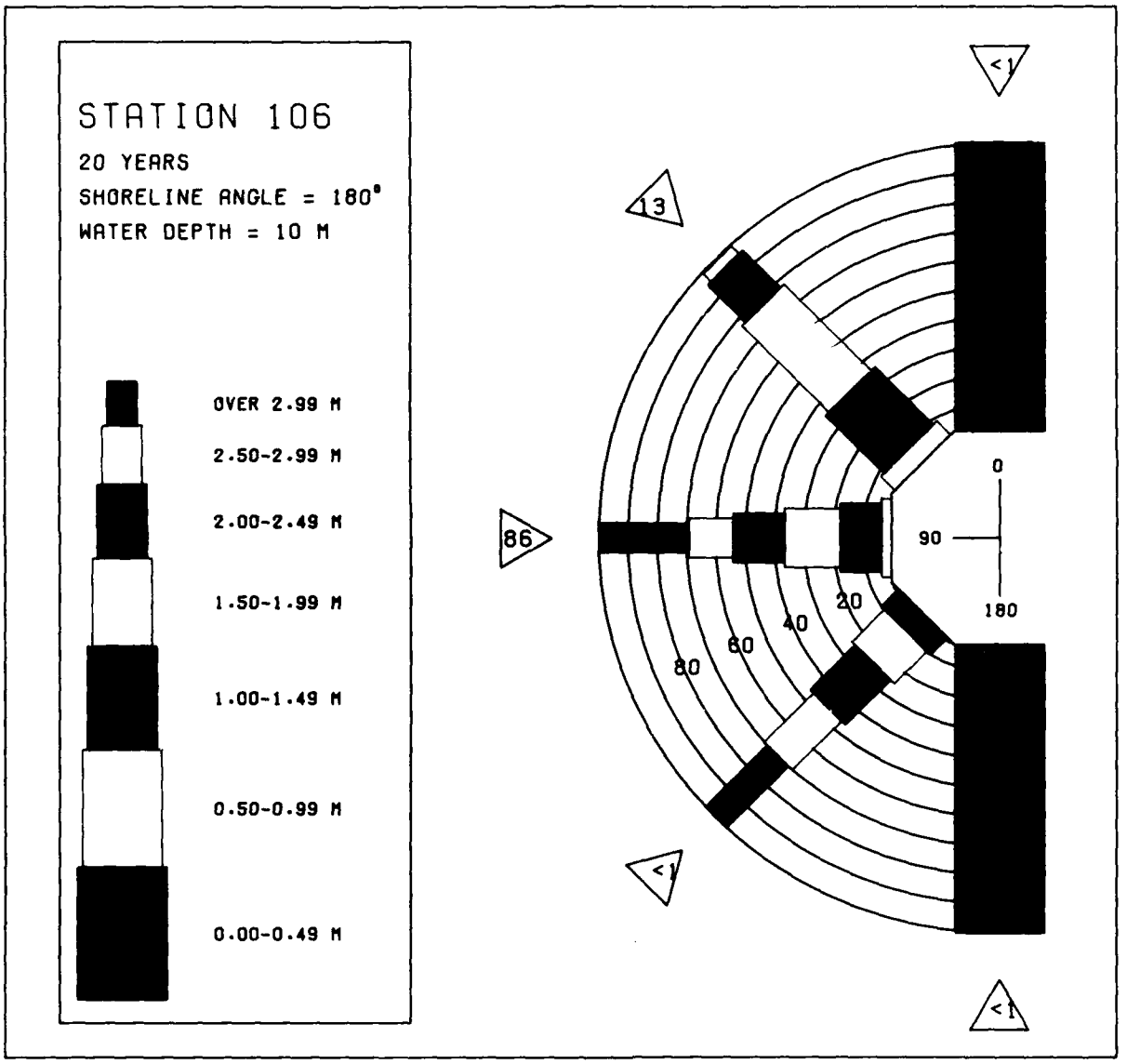
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 106 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	1	2	2					.	.	.	5
0.50 - 0.99	16	124	176	40	13	5	3	.	.	.	377
1.00 - 1.49	151	278	563	343	195	52	4	3	.	.	1589
1.50 - 1.99	221	392	394	437	482	225	45	4	.	.	2200
2.00 - 2.49	13	285	154	258	535	416	101	6	3	.	1772
2.50 - 2.99	.	85	79	102	387	541	154	13	1	.	1362
3.00 - 3.49	.	15	42	26	135	495	209	23	1	.	946
3.50 - 3.99	.	.	13	11	47	322	248	31	2	.	674
4.00 - 4.49	.	.	2	3	15	150	236	23	.	.	429
4.50 - 4.99	.	.	.	1	1	46	213	23	.	.	284
5.00 +						8	191	121	2	.	322
TOTAL	402	1181	1425	1221	1811	2260	1404	247	9	0	

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.27 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.0	3.2	2.5	2.1	2.0	2.2	1.4	1.7	1.3	1.8	2.3	2.6	2.2
1957	2.8	3.2	2.8	2.5	2.0	1.9	1.5	1.4	1.8	2.1	2.9	3.3	2.3
1958	4.1	3.8	2.8	3.2	1.8	1.6	1.6	1.5	1.5	1.9	2.9	3.6	2.5
1959	3.3	3.6	2.8	2.6	2.1	1.9	1.5	1.5	1.9	2.4	2.7	3.4	2.5
1960	3.4	4.0	2.0	2.4	2.1	1.5	1.5	1.5	1.2	1.9	3.1	3.4	2.3
1961	4.1	3.4	2.9	2.1	1.8	1.8	1.3	1.0	1.4	2.2	2.9	3.0	2.3
1962	3.5	3.1	2.9	2.3	1.7	1.4	1.6	1.6	1.6	2.5	3.7	3.3	2.4
1963	3.1	3.7	3.1	2.1	1.8	2.0	1.5	1.3	1.7	2.8	3.1	3.3	2.4
1964	4.2	3.0	3.2	2.8	1.8	1.8	2.1	1.7	1.7	2.0	3.0	3.4	2.6
1965	3.1	3.2	2.7	2.4	2.3	2.1	1.5	1.3	1.4	2.3	2.8	3.8	2.4
1966	3.8	3.1	3.0	2.3	2.1	1.8	1.7	1.6	1.7	2.0	2.4	3.6	2.4
1967	3.5	3.6	2.4	2.1	1.7	1.5	1.5	1.2	2.1	2.8	3.0	3.4	2.4
1968	3.0	3.3	3.2	2.6	1.8	1.8	1.9	1.5	1.5	2.3	3.5	3.4	2.5
1969	2.7	4.0	3.3	3.3	2.0	1.9	1.6	1.5	1.5	2.7	2.9	5.0	2.7
1970	3.8	4.5	3.7	3.1	2.0	1.7	1.6	1.5	1.6	2.0	3.0	3.6	2.7
1971	3.4	2.8	3.0	3.0	2.0	2.0	1.6	1.6	1.8	2.1	2.8	3.3	2.4
1972	3.7	3.3	2.8	2.4	2.1	2.0	1.8	1.6	1.3	1.7	3.9	3.1	2.5
1973	4.1	4.2	3.6	2.9	2.3	2.3	2.0	1.9	1.9	2.1	3.1	4.0	2.9
1974	3.2	3.3	3.1	3.1	2.9	2.2	1.9	1.6	1.4	2.3	3.2	3.8	2.6
1975	2.6	3.2	3.0	2.0	2.0	1.6	1.5	1.2	0.8	2.2	2.6	2.9	2.1
MEAN	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.0	4.4	3.9	3.2	3.6	2.2	2.8	3.1	3.3	4.0	3.9
1957	4.6	7.3	5.0	4.8	3.8	2.8	2.6	2.0	3.4	4.3	6.1	6.2
1958	6.1	6.1	5.8	6.8	2.9	2.5	2.7	2.6	2.5	4.2	6.0	5.8
1959	5.9	5.5	5.0	4.9	3.1	2.7	2.6	2.7	3.0	4.9	6.1	5.8
1960	6.1	6.1	3.7	4.0	2.8	2.5	2.1	2.3	1.8	5.5	5.5	5.2
1961	6.1	5.4	5.3	3.7	2.8	3.0	2.1	1.6	2.2	4.3	4.3	4.9
1962	4.2	4.9	4.4	3.9	2.5	2.4	2.3	2.3	3.1	4.7	6.1	5.7
1963	5.6	6.3	6.0	3.8	2.9	3.0	2.3	2.1	2.7	5.5	4.6	6.0
1964	6.9	4.0	4.7	5.0	4.0	3.3	3.5	2.7	2.6	4.5	5.2	5.1
1965	4.6	6.3	4.0	4.0	3.6	3.4	2.5	2.2	2.7	5.1	4.5	5.6
1966	5.4	4.7	6.2	3.9	3.6	2.5	2.4	2.3	3.3	3.9	4.2	6.0
1967	5.8	6.0	3.9	3.4	3.0	2.7	2.1	2.4	3.6	5.5	4.9	6.3
1968	4.8	5.3	5.0	5.7	2.8	2.9	3.3	2.5	3.7	4.1	5.9	5.9
1969	4.8	6.2	5.8	6.1	3.2	2.9	2.6	2.0	2.9	4.7	5.5	6.7
1970	6.2	6.3	6.1	5.9	3.2	3.1	2.6	2.4	2.5	4.5	5.3	6.3
1971	6.0	4.4	5.4	5.4	3.7	2.9	2.3	3.2	3.1	3.7	5.7	6.0
1972	6.2	6.1	4.6	4.1	3.5	2.8	2.9	2.4	2.1	3.0	6.1	6.1
1973	6.5	6.3	6.0	5.1	3.6	4.3	3.1	2.8	2.5	5.8	5.7	6.5
1974	5.8	5.4	6.3	5.2	4.1	3.3	3.3	2.6	2.7	5.5	5.7	5.5
1975	4.7	6.0	4.7	3.3	4.7	3.2	2.5	2.6	1.5	4.3	3.8	5.5

20 YR. STATISTICS FOR PACIFIC STATION106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)	2.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)	1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)	2.6
LARGEST WAVE HS . . . . . (METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	57022412

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	400	212	.	.	.	.	.	.	.	.	612
1.00 - 1.49	2224	1456	1	.	.	.	.	.	.	.	3681
1.50 - 1.99	823	1983	.	.	.	.	.	.	.	.	2806
2.00 - 2.49	.	186	.	.	.	.	.	.	.	.	186
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3447	3839	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.43 LARGEST HS(M) = 2.53 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 4261

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	47	87	3	3	1	.	.	.	.	146
0.50 - 0.99	56	1709	2979	1002	438	116	29	11	.	.	6340
1.00 - 1.49	92	2537	6517	4727	3514	1288	196	17	3	.	18891
1.50 - 1.99	152	1752	2888	4168	5701	3100	675	29	1	.	18466
2.00 - 2.49	11	1196	912	1505	5000	5477	1326	92	.	.	15519
2.50 - 2.99	.	302	407	335	1702	5150	2010	143	.	.	10049
3.00 - 3.49	.	20	140	78	497	3374	2354	177	.	.	6640
3.50 - 3.99	.	.	18	13	148	1459	2369	154	.	.	4161
4.00 - 4.49	.	.	6	1	27	398	1955	215	.	.	2602
4.50 - 4.99	.	.	.	.	.	82	982	258	.	.	1322
5.00 +	.	.	.	.	.	6	391	686	.	.	1083
TOTAL	316	7563	13954	11832	17030	20451	12287	1782	4	0	

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 49824

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	11	13	.	.	1	.	.	1	.	26
1.00 - 1.49	5	34	78	18	20	15	11	17	.	.	198
1.50 - 1.99	27	90	75	59	176	188	49	35	18	.	717
2.00 - 2.49	10	83	102	104	232	441	189	34	18	.	1213
2.50 - 2.99	.	97	95	88	160	402	270	83	11	.	1206
3.00 - 3.49	.	20	148	63	126	323	287	124	11	.	1102
3.50 - 3.99	.	1	78	41	68	156	275	143	5	.	807
4.00 - 4.49	.	.	37	51	29	128	244	63	5	.	557
4.50 - 4.99	.	.	3	13	5	83	193	59	13	.	369
5.00 +	.	.	1	1	.	59	195	136	8	.	375
TOTAL	42	336	629	438	816	1812	1713	694	90	0	

MEAN HS(M) = 3.10 LARGEST HS(M) = 7.11 MEAN TP(SEC) = 12.5 NUMBER OF CASES = 3864

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	5	.	.	.	.	.	.	.	5
1.00 - 1.49	1	13	6	.	.	.	.	.	.	.	20
1.50 - 1.99	11	44	22	.	.	.	.	.	.	.	77
2.00 - 2.49	5	58	58	.	3	.	.	.	.	.	124
2.50 - 2.99	.	83	73	8	6	.	.	.	.	.	170
3.00 - 3.49	.	23	87	51	5	.	.	.	.	.	166
3.50 - 3.99	.	3	95	47	5	1	.	.	.	.	151
4.00 - 4.49	.	.	23	27	8	8	.	.	.	.	66
4.50 - 4.99	.	.	8	5	5	5	.	.	.	.	23
5.00 +	.	.	.	.	5	.	.	.	.	.	5
TOTAL	17	224	377	138	37	14	0	0	0	0	

MEAN HS(M) = 3.01 LARGEST HS(M) = 5.20 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 481

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	6	1	.	.	.	.	.	.	.	.	7
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	6	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.99 LARGEST HS(M) = 3.01 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 10

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

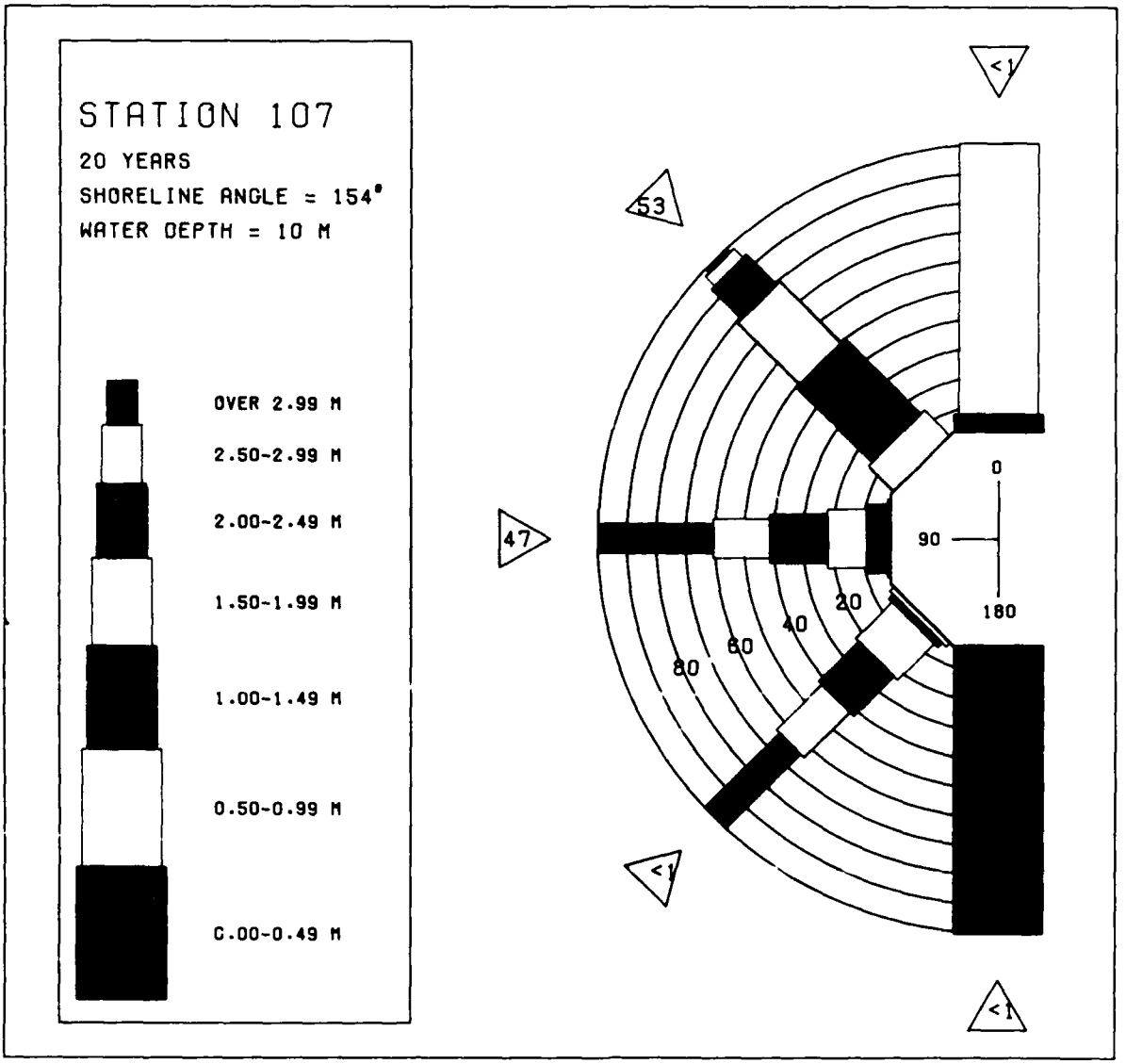
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 107 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49		4	8								12
0.50 - 0.99	45	193	299	100	43	11	2	1	.	.	694
1.00 - 1.49	232	404	660	474	353	130	20	3	.	.	2276
1.50 - 1.99	102	387	298	422	587	328	72	6	2	.	2204
2.00 - 2.49	2	152	107	161	523	591	151	12	1	.	1700
2.50 - 2.99	.	48	57	43	187	555	228	22	1	.	1141
3.00 - 3.49	.	6	37	19	62	369	264	30	1	.	788
3.50 - 3.99	.	.	19	10	22	165	264	29	.	.	509
4.00 - 4.49	.	.	6	8	6	53	220	27	.	.	320
4.50 - 4.99	.	.	1	1	1	17	117	31	1	.	169
5.00 +						4	58	82	.	.	144
TOTAL	381	1194	1492	1238	1784	2223	1396	243	6	0	

MEAN HS(M) = 2.17 LARGEST HS(M) = 7.11 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 107 (37.26N/ 122.41W TO 37.11N/ 122.31W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	2.9	2.9	2.1	1.9	1.7	1.9	1.2	1.5	1.1	1.6	2.0	2.3	1.9
1957	2.5	2.8	2.2	2.2	1.8	1.6	1.2	1.2	1.6	2.0	2.5	2.9	2.1
1958	3.8	3.7	2.5	2.8	1.6	1.4	1.4	1.3	1.3	1.6	2.6	3.2	2.3
1959	3.1	3.3	2.5	2.2	1.8	1.6	1.3	1.2	1.7	2.1	2.4	3.0	2.2
1960	3.1	3.6	1.8	2.1	1.8	1.3	1.3	1.3	1.1	1.6	2.8	3.0	2.1
1961	3.7	3.1	2.6	1.9	1.5	1.6	1.2	0.9	1.2	1.8	2.2	2.7	2.0
1962	2.3	2.9	2.6	2.0	1.5	1.2	1.3	1.4	1.4	2.2	3.3	3.1	2.1
1963	2.8	3.6	2.7	1.9	1.6	1.7	1.3	1.1	1.5	2.4	2.7	3.0	2.2
1964	3.8	2.6	2.8	2.4	1.6	1.6	1.9	1.5	1.5	1.7	2.6	3.2	2.3
1965	2.9	3.8	2.4	2.1	2.0	1.8	1.3	1.2	1.2	2.0	2.5	3.4	2.1
1966	3.4	2.8	2.6	2.0	1.8	1.5	1.4	1.3	1.5	1.7	2.2	3.3	2.1
1967	3.1	3.2	2.2	1.9	1.4	1.3	1.3	1.0	1.9	2.4	2.6	3.0	2.1
1968	2.8	3.0	2.9	2.2	1.6	1.5	1.6	1.3	1.3	2.0	3.1	3.1	2.2
1969	2.5	3.6	2.9	2.9	1.7	1.6	1.4	1.2	1.3	2.4	2.5	4.6	2.4
1970	3.6	4.1	3.3	2.7	1.8	1.5	1.4	1.3	1.4	1.7	2.7	3.2	2.4
1971	3.0	2.6	2.6	2.6	1.7	1.7	1.3	1.4	1.6	1.8	2.5	2.9	2.1
1972	3.3	3.9	2.5	2.1	1.9	1.7	1.5	1.4	1.1	1.5	3.4	3.0	2.2
1973	3.8	3.3	3.1	2.5	2.0	2.0	1.8	1.7	1.3	1.8	2.8	3.6	2.5
1974	3.1	2.9	2.8	2.7	2.5	1.9	1.6	1.4	1.3	2.0	2.7	3.4	2.3
1975	2.3	2.9	2.7	1.7	1.7	1.4	1.4	1.1	0.7	1.9	2.3	2.6	1.9
MEAN	3.1	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.4	1.9	2.6	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 107 (37.26N/ 122.41W TO 37.11N/ 122.31W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	4.5	4.9	3.8	3.5	2.8	3.1	1.8	2.4	2.7	3.3	3.5	3.5	
1957	4.0	7.1	4.3	4.1	3.3	2.4	2.2	1.7	2.9	3.7	5.6	5.5	
1958	6.0	5.8	5.0	6.3	2.5	2.3	2.3	2.3	2.1	3.7	6.0	5.1	
1959	5.1	4.9	4.4	4.2	2.6	2.4	2.3	2.3	2.9	4.2	5.5	5.1	
1960	5.9	5.9	3.4	3.5	2.3	2.1	1.8	2.1	1.5	4.7	4.9	4.7	
1961	6.1	5.0	4.8	3.2	2.4	2.6	1.8	1.4	1.8	3.5	3.9	4.2	
1962	3.7	4.9	3.9	3.4	2.5	2.6	2.0	2.0	2.7	4.7	5.4	5.4	
1963	5.9	6.4	5.3	5.2	2.7	2.5	1.9	1.8	2.3	4.8	4.0	6.0	
1964	7.0	3.7	4.1	4.3	3.4	2.9	3.1	2.4	2.3	3.9	4.5	5.1	
1965	4.3	5.5	3.5	3.6	3.2	3.0	2.1	1.9	2.2	4.4	4.5	5.2	
1966	4.9	4.4	5.4	3.4	2.8	2.2	2.1	2.0	2.9	3.1	3.6	5.5	
1967	5.3	5.8	4.0	2.8	2.6	2.4	1.9	2.1	3.1	4.8	4.2	5.5	
1968	4.9	5.0	4.3	4.9	2.4	2.6	2.9	2.3	3.2	3.6	5.1	5.2	
1969	4.2	5.5	5.0	5.8	2.9	2.5	2.3	2.6	2.5	4.1	4.9	6.9	
1970	6.0	6.1	6.0	5.0	2.8	2.6	2.3	2.1	2.1	3.9	4.7	5.7	
1971	5.9	4.0	4.9	4.6	2.9	2.5	2.0	2.7	2.7	3.1	5.0	6.0	
1972	6.0	5.5	4.0	3.4	3.0	2.5	2.5	2.2	1.8	2.6	5.6	6.0	
1973	6.2	5.8	5.1	4.4	3.2	3.8	2.7	2.4	2.8	3.4	4.7	6.1	
1974	5.8	4.7	5.8	4.8	3.6	2.9	2.9	2.3	2.3	4.8	4.9	5.1	
1975	4.3	5.1	4.2	2.8	4.0	2.8	2.1	2.3	1.4	3.7	3.3	4.8	

20 YR. STATISTICS FOR PACIFIC STATION107 (37.26N/ 122.41W TO 37.11N/ 122.31W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	75.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022406

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	.	.	.	.	.	.	.	.	.	18
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.19 LARGEST HS(M) = 0.29 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 11

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	162	205	37	.	.	.	.	.	.	.	404
0.50 - 0.99	2113	3572	319	.	.	.	.	.	.	.	6004
1.00 - 1.49	2260	4455	266	.	.	.	.	.	.	.	6981
1.50 - 1.99	145	1586	78	.	.	.	.	.	.	.	1809
2.00 - 2.49	.	147	3	.	.	.	.	.	.	.	150
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4680	9970	703	0	0	0	0	0	0	0	

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.71 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 8977

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	78	441	56	59	15	20	.	.	.	669
0.50 - 0.99	13	1206	7323	3256	1899	641	95	27	11	.	14471
1.00 - 1.49	53	876	4861	5600	7130	3475	643	53	23	.	22714
1.50 - 1.99	75	913	1331	1516	5427	6842	1865	177	6	.	18152
2.00 - 2.49	3	537	658	335	1572	5852	2756	263	8	.	11984
2.50 - 2.99	.	109	207	107	302	2393	3256	338	3	.	6715
3.00 - 3.49	.	22	66	27	106	716	2409	359	10	.	3715
3.50 - 3.99	.	1	15	11	27	227	1062	321	13	.	1677
4.00 - 4.49	.	.	.	.	5	94	342	354	5	.	800
4.50 - 4.99	.	.	.	3	1	6	106	160	.	.	276
5.00 +	.	.	.	.	.	.	39	99	.	.	138
TOTAL	144	3742	14902	10911	16528	20261	12593	2151	79	0	

MEAN HS(M) = 1.73 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 47541

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	3	.	.	.	.	.	.	.	4
1.00 - 1.49	6	70	11	5	.	.	.	.	.	.	92
1.50 - 1.99	66	155	47	22	29	3	.	.	.	.	332
2.00 - 2.49	6	232	128	30	70	29	3	.	3	.	501
2.50 - 2.99	.	184	177	63	39	29	3	3	.	.	498
3.00 - 3.49	.	68	323	94	41	42	22	11	.	.	601
3.50 - 3.99	.	6	135	104	30	37	17	.	.	.	329
4.00 - 4.49	.	.	61	23	15	32	17	.	.	.	148
4.50 - 4.99	.	.	3	15	6	46	20	.	.	.	90
5.00 +	.	.	.	1	6	23	13	.	.	.	43
TOTAL	79	715	888	367	236	241	95	14	3	0	

MEAN HS(M) = 2.91 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 9.? NUMBER OF CASES = 1558

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	3	11	.	.	.	.	.	.	.	17
1.00 - 1.49	35	10	1	.	.	.	.	.	.	.	46
1.50 - 1.99	42	25	17	3	.	.	.	.	.	.	87
2.00 - 2.49	27	66	25	.	.	.	.	.	.	.	118
2.50 - 2.99	1	87	18	.	.	.	.	.	.	.	106
3.00 - 3.49	.	39	42	11	.	.	.	.	.	.	92
3.50 - 3.99	.	.	46	10	1	.	.	.	.	.	57
4.00 - 4.49	.	.	29	3	5	.	.	.	.	.	37
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	108	230	189	27	7	0	0	0	0	0	

MEAN HS(M) = 2.58 LARGEST HS(M) = 5.16 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 336

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	1	1	.	.	.	.	.	.	.	.	2
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.98 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 6

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

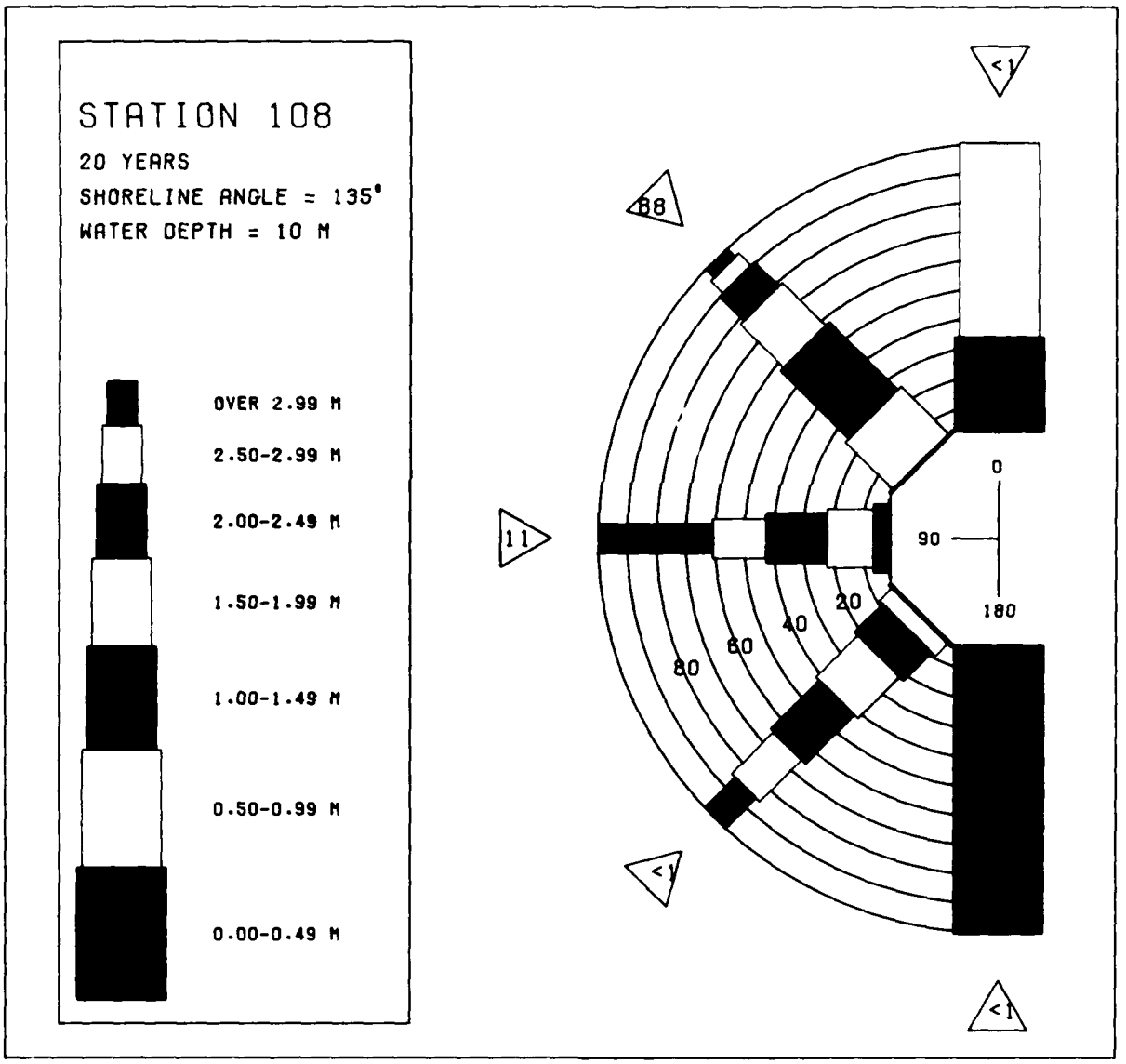
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 108 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.1IN/122.3IW LAT. LON. END= 37.0IN/122.2IW
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	28	47	5	5	1	1	.	.	.	106
0.50 - 0.99	213	476	765	325	189	64	9	2	1	.	2045
1.00 - 1.49	235	541	514	560	713	347	64	5	2	.	2981
1.50 - 1.99	33	268	147	155	545	684	186	17	.	.	2035
2.00 - 2.49	3	98	81	36	164	588	276	26	1	.	1273
2.50 - 2.99	.	38	40	17	34	242	325	34	.	.	730
3.00 - 3.49	.	13	43	13	14	75	243	37	1	.	439
3.50 - 3.99	.	.	19	12	5	26	107	32	1	.	202
4.00 - 4.49	.	.	9	5	2	16	35	25	.	.	95
4.50 - 4.99	.	.	.	1	.	5	13	16	.	.	34
5.00 +	.	.	.	.	.	2	5	9	.	.	16
TOTAL	502	1464	1665	1126	1671	2046	1264	213	6	0	

MEAN HS(M) = 1.67 LARGEST HS(M) = 6.50 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.4	2.2	1.6	1.5	1.3	1.4	0.9	1.1	0.8	1.2	1.5	1.8	1.5
1957	1.9	2.2	2.0	1.7	1.4	1.2	0.9	0.9	1.2	1.5	1.8	2.2	1.6
1958	3.0	3.1	2.0	2.2	1.2	1.1	1.0	0.9	1.0	1.2	1.8	2.5	1.7
1959	2.4	2.6	1.9	1.6	1.4	1.2	0.9	0.9	1.3	1.6	1.7	2.2	1.7
1960	2.4	2.9	1.4	1.7	1.4	1.0	0.9	0.9	0.8	1.2	2.1	2.4	1.6
1961	3.0	2.4	2.1	1.4	1.2	1.2	0.8	0.7	0.9	1.3	1.7	2.0	1.5
1962	1.8	2.4	1.9	1.5	1.2	0.8	0.9	1.0	1.1	1.7	2.4	2.5	1.6
1963	2.3	3.2	2.0	1.5	1.2	1.3	0.9	0.8	1.1	1.8	2.1	2.3	1.7
1964	2.9	2.0	2.1	1.8	1.2	1.3	1.4	1.1	1.1	1.3	2.0	2.6	1.7
1965	2.3	2.0	1.9	1.7	1.4	1.4	1.0	0.9	0.9	1.5	2.0	2.5	1.6
1966	2.7	2.1	1.9	1.5	1.3	1.2	1.0	1.0	1.1	1.2	1.7	2.7	1.6
1967	2.5	2.3	1.8	1.5	1.1	1.0	0.9	0.8	1.4	1.8	1.8	2.2	1.6
1968	2.2	2.5	2.2	1.6	1.2	1.2	1.2	1.0	0.9	1.5	2.4	2.5	1.7
1969	2.1	2.8	2.2	2.2	1.3	1.3	1.0	0.8	1.0	1.8	1.8	2.8	1.8
1970	3.1	3.1	2.6	2.0	1.4	1.1	1.1	0.9	1.0	1.2	2.1	2.4	1.8
1971	2.3	2.0	2.0	1.9	1.3	1.4	1.0	1.1	1.2	1.3	1.8	2.2	1.6
1972	2.4	2.3	2.0	1.6	1.5	1.4	1.2	1.2	0.8	1.1	2.5	2.4	1.7
1973	3.0	3.0	2.4	1.9	1.6	1.5	1.4	1.3	1.3	1.4	2.2	2.9	2.0
1974	2.6	2.1	2.2	2.0	1.9	1.4	1.3	1.1	1.0	1.5	2.0	2.7	1.8
1975	1.7	2.3	2.1	1.3	1.3	1.1	1.2	0.9	0.6	1.4	1.6	2.0	1.5
MEAN	2.4	2.5	2.0	1.7	1.3	1.2	1.1	1.0	1.0	1.4	1.9	2.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	4.1	2.9	2.8	2.0	2.2	1.5	1.7	1.8	2.8	2.6	2.7
1957	3.3	6.1	3.5	2.9	2.7	2.0	1.6	1.4	2.3	2.7	4.2	4.0
1958	4.8	4.7	3.5	5.2	1.8	1.9	1.5	1.6	1.5	2.6	4.7	4.0
1959	4.0	5.4	3.2	3.1	2.1	1.8	1.8	1.7	2.8	3.0	4.1	3.8
1960	5.0	5.0	2.8	2.7	1.8	1.6	1.3	1.6	1.4	3.4	3.9	3.9
1961	5.0	3.9	3.9	2.4	1.9	2.0	1.2	1.1	1.5	2.5	3.2	3.1
1962	2.9	4.4	4.1	2.6	1.8	1.6	1.5	1.6	1.9	4.7	4.2	4.6
1963	5.7	5.6	3.5	3.0	2.2	2.2	1.6	1.5	1.7	3.6	3.3	4.9
1964	5.7	2.9	3.0	3.0	2.6	2.4	2.2	2.1	1.8	2.8	3.2	4.5
1965	4.5	3.9	2.8	3.0	2.7	2.5	1.7	1.4	1.6	3.3	4.4	5.0
1966	4.6	3.7	3.6	2.7	2.1	1.8	1.7	1.6	2.0	2.3	2.7	4.1
1967	4.6	4.1	4.1	2.4	2.1	2.0	1.4	1.6	2.2	2.6	2.8	3.9
1968	4.3	4.2	3.3	3.5	2.1	2.1	2.2	1.9	2.4	2.8	3.9	4.5
1969	4.2	4.1	3.7	3.6	2.2	1.9	1.7	1.3	1.9	2.9	3.1	6.3
1970	5.3	4.9	4.3	3.8	2.6	1.8	1.7	1.6	1.7	2.7	3.7	4.3
1971	4.0	3.1	4.0	3.4	2.3	2.0	1.6	1.8	2.0	2.3	3.7	4.2
1972	4.6	4.1	3.3	2.8	2.3	2.0	1.9	1.9	1.6	1.9	3.9	5.1
1973	5.1	4.4	3.9	3.4	2.6	2.9	2.2	1.9	2.2	2.8	3.9	5.4
1974	6.5	3.8	4.7	4.1	2.8	2.2	2.2	2.1	1.7	2.7	3.6	4.6
1975	3.5	3.8	3.6	2.0	2.8	2.3	1.9	1.8	1.3	2.7	2.3	3.6

20 YR. STATISTICS FOR PACIFIC STATION108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . .	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . .	(DEGREES)	80.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011609

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	75	.	.	.	.	.	.	.	.	.	75
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	75	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.30 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 44

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	485	520	172	.	.	.	.	.	.	.	1177
0.50 - 0.99	2992	5838	970	.	.	.	.	.	.	.	9800
1.00 - 1.49	1704	4712	470	.	.	.	.	.	.	.	6886
1.50 - 1.99	49	1423	88	.	.	.	.	.	.	.	1560
2.00 - 2.49	1	118	.	.	.	.	.	.	.	.	119
2.50 - 2.99	.	1	1	.	.	.	.	.	.	.	2
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5231	12612	1701	0	0	0	0	0	0	0	

MEAN HS(M) = 0.98 LARGEST HS(M) = 2.64 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 11427

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	13	622	124	46	17	23	3	.	.	861
0.50 - 0.99	25	518	8471	5001	3321	1024	128	29	20	.	18537
1.00 - 1.49	71	509	2809	4385	8384	5816	1023	85	10	.	23092
1.50 - 1.99	88	716	1088	614	3258	7571	2802	248	10	.	16395
2.00 - 2.49	8	434	576	227	694	3601	3754	367	1	.	9662
2.50 - 2.99	.	131	227	80	140	1047	2819	419	5	.	4868
3.00 - 3.49	.	23	55	44	71	289	1168	422	17	.	2092
3.50 - 3.99	.	.	5	5	22	162	374	314	6	.	888
4.00 - 4.49	.	.	3	6	11	68	169	150	.	.	407
4.50 - 4.99	.	.	.	6	.	25	56	39	.	.	126
5.00 +	.	.	.	.	.	.	3	29	.	.	32
TOTAL	205	2344	13859	10492	15947	19620	12319	2105	69	0	

MEAN HS(M) = 1.55 LARGEST HS(M) = 5.65 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 45001

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	1	8	.	.	.	.	.	.	.	12
1.00 - 1.49	32	87	8	8	.	.	.	.	.	.	136
1.50 - 1.99	85	191	30	17	17	1	.	.	.	.	341
2.00 - 2.49	11	277	133	23	54	15	.	.	.	.	513
2.50 - 2.99	1	224	225	78	25	17	1	3	.	.	574
3.00 - 3.49	.	56	323	95	32	25	8	5	.	.	544
3.50 - 3.99	.	10	169	92	25	3	11	.	.	.	310
4.00 - 4.49	.	.	46	30	13	15	15	.	.	.	119
4.50 - 4.99	.	.	1	11	6	22	10	.	.	.	50
5.00 +	.	.	.	1	1	13	22	11	.	.	47
TOTAL	135	846	943	355	185	120	56	8	0	0	

MEAN HS(M) = 2.81 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 1565

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	3	.	.	.	.	.	.	.	.	32
0.50 - 0.99	17	1	18	.	.	.	.	.	.	.	36
1.00 - 1.49	46	8	6	.	.	.	.	.	.	.	60
1.50 - 1.99	58	41	13	3	.	.	.	.	.	.	115
2.00 - 2.49	32	77	13	.	.	.	.	.	.	.	122
2.50 - 2.99	5	88	10	.	.	.	.	.	.	.	103
3.00 - 3.49	.	34	32	1	.	.	.	.	.	.	67
3.50 - 3.99	.	3	18	3	1	.	.	.	.	.	25
4.00 - 4.49	.	.	8	.	.	.	.	.	.	.	8
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	187	255	118	7	1	0	0	0	0	0	

MEAN HS(M) = 2.14 LARGEST HS(M) = 4.27 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 339

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	53	.	.	.	.	.	.	.	.	.	53
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	53	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.29 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 31

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

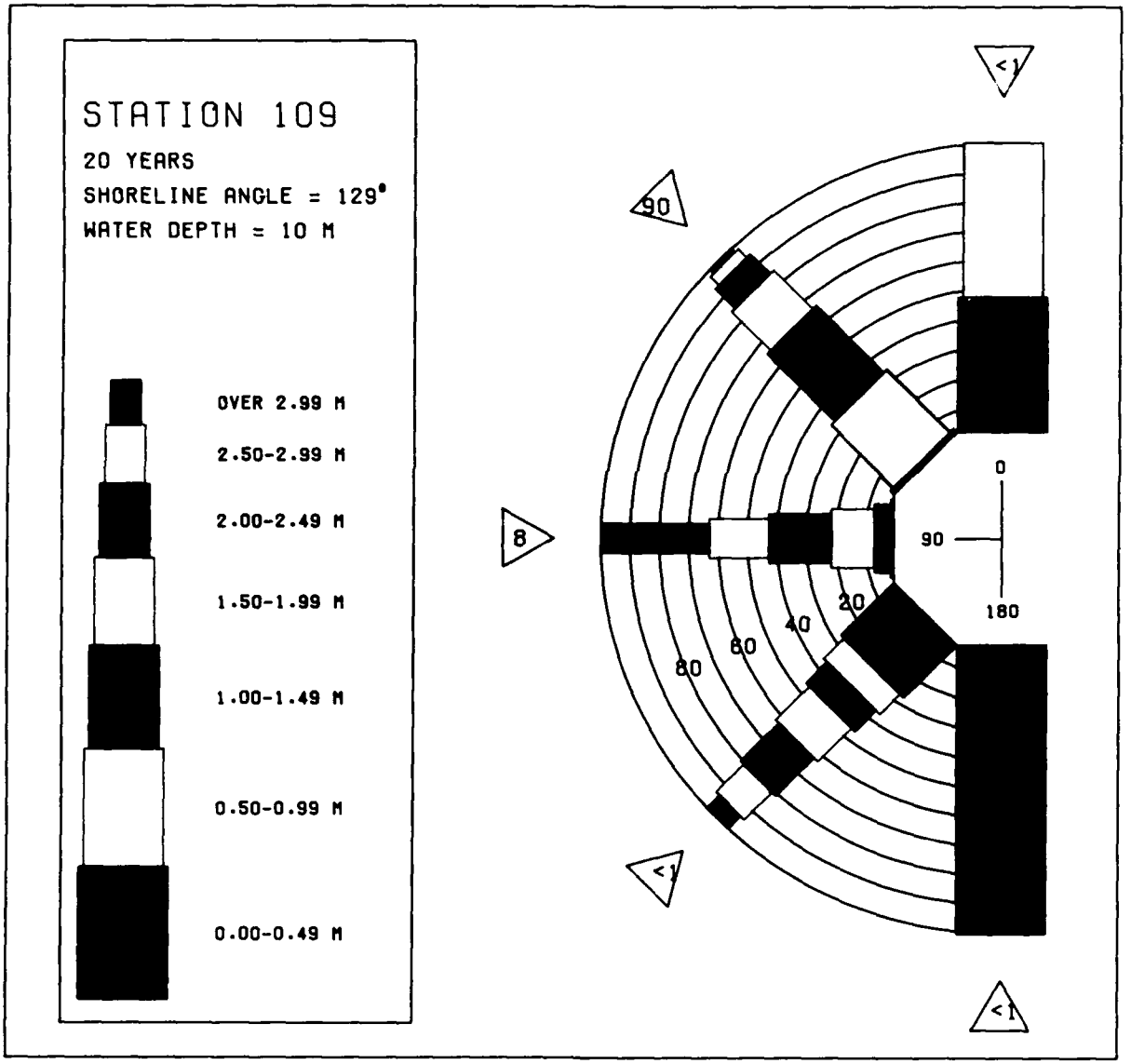
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 109 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	65	53	79	12	4	1	2	.	.	.	216
0.50 - 0.99	303	636	946	500	332	102	12	2	2	.	2835
1.00 - 1.49	185	531	329	439	838	581	102	8	1	.	3014
1.50 - 1.99	28	234	122	63	327	757	280	24	1	.	1839
2.00 - 2.49	5	90	72	25	74	361	375	36	.	.	1038
2.50 - 2.99	.	44	46	15	16	106	282	42	.	.	551
3.00 - 3.49	.	11	41	14	10	31	117	42	1	.	267
3.50 - 3.99	.	1	19	10	4	16	38	31	.	.	119
4.00 - 4.49	.	.	5	3	2	8	8	15	.	.	51
4.50 - 4.99	.	.	.	1	.	4	6	3	.	.	14
5.00 +	.	.	.	.	.	2	1	2	.	.	6
TOTAL	586	1603	1659	1082	1608	1969	1233	205	5	0	

MEAN HS(M) = 1.48 LARGEST HS(M) = 6.50 MEAN TP(SEC)= 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.2	1.9	1.4	1.3	1.1	1.2	0.8	1.0	0.8	1.0	1.3	1.6	1.3
1957	1.7	1.9	1.8	1.5	1.3	1.1	0.7	0.8	1.1	1.4	1.6	1.9	1.4
1958	2.7	2.9	1.8	1.9	1.0	0.9	0.9	0.8	0.8	1.0	1.6	2.2	1.6
1959	2.2	2.4	1.7	1.4	1.2	1.1	0.8	0.8	1.2	1.4	1.5	1.9	1.5
1960	2.5	2.6	1.2	1.5	1.2	0.9	0.8	0.8	0.7	1.0	1.8	2.1	1.4
1961	2.7	2.2	1.9	1.2	1.1	1.0	0.7	0.6	0.8	1.1	1.5	1.7	1.4
1962	1.6	2.2	1.7	1.3	1.0	0.7	0.8	0.9	0.9	1.5	2.1	2.3	1.4
1963	2.1	3.0	1.8	1.4	1.1	1.1	0.8	0.7	1.0	1.6	1.8	2.1	1.5
1964	2.6	1.7	1.8	1.5	1.1	1.2	1.2	1.0	1.0	1.1	1.7	2.4	1.5
1965	2.1	1.7	1.7	1.5	1.2	1.3	0.8	0.8	0.8	1.2	1.8	2.2	1.4
1966	2.4	1.9	1.7	1.3	1.1	1.0	0.9	0.9	1.0	1.1	1.5	2.4	1.4
1967	2.2	2.0	1.6	1.3	1.0	0.9	0.8	0.7	1.2	1.6	1.6	2.0	1.4
1968	2.0	2.3	2.0	1.4	1.1	1.0	1.1	0.9	0.8	1.3	2.1	2.3	1.5
1969	1.9	2.5	1.9	1.9	1.1	1.1	0.9	0.7	0.9	1.5	1.5	3.3	1.6
1970	2.8	2.7	2.2	1.7	1.2	1.0	1.0	0.8	0.9	1.1	1.9	2.1	1.6
1971	2.0	1.8	1.8	1.7	1.2	1.2	0.9	1.0	1.0	1.1	1.5	1.9	1.4
1972	2.1	2.0	1.8	1.4	1.3	1.2	1.1	1.0	0.7	1.0	2.2	2.2	1.5
1973	2.7	2.7	2.1	1.6	1.4	1.4	1.3	1.2	1.1	1.2	2.0	2.6	1.8
1974	2.5	1.9	2.0	1.8	1.7	1.3	1.2	1.0	0.9	1.3	1.7	2.4	1.6
1975	1.5	2.1	1.9	1.2	1.2	1.0	1.0	0.8	0.5	1.2	1.4	1.7	1.3
MEAN	2.2	2.2	1.8	1.5	1.2	1.1	0.9	0.9	0.9	1.2	1.7	2.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	4.0	2.5	2.4	1.8	1.9	1.3	1.5	1.5	2.7	2.3	2.5
1957	3.2	5.6	3.2	2.3	2.5	1.8	1.3	1.2	2.3	2.6	3.6	3.6
1958	4.3	4.5	3.5	4.7	1.6	1.7	1.3	1.4	1.4	2.2	4.0	3.6
1959	3.9	5.4	2.8	2.8	2.0	1.6	1.6	1.5	2.8	2.7	3.4	3.3
1960	4.6	4.8	2.5	2.5	1.6	1.4	1.2	1.4	0.9	2.8	3.6	3.7
1961	4.3	3.5	3.4	2.0	1.8	1.8	1.0	1.0	1.3	2.1	3.1	2.8
1962	2.9	4.2	4.1	2.2	1.7	1.4	1.3	1.4	1.6	4.7	3.7	4.5
1963	5.7	5.4	2.9	3.0	2.0	2.0	1.4	1.4	1.4	3.1	3.0	4.1
1964	5.0	2.7	2.6	2.5	2.4	2.2	2.0	1.9	1.6	2.3	2.9	4.3
1965	4.5	3.3	2.6	2.7	2.5	2.3	1.5	1.3	1.5	2.8	4.4	5.0
1966	4.3	3.5	3.1	2.4	1.9	1.6	1.5	1.4	1.7	2.0	2.6	3.5
1967	4.3	3.4	4.1	2.3	1.9	1.8	1.3	1.5	1.9	3.1	2.4	3.5
1968	4.2	3.9	3.2	2.9	1.9	2.0	2.0	1.7	2.2	2.4	3.4	4.3
1969	4.0	3.6	3.2	3.2	1.9	1.8	1.5	1.2	1.6	2.5	2.7	5.6
1970	5.0	4.3	3.6	3.2	2.3	1.5	1.5	1.4	1.5	2.3	3.3	3.8
1971	3.7	2.8	3.7	2.9	2.1	1.8	1.4	1.5	1.7	2.1	3.3	3.6
1972	3.9	3.6	3.0	2.7	2.1	1.9	1.7	1.8	1.4	1.6	3.4	4.4
1973	4.7	3.8	3.4	2.9	2.4	2.6	2.0	1.7	2.0	2.8	3.6	4.6
1974	6.5	3.6	4.3	3.8	2.5	1.9	2.0	1.9	1.4	3.3	3.4	4.3
1975	3.2	3.5	3.4	1.8	2.3	2.1	1.8	1.6	1.2	2.3	2.0	3.3

20 YR. STATISTICS FOR PACIFIC STATION109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	78.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011609

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	9214	.	.	.	.	.	.	.	.	.	9214
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9214	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.31 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 5385

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8738	20853	9656	1208	.	.	.	.	.	.	40455
0.50 - 0.99	566	2270	1031	5	.	.	.	.	.	.	3872
1.00 - 1.49	142	580	135	.	.	.	.	.	.	.	857
1.50 - 1.99	.	56	11	.	.	.	.	.	.	.	67
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9446	23759	10833	1213	0	0	0	0	0	0	

MEAN HS(M) = 0.26 LARGEST HS(M) = 1.83 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 26448

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	946	111	39	3447	5242	3617	1018	82	10	.	14512
0.50 - 0.99	848	381	210	338	800	1753	1420	244	.	.	5994
1.00 - 1.49	492	915	501	196	148	160	176	46	.	.	2634
1.50 - 1.99	102	959	467	147	99	92	25	8	.	.	1899
2.00 - 2.49	6	342	427	152	39	37	18	.	.	.	1021
2.50 - 2.99	.	34	311	88	13	3	18	.	.	.	467
3.00 - 3.49	.	3	37	27	13	20	1	.	.	.	101
3.50 - 3.99	.	.	17	15	8	15	1	.	.	.	56
4.00 - 4.49	.	.	1	1	6	8	.	.	.	.	16
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +	.	.	.	.	1	3	.	.	.	.	4
TOTAL	2394	2745	2010	4411	6369	5709	2677	380	10	0	

MEAN HS(M) = 0.73 LARGEST HS(M) = 5.33 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 15627

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3964	239	3	.	.	.	.	.	.	.	4206
0.50 - 0.99	446	42	1	.	.	.	.	.	.	.	489
1.00 - 1.49	47	61	3	.	.	.	.	.	.	.	111
1.50 - 1.99	5	58	13	.	.	.	.	.	.	.	76
2.00 - 2.49	.	15	13	5	.	.	.	.	.	.	33
2.50 - 2.99	.	.	3	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	3	3	1	5	.	.	.	.	12
3.50 - 3.99	.	.	.	.	1	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	1	.	.	.	.	1
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	4462	415	39	8	3	6	0	0	0	0	

MEAN HS(M) = 0.30 LARGEST HS(M) = 5.12 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 2890

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

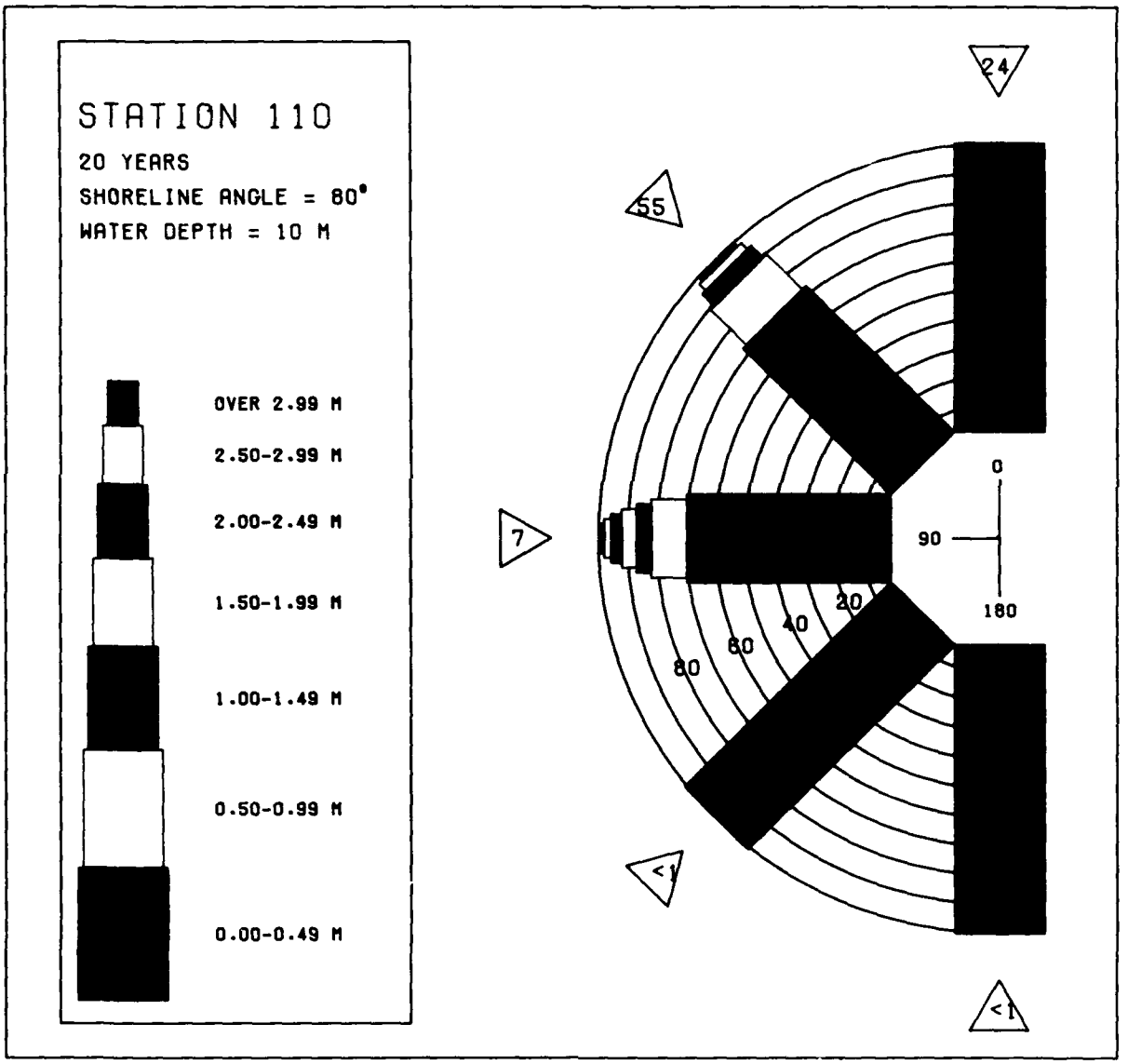
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2286	2120	969	465	524	361	101	8	1	.	6835
0.50 - 0.99	186	269	124	34	80	175	142	24	.	.	1034
1.00 - 1.49	68	155	63	19	14	16	17	4	.	.	356
1.50 - 1.99	10	107	49	14	9	9	2	.	.	.	200
2.00 - 2.49	.	35	44	15	3	3	1	.	.	.	101
2.50 - 2.99	.	3	31	8	1	.	1	.	.	.	44
3.00 - 3.49	.	.	4	3	1	2	.	.	.	.	10
3.50 - 3.99	.	.	1	1	1	1	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2550	2689	1285	559	633	567	264	36	1	0	

MEAN HS(M) = 0.33 LARGEST HS(M) = 5.33 MEAN TP(SEC)= 7.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 110 (36.95N/ 122.08W TO 36.96N/ 121.90W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.3
1957	0.6	0.7	0.5	0.4	0.4	0.1	0.1	0.1	0.3	0.5	0.3	0.6	0.4
1958	0.9	1.4	0.7	0.5	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.5	0.4
1959	1.0	1.0	0.3	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.5	0.3
1960	0.9	0.7	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.6	0.8	0.4
1961	0.8	0.5	0.6	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.7	0.4	0.4
1962	0.3	1.0	0.6	0.2	0.2	0.1	0.1	0.2	0.2	0.6	0.4	0.8	0.4
1963	0.5	1.3	0.6	0.6	0.2	0.2	0.1	0.1	0.2	0.5	0.6	0.4	0.4
1964	0.6	0.2	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.5	1.0	0.4
1965	0.8	0.3	0.4	0.6	0.2	0.3	0.2	0.1	0.1	0.2	0.8	0.7	0.4
1966	0.9	0.7	0.5	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.5	0.7	0.4
1967	1.0	0.3	0.6	0.4	0.2	0.2	0.1	0.1	0.2	0.3	0.4	0.7	0.4
1968	0.8	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	1.2	0.4
1969	1.0	1.0	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.3	0.3	1.0	0.4
1970	1.3	0.6	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.8	0.7	0.4
1971	0.6	0.3	0.5	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.6	0.7	0.4
1972	0.4	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.6	0.6	0.4
1973	1.0	0.9	0.5	0.3	0.4	0.3	0.3	0.3	0.2	0.4	0.8	0.8	0.5
1974	1.0	0.4	0.7	0.4	0.4	0.2	0.3	0.3	0.2	0.3	0.4	0.6	0.4
1975	0.3	0.7	0.6	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3
MEAN	0.8	0.7	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 110 (36.95N/ 122.08W TO 36.96N/ 121.90W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.4	2.7	0.7	1.2	0.7	0.5	0.3	0.3	0.4	1.9	0.5	0.9
1957	2.6	3.8	2.3	1.8	1.5	0.4	0.3	0.3	2.0	2.0	0.7	2.4
1958	2.1	3.1	3.2	2.1	0.3	0.5	0.3	0.3	0.4	1.3	0.8	2.0
1959	3.6	5.3	0.7	0.5	0.7	0.4	0.4	0.4	2.3	0.6	0.6	2.3
1960	3.4	2.7	1.0	1.5	0.6	0.2	0.2	0.4	0.2	1.3	2.5	2.6
1961	2.2	1.7	2.0	1.1	0.9	0.4	0.2	0.3	0.4	0.6	2.4	1.8
1962	2.1	3.3	4.0	0.9	1.1	0.4	0.2	0.4	0.4	3.8	1.4	2.7
1963	5.2	4.0	1.9	2.7	1.1	0.7	0.4	0.4	0.4	1.9	1.8	1.7
1964	2.7	0.5	1.2	1.0	1.2	0.7	0.6	0.6	0.4	2.2	1.4	3.3
1965	3.8	1.6	1.6	2.1	0.7	0.7	0.4	0.4	0.4	0.8	4.0	4.3
1966	2.6	2.4	1.8	0.5	0.4	0.5	0.4	0.4	0.6	0.4	2.1	2.8
1967	3.2	1.1	4.0	1.0	0.6	0.5	0.3	0.4	0.4	1.2	1.2	1.8
1968	2.6	2.1	2.7	0.6	0.6	0.6	0.5	0.7	0.6	1.3	1.4	3.3
1969	2.9	2.7	1.0	1.4	0.7	0.5	0.3	0.3	0.4	1.0	1.7	2.9
1970	3.6	1.8	1.8	0.7	0.6	0.4	0.3	0.3	0.4	1.2	2.2	1.7
1971	2.4	0.7	1.8	0.9	0.6	0.5	0.3	0.4	0.5	0.7	1.9	3.2
1972	1.2	1.2	1.1	1.9	0.6	0.6	0.5	0.6	0.5	1.0	2.4	2.8
1973	3.1	3.2	1.2	0.6	0.7	0.6	0.6	0.5	0.5	2.3	2.5	2.9
1974	3.8	2.5	2.9	1.3	0.7	0.5	0.8	0.6	0.3	0.8	2.8	3.2
1975	2.1	2.7	2.8	0.6	0.6	0.6	0.5	0.5	0.4	1.3	0.8	1.0

20 YR. STATISTICS FOR PACIFIC STATION 110 (36.95N/ 122.08W TO 36.96N/ 121.90W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.3
MEAN PEAK WAVE PERIOD	(SECONDS)	7.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	73.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021609

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5172	29	.	.	.	.	.	.	.	.	5201
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5172	29	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.25 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 3040

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	12695	6314	1454	234	66	10	25	3	.	.	20801
0.50 - 0.99	3785	11808	6889	3778	3141	1136	107	11	.	.	30655
1.00 - 1.49	266	3574	1841	990	2476	2717	821	15	.	.	12700
1.50 - 1.99	13	706	975	239	728	1341	1067	75	.	.	5144
2.00 - 2.49	.	51	143	136	362	590	354	95	.	.	1731
2.50 - 2.99	.	.	11	49	145	410	208	5	.	.	828
3.00 - 3.49	.	.	5	1	54	330	162	32	.	.	584
3.50 - 3.99	.	.	1	1	11	126	160	8	.	.	307
4.00 - 4.49	.	.	.	.	.	80	162	3	.	.	245
4.50 - 4.99	.	.	.	.	.	17	99	5	.	.	121
5.00 +	.	.	.	.	.	.	30	3	.	.	33
TOTAL	16759	22453	11319	5428	6983	6757	3195	255	0	0	

MEAN HS(M) = 0.87 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 42768

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	503	63	6	1	.	.	.	.	.	.	573
0.50 - 0.99	441	316	29	1	5	.	.	.	8	.	800
1.00 - 1.49	260	780	114	25	49	17	1	3	1	.	1250
1.50 - 1.99	63	894	385	56	97	71	70	11	3	.	1650
2.00 - 2.49	.	393	429	189	116	165	97	73	.	.	1462
2.50 - 2.99	.	54	374	193	97	42	56	46	.	.	862
3.00 - 3.49	.	3	128	68	42	47	25	13	.	.	326
3.50 - 3.99	.	.	13	44	59	49	23	8	3	.	199
4.00 - 4.49	.	.	13	6	15	70	23	3	.	.	130
4.50 - 4.99	.	.	.	6	3	35	29	.	.	.	73
5.00 +	.	.	.	.	.	11	18	.	.	.	29
TOTAL	1267	2503	1491	589	483	507	342	157	15	0	

MEAN HS(M) = 1.87 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 4320

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3853	318	1	.	.	.	.	.	.	.	4172
0.50 - 0.99	622	183	3	.	.	.	.	.	.	.	808
1.00 - 1.49	200	299	39	.	.	.	.	.	.	.	538
1.50 - 1.99	13	215	51	1	.	.	.	.	.	.	280
2.00 - 2.49	.	17	100	15	1	.	.	.	.	.	133
2.50 - 2.99	.	.	30	8	.	.	.	.	.	.	38
3.00 - 3.49	.	.	1	.	1	.	.	.	.	.	2
3.50 - 3.99	.	.	6	.	.	.	.	.	.	.	6
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4688	1032	231	24	2	0	0	0	0	0	

MEAN HS(M) = 0.46 LARGEST HS(M) = 3.76 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 3500

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

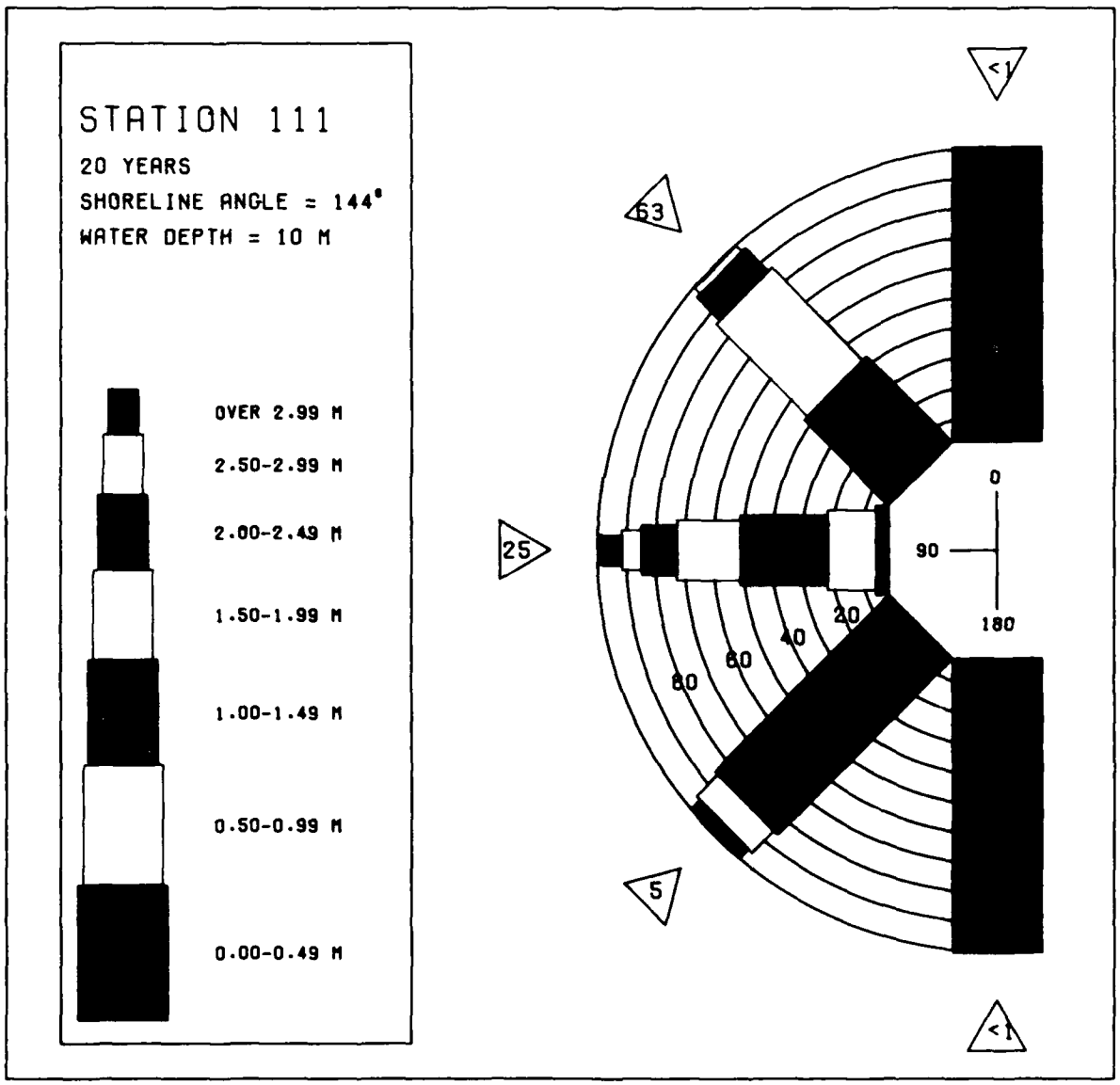
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2222	672	146	23	6	1	2	.	.	.	3072
0.50 - 0.99	484	1230	692	377	314	113	10	1	.	.	3221
1.00 - 1.49	72	465	199	101	252	273	82	1	.	.	1445
1.50 - 1.99	9	181	141	29	82	141	113	8	.	.	704
2.00 - 2.49	.	46	67	34	48	75	45	16	.	.	331
2.50 - 2.99	.	5	41	25	24	45	26	5	.	.	171
3.00 - 3.49	.	.	13	7	9	37	18	4	.	.	88
3.50 - 3.99	.	.	2	4	7	17	18	1	.	.	49
4.00 - 4.49	.	.	1	.	1	15	18	.	.	.	35
4.50 - 4.99	.	.	.	.	.	5	12	.	.	.	17
5.00 +	.	.	.	.	.	1	4	.	.	.	5
TOTAL	2787	2599	1302	600	743	723	348	36	0	0	

MEAN HS(M) = 0.81 LARGEST HS(M) = 6.40 MEAN TP(SEC)= 7.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 111 (36.96N/ 121.90W TO 36.85N/ 121.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.8	1.0	0.9	0.8	0.8	0.7	0.5	0.6	0.5	0.7	0.6	1.2	0.8
1957	1.0	1.3	1.2	0.7	0.9	0.5	0.4	0.5	0.7	1.0	0.8	1.1	0.8
1958	1.6	2.0	1.2	1.0	0.6	0.6	0.6	0.5	0.3	0.4	0.8	1.0	0.9
1959	1.3	1.3	0.7	0.6	0.8	0.6	0.5	0.5	0.8	0.8	0.4	0.9	0.8
1960	1.4	1.7	0.9	0.9	0.7	0.5	0.4	0.5	0.4	0.6	1.1	1.4	0.9
1961	1.5	1.3	1.3	0.7	0.8	0.5	0.4	0.4	0.5	0.5	0.9	0.8	0.8
1962	1.2	1.7	1.0	0.6	0.7	0.4	0.4	0.4	0.5	1.2	0.9	2.3	0.9
1963	1.1	2.9	1.0	1.1	0.7	0.7	0.5	0.5	0.6	0.9	1.1	1.2	1.0
1964	1.5	0.7	0.9	0.9	0.9	1.1	0.8	0.7	0.5	0.7	1.0	2.0	1.0
1965	1.6	0.5	0.8	1.0	0.6	0.9	0.6	0.5	0.5	0.7	1.1	1.0	0.8
1966	1.4	1.0	0.9	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.8	1.7	0.8
1967	1.8	0.8	1.2	1.0	0.6	0.6	0.5	0.5	0.6	0.8	0.6	1.4	0.9
1968	1.5	1.9	1.2	0.6	0.7	0.7	0.7	0.6	0.5	0.6	1.1	1.6	1.0
1969	1.4	1.5	0.7	0.9	0.7	0.7	0.6	0.4	0.6	0.6	0.6	1.8	0.9
1970	2.3	0.8	0.9	0.9	0.8	0.6	0.7	0.5	0.4	0.5	1.0	1.3	0.9
1971	1.2	1.3	1.2	1.0	0.8	0.8	0.6	0.7	0.6	0.6	1.1	1.2	0.9
1972	1.0	0.8	1.3	0.9	0.8	0.9	0.8	0.8	0.5	0.5	1.2	1.5	0.9
1973	1.5	1.4	1.4	0.9	1.0	0.8	0.9	0.9	0.7	0.7	1.4	1.4	1.1
1974	2.1	0.9	1.5	1.0	1.2	0.8	0.9	0.8	0.6	0.7	0.7	0.9	1.0
1975	0.7	1.2	1.2	0.8	0.8	0.7	0.8	0.6	0.4	0.8	0.7	0.7	0.8
MEAN	1.4	1.3	1.1	0.8	0.8	0.7	0.6	0.6	0.5	0.7	0.9	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 111 (36.96N/ 121.90W TO 36.85N/ 121.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	3.3	2.0	1.8	1.4	1.3	1.0	1.1	1.1	2.8	2.3	2.3
1957	2.5	6.3	3.0	2.2	2.1	1.1	0.8	0.8	2.2	2.5	2.1	2.8
1958	4.7	4.6	3.6	3.1	1.0	1.4	0.9	0.9	1.0	1.1	2.1	4.2
1959	3.3	4.2	2.4	2.4	2.0	1.2	1.2	1.1	2.6	2.8	1.9	2.6
1960	4.6	5.1	4.7	1.8	1.4	1.1	0.8	1.2	0.7	1.9	2.7	3.9
1961	4.9	3.5	3.2	1.8	1.5	1.2	0.8	0.8	1.3	1.6	2.5	2.0
1962	2.9	4.1	3.8	1.8	1.7	1.2	0.8	1.1	1.1	4.7	2.4	4.9
1963	5.8	5.7	2.1	2.7	1.6	1.8	1.1	1.1	1.1	2.5	2.7	3.7
1964	4.1	3.3	2.2	2.1	2.1	2.1	1.7	1.7	1.4	2.0	2.5	4.6
1965	4.3	2.0	2.6	2.2	2.1	2.0	1.2	0.8	1.1	2.0	4.1	4.6
1966	3.5	3.7	1.8	1.5	1.4	1.1	1.2	1.1	1.5	1.2	2.4	3.5
1967	3.9	2.3	3.7	2.0	1.5	1.5	0.9	1.2	1.3	1.9	1.7	3.1
1968	4.3	4.5	3.3	1.8	1.7	1.7	1.3	1.5	1.7	1.9	3.0	3.7
1969	4.2	3.0	2.0	2.1	1.6	1.4	1.2	0.9	1.3	1.8	2.1	6.0
1970	5.7	2.7	2.4	2.1	1.8	1.1	1.0	0.9	1.3	1.6	2.6	3.2
1971	3.7	3.1	2.8	2.1	1.8	1.7	1.1	1.2	1.5	1.7	2.1	2.7
1972	4.4	3.2	3.5	2.8	1.8	1.8	1.4	1.6	1.1	1.0	2.3	3.8
1973	4.5	3.7	2.6	1.8	1.9	1.8	1.8	1.5	1.4	2.7	3.5	4.6
1974	6.4	2.7	4.6	4.3	1.9	1.6	1.7	1.6	1.5	2.4	2.7	3.3
1975	2.1	2.9	2.6	1.4	1.7	1.8	1.5	1.4	1.2	2.1	1.9	2.9

20 YR. STATISTICS FOR PACIFIC STATION111 (36.96N/ 121.90W TO 36.85N/ 121.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	7.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	6.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011609

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	183	13	18	.	1	.	.	.	.	.	215
0.50 - 0.99	648	1582	1134	59	17	1	.	.	.	.	3441
1.00 - 1.49	879	3293	4048	302	29	22	.	.	.	.	8563
1.50 - 1.99	400	2039	3050	758	162	23	10	.	.	.	6442
2.00 - 2.49	3	333	571	627	246	37	.	.	.	.	1817
2.50 - 2.99	.	27	90	301	145	42	8	.	.	.	613
3.00 - 3.49	.	5	.	54	111	59	.	.	.	.	229
3.50 - 3.99	.	.	.	8	82	8	3	.	.	.	101
4.00 - 4.49	.	.	.	.	30	1	3	.	.	.	34
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2113	7282	8911	2109	822	194	24	0	0	0	

MEAN HS(M) = 1.47 LARGEST HS(M) = 4.39 MEAN TP(SEC) = 8.1 NUMBER OF CASES = 12553

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	29	68	3	1	.	.	.	.	.	118
0.50 - 0.99	32	792	2157	819	330	136	32	15	6	.	4319
1.00 - 1.49	53	884	3600	3667	2688	992	150	23	3	.	12060
1.50 - 1.99	51	751	1442	3742	5029	2458	530	49	29	.	14081
2.00 - 2.49	15	819	651	1587	5292	4336	1199	104	6	.	14009
2.50 - 2.99	.	321	477	444	2838	5126	1644	184	10	.	11044
3.00 - 3.49	.	27	227	124	1021	4395	1909	210	15	.	7928
3.50 - 3.99	.	3	18	23	318	2693	2310	536	11	.	5612
4.00 - 4.49	.	.	5	6	44	1115	2157	200	8	.	3535
4.50 - 4.99	.	.	1	1	3	311	1798	225	3	.	2342
5.00 +	.	.	.	.	1	44	1457	1033	20	.	2555
TOTAL	168	3626	8646	10416	17565	21606	13186	2279	111	0	

MEAN HS(M) = 2.48 LARGEST HS(M) = 7.14 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 45377

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	1	.	.	.	.	.	.	.	.	7
0.50 - 0.99	1	3	1	.	.	.	.	.	.	.	5
1.00 - 1.49	5	56	10	5	.	.	.	.	.	.	76
1.50 - 1.99	11	47	37	8	15	1	.	.	.	.	119
2.00 - 2.49	1	65	59	20	23	5	.	.	.	.	173
2.50 - 2.99	.	51	58	29	8	11	.	.	.	.	157
3.00 - 3.49	.	.	63	30	17	.	.	.	.	.	110
3.50 - 3.99	.	.	37	13	10	1	.	.	.	.	61
4.00 - 4.49	.	.	8	15	.	10	.	.	.	.	33
4.50 - 4.99	.	.	.	.	.	10	.	.	.	.	10
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	24	223	273	120	73	39	0	0	0	0	

MEAN HS(M) = 2.54 LARGEST HS(M) = 5.17 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 451

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.24 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 5

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

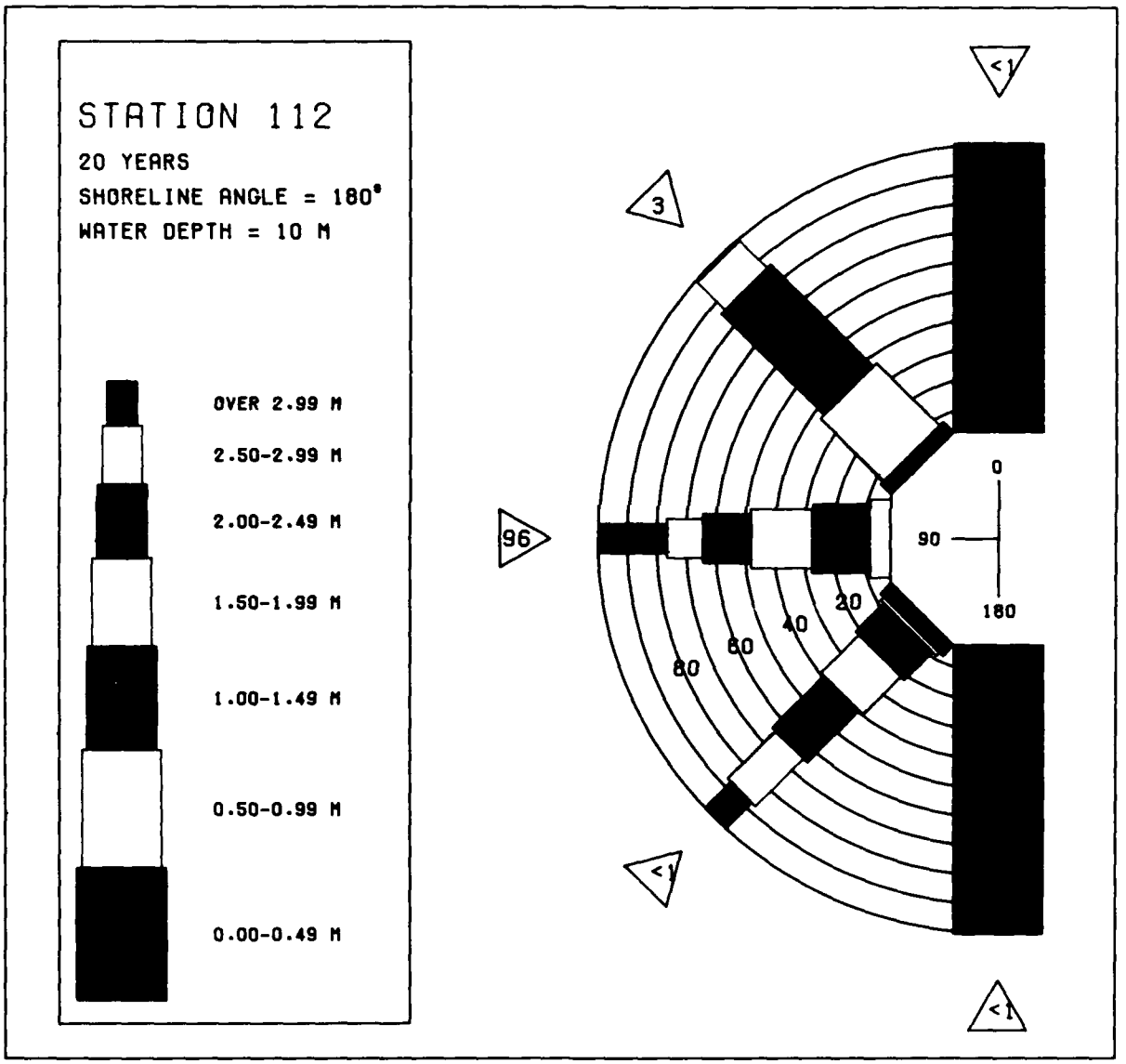
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 112 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	21	4	8	.	.	.	.	.	.	.	33
0.50 - 0.99	68	237	329	87	34	13	3	1	.	.	772
1.00 - 1.49	93	422	765	397	271	101	15	2	.	.	2066
1.50 - 1.99	46	283	453	450	520	248	54	4	2	.	2060
2.00 - 2.49	2	121	128	223	556	437	119	10	.	.	1596
2.50 - 2.99	.	40	62	77	299	518	165	18	1	.	1180
3.00 - 3.49	.	3	29	21	114	445	190	21	1	.	824
3.50 - 3.99	.	.	5	4	41	270	231	23	1	.	575
4.00 - 4.49	.	.	1	2	7	112	216	20	.	.	358
4.50 - 4.99	.	.	.	.	.	32	179	22	.	.	233
5.00 +	.	.	.	.	.	4	145	103	2	.	254
TOTAL	230	1110	1780	1261	1842	2180	1317	224	7	0	

MEAN HS(M) = 2.26 LARGEST HS(M) = 7.14 MEAN TP(SEC)= 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 112 (36.85N/ 121.81W TO 36.73N/ 121.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.0	2.7	2.0	1.8	2.0	1.2	1.5	1.2	1.6	2.2	2.5	2.0
1957	2.6	3.0	2.7	2.3	1.8	1.7	1.2	1.1	1.6	1.9	2.7	3.1	2.1
1958	3.9	3.7	2.5	3.0	1.6	1.5	1.4	1.2	1.3	1.7	2.7	3.5	2.3
1959	3.2	3.4	2.7	2.3	1.8	1.7	1.3	1.2	1.7	2.2	2.6	3.2	2.3
1960	3.2	3.8	2.8	2.3	1.8	1.7	1.3	1.2	1.1	1.7	2.9	3.2	2.1
1961	3.6	3.3	2.9	1.9	1.6	1.6	1.3	0.8	1.2	1.9	2.3	2.9	2.1
1962	2.4	3.0	2.6	2.1	1.4	1.0	1.3	1.4	1.4	2.3	3.5	3.2	2.1
1963	3.0	3.6	2.8	1.9	1.6	1.7	1.2	0.9	1.5	2.5	2.9	3.1	2.2
1964	4.1	2.8	3.0	2.5	1.6	1.6	1.9	1.5	1.5	1.8	2.8	3.3	2.4
1965	3.0	3.0	2.6	2.2	2.0	1.9	1.2	1.1	1.3	2.0	2.5	3.5	2.2
1966	3.6	2.9	2.7	2.1	1.8	1.6	1.4	1.3	1.6	1.9	2.3	3.5	2.2
1967	3.3	3.5	2.2	1.9	1.4	1.3	1.2	1.0	2.0	2.6	2.7	3.3	2.2
1968	2.8	3.1	3.0	2.3	1.5	1.5	1.6	1.3	1.3	2.1	3.4	3.2	2.2
1969	2.5	3.8	3.2	2.1	1.8	1.7	1.4	1.2	1.3	2.6	2.7	3.0	2.2
1970	3.7	4.4	3.7	2.9	1.8	1.5	1.4	1.2	1.4	1.8	2.8	3.4	2.5
1971	3.2	2.7	2.8	2.7	1.8	1.8	1.3	1.4	1.7	1.9	2.5	3.0	2.2
1972	3.5	3.2	2.6	2.2	2.0	1.8	1.6	1.5	1.1	1.6	3.6	3.0	2.3
1973	4.0	4.1	3.4	2.7	2.1	2.1	1.9	1.7	1.7	1.9	2.8	3.9	2.7
1974	3.1	3.1	2.9	2.8	2.6	1.9	1.7	1.4	1.4	2.0	2.9	3.7	2.5
1975	2.5	3.0	2.7	1.8	1.8	1.4	1.5	1.1	0.8	2.0	2.4	2.8	2.0
MEAN	3.2	3.3	2.8	2.4	1.8	1.6	1.4	1.3	1.4	2.0	2.8	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 112 (36.85N/ 121.81W TO 36.73N/ 121.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.1	4.7	4.2	3.8	2.9	3.2	2.0	2.5	2.7	2.8	3.7	3.7
1957	4.3	7.1	4.9	4.3	3.6	2.7	2.3	1.7	3.2	4.3	6.1	5.5
1958	6.0	6.0	5.4	6.6	3.6	2.4	2.4	2.3	2.1	3.9	6.0	5.8
1959	5.5	5.4	4.8	4.4	3.0	2.4	2.4	2.3	2.6	4.7	6.1	5.5
1960	6.2	6.0	3.8	3.9	2.4	2.2	1.8	1.9	1.6	5.2	5.3	4.9
1961	6.1	5.2	5.3	3.5	2.7	2.8	1.7	1.4	2.0	3.9	4.0	4.6
1962	4.1	4.6	4.2	3.9	2.3	2.0	2.0	2.0	2.9	4.3	5.9	5.6
1963	5.8	5.7	5.5	3.5	2.8	2.7	2.1	1.9	2.5	5.2	4.3	6.0
1964	6.8	3.9	4.3	4.7	3.4	3.0	2.2	2.6	2.6	4.2	4.8	5.9
1965	4.6	6.0	3.9	3.8	3.5	3.2	2.1	1.9	2.3	4.6	4.4	5.3
1966	5.4	4.5	5.2	4.0	2.9	2.4	2.2	2.2	3.0	3.4	4.0	6.0
1967	5.6	6.0	3.6	3.1	2.8	2.5	1.8	2.1	3.4	5.5	4.3	6.0
1968	4.2	5.0	4.8	5.3	2.7	2.6	3.0	2.3	3.5	4.2	5.8	5.8
1969	5.1	6.0	5.6	5.5	3.1	2.6	2.4	1.8	2.8	4.4	5.1	6.6
1970	6.1	6.2	6.1	5.8	3.2	2.7	2.3	2.1	2.3	4.1	5.4	6.0
1971	6.0	4.2	5.3	5.0	3.2	2.7	2.1	2.9	3.0	3.3	5.4	6.0
1972	6.0	6.0	4.6	3.7	3.3	2.6	2.3	2.4	2.0	2.7	6.0	6.0
1973	6.4	6.2	5.2	5.0	3.4	4.1	3.0	2.5	3.1	4.0	5.0	6.0
1974	6.3	4.9	6.5	5.2	3.9	3.1	2.9	2.5	2.5	5.4	5.6	5.6
1975	5.2	5.8	4.2	3.0	4.3	3.0	2.4	2.2	1.5	4.1	3.4	5.2

20 YR. STATISTICS FOR PACIFIC STATION112 (36.85N/ 121.81W TO 36.73N/ 121.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022418

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.19 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 2

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	9	8	.	1	.	.	.	.	.	23
0.50 - 0.99	195	1023	1740	432	177	90	34	11	1	.	3703
1.00 - 1.49	1368	2450	5191	2885	1942	657	123	30	6	.	14652
1.50 - 1.99	2279	3538	3788	3598	4252	2303	480	44	20	.	20302
2.00 - 2.49	172	2611	1297	2173	4520	3774	1112	97	13	.	15869
2.50 - 2.99	3	616	783	759	3033	4719	1663	177	25	.	11778
3.00 - 3.49	.	118	321	208	1178	4265	1906	229	23	.	8248
3.50 - 3.99	.	11	65	65	321	2486	2238	539	10	.	5435
4.00 - 4.49	.	.	8	5	59	990	2091	189	3	.	3345
4.50 - 4.99	.	.	3	1	.	210	1649	249	3	.	2115
5.00 +	.	.	.	.	.	34	1324	1018	20	.	2396
TOTAL	4025	10373	13204	10126	15583	19528	12620	2283	124	0	

MEAN HS(M) = 2.39 LARGEST HS(M) = 6.61 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 51373

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	18	.	.	.	.	.	.	.	.	28
0.50 - 0.99	56	356	547	95	47	6	.	.	.	.	1106
1.00 - 1.49	66	592	893	429	349	68	.	.	.	.	2397
1.50 - 1.99	130	373	576	556	621	311	39	.	.	.	2606
2.00 - 2.49	30	583	249	306	814	681	58	.	.	.	2721
2.50 - 2.99	.	297	111	90	354	645	140	1	.	.	1638
3.00 - 3.49	.	77	65	13	148	415	136	3	.	.	857
3.50 - 3.99	.	.	15	5	8	209	118	.	.	.	355
4.00 - 4.49	.	.	1	1	1	53	109	.	.	.	165
4.50 - 4.99	.	.	.	.	5	11	25	.	.	.	41
5.00 +							10				10
TOTAL	292	2277	2475	1495	2347	2395	635	4	0	0	

MEAN HS(M) = 2.02 LARGEST HS(M) = 5.54 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 6981

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	1	.	.	.	.	.	.	.	7
0.50 - 0.99	3	22	25	.	.	.	.	.	.	.	50
1.00 - 1.49	10	30	8	.	.	.	.	.	.	.	48
1.50 - 1.99	1	17	3	.	.	.	.	.	.	.	21
2.00 - 2.49	.	.	3	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	14	75	40	0	0	0	0	0	0	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.14 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 79

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

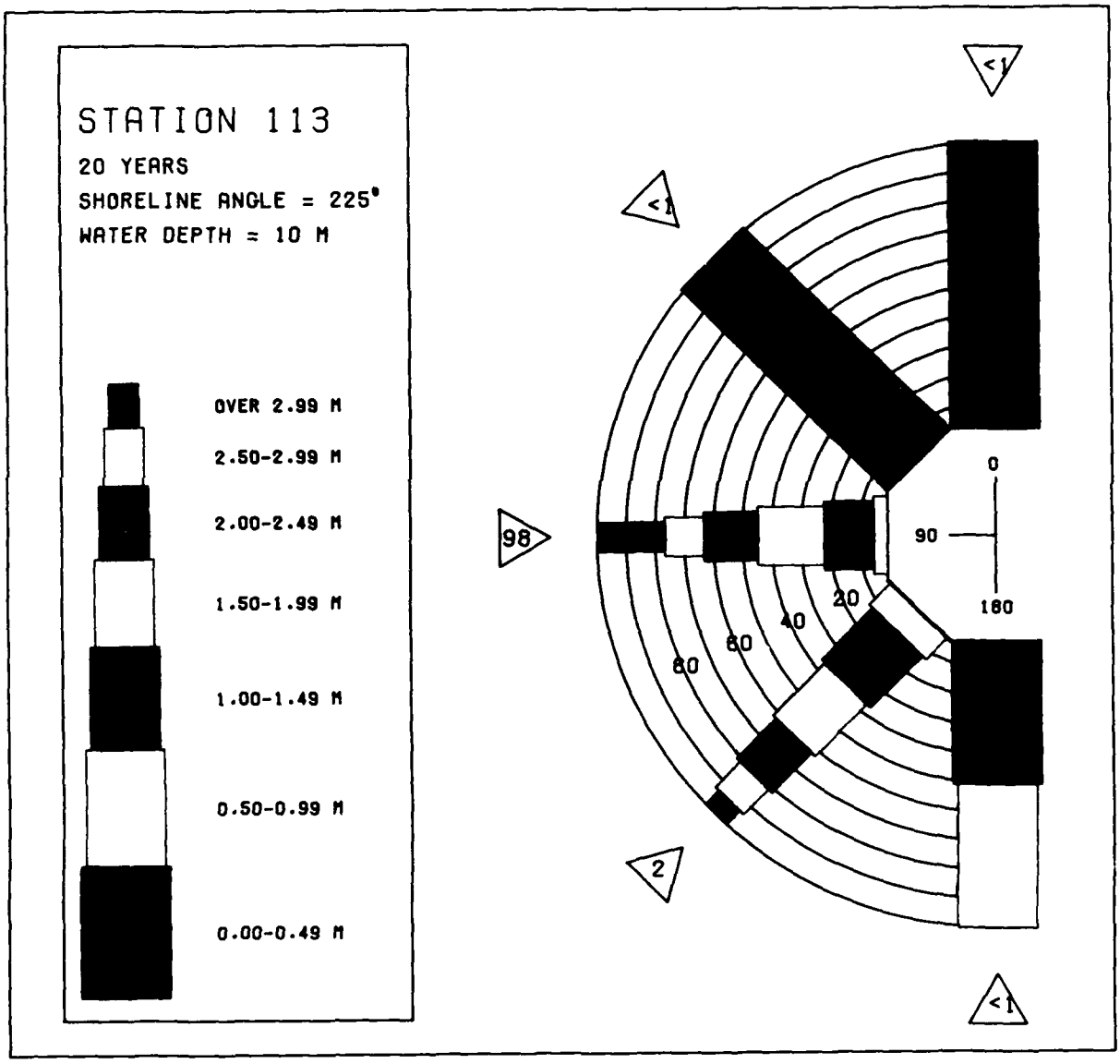
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2	1	2	.	.	.	.	.	.	.	5
0.50 - 0.99	25	140	231	52	22	9	3	1	.	.	483
1.00 - 1.49	144	307	609	331	229	72	12	3	.	.	1707
1.50 - 1.99	241	392	436	415	487	261	52	4	2	.	2290
2.00 - 2.49	20	319	155	247	543	445	117	9	1	.	1856
2.50 - 2.99	.	91	89	85	338	536	180	17	2	.	1338
3.00 - 3.49	.	19	38	22	132	468	204	23	2	.	908
3.50 - 3.99	.	1	8	7	33	269	235	23	1	.	577
4.00 - 4.49	.	.	1	.	6	104	220	18	.	.	349
4.50 - 4.99	.	.	.	.	.	22	167	24	.	.	213
5.00 +	.	.	.	.	.	3	133	101	2	.	239
TOTAL	432	1270	1569	1159	1790	2189	1323	223	10	0	

MEAN HS(M) = 2.34 LARGEST HS(M) = 6.61 MEAN TP(SEC)= 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.7	3.0	2.4	2.1	1.9	2.2	1.4	1.7	1.3	1.7	2.2	2.4	2.1
1957	2.6	2.9	2.7	2.4	1.9	1.8	1.5	1.4	1.6	1.9	2.8	3.1	2.2
1958	3.8	3.4	2.5	3.1	1.7	1.6	1.5	1.4	1.5	1.8	2.8	3.4	2.4
1959	3.1	3.4	2.8	2.4	2.0	1.9	1.5	1.4	1.8	2.3	2.6	3.2	2.4
1960	3.2	3.7	1.9	2.4	2.0	1.5	1.4	1.4	1.2	1.8	2.9	3.2	2.2
1961	3.7	3.2	2.7	2.1	1.7	1.7	1.3	0.9	1.3	2.1	2.4	2.9	2.2
1962	3.4	2.8	2.7	2.3	1.7	1.4	1.6	1.6	1.6	2.3	3.6	3.0	2.2
1963	2.9	3.0	2.9	1.9	1.8	2.0	1.5	1.3	1.6	2.5	3.0	3.1	2.3
1964	4.0	2.9	3.1	2.7	1.8	1.7	2.1	1.7	1.7	1.8	2.8	3.1	2.5
1965	2.8	3.1	2.7	2.2	2.3	2.1	1.4	1.3	1.4	2.1	2.4	3.5	2.3
1966	3.5	2.9	2.8	2.3	2.0	1.8	1.6	1.5	1.7	1.9	2.2	3.3	2.3
1967	3.2	3.5	2.2	2.1	1.7	1.5	1.5	1.2	2.0	2.7	2.8	3.3	2.3
1968	2.6	2.9	3.0	2.6	1.8	1.8	1.8	1.5	1.4	2.2	3.4	3.1	2.3
1969	5.4	3.8	3.2	3.3	2.0	1.9	1.6	1.5	1.4	2.6	2.8	4.9	2.6
1970	3.4	4.4	2.7	3.1	2.0	1.7	1.6	1.5	1.6	1.9	2.8	3.4	2.6
1971	3.1	2.7	2.9	2.9	2.0	2.0	1.6	1.6	1.8	2.0	2.6	3.1	2.4
1972	3.5	3.2	2.6	2.3	2.1	2.0	1.8	1.6	1.3	1.6	3.7	2.9	2.4
1973	3.8	4.0	3.5	2.8	2.3	2.3	2.0	1.9	1.8	2.0	2.8	3.8	2.8
1974	2.8	3.2	2.8	3.0	2.8	2.1	1.8	1.6	1.4	2.2	3.0	3.6	2.5
1975	2.5	3.0	2.8	2.0	1.9	1.6	1.6	1.2	0.8	2.1	2.5	2.8	2.1
MEAN	3.1	3.2	2.8	2.5	2.0	1.8	1.6	1.5	1.5	2.1	2.8	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.2	4.7	4.3	3.9	3.3	3.3	2.4	2.9	2.8	2.9	3.6	3.6
1957	4.4	6.4	4.9	4.5	3.7	3.2	2.7	2.2	2.2	4.3	6.1	5.3
1958	6.0	6.0	5.5	6.5	5.7	3.8	5.4	2.5	2.3	4.0	6.0	5.8
1959	5.5	5.4	4.9	4.4	3.4	2.8	2.7	2.5	3.0	4.8	6.1	5.7
1960	6.0	6.1	3.9	4.1	2.8	2.6	2.2	2.2	1.8	5.3	5.5	4.8
1961	6.1	5.0	5.2	3.5	3.3	3.1	2.1	1.5	2.6	4.2	4.0	4.6
1962	4.0	4.2	4.3	4.0	2.7	2.5	2.5	2.2	3.0	3.5	5.9	5.1
1963	5.1	4.2	5.6	3.9	2.9	3.2	2.4	2.2	2.5	5.2	4.4	6.0
1964	6.5	4.0	4.6	4.8	5.7	3.2	3.3	2.8	2.8	4.3	4.9	5.5
1965	4.5	6.3	3.8	3.9	3.8	3.5	2.7	2.1	2.6	4.9	4.0	5.5
1966	5.2	4.6	5.4	4.0	3.2	2.7	2.5	2.3	2.1	3.4	4.1	6.0
1967	5.3	6.0	3.6	3.3	3.2	2.7	2.1	2.4	2.5	5.5	4.3	6.0
1968	4.0	4.8	4.9	5.6	4.4	3.0	3.2	2.5	3.5	4.2	5.9	5.8
1969	5.0	6.0	5.9	5.6	3.3	2.9	2.7	2.4	2.9	4.6	5.3	6.6
1970	6.0	6.1	6.2	6.1	3.3	3.0	2.5	2.5	2.8	4.2	5.4	6.0
1971	6.0	4.2	5.2	5.2	3.8	2.9	2.6	3.1	2.2	3.7	5.4	6.0
1972	6.0	5.9	4.6	4.1	3.5	2.9	2.7	2.6	2.2	2.8	6.0	6.1
1973	6.2	6.1	5.7	5.3	3.6	4.2	3.2	2.6	2.3	4.0	5.0	6.0
1974	4.9	4.9	6.4	5.0	4.1	3.5	3.1	2.7	2.6	5.4	3.7	5.6
1975	5.2	5.9	4.4	3.2	4.4	3.3	2.5	2.4	1.5	4.4	3.6	5.1

20 YR. STATISTICS FOR PACIFIC STATION113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	97.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69122500

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	.	.	.	.	.	.	.	.	.	13
0.50 - 0.99	308	25	.	.	.	.	.	.	.	.	333
1.00 - 1.49	1603	641	.	.	.	.	.	.	.	.	2244
1.50 - 1.99	550	997	.	.	.	.	.	.	.	.	1547
2.00 - 2.49	6	138	.	.	.	.	.	.	.	.	144
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	2480	1806	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.43 LARGEST HS(M) = 2.76 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 2508

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	20	58	1	1	.	.	.	.	.	95
0.50 - 0.99	159	1813	3042	787	400	130	32	10	.	.	6373
1.00 - 1.49	525	3196	6673	3898	2760	1026	114	8	.	.	18200
1.50 - 1.99	970	3143	3504	3865	5102	2506	335	1	1	.	19427
2.00 - 2.49	41	1793	1208	1815	4662	4163	609	.	.	.	14291
2.50 - 2.99	.	496	597	453	2125	4442	1004	1	.	.	9118
3.00 - 3.49	.	41	196	130	684	3393	1245	.	.	.	5689
3.50 - 3.99	.	6	18	6	220	1697	1651	.	.	.	3588
4.00 - 4.49	.	.	8	3	29	484	1430	.	.	.	1954
4.50 - 4.99	.	.	.	.	1	106	927	.	.	.	1034
5.00 +						6	525				531
TOTAL	1710	10508	15304	10958	15984	17943	7872	20	1	0	

MEAN HS(M) = 2.08 LARGEST HS(M) = 6.83 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 46944

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	13	54	39	11	3	1	3	6	.	130
1.00 - 1.49	6	58	131	95	167	78	56	15	1	.	607
1.50 - 1.99	34	83	140	152	349	373	253	61	27	.	1472
2.00 - 2.49	10	92	118	107	902	869	543	124	8	.	2673
2.50 - 2.99	.	66	95	140	321	869	963	191	11	.	2682
3.00 - 3.49	.	20	119	65	135	643	915	229	15	.	2141
3.50 - 3.99	.	.	58	37	109	350	819	254	3	.	1630
4.00 - 4.49	.	.	22	27	25	103	752	239	5	.	1263
4.50 - 4.99	.	.	.	6	1	116	460	246	8	.	836
5.00 +				1	1	18	254	862	13	.	1149
TOTAL	50	361	734	669	1720	3512	5222	2224	97	0	

MEAN HS(M) = 3.14 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 13.2 NUMBER OF CASES = 8549

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	10	3	.	.	.	.	.	.	13
0.50 - 0.99	5	30	3	.	.	.	.	.	.	.	38
1.00 - 1.49	15	29	11	.	.	.	.	.	.	.	55
1.50 - 1.99	3	63	35	1	10	.	.	.	.	.	112
2.00 - 2.49	.	77	61	22	8	.	.	.	.	.	168
2.50 - 2.99	.	22	87	34	3	3	.	.	.	.	149
3.00 - 3.49	.	5	92	29	11	6	.	.	.	.	143
3.50 - 3.99	.	.	10	13	11	3	.	.	.	.	37
4.00 - 4.49	.	.	1	.	3	3	.	.	.	.	7
4.50 - 4.99	.	.	.	.	.	5	.	.	.	.	5
5.00 +											
TOTAL	23	226	310	102	46	20	0	0	0	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 5.78 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 434

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	8	.	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.68 LARGEST HS(M) = 1.80 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 5

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

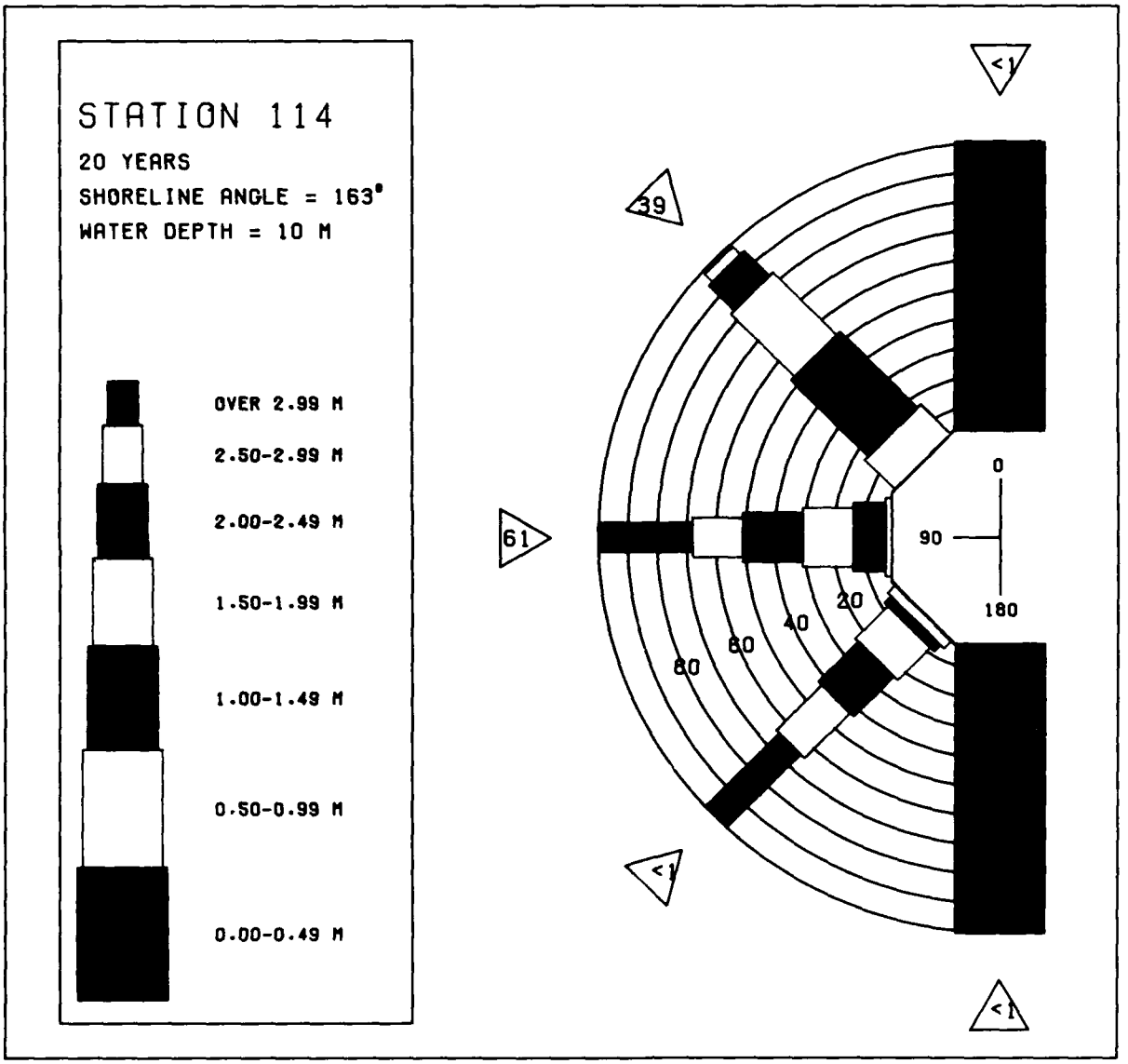
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 114 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	2	2	5								9
0.50 - 0.99	46	185	310	82	41	13	3	1	.	.	681
1.00 - 1.49	214	392	680	399	292	110	17	2	.	.	2106
1.50 - 1.99	157	425	365	401	545	287	58	6	2	.	2246
2.00 - 2.49	6	208	136	192	527	503	135	12	.	.	1719
2.50 - 2.99	.	67	75	61	245	531	196	19	1	.	1195
3.00 - 3.49	.	8	40	22	82	404	216	22	1	.	795
3.50 - 3.99	.	1	16	7	34	204	247	25	.	.	534
4.00 - 4.49	.	.	4	4	6	68	218	23	.	.	323
4.50 - 4.99	.	.	.	.	.	22	138	24	.	.	184
5.00 +	.	.	.	.	.	3	78	86	1	.	168
TOTAL	425	1288	1631	1168	1772	2145	1306	220	5	0	

MEAN HS(M) = 2.21 LARGEST HS(M) = 7.15 MEAN TP(SEC)= 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 114 (36.58N/ 121.96W TO 36.45N/ 121.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	2.9	2.2	1.9	1.7	2.0	1.3	1.5	1.2	1.6	2.1	2.4	2.0
1957	2.5	2.8	2.6	2.3	1.8	1.7	1.3	1.3	1.6	1.9	2.5	2.9	2.1
1958	3.8	3.7	2.5	2.9	1.6	1.5	1.4	1.2	1.4	1.6	2.6	3.3	2.3
1959	3.1	3.3	2.6	2.2	1.9	1.7	1.3	1.3	1.7	2.2	2.4	3.0	2.2
1960	3.1	3.7	1.8	2.2	1.8	1.4	1.3	1.3	1.1	1.7	2.8	3.1	2.1
1961	3.7	3.1	2.6	1.9	1.6	1.6	1.2	0.9	1.2	1.9	2.2	2.7	2.1
1962	2.3	2.9	2.5	2.0	1.5	1.2	1.4	1.4	1.4	2.2	3.3	3.1	2.1
1963	2.9	3.6	2.7	1.9	1.7	1.8	1.3	1.1	1.5	2.4	2.8	3.0	2.2
1964	3.9	2.7	2.9	2.4	1.7	1.7	1.9	1.5	1.5	1.7	2.6	3.2	2.3
1965	2.9	2.9	2.5	2.1	2.0	1.9	1.3	1.2	1.3	2.0	2.5	3.4	2.2
1966	3.4	2.8	2.6	2.1	1.8	1.6	1.5	1.4	1.5	1.7	2.2	3.3	2.2
1967	2.2	3.2	2.2	2.3	1.5	1.4	1.3	1.1	1.2	2.5	2.6	3.1	2.1
1968	2.7	3.0	2.9	2.3	1.6	1.6	1.6	1.3	1.3	2.0	2.2	3.1	2.2
1969	2.5	3.6	3.0	3.0	1.8	1.7	1.4	1.3	1.3	2.4	2.5	4.8	2.4
1970	3.7	4.2	3.5	2.8	1.8	1.6	1.5	1.3	1.4	1.7	2.7	3.2	2.4
1971	3.0	2.6	2.7	2.7	1.8	1.8	1.4	1.5	1.6	1.8	2.4	2.9	2.2
1972	3.3	3.0	2.5	2.1	2.0	1.8	1.6	1.5	1.1	1.5	3.4	2.9	2.2
1973	3.8	3.9	3.2	2.6	2.1	2.1	1.9	1.8	1.7	1.9	2.8	3.7	2.6
1974	3.0	2.9	2.8	2.7	2.6	1.9	1.7	1.5	1.3	2.0	2.7	3.5	2.4
1975	2.3	2.9	2.7	1.8	1.8	1.4	1.5	1.1	0.8	1.9	2.2	2.6	1.9
MEAN	3.1	3.2	2.6	2.3	1.8	1.7	1.5	1.3	1.4	1.9	2.6	3.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 114 (36.58N/ 121.96W TO 36.45N/ 121.93W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.7	4.5	4.0	3.6	2.8	3.0	2.1	2.5	2.5	2.9	3.4	3.5
1957	4.0	7.1	4.5	4.1	3.5	2.8	2.3	1.9	2.9	3.9	6.0	5.2
1958	6.0	5.9	5.0	6.6	2.5	2.5	2.2	2.4	2.0	3.7	6.0	5.4
1959	5.1	5.3	4.5	4.1	3.0	2.5	2.5	2.3	2.7	4.3	5.9	5.3
1960	6.2	5.9	3.7	3.7	2.5	2.3	1.9	2.0	1.6	4.8	4.9	4.6
1961	6.1	4.9	5.0	3.3	2.8	2.8	1.8	1.4	2.2	3.6	3.7	4.3
1962	3.8	4.7	3.8	3.7	2.4	2.1	2.1	2.0	2.7	4.6	5.6	5.4
1963	6.0	5.9	5.0	3.4	2.7	2.8	2.1	2.0	2.3	4.9	4.1	6.0
1964	6.9	3.7	4.1	4.3	3.4	3.0	3.1	2.6	2.5	3.9	4.4	5.6
1965	4.5	5.6	3.7	3.7	3.5	3.2	2.2	1.9	2.2	4.5	4.5	4.9
1966	5.4	4.1	4.9	3.7	2.9	2.5	2.2	2.1	2.8	3.2	3.7	5.8
1967	5.4	5.9	3.7	3.1	2.8	2.5	1.8	2.2	3.2	5.0	3.9	5.5
1968	4.5	4.9	4.5	5.0	2.8	2.7	2.9	2.4	3.2	3.9	5.4	5.4
1969	4.8	5.6	5.3	5.1	3.0	2.5	2.5	2.0	2.6	4.2	4.7	6.4
1970	6.0	6.1	6.1	5.5	3.2	2.5	2.3	2.2	2.4	3.8	5.0	5.5
1971	5.7	4.0	5.0	4.9	3.1	2.7	2.2	2.5	2.8	3.2	5.1	6.0
1972	6.0	5.6	4.3	3.6	3.2	2.6	2.5	2.4	2.0	2.6	5.5	6.1
1973	6.2	6.1	5.2	4.8	3.4	3.9	2.9	2.4	3.0	3.7	4.9	6.0
1974	6.4	4.6	6.2	5.0	3.7	3.1	2.9	2.6	2.4	5.0	5.1	5.7
1975	4.8	5.4	4.1	2.9	4.0	3.0	2.4	2.2	1.5	3.9	3.3	4.8

20 YR. STATISTICS FOR PACIFIC STATION114 (36.58N/ 121.96W TO 36.45N/ 121.93W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022406

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	142	1	.	.	.	.	.	.	.	.	143
1.00 - 1.49	616	78	.	.	.	.	.	.	.	.	694
1.50 - 1.99	106	34	.	.	.	.	.	.	.	.	140
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	881	113	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.24 LARGEST HS(M) = 1.93 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 582

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	8	35	1	.	.	.	.	.	.	59
0.50 - 0.99	227	1593	2500	557	172	27	13	1	.	.	5090
1.00 - 1.49	1165	3389	6113	3114	1500	225	23	1	.	.	15550
1.50 - 1.99	1718	4005	3844	3591	3555	497	44	.	.	.	17254
2.00 - 2.49	77	2334	1281	1923	3986	1276	11	.	.	.	10888
2.50 - 2.99	.	627	658	597	2231	1805	11	.	.	.	5929
3.00 - 3.49	.	85	256	128	785	1517	6	.	.	.	2777
3.50 - 3.99	.	11	35	29	254	850	11	.	.	.	1190
4.00 - 4.49	.	.	10	3	44	333	5	.	.	.	395
4.50 - 4.99	.	.	.	.	.	75	.	.	.	.	75
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3222	12052	14732	9942	12528	6605	124	2	0	0	

MEAN HS(M) = 1.85 LARGEST HS(M) = 4.99 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 34621

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	35	177	94	107	77	18	11	5	.	524
1.00 - 1.49	15	71	325	456	965	610	119	25	3	.	2589
1.50 - 1.99	27	68	304	590	1524	2056	420	47	29	.	5065
2.00 - 2.49	13	92	162	249	1358	3273	1177	94	5	.	6423
2.50 - 2.99	.	90	95	224	787	3422	1757	179	11	.	6565
3.00 - 3.49	.	18	85	77	316	2893	1969	208	11	.	5577
3.50 - 3.99	.	.	20	29	148	1664	2448	256	10	.	4575
4.00 - 4.49	.	.	6	8	42	682	2125	201	6	.	3070
4.50 - 4.99	.	.	1	5	3	248	1738	246	5	.	2246
5.00 +	.	.	.	.	1	27	1237	980	18	.	2263
TOTAL	55	374	1172	1732	5251	14952	13008	2247	103	0	

MEAN HS(M) = 3.00 LARGEST HS(M) = 7.18 MEAN TP(SEC) = 12.9 NUMBER OF CASES = 22754

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	39	5	1	.	.	.	.	.	.	48
1.50 - 1.99	8	35	20	.	.	.	.	.	.	.	63
2.00 - 2.49	1	68	41	15	25	1	.	.	.	.	151
2.50 - 2.99	.	73	63	29	6	3	.	.	.	.	174
3.00 - 3.49	.	6	109	32	6	6	.	.	.	.	159
3.50 - 3.99	.	5	71	29	17	8	.	.	.	.	130
4.00 - 4.49	.	.	23	18	5	1	.	.	.	.	47
4.50 - 4.99	.	.	.	1	.	6	.	.	.	.	7
5.00 +	.	.	.	.	.	6	.	.	.	.	6
TOTAL	12	226	332	125	59	31	0	0	0	0	

MEAN HS(M) = 2.89 LARGEST HS(M) = 5.62 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 470

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	8	3	.	.	.	.	.	.	.	.	11
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	3	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.67 LARGEST HS(M) = 1.93 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 8

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

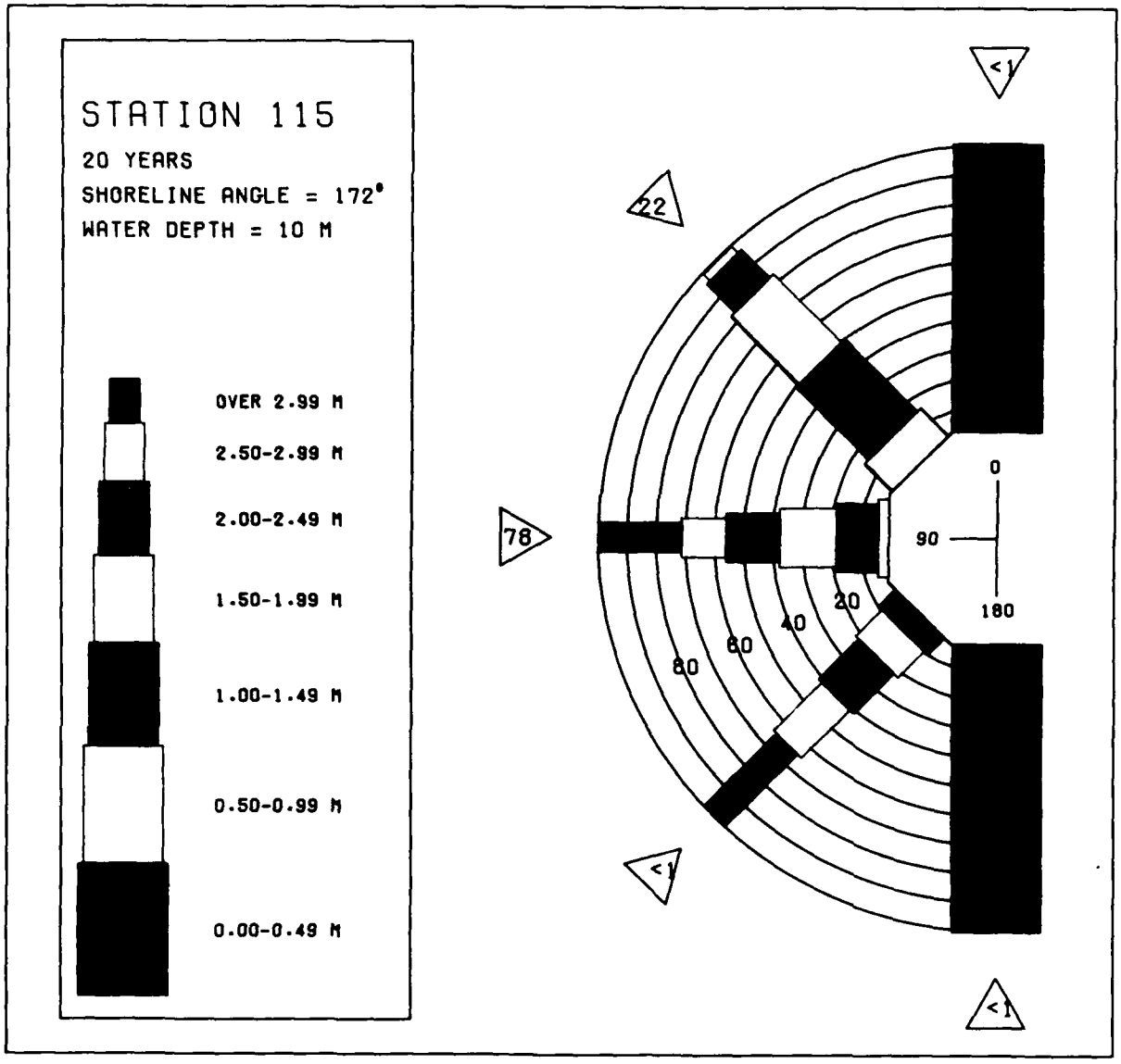
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.04 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 115 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	3									6
0.50 - 0.99	36	163	267	65	28	10	3	1	.	.	573
1.00 - 1.49	182	357	644	357	246	83	14	2	.	.	1885
1.50 - 1.99	186	414	417	418	508	255	46	4	2	.	2250
2.00 - 2.49	9	249	148	218	537	455	118	9	.	.	1743
2.50 - 2.99	.	79	81	85	302	523	176	17	1	.	1264
3.00 - 3.49	.	11	45	23	110	441	197	20	1	.	848
3.50 - 3.99	.	1	12	8	42	252	246	25	1	.	587
4.00 - 4.49	.	.	4	3	9	101	213	20	.	.	350
4.50 - 4.99	.	.	.	.	.	33	173	24	.	.	230
5.00 +	.	.	.	.	.	3	123	98	1	.	225
TOTAL	416	1274	1621	1177	1782	2156	1309	220	6	0	

MEAN HS(M) = 2.30 LARGEST HS(M) = 7.18 MEAN TP(SEC)= 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.9	3.0	2.3	2.0	1.8	2.0	1.3	1.6	1.2	1.7	2.2	2.4	2.0
1957	2.6	2.9	2.7	2.4	1.9	1.8	1.4	1.3	1.6	2.0	2.6	3.1	2.2
1958	3.9	3.7	2.6	3.0	1.6	1.5	1.5	1.3	1.4	1.7	2.7	3.5	2.4
1959	3.2	3.4	2.7	2.3	1.9	1.8	1.4	1.3	1.7	2.2	2.5	3.2	2.3
1960	3.5	3.8	1.9	2.3	1.9	1.4	1.3	1.1	1.8	2.3	2.9	3.2	2.2
1961	3.9	3.2	2.7	2.0	1.7	1.7	1.2	0.9	1.3	2.0	2.3	2.9	2.1
1962	3.4	3.0	2.6	2.1	1.6	1.3	1.5	1.5	1.5	2.3	2.5	3.2	2.2
1963	3.0	3.6	2.8	2.0	1.7	1.9	1.4	1.2	1.5	2.5	2.9	3.1	2.3
1964	4.0	2.8	3.0	2.6	1.7	1.7	2.0	1.6	1.6	1.8	2.8	3.3	2.4
1965	3.0	3.0	2.6	2.2	2.1	2.0	1.3	1.2	1.3	2.1	2.6	3.5	2.2
1966	3.6	2.9	2.7	2.2	1.9	1.7	1.5	1.4	1.6	1.8	2.2	3.5	2.3
1967	3.3	3.4	2.3	2.0	1.6	1.4	1.4	1.1	2.0	2.6	2.7	3.2	2.2
1968	2.8	3.1	3.0	2.5	1.7	1.7	1.7	1.4	1.4	2.1	3.4	3.2	2.3
1969	2.6	3.8	3.1	3.1	1.9	1.8	1.5	1.4	1.4	2.5	2.6	4.9	2.6
1970	3.7	4.4	3.6	2.9	1.9	1.6	1.5	1.4	1.5	1.8	2.8	3.3	2.5
1971	3.1	2.7	2.8	2.8	1.9	1.9	1.5	1.5	1.7	1.9	2.5	3.0	2.3
1972	3.4	3.1	2.6	2.2	2.1	1.9	1.7	1.5	1.2	1.6	3.6	3.0	2.3
1973	4.0	4.0	3.4	2.7	2.2	2.2	2.0	1.8	1.8	2.0	2.8	3.8	2.7
1974	3.1	3.1	2.9	2.9	2.7	2.0	1.8	1.5	1.4	2.1	2.9	3.6	2.5
1975	2.4	3.0	2.8	1.9	1.8	1.5	1.5	1.2	0.8	2.0	2.3	2.7	2.0
MEAN	3.2	3.3	2.8	2.4	1.9	1.7	1.5	1.4	1.4	2.0	2.7	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.9	4.6	4.2	3.8	3.0	3.1	2.2	2.7	2.6	2.9	3.6	3.6
1957	4.2	7.2	4.8	4.3	3.6	3.0	2.5	2.0	3.1	4.1	6.1	5.4
1958	6.0	6.1	5.2	6.8	5.6	2.9	2.3	2.5	2.1	3.8	6.0	5.7
1959	5.4	5.2	4.7	4.3	3.1	2.6	2.6	2.4	2.8	4.6	6.1	5.5
1960	6.4	6.1	3.8	3.9	2.6	2.4	2.0	2.1	1.7	5.1	5.2	4.8
1961	6.1	5.1	5.2	3.4	3.0	2.9	1.9	1.5	2.3	3.9	3.9	4.5
1962	4.0	4.8	4.0	3.9	2.5	2.2	2.2	2.1	2.9	4.5	5.8	5.5
1963	6.0	5.8	5.3	3.6	2.8	2.9	2.2	2.1	2.4	5.1	4.2	6.0
1964	4.9	3.8	4.4	4.6	3.6	3.1	2.2	2.7	2.6	4.1	4.6	5.8
1965	4.6	5.9	4.8	3.9	3.7	3.3	2.4	2.0	2.4	4.7	4.5	5.2
1966	5.5	4.3	4.2	3.9	3.0	2.6	2.3	2.2	2.9	3.3	3.9	6.0
1967	5.6	6.0	3.6	3.3	3.0	2.6	1.9	2.3	3.3	5.3	4.1	5.8
1968	4.4	5.0	4.7	5.3	3.0	2.8	3.1	2.4	3.4	4.1	5.7	5.6
1969	4.9	5.9	5.6	5.3	3.1	2.7	2.6	2.2	2.8	4.4	4.9	6.6
1970	6.0	6.2	6.1	5.8	3.2	2.6	2.4	2.3	2.5	4.0	5.2	5.8
1971	6.0	4.2	5.2	4.9	3.3	2.8	2.3	2.9	3.0	3.4	5.3	6.0
1972	6.0	5.8	4.5	3.8	3.3	2.7	2.6	2.5	2.1	2.7	5.8	6.1
1973	6.4	6.2	5.4	5.1	3.5	4.1	3.0	2.5	2.1	3.9	5.0	6.0
1974	6.4	4.8	6.4	5.2	3.9	3.2	3.0	2.7	2.5	5.3	5.4	5.8
1975	5.1	5.7	4.3	3.0	4.2	3.1	2.5	2.3	1.5	4.1	3.4	5.1

20 YR. STATISTICS FOR PACIFIC STATION115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022418

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	.	.	.	.	.	.	.	.	.	13
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.24 LARGEST HS(M) = 0.44 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 8

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	251	701	133	.	.	.	.	.	.	.	1085
0.50 - 0.99	2231	6738	684	.	.	.	.	.	.	.	9653
1.00 - 1.49	2270	4351	270	.	.	.	.	.	.	.	6891
1.50 - 1.99	212	1716	22	.	.	.	.	.	.	.	1950
2.00 - 2.49	5	210	.	.	.	.	.	.	.	.	215
2.50 - 2.99	.	15	.	.	.	.	.	.	.	.	15
3.00 - 3.49	.	1	.	.	.	.	.	.	.	.	1
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4969	13732	1109	0	0	0	0	0	0	0	

MEAN HS(M) = 1.01 LARGEST HS(M) = 3.09 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 11581

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	10	1057	205	56	32	27	18	1	.	1406
0.50 - 0.99	13	835	10408	6129	4330	1285	200	20	11	.	23231
1.00 - 1.49	83	776	3030	3295	8449	6913	1493	136	.	.	24175
1.50 - 1.99	75	805	1202	487	2267	6984	3300	272	34	.	15426
2.00 - 2.49	20	345	405	128	427	2456	3860	458	5	.	8106
2.50 - 2.99	.	104	61	23	65	617	2138	352	18	.	3378
3.00 - 3.49	.	10	10	.	.	147	540	395	13	.	1115
3.50 - 3.99	.	.	.	.	.	29	198	212	.	.	439
4.00 - 4.49	.	.	.	.	.	1	44	47	.	.	92
4.50 - 4.99	.	.	.	.	.	.	5	35	.	.	40
5.00 +	.	.	.	.	.	.	3	3	.	.	6
TOTAL	191	2885	16173	10267	15594	18466	11808	1948	82	0	

MEAN HS(M) = 1.40 LARGEST HS(M) = 5.43 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 45262

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	16	17	1	1	.	.	.	.	.	.	35
1.00 - 1.49	70	75	13	20	5	5	.	.	.	.	187
1.50 - 1.99	90	225	30	17	5	8	.	.	.	.	375
2.00 - 2.49	34	263	95	10	8	6	3	.	3	.	422
2.50 - 2.99	1	272	142	13	5	5	1	.	.	.	439
3.00 - 3.49	.	83	143	51	17	11	1	.	.	.	306
3.50 - 3.99	.	8	42	22	1	3	6	.	.	.	82
4.00 - 4.49	.	.	6	10	1	3	.	.	.	.	20
4.50 - 4.99	.	.	1	.	.	6	1	.	.	.	8
5.00 +	.	.	.	.	1	1	5	.	.	.	9
TOTAL	213	943	473	155	45	48	17	0	3	0	

MEAN HS(M) = 2.41 LARGEST HS(M) = 5.44 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 1124

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	11	.	.	.	.	.	.	.	.	11
0.50 - 0.99	17	5	56	.	.	.	.	.	.	.	78
1.00 - 1.49	59	3	11	.	.	.	.	.	.	.	73
1.50 - 1.99	121	27	11	3	.	.	.	.	.	.	162
2.00 - 2.49	44	104	11	.	.	.	.	.	.	.	159
2.50 - 2.99	5	112	13	.	.	.	.	.	.	.	130
3.00 - 3.49	.	30	41	.	.	.	.	.	.	.	71
3.50 - 3.99	.	3	13	.	.	.	.	.	.	.	16
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	1	.	.	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	246	295	157	3	0	0	0	0	0	0	

MEAN HS(M) = 2.07 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 417

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	27	.	.	.	.	.	.	.	.	.	27
0.50 - 0.99	6	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	20	6	.	.	.	.	.	.	.	.	26
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	56	6	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 1.95 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 38

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

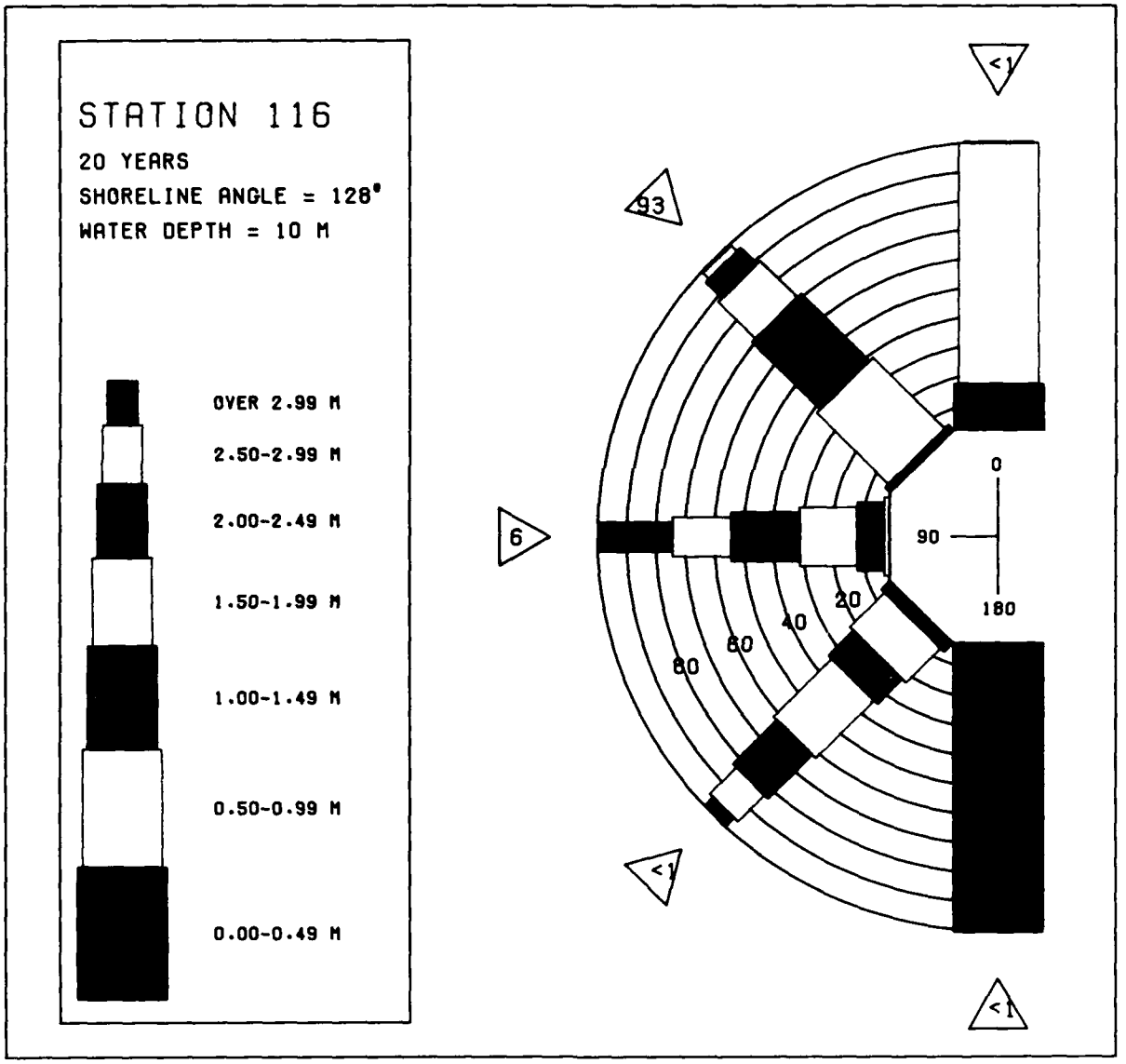
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 116 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.28N/121.91W LAT. LON. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	29	72	119	20	5	3	2	1	.	.	251
0.50 - 0.99	228	759	1115	613	433	128	20	2	1	.	3299
1.00 - 1.49	248	520	332	332	845	691	149	13	.	.	3130
1.50 - 1.99	52	278	126	50	227	699	330	27	3	.	1792
2.00 - 2.49	10	92	51	13	43	246	386	42	.	.	886
2.50 - 2.99	.	50	21	3	7	62	214	35	1	.	393
3.00 - 3.49	.	12	19	5	1	15	54	39	1	.	146
3.50 - 3.99	.	1	5	2	.	3	20	21	.	.	52
4.00 - 4.49	.	.	.	1	.	.	4	4	.	.	9
4.50 - 4.99	.	.	.	.	.	.	.	3	.	.	3
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	567	1784	1788	1039	1561	1847	1179	190	6	0	

MEAN HS(M) = 1.35 LARGEST HS(M) = 5.44 MEAN TP(SEC)= 10.3 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 116 (36.28N/ 121.91W TO 36.16N/ 121.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.8	1.7	1.3	1.2	1.1	1.2	0.8	1.0	0.7	1.0	1.2	1.5	1.2
1957	1.5	1.5	1.6	1.3	1.1	1.0	0.7	0.8	1.0	1.2	1.4	1.8	1.2
1958	2.3	2.4	1.6	1.7	0.9	0.9	0.8	0.7	0.8	0.9	1.4	2.0	1.4
1959	1.9	2.1	1.5	1.2	1.2	1.1	0.8	0.7	1.0	1.3	1.4	1.8	1.3
1960	1.8	2.3	1.1	1.4	1.1	0.8	0.7	0.7	0.6	1.0	1.6	1.8	1.2
1961	2.3	1.9	1.7	1.1	1.0	0.9	0.7	0.6	0.8	1.0	1.3	1.6	1.2
1962	1.5	1.9	1.5	1.2	1.0	0.7	0.8	0.8	0.9	1.3	1.9	2.0	1.3
1963	1.8	2.3	1.6	1.2	1.0	1.1	0.8	0.7	0.9	1.4	1.7	1.8	1.4
1964	2.4	1.6	1.7	1.5	1.2	1.2	1.2	1.0	0.9	1.0	1.6	2.1	1.4
1965	1.9	1.6	1.6	1.3	1.2	1.2	0.8	0.7	0.8	1.1	1.5	2.0	1.3
1966	2.1	1.6	1.4	1.2	1.0	1.0	0.9	0.8	0.9	1.0	1.3	2.1	1.3
1967	1.9	1.8	1.4	1.3	1.0	0.9	0.8	0.7	1.1	1.4	1.4	1.8	1.3
1968	1.6	2.0	1.7	1.4	1.1	1.1	1.1	0.9	0.8	1.1	1.9	2.0	1.4
1969	1.8	2.2	1.7	1.7	1.1	1.1	0.9	0.7	0.8	1.3	1.4	2.9	1.5
1970	2.4	2.4	2.1	1.7	1.2	0.9	0.9	0.8	0.8	1.0	1.7	1.9	1.5
1971	1.7	1.7	1.6	1.6	1.2	1.2	0.9	0.9	1.0	1.1	1.3	1.8	1.3
1972	1.8	1.8	1.6	1.2	1.3	1.2	1.1	1.0	0.7	0.9	2.0	1.9	1.4
1973	2.4	2.4	1.9	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.5	2.2	1.6
1974	2.1	1.7	1.7	1.7	1.7	1.2	1.2	1.0	0.9	1.2	1.5	2.2	1.5
1975	1.4	1.7	1.6	1.1	1.1	1.0	1.1	0.8	0.6	1.1	1.2	1.5	1.2
MEAN	1.9	1.9	1.6	1.4	1.1	1.1	0.9	0.8	0.9	1.1	1.5	1.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 116 (36.28N/ 121.91W TO 36.16N/ 121.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.2	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1957	2.9	4.6	2.9	2.4	2.2	1.9	1.3	1.3	2.0	2.0	3.3	3.1
1958	3.9	3.7	2.9	4.7	1.7	2.0	1.6	1.1	1.6	1.9	3.4	3.2
1959	3.5	5.4	2.6	2.5	2.1	1.8	1.9	1.7	2.4	2.4	3.4	3.3
1960	3.9	4.3	2.6	2.3	1.8	1.5	1.2	1.3	0.9	2.6	3.2	3.2
1961	4.0	3.0	3.5	1.9	2.1	1.7	1.1	0.9	1.3	2.1	2.6	2.6
1962	2.9	3.8	3.6	2.1	1.8	1.5	1.6	1.7	1.6	4.5	3.1	3.5
1963	5.4	5.4	2.5	2.6	1.7	2.3	1.5	1.4	1.3	2.8	2.9	3.6
1964	4.5	2.4	2.9	2.6	2.6	2.7	2.3	2.0	1.7	2.0	2.6	4.1
1965	3.5	3.0	2.6	2.6	2.5	2.4	1.6	1.2	1.5	2.5	3.4	4.6
1966	3.9	2.8	2.9	2.5	1.8	1.8	1.4	1.6	1.8	1.8	2.3	3.5
1967	4.1	3.1	3.4	2.3	2.3	1.9	1.2	1.4	1.8	2.9	2.2	3.1
1968	2.8	3.6	2.6	2.7	2.2	2.2	2.0	1.7	2.3	2.4	3.3	3.7
1969	3.6	3.4	2.8	3.0	2.3	2.0	1.9	1.3	1.5	2.1	2.5	5.1
1970	4.0	3.8	3.6	3.1	2.4	1.6	1.4	1.4	1.7	2.1	2.9	3.3
1971	3.2	2.7	3.4	3.2	2.3	2.1	1.9	1.5	1.8	2.3	2.8	3.6
1972	3.7	3.2	2.6	2.3	2.0	2.0	1.9	1.7	1.6	1.4	3.1	3.8
1973	4.1	3.5	3.1	3.0	2.4	2.7	2.1	1.9	1.9	2.3	3.3	4.3
1974	3.8	3.0	4.0	3.4	2.8	2.0	2.1	1.8	1.5	2.2	2.9	4.1
1975	2.9	3.1	3.5	1.8	2.3	2.3	1.7	1.4	1.0	2.3	1.9	3.0

20 YR. STATISTICS FOR PACIFIC STATION116 (36.28N/ 121.91W TO 36.16N/ 121.75W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.3
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	99.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021609

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10667	1132	.	.	.	.	.	.	.	.	11799
0.50 - 0.99	3913	3304	.	.	.	.	.	.	.	.	7217
1.00 - 1.49	797	980	.	.	.	.	.	.	.	.	1777
1.50 - 1.99	10	49	.	.	.	.	.	.	.	.	59
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15387	5470	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 12191

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	184	1546	1594	234	77	18	29	22	.	.	3705
0.50 - 0.99	463	8441	9811	4979	4130	1358	135	15	5	.	29337
1.00 - 1.49	299	3874	2597	1617	3463	3670	1127	94	1	.	16742
1.50 - 1.99	68	1202	1054	361	1117	2263	1685	133	11	.	7894
2.00 - 2.49	1	157	184	100	355	1315	1062	249	3	.	3426
2.50 - 2.99	.	22	17	6	83	660	1054	107	5	.	1954
3.00 - 3.49	.	3	1	.	6	207	383	78	8	.	686
3.50 - 3.99	.	1	.	.	.	46	219	37	.	.	303
4.00 - 4.49	.	.	.	.	.	3	49	49	.	.	101
4.50 - 4.99	.	.	.	.	.	.	5	11	.	.	16
5.00 +	.	.	.	.	.	.	.	10	.	.	10
TOTAL	1015	15246	15258	7297	9231	9540	5748	805	34	0	

MEAN HS(M) = 1.16 LARGEST HS(M) = 5.57 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 37524

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	338	18	.	.	1	.	.	.	.	.	357
0.50 - 0.99	308	136	13	6	.	.	.	.	.	.	463
1.00 - 1.49	225	273	25	35	8	6	.	.	.	.	572
1.50 - 1.99	92	420	53	13	5	10	.	.	5	.	598
2.00 - 2.49	6	304	136	22	8	8	8	.	3	.	495
2.50 - 2.99	1	126	196	29	13	11	1	.	5	.	382
3.00 - 3.49	.	44	61	34	13	11	3	.	.	.	166
3.50 - 3.99	.	.	15	11	1	3	11	.	.	.	41
4.00 - 4.49	.	.	8	3	.	3	5	.	.	.	19
4.50 - 4.99	.	.	1	.	.	6	1	.	.	.	8
5.00 +	.	.	.	.	3	1	11	.	.	.	15
TOTAL	970	1321	508	153	52	59	40	0	13	0	

MEAN HS(M) = 1.69 LARGEST HS(M) = 5.50 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 1841

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	282	116	1	.	.	.	.	.	.	.	399
0.50 - 0.99	316	42	75	.	.	.	.	.	.	.	433
1.00 - 1.49	347	126	6	.	.	.	.	.	.	.	479
1.50 - 1.99	92	164	20	3	.	.	.	.	.	.	279
2.00 - 2.49	6	160	42	.	.	.	.	.	.	.	208
2.50 - 2.99	.	39	44	.	.	.	.	.	.	.	83
3.00 - 3.49	.	5	13	5	.	.	.	.	.	.	23
3.50 - 3.99	.	.	10	5	.	.	.	.	.	.	15
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	1	.	.	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1043	652	212	13	0	0	0	0	0	0	

MEAN HS(M) = 1.23 LARGEST HS(M) = 4.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 1129

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	4912	82	.	.	.	.	.	.	.	.	4994
0.50 - 0.99	694	6	.	.	.	.	.	.	.	.	700
1.00 - 1.49	99	3	.	.	.	.	.	.	.	.	102
1.50 - 1.99	3	3	.	.	.	.	.	.	.	.	6
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5708	94	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.27 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 3393

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

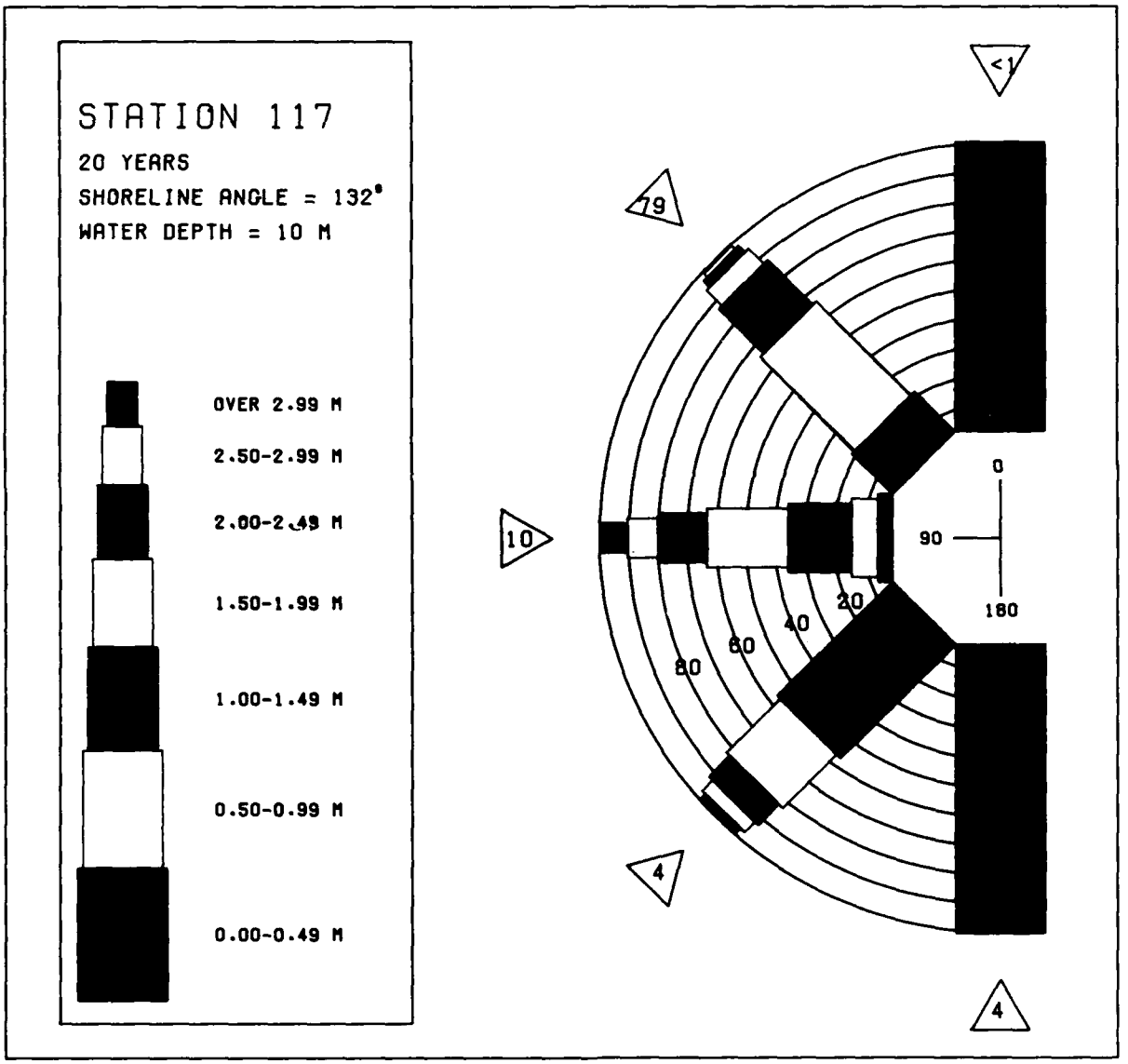
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	583	.	.	.	.	.	.	.	.	.	583
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	583	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 341

PHASE 3 ST. 117 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1696	289	159	23	7	1	2	2	.	.	2179
0.50 - 0.99	569	1193	990	498	413	135	13	1	.	.	3812
1.00 - 1.49	176	525	263	165	347	367	112	9	.	.	1964
1.50 - 1.99	26	184	112	37	112	227	168	13	1	.	880
2.00 - 2.49	1	62	36	12	36	132	107	24	1	.	410
2.50 - 2.99	.	18	25	3	9	67	105	10	1	.	238
3.00 - 3.49	.	5	7	3	2	21	38	7	.	.	83
3.50 - 3.99	.	.	2	1	.	4	23	3	.	.	33
4.00 - 4.49	.	.	.	.	.	.	5	4	.	.	9
4.50 - 4.99	.	.	.	.	.	.	.	1	.	.	1
5.00 +	.	.	.	.	.	.	1	1	.	.	2
TOTAL	2468	2276	1594	742	926	954	574	75	2	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 5.57 MEAN TP(SEC)= 8.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.5	1.0	0.9	0.9	0.8	0.8	0.7	0.8	0.6	0.7	0.7	1.3	0.9
1957	1.0	1.1	1.2	0.9	0.9	0.7	0.6	0.6	0.8	1.1	0.8	1.0	0.9
1958	2.1	2.2	1.3	1.2	0.7	0.7	0.7	0.6	0.5	0.5	0.8	1.2	1.1
1959	1.4	1.3	1.0	0.9	0.9	0.9	0.6	0.6	0.9	1.0	0.5	1.0	0.9
1960	1.3	1.9	0.9	1.0	0.8	0.6	0.5	0.6	0.4	0.6	1.1	1.4	0.9
1961	1.9	1.6	1.4	0.8	0.9	0.6	0.6	0.5	0.7	0.5	0.9	0.9	0.9
1962	1.4	1.7	1.0	0.6	0.8	0.5	0.7	0.6	0.6	1.1	1.0	1.8	1.0
1963	1.5	2.3	1.1	1.1	0.8	0.9	0.7	0.6	0.6	1.0	1.1	1.3	1.1
1964	1.9	1.0	1.0	1.0	1.0	1.1	1.0	0.8	0.7	0.7	0.9	1.9	1.1
1965	1.5	0.6	1.2	1.1	0.9	1.1	0.7	0.6	0.6	0.5	1.1	1.0	0.9
1966	1.5	0.9	1.0	0.7	0.8	0.8	0.7	0.7	0.6	0.7	0.8	1.6	0.9
1967	1.3	0.7	1.2	1.1	0.8	0.8	0.6	0.6	0.8	0.6	0.5	1.2	0.9
1968	1.3	2.0	1.3	0.7	1.0	0.9	0.9	0.7	0.6	0.7	1.1	1.5	1.0
1969	1.5	1.5	0.8	1.0	0.9	0.9	0.7	0.6	0.7	0.8	0.6	1.8	1.0
1970	1.9	1.3	1.3	1.0	1.0	0.7	0.7	0.7	0.5	0.6	1.1	1.2	1.0
1971	1.0	1.6	1.4	1.1	1.0	1.0	0.8	0.8	0.6	0.8	0.8	1.1	1.0
1972	0.8	1.1	1.3	0.9	1.0	1.0	0.9	0.9	0.6	0.6	1.1	1.4	1.0
1973	1.8	1.4	1.4	1.0	1.1	1.0	1.2	1.0	0.9	0.7	1.1	1.5	1.2
1974	1.9	0.8	1.4	1.2	1.4	1.0	1.1	0.9	0.7	0.9	0.8	1.7	1.1
1975	0.9	1.2	1.3	0.8	0.9	0.9	0.9	0.7	0.5	0.7	0.5	1.0	0.9
MEAN	1.5	1.4	1.1	0.9	0.9	0.8	0.8	0.7	0.6	0.7	0.9	1.3	

LARGEST HS(METERS) BY MONTH ANU YEAR

WIS STATION 117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.1	3.2	2.2	2.0	1.7	1.9	1.3	1.5	1.1	2.4	2.3	2.5
1957	2.5	5.0	2.5	2.6	2.4	1.9	0.9	1.0	2.0	2.0	2.5	2.7
1958	4.3	4.0	3.9	3.1	1.3	1.7	1.3	1.0	1.4	1.3	3.1	3.3
1959	3.7	3.4	2.0	2.7	2.0	1.5	1.3	1.4	2.4	2.7	2.2	2.2
1960	3.7	3.4	2.0	2.0	1.5	1.6	1.6	1.4	2.4	1.9	2.6	2.7
1961	2.3	4.5	1.7	2.0	1.5	1.1	1.1	1.2	0.8	1.9	3.0	3.1
1962	4.1	3.2	2.8	2.0	1.8	1.2	0.9	0.9	1.2	2.1	2.2	2.4
1963	2.9	3.9	3.5	2.0	1.5	1.3	1.5	1.2	1.2	4.5	2.7	3.8
1964	5.5	5.4	2.2	2.7	1.5	2.1	1.3	1.2	1.2	2.8	2.5	3.2
1965	3.5	2.6	2.5	2.4	2.4	2.6	2.3	1.8	1.6	1.6	2.3	4.4
1966	3.6	2.1	2.6	2.4	2.4	2.3	1.4	0.9	1.5	1.8	3.4	4.6
1967	4.1	2.3	2.4	2.2	1.6	1.4	1.2	1.3	1.6	1.8	2.3	3.5
1968	3.8	1.9	3.4	2.0	2.0	1.7	1.0	1.2	1.2	1.8	1.7	2.9
1969	2.9	3.8	2.7	2.0	2.0	2.0	1.5	1.6	2.1	2.4	3.4	3.8
1970	5.4	3.2	1.9	2.1	1.9	2.1	1.8	1.2	1.3	2.1	1.9	5.6
1971	4.2	4.3	2.8	2.1	2.2	1.3	1.2	1.1	1.4	1.5	3.2	2.9
1972	2.6	2.9	3.6	2.6	2.1	1.9	1.8	1.2	1.5	1.9	1.9	3.5
1973	3.6	3.5	2.8	2.2	1.9	1.8	1.6	1.7	1.3	1.4	2.5	4.3
1974	3.6	2.9	2.2	2.2	2.2	2.1	1.8	1.7	1.8	2.3	2.7	3.5
1975	3.9	2.4	4.2	3.6	2.4	1.7	2.0	1.7	1.4	2.1	2.4	3.7
1975	2.7	2.9	3.2	1.5	2.2	2.0	1.7	1.3	1.0	1.4	1.5	3.3

20 YR. STATISTICS FOR PACIFIC STATION117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	8.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.0
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121309

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	30	1	.	.	.	.	.	.	.	.	31
0.50 - 0.99	333	59	.	.	.	.	.	.	.	.	392
1.00 - 1.49	653	27	.	.	.	.	.	.	.	.	680
1.50 - 1.99	73	17	.	.	.	.	.	.	.	.	90
2.00 - 2.49	1	1	.	.	.	.	.	.	.	.	2
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1090	105	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.09 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 702

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	32	138	278	18	17	8	17	3	.	.	511
0.50 - 0.99	468	4383	6947	2183	947	335	37	22	1	.	15323
1.00 - 1.49	997	4724	7188	5684	5407	2180	379	39	.	.	26598
1.50 - 1.99	799	2874	2109	2623	6045	4483	1201	126	.	.	20260
2.00 - 2.49	51	1233	1009	693	3305	5294	1858	130	.	.	13573
2.50 - 2.99	.	253	374	208	1042	4283	2008	208	.	.	8376
3.00 - 3.49	.	53	54	37	251	2099	2494	193	1	.	5182
3.50 - 3.99	.	3	8	8	42	605	2072	205	.	.	2943
4.00 - 4.49	.	.	1	.	.	112	1144	200	.	.	1457
4.50 - 4.99	.	.	.	.	.	6	350	248	.	.	604
5.00 +	.	.	.	.	.	.	90	460	.	.	550
TOTAL	2347	13661	17968	11454	17056	19405	11650	1834	2	0	

MEAN HS(M) = 1.82 LARGEST HS(M) = 6.59 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 55760

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	17	6	5	.	1	.	1	5	.	35
1.00 - 1.49	20	22	27	27	32	18	23	3	20	.	192
1.50 - 1.99	35	51	39	63	85	30	68	6	6	.	443
2.00 - 2.49	8	133	69	90	65	191	124	29	17	.	616
2.50 - 2.99	.	102	11	13	30	179	138	95	27	.	595
3.00 - 3.49	.	49	44	22	5	56	99	49	11	.	335
3.50 - 3.99	.	6	41	6	11	42	94	20	5	.	225
4.00 - 4.49	.	.	10	6	.	3	59	8	6	.	92
4.50 - 4.99	.	.	.	.	.	5	37	.	13	.	55
5.00 +	.	.	.	.	.	.	11	6	.	.	17
TOTAL	63	380	208	162	228	585	653	217	110	0	

MEAN HS(M) = 2.59 LARGEST HS(M) = 5.64 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 1545

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	20	27	10	3	.	.	.	.	.	.	60
1.50 - 1.99	47	46	8	.	.	.	.	.	.	.	101
2.00 - 2.49	11	78	44	.	.	.	.	.	.	.	133
2.50 - 2.99	.	82	85	1	.	.	.	.	.	.	168
3.00 - 3.49	.	58	71	17	.	.	.	.	.	.	146
3.50 - 3.99	.	8	37	15	3	3	.	.	.	.	66
4.00 - 4.49	.	.	3	6	.	3	.	.	.	.	12
4.50 - 4.99	.	.	.	.	1	1	.	.	.	.	2
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	79	299	258	42	5	7	0	0	0	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 5.28 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 412

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	1	5	.	.	.	.	.	.	.	.	6
2.00 - 2.49	1	.	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5	5	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 7

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

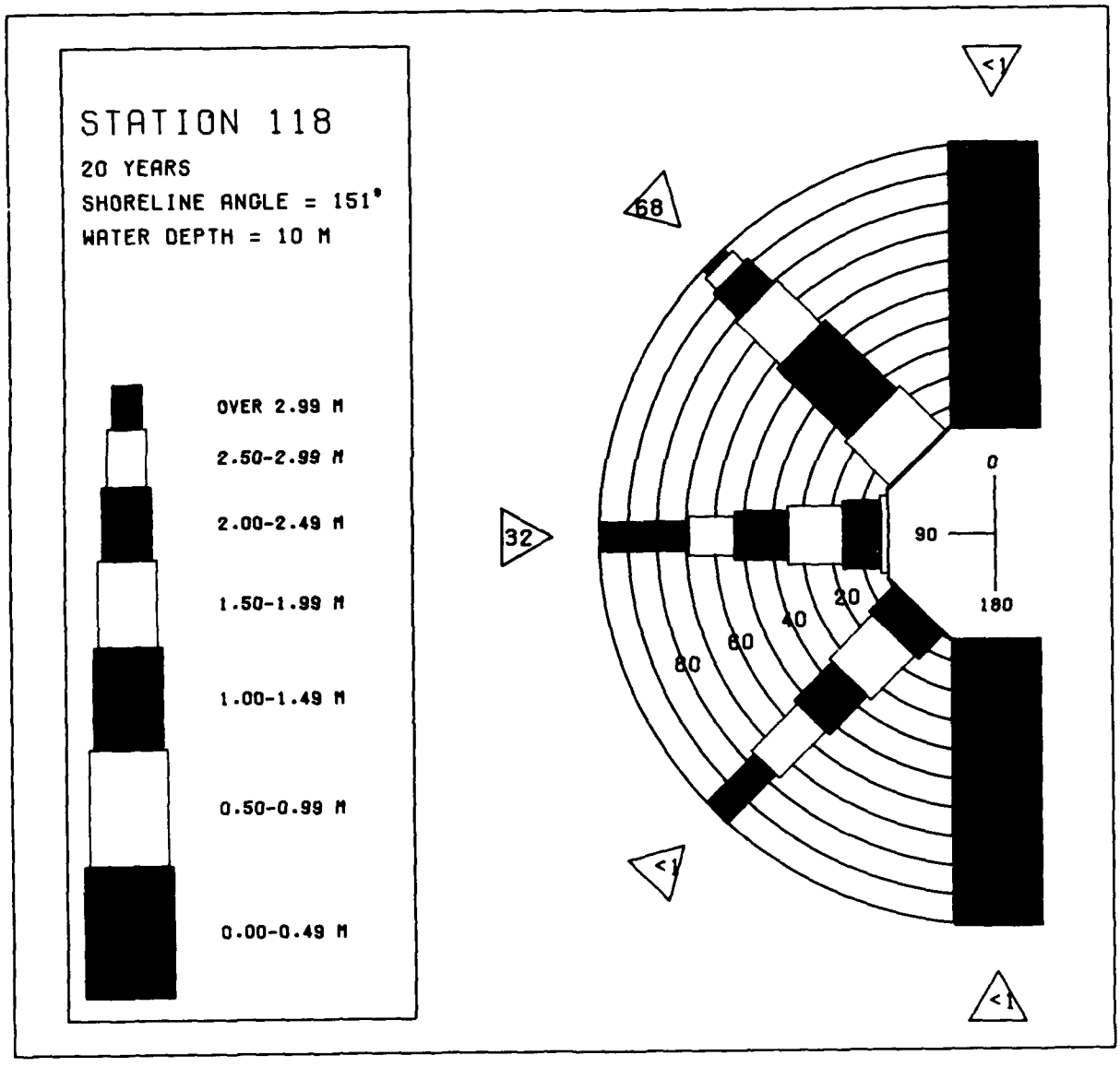
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	10	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 6

PHASE 3 ST. 118 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7	14	28	1	1	1	.	.	.	.	52
0.50 - 0.99	80	446	695	218	94	33	3	2	.	.	1571
1.00 - 1.49	169	480	722	571	543	219	40	4	2	.	2750
1.50 - 1.99	95	299	215	268	613	457	126	13	1	.	2086
2.00 - 2.49	7	144	108	71	337	548	198	15	1	.	1429
2.50 - 2.99	.	43	47	22	107	446	214	30	2	.	911
3.00 - 3.49	.	16	17	7	25	215	259	24	1	.	564
3.50 - 3.99	.	1	8	3	5	65	216	22	.	.	320
4.00 - 4.49	.	.	1	1	.	11	120	20	.	.	153
4.50 - 4.99	.	.	.	.	.	1	38	24	1	.	64
5.00 +							10	46	.	0	56
TOTAL	358	1443	1841	1162	1725	1995	1225	200	7	0	

MEAN HS(M) = 1.84 LARGEST HS(M) = 6.59 MEAN TP(SEC)= 10.6 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.3	2.5	1.8	1.6	1.5	1.6	1.1	1.3	0.9	1.3	1.7	2.1	1.6
1957	2.1	2.2	2.1	1.9	1.4	1.4	1.0	1.0	1.2	1.6	2.1	2.6	1.7
1958	3.2	3.0	2.1	2.5	1.2	1.3	1.1	0.9	1.1	1.3	2.1	2.9	1.9
1959	2.6	2.9	2.2	1.7	1.6	1.4	1.0	1.0	1.3	1.8	2.0	2.6	1.9
1960	2.6	3.1	1.4	1.9	1.5	1.1	1.0	1.0	0.9	1.4	2.3	2.5	1.7
1961	2.5	3.4	1.4	1.9	1.5	1.2	1.0	1.0	0.9	1.4	2.3	2.5	1.7
1962	3.2	2.5	2.3	1.5	1.3	1.2	0.9	0.7	1.0	1.5	1.8	2.3	1.7
1963	2.0	2.5	2.1	1.7	1.2	0.9	1.1	1.2	1.2	1.8	2.7	2.6	1.7
1964	2.4	2.8	2.2	1.6	1.4	1.4	1.1	0.9	1.2	1.9	2.4	2.6	1.8
1965	3.5	2.3	2.4	2.0	1.5	1.5	1.6	1.2	1.3	1.4	2.2	2.7	2.0
1966	2.5	2.4	2.2	1.7	1.6	1.6	1.1	1.0	1.1	1.5	2.0	2.8	1.8
1967	2.9	2.2	2.0	1.8	1.4	1.3	1.1	1.1	1.3	1.4	2.1	2.8	1.8
1968	2.6	2.8	1.8	1.7	1.4	1.2	1.0	0.9	1.6	2.1	2.1	2.6	1.8
1969	2.1	2.5	2.3	2.0	1.5	1.4	1.4	1.2	1.1	1.6	2.8	2.6	1.9
1970	2.3	3.0	2.4	2.5	1.5	1.5	1.2	0.9	1.0	1.9	2.1	4.2	2.0
1971	3.1	3.5	3.0	2.4	1.5	1.3	1.2	1.0	1.2	1.4	2.3	2.6	2.0
1972	2.4	2.3	2.2	2.3	1.5	1.6	1.2	1.2	1.4	1.5	1.9	2.5	1.8
1973	2.8	2.5	2.1	1.6	1.7	1.5	1.4	1.3	1.0	1.2	2.9	2.5	1.9
1974	5.4	3.3	2.7	2.1	1.9	1.7	1.7	1.5	1.5	1.5	2.1	3.1	2.2
1975	2.5	2.4	2.3	2.3	2.3	1.6	1.5	1.3	1.2	1.6	2.2	3.2	2.0
	2.0	2.3	2.2	1.5	1.4	1.3	1.3	1.0	0.7	1.5	1.8	2.2	1.6
MEAN	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.9	3.7	3.8	3.4	2.7	2.8	1.8	2.7	2.1	2.6	3.2	3.1
1957	3.3	6.4	3.8	3.5	3.0	2.4	2.0	1.6	2.4	3.0	5.5	4.3
1958	5.6	5.3	3.8	6.6	2.3	2.5	2.1	1.7	2.0	2.9	5.5	4.8
1959	5.3	5.3	3.8	3.5	2.5	2.4	2.3	2.3	2.4	3.7	5.3	4.5
1960	5.2	5.1	3.6	3.2	2.3	2.0	1.6	1.7	1.2	4.0	4.2	4.2
1961	6.0	4.0	5.1	2.7	2.8	2.4	1.4	1.2	1.7	3.1	3.1	3.6
1962	3.5	4.3	3.4	3.3	2.2	1.8	2.1	2.3	2.4	4.5	4.6	4.4
1963	5.6	5.6	3.8	3.1	2.4	2.8	1.9	1.7	2.0	4.1	3.9	5.9
1964	6.6	3.3	3.6	3.6	3.3	3.1	2.8	2.5	2.1	3.2	3.6	5.4
1965	3.9	4.6	3.4	3.2	2.5	3.1	2.0	1.5	1.9	3.8	3.7	4.4
1966	5.0	3.5	4.0	3.6	2.3	2.3	1.9	2.0	2.4	2.8	3.2	5.1
1967	4.9	4.9	3.4	2.7	2.9	2.4	1.6	1.7	2.8	4.5	3.4	4.5
1968	3.3	4.3	3.9	4.2	2.7	2.7	2.7	2.2	3.0	3.6	4.9	4.6
1969	4.5	5.2	4.4	4.3	2.9	2.4	2.4	1.7	2.3	3.2	3.8	6.3
1970	5.1	5.7	5.7	4.9	3.1	2.2	1.9	1.8	2.2	3.1	4.4	4.7
1971	5.0	3.7	4.5	4.4	3.1	2.7	2.4	2.2	2.5	3.0	4.3	5.1
1972	5.8	4.8	3.8	2.9	2.6	2.5	2.4	2.5	2.0	2.0	4.6	5.8
1973	5.5	4.9	4.5	4.3	3.1	3.6	2.6	2.3	2.6	3.3	4.4	6.0
1974	4.0	3.9	5.3	4.3	3.4	2.7	2.7	2.2	2.0	4.5	4.7	5.1
1975	4.3	4.7	3.9	2.4	3.0	2.9	2.1	1.8	1.3	3.4	2.7	4.2

20 YR. STATISTICS FOR PACIFIC STATION118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040306

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	34	.	.	.	.	.	.	.	.	56
0.50 - 0.99	732	480	.	.	.	.	.	.	.	.	1212
1.00 - 1.49	1550	610	.	.	.	.	.	.	.	.	2160
1.50 - 1.99	458	222	.	.	.	.	.	.	.	.	680
2.00 - 2.49	22	56	.	.	.	.	.	.	.	.	78
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2784	1405	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.19 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 2451

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	124	325	25	37	13	15	3	.	.	552
0.50 - 0.99	169	4289	7476	2542	1168	386	61	23	3	.	16117
1.00 - 1.49	408	4135	6783	5722	6060	2541	499	47	17	.	26212
1.50 - 1.99	427	2758	1962	2248	5973	5080	1403	140	.	.	19991
2.00 - 2.49	27	1112	920	532	2813	5593	2171	188	11	.	13357
2.50 - 2.99	.	266	299	157	749	3913	2349	280	15	.	8028
3.00 - 3.49	.	41	47	27	143	1594	2665	222	.	.	4739
3.50 - 3.99	.	1	3	3	11	393	1795	251	1	.	2458
4.00 - 4.49	.	.	1	.	.	66	812	219	3	.	1101
4.50 - 4.99	.	.	.	.	.	1	193	308	1	.	503
5.00 +	.	.	.	.	.	.	58	290	.	.	348
TOTAL	1041	12726	17816	11256	16954	19570	12021	1971	51	0	

MEAN HS(M) = 1.78 LARGEST HS(M) = 6.47 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 54610

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	15	.	1	.	.	.	.	3	.	19
1.00 - 1.49	20	32	23	29	20	8	.	.	.	.	132
1.50 - 1.99	30	70	25	46	27	42	20	.	8	.	268
2.00 - 2.49	5	159	35	20	37	71	37	10	10	.	384
2.50 - 2.99	.	104	35	11	27	66	73	37	10	.	363
3.00 - 3.49	.	68	54	22	6	20	51	15	6	.	242
3.50 - 3.99	.	6	56	6	11	11	39	5	3	.	137
4.00 - 4.49	.	.	13	8	.	.	13	.	10	.	44
4.50 - 4.99	.	.	.	.	1	5	3	.	3	.	12
5.00 +	.	.	.	.	.	.	11	.	.	.	11
TOTAL	55	454	241	143	129	223	247	67	53	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 5.63 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 961

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	20	20	5	.	.	.	.	.	.	.	45
1.50 - 1.99	58	32	11	3	.	.	.	.	.	.	104
2.00 - 2.49	15	68	34	.	.	.	.	.	.	.	117
2.50 - 2.99	.	121	77	.	.	.	.	.	.	.	198
3.00 - 3.49	.	65	75	17	.	.	.	.	.	.	157
3.50 - 3.99	.	5	23	18	3	.	.	.	.	.	49
4.00 - 4.49	.	.	5	3	.	3	.	.	.	.	11
4.50 - 4.99	.	.	.	.	1	1	.	.	.	.	2
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	94	311	230	41	5	4	0	0	0	0	

MEAN HS(M) = 2.65 LARGEST HS(M) = 5.32 MEAN TP(SEC) = 7.7 NUMBER OF CASES = 407

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	3	8	.	.	.	.	.	.	.	.	11
2.00 - 2.49	1	.	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	8	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.67 LARGEST HS(M) = 2.05 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 11

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

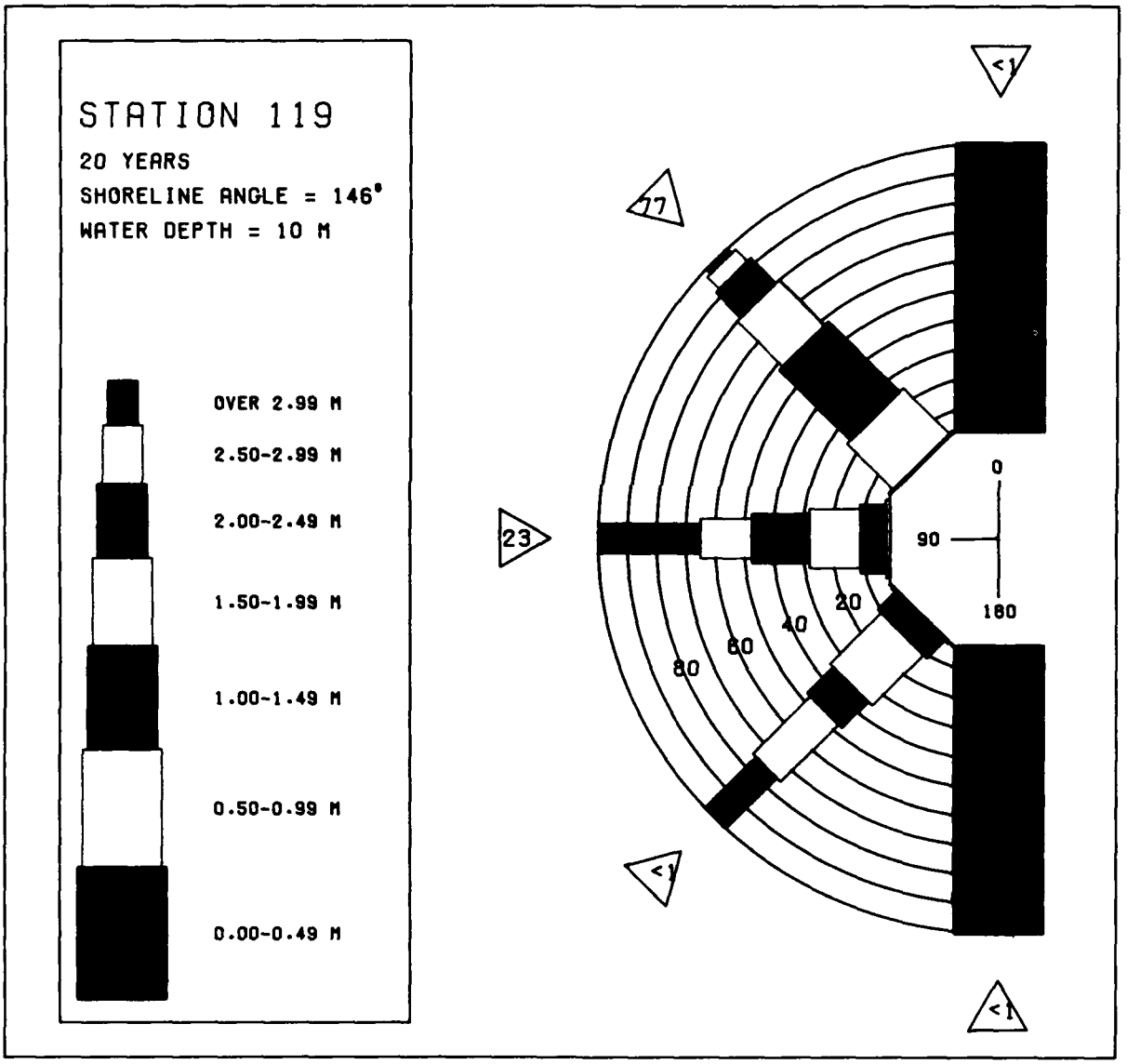
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 119 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	15	32	2	3	1	1	.	.	.	57
0.50 - 0.99	90	478	747	254	116	38	6	2	.	.	1731
1.00 - 1.49	200	479	681	575	608	254	49	4	1	.	2851
1.50 - 1.99	97	309	200	229	600	512	142	14	.	.	2103
2.00 - 2.49	7	139	99	55	285	565	220	19	2	.	1391
2.50 - 2.99	.	49	41	16	77	398	242	31	2	.	856
3.00 - 3.49	.	17	17	6	15	161	271	23	.	.	510
3.50 - 3.99	.	1	8	2	2	40	183	25	.	.	261
4.00 - 4.49	.	.	2	1	.	7	82	21	1	.	114
4.50 - 4.99	.	.	.	.	.	.	19	30	.	.	49
5.00 +	.	.	.	.	.	.	7	29	.	.	36
TOTAL	397	1487	1827	1140	1706	1976	1222	198	6	0	

MEAN HS(M) = 1.77 LARGEST HS(M) = 6.47 MEAN TP(SEC)= 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 119 (36.03N/ 121.63W TO 35.86N/ 121.53W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.2	2.4	1.7	1.6	1.4	1.6	1.1	1.3	0.9	1.3	1.6	2.0	1.6
1957	2.0	2.1	2.0	1.8	1.4	1.3	0.9	1.0	1.2	1.5	2.0	2.5	1.6
1958	2.1	2.9	2.0	2.3	1.5	1.2	1.1	0.9	1.1	2.2	2.0	2.8	1.8
1959	2.5	2.8	2.1	1.6	1.5	1.4	1.0	1.0	1.3	1.7	1.9	2.9	1.8
1960	2.4	3.0	1.4	1.8	1.4	1.0	0.9	0.9	0.8	1.3	2.2	2.4	1.6
1961	3.0	2.4	2.2	1.5	1.3	1.2	0.8	0.7	0.9	1.5	1.7	2.2	1.6
1962	1.9	2.4	2.0	1.7	1.2	0.9	1.0	1.1	1.1	1.7	2.6	2.5	1.7
1963	2.3	2.7	2.1	1.6	1.3	1.4	1.1	0.8	1.2	1.9	2.3	2.5	1.8
1964	3.3	2.2	2.3	1.9	1.4	1.5	1.5	1.2	1.2	1.3	2.1	2.6	1.9
1965	2.4	2.3	2.1	1.7	1.6	1.6	1.0	0.9	1.0	1.5	1.9	2.7	1.7
1966	2.8	2.1	1.8	1.7	1.4	1.3	1.1	1.0	1.2	1.3	1.7	2.7	1.7
1967	2.5	2.6	1.8	1.7	1.3	1.1	1.0	0.8	1.5	2.0	2.0	2.5	1.7
1968	2.0	2.4	2.2	1.9	1.4	1.4	1.3	1.1	1.1	1.6	2.7	2.5	1.8
1969	2.2	2.8	2.3	2.3	1.4	1.4	1.1	0.9	1.0	1.8	2.0	4.0	2.0
1970	3.0	3.3	2.9	2.3	1.5	1.2	1.1	1.0	1.1	1.3	2.2	2.5	2.0
1971	2.3	2.2	2.1	2.2	1.5	1.2	1.2	1.2	1.4	1.4	1.8	2.4	1.8
1972	2.6	2.4	2.0	1.6	1.6	1.5	1.4	1.3	0.9	1.2	2.7	2.4	1.8
1973	2.2	2.3	2.6	2.1	1.8	1.7	1.6	1.5	1.5	1.5	2.0	3.0	2.1
1974	2.4	2.3	2.9	2.2	2.2	1.9	1.5	1.2	1.1	1.8	2.1	3.0	1.9
1975	1.9	2.2	2.1	1.5	1.4	1.3	1.3	1.0	0.7	1.5	1.7	2.1	1.5
MEAN	2.5	2.5	2.1	1.8	1.5	1.3	1.2	1.0	1.1	1.5	2.1	2.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 119 (36.03N/ 121.63W TO 35.86N/ 121.53W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	3.5	3.6	3.3	2.6	2.7	1.8	2.6	2.0	2.6	3.0	3.0
1957	3.2	6.1	3.6	3.3	2.8	2.4	1.9	1.6	2.3	2.8	4.9	4.1
1958	5.3	5.0	3.6	6.5	2.2	2.4	2.0	1.6	2.0	2.8	5.2	4.5
1959	5.0	5.3	3.6	3.3	2.4	2.3	2.3	2.2	2.4	3.5	5.0	4.3
1960	5.0	4.8	3.4	3.0	2.2	1.9	1.6	1.6	1.2	3.8	4.0	4.0
1961	5.9	3.8	4.9	2.6	2.8	2.3	1.4	1.1	1.6	2.9	3.0	3.4
1962	3.3	4.2	3.5	3.1	2.1	1.8	2.0	2.2	2.3	4.5	4.4	4.3
1963	5.9	5.6	3.6	3.0	2.3	2.7	2.9	1.6	1.9	3.9	3.7	5.5
1964	6.3	3.1	3.5	3.4	3.2	3.1	2.8	2.4	2.1	3.1	3.4	5.2
1965	3.8	4.4	3.3	3.1	3.1	3.0	1.9	1.5	1.9	3.6	3.6	4.5
1966	4.8	3.3	3.9	3.4	2.2	2.3	1.8	1.9	2.2	2.7	3.1	4.8
1967	4.7	4.6	3.4	2.6	2.8	2.4	1.5	1.7	2.6	4.2	3.2	4.2
1968	3.2	4.2	3.6	4.0	2.7	2.6	2.6	2.1	2.9	3.4	4.7	4.5
1969	4.3	5.0	4.1	4.1	2.8	2.4	2.3	1.8	2.2	3.1	3.5	6.2
1970	4.8	3.4	5.4	4.6	3.0	2.1	1.8	1.8	2.2	2.9	4.2	4.5
1971	4.7	3.5	4.3	4.2	2.9	2.6	2.4	2.1	2.4	2.9	4.0	4.8
1972	5.5	4.5	3.6	2.8	2.5	2.4	2.4	2.1	1.9	1.9	4.4	5.4
1973	5.1	4.6	4.3	4.1	3.0	3.5	2.5	2.3	2.5	3.2	4.2	6.0
1974	4.0	3.7	5.1	4.2	3.4	2.6	2.6	2.1	1.9	4.3	4.4	5.0
1975	4.1	4.4	3.8	2.3	2.9	2.8	2.1	1.8	1.2	3.2	2.5	4.0

20 YR. STATISTICS FOR PACIFIC STATION119 (36.03N/ 121.63W TO 35.86N/ 121.53W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	35	.	.	.	.	.	.	.	.	.	35
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	35	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.31 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 21

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	140	138	32	.	.	.	.	.	.	.	310
0.50 - 0.99	2619	3600	395	.	.	.	.	.	.	.	6614
1.00 - 1.49	3966	7149	162	.	.	.	.	.	.	.	11277
1.50 - 1.99	265	3550	68	.	.	.	.	.	.	.	3883
2.00 - 2.49	.	157	1	.	.	.	.	.	.	.	158
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6990	14595	658	0	0	0	0	0	0	0	

MEAN HS(M) = 1.18 LARGEST HS(M) = 2.53 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 13003

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	20	438	61	34	11	1	6	.	.	574
0.50 - 0.99	10	847	7279	3381	2043	686	105	20	8	.	14383
1.00 - 1.49	65	927	3658	4746	6348	3314	732	61	17	.	19868
1.50 - 1.99	95	1404	1558	1651	5263	5824	1803	128	32	.	17758
2.00 - 2.49	8	698	1021	296	1581	4953	2484	287	35	.	11363
2.50 - 2.99	.	88	191	75	331	2137	2992	268	5	.	6087
3.00 - 3.49	.	6	22	17	87	585	1988	265	6	.	2976
3.50 - 3.99	.	.	1	1	1	234	802	277	17	.	1333
4.00 - 4.49	.	.	.	8	1	35	179	318	.	.	541
4.50 - 4.99	.	.	.	.	.	.	73	100	.	.	173
5.00 +	.	.	.	.	.	.	8	106	.	.	114
TOTAL	181	3990	14168	10236	15689	17779	11171	1836	120	0	

MEAN HS(M) = 1.70 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 43951

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	1	.	.	.	.	.	.	.	1
0.50 - 0.99	8	5	.	.	.	.	.	.	.	.	13
1.00 - 1.49	27	63	10	10	1	.	.	.	.	.	111
1.50 - 1.99	49	123	32	44	23	1	.	1	5	.	278
2.00 - 2.49	13	275	61	44	22	32	.	.	1	.	448
2.50 - 2.99	.	189	112	46	27	35	8	.	.	.	417
3.00 - 3.49	.	66	148	25	32	56	25	3	.	.	355
3.50 - 3.99	.	3	65	22	5	29	13	.	.	.	137
4.00 - 4.49	.	.	8	10	.	17	5	.	.	.	40
4.50 - 4.99	.	.	1	.	5	13	10	.	.	.	29
5.00 +	.	.	.	.	1	27	15	4	6	0	43
TOTAL	97	724	438	201	116	210	76	4	6	0	

MEAN HS(M) = 2.67 LARGEST HS(M) = 5.90 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1109

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	13	.	.	.	.	.	.	.	.	.	13
1.00 - 1.49	58	11	.	.	.	.	.	.	.	.	69
1.50 - 1.99	59	30	15	5	.	.	.	.	.	.	109
2.00 - 2.49	15	78	27	.	.	.	.	.	.	.	120
2.50 - 2.99	.	63	35	.	.	.	.	.	.	.	98
3.00 - 3.49	.	27	44	1	.	.	.	.	.	.	72
3.50 - 3.99	.	.	22	15	.	.	.	.	.	.	37
4.00 - 4.49	.	.	6	5	.	.	.	.	.	.	11
4.50 - 4.99	.	.	.	1	.	.	.	.	.	.	1
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	145	209	149	27	1	0	0	0	0	0	

MEAN HS(M) = 2.38 LARGEST HS(M) = 5.43 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 317

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	8	.	.	.	.	.	.	.	.	23
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	6	8	.	.	.	.	.	.	.	.	14
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	29	19	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.86 LARGEST HS(M) = 1.99 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 30

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

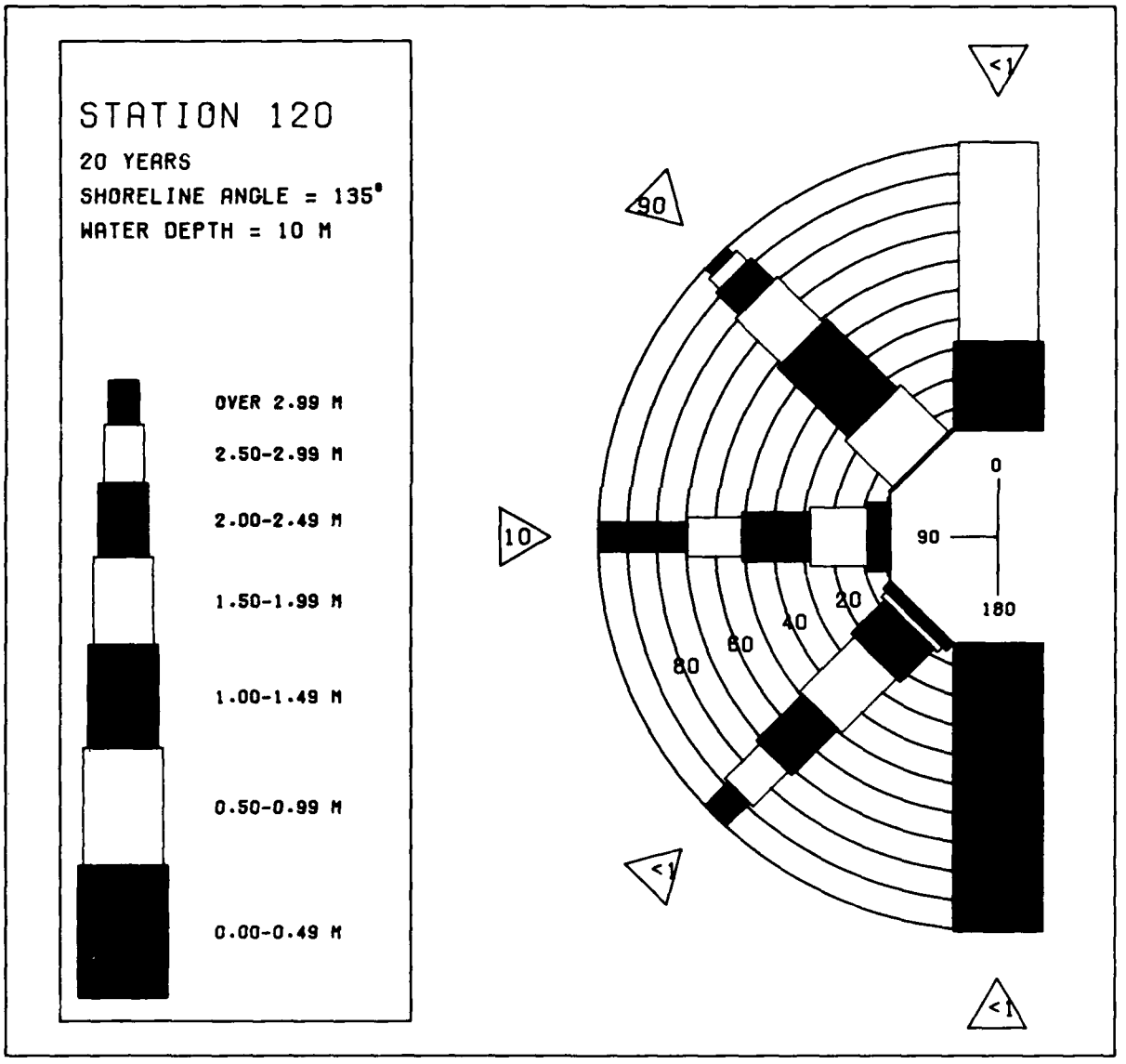
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 120 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	19	16	47	6	3	1	.	.	.	.	92
0.50 - 0.99	265	445	767	338	204	68	10	2	.	.	2099
1.00 - 1.49	412	615	383	475	635	331	73	6	1	.	3131
1.50 - 1.99	47	511	167	170	528	582	180	13	3	.	2201
2.00 - 2.49	3	120	111	34	160	498	248	28	3	.	1205
2.50 - 2.99	.	34	34	12	35	217	300	26	.	.	658
3.00 - 3.49	.	10	21	4	11	64	201	26	.	.	337
3.50 - 3.99	.	.	8	3	.	26	81	27	1	.	146
4.00 - 4.49	.	.	1	2	.	5	18	31	.	.	57
4.50 - 4.99	.	.	.	.	.	1	8	10	.	.	19
5.00 +	.	.	.	.	.	1	2	10	.	.	14
TOTAL	746	1951	1539	1044	1576	1795	1121	179	8	0	

MEAN HS(M) = 1.61 LARGEST HS(M) = 6.52 MEAN TP(SEC)= 10.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 120 (35.86N/ 121.53W TO 35.76N/ 121.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.2	2.0	1.5	1.5	1.2	1.4	1.0	1.2	0.8	1.1	1.4	1.7	1.4
1957	1.8	1.9	1.9	1.6	1.4	1.2	0.9	1.0	1.1	1.4	1.7	2.1	1.5
1958	2.7	2.9	1.8	2.1	1.0	1.2	1.0	0.9	1.0	1.1	1.6	2.5	1.6
1959	2.3	2.5	1.9	1.4	1.4	1.4	1.0	0.9	1.2	1.5	1.6	2.1	1.6
1960	2.2	2.6	1.3	1.7	1.3	1.0	0.8	0.9	0.8	1.1	1.9	2.1	1.5
1961	2.7	2.2	2.0	1.3	1.2	1.1	0.8	0.7	0.9	1.3	1.6	1.9	1.5
1962	1.7	2.2	1.7	1.4	1.2	0.9	1.1	1.0	1.0	1.5	2.2	2.4	1.5
1963	2.1	2.9	1.9	1.5	1.3	1.3	1.0	0.9	1.0	1.6	2.0	2.2	1.9
1964	2.6	1.9	2.0	1.7	1.3	1.4	1.2	1.2	1.2	1.6	1.8	2.4	1.7
1965	2.1	2.0	1.9	1.6	1.3	1.5	1.0	0.9	1.0	1.3	1.8	2.3	1.6
1966	2.4	1.9	1.7	1.5	1.3	1.3	1.1	1.0	1.1	1.1	1.5	2.5	1.5
1967	2.3	2.2	1.7	1.5	1.2	1.1	1.0	0.9	1.3	1.7	1.6	2.1	1.5
1968	2.0	2.3	2.0	1.7	1.4	1.3	1.3	1.1	1.0	1.3	2.3	2.3	1.7
1969	2.0	2.5	2.0	2.0	1.3	1.3	1.2	1.0	0.9	1.6	1.5	3.6	1.8
1970	2.9	2.9	2.6	2.0	1.4	1.2	1.2	1.0	1.0	1.1	2.0	2.2	1.8
1971	2.1	2.0	1.9	1.9	1.3	1.5	1.1	1.1	1.2	1.3	1.6	2.0	1.6
1972	2.1	2.2	1.9	1.5	1.2	1.4	1.4	1.2	0.9	1.0	2.4	2.2	1.6
1973	2.9	3.0	2.3	1.8	1.7	1.6	1.6	1.4	1.4	1.3	1.9	2.7	2.0
1974	2.5	1.9	2.0	2.0	2.0	1.5	1.5	1.3	1.1	1.4	1.8	2.7	1.8
1975	1.6	2.1	1.9	1.3	1.3	1.3	1.3	1.0	0.8	1.2	1.4	1.8	1.4
MEAN	2.3	2.3	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 120 (35.86N/ 121.53W TO 35.76N/ 121.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.5	3.4	2.9	2.8	2.2	2.2	1.6	2.1	1.9	2.5	2.8	2.6
1957	3.2	6.5	3.2	2.8	2.6	2.2	1.6	1.5	2.1	2.4	4.3	3.4
1958	4.6	4.5	3.2	5.9	1.8	2.0	1.6	1.6	1.5	2.3	4.1	4.0
1959	4.2	5.5	3.1	2.8	2.3	2.0	1.6	1.7	2.3	2.8	4.4	3.6
1960	4.4	4.6	2.9	2.8	1.9	1.9	1.3	1.4	1.2	2.1	3.5	3.7
1961	5.1	2.5	3.5	2.3	2.2	1.9	1.3	1.2	1.2	2.7	2.9	2.9
1962	2.9	4.4	3.6	2.8	1.9	1.5	1.8	1.9	1.6	3.7	3.8	4.3
1963	5.9	5.9	2.7	2.7	2.1	2.4	1.6	1.5	1.6	3.2	3.3	4.5
1964	5.5	2.8	2.7	2.7	2.5	2.7	2.3	2.3	2.1	1.8	2.8	5.2
1965	3.5	3.7	2.8	2.9	2.7	2.5	1.7	1.5	1.5	3.0	3.9	4.6
1966	4.6	3.3	2.9	2.9	2.2	1.9	1.5	1.6	2.0	2.3	2.6	4.0
1967	4.3	3.6	3.1	2.4	2.3	2.1	1.5	1.5	2.1	2.7	2.7	3.5
1968	3.5	4.0	3.0	3.4	2.4	2.2	2.1	1.8	2.3	3.0	3.9	4.2
1969	4.1	4.3	3.7	3.4	2.4	2.1	2.1	1.5	1.6	2.8	3.0	6.2
1970	5.0	4.4	4.8	3.7	2.3	2.1	1.7	1.5	1.6	2.4	3.7	3.8
1971	3.8	3.2	3.8	3.5	2.7	2.2	1.8	1.9	2.1	2.3	3.4	3.8
1972	4.6	3.9	3.2	2.6	2.3	2.2	2.1	2.1	1.8	1.6	3.8	4.5
1973	4.9	4.2	3.6	3.1	2.5	2.7	2.3	2.0	2.2	2.7	3.8	5.4
1974	5.5	3.4	4.4	3.7	2.8	2.3	2.4	2.0	1.8	3.7	4.0	4.7
1975	3.5	3.7	3.7	2.2	2.5	2.4	2.2	1.7	1.3	2.5	2.1	3.6

20 YR. STATISTICS FOR PACIFIC STATION120 (35.86N/ 121.53W TO 35.76N/ 121.41W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022415

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	1	.	.	.	.	.	.	.	.	11
0.50 - 0.99	431	111	.	.	.	.	.	.	.	.	542
1.00 - 1.49	1783	612	.	.	.	.	.	.	.	.	2395
1.50 - 1.99	25	94	.	.	.	.	.	.	.	.	119
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2249	818	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.17 LARGEST HS(M) = 1.69 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 1794

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	17	61	10	1	.	.	.	.	.	101
0.50 - 0.99	219	1906	4274	1131	496	172	23	5	.	.	8226
1.00 - 1.49	1587	4274	6221	4190	3473	1321	213	18	.	.	21297
1.50 - 1.99	1555	6461	2648	3523	5085	2980	586	34	6	.	22878
2.00 - 2.49	20	2522	1237	1579	4476	3963	1110	32	1	.	14940
2.50 - 2.99	.	396	775	347	1842	4086	1319	30	3	.	8798
3.00 - 3.49	.	10	154	102	549	2787	1832	37	.	.	5471
3.50 - 3.99	.	.	22	13	126	1115	1901	78	.	.	3255
4.00 - 4.49	.	.	1	.	8	319	1331	124	.	.	1783
4.50 - 4.99	.	.	.	.	.	25	799	104	.	.	928
5.00 +	.	.	.	.	.	.	287	405	.	.	692
TOTAL	3392	15586	15393	10895	16055	16769	9401	868	10	0	

MEAN HS(M) = 2.00 LARGEST HS(M) = 6.64 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 51664

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	1	.	.	1
0.50 - 0.99	.	8	20	6	8	.	.	3	.	.	45
1.00 - 1.49	11	58	77	65	107	54	49	13	1	.	435
1.50 - 1.99	53	53	147	143	266	325	217	54	30	.	1288
2.00 - 2.49	5	39	102	124	266	600	439	82	30	.	1747
2.50 - 2.99	.	109	61	83	176	446	366	201	25	.	1467
3.00 - 3.49	.	30	49	18	104	405	412	148	20	.	1186
3.50 - 3.99	.	.	39	17	23	189	253	104	8	.	633
4.00 - 4.49	.	.	1	8	5	123	248	92	3	.	480
4.50 - 4.99	.	.	.	3	.	32	118	80	6	.	239
5.00 +	.	.	.	.	.	29	59	251	10	.	349
TOTAL	69	357	496	467	955	2203	2161	1029	133	0	

MEAN HS(M) = 2.81 LARGEST HS(M) = 6.60 MEAN TP(SEC) = 12.8 NUMBER OF CASES = 4621

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 150.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	3	.	.	.	.	.	.	.	4
1.00 - 1.49	18	5	6	5	.	.	.	.	.	.	34
1.50 - 1.99	30	63	.	.	.	.	.	.	.	.	93
2.00 - 2.49	10	99	39	.	.	.	.	.	.	.	148
2.50 - 2.99	.	47	54	1	.	.	.	.	.	.	102
3.00 - 3.49	.	23	92	18	.	3	.	.	.	.	136
3.50 - 3.99	.	.	34	10	1	3	.	.	.	.	48
4.00 - 4.49	.	.	8	6	3	.	.	.	.	.	17
4.50 - 4.99	.	.	1	.	1	1	.	.	.	.	3
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	59	237	237	40	6	7	0	0	0	0	

MEAN HS(M) = 2.62 LARGEST HS(M) = 5.04 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 352

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 150.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	7	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.84 LARGEST HS(M) = 1.52 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 9

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 150.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

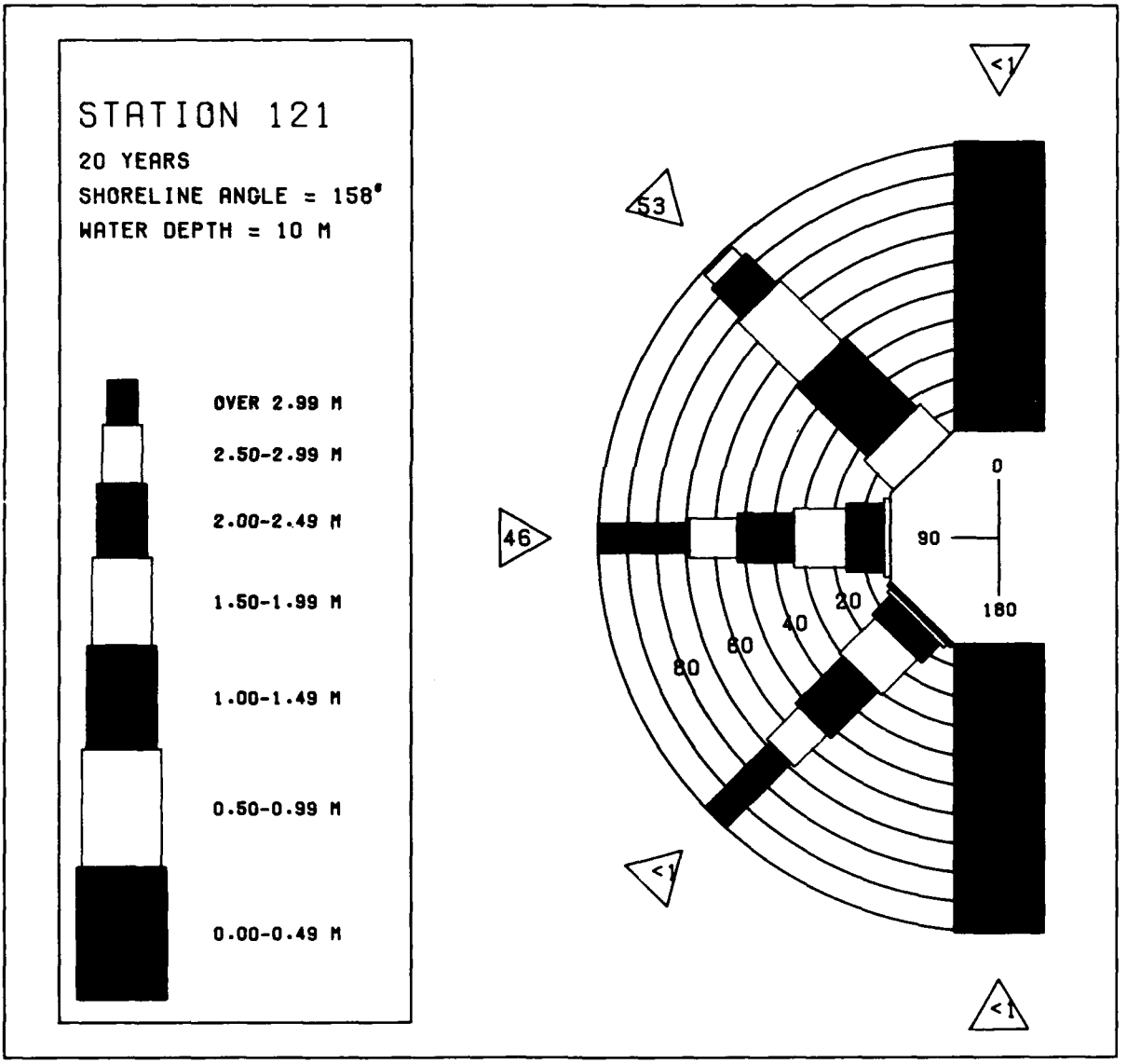
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 121 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2	2	6	1	.	.	.	.	.	.	11
0.50 - 0.99	65	202	429	113	50	17	2	.	.	.	878
1.00 - 1.49	340	495	630	426	358	137	26	3	.	.	2415
1.50 - 1.99	166	667	279	366	535	330	80	8	3	.	2434
2.00 - 2.49	3	272	137	170	474	456	155	11	3	.	1681
2.50 - 2.99	.	55	89	43	201	453	168	23	2	.	1034
3.00 - 3.49	.	6	29	14	65	319	224	18	2	.	677
3.50 - 3.99	.	.	9	4	15	130	215	18	.	.	391
4.00 - 4.49	.	.	1	1	1	44	157	21	.	.	225
4.50 - 4.99	.	.	.	.	.	5	91	18	.	.	114
5.00 +	.	.	.	.	.	2	34	65	1	.	102
TOTAL	576	1699	1609	1138	1699	1893	1152	185	11	0	

MEAN HS(M) = 2.04 LARGEST HS(M) = 6.64 MEAN TP(SEC)= 10.3 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.6	2.0	1.8	1.6	1.8	1.3	1.5	1.1	1.5	1.8	2.2	1.8
1957	2.3	2.4	2.3	2.0	1.7	1.5	1.3	1.2	1.3	1.7	2.2	2.8	1.9
1958	3.4	3.3	2.2	2.7	1.3	1.5	1.3	1.1	1.3	1.4	2.1	3.2	2.1
1959	2.9	3.1	2.4	1.8	1.8	1.7	1.3	1.2	1.5	2.0	2.1	2.7	2.0
1960	2.8	3.4	1.7	2.1	1.7	1.3	1.1	1.1	1.0	1.6	2.4	2.7	1.9
1961	3.4	2.8	2.5	1.7	1.5	1.3	1.1	0.9	1.2	1.7	2.1	2.5	1.9
1962	3.1	2.9	2.1	1.9	1.5	1.1	1.4	1.3	1.3	1.9	2.8	2.9	1.9
1963	3.5	3.3	2.4	1.8	1.6	1.4	1.3	1.2	1.3	2.0	2.6	2.8	2.0
1964	3.7	2.5	2.5	2.6	1.6	1.7	1.6	1.4	1.5	1.4	2.2	2.9	2.1
1965	2.7	2.6	2.4	1.9	1.9	1.9	1.2	1.1	1.2	1.7	2.2	2.9	2.0
1966	3.1	2.3	2.2	2.0	1.6	1.6	1.4	1.3	1.4	1.5	1.9	3.1	1.9
1967	2.9	2.9	2.0	1.9	1.5	1.3	1.3	1.1	1.7	2.3	2.2	2.8	2.0
1968	3.4	2.8	2.5	2.3	1.7	1.6	1.6	1.3	1.2	1.7	2.1	2.8	2.1
1969	3.4	3.2	2.7	2.6	1.7	1.6	1.5	1.3	1.3	2.1	2.3	4.5	2.3
1970	3.4	3.9	3.4	2.6	1.7	1.5	1.5	1.3	1.5	1.5	2.5	2.9	2.3
1971	3.7	3.5	2.5	2.2	1.7	1.7	1.4	1.4	1.3	1.7	2.1	2.9	2.0
1972	3.9	2.8	2.5	1.9	1.6	1.8	1.4	1.4	1.2	1.3	2.1	3.7	2.1
1973	3.7	3.7	2.9	2.3	2.1	2.0	2.0	1.8	1.8	1.8	2.5	3.4	2.5
1974	2.9	2.6	2.5	2.5	2.5	1.9	1.8	1.6	1.4	1.8	2.4	3.4	2.3
1975	2.1	2.6	2.3	1.7	1.7	1.6	1.6	1.3	0.9	1.6	2.0	2.4	1.8
MEAN	2.8	2.9	2.4	2.1	1.7	1.6	1.4	1.3	1.3	1.7	2.3	2.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.1	4.1	3.9	3.5	2.8	2.8	2.0	2.7	2.5	2.7	3.7	3.4
1957	3.4	6.6	4.2	3.8	3.3	2.8	2.1	1.8	2.4	4.2	5.9	4.6
1958	6.0	5.0	4.1	7.6	2.3	2.6	2.0	2.0	1.8	3.1	5.7	5.3
1959	5.9	5.0	4.6	4.8	3.1	2.5	2.0	2.1	2.4	3.8	5.9	4.7
1960	7.1	5.9	5.8	4.5	3.3	2.3	1.7	1.8	1.5	4.3	4.6	5.0
1961	6.1	4.3	4.6	3.0	2.8	2.5	1.6	1.4	2.0	3.5	3.6	3.8
1962	3.8	4.7	3.4	3.7	2.3	2.0	2.2	2.4	2.1	4.1	5.1	5.1
1963	6.0	6.0	3.7	3.2	2.6	2.9	2.0	1.8	2.1	4.3	4.1	6.0
1964	6.4	3.6	3.6	3.8	3.2	2.7	2.7	2.8	2.5	2.4	3.9	6.2
1965	4.4	5.0	3.5	3.5	3.3	3.1	2.1	1.9	2.2	4.1	4.3	4.5
1966	5.8	4.3	3.7	3.8	2.7	2.4	2.0	2.1	2.7	3.1	3.5	5.5
1967	5.0	4.8	3.9	3.0	2.9	2.5	1.8	1.6	1.8	2.0	3.9	2.3
1968	3.9	4.6	4.1	4.6	3.9	2.7	2.7	2.6	2.9	4.0	5.3	5.0
1969	4.4	5.8	5.0	4.3	3.1	2.6	2.6	1.9	2.1	3.8	4.3	6.6
1970	5.7	5.9	6.1	5.1	3.1	2.8	2.2	1.9	2.0	3.2	5.0	4.9
1971	5.2	4.2	4.8	4.6	3.5	2.8	2.3	2.5	2.7	2.9	4.6	5.2
1972	6.0	5.2	4.2	3.0	2.9	2.7	2.5	2.5	2.1	2.0	5.1	6.0
1973	6.0	5.5	4.5	4.2	3.2	3.5	2.8	2.5	2.8	3.7	4.8	6.0
1974	5.7	4.0	5.6	4.4	3.6	2.8	3.0	2.4	2.3	4.8	5.4	5.4
1975	4.7	5.1	3.8	2.7	3.2	3.0	2.7	2.1	1.5	3.4	2.9	4.6

20 YR. STATISTICS FOR PACIFIC STATION121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	10.3
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	74.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5441	.	.	.	.	.	.	.	.	.	5441
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5441	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3180

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7970	6042	3304	.	.	.	.	.	.	.	17316
0.50 - 0.99	5162	13706	4087	.	.	.	.	.	.	.	22955
1.00 - 1.49	227	3593	1158	.	.	.	.	.	.	.	4978
1.50 - 1.99	11	54	46	.	.	.	.	.	.	.	111
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13370	23400	8595	0	0	0	0	0	0	0	

MEAN HS(M) = 0.62 LARGEST HS(M) = 2.19 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 26515

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	342	63	1943	1327	539	189	35	15	.	.	4453
0.50 - 0.99	266	357	2989	4676	5953	3788	824	90	1	.	18943
1.00 - 1.49	241	362	787	525	1060	2549	2049	174	11	.	7758
1.50 - 1.99	68	535	150	61	133	550	626	167	3	.	2293
2.00 - 2.49	3	177	29	13	17	157	186	53	.	.	635
2.50 - 2.99	.	35	47	17	3	37	66	10	.	.	215
3.00 - 3.49	.	1	11	1	1	.	11	.	.	.	25
3.50 - 3.99	.	.	1	3	.	.	5	.	.	.	9
4.00 - 4.49	.	.	3	.	.	.	10	.	.	.	13
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	920	1530	5960	6623	7706	7270	3812	509	14	0	

MEAN HS(M) = 0.90 LARGEST HS(M) = 4.44 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 20090

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	333	47	.	.	.	.	.	.	.	.	380
0.50 - 0.99	429	70	.	.	.	.	.	3	.	.	502
1.00 - 1.49	347	347	3	1	.	.	.	.	.	.	698
1.50 - 1.99	104	395	73	18	.	.	.	.	.	.	590
2.00 - 2.49	10	355	138	6	.	1	.	.	.	.	510
2.50 - 2.99	.	63	154	13	5	1	.	.	.	.	236
3.00 - 3.49	.	5	56	17	.	3	.	.	.	.	81
3.50 - 3.99	.	.	10	10	.	3	.	.	.	.	23
4.00 - 4.49	.	.	1	.	1	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	3	.	.	.	.	.	3
5.00 +	.	.	1	1	3	.	.	.	.	.	5
TOTAL	1223	1282	436	66	11	8	0	3	0	0	

MEAN HS(M) = 1.51 LARGEST HS(M) = 5.47 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 1780

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2722	135	.	.	.	.	.	.	.	.	2857
0.50 - 0.99	580	85	94	.	.	.	.	.	.	.	759
1.00 - 1.49	174	11	34	3	.	.	.	.	.	.	222
1.50 - 1.99	32	58	.	.	.	.	.	.	.	.	90
2.00 - 2.49	10	25	6	.	.	.	.	.	.	.	41
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3518	317	134	3	0	0	0	0	0	0	

MEAN HS(M) = 0.44 LARGEST HS(M) = 2.83 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 2325

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2650	.	.	.	.	.	.	.	.	.	2650
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2650	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.18 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 1549

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

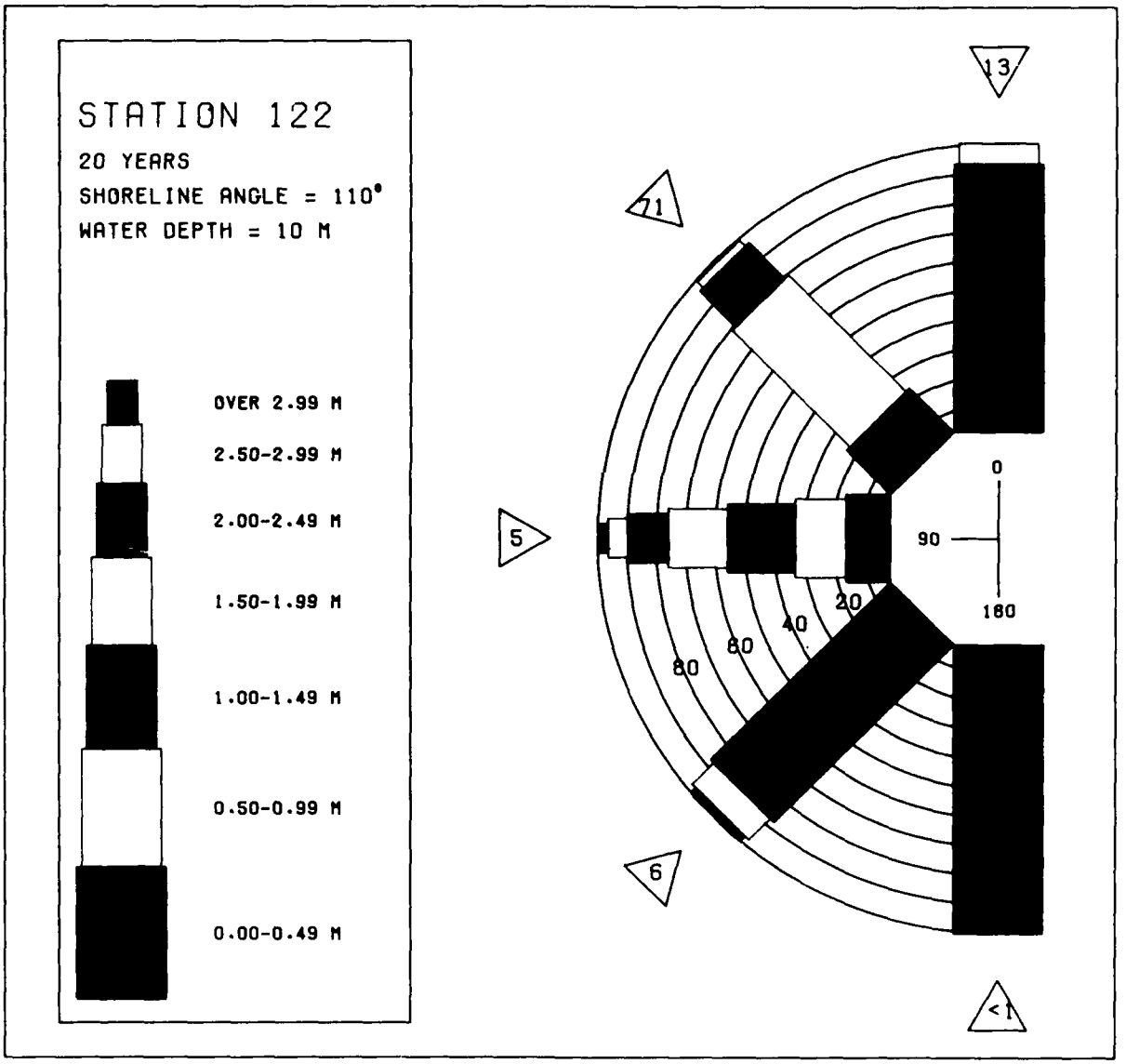
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 122 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	1946	628	524	132	53	18	3	1	.	.	3305
0.50 - 0.99	643	1421	717	467	595	378	82	9	.	.	4312
1.00 - 1.49	99	431	198	53	106	254	204	17	1	.	1363
1.50 - 1.99	21	104	27	8	13	55	62	16	.	.	306
2.00 - 2.49	2	56	17	2	1	15	18	5	.	.	116
2.50 - 2.99	.	10	20	3	.	3	6	1	.	.	43
3.00 - 3.49	.	.	6	1	.	.	1	.	.	.	8
3.50 - 3.99	.	.	1	1	.	.	.	.	.	.	2
4.00 - 4.49	.	.	.	.	.	.	1	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2711	2650	1510	667	768	723	377	49	1	0	

MEAN HS(M) = 0.66 LARGEST HS(M) = 5.47 MEAN TP(SEC)= 8.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.1	0.7	0.6	0.7	0.6	0.7	0.5	0.6	0.4	0.6	0.3	0.7	0.6
1957	0.7	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.6	0.8	0.6	0.7	0.7
1958	1.0	1.6	1.0	0.8	0.5	0.6	0.6	0.5	0.5	0.4	0.6	0.6	0.7
1959	0.9	1.1	0.6	0.6	0.7	0.7	0.5	0.5	0.6	0.6	0.4	0.7	0.7
1960	0.9	1.1	0.6	0.7	0.6	0.5	0.4	0.5	0.3	0.5	0.8	0.8	0.6
1961	1.0	0.9	1.0	0.6	0.7	0.5	0.4	0.4	0.5	0.4	0.7	0.5	0.6
1962	0.7	1.2	0.8	0.5	0.6	0.4	0.6	0.4	0.5	0.8	0.6	1.1	0.7
1963	0.9	1.5	0.8	0.9	0.6	0.7	0.5	0.5	0.5	0.7	0.7	0.5	0.7
1964	0.9	0.4	0.7	0.8	0.8	0.9	0.8	0.7	0.6	0.5	0.7	1.2	0.8
1965	0.9	0.5	0.7	0.8	0.7	0.8	0.6	0.5	0.5	0.4	0.9	0.8	0.7
1966	0.9	0.6	0.7	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.6	1.0	0.6
1967	0.9	0.4	1.0	0.9	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.7	0.6
1968	0.8	1.2	0.8	0.6	0.8	0.7	0.7	0.6	0.5	0.5	0.7	1.1	0.7
1969	1.3	1.1	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.4	1.0	0.7
1970	1.4	0.7	0.8	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.8	0.8	0.7
1971	0.6	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.5	0.5	0.6	0.9	0.7
1972	0.5	0.9	0.7	0.6	0.8	0.8	0.8	0.7	0.5	0.5	0.8	0.8	0.7
1973	1.0	1.1	1.0	0.8	0.9	0.8	0.9	0.8	0.6	0.6	0.8	0.8	0.8
1974	1.4	0.6	1.0	0.8	1.1	0.8	0.8	0.8	0.6	0.6	0.5	0.8	0.8
1975	0.4	0.7	1.0	0.6	0.7	0.8	0.8	0.6	0.4	0.5	0.4	0.5	0.6
MEAN	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	2.9	2.0	1.9	1.7	1.3	1.2	1.0	1.2	0.8	1.7	1.0	1.4
1957	2.5	2.7	2.1	1.8	1.5	1.3	0.8	0.9	1.8	1.7	1.6	2.5
1958	2.5	3.0	2.8	2.7	0.9	1.2	1.1	0.9	1.2	0.8	1.5	2.1
1959	3.0	5.5	1.3	1.3	1.4	1.2	1.1	1.0	1.9	1.4	1.2	2.4
1960	2.6	3.4	1.5	1.7	1.1	0.9	0.8	0.9	0.6	1.1	2.2	2.3
1961	2.2	1.8	1.9	1.6	1.4	0.9	0.8	0.7	0.9	1.2	2.5	1.9
1962	2.8	3.2	3.4	1.5	1.4	1.0	1.2	1.0	0.9	4.1	1.5	2.8
1963	4.4	4.4	1.9	1.9	1.1	1.6	1.0	1.0	0.7	1.6	1.9	2.1
1964	2.3	2.4	1.8	1.5	1.6	1.8	1.5	1.5	1.3	1.3	1.6	2.9
1965	2.8	1.3	1.6	1.9	1.7	1.6	1.2	0.8	1.0	0.9	3.7	4.2
1966	2.4	2.0	1.4	1.2	1.2	1.1	0.9	1.0	1.3	0.9	2.3	3.0
1967	3.8	1.4	2.9	1.8	1.4	1.4	0.9	1.0	0.9	1.6	1.5	1.8
1968	2.2	3.5	2.0	1.6	1.6	1.5	1.2	1.2	1.4	1.4	1.8	2.8
1969	3.5	3.5	1.5	1.4	1.5	1.6	1.4	1.1	0.9	1.1	1.4	2.6
1970	3.6	1.7	1.9	1.7	1.7	1.4	0.9	0.9	1.1	1.2	2.9	2.2
1971	2.0	1.6	1.8	1.6	1.7	1.3	1.2	1.0	1.2	1.5	1.6	3.5
1972	1.9	1.2	1.7	1.4	1.5	1.3	1.3	1.3	1.1	1.1	2.2	1.9
1973	2.8	2.4	1.7	1.7	1.6	1.6	1.4	1.3	1.2	2.0	2.2	3.3
1974	3.0	2.0	2.5	2.2	1.8	1.3	1.4	1.3	1.1	1.7	2.2	3.5
1975	1.5	2.5	3.5	1.2	1.6	1.5	1.4	1.1	0.9	1.0	1.1	1.5

20 YR. STATISTICS FOR PACIFIC STATION122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	8.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	91.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021606

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	196	11	.	.	.	.	.	.	.	.	207
0.50 - 0.99	1016	318	.	.	.	.	.	.	.	.	1334
1.00 - 1.49	1416	408	.	.	.	.	.	.	.	.	1824
1.50 - 1.99	70	56	.	.	.	.	.	.	.	.	126
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2698	793	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.02 LARGEST HS(M) = 1.99 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 2043

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	49	123	371	54	32	10	13	11	.	.	663
0.50 - 0.99	439	4466	7549	2624	1372	407	29	11	.	.	16897
1.00 - 1.49	1211	4977	6033	5155	5412	2426	472	59	23	.	25768
1.50 - 1.99	583	4358	1978	2559	5768	4616	1338	136	13	.	21349
2.00 - 2.49	13	1226	1060	658	2944	5188	2733	188	13	.	13023
2.50 - 2.99	.	150	323	184	845	3685	2236	213	17	.	7653
3.00 - 3.49	.	6	30	23	111	1512	2534	191	1	.	4408
3.50 - 3.99	.	.	3	1	6	405	1627	224	1	.	2267
4.00 - 4.49	.	.	.	.	.	34	859	225	3	.	1121
4.50 - 4.99	.	.	.	.	.	5	167	251	3	.	426
5.00 +	.	.	.	.	.	.	53	330	.	.	383
TOTAL	2295	15306	17347	11258	16490	18288	11061	1839	74	0	

MEAN HS(M) = 1.75 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 54933

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	1	1	.	.	.	.	.	.	.	10
0.50 - 0.99	15	11	6	1	.	1	.	.	.	.	36
1.00 - 1.49	8	47	27	32	25	8	6	1	.	.	154
1.50 - 1.99	37	107	49	27	51	51	34	6	6	.	350
2.00 - 2.49	13	140	32	18	20	85	35	18	23	.	384
2.50 - 2.99	.	104	25	29	20	82	92	46	11	.	409
3.00 - 3.49	.	42	49	3	8	23	53	15	6	.	199
3.50 - 3.99	.	5	29	11	6	3	44	1	1	.	100
4.00 - 4.49	.	.	11	3	.	1	20	3	6	.	44
4.50 - 4.99	.	.	1	.	.	.	6	.	5	.	12
5.00 +	.	.	.	.	.	.	5	.	.	.	5
TOTAL	81	457	210	126	130	254	295	90	60	0	

MEAN HS(M) = 2.42 LARGEST HS(M) = 5.10 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1018

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49		5	.	.	.	.	.	.	.	.	5
0.50 - 0.99	5	.	.	.	.	.	.	.	.	.	5
1.00 - 1.49	30	22	.	.	.	.	.	.	.	.	52
1.50 - 1.99	39	59	15	1	.	.	.	.	.	.	114
2.00 - 2.49	11	65	41	.	.	.	.	.	.	.	117
2.50 - 2.99	.	112	56	1	.	.	.	.	.	.	169
3.00 - 3.49	.	47	47	8	.	.	.	.	.	.	102
3.50 - 3.99	.	.	18	11	.	.	.	.	.	.	29
4.00 - 4.49	.	.	6	5	1	.	.	.	.	.	12
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +	.	.	1	.	3	.	.	.	.	.	4
TOTAL	85	310	184	26	5	0	0	0	0	0	

MEAN HS(M) = 2.48 LARGEST HS(M) = 5.29 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 365

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	8	5	.	.	.	.	.	.	.	.	13
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	.	.	.	.	.	.	.	.	.	3
1.50 - 1.99	5	1	.	.	.	.	.	.	.	.	6
2.00 - 2.49	1	1	.	.	.	.	.	.	.	.	2
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	17	7	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.91 LARGEST HS(M) = 2.14 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 16

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

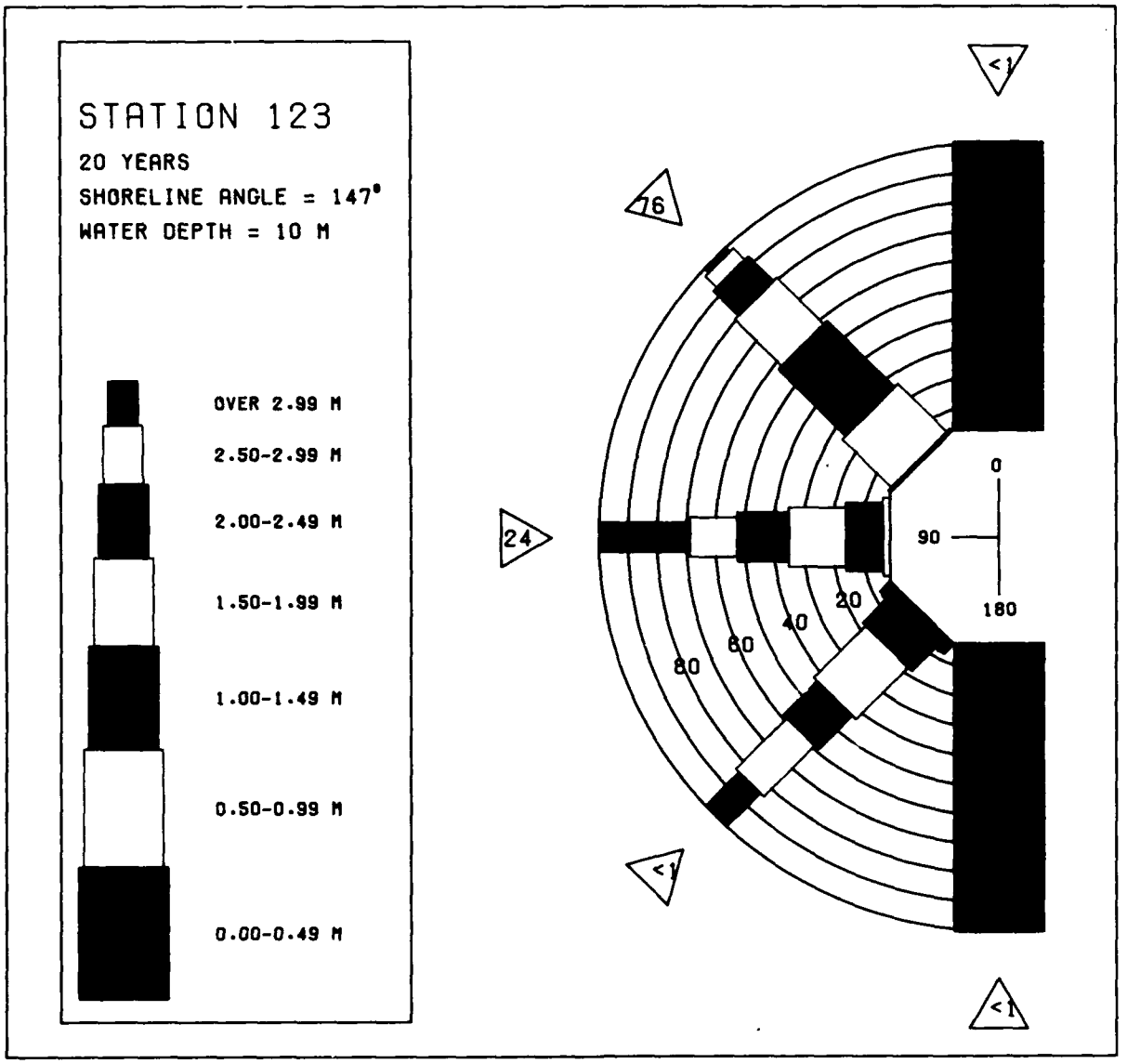
HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	51	.	.	.	.	.	.	.	.	.	51
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	51	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.22 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 30

PHASE 3 ST. 123 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT., LON. START= 35.56N/121.26W LAT., LON. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	31	14	37	6	3	1	1	1	.	.	93
0.50 - 0.99	147	479	755	262	137	40	2	1	.	.	1823
1.00 - 1.49	267	545	606	518	543	243	47	6	2	.	2777
1.50 - 1.99	73	458	202	256	581	466	137	14	2	.	2191
2.00 - 2.49	4	143	113	67	296	527	176	20	3	.	1349
2.50 - 2.99	.	36	40	21	86	376	232	26	2	.	819
3.00 - 3.49	.	9	12	3	11	153	258	20	.	.	466
3.50 - 3.99	.	.	5	2	1	40	167	22	.	.	237
4.00 - 4.49	.	.	1	.	.	3	87	22	1	.	114
4.50 - 4.99	.	.	.	.	.	.	17	25	.	.	42
5.00 +	.	.	.	.	.	.	5	33	.	.	38
TOTAL	522	1684	1771	1136	1658	1849	1129	190	10	0	

MEAN HS(M) = 1.74 LARGEST HS(M) = 6.58 MEAN TP(SEC)= 10.3 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.2	2.3	1.7	1.6	1.4	1.6	1.1	1.3	0.9	1.2	1.6	1.9	1.6
1957	2.0	2.0	2.0	1.7	1.4	1.3	0.9	1.0	1.2	1.4	2.0	2.5	1.6
1958	3.0	2.8	1.9	2.4	1.1	1.3	1.1	0.9	1.2	1.2	1.9	2.8	1.8
1959	2.5	2.7	2.1	1.5	1.5	1.4	1.0	1.0	1.2	1.7	1.9	2.4	1.7
1960	2.3	2.9	1.4	1.9	1.4	1.0	0.9	0.9	0.8	1.2	2.1	2.3	1.6
1961	2.9	2.4	2.2	1.4	1.3	1.2	0.8	0.7	0.9	1.4	1.7	2.1	1.6
1962	1.9	2.3	1.9	1.6	1.2	0.9	1.1	1.1	1.1	1.6	2.5	2.5	1.6
1963	2.2	2.7	2.1	1.5	1.4	1.4	1.0	0.9	1.1	1.7	2.3	2.5	1.7
1964	2.5	2.2	2.1	1.9	1.4	1.5	1.0	1.2	1.1	1.3	2.1	2.5	1.9
1965	2.3	2.3	2.1	1.6	1.6	1.6	1.0	0.9	1.0	1.4	1.8	2.2	1.7
1966	2.7	2.0	1.8	1.7	1.3	1.3	1.1	1.0	1.2	1.3	1.6	2.7	1.6
1967	2.5	2.5	1.7	1.6	1.3	1.1	1.0	0.9	1.1	2.0	1.9	2.4	1.7
1968	1.9	2.4	2.2	1.9	1.5	1.4	1.3	1.1	1.1	1.5	2.7	2.4	1.8
1969	2.2	2.8	2.3	2.3	1.4	1.4	1.2	0.9	1.0	1.8	1.9	4.0	1.9
1970	2.9	3.3	2.9	2.2	1.5	1.3	1.1	1.0	1.1	1.3	2.1	2.4	1.9
1971	2.3	2.2	2.1	2.1	1.4	1.6	1.2	1.1	1.1	1.4	1.8	2.2	1.7
1972	2.7	2.4	2.6	1.8	1.6	1.5	1.3	1.1	0.8	1.1	1.9	2.3	1.8
1973	2.3	2.2	2.6	2.0	1.6	1.7	1.7	1.5	1.2	1.4	1.9	2.9	2.1
1974	2.4	2.2	2.1	2.2	2.2	1.6	1.5	1.4	1.2	1.5	2.0	3.0	1.9
1975	1.8	2.2	2.0	1.4	1.4	1.3	1.4	1.0	0.7	1.3	1.6	2.1	1.5
MEAN	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	3.5	3.4	3.1	2.5	2.4	1.7	2.4	2.1	2.4	3.2	3.1
1957	3.5	6.2	3.5	3.4	2.8	2.5	1.8	1.6	2.3	2.8	5.1	4.2
1958	5.2	5.1	3.5	6.6	1.9	2.3	1.9	1.7	1.6	2.6	5.1	4.7
1959	4.8	5.3	3.6	3.3	2.6	2.2	1.9	1.9	2.1	3.4	5.2	4.2
1960	4.8	5.3	3.4	3.1	3.0	2.1	1.5	1.6	1.3	3.7	4.6	4.4
1961	6.0	3.6	4.8	2.6	2.3	2.4	1.3	1.6	1.3	3.1	3.9	3.3
1962	3.4	4.3	3.3	3.6	2.3	1.7	2.0	2.2	2.3	4.3	4.5	4.2
1963	5.1	5.0	3.2	2.9	2.3	2.6	1.7	1.6	1.8	3.8	3.7	5.5
1964	6.4	3.2	3.1	3.3	2.9	2.9	2.5	2.5	2.2	2.9	3.4	5.3
1965	4.3	4.4	3.2	3.1	2.9	2.8	2.1	1.7	1.8	3.5	3.7	4.1
1966	5.0	3.4	3.3	3.6	2.2	2.1	1.8	1.7	2.3	2.7	3.0	4.8
1967	4.5	4.3	2.8	2.8	2.7	2.4	1.6	1.7	2.5	4.3	3.2	4.1
1968	3.1	4.1	3.6	4.3	2.7	2.5	2.4	2.0	2.7	3.9	4.6	4.3
1969	4.3	5.1	3.6	4.3	2.7	2.5	2.4	2.0	2.9	3.9	4.6	4.3
1970	5.0	5.2	5.7	4.6	2.9	2.4	1.9	1.7	1.8	2.8	4.3	4.3
1971	4.6	3.7	4.3	4.1	3.2	2.6	2.1	2.2	2.5	2.7	4.0	4.5
1972	5.5	4.6	3.7	2.5	2.6	2.3	2.3	2.2	2.0	1.7	4.5	5.4
1973	5.3	4.6	4.2	3.7	2.8	3.2	2.5	2.2	2.7	3.2	4.2	6.0
1974	3.7	3.7	4.9	4.0	3.2	2.5	2.5	2.2	2.0	4.4	4.7	5.2
1975	4.2	4.5	4.0	2.5	2.9	2.7	2.3	1.8	1.3	3.0	2.5	4.1

20 YR. STATISTICS FOR PACIFIC STATION123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.3
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	34	.	.	.	.	.	.	.	.	.	34
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	34	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.14 LARGEST HS(M) = 0.47 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 20

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	147	273	32	.	.	.	.	.	.	.	452
0.50 - 0.99	2369	4567	231	.	.	.	.	.	.	.	7167
1.00 - 1.49	3324	5420	111	.	.	.	.	.	.	.	8855
1.50 - 1.99	208	2833	51	.	.	.	.	.	.	.	3092
2.00 - 2.49	1	224	3	.	.	.	.	.	.	.	228
2.50 - 2.99	.	6	.	.	.	.	.	.	.	.	6
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6049	13323	428	0	0	0	0	0	0	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.96 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 11576

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	47	766	106	68	25	15	15	.	.	1043
0.50 - 0.99	18	1644	9368	4668	2852	807	138	23	1	.	19519
1.00 - 1.49	56	1288	3761	4375	7532	4587	949	112	20	.	22680
1.50 - 1.99	83	1303	1396	949	3998	6594	2265	191	30	.	16809
2.00 - 2.49	20	515	742	201	873	4115	3003	325	34	.	9827
2.50 - 2.99	.	77	88	41	123	1332	2900	284	8	.	4853
3.00 - 3.49	.	6	10	3	5	270	1454	319	10	.	2077
3.50 - 3.99	.	.	.	.	.	34	364	325	11	.	734
4.00 - 4.49	.	.	.	.	.	6	78	191	.	.	275
4.50 - 4.99	.	.	.	.	.	.	10	63	.	.	73
5.00 +	.	.	.	.	.	.	.	37	.	.	37
TOTAL	178	4880	16131	10343	15450	17770	11176	1885	114	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 5.71 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 45562

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	41	11	1	.	.	1	.	3	.	.	57
1.00 - 1.49	34	95	29	27	5	3	.	.	.	.	193
1.50 - 1.99	59	239	57	11	10	3	.	.	.	.	349
2.00 - 2.49	27	254	77	10	5	15	8	.	.	.	396
2.50 - 2.99	.	198	85	27	5	13	1	.	.	.	329
3.00 - 3.49	.	41	107	15	10	5	10	.	.	.	188
3.50 - 3.99	.	3	42	18	3	3	5	.	.	.	74
4.00 - 4.49	.	.	8	6	1	1	8	.	.	.	24
4.50 - 4.99	.	.	.	.	1	.	11	.	.	.	12
5.00 +	.	.	.	.	3	.	.	.	.	.	3
TOTAL	167	841	376	114	43	44	43	3	0	0	

MEAN HS(M) = 2.32 LARGEST HS(M) = 5.37 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 968

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	.	30	.	.	.	.	.	.	.	38
1.00 - 1.49	32	15	.	.	.	.	.	.	.	.	47
1.50 - 1.99	51	11	11	1	.	.	.	.	.	.	74
2.00 - 2.49	5	87	11	.	.	.	.	.	.	.	103
2.50 - 2.99	1	99	18	.	.	.	.	.	.	.	118
3.00 - 3.49	.	22	32	.	.	.	.	.	.	.	54
3.50 - 3.99	.	1	8	5	.	.	.	.	.	.	14
4.00 - 4.49	.	.	1	1	.	.	.	.	.	.	2
4.50 - 4.99	.	.	.	1	.	.	.	.	.	.	1
5.00 +	.	.	1	.	.	.	.	.	.	.	1
TOTAL	97	235	112	8	0	0	0	0	0	0	

MEAN HS(M) = 2.28 LARGEST HS(M) = 5.38 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 272

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	.	.	.	.	.	.	.	.	.	15
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	6	1	.	.	.	.	.	.	.	.	7
1.50 - 1.99	3	.	.	.	.	.	.	.	.	.	3
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.65 LARGEST HS(M) = 1.60 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 16

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

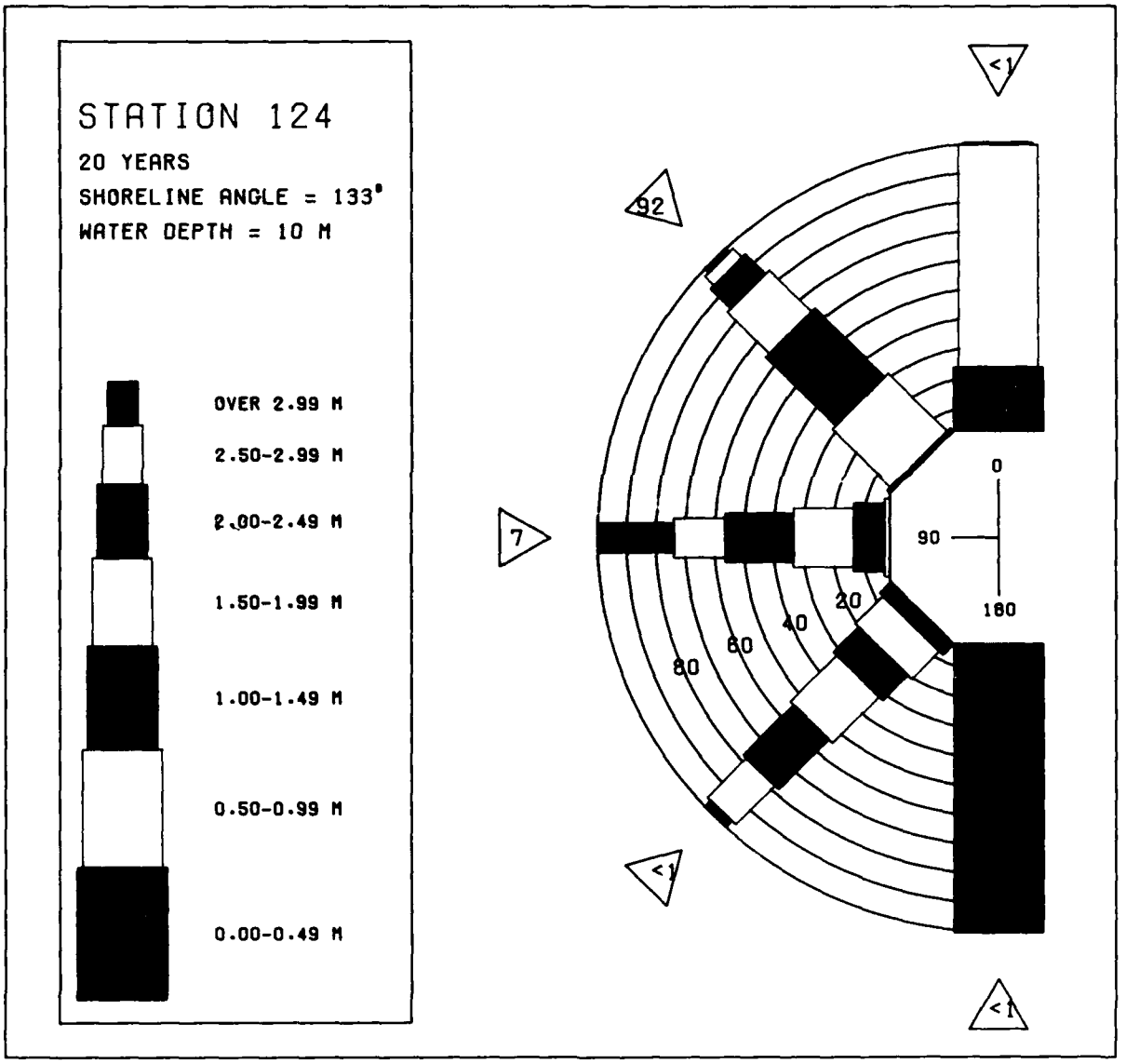
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 124 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	20	32	79	10	6	2	1	1	.	.	151
0.50 - 0.99	243	622	963	466	285	80	13	2	.	.	2674
1.00 - 1.49	345	682	390	440	753	459	94	11	2	.	3176
1.50 - 1.99	40	438	148	96	400	659	226	19	3	.	2029
2.00 - 2.49	5	108	83	21	87	413	301	32	3	.	1053
2.50 - 2.99	.	38	19	6	12	134	290	28	.	.	527
3.00 - 3.49	.	7	15	1	1	27	146	31	1	.	229
3.50 - 3.99	.	.	5	2	.	3	36	32	1	.	79
4.00 - 4.49	.	.	1	.	.	.	8	19	.	.	28
4.50 - 4.99	.	.	.	.	.	.	2	6	.	.	8
5.00 +	.	.	.	.	.	.	.	3	.	.	3
TOTAL	653	1927	1703	1042	1544	1777	1117	184	10	0	

MEAN HS(M) = 1.47 LARGEST HS(M) = 5.71 MEAN TP(SEC)= 10.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.9	1.9	1.4	1.4	1.2	1.3	0.9	1.1	0.8	1.1	1.3	1.6	1.3
1957	1.6	1.9	1.7	1.4	1.2	1.1	0.8	0.9	1.0	1.3	1.6	2.0	1.4
1958	2.5	2.5	1.6	2.0	1.0	1.1	0.9	0.8	0.9	1.0	1.5	2.3	1.5
1959	2.1	2.3	1.7	1.3	1.3	1.3	0.9	0.8	1.1	1.4	1.5	1.9	1.5
1960	1.9	2.4	1.1	1.6	1.2	0.9	0.8	0.8	0.7	1.0	1.7	1.9	1.3
1961	2.4	2.0	1.9	1.2	1.1	1.0	0.7	0.7	0.8	1.2	1.4	1.7	1.3
1962	1.6	2.0	1.6	1.3	1.1	0.8	1.0	0.9	1.0	1.4	2.0	2.1	1.4
1963	1.9	2.4	1.7	1.3	1.2	1.2	0.9	0.8	1.0	1.4	1.8	2.0	1.5
1964	2.7	1.7	1.8	1.6	1.3	1.4	1.4	1.1	1.1	1.0	1.7	2.2	1.6
1965	2.0	1.8	1.8	1.4	1.4	1.4	0.9	0.8	0.9	1.1	1.6	2.1	1.4
1966	2.2	1.6	1.5	1.4	1.1	1.1	1.0	0.9	1.0	1.0	1.3	2.3	1.4
1967	2.0	2.0	1.5	1.4	1.1	1.0	0.9	0.8	1.2	1.6	1.5	1.9	1.4
1968	1.6	2.1	1.9	1.6	1.3	1.3	1.2	1.0	0.9	1.2	2.2	2.1	1.5
1969	1.9	2.3	1.9	1.9	1.2	1.3	1.1	0.9	0.9	1.5	1.5	3.3	1.6
1970	2.5	2.6	2.4	1.9	1.3	1.1	1.0	0.9	0.9	1.0	1.8	2.0	1.6
1971	1.8	1.9	1.8	1.8	1.2	1.4	1.1	1.0	1.1	1.2	1.4	1.8	1.5
1972	2.0	1.9	1.7	1.3	1.4	1.3	1.3	1.2	0.8	0.9	2.2	2.0	1.5
1973	2.6	2.6	2.1	1.7	1.6	1.5	1.5	1.3	1.3	1.2	1.6	2.4	1.8
1974	2.2	1.8	1.8	1.8	1.2	1.4	1.4	1.2	1.0	1.3	1.6	2.5	1.7
1975	1.5	1.8	1.7	1.2	1.2	1.2	1.2	0.9	0.7	1.1	1.3	1.7	1.3
MEAN	2.1	2.1	1.7	1.5	1.3	1.2	1.0	0.9	1.0	1.2	1.6	2.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.4	2.7	2.9	2.7	2.1	2.1	1.5	2.1	1.7	2.2	2.6	2.4
1957	3.0	5.2	2.9	2.8	2.4	2.2	1.5	1.4	1.9	2.2	3.9	3.3
1958	4.2	4.1	2.8	5.6	1.6	2.0	1.7	1.5	1.5	2.0	3.9	3.8
1959	3.8	5.4	3.0	2.6	2.2	1.9	1.7	1.7	2.0	2.6	4.0	3.4
1960	4.1	4.4	2.8	2.5	1.8	1.8	1.3	1.4	1.2	2.9	3.3	3.4
1961	4.7	3.0	3.9	2.1	2.2	1.9	1.3	1.1	1.6	2.6	2.7	2.7
1962	2.9	3.9	3.4	2.5	2.0	1.5	1.8	1.8	1.8	4.3	3.5	5.7
1963	5.0	4.9	2.6	2.6	1.9	2.4	1.5	1.5	1.5	3.0	3.1	4.3
1964	5.1	2.6	2.8	2.5	2.5	2.7	2.2	2.2	2.0	2.3	2.6	4.6
1965	3.4	3.5	2.7	2.7	2.6	2.4	1.9	1.5	1.6	2.8	3.7	4.2
1966	4.2	2.7	2.7	2.9	2.0	1.9	1.6	1.5	1.9	2.2	2.4	3.7
1967	4.2	3.4	2.8	2.5	2.3	2.1	1.5	1.5	2.0	3.4	2.5	3.3
1968	2.6	3.7	2.8	3.4	2.4	2.3	2.0	1.8	2.3	2.8	3.7	3.7
1969	3.7	4.0	3.3	3.1	2.3	3.5	2.2	1.5	1.6	2.6	2.8	5.7
1970	4.1	4.1	4.4	3.9	2.6	2.3	2.2	1.5	1.6	2.3	3.4	3.5
1971	3.6	3.0	3.5	3.3	2.8	2.3	1.8	1.8	2.1	2.3	3.2	3.2
1972	4.2	3.6	3.0	2.1	2.3	2.0	2.1	1.9	1.8	1.5	3.5	4.2
1973	4.4	3.7	3.4	2.9	2.5	2.7	2.2	2.0	2.3	2.5	3.5	5.0
1974	3.5	3.2	4.1	3.5	2.8	2.1	2.2	2.0	1.7	3.6	3.6	4.5
1975	3.3	3.4	3.9	2.1	2.5	2.4	2.1	1.6	1.2	2.4	2.0	3.4

20 YR. STATISTICS FOR PACIFIC STATION124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121312

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5441	.	.	.	.	.	.	.	.	.	5441
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5441	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3180

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7980	6095	3347	.	.	.	.	.	.	.	17422
0.50 - 0.99	5167	13721	4091	.	.	.	.	.	.	.	22979
1.00 - 1.49	227	3591	1158	.	.	.	.	.	.	.	4976
1.50 - 1.99	11	54	46	.	.	.	.	.	.	.	111
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13385	23466	8642	0	0	0	0	0	0	0	

MEAN HS(M) = 0.62 LARGEST HS(M) = 2.19 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 26590

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	357	65	1957	1343	549	189	35	20	.	.	4515
0.50 - 0.99	285	357	2991	4702	5980	3809	824	90	.	.	19038
1.00 - 1.49	246	374	787	525	1054	2546	2058	174	11	.	7775
1.50 - 1.99	68	549	155	63	128	557	624	167	5	.	2316
2.00 - 2.49	3	186	25	18	15	155	184	53	.	.	639
2.50 - 2.99	.	35	47	17	3	32	65	10	.	.	209
3.00 - 3.49	.	1	11	1	1	.	10	.	.	.	24
3.50 - 3.99	.	.	1	5	.	.	5	.	.	.	11
4.00 - 4.49	.	.	3	.	.	.	10	.	.	.	13
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	959	1567	5977	6674	7730	7288	3815	514	16	0	

MEAN HS(M) = 0.90 LARGEST HS(M) = 4.41 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 20202

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	576	111	.	.	.	.	.	.	.	.	687
0.50 - 0.99	614	88	.	.	.	.	.	3	.	.	705
1.00 - 1.49	386	390	6	5	.	.	.	.	.	.	787
1.50 - 1.99	80	455	87	13	.	.	.	.	.	.	635
2.00 - 2.49	10	314	140	5	.	1	.	.	.	.	470
2.50 - 2.99	.	46	147	17	5	1	.	.	.	.	216
3.00 - 3.49	.	1	44	22	.	3	.	.	.	.	70
3.50 - 3.99	.	.	10	1	.	3	.	.	.	.	14
4.00 - 4.49	.	.	1	.	.	.	.	.	.	.	1
4.50 - 4.99	.	.	.	1	3	.	.	.	.	.	4
5.00 +	.	.	.	.	3	.	.	.	.	.	4
TOTAL	1666	1405	436	64	11	8	0	3	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 5.47 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 2109

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3213	73	.	.	.	.	.	.	.	.	3286
0.50 - 0.99	174	5	.	.	.	.	.	.	.	.	179
1.00 - 1.49	5	.	.	.	.	.	.	.	.	.	5
1.50 - 1.99	.	1	1	.	.	.	.	.	.	.	2
2.00 - 2.49	.	.	5	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3392	79	6	0	0	0	0	0	0	0	

MEAN HS(M) = 0.15 LARGEST HS(M) = 2.22 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 2034

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

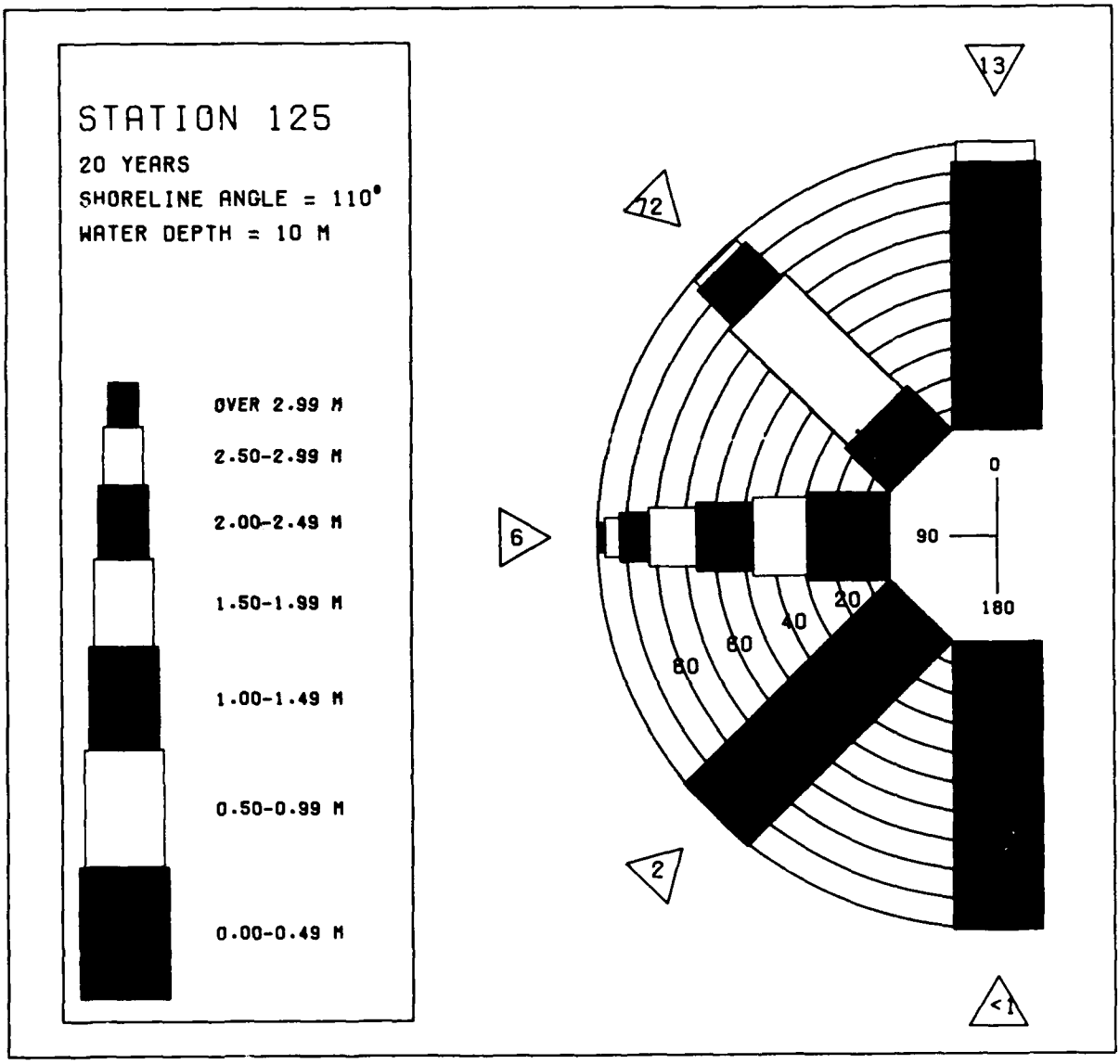
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 125 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	1757	634	530	134	54	18	3	2	.	.	3132
0.50 - 0.99	624	1417	708	470	598	380	82	9	.	.	4288
1.00 - 1.49	86	435	195	53	105	254	205	17	1	.	1351
1.50 - 1.99	16	106	29	7	12	55	62	16	.	.	303
2.00 - 2.49	1	50	17	2	1	15	18	5	.	.	109
2.50 - 2.99	.	8	19	3	.	3	6	1	.	.	40
3.00 - 3.49	.	.	5	2	.	.	1	.	.	.	8
3.50 - 3.99	.	.	1	.	.	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	1	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2484	2650	1504	671	770	725	378	50	1	0	

MEAN HS(M) = 0.65 LARGEST HS(M) = 5.47 MEAN TP(SEC)= 8.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.0	0.8	0.6	0.7	0.6	0.7	0.5	0.6	0.4	0.6	0.4	0.8	0.6
1957	0.7	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.6	0.8	0.6	0.7	0.7
1958	1.0	1.5	1.0	0.8	0.5	0.6	0.6	0.5	0.5	0.4	0.6	0.6	0.7
1959	0.9	1.1	0.6	0.6	0.7	0.7	0.5	0.5	0.6	0.6	0.4	0.7	0.7
1960	0.9	1.1	0.6	0.7	0.6	0.5	0.4	0.5	0.3	0.5	0.8	0.8	0.6
1961	1.0	0.9	1.0	0.6	0.7	0.5	0.4	0.4	0.5	0.4	0.7	0.6	0.6
1962	0.7	1.2	0.8	0.5	0.6	0.4	0.6	0.4	0.5	0.9	0.6	1.1	0.7
1963	0.9	1.5	0.8	0.9	0.6	0.7	0.5	0.5	0.5	0.7	0.7	0.6	0.7
1964	1.0	0.5	0.7	0.8	0.8	0.9	0.8	0.7	0.6	0.5	0.7	1.3	0.8
1965	1.1	0.5	0.7	0.8	0.7	0.8	0.6	0.5	0.5	0.4	0.9	0.8	0.7
1966	0.9	0.6	0.7	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.6	1.0	0.6
1967	1.0	0.6	0.9	0.9	0.6	0.6	0.5	0.5	0.5	0.6	0.4	0.8	0.7
1968	0.8	1.2	0.8	0.6	0.8	0.7	0.7	0.6	0.5	0.5	0.7	1.1	0.8
1969	1.3	1.1	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.4	1.0	0.7
1970	1.3	0.7	0.8	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.8	0.9	0.7
1971	0.7	0.8	0.8	0.8	0.7	0.8	0.7	0.6	0.5	0.5	0.7	0.9	0.7
1972	0.6	0.5	0.7	0.6	0.8	0.8	0.8	0.7	0.5	0.5	0.9	0.9	0.7
1973	1.0	1.1	1.0	0.8	0.9	0.8	0.9	0.8	0.6	0.6	0.8	0.8	0.8
1974	1.4	0.6	1.0	0.8	1.1	0.8	0.8	0.8	0.6	0.6	0.5	0.9	0.8
1975	0.5	0.7	1.0	0.6	0.7	0.8	0.8	0.6	0.4	0.5	0.4	0.5	0.6
MEAN	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.9	2.0	1.9	1.7	1.3	1.2	1.0	1.2	0.8	1.7	1.0	1.4
1957	2.4	2.2	1.9	1.8	1.5	1.3	0.8	0.9	1.8	1.6	1.6	2.4
1958	2.5	3.0	2.7	2.7	0.9	1.2	1.1	0.9	0.9	0.8	1.5	2.1
1959	2.9	5.5	1.3	1.3	1.4	1.2	1.1	1.0	1.9	1.4	1.2	2.4
1960	2.6	3.4	1.5	1.7	1.1	0.9	0.8	0.9	0.6	1.1	2.2	2.2
1961	2.1	1.8	1.9	1.5	1.4	0.9	0.8	0.7	0.9	1.2	2.2	1.8
1962	2.8	3.2	3.3	1.5	1.4	1.0	1.2	1.0	0.9	4.1	1.5	2.7
1963	4.4	4.4	1.9	1.1	1.6	1.0	1.0	1.0	0.7	1.6	1.9	1.9
1964	2.3	1.4	1.8	1.5	1.6	1.8	1.5	1.5	1.3	1.3	1.6	2.8
1965	2.8	1.3	1.6	1.9	1.7	1.6	1.2	0.8	1.0	0.9	3.6	4.2
1966	2.4	1.6	1.4	1.2	1.2	1.1	0.9	1.0	1.3	0.9	2.3	3.0
1967	3.8	1.4	2.8	1.8	1.4	1.4	0.9	1.0	0.9	1.6	1.5	1.8
1968	2.2	2.5	2.0	1.6	1.6	1.5	1.2	1.2	1.4	1.4	1.8	2.8
1969	5.1	3.2	1.5	1.4	1.5	1.6	1.4	1.0	0.9	1.1	1.4	2.6
1970	3.4	2.5	1.9	1.7	1.7	1.4	0.9	0.9	1.1	1.2	2.7	2.2
1971	1.9	1.6	1.8	1.6	1.7	1.3	1.2	1.0	1.2	1.5	1.6	3.4
1972	1.9	1.2	1.7	1.4	1.5	1.3	1.3	1.3	1.1	1.1	2.2	1.9
1973	2.7	2.4	1.7	1.7	1.6	1.6	1.4	1.3	1.2	2.0	2.2	3.3
1974	3.0	2.0	2.5	2.2	1.8	1.3	1.4	1.3	1.0	1.7	2.2	3.5
1975	1.5	2.4	3.5	1.2	1.6	1.5	1.4	1.1	0.8	1.0	1.1	1.5

20 YR. STATISTICS FOR PACIFIC STATION125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	8.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	89.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021606

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	3	1	.	.	.	.	.	.	.	14
0.50 - 0.99	349	516	193	15	29	17	.	.	.	.	1119
1.00 - 1.49	1398	1392	487	55	42	30	10	.	.	.	3424
1.50 - 1.99	877	1093	390	90	73	75	.	.	.	.	2598
2.00 - 2.49	.	193	208	22	18	27	6	.	.	.	474
2.50 - 2.99	.	11	32	8	3	1	1	.	.	.	56
3.00 - 3.49	.	1	3	6	.	.	.	.	.	.	10
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2634	3209	1314	206	165	150	17	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 3.36 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 4508

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	10	65	5	1	5	1	5	.	.	109
0.50 - 0.99	284	1984	4043	900	350	148	18	11	.	.	7738
1.00 - 1.49	439	3370	6928	4389	3052	977	165	23	3	.	19346
1.50 - 1.99	874	3462	2876	3536	5090	2790	689	85	25	.	19447
2.00 - 2.49	58	2465	1350	1921	4644	4048	1216	143	4	.	15879
2.50 - 2.99	.	665	823	646	2811	4327	1480	165	6	.	10963
3.00 - 3.49	.	75	296	177	970	3803	1647	222	27	.	7217
3.50 - 3.99	.	3	44	61	231	1955	1960	164	18	.	4436
4.00 - 4.49	.	.	6	5	13	739	1947	147	1	.	2858
4.50 - 4.99	.	.	.	.	.	177	1252	207	.	.	1636
5.00 +	.	.	.	.	.	13	1131	816	20	.	1980
TOTAL	1672	12054	16431	11640	17162	18982	11506	1988	174	0	

MEAN HS(M) = 2.19 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 53560

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	11	.	3	3	.	.	.	.	.	.	17
1.00 - 1.49	8	27	10	13	5	.	.	.	.	.	63
1.50 - 1.99	23	59	32	13	5	.	.	.	.	.	132
2.00 - 2.49	6	72	25	17	3	8	.	.	.	.	144
2.50 - 2.99	.	85	35	17	.	6	.	.	.	.	143
3.00 - 3.49	.	10	27	.	3	.	.	.	.	.	40
3.50 - 3.99	.	.	18	5	6	.	.	.	.	.	29
4.00 - 4.49	.	.	.	3	.	.	.	.	.	.	3
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	51	256	150	71	22	14	0	0	0	0	

MEAN HS(M) = 2.25 LARGEST HS(M) = 4.35 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 339

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	3	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	3	3	.	.	.	.	.	.	.	.	11
1.50 - 1.99	10	5	.	.	.	.	.	.	.	.	15
2.00 - 2.49	.	8	.	.	.	.	.	.	.	.	8
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	18	19	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.49 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 23

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

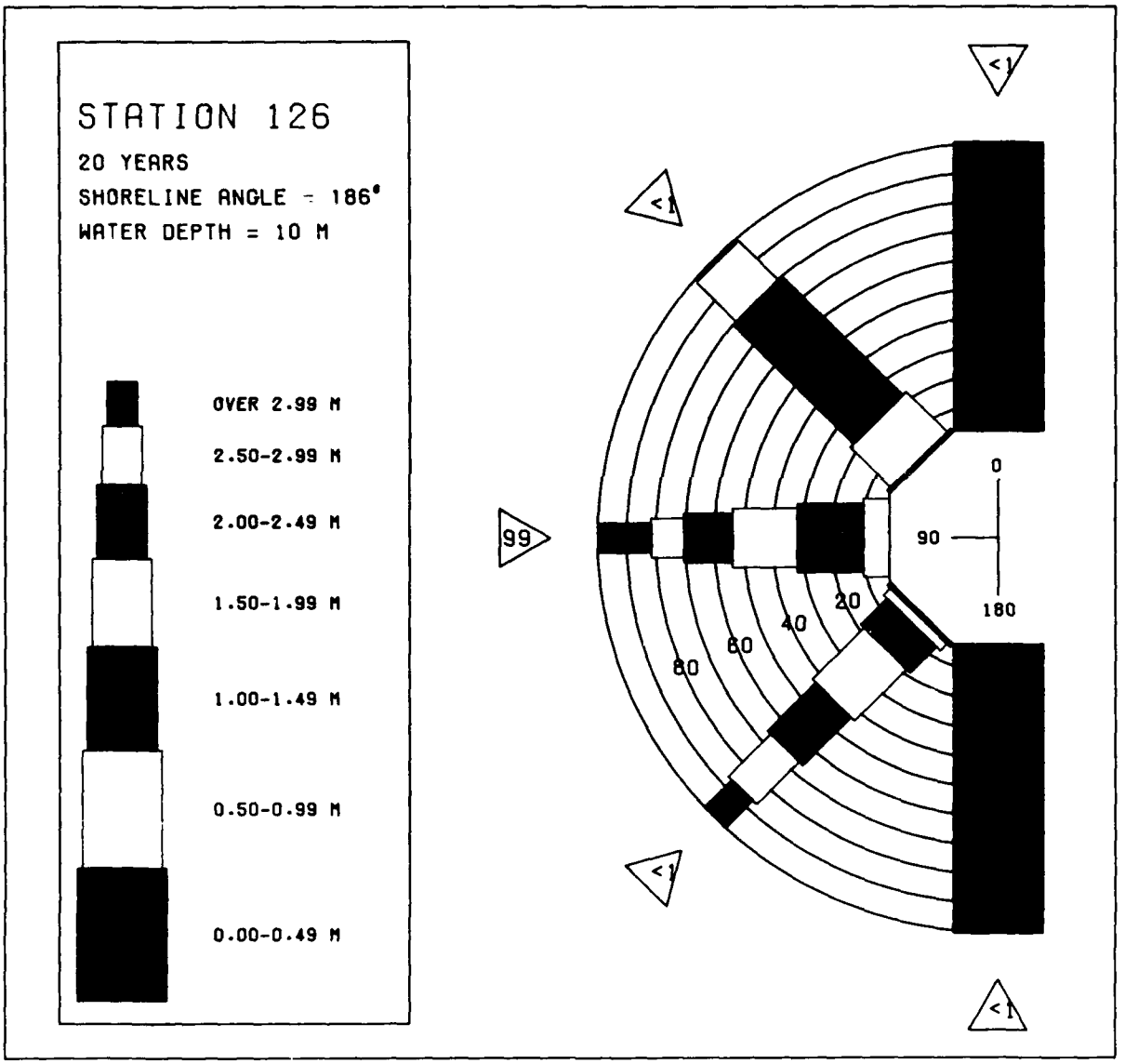
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.13 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 5

PHASE 3 ST. 126 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	3	1	6								10
0.50 - 0.99	64	250	424	91	37	16	1	1	.	.	884
1.00 - 1.49	185	479	742	446	310	100	17	2	.	.	2281
1.50 - 1.99	178	464	329	364	516	286	68	8	2	.	2215
2.00 - 2.49	6	274	158	196	466	408	122	14	3	.	1647
2.50 - 2.99	.	76	89	67	281	433	148	16	4	.	1114
3.00 - 3.49	.	8	32	18	97	380	164	22	2	.	723
3.50 - 3.99	.	.	6	6	23	195	196	16	1	.	443
4.00 - 4.49	.	.	.	.	1	73	194	14	.	.	282
4.50 - 4.99	.	.	.	.	.	17	125	20	.	.	162
5.00 +	.	.	.	.	.	1	113	81	2	.	197
TOTAL	436	1552	1786	1188	1731	1909	1148	194	14	0	

MEAN HS(M) = 2.13 LARGEST HS(M) = 6.68 MEAN TP(SEC)= 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.6	2.9	2.1	1.9	1.7	1.9	1.3	1.6	1.1	1.6	2.0	2.3	1.9
1957	2.4	2.4	2.4	2.1	1.6	1.6	1.2	1.2	1.4	1.7	2.5	3.1	2.0
1958	3.6	3.2	2.2	2.6	1.4	1.6	1.3	1.1	1.3	1.5	2.4	3.5	2.2
1959	3.0	3.2	2.6	1.8	1.9	1.7	1.3	1.2	1.5	2.1	2.4	3.9	2.1
1960	2.9	3.5	1.7	2.3	1.7	1.2	1.1	1.1	1.0	1.6	2.6	3.9	2.0
1961	2.5	2.9	2.7	1.7	1.6	1.4	1.0	0.9	1.1	1.8	2.1	2.7	1.9
1962	3.3	2.7	2.2	2.1	1.5	1.1	1.4	1.3	1.4	1.9	2.1	2.9	2.0
1963	2.7	3.0	2.8	1.8	1.6	1.8	1.3	1.4	1.4	2.2	2.8	3.0	2.1
1964	4.0	2.7	2.8	2.3	1.7	1.9	1.4	1.4	1.5	1.5	2.6	3.0	2.3
1965	2.8	2.9	2.6	1.9	2.0	1.9	1.3	1.1	1.3	1.8	2.2	3.2	2.1
1966	3.3	2.4	2.3	2.1	1.6	1.6	1.3	1.3	1.5	1.6	2.0	3.2	2.0
1967	3.0	3.2	2.0	2.0	1.6	1.4	1.2	1.0	1.8	2.5	2.3	3.1	2.1
1968	2.3	2.8	2.7	2.5	1.8	1.7	1.6	1.4	1.3	1.9	2.3	2.9	2.2
1969	2.5	3.4	2.9	2.8	1.8	1.8	1.5	1.2	1.2	1.3	2.4	4.7	2.4
1970	3.3	4.1	3.2	2.8	1.8	1.5	1.5	1.3	1.3	1.6	2.6	4.0	2.4
1971	3.8	4.2	3.2	2.8	1.8	1.9	1.5	1.4	1.3	1.8	2.2	3.8	2.3
1972	3.0	3.6	3.2	2.7	1.8	1.7	1.3	1.4	1.2	1.8	2.4	3.5	2.2
1973	3.1	3.0	3.5	1.9	2.0	1.8	1.8	1.6	1.2	1.4	2.4	3.8	2.2
1974	3.9	3.8	3.1	2.5	2.3	2.1	2.1	1.8	1.9	1.8	2.4	3.5	2.6
1975	2.7	2.8	2.5	2.7	2.7	2.0	1.8	1.6	1.4	1.9	2.5	3.7	2.4
	2.3	2.7	2.4	1.8	1.7	1.6	1.6	1.2	0.9	1.8	2.1	2.6	1.9
MEAN	2.9	3.0	2.5	2.2	1.8	1.7	1.4	1.3	1.4	1.8	2.5	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.7	4.5	4.2	3.8	3.1	3.0	2.1	3.0	2.7	2.7	4.1	3.9
1957	3.8	6.4	4.5	4.3	3.3	3.1	2.3	1.9	2.9	3.6	6.1	5.2
1958	6.0	6.1	4.4	6.2	3.3	3.0	2.2	2.1	1.9	3.3	6.0	6.0
1959	6.0	5.3	4.5	4.2	3.3	2.7	2.2	2.3	2.7	4.4	6.1	5.3
1960	5.9	6.5	4.2	4.6	3.2	2.6	1.9	1.9	1.6	4.8	5.2	5.7
1961	6.1	4.5	6.0	3.4	3.0	2.8	1.8	1.4	2.2	3.9	3.8	4.2
1962	4.2	4.5	3.8	4.2	2.5	2.1	2.4	2.7	2.9	3.8	5.8	5.1
1963	4.8	4.8	4.2	3.7	2.8	3.1	2.1	1.9	2.3	4.8	4.5	6.0
1964	6.4	4.0	4.1	4.2	3.4	3.3	2.9	3.0	2.7	3.8	4.4	6.2
1965	4.9	5.7	3.9	3.6	3.5	3.3	2.6	2.0	2.5	4.4	3.9	5.0
1966	6.2	4.2	4.2	4.5	2.7	2.6	2.2	2.0	3.0	3.5	3.9	6.0
1967	5.4	5.6	3.5	3.3	3.5	2.8	1.9	2.0	3.1	5.2	4.0	5.4
1968	3.7	4.5	4.7	5.4	3.2	3.0	2.9	2.4	3.2	4.5	5.9	5.6
1969	5.2	6.4	5.7	5.0	3.4	3.2	2.9	2.0	2.6	4.1	4.7	6.3
1970	6.0	6.0	6.1	5.9	3.5	3.0	2.3	2.1	2.4	3.5	5.6	5.5
1971	5.9	4.6	5.5	5.1	3.9	3.2	2.5	2.7	3.0	3.2	5.1	5.9
1972	6.0	5.8	4.7	3.4	3.2	2.7	2.8	2.6	2.3	2.1	5.8	6.1
1973	6.0	5.7	5.2	4.8	3.4	3.9	3.0	2.7	2.3	4.1	5.1	6.0
1974	4.7	4.5	5.6	4.7	3.9	3.1	2.9	2.6	2.4	5.4	6.0	6.0
1975	5.4	5.8	3.9	3.2	3.5	3.2	2.7	2.0	1.5	3.9	3.2	5.0

20 YR. STATISTICS FOR PACIFIC STATION126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040300

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	304	.	.	.	.	.	.	.	.	.	304
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	304	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 178

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	795	626	468	.	.	.	.	.	.	.	1889
0.50 - 0.99	4962	8319	2002	.	.	.	.	.	.	.	15283
1.00 - 1.49	1957	8696	648	.	.	.	.	.	.	.	11301
1.50 - 1.99	47	2084	191	.	.	.	.	.	.	.	2322
2.00 - 2.49	.	37	6	.	.	.	.	.	.	.	43
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7761	19762	3315	0	0	0	0	0	0	0	

MEAN HS(M) = 0.98 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 18026

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	15	792	234	83	22	11	3	.	.	1180
0.50 - 0.99	32	217	7010	5034	4922	1448	272	35	5	.	19866
1.00 - 1.49	150	361	1593	2691	7231	7214	1654	143	13	.	21054
1.50 - 1.99	85	405	1341	408	1579	5905	3629	277	11	.	13640
2.00 - 2.49	8	290	340	133	287	1682	3501	376	11	.	6628
2.50 - 2.99	.	71	75	44	94	468	1329	429	1	.	2511
3.00 - 3.49	.	1	11	17	15	172	337	342	.	.	895
3.50 - 3.99	.	3	.	.	8	58	95	66	.	.	230
4.00 - 4.49	.	.	.	.	8	25	37	25	.	.	95
4.50 - 4.99	.	.	.	.	3	11	.	25	.	.	39
5.00 +	.	.	.	.	.	17	.	.	.	.	17
TOTAL	290	1363	11152	9461	14235	17023	10865	1721	45	0	

MEAN HS(M) = 1.38 LARGEST HS(M) = 5.55 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 38682

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	22	8	.	.	.	.	.	3	.	.	30
0.50 - 0.99	68	1	.	.	.	.	.	.	.	.	72
1.00 - 1.49	94	61	.	1	.	.	.	.	.	.	156
1.50 - 1.99	99	244	32	22	3	3	.	.	.	.	403
2.00 - 2.49	32	316	92	18	3	3	.	.	.	.	464
2.50 - 2.99	.	200	116	20	3	1	.	.	.	.	340
3.00 - 3.49	.	30	155	30	1	5	8	.	.	.	229
3.50 - 3.99	.	1	56	30	.	1	.	.	.	.	88
4.00 - 4.49	.	.	8	6	.	1	.	.	.	.	15
4.50 - 4.99	.	.	.	.	3	.	.	.	.	.	3
5.00 +	.	.	.	.	5	.	.	.	.	.	5
TOTAL	315	861	459	127	18	14	8	3	0	0	

MEAN HS(M) = 2.29 LARGEST HS(M) = 5.54 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 1067

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	44	29	.	.	.	.	.	.	.	.	73
0.50 - 0.99	22	10	37	.	.	.	.	.	.	.	69
1.00 - 1.49	32	22	10	.	.	.	.	.	.	.	64
1.50 - 1.99	30	25	8	.	.	.	.	.	.	.	63
2.00 - 2.49	1	78	18	5	.	.	.	.	.	.	102
2.50 - 2.99	.	51	6	.	.	.	.	.	.	.	57
3.00 - 3.49	.	3	13	.	.	.	.	.	.	.	16
3.50 - 3.99	.	.	1	1	.	.	.	.	.	.	2
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	129	218	93	6	0	0	0	0	0	0	

MEAN HS(M) = 1.59 LARGEST HS(M) = 3.73 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 267

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	157	13	.	.	.	.	.	.	.	.	170
0.50 - 0.99	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	160	14	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.16 LARGEST HS(M) = 0.68 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 103

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

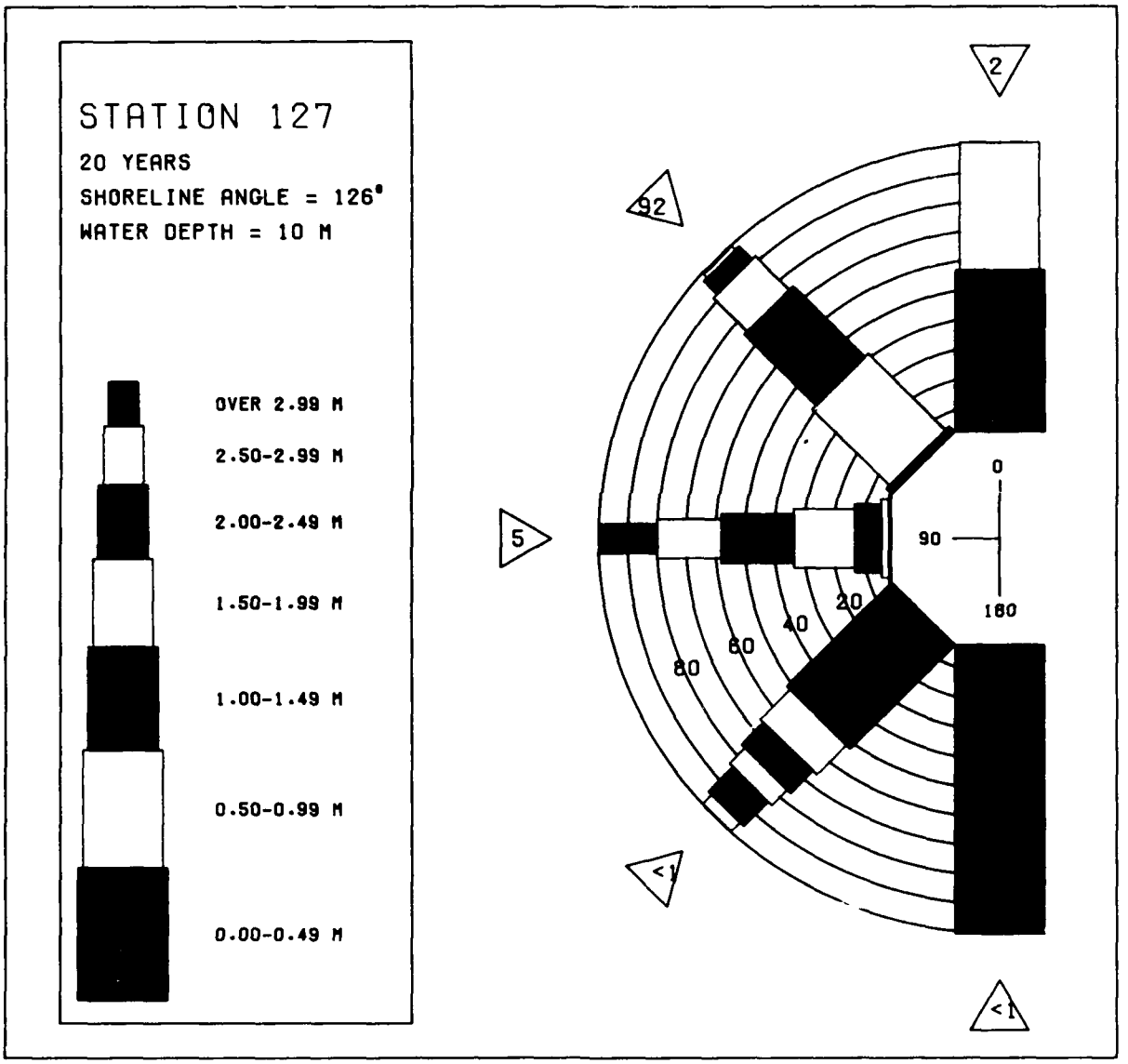
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 127 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	133	69	126	23	8	2	1	.	.	.	362
0.50 - 0.99	508	855	904	593	492	144	27	3	.	.	3526
1.00 - 1.49	223	914	225	269	723	721	165	14	1	.	3255
1.50 - 1.99	26	276	157	43	158	590	362	27	1	.	1640
2.00 - 2.49	4	72	45	15	29	168	350	37	1	.	721
2.50 - 2.99	.	32	19	6	9	47	132	42	.	.	287
3.00 - 3.49	.	3	18	4	1	17	34	34	.	.	111
3.50 - 3.99	.	.	5	3	.	5	9	6	.	.	28
4.00 - 4.49	.	.	.	.	.	2	3	2	.	.	7
4.50 - 5.00	.	.	.	.	.	1	.	2	.	.	3
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	894	2221	1499	956	1420	1698	1083	167	3	0	

MEAN HS(M) = 1.27 LARGEST HS(M) = 5.55 MEAN TP(SEC)= 9.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 127 (35.23N/ 120.88W TO 35.16N/ 120.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.8	1.6	1.1	1.2	1.0	1.2	0.8	0.9	0.7	0.8	1.0	1.4	1.1
1957	1.4	1.5	1.5	1.3	1.1	1.0	0.7	0.8	0.6	1.2	1.2	1.6	1.2
1958	2.1	2.5	1.5	1.2	0.8	1.0	0.9	0.7	0.8	0.8	1.2	1.9	1.4
1959	1.8	2.0	1.4	1.1	1.1	1.1	0.8	0.7	1.0	1.2	1.2	1.6	1.3
1960	1.9	2.0	1.4	1.4	1.0	1.1	0.8	0.7	1.0	1.2	1.2	1.9	1.3
1961	2.1	1.8	1.6	1.0	1.0	0.8	0.6	0.6	0.7	0.9	1.1	1.4	1.2
1962	1.4	1.9	1.4	1.1	1.0	0.7	0.9	0.8	0.8	1.2	1.6	1.9	1.2
1963	1.8	2.5	1.4	1.2	1.0	1.1	0.8	0.7	0.8	1.2	1.5	1.7	1.3
1964	2.2	1.5	1.5	1.3	1.1	1.3	1.2	1.0	0.9	0.9	1.3	1.9	1.3
1965	1.6	1.5	1.5	1.3	1.2	1.2	0.9	0.7	0.8	1.0	1.4	1.7	1.2
1966	1.8	1.4	1.3	1.2	1.0	1.0	0.9	0.8	0.9	0.8	1.2	2.1	1.2
1967	1.8	1.6	1.4	1.3	0.9	0.9	0.8	0.7	1.0	1.3	1.5	1.5	1.2
1968	1.5	2.0	1.6	1.3	1.1	1.1	1.0	0.9	0.8	0.9	1.6	1.8	1.3
1969	1.8	2.0	1.6	1.5	1.1	1.1	0.9	0.7	0.8	1.2	1.1	2.8	1.4
1970	2.4	2.2	2.0	1.5	1.1	0.9	0.9	0.8	0.8	0.9	1.6	1.6	1.4
1971	1.6	1.6	1.4	1.5	1.1	1.2	0.9	0.9	0.9	0.9	1.2	1.5	1.2
1972	1.5	1.7	1.5	1.1	1.2	1.2	1.1	1.0	0.7	0.8	1.8	1.7	1.3
1973	2.3	2.4	1.8	1.4	1.4	1.3	1.3	1.1	1.1	1.0	1.5	2.0	1.6
1974	2.2	1.4	1.6	1.6	1.6	1.2	1.2	1.1	0.9	1.1	1.3	2.1	1.5
1975	1.2	1.7	1.6	1.0	1.1	1.0	1.0	0.8	0.6	0.9	1.0	1.4	1.1
MEAN	1.8	1.8	1.5	1.3	1.1	1.0	0.9	0.8	0.8	1.0	1.3	1.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 127 (35.23N/ 120.88W TO 35.16N/ 120.81W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.2	2.5	2.3	2.3	1.7	1.9	1.4	1.6	1.4	2.0	2.1	2.0
1957	2.6	4.8	2.8	2.1	2.1	1.9	1.2	1.5	1.8	1.8	2.8	2.7
1958	3.7	4.8	2.8	2.5	2.4	1.7	1.2	1.5	1.8	1.8	2.8	2.7
1959	3.4	2.8	2.8	4.2	1.4	1.7	1.4	1.3	1.5	1.5	2.8	2.7
1960	3.2	5.5	2.2	2.2	1.8	1.6	1.3	1.4	2.1	2.0	3.2	3.1
1961	3.6	4.1	2.3	2.2	1.5	1.6	1.0	1.1	1.0	2.2	2.7	2.9
1962	3.6	2.9	2.7	1.8	2.0	1.6	1.0	1.0	1.3	2.0	2.5	2.3
1963	2.8	3.9	3.6	1.9	1.6	1.2	1.3	1.5	1.3	3.4	2.7	3.7
1964	5.6	5.5	2.5	2.4	1.6	2.0	1.3	1.2	1.2	2.4	2.6	3.3
1965	3.9	3.2	2.5	1.9	2.1	2.3	1.9	1.6	1.9	1.5	2.5	4.4
1966	2.8	5.2	2.5	2.3	2.2	2.0	1.4	1.2	1.4	2.2	2.5	4.4
1967	3.9	5.0	2.5	2.3	2.2	1.5	1.5	1.2	1.6	1.6	2.4	3.5
1968	3.7	5.5	3.9	2.2	2.0	1.8	1.3	1.2	1.5	2.5	1.9	2.9
1969	4.1	3.5	2.5	2.4	2.0	1.9	1.7	1.6	1.9	2.2	2.8	3.3
1970	2.8	3.5	2.5	2.4	2.0	1.9	1.7	1.6	1.9	2.2	2.8	3.3
1971	3.7	3.5	2.9	2.5	2.1	1.8	1.9	1.4	1.2	2.0	2.1	4.7
1972	4.3	4.3	3.4	2.7	2.0	1.8	1.4	1.2	1.4	1.7	3.0	2.9
1973	2.6	2.5	3.1	2.7	2.3	1.7	1.6	1.5	1.6	1.9	2.5	3.4
1974	3.1	3.7	2.6	2.2	2.0	1.8	1.7	1.7	1.5	1.4	2.9	3.2
1975	2.1	2.9	2.9	2.4	2.1	2.2	2.0	1.7	1.7	2.1	3.0	3.8
1976	4.2	2.7	2.2	2.2	2.2	2.2	1.9	1.9	1.7	2.3	2.9	2.5
1975	2.6	2.9	3.6	1.7	2.0	2.1	1.7	1.3	1.1	1.7	1.8	2.7

20 YR. STATISTICS FOR PACIFIC STATION127 (35.23N/ 120.88W TO 35.16N/ 120.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.3
MEAN PEAK WAVE PERIOD	(SECONDS)	9.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.9
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	12.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6574	.	.	.	.	.	.	.	.	.	6574
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6574	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.36 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3842

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11386	17392	8343	8	.	.	.	.	.	.	37129
0.50 - 0.99	1695	10544	3059	3	.	.	.	.	.	.	15301
1.00 - 1.49	152	405	349	.	.	.	.	.	.	.	906
1.50 - 1.99	.	22	.	.	.	.	.	.	.	.	22
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13233	28364	11751	11	0	0	0	0	0	0	

MEAN HS(M) = 0.43 LARGEST HS(M) = 2.00 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 31186

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	434	39	114	3892	2647	723	109	15	.	.	7973
0.50 - 0.99	485	354	369	1461	3454	4183	1718	160	8	.	12192
1.00 - 1.49	352	722	326	270	258	701	783	155	1	.	3568
1.50 - 1.99	53	802	195	90	106	160	164	83	.	.	1653
2.00 - 2.49	.	256	152	54	47	53	34	.	.	.	596
2.50 - 2.99	.	17	106	15	18	17	10	.	.	.	183
3.00 - 3.49	.	1	17	5	10	13	.	.	.	.	46
3.50 - 3.99	.	.	3	1	5	6	.	.	.	.	15
4.00 - 4.49	.	.	.	.	.	13	.	.	.	.	13
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1324	2191	1282	5788	6545	5869	2818	413	9	0	

MEAN HS(M) = 0.80 LARGEST HS(M) = 4.40 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 15350

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1451	164	.	.	.	.	.	.	.	.	1615
0.50 - 0.99	477	80	3	.	.	.	.	3	.	.	563
1.00 - 1.49	213	160	3	.	.	.	.	.	.	.	376
1.50 - 1.99	17	249	32	.	.	.	.	.	.	.	298
2.00 - 2.49	.	116	109	10	.	.	.	.	.	.	235
2.50 - 2.99	.	13	97	8	.	1	.	.	.	.	119
3.00 - 3.49	.	3	18	20	.	3	.	.	.	.	44
3.50 - 3.99	.	.	1	5	.	3	.	.	.	.	9
4.00 - 4.49	.	.	1	.	.	.	.	.	.	.	1
4.50 - 4.99	.	.	.	.	1	2	.	.	.	.	3
5.00 +	.	.	.	.	5	.	.	.	.	.	5
TOTAL	2158	785	264	43	8	7	0	3	0	0	

MEAN HS(M) = 0.87 LARGEST HS(M) = 5.55 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1918

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2553	82	.	.	.	.	.	.	.	.	2635
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2553	82	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 1540

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

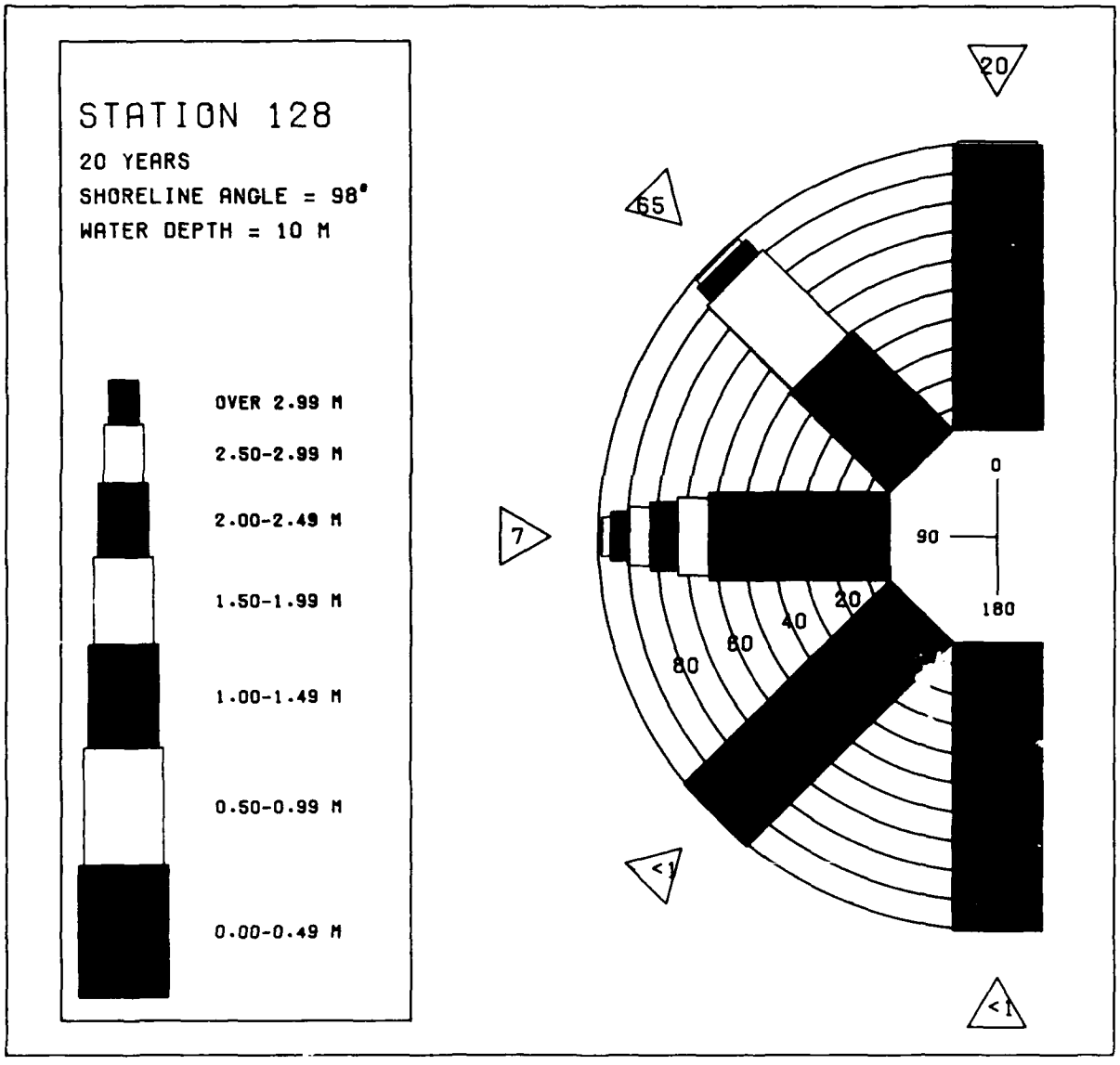
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 128 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2239	1767	845	390	264	72	10	1	.	.	5588
0.50 - 0.99	265	1097	343	146	345	418	171	16	.	.	2801
1.00 - 1.49	71	128	67	27	25	70	78	15	.	.	481
1.50 - 1.99	7	107	22	9	10	16	16	8	.	.	195
2.00 - 2.49	.	37	26	6	4	5	3	.	.	.	81
2.50 - 2.99	.	3	20	2	1	1	1	.	.	.	28
3.00 - 3.49	.	.	3	2	1	1	.	.	.	.	7
3.50 - 3.99	.	.	.	.	.	1	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	1	.	.	.	.	1
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2582	3139	1326	582	650	585	279	40	0	0	

MEAN HS(M) = 0.47 LARGEST HS(M) = 5.55 MEAN TP(SEC)= 7.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 128 (35.16N/ 120.81W TO 35.10N/ 120.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	0.6	0.4	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.2	0.3	0.4
1957	0.6	0.7	0.7	0.5	0.5	0.4	0.3	0.3	0.5	0.5	0.5	0.6	0.5
1958	0.7	1.4	0.8	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.5
1959	0.7	1.J	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.3	0.6	0.5
1960	0.8	0.8	0.4	0.5	0.4	0.3	0.2	0.3	0.2	0.3	0.7	0.6	0.5
1961	0.7	0.6	0.8	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.6	0.5	0.5
1962	0.4	1.0	0.7	0.4	0.4	0.3	0.4	0.3	0.3	0.6	0.4	0.7	0.5
1963	0.6	1.3	0.6	0.7	0.4	0.5	0.3	0.3	0.4	0.5	0.5	0.3	0.5
1964	0.7	0.3	0.5	0.5	0.6	0.7	0.6	0.5	0.4	0.4	0.5	1.0	0.5
1965	0.9	0.3	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.8	0.7	0.5
1966	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.6	0.9	0.5
1967	0.9	0.3	0.7	0.6	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.5
1968	0.6	0.8	0.5	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.5	1.0	0.5
1969	1.3	1.0	0.5	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.3	0.8	0.6
1970	1.1	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.7	0.7	0.5
1971	0.5	0.4	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.5	0.8	0.5
1972	0.4	0.4	0.4	0.5	0.9	0.6	0.6	0.5	0.4	0.5	0.7	0.7	0.5
1973	0.8	1.0	0.8	0.5	0.6	0.6	0.6	0.6	0.4	0.5	0.7	0.7	0.7
1974	1.3	0.4	0.9	0.5	0.8	0.6	0.6	0.6	0.4	0.5	0.4	0.7	0.6
1975	0.3	0.6	0.8	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.3	0.5
MEAN	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 128 (35.16N/ 120.81W TO 35.10N/ 120.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.7	1.9	1.3	1.4	0.9	0.9	0.7	0.8	0.6	1.5	0.7	1.1
1957	2.5	2.7	1.6	1.8	1.1	0.9	0.5	0.6	1.6	1.4	1.1	2.5
1958	2.0	3.0	2.7	2.6	0.6	0.9	0.7	0.6	0.7	0.6	1.1	1.4
1959	2.9	5.5	0.9	0.8	0.8	0.9	0.7	0.7	1.9	0.9	0.9	2.8
1960	2.4	2.5	1.2	1.6	0.8	0.6	0.4	0.5	0.4	0.9	1.9	2.2
1961	2.0	1.9	1.8	1.3	1.1	0.7	0.5	0.5	0.6	0.9	2.0	1.7
1962	2.4	3.0	3.4	1.2	1.3	0.7	0.8	0.7	0.7	3.0	1.2	2.3
1963	4.4	4.3	1.9	1.8	0.9	1.1	0.7	0.7	0.6	1.6	1.7	1.0
1964	2.0	1.0	1.2	1.0	1.1	1.3	1.0	1.0	1.0	1.3	1.4	3.0
1965	2.3	1.0	1.7	1.6	1.2	1.1	0.7	0.6	0.7	1.1	3.3	4.2
1966	2.2	1.6	0.9	0.9	0.8	0.7	0.6	0.6	0.9	0.7	2.2	2.9
1967	3.5	1.3	2.8	1.4	1.0	1.0	0.7	0.6	0.6	1.1	1.2	1.6
1968	2.0	1.9	1.9	1.5	1.1	1.0	0.9	0.9	0.9	1.2	1.6	2.7
1969	3.0	3.0	1.2	1.0	1.1	0.9	1.0	0.7	0.7	0.9	1.2	2.3
1970	3.4	1.6	2.0	1.1	1.1	0.9	0.6	0.7	0.7	0.8	2.5	1.9
1971	1.8	1.0	1.6	1.2	1.2	0.9	0.8	0.7	0.8	1.0	1.3	3.3
1972	1.4	1.3	1.7	1.9	1.1	1.0	0.9	0.9	0.8	1.2	2.0	1.6
1973	2.8	2.3	1.5	1.1	1.1	1.1	1.0	0.8	0.9	1.9	2.2	3.0
1974	3.6	2.0	2.4	1.6	1.1	1.0	1.1	1.2	0.7	1.2	2.1	3.7
1975	1.2	2.6	3.2	0.9	1.1	1.1	0.9	0.3	0.6	0.8	0.9	0.9

20 YR. STATISTICS FOR PACIFIC STATION128 (35.16N/ 120.81W TO 35.10N/ 120.65W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	7.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	5.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021609

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	15	1	15	.	.	.	.	.	.	.	31
0.50 - 0.99	361	1059	1707	71	47	20	.	.	.	.	3265
1.00 - 1.49	2368	3778	3891	422	155	85	34	.	.	.	10733
1.50 - 1.99	1897	6131	2606	701	417	142	54	.	.	.	11948
2.00 - 2.49	46	3186	920	751	316	142	32	.	.	.	5393
2.50 - 2.99	.	532	438	284	234	126	39	.	.	.	1653
3.00 - 3.49	.	32	133	32	121	106	44	.	.	.	468
3.50 - 3.99	.	.	6	8	30	35	46	.	.	.	125
4.00 - 4.49	.	.	.	.	.	6	15	.	.	.	21
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4687	14719	9716	2269	1320	662	264	0	0	0	

MEAN HS(M) = 1.65 LARGEST HS(M) = 4.18 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 19670

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	5	.	1	3	.	1	.	.	10
0.50 - 0.99	3	99	1375	527	172	68	8	5	.	.	2257
1.00 - 1.49	22	224	2561	3230	2419	710	106	32	5	.	9309
1.50 - 1.99	102	164	1206	3015	4243	2359	509	63	22	.	11683
2.00 - 2.49	20	503	463	1960	4637	3901	1230	169	34	.	12917
2.50 - 2.99	.	371	532	462	3044	4286	1401	155	22	.	10273
3.00 - 3.49	.	66	328	116	1055	4041	1813	184	29	.	7632
3.50 - 3.99	.	.	65	23	296	2174	2022	162	11	.	4753
4.00 - 4.49	.	.	11	3	32	932	1962	159	.	.	3099
4.50 - 4.99	.	.	.	.	6	272	1387	207	1	.	1873
5.00 +	.	.	.	.	.	53	1090	783	3	.	1929
TOTAL	147	1427	6546	9336	15905	18799	11528	1920	127	0	

MEAN HS(M) = 2.53 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 38436

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	6	.	.	1	.	.	.	.	.	.	7
1.00 - 1.49	17	3	5	.	.	.	.	.	.	.	25
1.50 - 1.99	20	65	35	23	.	.	.	.	.	.	143
2.00 - 2.49	3	63	30	11	3	.	.	.	.	.	110
2.50 - 2.99	.	87	34	23	.	10	.	.	.	.	154
3.00 - 3.49	.	10	37	3	5	.	.	.	.	.	55
3.50 - 3.99	.	1	18	1	3	.	.	.	.	.	23
4.00 - 4.49	.	.	5	5	.	.	.	.	.	.	10
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	47	229	164	67	11	10	0	0	0	0	

MEAN HS(M) = 2.39 LARGEST HS(M) = 4.41 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 317

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	6	.	.	.	.	.	.	.	.	9
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4	7	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.57 LARGEST HS(M) = 2.00 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 8

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

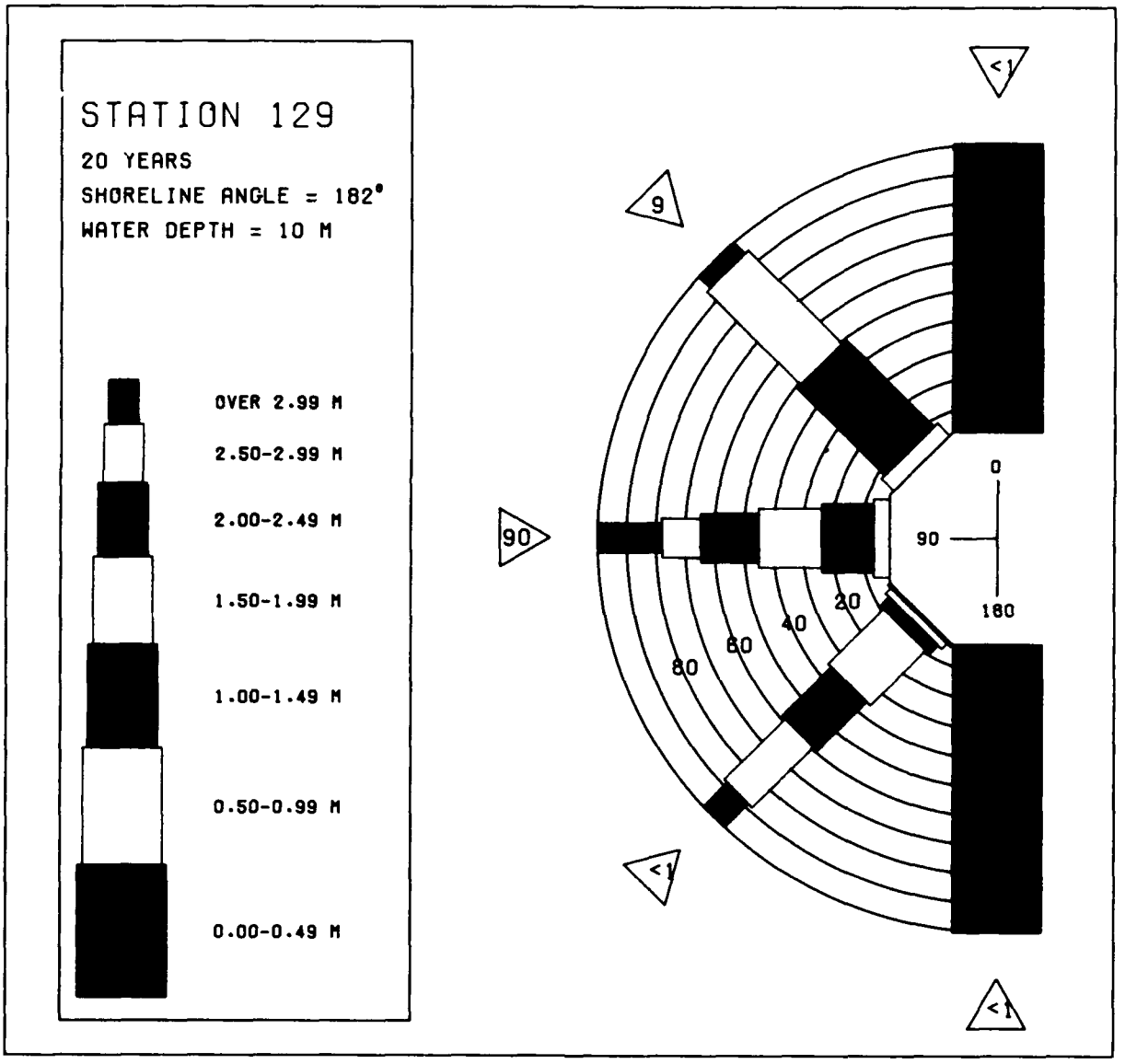
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0 06 LARGEST HS(M) = 0.09 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 4

PHASE 3 ST. 129 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	2	2									4
0.50 - 0.99	37	115	308	60	22	8	1				550
1.00 - 1.49	240	400	645	365	257	79	14	3			2003
1.50 - 1.99	202	636	384	374	466	250	56	6	2		2376
2.00 - 2.49	7	375	141	272	495	404	126	16	3		1839
2.50 - 2.99		99	100	77	327	442	144	15	2		1206
3.00 - 3.49		10	49	15	118	414	185	18	2		811
3.50 - 3.99			9	3	33	221	206	16	1		489
4.00 - 4.49			1		3	93	197	15			309
4.50 - 4.99						27	138	20			185
5.00 +						5	109	78			192
TOTAL	488	1635	1639	1166	1721	1943	1175	187	10	0	

MEAN HS(M) = 2.23 LARGEST HS(M) = 6.72 MEAN TP(SEC)= 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 129 (35.10N/ 120.65W TO 34.85N/ 120.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.7	2.9	2.2	2.0	1.7	2.0	1.4	1.6	1.2	1.6	2.1	2.4	2.0
1957	2.9	2.6	2.6	2.2	1.8	1.7	1.4	1.4	1.4	1.8	2.4	3.1	2.1
1958	2.9	3.4	2.3	2.0	1.8	1.7	1.4	1.3	1.4	1.9	2.4	3.3	2.3
1959	3.2	3.3	2.7	2.0	2.0	1.9	1.4	1.3	1.6	2.1	2.3	3.0	2.2
1960	3.0	3.6	1.8	2.4	1.8	1.4	1.2	1.2	1.3	1.8	2.6	3.0	2.1
1961	3.6	3.0	2.7	1.9	1.7	1.5	1.2	1.0	1.3	1.9	2.3	2.8	2.1
1962	2.4	2.9	2.3	2.1	1.6	1.3	1.6	1.4	1.4	2.0	3.1	3.1	2.1
1963	2.9	3.4	2.7	2.0	1.8	1.9	1.5	1.3	1.4	2.2	2.9	3.1	2.3
1964	4.0	2.8	2.8	2.4	1.8	1.9	2.0	1.5	1.7	1.6	2.6	3.1	2.3
1965	2.8	2.9	2.7	2.1	1.8	2.1	1.4	1.2	1.3	1.9	2.3	3.2	2.2
1966	3.5	3.5	2.4	2.3	1.9	1.4	1.5	1.4	1.2	1.7	2.0	3.4	2.2
1967	3.4	3.1	2.1	2.2	1.9	1.7	1.5	1.4	1.2	1.8	2.4	3.2	2.2
1968	2.5	3.0	2.8	2.5	1.9	1.8	1.7	1.4	1.4	1.9	2.3	3.0	2.3
1969	2.5	3.5	3.0	2.9	1.9	1.8	1.7	1.5	1.3	2.3	2.4	4.8	2.5
1970	3.6	4.2	3.7	2.9	1.8	1.7	1.6	1.4	1.4	1.7	2.7	3.1	2.5
1971	2.9	2.7	2.8	2.7	1.9	2.0	1.6	1.5	1.6	1.9	2.3	2.8	2.2
1972	3.1	3.0	2.9	2.1	2.1	2.0	1.9	1.6	1.4	1.5	2.4	2.9	2.3
1973	4.0	4.0	3.2	2.6	2.4	2.2	2.2	1.9	1.8	2.0	2.6	3.6	2.7
1974	2.9	2.8	2.6	2.9	1.8	2.1	1.9	1.7	1.5	2.0	2.6	3.7	2.5
1975	2.4	2.9	2.6	1.8	1.8	1.7	1.7	1.3	1.0	1.8	2.2	2.6	2.0
MEAN	3.1	3.1	2.6	2.3	1.9	1.8	1.6	1.4	1.4	1.9	2.5	3.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 129 (35.10N/ 120.65W TO 34.85N/ 120.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.5	4.5	4.2	4.0	3.1	3.2	2.1	2.8	2.6	2.7	4.1	4.0
1957	3.7	6.7	4.8	4.2	3.4	3.1	2.4	2.0	2.9	3.6	6.1	5.2
1958	6.0	6.1	4.4	6.7	2.6	3.8	2.3	2.0	2.0	3.2	6.0	5.4
1959	6.1	5.3	4.1	4.0	3.3	3.7	2.2	2.3	2.6	4.0	6.1	4.9
1960	5.5	6.5	4.2	4.0	3.3	3.7	2.6	2.3	2.9	4.8	5.1	5.8
1961	6.1	4.8	5.1	3.6	3.3	3.6	2.7	2.5	2.2	3.6	3.8	4.6
1962	4.2	4.8	4.0	4.0	2.5	3.2	2.5	2.6	2.8	4.1	5.6	5.2
1963	5.7	5.7	4.3	3.7	2.8	3.1	2.1	1.9	2.3	4.8	4.3	6.0
1964	6.4	4.3	4.1	4.3	3.3	3.6	3.0	3.0	2.8	2.7	4.3	6.2
1965	5.0	5.1	3.9	3.6	3.5	3.4	2.3	2.0	2.7	4.6	4.5	5.0
1966	6.2	4.5	3.9	4.4	2.8	3.6	2.2	2.1	2.0	3.3	3.8	6.0
1967	5.5	5.2	3.2	3.2	3.2	3.5	2.5	2.3	2.1	2.2	3.9	6.0
1968	4.6	4.7	4.4	4.9	3.4	3.0	2.9	2.3	3.1	4.4	5.6	5.4
1969	4.9	5.9	5.8	4.8	3.5	2.8	3.0	2.2	2.5	4.2	4.7	6.6
1970	6.0	6.0	6.2	5.5	3.2	2.9	2.3	2.1	2.4	3.5	6.0	5.2
1971	5.5	4.8	5.6	5.1	3.9	2.9	2.5	2.7	2.8	3.3	5.2	5.3
1972	6.0	4.9	4.7	3.6	3.2	2.7	2.8	2.6	2.2	2.2	5.6	6.0
1973	6.2	6.1	5.2	4.8	3.4	3.8	3.2	2.7	3.1	4.1	5.0	6.0
1974	4.9	4.5	6.0	4.9	3.8	3.1	3.0	2.6	2.4	3.3	6.0	6.0
1975	5.0	5.7	4.1	2.8	3.4	3.4	2.7	2.1	1.6	3.5	3.2	4.8

20 YR. STATISTICS FOR PACIFIC STATION129 (35.10N/ 120.65W TO 34.85N/ 120.75W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040300

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	58	.	.	.	.	.	.	.	.	.	58
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	58	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.15 LARGEST HS(M) = 0.50 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 34

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	126	236	15	.	.	.	.	.	.	.	377
0.50 - 0.99	2553	4274	201	.	.	.	.	.	.	.	7028
1.00 - 1.49	3362	5496	140	.	.	.	.	.	.	.	8998
1.50 - 1.99	205	2843	66	.	.	.	.	.	.	.	3114
2.00 - 2.49	2	182	13	.	.	.	.	.	.	.	205
2.50 - 2.99	.	5	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6249	13043	435	0	0	0	0	0	0	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.81 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 11533

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	46	675	104	59	35	11	15	.	.	955
0.50 - 0.99	10	1486	9885	4596	2883	792	131	17	11	.	19811
1.00 - 1.49	80	1156	3940	4596	7710	4471	886	123	5	.	22967
1.50 - 1.99	85	1332	1204	975	4010	6706	2299	171	35	.	16817
2.00 - 2.49	11	540	747	135	850	4216	3162	394	23	.	9978
2.50 - 2.99	.	63	102	25	75	1341	2963	270	13	.	4852
3.00 - 3.49	.	3	15	1	.	225	1415	369	1	.	1928
3.50 - 3.99	.	.	.	.	.	25	367	354	.	.	746
4.00 - 4.49	.	.	.	.	.	5	66	148	.	.	219
4.50 - 4.99	.	.	.	.	.	.	15	61	.	.	76
5.00 +	.	.	.	.	.	.	8	20	.	.	28
TOTAL	196	4626	16568	10432	15587	17816	11323	1801	88	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 5.65 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 45860

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	47	10	.	.	.	.	.	1	.	.	58
1.00 - 1.49	32	114	44	17	1	.	.	.	.	.	208
1.50 - 1.99	77	174	18	6	17	11	.	.	1	.	304
2.00 - 2.49	20	212	65	27	8	13	1	.	.	.	346
2.50 - 2.99	.	155	78	11	13	17	1	.	.	.	275
3.00 - 3.49	.	41	80	25	1	1	.	.	.	.	149
3.50 - 3.99	.	1	49	10	1	1	.	.	.	.	64
4.00 - 4.49	.	.	3	1	1	.	.	.	.	.	7
4.50 - 4.99	.	.	.	1	1	.	.	.	.	.	2
5.00 +	.	.	.	.	1	.	.	.	.	.	1
TOTAL	181	707	337	98	49	45	2	1	1	0	

MEAN HS(M) = 2.24 LARGEST HS(M) = 5.29 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 844

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	3	.	.	.	.	.	.	.	.	13
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	17	6	.	.	.	.	.	.	.	.	23
1.50 - 1.99	22	17	5	.	.	.	.	.	.	.	44
2.00 - 2.49	.	75	23	.	.	.	.	.	.	.	98
2.50 - 2.99	.	25	8	1	.	.	.	.	.	.	34
3.00 - 3.49	.	10	6	.	.	.	.	.	.	.	16
3.50 - 3.99	.	1	1	.	.	.	.	.	.	.	2
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	50	137	43	1	0	0	0	0	0	0	

MEAN HS(M) = 2.08 LARGEST HS(M) = 3.73 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 140

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.09 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 5

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

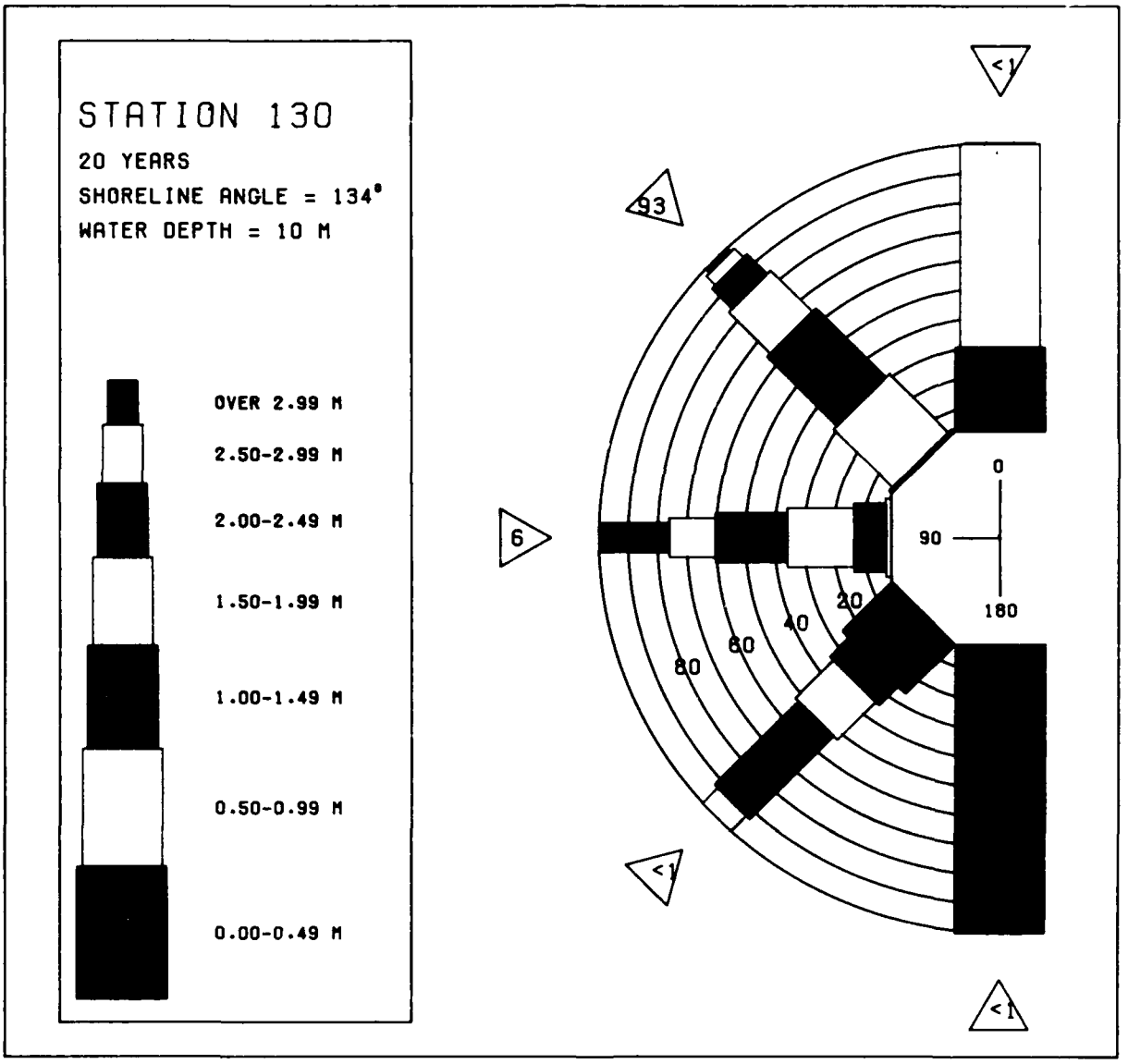
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 130 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	21	28	69	10	5	3	1	1	.	.	138
0.50 - 0.99	261	577	1008	459	288	79	13	1	1	.	2687
1.00 - 1.49	349	677	412	461	771	447	88	12	.	.	3217
1.50 - 1.99	39	436	129	98	402	671	229	17	3	.	2024
2.00 - 2.49	3	101	85	16	85	422	316	29	2	.	1059
2.50 - 2.99	.	24	18	3	8	135	296	27	1	.	512
3.00 - 3.49	.	5	10	2	.	22	141	32	.	.	212
3.50 - 3.99	.	.	5	1	.	2	36	35	.	.	79
4.00 - 4.49	.	.	.	.	.	.	6	14	.	.	20
4.50 - 4.99	.	.	.	.	.	.	1	6	.	.	7
5.00 +	.	.	.	.	.	.	.	2	.	.	2
TOTAL	673	1848	1736	1050	1559	1781	1127	176	7	0	

MEAN HS(M) = 1.46 LARGEST HS(M) = 5.65 MEAN TP(SEC)= 10.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.8	1.9	1.4	1.4	1.2	1.4	1.0	1.1	0.8	1.0	1.3	1.6	1.3
1957	1.6	1.6	1.7	1.4	1.2	1.1	0.8	0.9	1.0	1.3	1.5	2.0	1.4
1958	2.5	2.5	1.6	2.0	1.0	1.2	1.0	0.6	0.9	0.9	1.5	2.2	1.5
1959	2.1	2.3	1.8	1.3	1.3	1.3	0.9	0.8	1.0	1.4	1.5	1.9	1.5
1960	1.9	2.4	1.1	1.6	1.2	0.9	0.7	0.7	0.7	1.0	1.7	1.9	1.3
1961	2.4	2.0	1.9	1.2	1.2	1.0	0.7	0.7	0.8	1.1	1.3	1.8	1.3
1962	1.6	2.0	1.6	1.3	1.1	0.8	1.0	0.9	1.0	1.3	1.9	2.1	1.4
1963	2.0	2.4	1.7	1.4	1.2	1.2	1.0	0.8	1.0	1.4	1.8	2.0	1.5
1964	2.6	1.8	1.8	1.6	1.3	1.4	1.3	1.1	1.1	1.0	1.6	2.1	1.6
1965	1.8	1.9	1.8	1.4	1.4	1.4	1.0	0.8	0.9	1.1	1.5	2.0	1.4
1966	2.2	1.6	1.5	1.5	1.1	1.2	1.0	0.9	1.0	1.0	1.3	2.3	1.4
1967	2.0	2.0	1.5	1.4	1.1	1.1	0.9	0.8	1.2	1.6	1.5	1.9	1.4
1968	1.8	2.1	1.9	1.6	1.3	1.3	1.2	1.0	0.9	1.1	1.7	2.0	1.5
1969	2.9	2.3	1.9	1.9	1.3	1.2	1.1	0.9	0.8	1.4	1.4	2.2	1.6
1970	2.5	2.6	2.4	1.9	1.3	1.1	1.0	0.9	0.9	1.0	1.8	1.9	1.6
1971	1.8	1.9	1.8	1.8	1.3	1.4	1.1	1.0	1.1	1.2	1.4	1.8	1.4
1972	1.9	1.9	1.7	1.3	1.4	1.3	1.3	1.1	0.8	0.9	2.2	1.9	1.5
1973	2.6	2.6	2.1	1.7	1.6	1.5	1.5	1.3	1.3	1.2	1.6	2.3	1.8
1974	2.1	1.8	1.7	1.9	1.9	1.4	1.4	1.2	1.0	1.3	1.6	2.4	1.6
1975	1.5	1.9	1.8	1.2	1.2	1.2	1.2	0.9	0.6	1.1	1.2	1.7	1.3
MEAN	2.0	2.1	1.7	1.5	1.3	1.2	1.1	0.9	0.9	1.2	1.6	2.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.2	2.8	2.9	2.7	2.1	2.2	1.5	2.0	1.7	1.9	2.6	2.6
1957	2.8	4.9	2.9	2.7	2.3	2.2	1.5	1.4	1.9	2.2	3.4	3.2
1958	4.2	4.3	2.8	5.3	1.6	2.0	1.7	1.4	1.6	1.9	3.5	3.4
1959	3.9	5.3	2.8	2.6	2.1	1.9	1.6	1.7	1.8	2.5	4.0	3.4
1960	3.7	4.2	2.7	2.7	1.7	1.8	1.2	1.3	1.2	2.9	3.0	3.6
1961	4.5	3.0	3.9	3.2	2.3	1.8	1.2	1.1	1.6	2.4	2.3	2.9
1962	2.9	3.8	3.4	2.5	1.9	1.6	1.8	1.8	1.7	3.6	3.4	3.7
1963	4.8	4.7	2.6	2.8	2.0	2.3	1.5	1.8	1.5	3.0	2.9	4.1
1964	4.6	2.7	2.9	2.5	2.6	2.7	2.3	2.1	2.1	2.1	2.5	4.7
1965	3.4	3.3	2.7	2.6	2.5	2.4	1.9	1.4	1.7	2.8	3.7	3.8
1966	4.2	2.9	2.6	2.9	1.9	1.8	1.4	1.5	1.9	2.0	2.4	3.9
1967	4.2	3.2	2.5	2.5	2.3	2.1	1.5	1.4	1.8	2.2	2.4	3.7
1968	2.7	3.7	2.9	3.4	2.5	2.3	2.1	1.8	2.2	2.7	3.6	3.5
1969	3.9	3.8	3.6	3.1	2.4	2.4	2.3	1.7	1.6	2.5	2.7	3.7
1970	4.0	4.0	4.2	3.8	2.4	2.3	1.5	1.4	1.9	2.1	3.8	3.5
1971	3.4	3.1	3.8	3.4	2.6	2.2	1.8	1.8	1.9	2.3	3.1	3.2
1972	4.0	3.2	2.9	2.3	2.4	2.0	2.0	1.9	1.7	1.6	3.4	4.0
1973	4.3	3.8	3.5	3.1	2.5	2.6	2.2	1.8	2.4	2.6	3.4	4.9
1974	3.3	3.0	4.0	3.4	2.6	2.1	2.3	1.9	1.7	3.5	3.7	4.5
1975	3.2	3.5	3.5	2.0	2.8	2.6	1.9	1.5	1.2	2.3	2.1	3.2

20 YR. STATISTICS FOR PACIFIC STATION130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121318

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49		1					.	.	.	.	1
0.50 - 0.99	297	581	208	10	23	17	.	.	.	.	1136
1.00 - 1.49	1598	1480	477	78	54	25	.	.	.	.	3712
1.50 - 1.99	1937	2149	220	22	75	61	.	.	.	.	4464
2.00 - 2.49	143	1038	234	11	8	32	.	.	.	.	1466
2.50 - 2.99	.	130	124	3	.	.	.	.	.	.	257
3.00 - 3.49	.	17	39	.	.	.	.	.	.	.	56
3.50 - 3.99	.	1	3	.	.	.	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3975	5397	1305	124	160	135	0	0	0	0	

MEAN HS(M) = 1.58 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6494

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	11		23			3		3	.	.	40
0.50 - 0.99	145	169	3237	679	254	109	20	13	.	.	5643
1.00 - 1.49	256	1710	7174	3920	2607	838	140	23	8	.	17676
1.50 - 1.99	585	2433	3304	3862	4989	2505	552	78	18	.	18386
2.00 - 2.49	99	2681	1178	1962	4779	4161	1254	147	22	.	16283
2.50 - 2.99	.	1023	746	682	2802	4372	1572	133	30	.	11360
3.00 - 3.49	.	183	497	140	1125	3819	1786	200	30	.	7780
3.50 - 3.99	.	10	95	56	244	1991	1969	140	15	.	4520
4.00 - 4.49	.	.	10	15	15	840	1935	177	1	.	2992
4.50 - 4.99	.	.	.	.	.	181	1427	191	3	.	1802
5.00 +	.	.	.	.	.	17	1042	802	1	.	1862
TOTAL	1096	10229	16324	11316	16815	18833	11697	1907	127	0	

MEAN HS(M) = 2.27 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 51650

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	10	3	11	5	.	.	.	.	.	.	29
1.00 - 1.49	1	25	25	11	1	.	.	.	.	.	63
1.50 - 1.99	41	22	20	18	6	.	.	.	.	.	107
2.00 - 2.49	1	73	20	17	1	10	.	.	.	.	122
2.50 - 2.99	.	41	20	8	6	.	.	.	.	.	75
3.00 - 3.49	.	20	22	1	3	.	.	.	.	.	46
3.50 - 3.99	.	.	6	.	5	.	.	.	.	.	11
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	54	184	124	60	22	10	0	0	0	0	

MEAN HS(M) = 2.12 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 275

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	3	.	.	.	.	.	.	.	.	4
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	3	5	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	6	.	.	.	.	.	.	.	.	6
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4	16	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 14

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

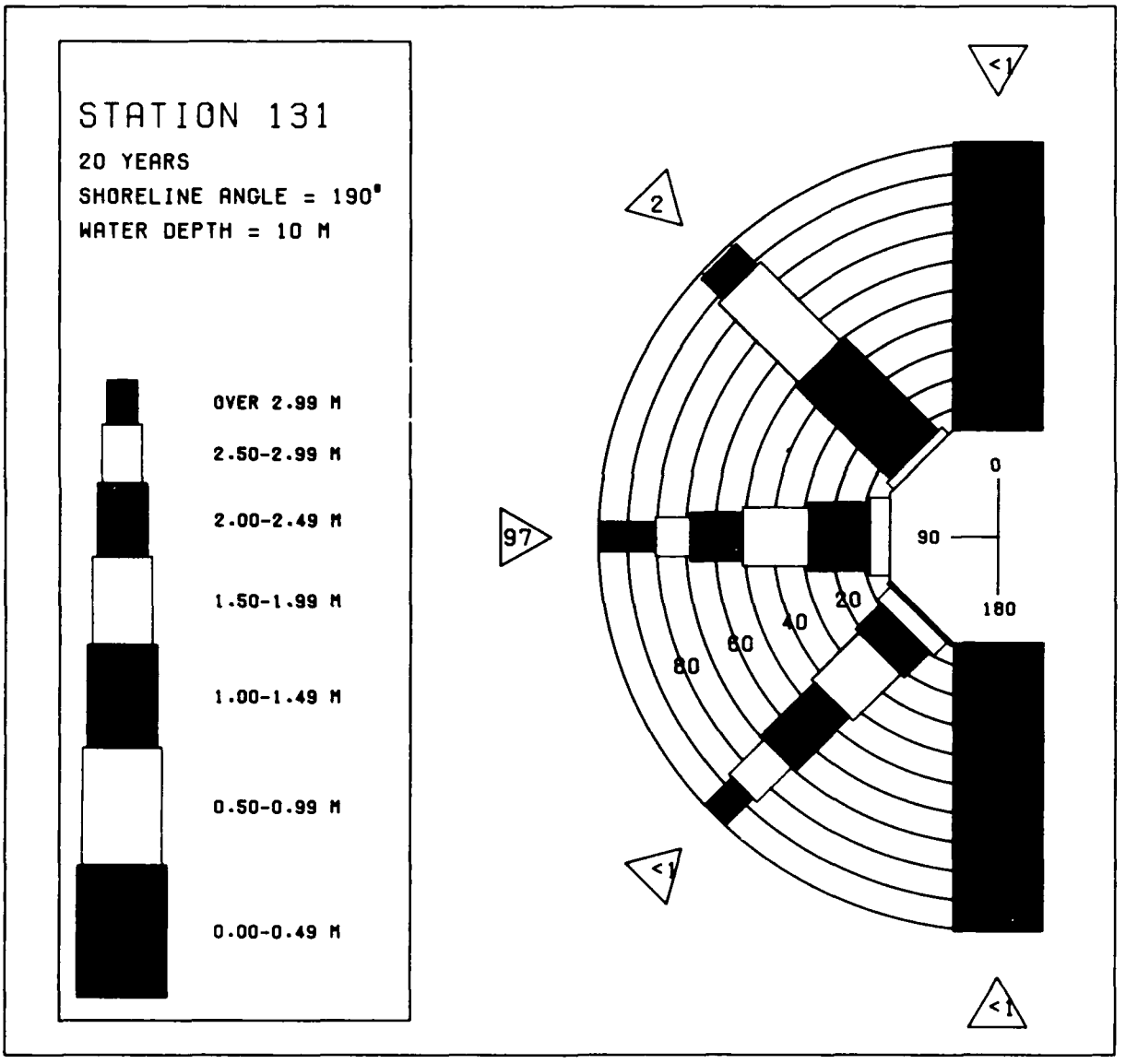
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 131 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	2									3
0.50 - 0.99	45	177	345	69	27	12	2	1	.	.	678
1.00 - 1.49	185	421	767	401	266	86	14	2	.	.	2142
1.50 - 1.99	256	460	360	390	507	256	55	7	1	.	2292
2.00 - 2.49	24	380	143	199	478	420	125	14	2	.	1785
2.50 - 2.99	.	119	89	69	280	437	157	13	3	.	1167
3.00 - 3.49	.	22	55	14	112	381	178	20	3	.	785
3.50 - 3.99	.	1	10	5	24	199	196	14	1	.	450
4.00 - 4.49	.	.	1	1	1	84	193	17	.	.	297
4.50 - 4.99	.	.	.	.	.	18	142	19	.	.	179
5.00 +	.	.	.	.	.	1	104	80	.	.	185
TOTAL	511	1580	1772	1148	1695	1894	1166	187	10	0	

MEAN HS(M) = 2.19 LARGEST HS(M) = 6.72 MEAN TP(SEC)= 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 131 (34.81N/ 120.68W TO 34.73N/ 120.61W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.5	2.9	2.2	2.0	1.7	2.0	1.4	1.6	1.2	1.6	2.1	2.4	2.0
1957	2.7	2.5	2.6	2.1	1.6	1.7	1.2	1.3	1.4	1.8	2.4	3.1	2.0
1958	3.7	3.2	2.6	2.0	1.4	1.7	1.4	1.1	1.4	1.8	2.4	3.2	2.2
1959	3.1	3.3	2.6	1.9	1.9	1.8	1.3	1.2	1.5	2.1	2.3	3.0	2.2
1960	2.9	3.5	1.7	2.4	1.8	1.3	1.1	1.2	1.1	1.7	2.6	3.0	2.0
1961	3.5	3.0	2.8	1.8	1.7	1.5	1.1	1.0	1.2	1.9	2.1	2.8	2.0
1962	2.3	2.8	2.3	2.1	1.6	1.2	1.5	1.4	1.4	1.9	3.1	3.0	2.0
1963	2.9	3.1	2.6	1.9	1.7	1.9	1.5	1.2	1.4	2.2	2.8	3.1	2.2
1964	4.0	2.8	2.8	2.4	1.8	1.9	1.9	1.5	1.6	1.6	2.5	3.1	2.3
1965	2.7	2.9	2.7	1.9	2.1	2.0	1.4	1.2	1.3	1.8	2.2	3.1	2.1
1966	3.5	3.4	2.5	2.2	1.7	1.7	1.4	1.3	1.6	1.9	1.6	3.2	2.1
1967	3.0	3.2	2.0	2.1	1.7	1.5	1.3	1.1	1.8	2.5	2.3	3.1	2.1
1968	2.3	2.8	2.8	2.6	1.9	1.8	1.7	1.4	1.4	1.9	3.3	2.8	2.2
1969	2.5	3.4	2.9	2.9	1.9	1.8	1.6	1.3	1.2	2.3	2.4	4.7	2.4
1970	3.4	4.1	3.7	2.9	1.8	1.7	1.5	1.3	1.4	1.6	2.6	3.1	2.4
1971	2.7	2.7	2.8	2.7	1.9	2.0	1.6	1.4	1.7	1.8	2.3	2.8	2.2
1972	3.1	3.0	2.6	2.0	2.0	1.9	1.8	1.6	1.3	1.4	2.4	3.8	2.3
1973	3.8	3.8	2.2	2.7	2.4	2.2	2.2	1.9	1.9	1.9	2.4	3.2	2.3
1974	2.6	2.8	2.5	2.9	2.8	2.1	1.9	1.7	1.4	2.0	2.5	3.7	2.4
1975	2.4	2.8	2.6	1.8	1.8	1.7	1.7	1.3	0.9	1.8	2.1	2.6	1.9
MEAN	3.0	3.0	2.6	2.3	1.9	1.8	1.5	1.4	1.4	1.8	2.5	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 131 (34.81N/ 120.68W TO 34.73N/ 120.61W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.5	4.5	4.4	4.0	3.1	3.2	2.2	3.0	2.6	2.7	4.2	4.0
1957	3.8	6.3	4.7	4.4	3.3	3.3	2.4	2.0	2.8	3.5	5.7	5.2
1958	6.0	6.1	4.3	6.7	2.3	2.9	2.3	2.1	2.1	3.1	5.9	5.5
1959	6.1	5.3	4.3	4.1	3.4	5.7	2.3	2.4	2.6	4.1	6.1	5.1
1960	5.4	6.2	4.3	4.0	2.6	5.7	1.9	2.0	1.7	4.8	5.0	5.8
1961	6.1	4.6	6.0	3.6	3.3	5.7	1.8	1.5	2.3	3.9	3.7	4.7
1962	4.2	4.5	3.6	4.0	2.6	3.1	2.5	2.7	2.9	3.8	5.7	5.0
1963	5.1	4.8	4.0	3.8	2.9	3.2	2.1	2.0	2.3	4.8	4.2	6.0
1964	6.5	4.3	4.2	4.3	3.5	3.7	3.3	3.0	2.8	3.5	4.3	6.2
1965	5.1	5.4	4.1	3.6	3.5	3.5	2.6	2.0	2.5	4.5	4.1	5.0
1966	6.2	4.6	4.0	4.5	2.8	3.6	2.1	2.1	3.0	3.3	3.8	6.0
1967	5.7	5.3	3.1	4.2	3.9	3.9	2.1	2.0	2.9	5.3	3.8	6.0
1968	3.9	4.5	4.4	5.3	3.5	3.1	2.1	2.4	3.2	2.4	5.8	5.4
1969	5.2	5.9	5.9	4.9	3.7	3.2	3.3	2.5	2.5	4.2	4.4	6.5
1970	6.0	6.0	6.2	5.9	3.4	3.6	2.3	2.2	2.7	3.4	6.0	5.3
1971	5.6	4.9	5.7	5.2	3.8	3.1	2.6	2.7	2.9	3.4	5.0	5.3
1972	6.0	5.0	4.7	3.6	3.4	2.8	2.9	2.7	2.3	2.4	5.7	6.1
1973	6.0	5.9	5.3	5.1	3.6	3.8	3.2	2.7	3.4	4.2	4.9	6.0
1974	4.8	4.5	5.9	5.0	3.9	3.0	3.2	2.6	2.4	5.3	6.0	6.0
1975	5.3	5.8	4.5	2.9	3.7	3.7	2.7	2.2	1.7	3.8	3.2	4.8

20 YR. STATISTICS FOR PACIFIC STATION131 (34.81N/ 120.68W TO 34.73N/ 120.61W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	10	.	.	.	.	.	.	.	.	.	10
1.00 - 1.49	56	.	.	.	.	.	.	.	.	.	56
1.50 - 1.99	17	.	.	.	.	.	.	.	.	.	17
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	83	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.26 LARGEST HS(M) = 1.81 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 49

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	1	22	.	.	.	.	.	.	.	31
0.50 - 0.99	378	1579	2113	128	71	34	1	.	.	.	4304
1.00 - 1.49	1697	3957	4421	444	131	53	51	.	.	.	10754
1.50 - 1.99	2915	4372	2063	400	265	97	15	.	.	.	10127
2.00 - 2.49	345	3848	922	268	90	49	11	.	.	.	5533
2.50 - 2.99	.	1146	407	128	41	13	18	.	.	.	1753
3.00 - 3.49	.	200	174	65	44	.	.	.	.	.	483
3.50 - 3.99	.	8	23	10	20	.	5	.	.	.	66
4.00 - 4.49	.	.	1	5	.	.	.	.	.	.	6
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5343	15111	10146	1448	662	246	101	0	0	0	0

MEAN HS(M) = 1.62 LARGEST HS(M) = 4.08 MEAN TP(SEC) = 7.6 NUMBER OF CASES = 19332

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	1	1	.	.	3	.	3	.	.	10
0.50 - 0.99	3	106	1285	566	220	88	20	13	.	.	2301
1.00 - 1.49	15	160	3054	3543	2537	878	87	27	8	.	10259
1.50 - 1.99	80	147	1420	3461	4835	2523	554	78	18	.	13116
2.00 - 2.49	27	268	439	1536	4628	4180	1266	143	23	.	12510
2.50 - 2.99	.	171	468	542	2655	4392	1575	131	23	.	9957
3.00 - 3.49	.	32	381	78	1064	3747	1851	212	27	.	7392
3.50 - 3.99	.	5	85	35	186	1942	1991	135	15	.	4394
4.00 - 4.49	.	.	8	10	8	778	1950	184	.	.	2938
4.50 - 4.99	.	.	.	.	.	155	1362	200	3	.	1720
5.00 +	.	.	.	.	.	11	917	771	1	.	1700
TOTAL	128	889	7141	9771	16133	18647	11573	1897	118	0	

MEAN HS(M) = 2.47 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 38768

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	10	1	10	3	.	.	.	.	.	.	24
1.00 - 1.49	3	23	17	11	.	.	.	.	.	.	54
1.50 - 1.99	30	22	29	15	3	.	.	.	.	.	99
2.00 - 2.49	3	85	13	18	.	3	.	.	.	.	122
2.50 - 2.99	.	49	27	8	3	5	.	.	.	.	92
3.00 - 3.49	.	22	22	3	6	.	.	.	.	.	53
3.50 - 3.99	.	1	8	.	6	.	.	.	.	.	15
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	1	.	.	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	47	203	127	58	18	8	0	0	0	0	

MEAN HS(M) = 2.22 LARGEST HS(M) = 4.53 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 279

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	.	.	.	.	.	.	.	.	2
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	1	1	.	.	.	.	.	.	.	.	2
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2	4	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.29 LARGEST HS(M) = 2.52 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 6

PHASE 3 ST. 132 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

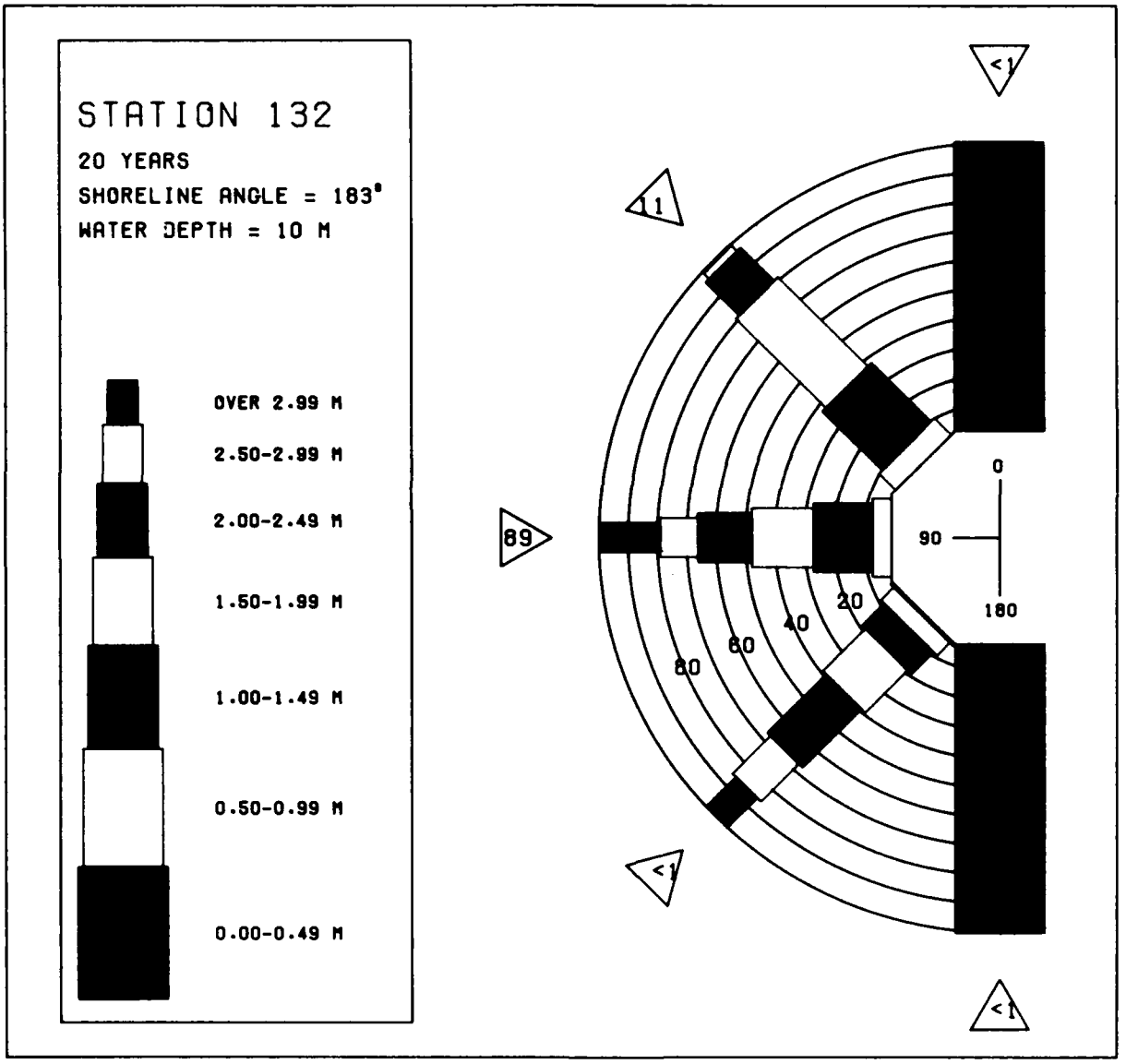
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 132 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 34.73N/120.61W LAT. LON. END= 34.60N/120.71W
SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	2									3
0.50 - 0.99	40	168	340	69	29	12	2	1	.	.	661
1.00 - 1.49	177	414	749	400	266	88	13	2	.	.	2109
1.50 - 1.99	304	454	351	387	510	262	56	7	1	.	2332
2.00 - 2.49	37	420	137	182	471	423	127	14	2	.	1813
2.50 - 2.99	.	136	90	67	270	441	159	13	2	.	1178
3.00 - 3.49	.	25	57	14	111	374	185	21	2	.	789
3.50 - 3.99	.	1	11	4	21	194	199	13	1	.	444
4.00 - 4.49	.	.	1	1	.	77	195	18	.	.	292
4.50 - 4.99	.	.	.	.	.	15	136	20	.	.	171
5.00 +	.	.	.	.	.	1	31	77	.	.	169
TOTAL	559	1618	1738	1124	1678	1887	1163	186	8	0	

MEAN HS(M) = 2.18 LARGEST HS(M) = 6.72 MEAN TP(SEC)= 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 132 (34.73N/ 120.61W TO 34.60N/ 120.71W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.5	2.8	2.2	2.0	1.7	2.0	1.4	1.7	1.2	1.6	2.0	2.4	2.0
1957	2.5	2.4	2.6	2.1	1.6	1.7	1.3	1.3	1.4	1.7	2.4	2.1	2.0
1958	2.6	2.2	2.2	2.0	1.4	1.7	1.4	1.1	1.4	1.5	2.4	2.4	2.2
1959	2.1	2.5	2.8	1.9	2.0	1.8	1.4	1.2	1.5	2.1	2.3	2.9	2.2
1960	2.9	2.5	1.7	2.4	1.8	1.3	1.1	1.2	1.1	1.7	2.6	2.9	2.0
1961	2.5	3.0	2.7	1.8	1.7	1.5	1.1	1.0	1.2	1.9	2.1	2.7	2.0
1962	2.3	2.7	2.3	2.1	1.6	1.3	1.5	1.4	1.4	1.9	3.0	2.9	2.0
1963	2.9	3.1	2.6	1.9	1.7	1.9	1.5	1.2	1.4	2.2	2.7	3.1	2.2
1964	4.0	3.8	2.8	2.4	1.9	1.9	2.0	1.5	1.7	1.5	2.5	3.0	2.5
1965	2.7	2.9	2.6	1.9	2.1	2.0	1.4	1.2	1.3	1.8	2.2	3.1	2.1
1966	3.4	3.4	2.3	2.2	1.4	1.7	1.5	1.3	1.6	1.7	1.9	3.2	2.1
1967	3.0	3.1	2.0	2.1	1.7	1.5	1.3	1.2	1.8	2.4	2.3	3.1	2.1
1968	2.3	2.8	2.8	2.6	2.0	1.8	1.7	1.5	1.4	1.9	2.3	2.8	2.2
1969	2.5	3.3	2.9	2.9	1.9	1.8	1.6	1.4	1.2	2.3	2.3	4.7	2.4
1970	3.4	4.0	3.7	2.9	1.8	1.7	1.5	1.4	1.5	1.6	2.6	3.0	2.4
1971	2.7	2.7	2.7	2.7	1.9	2.0	1.6	1.5	1.7	1.8	2.2	2.7	2.2
1972	3.1	3.0	2.6	2.0	2.0	1.9	1.8	1.6	1.3	1.4	2.4	2.7	2.2
1973	2.8	2.8	2.5	2.7	2.4	2.2	2.2	1.9	1.4	1.8	2.4	3.5	2.2
1974	2.6	2.8	2.5	2.9	2.8	2.4	2.1	1.9	1.7	1.9	2.5	3.7	2.4
1975	2.4	2.8	2.6	1.8	1.8	1.7	1.7	1.3	0.9	1.8	2.1	2.6	1.9
MEAN	3.0	3.0	2.6	2.3	1.9	1.8	1.5	1.4	1.4	1.8	2.5	3.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 132 (34.73N/ 120.61W TO 34.60N/ 120.71W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	4.4	4.4	4.4	4.0	3.0	3.2	2.2	3.0	2.6	2.7	4.1	4.0
1957	3.7	6.3	4.6	4.5	3.3	3.3	2.4	2.0	2.8	3.5	5.6	5.1
1958	6.0	6.1	4.3	6.7	2.3	2.9	2.3	2.2	2.2	3.0	5.8	5.4
1959	6.1	5.2	4.3	4.0	3.4	2.7	2.3	2.4	2.6	4.1	6.1	5.0
1960	5.3	6.2	4.3	4.0	2.7	2.7	2.0	2.0	1.7	4.4	4.9	5.8
1961	6.1	4.6	5.2	3.5	3.3	2.2	1.9	1.5	2.3	3.9	3.7	4.6
1962	4.2	4.4	3.7	4.0	2.6	2.2	2.5	2.7	2.8	3.9	5.6	5.0
1963	5.0	4.9	4.0	3.7	2.9	3.2	2.1	2.1	2.3	4.7	4.2	6.0
1964	6.5	4.2	4.1	4.2	3.5	3.7	3.3	3.0	2.8	3.4	4.2	6.2
1965	5.0	5.4	4.1	3.6	3.5	3.5	2.6	2.1	2.5	4.4	4.0	4.9
1966	6.2	4.5	3.9	4.4	2.8	2.6	2.1	2.1	2.0	3.2	3.8	6.0
1967	5.5	5.2	4.3	4.1	3.2	2.9	2.1	2.1	2.8	5.2	5.8	5.9
1968	3.8	4.5	4.4	5.1	3.2	3.1	3.0	2.4	3.2	4.4	5.8	5.3
1969	5.2	5.8	5.8	4.8	3.7	3.2	3.1	2.5	2.5	4.2	4.4	6.4
1970	6.0	6.0	6.2	5.8	3.4	3.6	2.3	2.2	2.7	3.4	6.1	5.2
1971	5.5	4.8	5.7	5.2	3.8	3.1	2.7	2.7	3.0	3.4	5.0	5.2
1972	6.0	4.9	4.6	3.6	3.4	2.8	2.9	2.8	2.3	2.5	5.6	6.1
1973	6.0	5.8	5.3	5.1	3.6	3.8	3.1	2.7	2.4	4.1	4.8	6.0
1974	4.7	4.5	5.8	5.0	3.8	3.0	3.2	2.7	2.4	5.2	6.0	6.0
1975	5.3	5.8	4.4	2.9	3.7	3.7	2.7	2.2	1.7	3.9	3.2	4.7

20 YR. STATISTICS FOR PACIFIC STATION132 (34.73N/ 120.61W TO 34.60N/ 120.71W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	994	.	.	.	.	.	.	.	.	.	994
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	994	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.42 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 581

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2746	1748	1302	.	.	.	.	.	.	.	5796
0.50 - 0.99	5686	9356	3689	.	.	.	.	.	.	.	18731
1.00 - 1.49	1351	7351	805	.	.	.	.	.	.	.	9507
1.50 - 1.99	11	965	441	.	.	.	.	.	.	.	1417
2.00 - 2.49	.	25	8	.	.	.	.	.	.	.	33
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9794	19445	6245	0	0	0	0	0	0	0	

MEAN HS(M) = 0.84 LARGEST HS(M) = 2.26 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 20741

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	42	10	1281	521	237	78	18	8	.	.	2195
0.50 - 0.99	147	213	6100	6632	8003	4117	593	83	8	.	25896
1.00 - 1.49	128	451	1040	908	3617	8507	3851	234	6	.	18742
1.50 - 1.99	97	552	713	184	379	2156	4591	552	6	.	9230
2.00 - 2.49	6	244	200	124	131	434	1139	627	.	.	2905
2.50 - 2.99	.	41	51	30	17	136	241	177	.	.	693
3.00 - 3.49	.	5	25	17	8	46	53	49	.	.	203
3.50 - 3.99	.	.	8	.	1	6	11	3	.	.	29
4.00 - 4.49	.	.	.	.	.	6	3	.	.	.	9
4.50 - 4.99	.	.	.	.	.	13	1	.	.	.	14
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	420	1516	9418	8416	12393	15499	10501	1733	20	0	

MEAN HS(M) = 1.14 LARGEST HS(M) = 4.91 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 35037

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	41	6	.	.	.	.	.	.	.	.	47
0.50 - 0.99	65	29	.	.	.	.	.	.	.	.	94
1.00 - 1.49	77	47	3	.	.	.	.	.	.	.	127
1.50 - 1.99	65	188	23	11	.	.	.	.	.	.	307
2.00 - 2.49	10	253	53	8	1	.	.	.	.	.	325
2.50 - 2.99	.	94	97	6	1	5	.	.	.	.	203
3.00 - 3.49	.	15	63	15	3	1	.	.	.	.	117
3.50 - 3.99	.	.	10	8	1	.	.	.	.	.	19
4.00 - 4.49	.	.	.	.	3	.	.	.	.	.	3
4.50 - 4.99	.	.	.	1	3	.	.	.	.	.	5
5.00 +	.	.	.	1	1	.	.	.	.	.	2
TOTAL	278	632	269	49	13	6	0	0	0	0	

MEAN HS(M) = 2.06 LARGEST HS(M) = 5.14 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 738

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	540	318	3	.	.	.	.	.	.	.	861
0.50 - 0.99	61	34	25	8	.	.	.	.	.	.	128
1.00 - 1.49	25	13	.	.	.	.	.	.	.	.	38
1.50 - 1.99	15	37	3	.	.	.	.	.	.	.	55
2.00 - 2.49	.	47	15	.	.	.	.	.	.	.	62
2.50 - 2.99	.	8	3	.	.	.	.	.	.	.	11
3.00 - 3.49	.	.	3	.	.	.	.	.	.	.	3
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	641	457	52	8	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 3.19 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 682

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	451	.	.	.	.	.	.	.	.	.	451
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	451	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.05 LARGEST HS(M) = 0.13 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 264

PHASE 3 ST. 133 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 34.60N/120.71W LAT. LON. END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

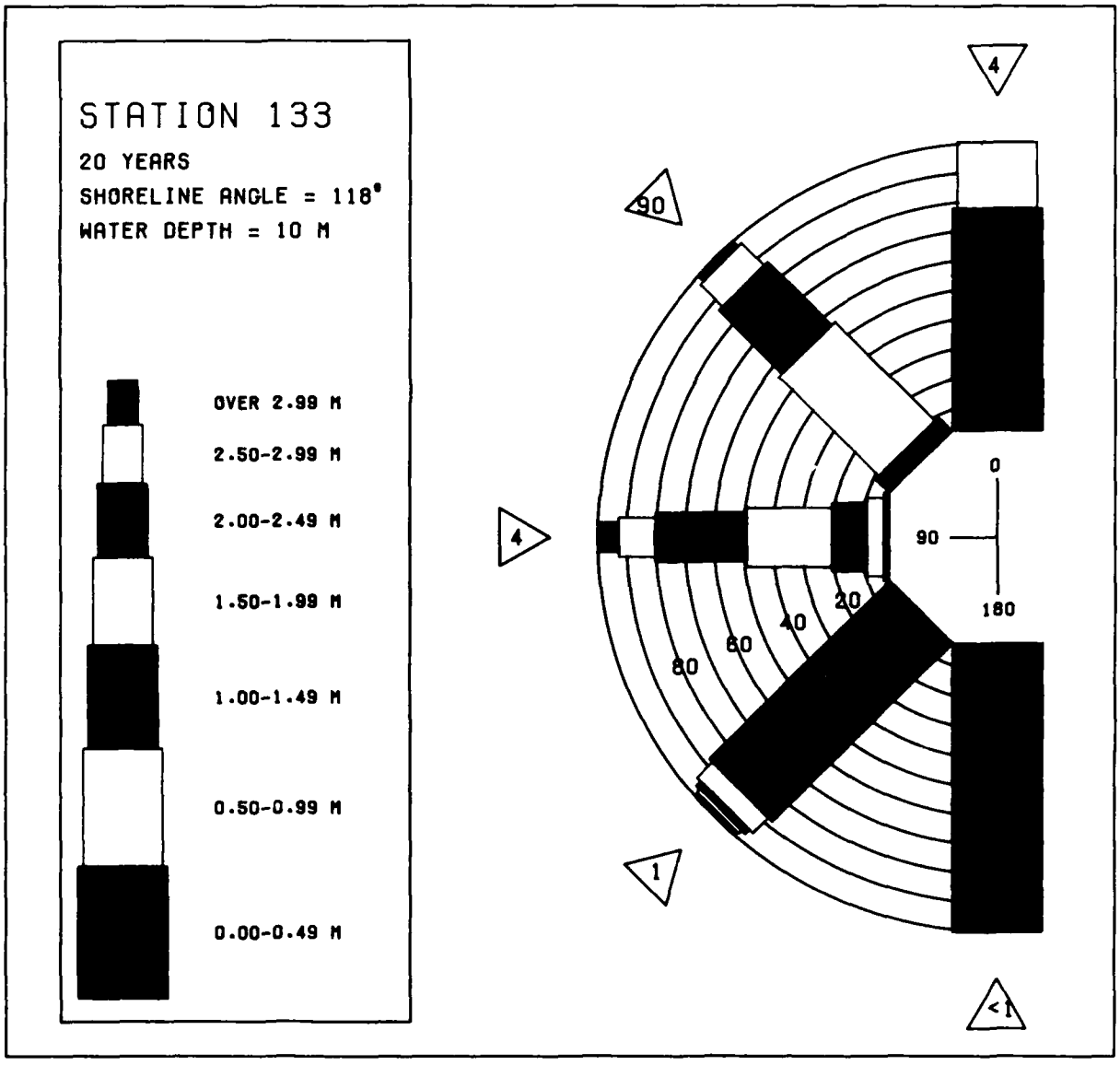
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 133 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT, LON, START= 34.60N/120.71W LAT, LON, END= 34.53N/120.60W
SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0. - 0.49	481	208	258	52	23	7	1	.	.	.	1030
0.50 - 0.99	595	963	981	664	800	411	59	8	.	.	4481
1.00 - 1.49	158	786	184	90	361	850	385	23	.	.	2837
1.50 - 1.99	21	174	118	19	37	215	459	55	.	.	1098
2.00 - 2.49	1	57	27	13	13	43	113	62	.	.	329
2.50 - 2.99	.	14	15	3	1	14	24	17	.	.	88
3.00 - 3.49	.	2	11	3	1	4	5	4	.	.	30
3.50 - 3.99	.	.	1	.	.	.	1	.	.	.	2
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	1	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1256	2204	1595	844	1236	1545	1047	169	0	0	

MEAN HS(M) = 1.02 LARGEST HS(M) = 5.14 MEAN TP(SEC)= 9.6 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 133 (34.60N/ 120.71W TO 34.53N/ 120.60W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.4	1.2	0.8	1.0	0.8	1.0	0.7	0.8	0.6	0.6	0.7	1.1	0.9
1957	1.1	1.2	1.3	1.0	0.9	0.8	0.6	0.6	0.8	0.9	0.9	1.3	1.0
1958	1.4	2.0	1.3	1.4	0.7	0.9	0.8	0.6	0.6	0.5	0.9	1.5	1.1
1959	1.4	1.7	1.1	0.9	0.9	0.9	0.7	0.6	0.7	1.0	0.9	1.2	1.0
1960	1.3	1.7	0.8	1.1	0.8	0.6	0.5	0.5	0.5	0.6	1.1	1.3	0.9
1961	1.6	1.5	1.4	0.8	0.9	0.7	0.5	0.5	0.6	0.7	0.9	1.1	0.9
1962	1.1	1.6	1.1	0.9	0.8	0.6	0.8	0.6	0.6	1.0	1.2	1.5	1.0
1963	1.5	2.1	1.2	1.1	0.9	0.9	0.7	0.6	0.7	0.9	1.0	1.3	1.1
1964	1.7	1.2	1.2	1.1	1.0	1.2	1.0	0.8	0.8	0.7	0.9	1.5	1.1
1965	1.2	1.2	1.5	1.1	1.0	1.0	0.7	0.6	0.6	0.7	1.1	1.3	1.0
1966	1.4	1.1	1.0	1.0	0.8	0.9	0.7	0.6	0.7	0.6	0.9	1.7	1.0
1967	1.5	1.2	1.1	1.1	0.8	0.8	0.7	0.6	0.8	1.0	0.9	1.0	1.0
1968	1.1	1.6	1.3	1.1	1.0	1.0	0.9	0.7	0.7	0.7	1.4	1.4	1.1
1969	1.5	1.5	1.3	1.2	1.0	0.9	0.8	0.6	0.6	0.9	0.7	2.1	1.1
1970	1.9	1.7	1.7	1.3	0.9	0.8	0.7	0.7	0.6	0.6	1.3	1.2	1.1
1971	1.1	1.3	1.2	1.2	0.9	1.0	0.8	0.7	0.7	0.7	0.8	1.1	1.0
1972	1.1	1.3	1.2	0.9	1.0	1.1	1.0	0.8	0.6	0.6	1.4	1.4	1.0
1973	1.8	2.0	1.6	1.2	1.2	1.1	1.1	1.0	0.9	0.8	1.1	1.5	1.3
1974	1.8	1.1	1.4	1.5	1.4	1.4	1.1	1.0	0.8	0.9	0.8	1.6	1.2
1975	1.0	1.3	1.4	0.9	0.9	1.0	0.9	0.7	0.5	0.7	0.6	1.1	0.9
MEAN	1.4	1.5	1.2	1.1	0.9	0.9	0.8	0.7	0.7	0.8	1.0	1.4	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 133 (34.60N/ 120.71W TO 34.53N/ 120.60W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.0	1.9	2.2	1.9	1.6	1.7	1.2	1.5	1.1	1.4	1.6	1.7
1957	2.5	3.5	2.0	1.7	1.7	1.9	1.0	1.1	1.4	1.4	2.0	2.8
1958	2.6	3.4	2.6	3.8	1.2	1.6	1.2	1.1	1.3	1.1	2.0	2.4
1959	3.0	5.1	2.0	1.6	1.6	1.5	1.1	1.3	1.3	1.6	2.4	5.2
1960	2.7	3.5	1.8	1.8	1.2	1.3	0.8	0.9	0.8	1.7	2.0	2.3
1961	2.9	2.3	1.8	1.6	1.6	1.3	0.9	0.9	0.9	1.5	1.9	2.0
1962	2.6	3.5	2.5	1.6	1.7	1.2	1.2	1.1	1.1	1.3	2.0	3.1
1963	4.9	4.9	2.0	2.2	1.6	1.9	1.3	1.1	1.0	1.8	2.0	2.5
1964	3.0	1.8	2.0	1.9	2.1	2.3	1.8	1.5	1.8	1.2	1.7	3.8
1965	2.2	2.1	1.9	2.1	2.0	1.9	1.5	1.0	1.2	1.7	3.4	3.8
1966	3.0	2.1	2.0	2.0	1.4	1.4	1.1	1.1	1.4	1.1	2.2	3.2
1967	3.8	2.0	2.2	2.1	1.8	1.7	1.3	1.0	1.1	1.8	1.4	2.4
1968	2.1	3.0	2.1	2.3	2.1	1.8	1.5	1.3	1.2	1.8	2.1	2.5
1969	3.1	3.4	2.2	2.1	1.9	1.6	1.5	1.3	1.6	1.9	1.8	3.5
1970	3.6	3.4	2.2	2.3	2.0	1.9	1.9	1.1	1.0	1.7	3.2	3.2
1971	3.4	2.5	2.5	2.3	1.9	1.7	1.5	1.1	1.4	1.5	3.2	2.5
1972	1.9	2.2	2.7	2.3	2.1	1.8	1.5	1.2	1.4	1.6	1.9	3.1
1973	2.3	1.9	2.0	1.8	1.9	1.5	1.6	1.4	1.3	1.4	2.3	2.4
1974	3.4	3.2	2.4	2.0	2.0	1.9	1.6	1.3	1.6	1.7	2.4	3.1
1975	3.2	2.0	2.9	2.6	2.1	1.7	1.8	1.5	1.2	2.5	2.2	4.0
	2.1	2.2	3.2	1.5	2.0	2.1	1.4	1.2	1.0	1.3	1.5	2.0

20 YR. STATISTICS FOR PACIFIC STATION133 (34.60N/ 120.71W TO 34.53N/ 120.60W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	9.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.0
LARGEST WAVE HS	(METERS)	5.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021609

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.01 LARGEST HS(M) = 0.01 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	32	.	.	.	.	.	.	.	.	42
0.50 - 0.99	735	496	.	.	.	.	.	.	.	.	1231
1.00 - 1.49	3478	1466	1	.	.	.	.	.	.	.	4945
1.50 - 1.99	1238	1765	5	.	.	.	.	.	.	.	3008
2.00 - 2.49	6	109	.	.	.	.	.	.	.	.	115
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5467	3871	6	0	0	0	0	0	0	0	

MEAN HS(M) = 1.35 LARGEST HS(M) = 2.99 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 5465

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	27	123	17	29	6	3	.	.	.	208
0.50 - 0.99	90	2424	6700	2012	987	333	88	6	1	.	12641
1.00 - 1.49	275	3518	6543	5249	5118	1998	342	42	15	.	23100
1.50 - 1.99	479	3928	2014	2754	5537	4283	1305	143	11	.	20454
2.00 - 2.49	32	2500	1026	696	3114	5123	1765	154	1	.	14411
2.50 - 2.99	.	343	609	116	995	3773	2426	152	.	.	8414
3.00 - 3.49	.	10	99	34	109	1649	2455	167	.	.	4523
3.50 - 3.99	.	.	10	5	13	434	1856	278	.	.	2596
4.00 - 4.49	.	.	.	.	1	114	816	236	.	.	1167
4.50 - 4.99	.	.	.	.	.	3	210	309	.	.	522
5.00 +	.	.	.	.	.	.	54	263	.	.	317
TOTAL	879	12750	17124	10883	15903	17716	11320	1750	28	0	

MEAN HS(M) = 1.85 LARGEST HS(M) = 6.34 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 51654

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	17	5	3	.	.	.	.	1	.	.	26
1.00 - 1.49	20	65	29	15	11	5	10	1	1	.	157
1.50 - 1.99	61	114	114	62	82	32	1	8	15	.	445
2.00 - 2.49	15	135	59	53	51	63	15	20	6	.	417
2.50 - 2.99	.	73	44	54	54	126	73	37	3	.	474
3.00 - 3.49	.	15	37	29	25	39	70	17	5	.	237
3.50 - 3.99	.	1	41	5	3	11	51	17	1	.	130
4.00 - 4.49	.	.	18	3	.	6	11	.	.	.	38
4.50 - 4.99	.	.	.	.	.	6	8	.	.	.	14
5.00 +	.	.	.	.	.	20	6	1	.	.	27
TOTAL	103	408	345	213	200	318	245	102	31	0	

MEAN HS(M) = 2.49 LARGEST HS(M) = 5.80 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 1167

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	1	6	.	.	.	.	.	.	.	7
0.50 - 0.99	.	1	.	.	.	.	.	.	.	.	1
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	13	10	6	.	.	.	.	.	.	.	29
2.00 - 2.49	5	25	29	3	.	.	.	.	.	.	62
2.50 - 2.99	.	49	32	.	.	.	.	.	.	.	81
3.00 - 3.49	.	3	29	.	.	.	.	.	.	.	32
3.50 - 3.99	.	.	10	.	3	.	.	.	.	.	13
4.00 - 4.49	.	.	.	.	3	.	.	.	.	.	3
4.50 - 4.99	.	.	.	1	1	.	.	.	.	.	2
5.00 +											0
TOTAL	18	88	107	10	7	0	0	0	0	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 4.74 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 140

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	6	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.26 LARGEST HS(M) = 0.37 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 4

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

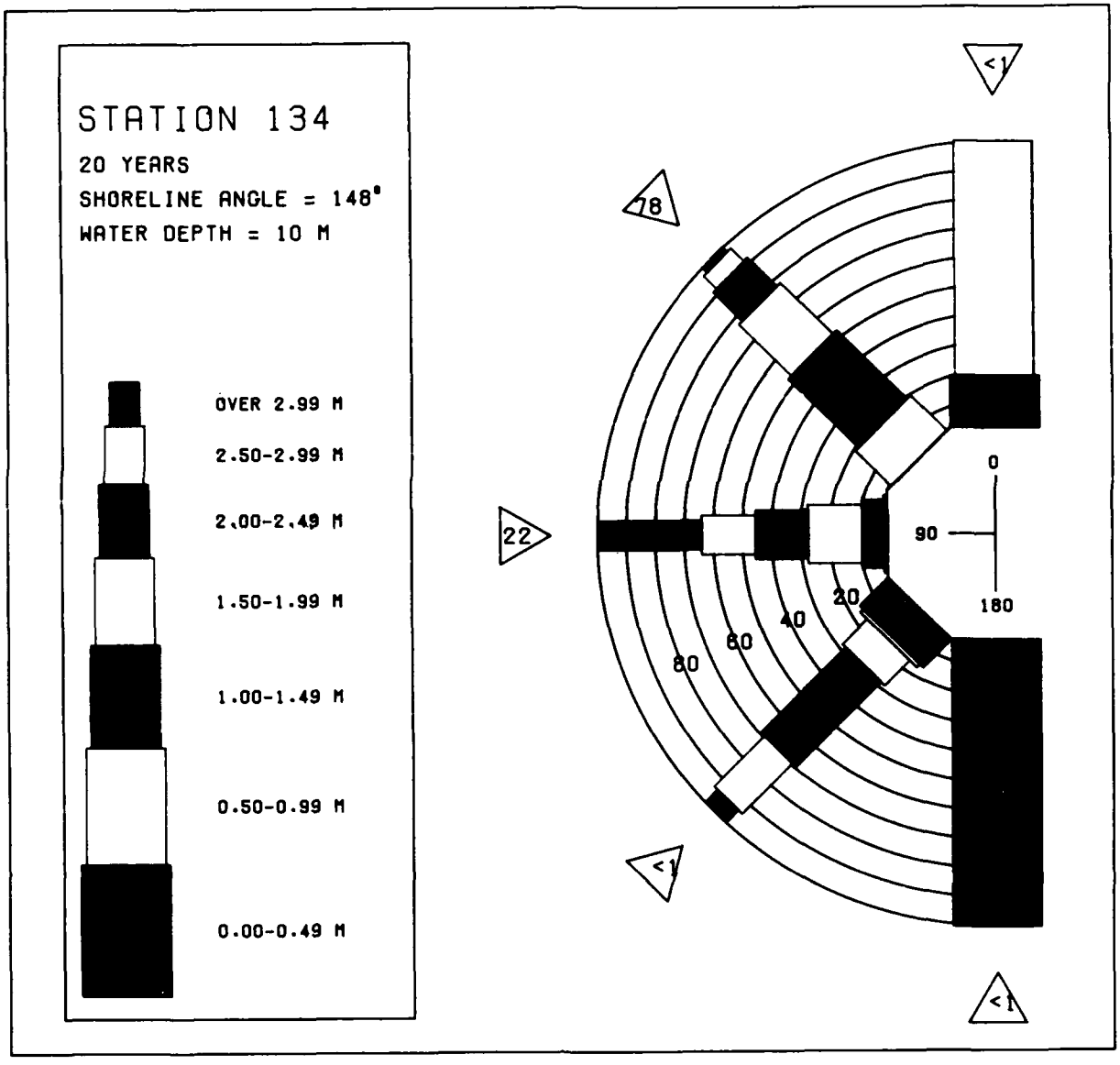
HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 134 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS) 4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	6	12	2	2	.	.	.	.	.	23
0.50 - 0.99	84	292	670	201	98	33	8	.	.	.	1386
1.00 - 1.49	377	504	657	526	513	200	35	4	1	.	2817
1.50 - 1.99	178	581	214	280	559	431	130	15	2	.	2390
2.00 - 2.49	5	277	111	75	316	518	178	17	.	.	1497
2.50 - 2.99	.	47	68	17	105	390	250	18	.	.	895
3.00 - 3.49	.	2	16	6	13	168	252	18	.	.	475
3.50 - 3.99	.	.	6	1	2	44	190	29	.	.	272
4.00 - 4.49	.	.	1	.	.	12	82	23	.	.	118
4.50 - 4.99	.	.	.	.	.	1	21	30	.	.	52
5.00 +	.	.	.	.	.	2	6	26	.	.	34
TOTAL	645	1709	1755	1108	1608	1799	1152	180	3	0	

MEAN HS(M) = 1.82 LARGEST HS(M) = 6.34 MEAN TP(SEC)= 10.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 134 (34.53N/ 120.60W TO 34.43N/ 120.46W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	2.2	2.3	1.8	1.7	1.4	1.7	1.2	1.4	1.0	1.2	1.7	2.0	1.6
1957	2.1	2.0	2.2	1.7	1.4	1.4	1.0	1.1	1.2	1.5	1.8	2.5	1.7
1958	3.0	3.0	2.0	2.5	1.2	1.5	1.3	1.0	1.1	1.2	1.8	2.8	1.9
1959	2.6	2.8	2.2	1.5	1.7	1.5	1.1	1.1	1.2	1.8	2.8	2.4	1.8
1960	2.4	2.9	1.4	1.9	1.8	1.7	1.0	1.0	0.9	1.3	2.0	2.4	1.6
1961	2.9	2.5	2.3	1.5	1.4	1.2	0.9	0.9	1.0	1.4	1.7	2.2	1.7
1962	2.0	2.4	1.9	1.7	1.4	1.1	1.3	1.1	1.2	1.6	2.3	2.6	1.7
1963	2.6	3.1	2.1	1.7	1.5	1.6	1.3	1.1	1.2	1.7	2.2	2.6	1.9
1964	3.3	2.3	2.2	2.0	1.6	1.7	1.7	1.3	1.4	1.2	2.0	2.6	1.9
1965	2.2	2.3	2.2	1.7	1.7	1.7	1.2	1.1	1.1	1.4	1.9	2.5	1.7
1966	2.8	2.0	1.8	1.9	1.4	1.4	1.2	1.1	1.3	1.3	1.6	2.9	1.7
1967	2.6	2.4	1.8	1.7	1.4	1.3	1.2	1.0	1.4	1.9	1.8	2.4	1.7
1968	2.0	2.6	2.4	2.0	1.7	1.6	1.4	1.2	1.1	1.4	2.6	2.4	1.9
1969	2.3	2.7	2.4	2.3	1.7	1.5	1.4	1.1	1.0	1.8	1.8	4.0	2.0
1970	3.0	3.2	3.1	2.3	1.5	1.4	1.2	1.2	1.2	1.3	2.2	2.4	2.0
1971	2.2	2.3	2.2	2.2	1.6	1.7	1.4	1.2	1.3	1.5	1.7	2.2	1.8
1972	2.4	2.5	2.2	1.7	1.7	1.6	1.6	1.3	1.1	1.2	2.6	2.4	1.9
1973	3.2	3.3	2.7	2.2	2.0	1.9	1.9	1.6	1.7	1.5	2.0	2.9	2.2
1974	2.5	2.3	2.2	2.4	2.3	1.8	1.7	1.5	1.3	1.6	2.0	3.0	2.1
1975	1.9	2.4	2.2	1.5	1.5	1.5	1.4	1.1	0.8	1.4	1.6	2.1	1.6
MEAN	2.5	2.6	2.2	1.9	1.6	1.5	1.3	1.2	1.2	1.5	2.0	2.6	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 134 (34.53N/ 120.60W TO 34.43N/ 120.46W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	3.5	3.6	3.5	2.5	2.7	1.9	2.3	2.1	2.1	3.4	3.3
1957	3.1	6.0	4.0	3.4	2.8	2.9	1.9	1.7	2.4	2.8	4.1	4.1
1958	5.1	5.8	3.6	6.1	1.9	2.5	1.9	1.8	1.9	2.2	4.3	4.5
1959	4.9	4.7	3.5	3.1	2.5	2.2	1.8	2.1	2.1	3.1	5.1	4.1
1960	4.4	5.2	3.4	3.2	2.2	2.3	1.6	1.5	1.5	2.7	3.5	4.7
1961	5.3	3.9	4.7	3.0	2.9	2.2	1.5	1.5	1.9	2.8	3.2	3.9
1962	3.4	4.3	3.5	3.0	2.4	1.8	2.2	2.2	2.2	3.8	4.3	4.4
1963	5.7	5.7	3.3	3.5	3.3	1.8	2.0	1.8	1.8	3.8	3.5	5.3
1964	6.1	3.7	3.3	3.3	3.1	3.3	2.7	2.4	2.6	2.5	3.1	5.9
1965	4.1	4.1	3.3	3.0	3.1	2.9	2.3	1.7	1.9	3.6	3.9	3.8
1966	5.2	3.7	3.3	3.7	2.2	2.2	1.8	1.7	2.4	2.4	3.0	4.9
1967	4.8	3.9	2.7	2.8	2.8	2.5	1.9	1.6	2.1	3.8	3.0	5.2
1968	3.6	4.2	3.9	4.0	3.2	2.7	2.5	1.9	2.6	3.4	4.4	4.1
1969	4.4	4.4	5.0	3.7	3.0	3.4	2.7	1.7	2.0	3.4	3.2	6.3
1970	5.2	5.1	5.2	4.5	2.9	2.6	1.8	1.7	2.1	2.7	3.1	4.1
1971	4.1	4.0	4.7	4.1	3.1	2.9	2.2	2.1	2.1	2.7	3.9	3.9
1972	5.0	3.9	3.7	3.0	2.8	2.4	2.5	2.2	2.0	1.9	4.4	5.1
1973	5.1	4.9	4.2	4.2	3.1	3.0	2.7	2.4	2.7	3.3	3.9	6.0
1974	4.2	3.7	4.9	4.3	3.2	2.6	2.7	2.3	2.0	4.3	4.8	4.9
1975	3.9	4.5	3.8	2.4	3.2	3.2	2.3	1.8	1.5	2.8	2.6	3.8

20 YR. STATISTICS FOR PACIFIC STATION 134 (34.53N/ 120.60W TO 34.43N/ 120.46W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	10.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69122606

Appendix F: Maximum Wave Height Return Period Table

Table F1

Maximum Significant Wave Height at Phase III Stations for Various Return Periods

Station No.	Return Period, Years					
	21	10	7	5	3	1
1	7.5	7.3	7.3	7.3	6.7	6.5
2	7.3	7.2	7.0	6.7	6.6	6.4
3	7.5	7.3	7.3	7.3	6.7	6.6
4	7.6	7.5	7.4	7.4	7.2	6.6
5	7.7	7.7	7.4	7.4	7.1	6.7
6	7.4	7.3	7.2	7.1	7.0	6.5
7	7.7	7.6	7.4	7.3	7.1	6.6
8	6.9	6.9	6.8	6.8	6.7	6.3
9	7.0	7.0	6.7	6.7	6.5	6.2
10	7.0	6.9	6.8	6.8	6.5	6.2
11	7.0	6.9	6.8	6.8	6.5	6.2
12	7.0	6.9	6.8	6.7	6.6	6.2
13	7.0	6.9	6.8	6.7	6.6	6.2
14	7.3	7.3	7.3	7.3	7.0	6.6
15	7.4	7.3	7.2	7.2	7.1	6.6
16	7.2	7.1	6.9	6.8	6.6	6.3
17	7.1	7.0	6.9	6.8	6.6	6.2
18	7.2	7.1	6.9	6.8	6.6	6.3
19	7.5	7.3	7.2	7.2	6.9	6.6
20	7.5	7.2	7.2	7.2	6.9	6.6
21	7.3	6.9	6.9	6.7	6.6	6.3
22	7.1	6.9	6.8	6.8	6.5	6.3
23	7.4	7.1	7.0	6.8	6.6	6.3
24	7.3	6.9	6.9	6.7	6.6	6.3
25	7.4	7.2	7.1	6.9	6.8	6.5
26	7.4	7.2	7.2	7.0	6.9	6.5
27	7.4	7.3	7.2	6.9	6.9	6.6
28	7.4	7.2	7.1	6.9	6.8	6.5
29	7.2	6.9	6.8	6.8	6.6	6.3
30	7.2	6.9	6.8	6.8	6.6	6.3
31	7.3	7.2	7.2	7.2	6.8	6.5
32	7.3	7.2	7.2	7.0	6.8	6.5
33	7.3	7.2	7.2	7.1	6.8	6.5
34	7.2	7.2	7.0	7.0	6.9	6.6
35	7.3	7.3	7.3	7.1	7.0	6.6
36	7.3	7.3	7.2	7.1	7.0	6.6
37	7.2	7.2	7.1	7.1	6.9	6.6
38	7.2	6.8	6.8	6.7	6.6	6.3
39	7.2	6.9	6.8	6.7	6.6	6.4
40	7.5	7.2	7.2	7.1	6.8	6.5

(Continued)

Table F1 (Continued)

Station No.	Return Period, Years					
	21	10	7	5	3	1
41	7.4	7.2	7.2	7.0	6.8	6.5
42	7.3	7.2	7.2	7.0	6.8	6.5
43	7.4	7.2	7.1	7.1	6.9	6.6
44	7.3	7.2	7.1	7.0	6.8	6.6
45	7.2	7.2	7.1	7.0	6.8	6.5
46	7.0	6.9	6.9	6.8	6.7	6.4
47	7.7	7.1	7.1	7.0	6.9	6.6
48	7.4	7.1	7.1	6.9	6.8	6.5
49	7.4	7.0	7.0	6.9	6.8	6.5
50	7.2	6.9	6.9	6.8	6.7	6.4
51	7.8	7.7	7.3	7.1	7.1	6.7
52	8.0	7.7	7.1	7.1	6.9	6.5
53	7.8	7.1	7.1	7.1	6.9	6.6
54	7.8	7.7	7.1	7.0	6.9	6.6
55	7.8	7.6	7.1	7.0	6.9	6.6
56	7.8	7.5	7.2	7.1	7.0	6.5
57	7.8	7.3	7.2	7.0	6.5	6.3
58	7.8	7.0	7.0	7.0	6.9	6.5
59	7.7	6.9	6.9	6.9	6.8	6.4
60	7.9	7.7	6.8	6.7	6.4	6.0
61	7.8	7.7	7.0	6.9	6.8	6.5
62	7.8	7.4	7.0	6.9	6.9	6.5
63	7.8	7.1	7.0	6.9	6.9	6.5
64	7.3	7.1	7.0	6.7	6.6	6.3
65	7.1	7.1	6.9	6.6	6.6	6.3
66	7.7	7.2	7.0	6.8	6.8	6.4
67	7.8	7.2	7.1	7.0	6.9	6.4
68	7.7	7.2	6.8	6.7	6.6	6.4
69	7.6	7.1	6.8	6.7	6.6	6.4
70	7.6	7.1	6.7	6.7	6.6	6.4
71	7.7	7.2	6.8	6.7	6.7	6.4
72	7.1	7.0	6.8	6.6	6.5	6.3
73	7.7	7.4	7.0	6.8	6.6	6.2
74	7.7	7.2	7.1	7.0	6.7	6.4
75	7.0	6.8	6.6	6.4	6.3	5.8
76	6.7	6.6	6.5	6.4	6.1	5.5
77	7.5	6.9	6.8	6.7	6.5	6.1
78	7.0	6.8	6.5	6.4	6.2	5.7
79	7.2	6.9	6.5	6.4	6.3	5.8
80	7.7	7.2	6.8	6.8	6.5	6.2

(Continued)

Table F1 (Continued)

Station No.	Return Period, Years					
	21	10	7	5	3	1
81	7.7	7.2	6.9	6.8	6.5	6.2
82	7.2	7.2	6.9	6.8	6.4	6.2
83	7.2	7.2	6.9	6.8	6.4	6.2
84	7.4	7.2	6.8	6.5	6.4	6.2
85	7.4	7.1	6.5	6.4	6.2	6.0
86	7.4	7.4	7.2	6.6	6.6	6.3
87	7.4	7.1	6.9	6.8	6.6	6.3
88	7.0	6.9	6.8	6.5	6.1	5.6
89	6.9	6.8	6.1	5.9	5.8	5.2
90	6.9	6.9	6.3	6.0	5.8	5.3
91	6.9	6.9	6.3	6.1	5.8	5.3
92	6.3	6.3	5.9	5.7	5.2	4.6
93	6.8	6.6	6.6	6.6	6.1	5.7
94	7.0	6.9	6.8	6.6	6.5	6.2
95	6.7	6.6	6.5	6.4	6.0	5.5
96	7.0	6.8	6.7	6.6	6.4	6.2
97	7.0	6.6	6.6	6.6	6.5	6.2
98	5.1	5.0	4.9	4.8	4.1	3.3
99	6.3	5.6	5.2	5.0	4.8	4.1
100	5.0	5.0	4.9	4.8	4.1	3.3
101	6.2	6.0	5.6	5.2	4.9	4.5
102	7.0	6.9	6.6	6.5	6.3	6.1
103	6.9	6.8	6.6	6.6	6.5	6.2
104	7.0	6.9	6.6	6.6	6.4	6.1
105	7.0	6.9	6.6	6.4	6.2	5.9
106	7.3	6.9	6.8	6.7	6.5	6.1
107	7.1	7.0	6.6	6.4	6.2	5.9
108	6.5	6.3	6.1	5.7	5.4	4.9
109	6.5	5.7	5.6	5.6	5.0	4.5
110	5.3	5.2	4.3	4.0	4.0	3.2
111	6.4	6.3	6.0	5.8	5.3	4.6
112	7.1	6.8	6.8	6.6	6.4	6.0
113	6.6	6.5	6.5	6.4	6.2	6.0
114	7.1	6.9	6.6	6.4	6.2	6.0
115	7.2	6.9	6.8	6.6	6.4	6.0
116	5.4	5.4	5.4	5.1	4.6	4.0
117	5.6	5.5	5.4	5.4	4.5	4.0
118	6.6	6.6	6.4	6.3	6.0	5.3
119	6.5	6.3	6.2	6.1	5.9	5.1
120	6.5	6.2	5.9	5.9	5.5	4.6

(Continued)

Table F1 (Concluded)

Station No.	Return Period, Years					
	21	10	7	5	3	1
121	6.6	6.6	6.6	6.4	6.1	5.9
122	5.5	4.4	4.4	4.2	3.7	3.0
123	6.6	6.4	6.2	6.1	6.0	5.2
124	5.7	5.6	5.4	5.2	5.0	4.2
125	5.5	4.4	4.4	4.2	3.6	3.0
126	6.7	6.4	6.4	6.4	6.2	6.0
127	5.6	5.5	5.5	4.8	4.5	3.8
128	5.5	4.4	4.3	4.2	3.5	2.9
129	6.7	6.7	6.6	6.4	6.2	6.0
130	5.7	5.3	5.3	5.0	4.8	4.1
131	6.7	6.5	6.5	6.3	6.2	6.0
132	6.7	6.5	6.4	6.3	6.2	6.0
133	5.1	4.9	4.9	4.0	3.8	3.4
134	6.3	6.1	6.1	6.0	5.9	5.1