



WILLIAM & MARY

CHARTERED 1693

W&M ScholarWorks

---

Reports

---

1-1993

**Chesapeake Bay wave climate : Thimble Shoal light wave station, report and summary of wave observations, October 8, 1990 through August 22, 1991 and Chesapeake light tower - VIMS Star gage test measurements and evaluation, July, August, October 1991**

John D. Boon

*Virginia Institute of Marine Science*

D. A. Hepworth

*Virginia Institute of Marine Science*

K. D. Suh

*Korea Ocean Research & Development Institute*

F. H. Farmer

*Virginia Institute of Marine Science*

Follow this and additional works at: <https://scholarworks.wm.edu/reports>



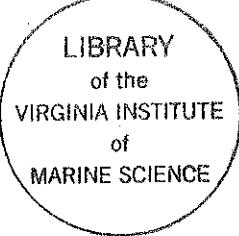
Part of the [Oceanography Commons](#)

---

**Recommended Citation**

Boon, J. D., Hepworth, D. A., Suh, K. D., & Farmer, F. H. (1993) Chesapeake Bay wave climate : Thimble Shoal light wave station, report and summary of wave observations, October 8, 1990 through August 22, 1991 and Chesapeake light tower - VIMS Star gage test measurements and evaluation, July, August, October 1991. Data report (Virginia Institute of Marine Science) ; no. 44. Virginia Institute of Marine Science, College of William and Mary. <https://doi.org/10.21220/V5GC8J>

This Report is brought to you for free and open access by W&M ScholarWorks. It has been accepted for inclusion in Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact [scholarworks@wm.edu](mailto:scholarworks@wm.edu).



VIMS  
GC  
1  
D37  
NO. 44

## CHESAPEAKE BAY WAVE CLIMATE

**Thimble Shoal Light Wave Station,  
Report and Summary of Wave Observations  
October 8, 1990 through August 22, 1991**

and

**Chesapeake Light Tower - VIMS Star Gage  
Test Measurements and Evaluation  
July, August, October, 1991**

J.D. Boon, D.A. Hepworth, K.D. Suh\* and F.H. Farmer

Department of Physical Sciences  
Virginia Institute of Marine Science and  
School of Marine Science, College of William and Mary  
Gloucester Point, Virginia 23062

\*Korea Ocean Research & Development Institute  
Seoul 425-600, Korea

This project was funded, in part, by the Virginia Council on the Environment's Coastal Resources Management Program through grant # NA90AA-H-CZ796 of the National Oceanic and Atmospheric Administration under the Coastal Zone Management Act of 1972 as amended.

January 1993

## TABLE OF CONTENTS

I.	INTRODUCTION . . . . .	1
II.	TSL WAVE GAGE, IN SITU DESCRIPTION . . . . .	3
III.	TSL STATION, DATA SAMPLING AND ANALYSIS . . . . .	3
	III. a. PUV Gage, Standard Wave Parameters . . . . .	4
IV.	TSL STATION, DATA EDITING . . . . .	5
V.	TSL STATION, DATA BASE ORGANIZATION . . . . .	6
VI.	TSL STATION, 1990-1991 WAVE CHARACTERISTICS . . . . .	7
	VI. a. Distribution of Wave Height, Period and Direction . . . . .	7
	VI. b. Late 1991 - An Unusual Display of Large Ocean Waves . . . . .	8
VII.	CHESAPEAKE LIGHT TOWER - DIRECTIONAL WAVE GAGE . . . . .	9
	VII. a. VIMS Star Gage Description . . . . .	9
	VII. b. CLT Station, Directional Wave Spectra . . . . .	10
	VII. c. VIMS Star Gage Results . . . . .	12
VIII.	CONCLUSIONS AND RECOMMENDATIONS . . . . .	13
DATA FIGURES	. . . . .	15
REFERENCES	. . . . .	34
ACKNOWLEDGEMENTS	. . . . .	35
APPENDIX A	. . . . .	36

## I. INTRODUCTION

The Virginia Institute of Marine Science, in cooperation with the Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, has identified as one of its major goals the systematic study of hydrodynamic processes that affect recreational, shoreline and benthic resources in the coastal zone of the Commonwealth. In pursuit of that goal, a long-term study of the wave climate in the Virginia portion of Chesapeake Bay was initiated in 1988 with support from the National Oceanographic and Atmospheric Administration through the Virginia Council on the Environment's Coastal Resources Management Program.

Long-term wave monitoring objectives in Chesapeake Bay have been initially addressed through collection of representative (year-long) series of wave observations at selected locations to characterize the local wave climate. The first series was completed in the fall of 1989 for a station located near Thimble Shoals Light (TSL) to the west of the Chesapeake Bay entrance (TSL, Fig. 1). Results of the initial year of study are contained in VIMS Data Report No. 32 (Boon et al., 1990).

A key finding documented by the initial wave measurements from Thimble Shoals was the common presence of bimodal peaks in the distribution of wave frequency and directional spectra during much of the year. During the height of extratropical winter storms, the Thimble Shoals region of the bay simultaneously received roughly equal contributions of westerly-directed, long-period (8-12 second) wave energy from the Atlantic Ocean and southerly-directed, short-period (4-6 second) energy generated locally within the bay.

A second year of directional wave observations (Boon, et al., 1991) was begun on November 6, 1989, near the Wolf Trap Light (WTL), a navigational aid located approximately 23 nautical miles north of Thimble Shoals Light (WTL, Fig. 1). The latter measurement series was intended to investigate spatial changes in wave characteristics, particularly those involving long-period ocean swell that may proceed from lower bay to mid-lower bay regions. Such waves could affect the bay stem plains region (Wright et al., 1987) which contains ongoing benthic study sites for proposed dredged material disposal (Boon et al., 1987; Wright et al., in press).

Although wave records obtained at the WTL station in 1989-90 did not contain appreciable evidence of ocean swell, other studies (Wright et al., in press) have demonstrated their presence in the deeper benthic regions located a few miles southeast of this site near the Baltimore channel.

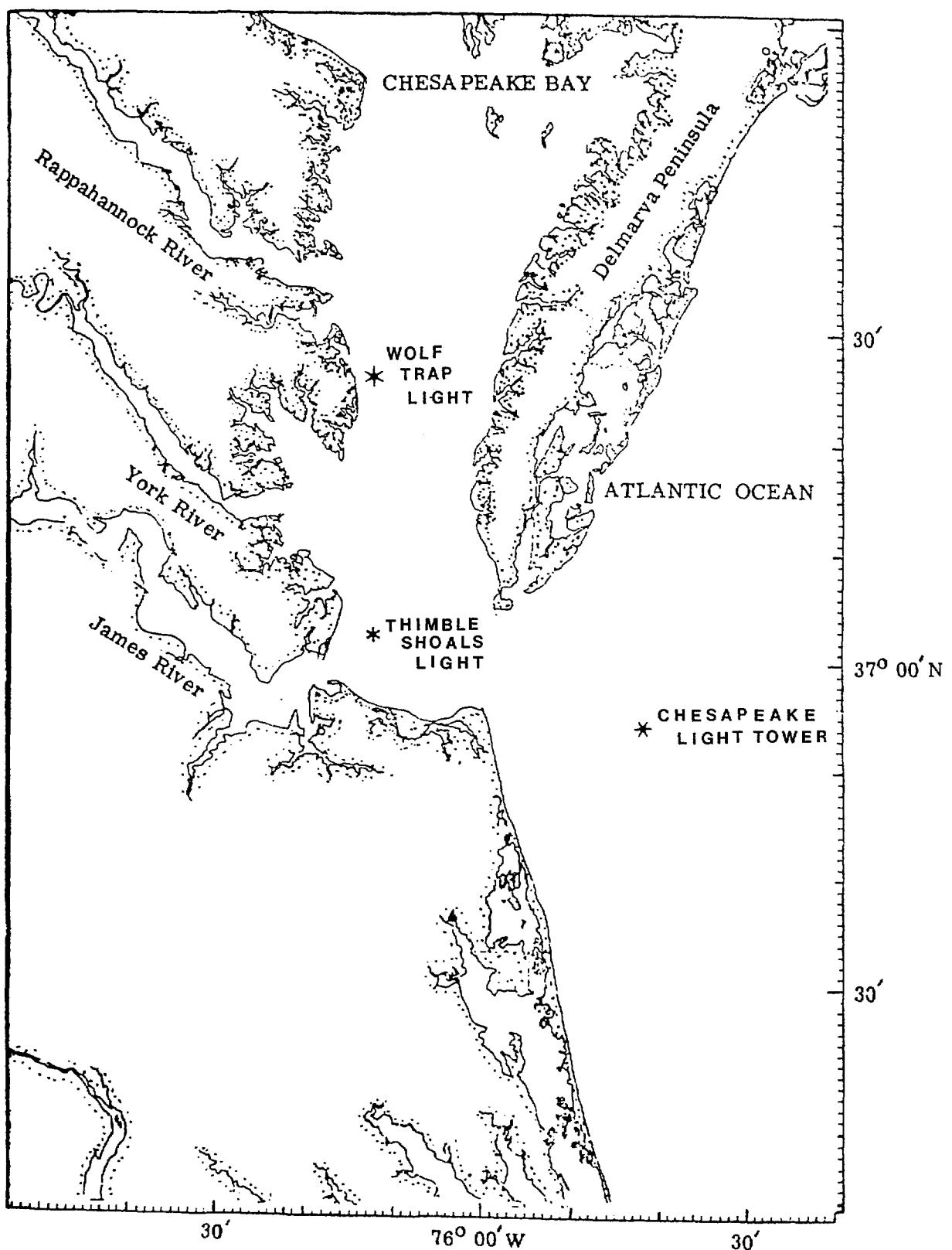


Figure 1. Location of Lower Chesapeake Bay Wave Gage Stations for 1988-89, 1989-90, 1990-91.

This report also presents a description of a directional wave gaging system, known as a "Star" gage, that is designed for long-term, low-maintenance operation both within and immediately outside the Chesapeake Bay entrance area. This development was prompted by our dependence to date on the single-point, PUV-type directional wave gage described below. While ideally suited for short-term investigative studies at different sites, the PUV directional wave gage requires field service visits at monthly intervals to maintain adequate performance and uninterrupted operation.

A prototype Star gage system was constructed and field tested to evaluate its potential use as a long-term and eventual real-time wave gage for the Virginia coastal environment. A test deployment of the VIMS Star gage, a 4-element pressure sensor array utilizing a star configuration (Goda, 1985) was conducted at the Chesapeake Light Tower (CLT, Fig. 1) located approximately 14 nautical miles east of the bay entrance. Results of these tests are reported in Section VII.

## II. TSL WAVE GAGE, IN SITU DESCRIPTION

For the period October 8, 1990 through August 22, 1991, a bottom-mounted wave gage was maintained at the TSL station (lat  $37^{\circ} 0.4'N$ , long  $76^{\circ} 12.8'W$ ) at a mean depth of approximately 6.3 meters (20 feet) below mean sea level. Wave data were sensed and recorded by a Sea Data Model 635-9RS directional wave gage with integrated Paroscientific high-precision quartz pressure transducer, Digicourse internal compass, and Marsh-McBirney remote 2-axis electromagnetic flow sensor with 4-cm diameter sphere. The flow sensor was co-located with (20 cm below) the pressure (P) sensor and oriented to obtain measures of the horizontal flow (UV) components at a height of 1.5 meters above the bottom. All components of the wave gage were attached to an aluminum tetrapod which was retrieved and re-deployed at monthly intervals using an acoustic recall system to permit data recovery and servicing. Divers inspected the tetrapod as deployed and verified proper orientation on the fine to medium sand bottom of the location.

## III. TSL STATION, DATA SAMPLING AND ANALYSIS

The wave sampling and analysis performed at this station employed a standard set of wave summary parameters. Most of the parameters we have selected for this purpose follow accepted international definitions as given by the Permanent International Association of Navigational Congresses ("PIANC", 1973) and the IAHR Working Group on Wave Generation and Analysis ("IAHR", 1989).

### III.a. PUV Gage - Standard Wave Summary Parameters

A 1024-point series of simultaneous pressure (P) and horizontal velocity (UV) measurements, interleaved with 128 compass (C) readings, was "burst-sampled" once every three hours (8 bursts per day) at a sampling rate of 1 Hz (1.0-second sampling interval). Each PUV8C burst recorded on magnetic tape was later processed and edited in the laboratory to extract a set of wave statistical parameters placed in a data base record representing that burst. The parameters, listed separately in Table 1 under Section V. Data Base Organization, are defined in the following paragraphs.

Prior to wave analysis, the pressure readings in each burst were detrended and reduced to zero-mean value before conversion to a depth-frequency corrected sea level (CSL) series using the local frequency approximation method of Nielsen (1988) in combination with linear wave theory. After recording the burst-mean depth (surface to bottom), the average zero-crossing wave period (Tz), and the zero-moment wave height (Hmo) were determined from the fluctuating (zero-mean) CSL series. Tz is defined as the average of the zero-crossing interval as obtained by dividing the series duration by the number of times the water elevation crosses the mean level in one direction (upcrossing in our analyses). The Hmo wave height is defined as four times the standard deviation (square root of the variance) of the series and is considered equivalent to the significant wave height (Hs).

Vector-averaged mean current speed (MC\_SPD) and mean current direction (MC\_DIR) were calculated from the compass-corrected UV horizontal velocity components in each burst, further corrected to indicate direction relative to true north. After removing the burst-mean U and V components, the resulting UV wave orbital velocities were also depth-frequency adjusted by the method noted above and then used to determine a principal wave direction (WavDIR) through resolution of the principal axis of the adjusted velocity components. This parameter is not based on presently accepted international definitions but is used because a standard definition for wave direction based on time-domain calculations is now lacking. Definition of the principal wave direction (WavDIR) assumes that 1) monochromatic waves of sufficient amplitude for a given depth and frequency will induce bottom orbital motion in vertical planes parallel to the direction of wave advance and 2) a principal component of motion can be resolved whenever mixed wave frequencies, amplitudes and directions occur that vary within certain limits.

The principal axis (principal component) is defined, using eigenvector methods, as the axis of maximum variance among rotated coordinate axes containing the projected orbital velocity components and the contribution these components make to the total variance. The variance contributed along a given

directional axis is a function of both wave frequency and amplitude so that the WavDIR parameter tends to favor higher frequencies as well as higher amplitudes in mixed wave fields. The 180-degree directional ambiguity associated with a line axis is resolved by assuming progressive linear wave motion and correlating the projected orbital velocity on that axis with fluctuating sea level.

An index of directional strength associated with the WavDIR parameter is provided by a reduction-in-variance (Rvar) parameter expressing the fraction of total variance in U and V orbital velocity accounted for by projection onto the principal axis. An Rvar value of 1.0 indicates bidirectional motion confined to a single axis and a unidirectional wave advance regardless of wave frequency. However, as this fraction approaches 0.5, it indicates that no axis accounts for more variance than any other and principal wave direction is then undefined.

Spectral analysis of the converted (Pressure to Corrected Sea Level) fluctuation signal was employed to determine the peak spectral wave period (Tp) associated with the peak spectral energy density in each CSL series. Many of these spectra showing energy density as a function of frequency contained multiple peaks; in each case the highest peak was used to find Tp as the reciprocal of the peak frequency. The percent of wave energy (%E) occurring in each of five spectral bands marked by four selected wave periods ( $> 12$  s, 12-8 s, 8-6 s, 6-4 s, and  $< 4$  s) provides a general indication of the wave energy distribution for each burst. These percentages were determined by summing the energy density within each of the spectral bands.

#### IV. TSL STATION, DATA EDITING

Preliminary editing of the processed data for the TSL station was performed prior to determination of wave parameters. The chief problem encountered in the use of a PUV-type directional wave gage concerns the "cleanliness" of the velocity signal. Although electromagnetic velocity sensors contain no moving parts, they are more sensitive to biofouling effects than pressure sensors. In addition, pressure-based measurements contain only the fluctuations induced by wave motion whereas velocity measurements contain these fluctuations as well as turbulent fluctuations caused by sheared tidal flows and bottom boundary layer effects. Since the frequencies of the wave orbital and bottom turbulence motions often overlap, conventional filtering techniques cannot be applied to separate them. Larger "spikes" in the UV signal are particularly deleterious to wave directional estimates but these usually can be detected and removed if their numbers are not excessive.

We used a combination of differencing (local curvature) and departure (local standard deviation) techniques to detect and

remove spikes in the raw PUV data series. These procedures have rarely encountered more than a few spikes in the pressure (CSL) signal (usually involving an equipment malfunction or tape reader error) but UV spikes were, on occasion, excessive. When more than 2 percent of either the U or V data points were identified as spikes by our computer algorithm, the burst containing them was marked with an "S" data code (explained below) and the UV spike checking discontinued. Graphic plots were made of these and certain other records for visual checking. All processed wave records contain a data quality code indicating whether all or only part of the record is suitable for use. The codes used are:

G	-	good data
W	-	record contains ship wakes
S	-	spikes in UV but not P data
M	-	data missing or unusable

In obtaining a "G" rating, the data record will contain no discernible ship wakes and fewer than 2 percent UV spikes removed through interpolation. A "W" indicates a transient, usually a ship wake, was detected in the visual plot while "M" indicates data missing or completely unusable due to a gage malfunction or equipment outage during a gage servicing period. "S" indicates that the statistical parameters based on pressure readings are good but those based on UV data (MC\_SPD, MC\_DIR, WavDIR, Rvar) are considered unusable. Data code designations allow users of the described wave information to selectively exclude unusable parameters when making statistical calculations on an electronic spreadsheet or when "querying" a computerized data base with wave records as described in the following section.

## V. TSL STATION, DATA BASE ORGANIZATION

The wave information collected between October 8, 1990 and August 22, 1991, at TSL has produced data records that are stored in basic formats of optimal use on IBM PC or AT-compatible computers, including ASCII files, Quattro Pro and Lotus 1-2-3 spreadsheet files.

The basic data format has been designed to accommodate a wide variety of data base applications, including graphical and statistical summaries covering time periods of months to years. Each time-sequential wave record (collected once every 3 hours) includes 5 date and time fields and 13 numeric fields containing the wave parameters described in Section IV above. Each record ends with a data code field and a source file field referencing an MS-DOS (ASCII) source file. This file contains the original 1024-point data series of corrected sea level and UV velocity readings that define the wave parameters contained in the record. These 20 data fields are summarized in the following table.

Table 1. Wave Parameters and Their Description

Field	Parameter	Description
1	Mon	month (1..12)
2	Day	day (1..31)
3	Yr	year (01..99)
4	JDAY	Julian day of year (1..366)
5	Time	24-hour Eastern Standard Time
6	Depth	burst-mean water depth (meters)
7	MC_SPD	mean current speed (cm/s)
8	MC_DIR	mean current direction (0..360)
9	WavDIR	principal wave direction (0..360)
10	Rvar	reduction in variance (0..1)
11	Hmo	zero-moment wave height (meters)
12	Tz	zero-up-crossing wave period (sec)
13	Tp	peak spectral wave period (sec)
14	%E>12s	percent wave energy > 12 sec
15	%E12-8s	" " " between 12 and 8 sec
16	%E8-6s	" " " between 8 and 6 sec
17	%E6-4s	" " " between 6 and 4 sec
18	%E<4s	" " " < 4 sec
19	code	data quality code (G,W,S,M)
20	source	source data DOS file name

In fields 8 and 9 above, the direction toward which the current or wave is moving is given in compass degrees increasing clockwise starting with zero degrees for waves traveling toward true north. All of the wave data records obtained for the 1990-1991 TSL station data set are presented in Appendix A at the end of this report and are available to users of computer information systems in the formats mentioned above.

## VI. TSL STATION, 1990-1991 WAVE CHARACTERISTICS

### VI.a. Distribution of Wave Height, Period and Direction

The 1990-91 fall, winter and spring season for Thimble Shoals was not uneventful in terms of extratropical disturbances. At least five extratropical weather systems occurred which produced Hmo wave heights in excess of 1 m at TSL during the period of record. These were a mixture of bay and ocean-generated waves as indicated by the summary information in Table 2.

**Table 2. TSL Extreme Events, 10 October - 22 August, 1991**  
**Observed Wave Height, Period and Direction**

Date	Type	Hmo(m)	Tz(s)	Tp(s)	WavDIR(degT)
10/26/90	ETS	1.772	6.40	7.76	193.7 SSW
11/18/90	ETS	1.336	5.20	5.95	199.4 SSW
12/28/90	ETS	1.254	7.64	8.83	291.4 WNW
1/ 9/91	ETS	1.415	8.83	11.13	292.1 WNW
4/20/91	ETS	1.208	6.13	6.24	259.5 W
5/19/91	?	1.332	5.85	6.56	290.2 WNW
8/19/91	BOB	1.012	6.13	5.45	263.3 W

The largest burst-averaged wave height among bay-generated waves in the 1990-1991 period was recorded on October 26, 1991 ( $H_{mo} = 1.77$  m,  $\text{WavDIR} = 193.7^\circ$ ,  $T_p = 7.76$  s). This height is slightly larger than that of the damaging March 7-10, 1989 storm ( $H_{mo} = 1.63$  m) but less than the brief February 23-24, 1989 storm ( $H_{mo} = 1.93$  m) previously reported for the TSL station (Boon, et al., 1990). On May 19, 1991, a late spring storm produced unusually large ocean-derived waves ( $H_{mo} = 1.33$  m,  $\text{WavDIR} = 290.2^\circ$ ,  $T_p = 6.56$  s).

An overall picture of the distribution of 1990-1991 TSL waves in terms of height, period and direction is presented in Figures 2 through 11. As previously noted, there is a clear distinction between southerly-moving, short period "bay" waves and west-to northwest-moving, long period "ocean" waves. The picture differs slightly from the previous 1989-1990 TSL observations in that the ocean wave contribution seems to have been more energetic as compared to the bay-generated waves present at TSL in 1990-1991.

#### VI.b. Late 1991 - An Unusual Display of Large Ocean Waves

The late summer and fall of 1991 provided quite an exceptional ending to 1991, a time during which both a hurricane ("Bob", August 19) and a very extreme extratropical storm (October 28 - November 3) occurred. The latter has become known as the Halloween Storm, an event which produced the highest waves experienced during the past 42 years at Cape Hatteras, North Carolina. These include some very destructive waves with significant heights reaching 11 m and periods of 18 seconds (Dolan and Davis, 1992).

The TSL wave station was operating during Hurricane Bob but with pressure (P) information only. No directional wave

information was recorded because of extreme bio-fouling of the velocity (UV) sensor experienced during August. As indicated by the TSL records, Hurricane Bob's effect on the lower Chesapeake Bay was apparently moderate,  $H_{mo} = 1.01$  m being the largest value recorded at TSL on August 19th. This value may possibly have been diminished due to extreme bio-fouling of the sensor, although previous experience suggests no apparent attenuation of the pressure signal with moderate sensor fouling.

NOAA funding of the VIMS wave observation program terminated at the end of September, 1991. Although separate funding was received that enabled us to continue the observations, post-project maintenance repairs and an overhaul of the tetrapod frame were not completed until late October, just as the "prelude" to the Halloween storm was beginning. Unfortunately (fortunately?), the PUV wave gage could not be transported and deployed on station at TSL during the brief time between warning and onset of the Halloween Storm. The VIMS Star gage was in operation at the Chesapeake Light Tower (see CLT, Section VII) but was subsequently destroyed during the Halloween storm.

## VII. CHESAPEAKE LIGHT TOWER - DIRECTIONAL WAVE GAGE

Permission was obtained from the U.S. Coast Guard to conduct tests of a directional wave gage at the Chesapeake Light Tower (CLT), a large platform 117 ft (36 m) high located 14 nautical mi (26 km) east of Virginia Beach on the inner shelf. Average depths surrounding this site are about 60 ft (18 m) but the tower itself occupies a narrow shoal at a minimum depth of approximately 39 ft (12 m). We chose this site as a reasonable location to test a directional wave gage consisting of four (4) pressure sensors mounted in a horizontal "star" array (Goda, 1985, p. 295). The "star" gage is easier to maintain than a PUV-type gage whose velocity sensor requires frequent cleaning. At CLT, both electrical power and an enclosed room to contain computer equipment was available. Our objective was to assess the performance, including the directional accuracy of the star gage and to obtain records of ocean waves near the bay entrance for comparison with the Thimble Shoals Light (TSL) station. If successful, radio transmission of wave information on a regular or real-time basis would become a further objective.

### VII.a. VIMS Star Gage Description

Figure 12 shows the horizontal configuration of the star array as it was mounted by VIMS divers on two tensioned steel wires running diagonally between the four supporting legs of the CLT platform at the minus 18 ft (-5.5 m) elevation, MLW. In the star configuration, three of the sensors are located at the corners of an equilateral triangle with the remaining sensor located in the center of the triangle. This layout avoids signal

redundancy by ensuring that no sensor pair will have the same vector distance between them and that all vector distances will be uniformly distributed, as recommended by Goda (1985, p. 294). The distance between star sensors used at CLT was 20 ft (6.1 m), slightly less than half the expected minimum wavelength of 45 ft (13.7 m) associated with a 3-second deepwater wave.

Four Sensotec Model Z (0-30 PSIA) pressure transducers were mounted in 3 in (7.6 cm) cylindrical PVC housings using an oil-chamber interface separated (from the sea) by a rubber diaphragm. Copper "brillo" pads were placed outside the diaphragms to retard bio-fouling. Each sensor was statically calibrated in a shallow laboratory test tank before deployment. Each calibration curve was found to be highly linear with a resolution of approximately + or - 1 cm. No dynamic tests were conducted to assess the frequency response of these particular sensors although the same make has been successfully tested for response at the ocean engineering laboratories of the Scripps Institution of Oceanography in California (D. Castel, personal communication).

Sensors PS1 to PS4 (Fig. 12) were connected by electrical cables to a Tattletale Model 4A (TT4) microcomputer located in an integral housing with sensor PS2. The Model 4A microcomputer was programmed to "poll" the four pressure sensors during burst-sampling (1024 samples at 1 Hz sampling rate) conducted every 3 hours starting at midnight each day. The sensor 0-5 VDC analog outputs were digitally converted by the Model 4A and then stored in RAM memory. Once every three days, the Model 4A was polled by a Tattletale Model 6 (TT6) microcomputer with 20 MB hard disk located in an enclosed room within the tower. The purpose of the dual computer scheme was to 1) avoid data loss inherent in analog signal transmission through long cables, 2) provide surface access to (and safe storage of) the data.

Using a compressed data format with the TT6, it was technically possible to store up to eight months of wave observations at the unmanned tower. Use of the TT6 computer with its 20 MB hard disk data storage and limited volatile RAM memory, was complicated, however, by the requirement that data be transferred to the disk in large blocks or tracks, each track containing about three days of observations. Thus, up to three days could be lost due to a power failure.

#### VII.b. CLT Station, Directional Wave Spectra

Ordinary spectral analysis determines the distribution of variance per unit frequency, or energy density, as a function of the frequency. Both wave variance and wave energy are proportional to the wave height squared. Directional spectra provide estimates of the distribution of wave variance as a function of both frequency ( $f$ ) and direction ( $\theta$ ). A directional spectrum,  $E(f, \theta)$ , exists that may be integrated over a range of

frequencies and directions to yield the variance in that range. Integrating  $E(f, \theta)$  over all directions yields the ordinary frequency spectrum,  $E(f)$ . Calculation of a non-negative directional wave spectrum is commonly achieved using a truncated Fourier series (Longuet-Higgins et al., 1963) of the form

$$E(f, \theta) = a_0 + \frac{2}{3} (a_1 \cos \theta + b_1 \sin \theta) + \frac{1}{6} (a_2 \cos 2\theta + b_2 \sin 2\theta)$$

where the five frequency-dependent Fourier coefficients are determined in terms of the auto- and cross-spectra between various pairings of either the CSL, U and V time series obtained from a PUV wave burst (TSL data) or a P1, P2, P3, P4 time series obtained from each burst of the four-element pressure array (CLT data). The mathematics and spectral computations involved are presented in Goda (1985).

The directional Fourier coefficients can also be used to calculate the mean direction and the directional spread that characterizes the broadness of the spectrum in direction at a specific frequency:

$$\text{mean direction} = \tan^{-1}(b_1/a_1)$$

$$\text{directional spread} = \left[ 2 - 2 \frac{(a_1^2 + b_1^2)^{1/2}}{a_0} \right]^{1/2}$$

When the above computations are performed for a single burst, a set of mean directions and associated spreading values arranged symmetrically about each mean are obtained, the means corresponding to a set of frequency intervals or frequency "bands". The variance in each frequency band can be distributed across direction using the mean and variance estimates within row-and-column cells that correspond to intervals of frequency and direction. These gridded values can be contoured on frequency-direction diagrams, like elevations on an X-Y plane coordinate map, to reveal spectral energy peaks marked by coordinates of wave frequency and direction.

When the auto- and cross-spectra are calculated, the raw (unsmoothed) estimates of the spectra fluctuate about their true values with a standard error of 100 percent. More stable and

smoother spectral estimates result when ensemble- and frequency-averaging is applied to these estimates. In our analyses, 1024 data points were first processed in three overlapping segments of 512 points per segment. The raw spectra from each segment was then ensemble-averaged. Further smoothing was made by frequency averaging over 5 neighboring frequency bands. Through this procedure, the number of degrees of freedom was increased from 2 to 20 and consequently the standard error decreased from 100 percent to 32 percent. Analysis of the collected sample records was done using a Microsoft Fortran program written by K.D. Suh (Boon et al., 1990) for an IBM-compatible 386 microcomputer.

#### VII.c. VIMS Star Gage Results

Overall performance of the VIMS Star gage was considered to be quite good. Data acquisition and storage worked smoothly except for the month of September, 1991, when a programming error caused one of the computers to lock up and stop polling. Otherwise, the time series records accumulated in a very regular fashion and contained very little "noise" or spurious values that would require editing as is often the case for the velocity signal in PUV records. A sample of one of the CLT time series records is shown in Fig. 13 in the form used as input to the spectral analysis routine described above.

Testing of the VIMS Star gage at the CLT station began on the 26th of July, 1991, and continued until the destruction of the connecting cable between surface and subsurface computers. This happened at an unknown time during the Halloween Storm of 29 October - 3 November, 1991. Unfortunately, the subsurface TT4 computer was not able to transmit the last of the data it had stored in RAM memory when the break occurred so that the record terminated prematurely on the 27th of October.

Height, period and direction information is shown in Fig. 14 for the initial buildup period prior to the main event of the late October storm. As noted in Fig. 14, H<sub>mo</sub> wave heights increased from about 0.8 m to 1.2 m at CLT on the 27th with periods increasing from about 9.5 s to 11.5 s while waves advanced toward WNW (heading 298°T). Data obtained from a Wave Rider buoy (gage 630) located offshore of the Army Corps of Engineers Field Research Facility at Duck, N.C., gave slightly larger H<sub>mo</sub> values increasing from 1.2 m to 1.8 m while periods increased from 9 s to 12 s during this same 24-hour interval.

Other storms, including a mid-October northeaster (Fig. 15) and Hurricane "Bob" (Fig. 16), are typified by quickly building, peak H<sub>mo</sub> heights of nearly 2 m followed by fairly rapid reduction to near-calm conditions. In both of these storms, wave direction of advance during the highs was centered near 240°T (WSW) but changed to approximately 320°T (NW) during the following near-

calm. Wave periods briefly exceeded 13 s shortly before the peak Hmo heights were attained during "Bob" but fell rapidly to about 7 s after the peak.

Directional spectra for Hurricane "Bob" and the mid-October storm are shown in Figs. 17 - 20. These are normalized spectra that emphasize the distribution of energy density over frequency and direction rather than energy magnitude. There was a tendency for a sharp peak associated with a single frequency and direction to develop at the height of both storms but multiple peaks were particularly evident during the waning phases of the mid-October northeaster.

#### VIII. CONCLUSIONS AND RECOMMENDATIONS

A third year of directional wave observations has added significantly to the characterization of the lower Chesapeake Bay wave climate. We now see clear evidence of an interplay between bay and ocean-generated waves that may vary from year to year but is itself a characteristic feature of this region. Shoreline protection and erosion abatement efforts require this information as do studies of the benthic regime of the lower bay where long-period wave motion is especially important to the entrainment of bottom sediment. Only data collected over a period of years will ultimately answer the question of what is representative in terms of wave parameters experienced in this regime. We conclude that these observations should continue but improved measurement systems are needed that will require less field servicing and maintenance. Ideally a real-time system should be employed so that computer-processed wave parameters could be made available to users through a dial-up link to a central computer facility.

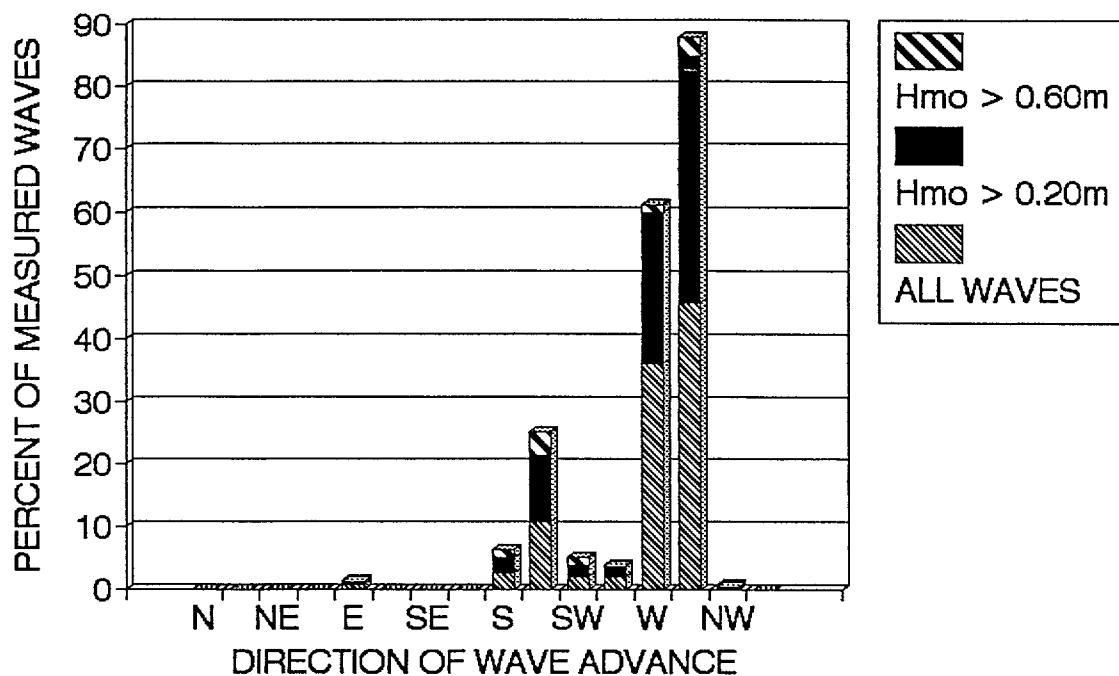
Testing of the VIMS Star Gage at the Chesapeake Light Tower has shown the potential for this type of gage to yield accurate, reliable measures of wave height, period and direction at a key location outside the entrance to the bay. Data were obtained at relatively low cost with a minimum of maintenance involved when compared to the use of a single-point, pressure and two-axis velocity gage. It would seem feasible to use a pressure array at shallow-depth locations inside the Chesapeake Bay as well to achieve this purpose. A platform such as the Thimble Shoals Light would be needed for mounting telemetry equipment (as opposed to a telemetering buoy) used inside the bay.

In addition to compilation of a statistical data base of wave information, data for the computation of offshore directional spectra is needed for comprehensive models predicting wave shoaling, refraction and diffraction across the Virginia shelf. These models do not simply employ peak values of wave height, period and direction but use a spectrum of values in order to treat all of the wave components participating in energy

transmission toward selected shoreline sites. Potential modification of the nearshore bottom, as through dredging of beach fill or the emplacement of an underwater berm to protect the shoreline, may soon require this information as alternate plans are compared.

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 10/90 158 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 10/90 158 WAVE BURSTS

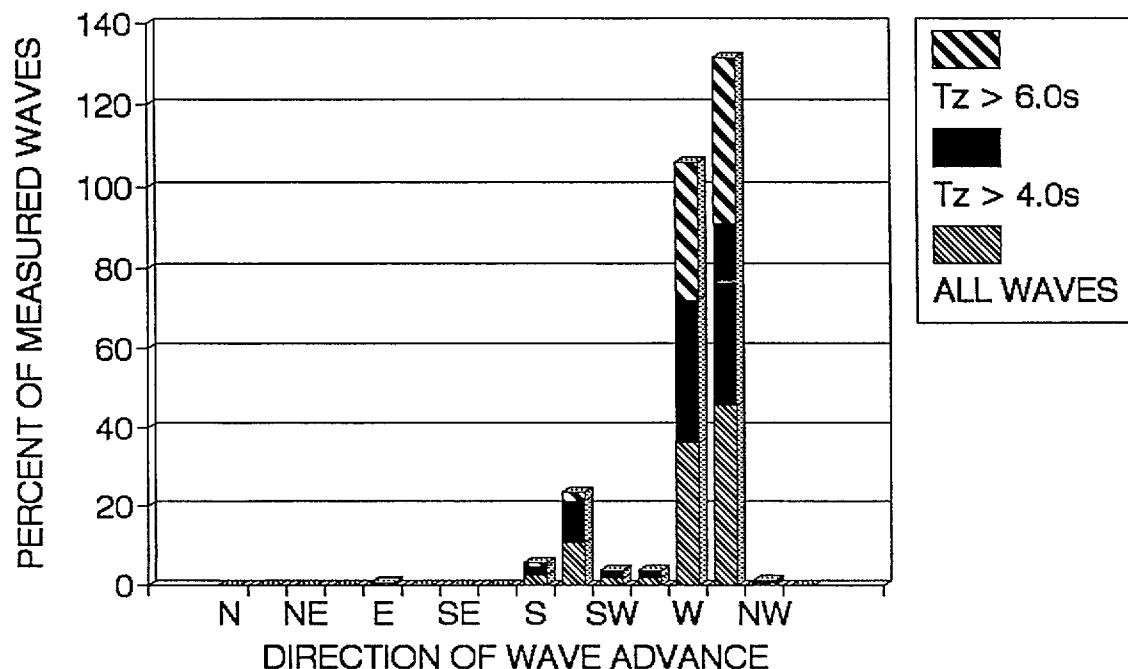
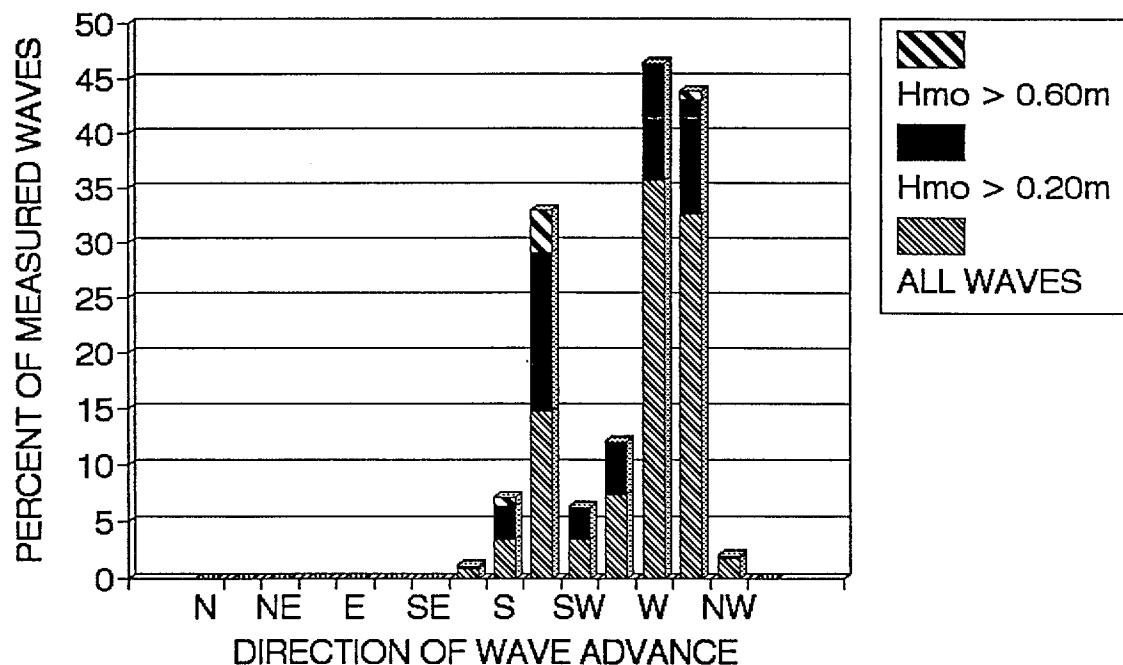


Figure 2. Distribution of wave directions, October 1990

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 11/90 230 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 11/90 230 WAVE BURSTS

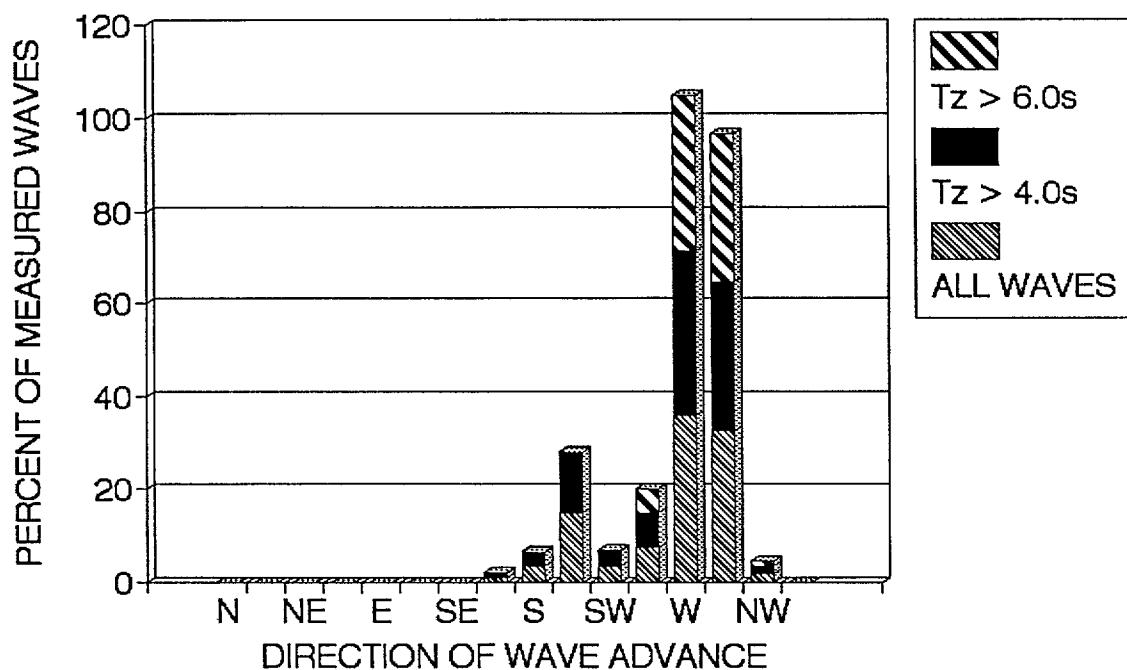
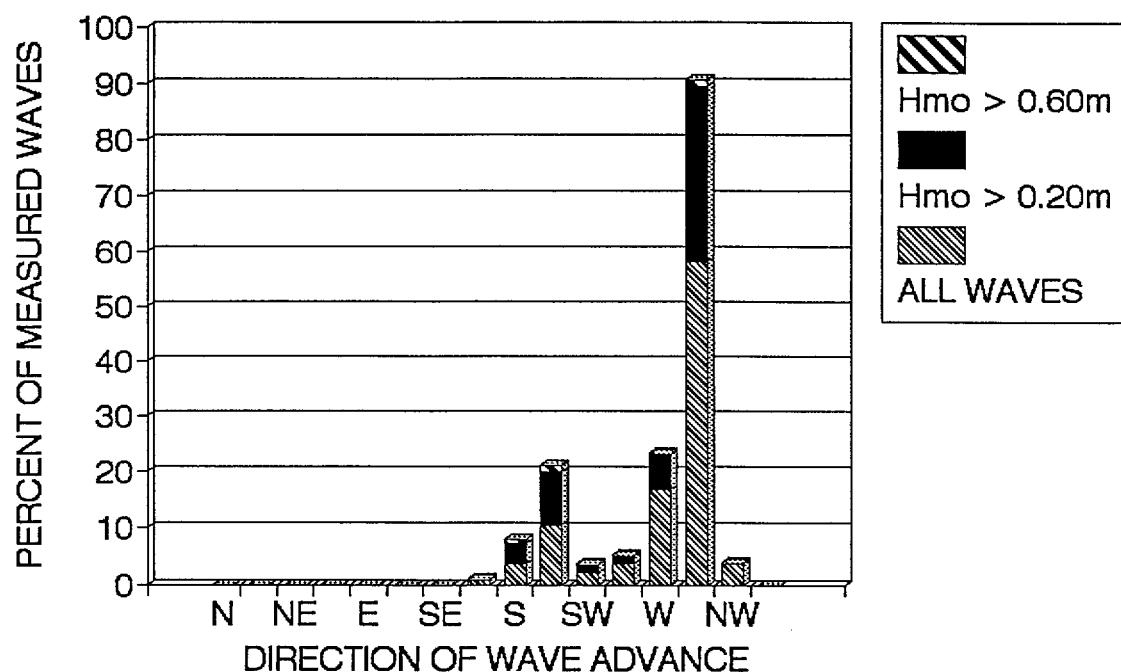


Figure 3. Distribution of wave directions, November, 1990

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 12/90 236 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 12/90 236 WAVE BURSTS

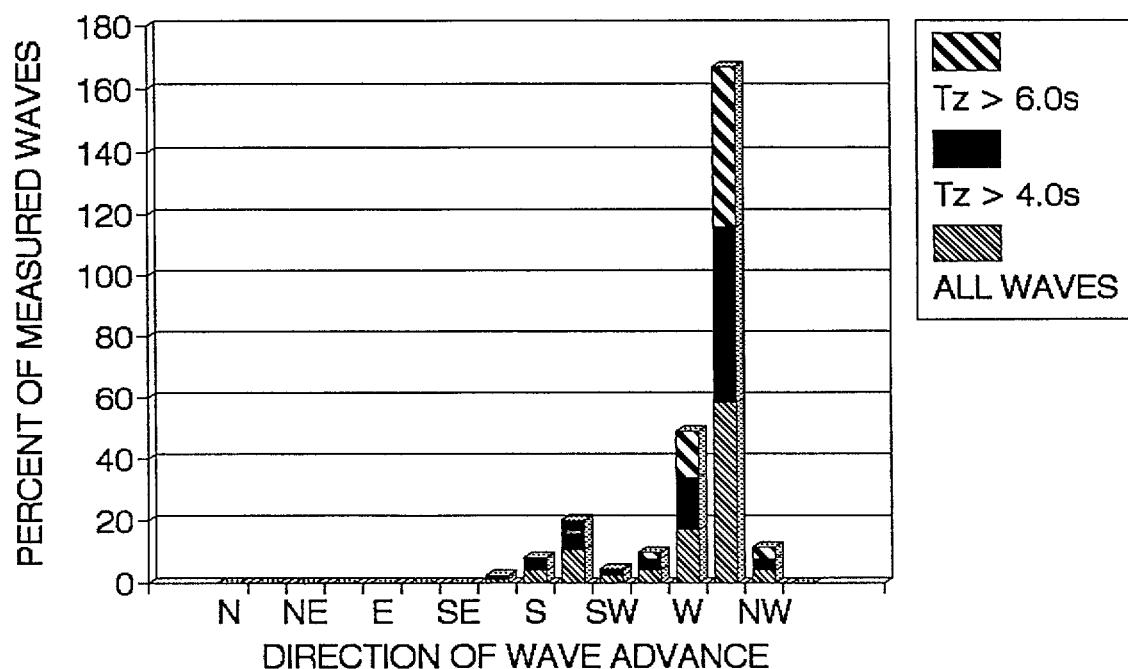
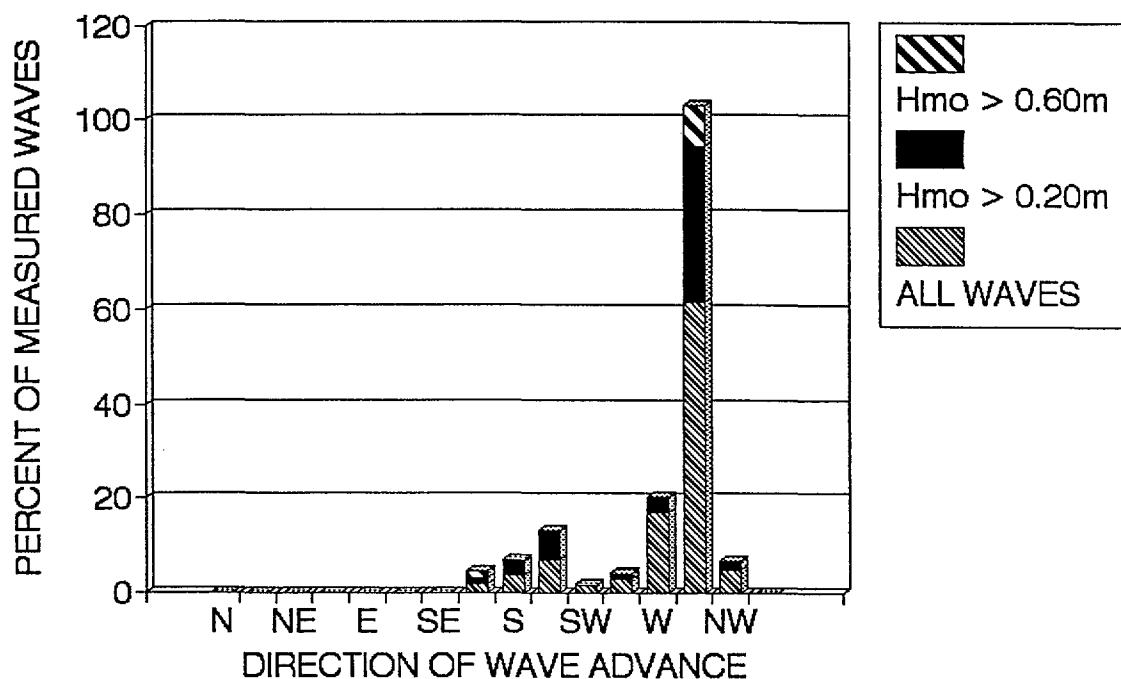


Figure 4. Distribution of wave directions, December, 1990

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 01/91 216 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 01/91 216 WAVE BURSTS

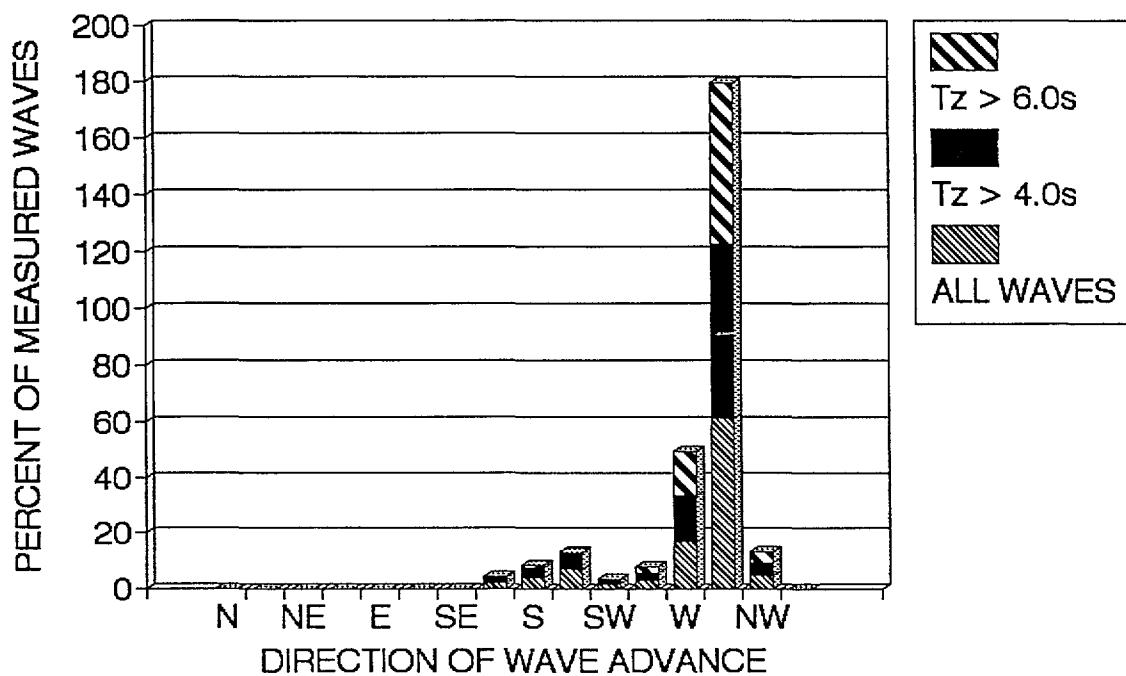
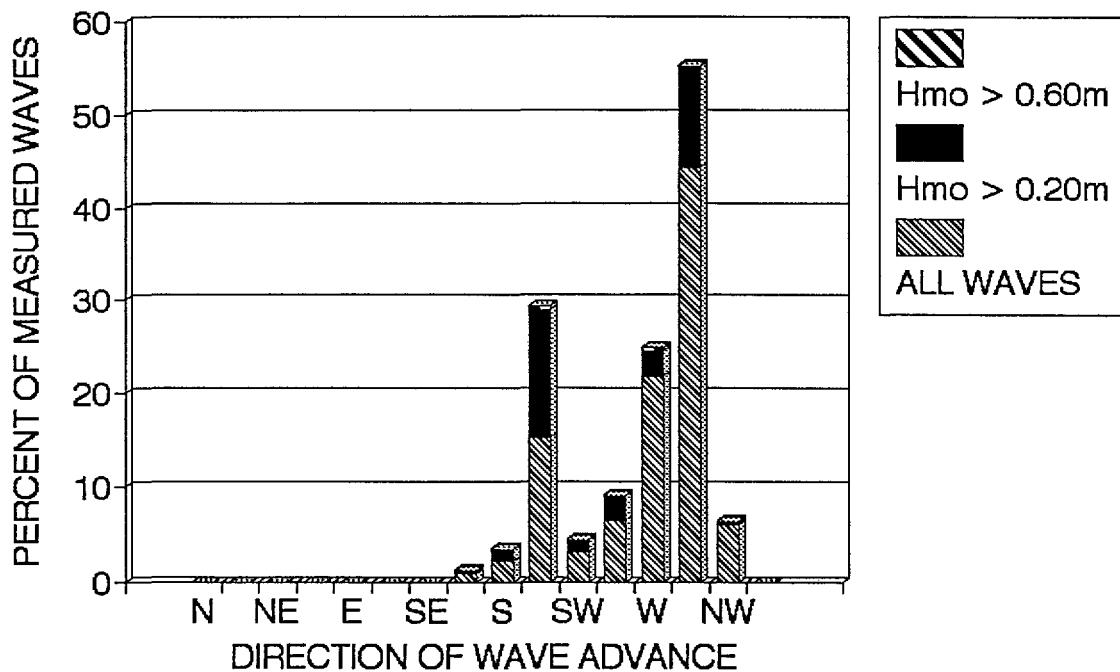


Figure 5. Distribution of wave directions, January, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 02/91 217 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 02/91 217 WAVE BURSTS

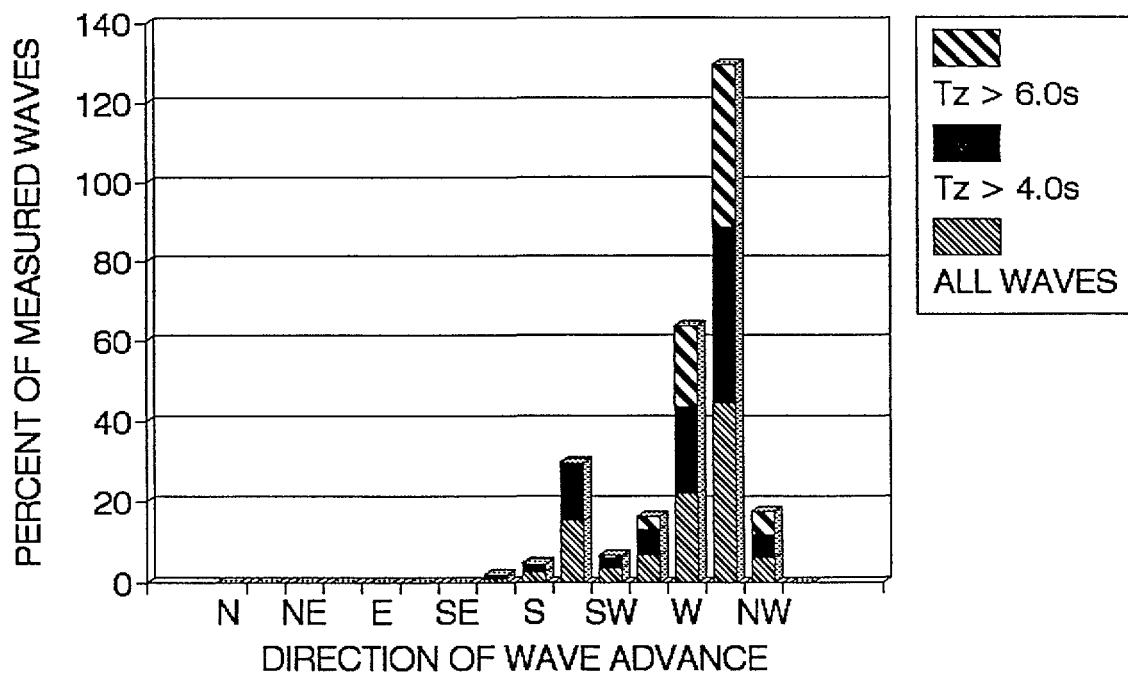
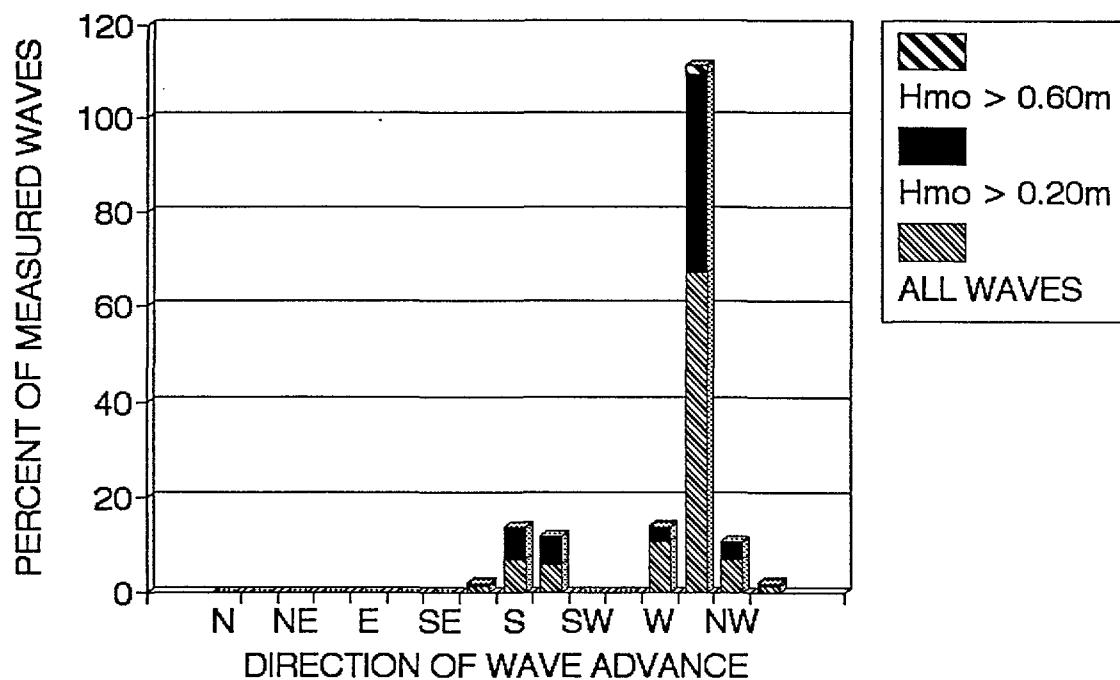


Figure 6. Distribution of wave directions, February, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 03/91 243 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 03/91 243 WAVE BURSTS

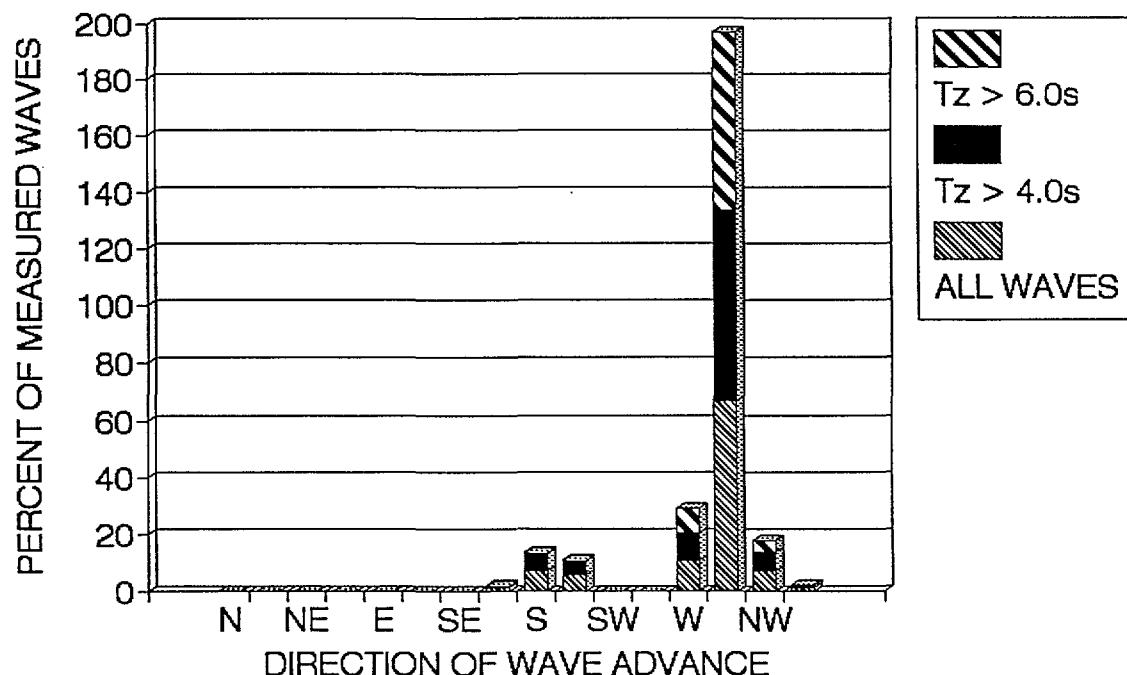
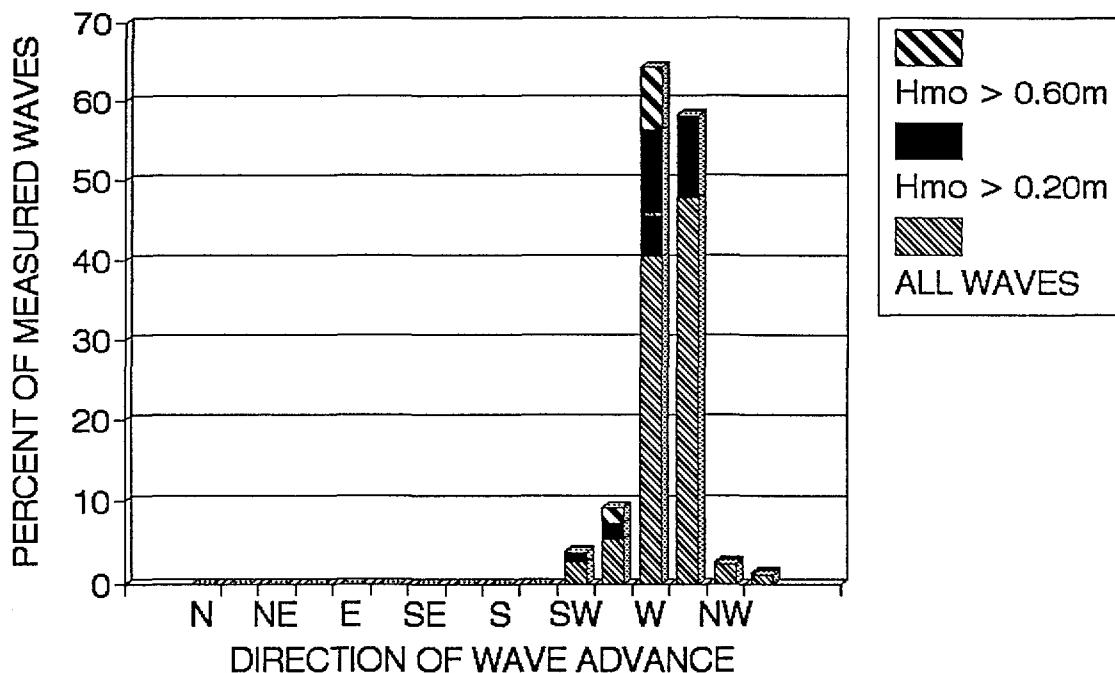


Figure 7. Distribution of wave directions, March, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 04/91 151 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 04/91 151 WAVE BURSTS

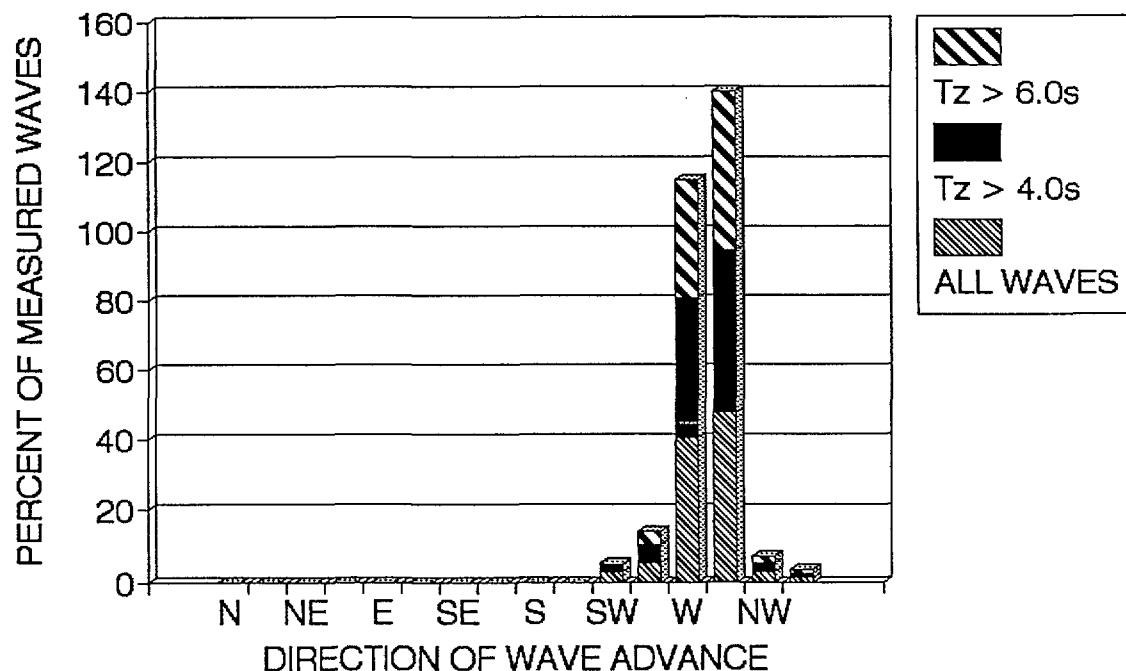
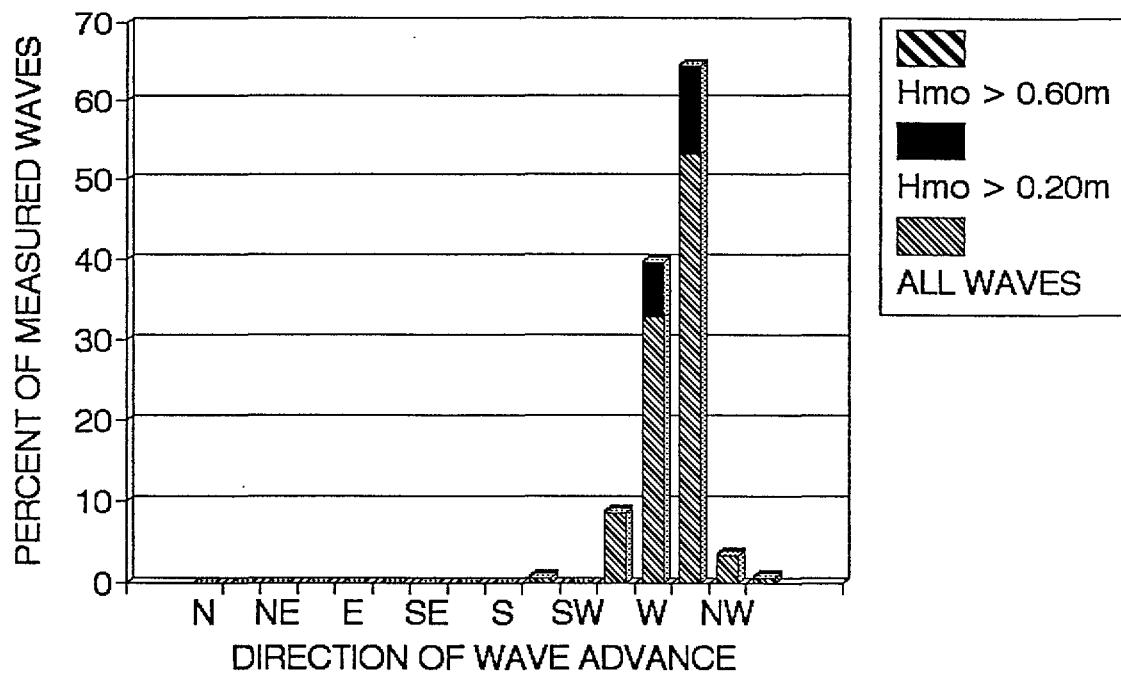


Figure 8. Distribution of wave directions, April, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 05/91 113 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 05/91 113 WAVE BURSTS

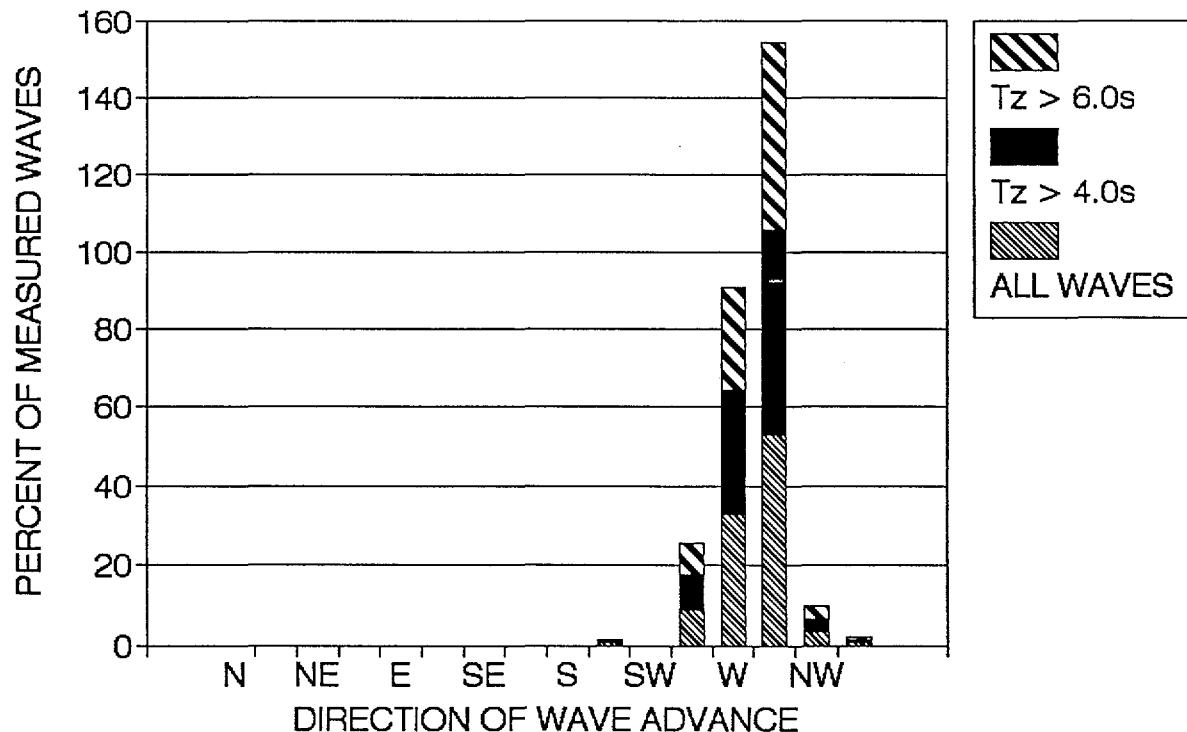
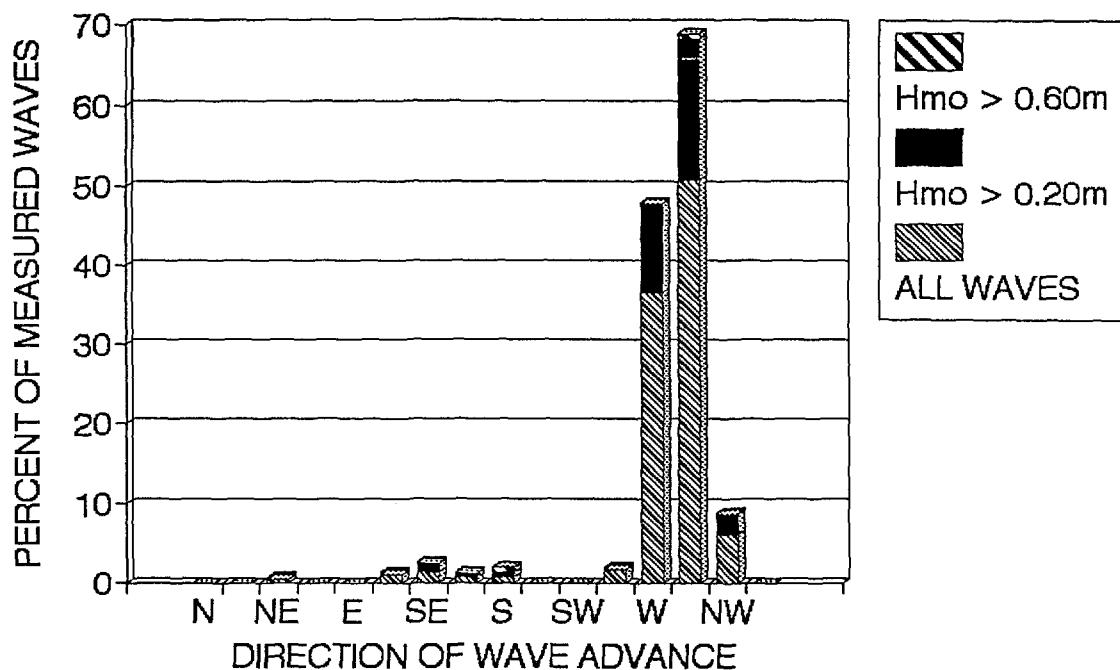


Figure 9. Distribution of wave directions, May, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 06/91 148 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 06/91 148 WAVE BURSTS

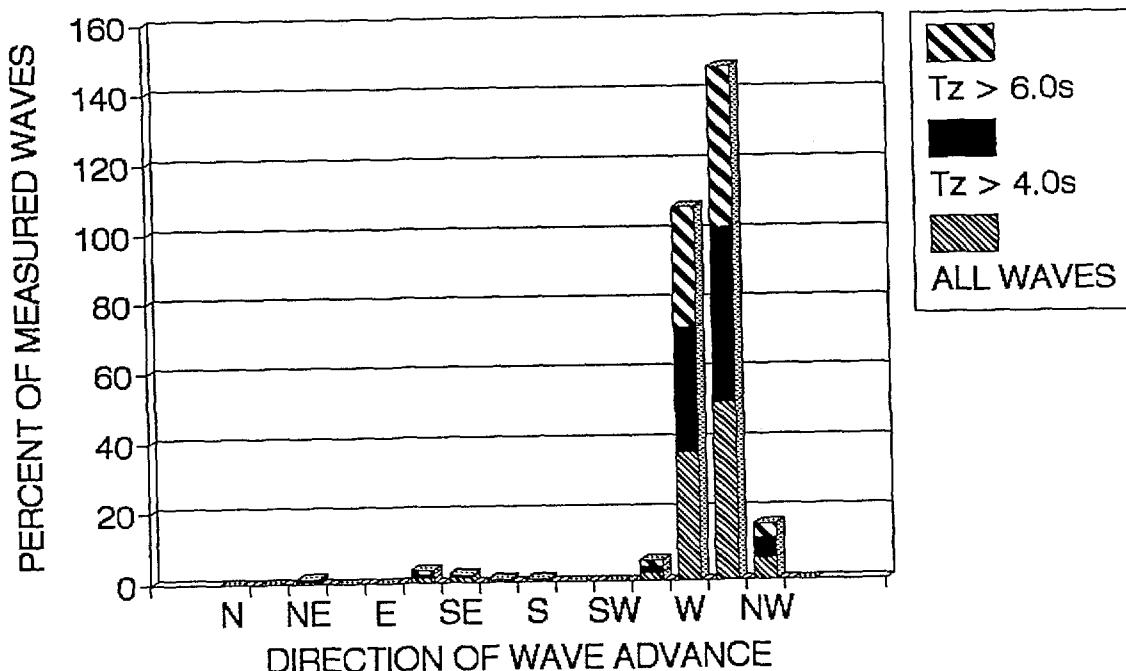
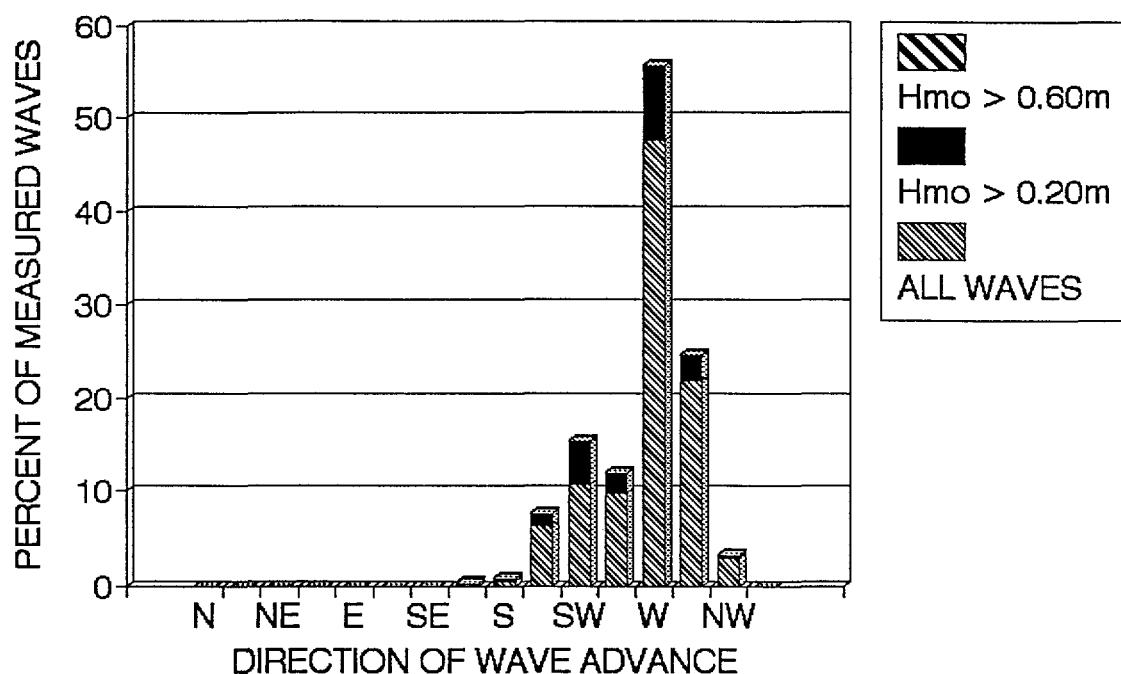


Figure 10. Distribution of wave directions, June, 1991

# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 07/91 206 WAVE BURSTS



# DISTRIBUTION OF WAVE DIRECTIONS

THIMBLE SHOALS 07/91 206 WAVE BURSTS

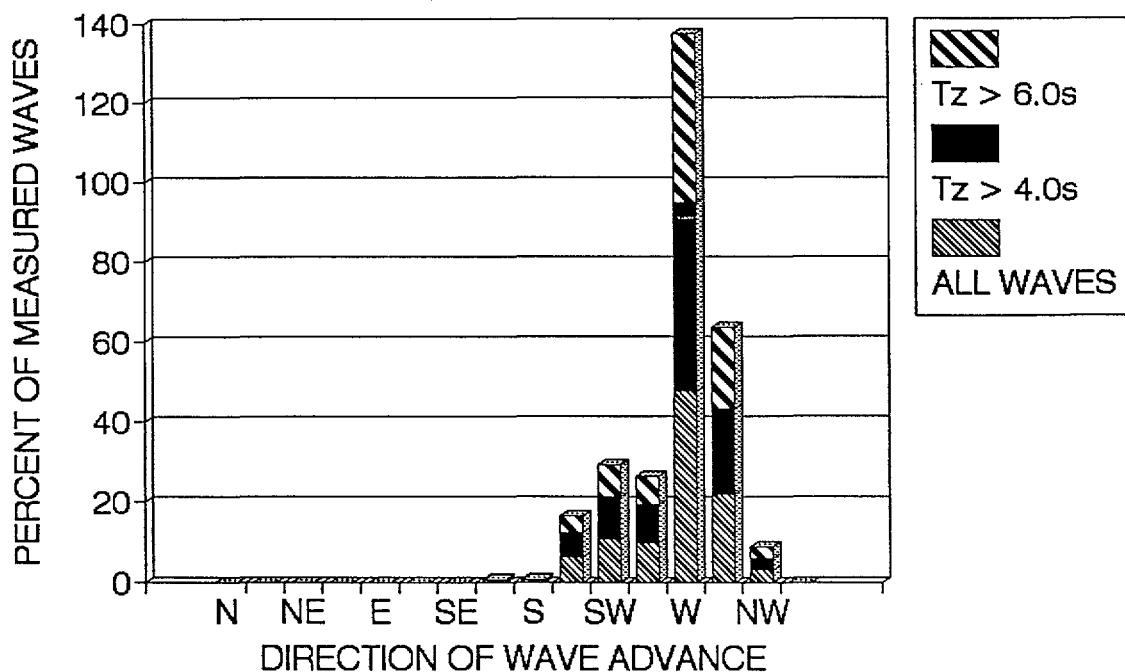
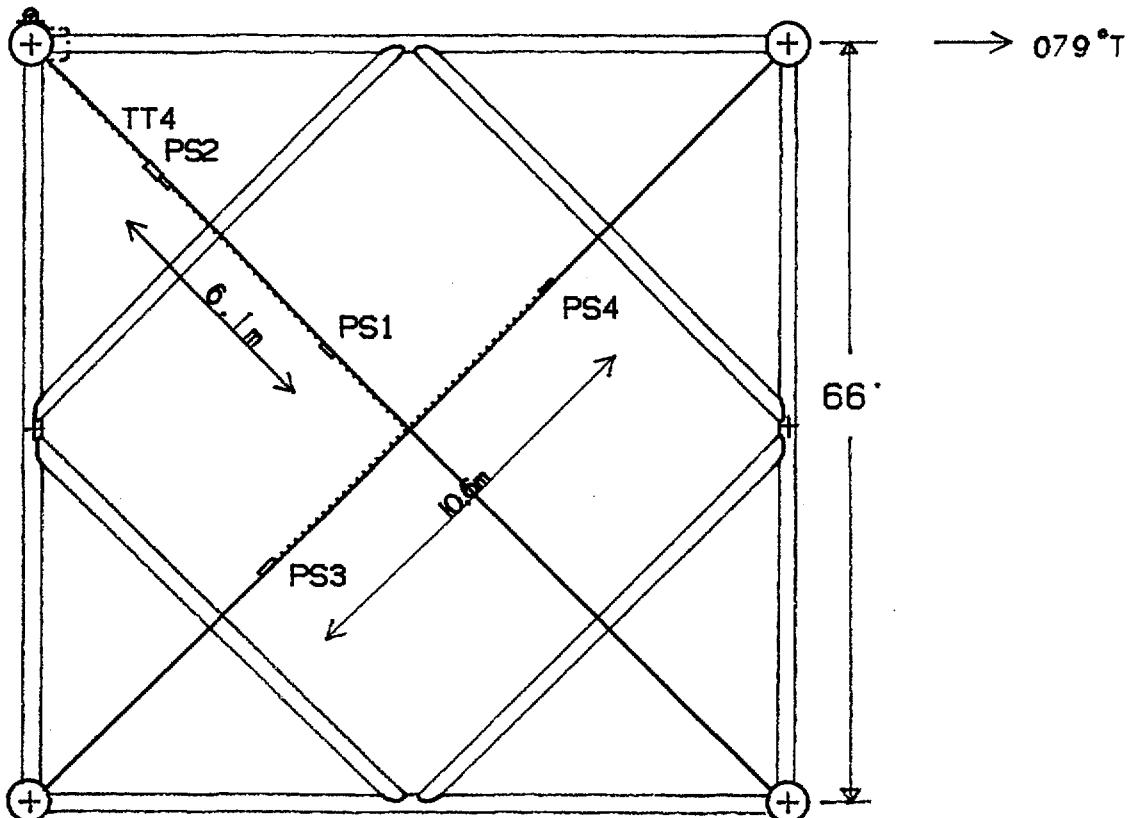


Figure 11. Distribution of wave directions, July, 1991

DIRECTIONAL WAVE GAGE  
TYPE: PRESSURE ARRAY.  
triangular. 4 pressure  
sensors, wire mounted



CHESAPEAKE LIGHT TOWER  
PLAN - ELEVATION - 18.0'

Figure 12. Layout of the four pressure sensors of the  
VIMS Star gage beneath the USCG Chesapeake Light Tower.

**Chesapeake Light Tower - VIMS Star Gage**  
**Mid-October Storm, 17 Oct, 1991- Hour 6**

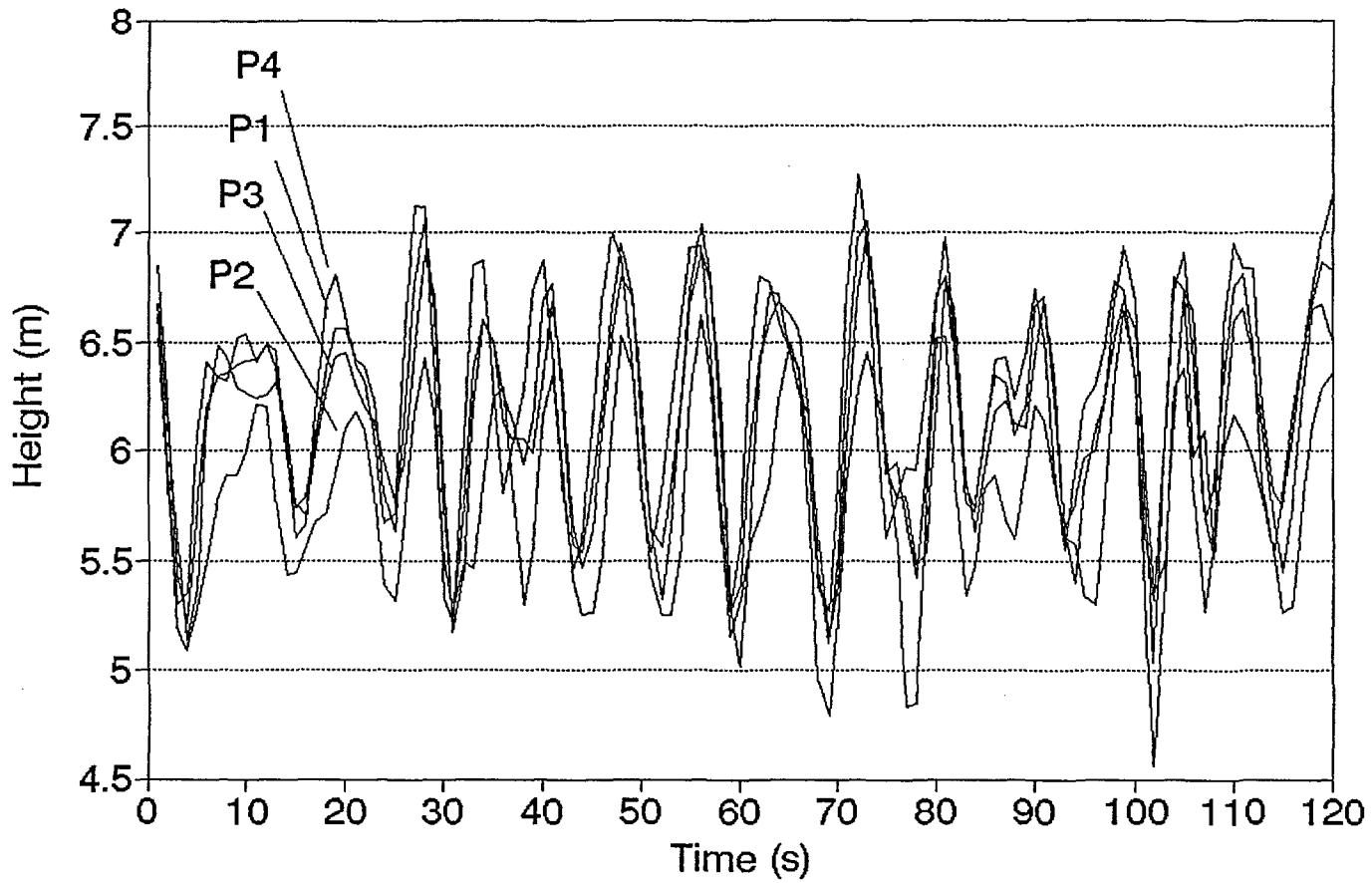
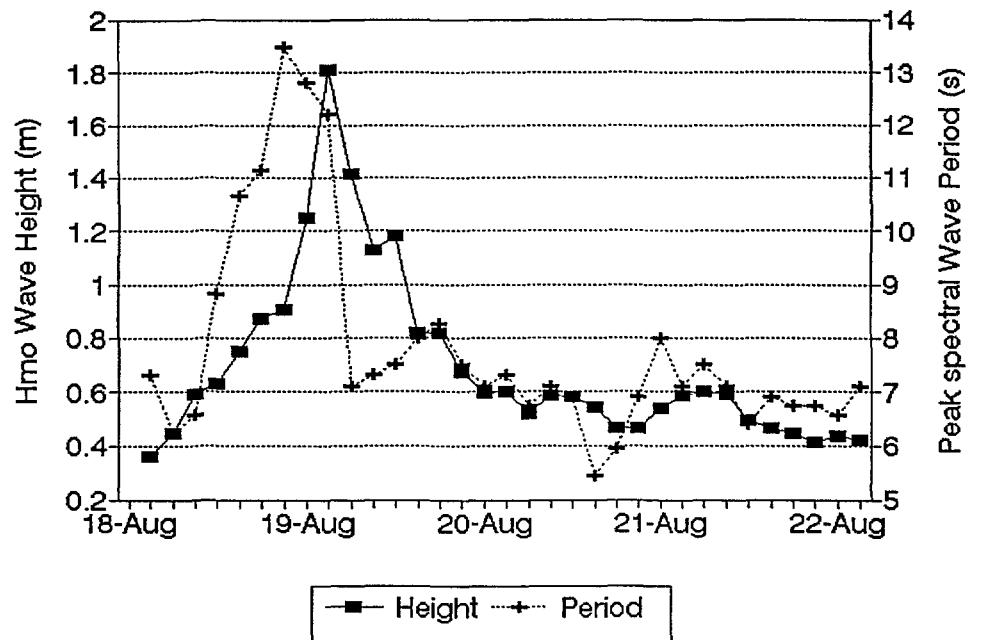


Figure 13. Time series example from the CLT wave station.

## Chesapeake Light Tower - VIMS Star Gage Hurricane Bob, August 1991



## Chesapeake Light Tower - VIMS Star Gage Hurricane Bob, August 1991

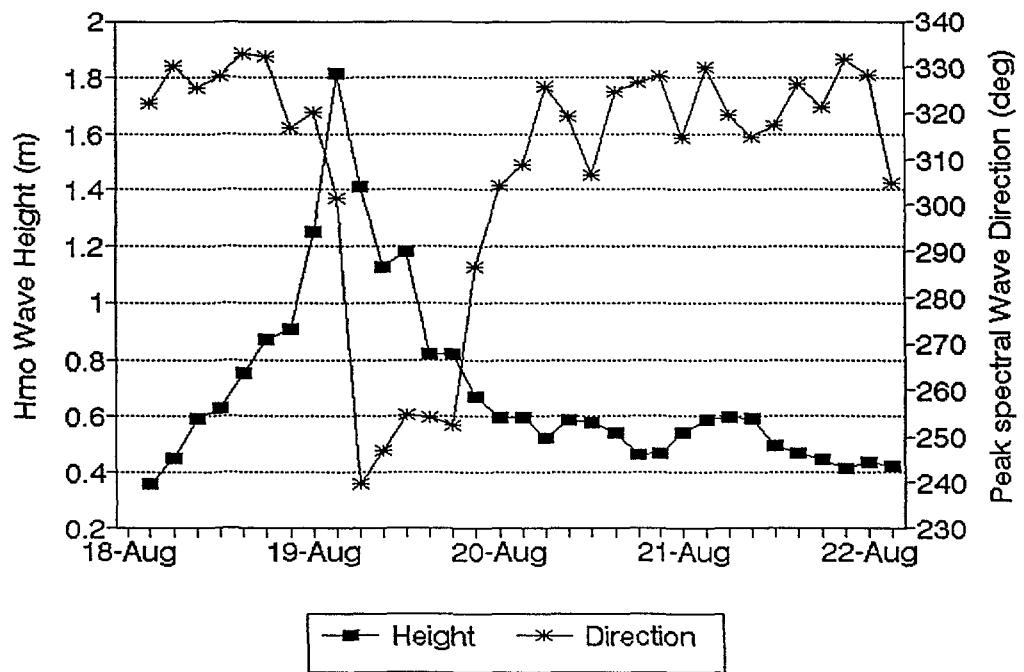
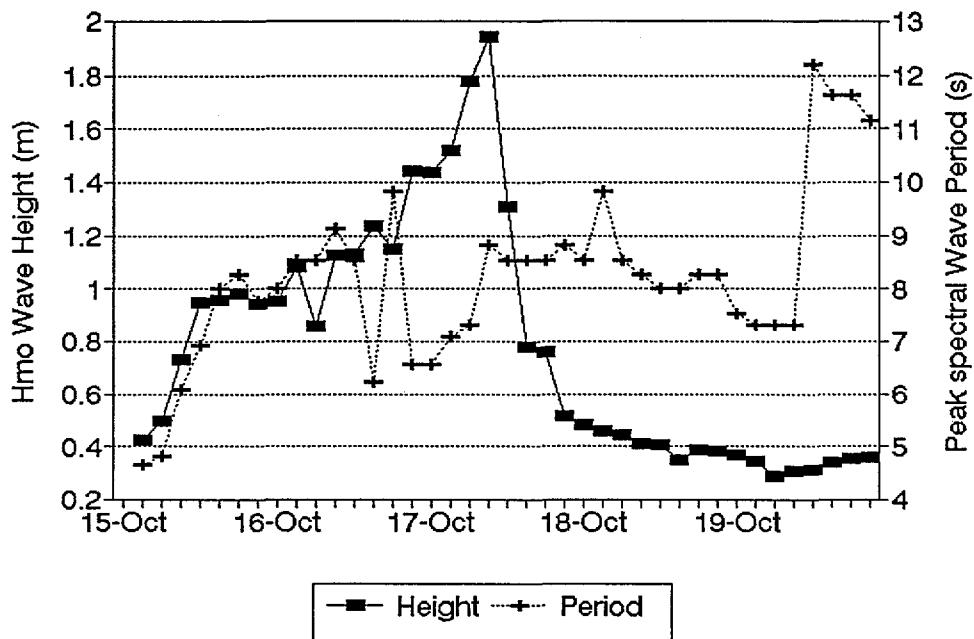


Figure 14. Data from CLT wave station, August, 1991.

Chesapeake Light Tower - VIMS Star Gage  
Mid-October Storm, 1991



Chesapeake Light Tower - VIMS Star Gage  
Mid-October Storm, 1991

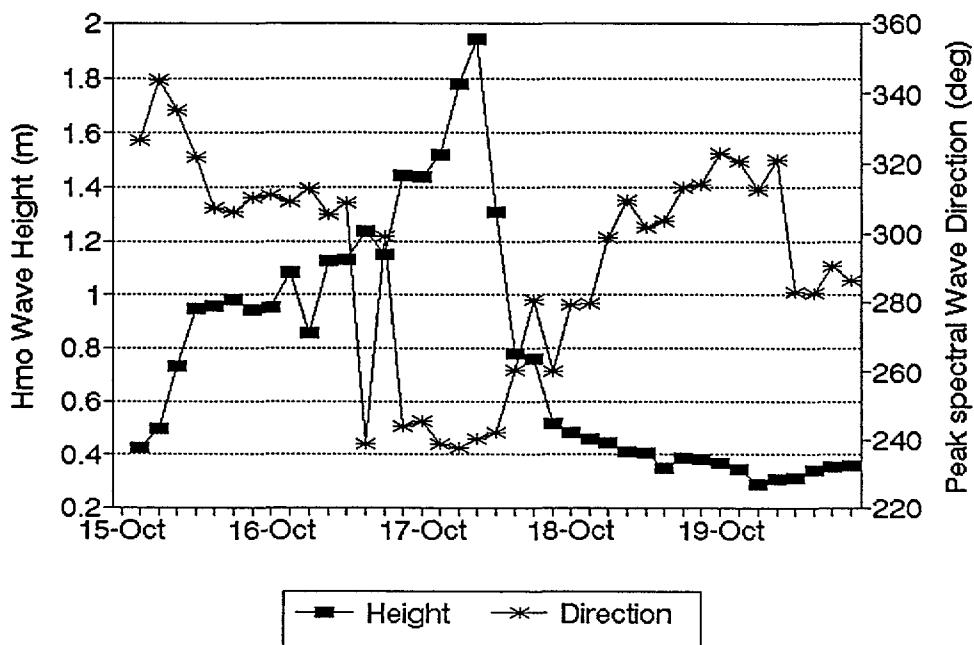
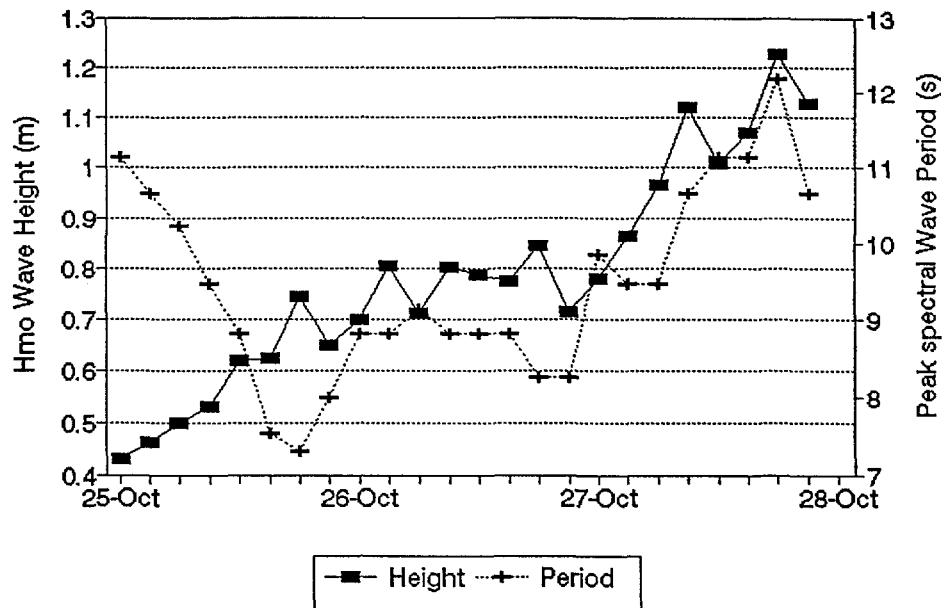


Figure 15. Data from CLT wave station, October, 1991.

Chesapeake Light Tower - VIMS Star Gage  
Late-October Storm, 1991



Chesapeake Light Tower - VIMS Star Gage  
Late-October Storm, 1991

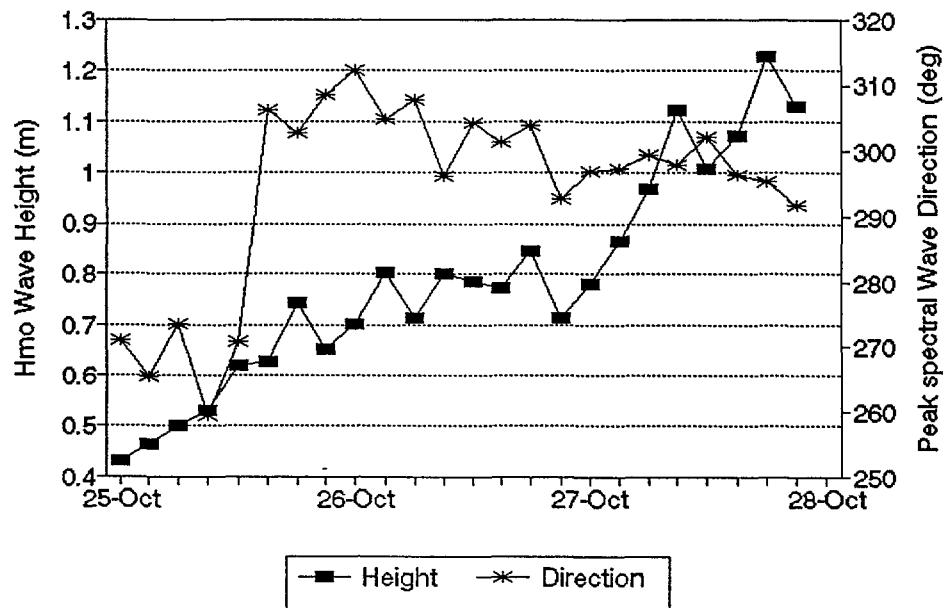


Figure 16. Data from CLT wave station, October, 1991.

Figure 17. Directional wave spectra, CLT wave station, August, 1991.

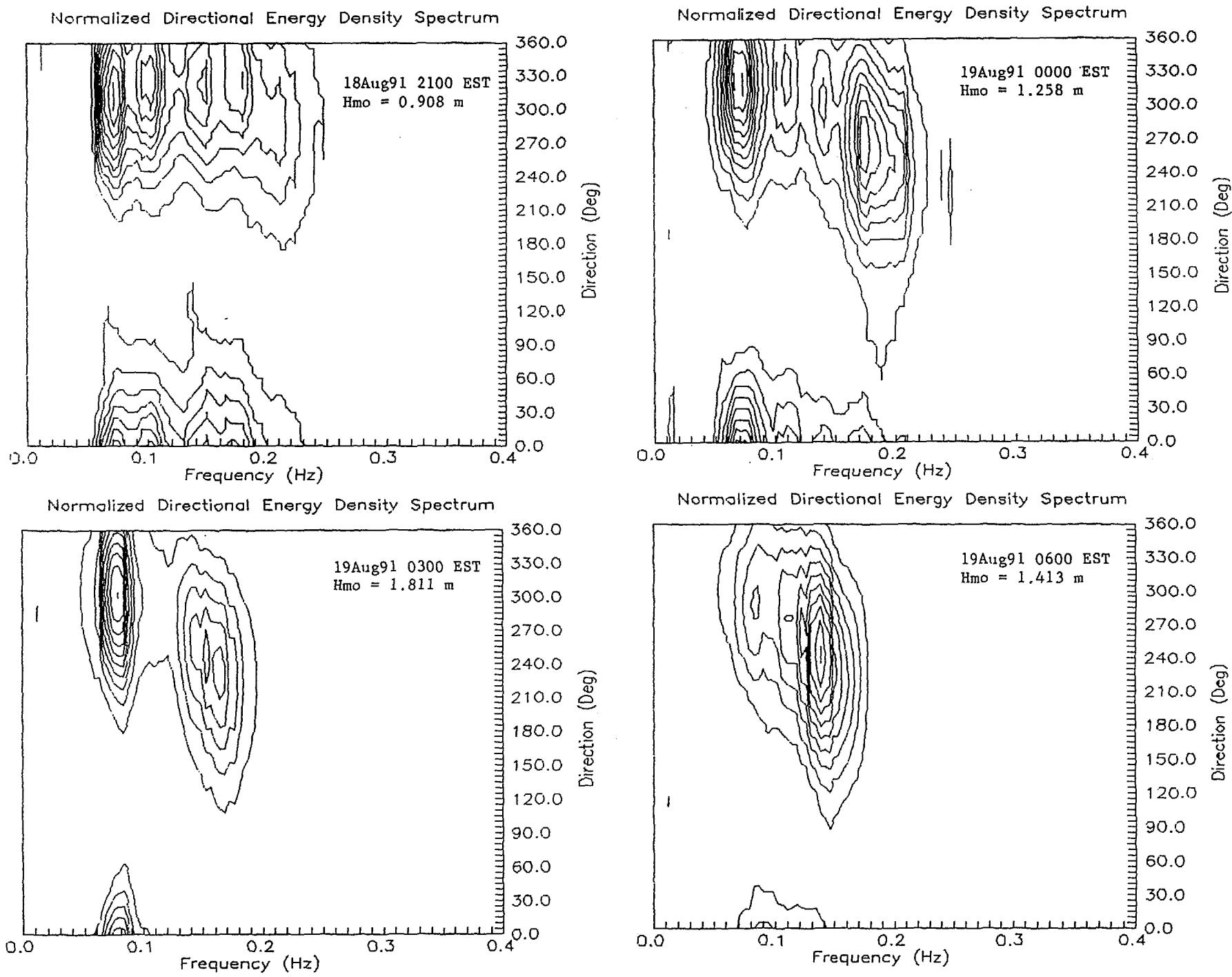


Figure 18. Directional wave spectra, CLT wave station, August, 1991.

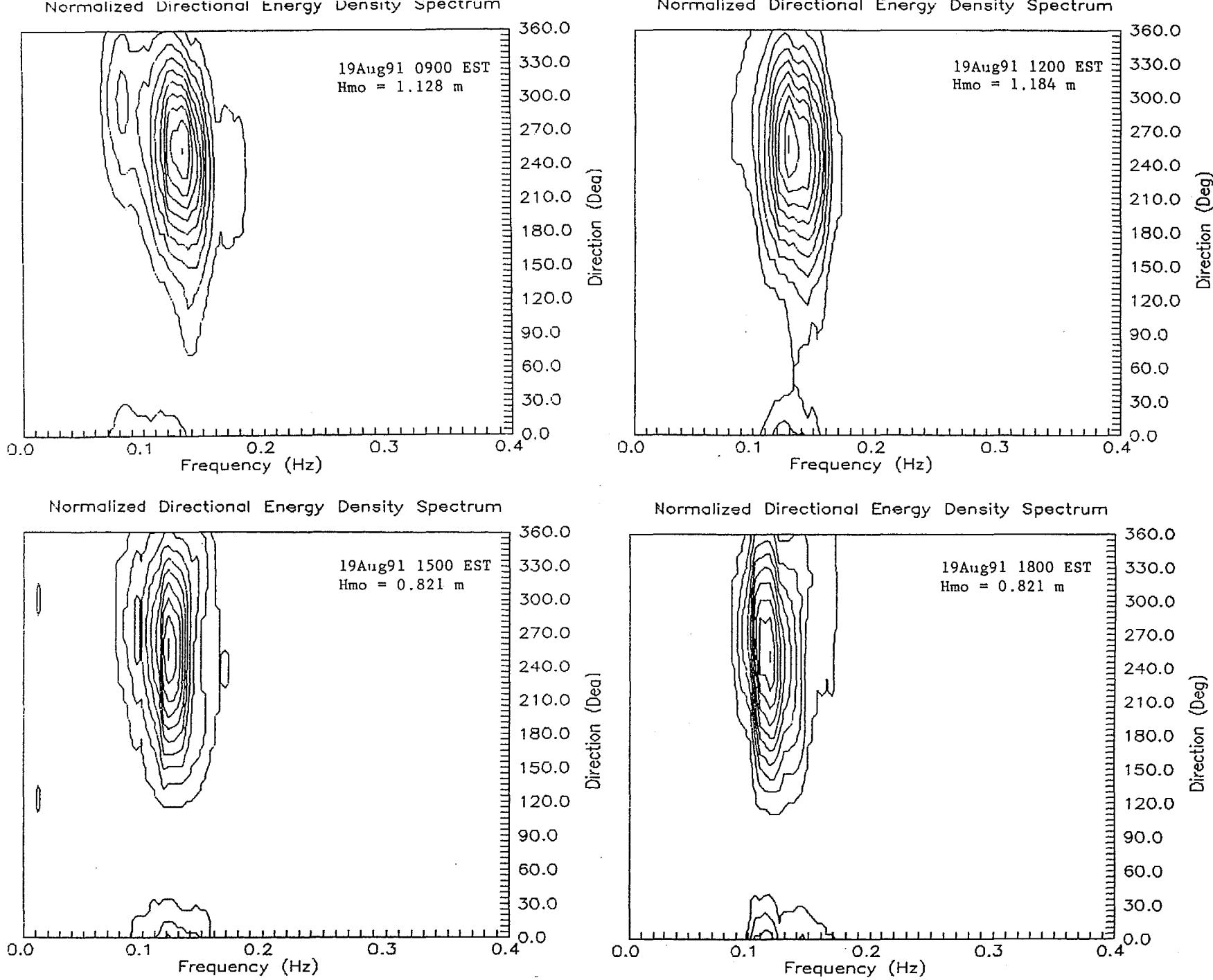


Figure 19. Directional wave spectra, CLT wave station, October, 1991.

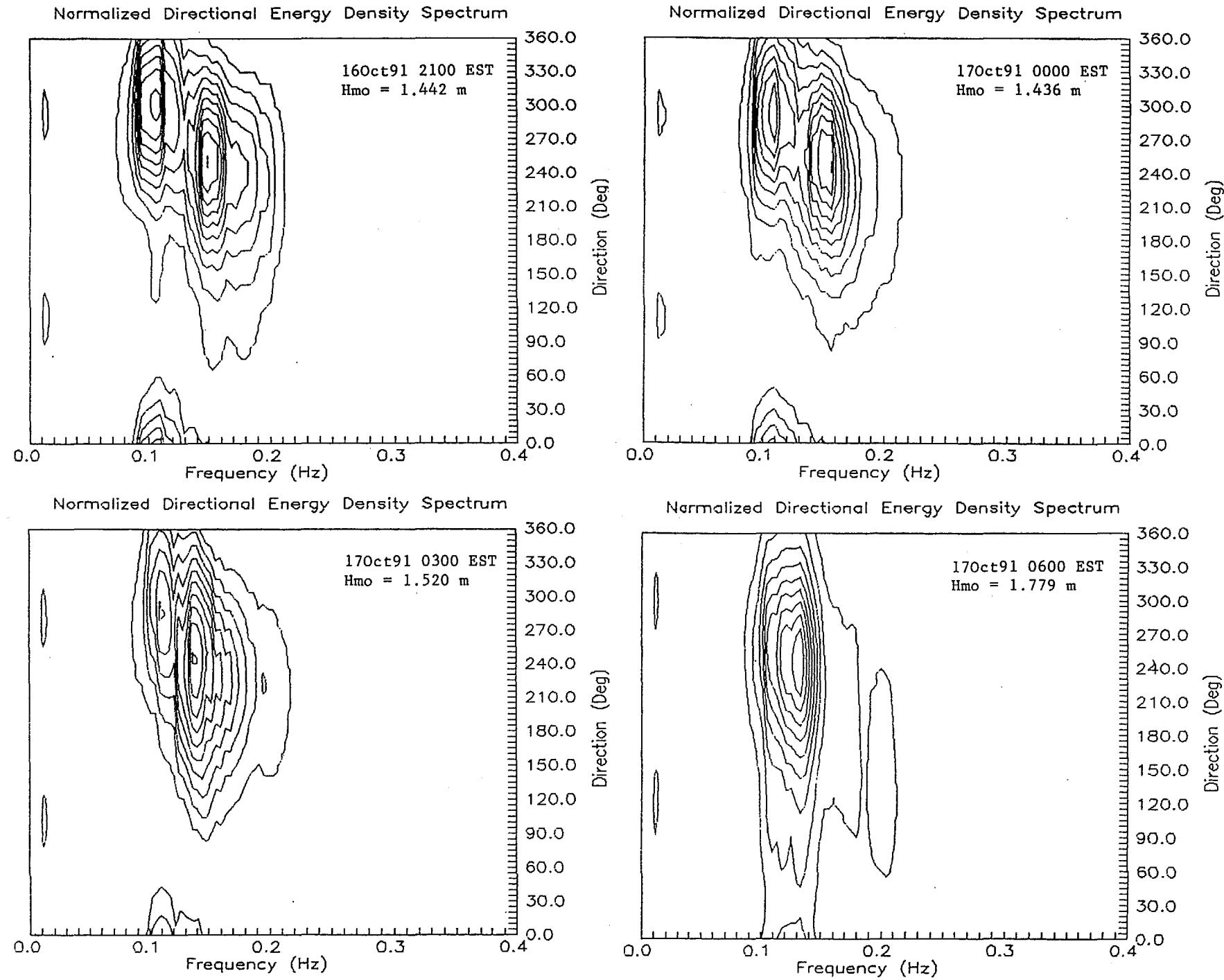
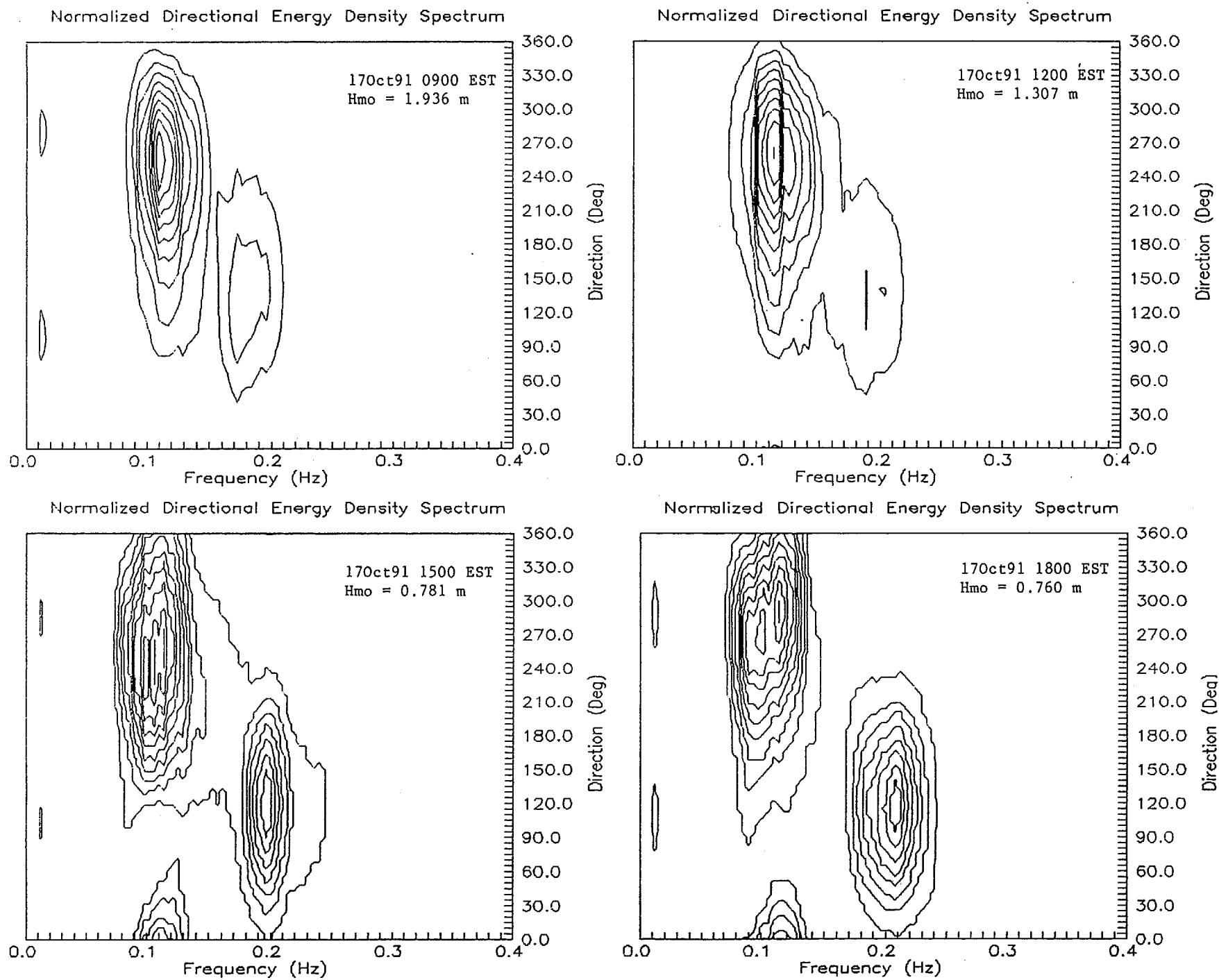


Figure 20. Directional wave spectra, CLT wave station, October, 1991.



## REFERENCES

- Boon, J.D., Kimball, S.K., Suh, K.D. and Hepworth, D.A., 1990. Chesapeake Bay Wave Climate, Thimble Shoals Wave Station, Report and Summary of Wave Observations, September 27, 1988 through October 17, 1989. VIMS Data Report No. 32, 122 p.
- Boon, J.D., Kimball, S.K. and Hepworth, D.A., 1991. Chesapeake Bay Wave Climate, Wolf Trap Wave Station, Report and Summary of Wave Observations, November 6, 1989 through August 2, 1990. VIMS Technical Report, 109p.
- Boon, J.D., Bohlen, W.F. and Wright, L.D., 1987. Estuarine versus inner shelf disposal sites: a comparison of benthic current regimes. ASCE Proceedings of Coastal Sediments '87, pp. 571-583.
- Dolan, R. and Davis, R.E., 1992. Rating northeasters, a scale to classify the dangerous extratropical storms. *Mariners Weather Log* - Winter 1992, Vol. 36, pp. 4-11.
- Goda, Y., 1985. *Random Seas and Design of Maritime Structures*. University of Tokyo Press, 323p.
- IAHR, 1989. List of sea-state parameters by the International Association for Hydraulic Research (IAHR) Working Group on Wave Generation and Analysis. *J. Waterway, Port, Coastal and Ocean Engineering*, vol. 115, pp. 793-808.
- Longuet-Higgins, M.S., Cartwright, D.E. and Smith, N.D., 1963. Observations of the directional spectrum of sea waves using the Motions of a floating buoy. In: Ocean Wave Spectra, Prentice-Hall, Englewood Cliffs, NJ, pp. 111-136.
- Nielsen, P., 1989. Analysis of natural waves by local approximations. *ASCE, J. Waterway, Port, Coastal and Ocean Engineering*, vol. 115, pp. 384-396.
- PIANC, 1973. Report of the International Committee for the Study of Waves. Permanent International Association of Navigational Congresses. Bulletin No. 15, vol. II, Brussels, Belgium.
- Wright, L.D., Prior, D.B., Hobbs, C.H., Byrne, R.J., Boon, J.D., Schaffner, L.C. and Green, M.O., 1987. Spatial variability of bottom types in the lower Chesapeake Bay and adjoining estuaries and inner shelf. *Estuarine, Coastal and Shelf Science*, vol. 24, pp. 765-784.
- Wright, L.D., Boon, J.D., Xu, J.P. and Kim, S.C. (in press). The bottom boundary layer of the bay stem plains environment of lower Chesapeake Bay. Accepted by *Estuarine, Coastal and Shelf Science*.

#### ACKNOWLEDGEMENTS

We gratefully acknowledge the assistance of R.A. Gammisch, D. Gouge, C.S. Hardaway and L.D. Wright for underwater dives they made to look after our wave gage in all types of weather. A.L. Edwards assisted with the data analysis. The expert assistance of Duran Ward, captain of the RV BAY EAGLE is also greatly appreciated, without which the project would not have been possible.

**APPENDIX A**

**Listing of the Thimble Shoals Wave Data Base**

**October 8, 1990 through August 22, 1991**

**Note: Field 20, Source File Name, is not included  
in this listing due to space limitations.**

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	6	90	279	2.3													M	
10	6	90	279	5.3													M	
10	6	90	279	8.3													M	
10	6	90	279	11.3													M	
10	6	90	279	14.3													M	
10	6	90	279	17.3													M	
10	6	90	279	20.3													M	
10	6	90	279	23.3													M	
10	7	90	280	2.3													M	
10	7	90	280	5.3													M	
10	7	90	280	8.3													M	
10	7	90	280	11.3													M	
10	7	90	280	14.3													M	
10	7	90	280	17.3													M	
10	7	90	280	20.3													M	
10	7	90	280	23.3													M	
10	8	90	281	2.3													M	
10	8	90	281	5.3													M	
10	8	90	281	8.3													M	
10	8	90	281	11.3	6.85	36.3	327.3	294.5	0.707	0.218	9.57	12.19	34.60	49.12	5.74	5.56	4.98	G
10	8	90	281	14.3	6.36	19.8	13.8	287.4	0.704	0.208	9.75	12.19	48.93	37.18	4.65	4.75	4.49	G
10	8	90	281	17.3	5.95	26.4	116.1	255.3	0.744	0.181	8.98	12.19	31.74	51.46	6.00	4.52	6.29	S
10	8	90	281	20.3	6.29	19.5	222.5	284.0	0.797	0.255	7.70	10.24	10.70	61.77	12.67	6.01	8.85	G
10	8	90	281	23.3	6.65	20.0	300.9	291.8	0.771	0.285	8.98	10.24	22.69	55.66	9.50	7.50	4.65	G
10	9	90	282	2.3	6.30	14.8	31.0	279.2	0.803	0.218	8.98	11.13	18.59	67.12	6.54	5.27	2.48	G
10	9	90	282	5.3	5.93	23.9	117.8	251.8	0.780	0.163	9.75	12.19	42.77	41.71	10.31	3.93	1.27	S
10	9	90	282	8.3	6.34	21.8	225.9	273.6	0.697	0.254	8.98	11.13	13.79	57.99	20.06	6.03	2.12	G
10	9	90	282	11.3	6.87	29.7	311.3	292.0	0.722	0.289	8.61	11.12	16.44	58.00	10.03	12.20	3.33	G
10	9	90	282	14.3	6.62	25.4	333.6	280.8	0.724	0.269	8.53	11.13	20.41	47.60	14.71	12.85	4.43	G
10	9	90	282	17.3	6.07	34.4	89.1	250.7	0.776	0.223	7.31	12.19	24.58	31.98	11.55	17.51	14.38	S
10	9	90	282	20.3	6.14	16.7	179.7	285.9	0.795	0.267	7.01	10.24	11.11	51.50	8.03	16.47	12.89	G
10	9	90	282	23.3	6.63	14.1	275.5	285.4	0.759	0.318	7.94	10.24	10.48	48.26	16.94	17.03	7.29	G
10	10	90	283	2.3	6.53	14.0	2.2	272.8	0.764	0.262	9.48	11.13	24.87	43.47	13.30	13.81	4.56	G
10	10	90	283	5.3	6.11	19.8	119.6	265.4	0.739	0.179	9.57	10.24	25.06	52.70	10.85	9.44	1.95	G
10	10	90	283	8.3	6.20	12.4	168.8	277.9	0.627	0.187	8.06	10.24	8.26	52.89	23.93	9.92	5.00	G
10	10	90	283	11.3	6.81	28.0	272.6	291.4	0.742	0.352	7.70	10.24	3.65	56.14	18.70	16.00	5.51	G
10	10	90	283	14.3	6.83	28.5	330.5	277.8	0.762	0.266	8.06	10.24	8.64	51.12	18.24	16.10	5.89	G
10	10	90	283	17.3	6.29	19.3	96.6	266.7	0.799	0.242	7.31	8.83	10.60	35.65	29.32	13.02	11.41	S
10	10	90	283	20.3	6.16	14.0	140.9	277.1	0.759	0.352	6.10	8.26	2.32	22.97	26.27	32.09	16.35	G
10	10	90	283	23.3	6.57	21.9	254.0	280.8	0.729	0.443	6.13	8.26	3.50	22.84	23.73	28.38	21.55	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	11	90	284	2.3	6.68	28.4	330.4	281.4	0.827	0.496	6.36	7.31	2.88	28.01	35.71	23.56	9.84	G
10	11	90	284	5.3	6.32	20.7	50.9	279.6	0.828	0.418	5.82	8.26	2.88	28.47	29.00	25.57	14.07	G
10	11	90	284	8.3	6.12	16.7	129.6	274.4	0.766	0.358	6.32	7.31	2.33	22.67	43.08	21.60	10.31	G
10	11	90	284	11.3	6.55	20.6	255.8	285.6	0.732	0.472	5.57	7.76	4.11	15.73	38.47	23.01	18.68	G
10	11	90	284	14.3	6.87	35.2	323.3	294.1	0.803	0.466	6.44	7.76	2.04	27.36	38.37	21.53	10.70	G
10	11	90	284	17.3	6.62	12.5	3.9	277.2	0.799	0.305	6.83	7.76	6.72	36.97	28.00	16.51	11.80	G
10	11	90	284	20.3	6.25	29.8	115.3	280.8	0.815	0.212	6.83	7.31	3.73	27.74	40.33	13.05	15.14	G
10	11	90	284	23.3	6.52	13.8	197.0	292.5	0.802	0.285	6.48	7.76	4.62	19.60	44.06	21.11	10.61	G
10	12	90	285	2.3	6.91	13.5	259.1	289.2	0.763	0.360	6.65	6.92	6.77	27.63	33.92	23.08	8.61	G
10	12	90	285	5.3	6.68	16.2	44.0	281.8	0.811	0.279	7.21	7.76	9.76	19.78	42.40	22.71	5.35	G
10	12	90	285	8.3	6.28	24.1	117.7	284.3	0.803	0.212	7.70	7.31	11.64	27.17	41.77	14.18	5.24	G
10	12	90	285	11.3	6.52	21.0	219.4	282.3	0.769	0.335	6.69	6.56	3.69	25.24	42.24	17.02	11.81	G
10	12	90	285	14.3	6.97	15.8	287.4	285.9	0.819	0.457	7.01	6.24	11.48	16.32	33.25	30.02	8.93	G
10	12	90	285	17.3	6.81	25.9	348.9	287.8	0.789	0.379	8.00	15.06	30.70	25.43	24.83	15.33	3.70	G
10	12	90	285	20.3	6.32	23.2	93.7	280.6	0.863	0.363	9.31	15.06	43.43	23.43	20.78	10.28	2.08	G
10	12	90	285	23.3	6.33	13.9	163.3	288.1	0.835	0.484	8.39	13.47	28.44	26.46	28.37	14.09	2.65	G
10	13	90	286	2.3	6.78	12.7	270.7	287.9	0.770	0.681	8.68	12.19	30.29	32.68	19.96	14.36	2.71	G
10	13	90	286	5.3	6.76	11.8	354.7	288.3	0.844	0.632	9.06	9.48	29.47	46.74	12.81	10.07	0.91	G
10	13	90	286	8.3	6.28	23.8	94.1	282.2	0.840	0.444	8.53	13.47	30.57	36.79	17.46	13.86	1.33	G
10	13	90	286	11.3	6.25	18.7	152.4	288.1	0.809	0.374	8.39	8.26	17.02	48.63	20.89	12.23	1.22	G
10	13	90	286	14.3	6.75	20.4	254.3	293.0	0.810	0.647	8.26	7.76	14.24	40.28	27.42	14.92	3.14	G
10	13	90	286	17.3	6.87	17.4	350.8	286.8	0.849	0.600	8.68	11.13	16.73	36.79	31.85	12.91	1.72	G
10	13	90	286	20.3	6.36	20.6	59.1	280.0	0.821	0.344	9.14	10.24	23.81	43.79	21.01	10.32	1.06	G
10	13	90	286	23.3	6.19	17.5	135.6	284.8	0.768	0.301	8.90	9.48	16.28	59.83	13.90	9.10	0.89	G
10	14	90	287	2.3	6.63	17.4	257.8	293.5	0.799	0.497	8.75	10.24	5.75	62.01	16.99	12.79	2.46	G
10	14	90	287	5.3	6.87	18.1	341.6	285.1	0.792	0.423	7.82	11.13	8.45	42.76	23.91	21.51	3.37	G
10	14	90	287	8.3	6.47	16.5	65.1	288.2	0.698	0.252	8.26	11.13	11.42	58.08	10.69	11.63	8.19	G
10	14	90	287	11.3	6.21	25.2	137.3	321.0	0.540	0.308	7.37	9.48	6.69	62.76	7.26	5.04	18.25	G
10	14	90	287	14.3	6.60	24.5	234.5	292.1	0.724	0.382	7.26	9.48	13.23	49.26	11.84	18.16	7.50	G
10	14	90	287	17.3	6.89	14.1	308.3	285.5	0.756	0.440	8.39	10.24	22.30	43.75	18.65	13.27	2.03	G
10	14	90	287	20.3	6.51	20.0	27.6	278.8	0.801	0.313	10.34	12.19	48.49	35.22	8.06	7.13	1.09	G
10	14	90	287	23.3	6.09	23.8	110.1	270.3	0.758	0.280	11.01	13.47	58.30	30.40	6.37	3.92	1.02	G
10	15	90	288	2.3	6.41	13.3	224.1	283.9	0.815	0.361	9.57	12.19	34.72	39.34	16.88	8.23	0.83	G
10	15	90	288	5.3	6.83	24.3	308.9	291.6	0.758	0.400	9.48	12.19	43.00	38.34	9.34	7.77	1.56	G
10	15	90	288	8.3	6.57	18.0	353.1	279.5	0.775	0.291	10.24	13.47	63.61	23.97	5.18	3.97	3.27	G
10	15	90	288	11.3	6.11	28.6	115.1	283.8	0.766	0.219	9.66	12.19	40.91	45.86	3.24	4.52	5.47	G
10	15	90	288	14.3	6.33	17.5	202.7	293.1	0.736	0.248	8.98	11.13	7.81	66.41	10.81	11.37	3.60	G
10	15	90	288	17.3	6.84	21.6	269.1	285.8	0.736	0.328	9.06	10.24	5.85	75.91	9.15	7.54	1.56	G
10	15	90	288	20.3	6.69	13.6	17.1	280.2	0.790	0.268	10.14	12.19	30.49	53.53	7.86	6.88	1.25	G
10	15	90	288	23.3	6.27	31.4	119.5	215.9	0.731	0.425	4.47	4.06	6.32	20.77	2.43	48.18	22.29	G

Mon	Day	Yr	JDAY	Time (EST)	*Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	16	90	289	2.3	6.44	22.7	196.8	202.8	0.678	0.407	4.76	10.24	5.00	24.42	8.11	34.49	27.98	G
10	16	90	289	5.3	7.02	27.1	273.7	267.1	0.614	0.457	5.63	9.48	6.18	26.50	8.38	38.46	20.48	G
10	16	90	289	8.3	6.99	30.0	342.6	290.5	0.544	0.503	5.39	4.06	7.70	15.30	9.90	42.29	24.81	G
10	16	90	289	11.3	6.33	30.2	84.1	256.5	0.609	0.334	5.89	11.13	7.90	35.10	8.14	33.45	15.40	G
10	16	90	289	14.3	6.29	18.1	162.9	275.7	0.627	0.298	6.44	9.48	2.40	48.23	10.75	20.80	17.81	G
10	16	90	289	17.3	6.83	24.8	265.3	294.8	0.746	0.319	7.70	8.26	3.98	56.89	15.80	14.72	8.61	G
10	16	90	289	20.3	6.81	25.4	342.1	283.6	0.749	0.222	8.26	10.24	18.17	45.83	12.23	14.39	9.39	G
10	16	90	289	23.3	6.25	28.1	82.4	286.2	0.765	0.170	9.75	10.24	11.13	62.32	11.98	9.89	4.67	G
10	17	90	290	2.3	6.21	19.8	162.6	289.4	0.741	0.153	7.76	9.48	7.55	56.60	17.29	8.66	9.91	G
10	17	90	290	5.3	6.84	26.7	258.9	293.2	0.719	0.224	6.83	8.83	6.98	42.16	25.93	16.94	8.00	G
10	17	90	290	8.3	6.96	42.0	331.7	300.8	0.732	0.209	7.82	9.48	13.45	51.94	7.83	18.06	8.73	G
10	17	90	290	11.3	6.37	19.9	71.8	283.4	0.654	0.210	7.01	11.13	14.21	44.89	5.71	19.14	16.06	G
10	17	90	290	14.3	6.15	22.2	143.0	290.5	0.749	0.182	6.36	8.83	6.41	41.85	13.35	21.69	16.70	G
10	17	90	290	17.3	6.64	25.8	238.1	281.3	0.752	0.274	5.69	4.34	6.83	19.23	14.31	36.13	23.50	G
10	17	90	290	20.3	6.79	19.6	333.5	280.2	0.782	0.253	6.28	9.48	6.78	25.73	13.96	42.60	10.93	G
10	17	90	290	23.3	6.22	31.2	65.5	275.5	0.777	0.182	6.36	9.48	10.83	25.91	12.79	37.67	12.80	G
10	18	90	291	2.3	5.99	16.9	142.7	281.9	0.731	0.167	5.75	8.83	14.73	25.15	7.76	34.60	17.76	G
10	18	90	291	5.3	6.52	25.2	256.3	293.4	0.763	0.222	5.95	8.26	12.30	24.29	20.47	28.41	14.53	G
10	18	90	291	8.3	6.85	35.6	323.7	285.0	0.735	0.245	6.44	8.83	15.13	24.24	14.51	36.66	9.45	G
10	18	90	291	11.3	6.31	25.0	40.1	298.1	0.710	0.231	5.04	8.83	12.17	36.67	8.98	12.26	29.92	G
10	18	90	291	14.3	5.85	21.8	112.8	254.8	0.864	0.275	5.28	3.82	6.59	9.13	20.63	29.49	34.16	S
10	18	90	291	17.3	6.16	16.7	244.8	296.4	0.679	0.318	5.17	5.95	8.70	12.15	15.39	34.18	29.58	S
10	18	90	291	20.3	6.50	16.3	314.3	80.0	0.818	0.407	5.17	4.34	6.46	6.51	32.49	28.65	25.89	G
10	18	90	291	23.3	6.28	15.6	109.3	250.3	0.802	0.234	4.49	7.31	13.93	11.75	18.73	6.24	49.35	S
10	19	90	292	2.3	5.99	39.3	144.1	223.8	0.612	0.242	4.08	4.06	8.19	3.80	3.70	40.79	43.52	S
10	19	90	292	5.3	6.38	30.1	233.4	201.5	0.636	0.247	4.81	4.06	12.60	14.65	8.68	30.51	33.56	G
10	19	90	292	8.3	6.93	26.8	302.0	256.5	0.533	0.219	6.44	8.26	19.07	26.44	17.32	20.52	16.65	G
10	19	90	292	11.3	6.63	20.9	347.1	250.6	0.550	0.190	6.78	8.26	22.47	24.82	20.66	17.27	14.78	G
10	19	90	292	14.3	6.11	34.9	105.3	243.8	0.817	0.178	5.00	15.06	17.03	17.54	14.46	17.23	33.74	S
10	19	90	292	17.3	6.26	13.9	180.9	239.8	0.722	0.210	5.33	7.31	11.64	13.75	24.13	25.76	24.71	S
10	19	90	292	20.3	6.72	21.1	270.9	236.0	0.714	0.314	4.92	3.82	10.09	13.29	12.84	27.94	35.84	S
10	19	90	292	23.3	6.53	12.2	45.5	217.3	0.662	0.347	4.83	4.06	7.52	18.81	3.79	39.35	30.54	S
10	20	90	293	2.3	6.08	31.6	105.9	227.8	0.710	0.290	4.59	4.65	11.14	11.42	4.38	45.12	27.94	S
10	20	90	293	5.3	6.33	18.4	212.2	245.2	0.682	0.292	5.04	3.94	10.28	15.83	7.11	31.59	35.18	S
10	20	90	293	8.3	6.91	29.3	295.8	259.0	0.668	0.292	5.36	7.31	9.11	18.04	16.90	33.17	22.78	G
10	20	90	293	11.3	6.70	31.4	342.0	251.4	0.758	0.217	6.40	8.83	15.18	23.69	16.49	28.42	16.22	S
10	20	90	293	14.3	6.09	34.5	85.8	249.7	0.818	0.194	6.65	8.26	11.13	30.40	14.26	24.99	19.21	S
10	20	90	293	17.3	6.20	14.9	189.4	249.3	0.797	0.227	6.65	8.26	6.94	34.04	20.41	20.02	18.59	S
10	20	90	293	20.3	6.67	22.9	262.4	262.1	0.771	0.255	7.53	9.48	8.28	50.91	18.56	10.68	11.57	S
10	20	90	293	23.3	6.60	15.3	5.8	257.2	0.820	0.238	8.06	10.24	13.18	54.46	14.81	10.21	7.33	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	21	90	294	2.3	6.13	24.1	84.5	263.1	0.787	0.186	8.26	8.83	14.21	49.40	11.33	12.99	12.07	G
10	21	90	294	5.3	6.28	6.9	191.6	285.1	0.767	0.224	8.06	9.48	3.95	55.83	18.29	15.66	6.28	G
10	21	90	294	8.3	6.84	28.9	277.3	276.6	0.785	0.306	7.11	9.48	3.33	68.74	9.79	9.62	8.53	G
10	21	90	294	11.3	6.84	28.6	326.2	287.9	0.749	0.224	7.47	10.24	6.17	55.44	16.11	17.70	4.57	G
10	21	90	294	14.3	6.26	27.8	66.2	277.6	0.771	0.195	7.59	10.24	5.16	53.59	14.54	17.59	9.13	G
10	21	90	294	17.3	6.23	15.1	160.8	252.9	0.808	0.230	6.48	8.26	3.05	42.23	19.94	17.15	17.62	S
10	21	90	294	20.3	6.68	18.0	250.0	291.6	0.760	0.258	6.65	9.48	4.33	36.42	30.32	19.15	9.78	G
10	21	90	294	23.3	6.73	19.0	348.6	279.7	0.800	0.233	6.83	10.24	6.02	48.29	14.18	24.05	7.46	G
10	22	90	295	2.3	6.29	16.4	96.7	280.6	0.879	0.169	7.47	8.83	5.51	53.30	12.97	22.88	5.34	G
10	22	90	295	5.3	6.30	11.3	133.4	279.4	0.812	0.210	7.26	8.26	3.06	33.59	41.91	18.17	3.28	G
10	22	90	295	8.3	6.80	20.3	257.5	293.0	0.806	0.252	6.87	8.83	3.26	29.05	36.98	23.10	7.60	G
10	22	90	295	11.3	6.94	19.7	324.6	273.8	0.621	0.243	7.31	9.48	3.29	42.11	32.77	16.28	5.55	G
10	22	90	295	14.3	6.42	22.0	75.7	277.2	0.775	0.174	8.19	8.83	7.92	52.63	23.37	10.86	5.22	G
10	22	90	295	17.3	6.28	17.3	108.0	281.3	0.811	0.174	7.37	7.76	3.76	37.91	39.75	13.90	4.67	G
10	22	90	295	20.3	6.63	6.4	266.7	285.7	0.740	0.237	6.32	7.76	3.66	31.04	33.10	17.50	14.70	G
10	22	90	295	23.3	6.79	12.5	304.0	278.4	0.802	0.272	6.17	7.76	3.40	24.00	36.19	19.04	17.37	S
10	23	90	296	2.3	6.44	11.9	77.2	276.0	0.847	0.184	6.61	8.26	7.85	31.06	23.51	26.37	11.21	G
10	23	90	296	5.3	6.27	14.8	139.7	277.8	0.783	0.185	6.28	7.76	3.86	28.36	30.89	24.67	12.22	G
10	23	90	296	8.3	6.67	17.0	259.9	289.6	0.783	0.219	5.95	8.26	5.03	33.76	24.20	17.19	19.82	G
10	23	90	296	11.3	6.89	25.5	319.2	282.0	0.787	0.246	6.21	7.76	3.96	15.62	32.90	32.03	15.49	G
10	23	90	296	14.3	6.60	9.6	5.3	271.5	0.774	0.243	7.01	6.56	3.30	19.13	62.69	11.14	3.74	G
10	23	90	296	17.3	6.27	34.9	97.7	277.3	0.759	0.270	7.21	7.76	2.30	17.78	60.40	17.07	2.45	G
10	23	90	296	20.3	6.43	3.8	187.4	297.6	0.773	0.323	7.59	8.83	2.29	49.14	31.82	14.78	1.97	G
10	23	90	296	23.3	6.77	7.8	287.4	292.6	0.778	0.318	8.19	8.83	6.63	52.86	27.61	10.61	2.29	G
10	24	90	297	2.3	6.57	8.6	89.3	278.3	0.679	0.189	8.83	9.48	11.62	59.45	16.06	7.79	5.08	G
10	24	90	297	5.3	6.30	25.8	134.1	241.4	0.618	0.186	4.92	9.48	6.64	35.81	10.21	11.13	36.21	S
10	24	90	297	8.3	6.55	16.1	214.5	242.0	0.661	0.277	5.75	8.26	5.29	33.55	16.57	20.63	23.96	S
10	24	90	297	11.3	6.94	16.8	310.5	264.4	0.582	0.266	6.44	8.26	5.61	36.94	20.07	24.63	12.75	G
10	24	90	297	14.3	6.70	22.3	354.6	253.7	0.540	0.217	7.16	8.83	15.31	38.41	13.18	26.24	6.85	G
10	24	90	297	17.3	6.32	20.4	74.3	294.3	0.629	0.170	7.76	8.26	15.77	40.93	20.33	13.90	9.07	G
10	24	90	297	20.3	6.45	11.3	104.9	278.9	0.797	0.199	7.59	7.31	13.12	26.53	41.87	12.56	5.91	G
10	24	90	297	23.3	6.76	14.3	328.8	266.7	0.734	0.223	8.06	7.76	7.31	34.58	46.31	8.83	2.97	G
10	25	90	298	2.3	6.63	17.9	19.0	285.5	0.715	0.177	8.39	8.26	12.72	40.65	33.36	8.09	5.18	G
10	25	90	298	5.3	6.33	22.0	75.9	254.1	0.652	0.205	6.02	10.24	7.71	39.01	19.77	8.12	25.39	G
10	25	90	298	8.3	6.51	14.5	201.7	243.3	0.564	0.301	5.02	3.51	6.39	17.27	27.48	7.90	40.96	G
10	25	90	298	11.3	6.94	21.6	259.7	208.8	0.527	0.314	5.57	8.83	9.25	27.22	18.78	15.10	29.65	G
10	25	90	298	14.3	6.94	16.1	324.6	199.1	0.662	0.592	4.72	4.34	5.05	7.52	4.54	68.72	14.17	G
10	25	90	298	17.3	6.66	18.7	114.6	195.3	0.752	0.780	4.92	5.22	2.77	4.62	7.66	69.01	15.93	G
10	25	90	298	20.3	6.72	15.0	181.9	195.2	0.673	0.926	5.17	5.45	1.42	5.57	15.33	66.83	10.85	G
10	25	90	298	23.3	7.17	24.3	231.5	214.7	0.570	1.575	5.85	5.95	0.99	5.80	28.34	57.15	7.72	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	26	90	299	2.3	7.42	21.7	191.8	193.7	0.692	1.772	6.40	7.76	1.09	6.70	54.70	30.22	7.30	G
10	26	90	299	5.3	7.35	46.1	152.1	198.2	0.807	1.693	6.40	6.56	1.73	10.78	54.11	23.32	10.07	G
10	26	90	299	8.3	7.24	40.3	139.2	193.3	0.737	1.430	6.24	6.92	3.05	16.73	41.37	28.21	10.64	G
10	26	90	299	11.3	7.39	25.9	151.4	182.7	0.628	1.335	6.65	10.24	8.51	30.95	23.07	29.66	7.82	G
10	26	90	299	14.3	7.40	13.2	348.4	279.3	0.567	1.095	7.88	10.24	11.14	37.74	25.24	22.35	3.52	G
10	26	90	299	17.3	7.14	21.4	46.9	202.2	0.595	0.880	7.01	10.24	13.49	29.48	13.82	34.14	9.07	G
10	26	90	299	20.3	6.94	15.1	84.4	213.8	0.650	0.803	6.61	12.19	28.21	18.20	11.80	32.42	9.38	G
10	26	90	299	23.3	7.10	14.7	176.2	201.1	0.532	1.054	7.16	10.24	17.06	30.55	14.49	31.63	6.28	G
10	27	90	300	2.3	7.28	10.8	310.5	277.8	0.631	0.904	7.59	13.47	20.00	26.10	17.23	33.21	3.45	G
10	27	90	300	5.3	7.08	9.8	311.3	170.3	0.582	0.626	6.56	12.19	22.19	16.77	14.68	33.93	12.43	G
10	27	90	300	8.3	6.88	8.1	322.6	249.7	0.542	0.528	6.97	10.24	18.81	23.30	14.26	34.81	8.81	G
10	27	90	300	11.3	7.12	15.3	323.3	285.3	0.733	0.671	7.94	12.19	27.72	34.89	8.44	24.85	4.11	G
10	27	90	300	14.3	7.35	22.7	319.8	288.0	0.782	0.645	8.98	12.19	34.95	23.47	15.53	22.79	3.27	G
10	27	90	300	17.3	7.14	15.4	343.2	283.0	0.784	0.368	8.26	11.13	32.46	31.39	15.55	18.21	2.40	G
10	27	90	300	20.3	6.80	3.8	56.4	275.0	0.816	0.270	9.14	12.19	27.67	37.15	15.93	17.14	2.10	G
10	27	90	300	23.3	6.92	9.9	242.8	283.2	0.822	0.333	8.33	10.24	22.90	42.22	20.20	12.71	1.97	G
10	28	90	301	2.3	7.16	16.9	314.8	278.3	0.756	0.306	8.90	9.48	29.38	40.55	14.08	13.72	2.26	G
10	28	90	301	5.3	6.95	11.2	316.9	280.1	0.733	0.237	9.57	13.47	57.75	23.62	8.35	6.14	4.14	G
10	28	90	301	8.3	6.56	16.5	104.7	283.3	0.832	0.192	11.77	12.19	52.14	37.52	5.16	2.82	2.35	G
10	28	90	301	11.3	6.77	28.7	184.3	285.1	0.884	0.225	9.94	12.19	40.14	43.73	10.00	3.81	2.32	G
10	28	90	301	14.3	7.22	21.3	223.6	278.1	0.709	0.222	9.14	12.19	29.91	44.98	10.79	9.97	4.35	G
10	28	90	301	17.3	7.14	17.6	137.9	304.8	0.629	0.182	8.98	11.13	30.58	50.02	8.53	4.68	6.19	G
10	28	90	301	20.3	6.84	25.8	130.7	209.0	0.683	0.310	4.36	11.13	10.10	23.44	2.40	22.00	42.06	G
10	28	90	301	23.3	6.83	30.1	182.7	200.5	0.848	0.521	4.70	5.02	3.54	7.55	1.86	61.40	25.65	G
10	29	90	302	2.3	7.16	18.6	219.3	193.6	0.744	0.493	5.00	4.83	4.52	11.05	5.78	57.29	21.36	G
10	29	90	302	5.3	7.20	10.7	335.2	196.8	0.836	0.544	5.28	5.45	6.89	8.95	9.17	64.72	10.26	G
10	29	90	302	8.3	6.77	22.7	84.7	203.7	0.804	0.469	4.68	5.02	5.42	6.31	3.19	62.79	22.28	G
10	29	90	302	11.3	6.69	12.9	159.7	204.4	0.775	0.351	4.88	4.65	8.27	10.60	4.31	59.74	17.08	G
10	29	90	302	14.3	7.01	10.6	310.2	179.3	0.608	0.323	5.82	9.48	12.31	22.85	11.04	36.94	16.87	G
10	29	90	302	17.3	7.16	18.4	328.0	171.5	0.642	0.285	5.39	4.65	14.76	16.56	10.24	43.87	14.56	G
10	29	90	302	20.3	6.75	9.8	58.3	205.9	0.772	0.282	4.97	4.49	19.70	8.15	4.72	52.32	15.11	G
10	29	90	302	23.3	6.58	14.0	144.0	213.5	0.692	0.303	5.25	4.34	10.78	13.27	12.33	44.32	19.29	G
10	30	90	303	2.3	7.03	12.2	257.2	288.2	0.647	0.417	5.85	6.56	6.26	8.51	32.29	40.65	12.28	G
10	30	90	303	5.3	7.25	30.0	319.4	284.6	0.693	0.394	5.95	5.95	15.25	10.30	22.91	37.50	14.04	G
10	30	90	303	8.3	6.85	10.1	358.9	274.7	0.640	0.236	6.92	13.47	25.57	17.79	17.52	28.82	10.31	G
10	30	90	303	11.3	6.55	14.3	128.3	279.3	0.746	0.195	7.42	13.47	26.94	19.32	18.92	21.82	12.99	G
10	30	90	303	14.3	6.89	16.4	240.5	282.9	0.789	0.219	7.53	12.19	22.57	16.17	24.53	31.61	5.12	G
10	30	90	303	17.3	7.23	22.3	315.7	280.8	0.757	0.239	6.92	6.92	18.98	9.52	43.91	23.06	4.54	G
10	30	90	303	20.3	6.83	11.0	41.4	278.2	0.795	0.173	9.23	13.47	38.54	16.88	25.25	15.23	4.10	G
10	30	90	303	23.3	6.40	28.0	112.1	279.4	0.868	0.161	9.31	12.19					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
10	31	90	304	2.3	6.77	25.2	225.0	271.0	0.758	0.162	9.48	12.19						GR
10	31	90	304	5.3	7.24	14.6	290.7	279.8	0.744	0.165	9.85	13.47						GR
10	31	90	304	8.3	6.98	24.1	351.2	275.9	0.729	0.166	10.24	15.06						GR
10	31	90	304	11.3	6.46	25.6	117.8	275.8	0.817	0.142	9.39	12.19						GR
10	31	90	304	14.3	6.65	13.4	176.4	296.0	0.672	0.155	8.53	11.13						GR
10	31	90	304	17.3	7.22	24.8	264.1	266.7	0.698	0.231	9.75	11.13						GR
10	31	90	304	20.3	6.98	16.8	355.5	285.3	0.695	0.138	11.01	11.13						GR
10	31	90	304	23.3	6.41	23.5	103.5	274.9	0.803	0.137	11.13	17.07						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	1	90	305	2.3	6.68	19.8	213.8	285.2	0.729	0.165	9.39	10.24						GR
11	1	90	305	5.3	7.32	25.3	282.9	279.2	0.741	0.193	9.48	10.24						GR
11	1	90	305	8.3	7.21	29.1	323.1	315.3	0.618	0.157	8.98	11.13						GR
11	1	90	305	11.3	6.52	37.0	82.1	269.1	0.699	0.211	8.68	12.19						GR
11	1	90	305	14.3	6.52	19.4	175.3	288.5	0.724	0.118	8.68	10.24						GR
11	1	90	305	17.3	7.11	17.3	266.3	288.1	0.818	0.199	8.75	10.24						GR
11	1	90	305	20.3	7.10	18.0	345.8	281.8	0.693	0.164	8.39	11.13						GR
11	1	90	305	23.3	6.41	26.6	106.7	275.8	0.790	0.123	8.61	9.48						GR
11	2	90	306	2.3	6.42	26.5	167.7	281.5	0.653	0.107	7.94	10.24						GR
11	2	90	306	5.3	7.14	33.2	257.9	256.1	0.641	0.211	7.76	7.31						GR
11	2	90	306	8.3	7.29	30.0	338.3	277.3	0.607	0.139	8.39	15.06						GR
11	2	90	306	11.3	6.57	22.6	75.6	280.6	0.729	0.127	8.75	11.13						GR
11	2	90	306	14.3	6.28	23.7	149.0	327.7	0.751	0.163	7.06	7.31						WR
11	2	90	306	17.3	6.86	22.9	245.6	294.1	0.740	0.154	7.37	6.56						GR
11	2	90	306	20.3	7.09	15.5	318.1	287.8	0.766	0.146	8.90	15.06						GR
11	2	90	306	23.3	6.50	15.1	76.6	276.1	0.748	0.119	9.14	8.83						GR
11	3	90	307	2.3	6.21	24.7	140.2	158.6	0.697	0.104	10.24	12.19						GR
11	3	90	307	5.3	6.88	36.1	245.1	288.8	0.677	0.168	8.19	7.31						GR
11	3	90	307	8.3	7.31	32.4	310.0	296.7	0.556	0.126	8.19	15.06						GR
11	3	90	307	11.3	6.76	16.2	9.4	287.9	0.664	0.104	11.01	15.06						GR
11	3	90	307	14.3	6.20	28.1	123.5	301.0	0.677	0.160	6.24	5.95						WR
11	3	90	307	17.3	6.60	17.6	216.0	279.0	0.700	0.108	9.06	12.19						GR
11	3	90	307	20.3	7.08	19.5	285.2	265.8	0.677	0.139	8.26	9.48						GR
11	3	90	307	23.3	6.68	16.0	18.7	291.9	0.663	0.119	9.31	15.06						GR
11	4	90	308	2.3	6.15	26.8	118.8	275.4	0.729	0.126	7.37	4.49						GR
11	4	90	308	5.3	6.65	28.2	232.4	275.7	0.755	0.170	8.13	8.83						GR
11	4	90	308	8.3	7.32	33.4	300.0	307.6	0.611	0.157	8.26	8.83						GR
11	4	90	308	11.3	7.02	28.8	339.2	293.2	0.614	0.133	9.06	8.83						GR
11	4	90	308	14.3	6.25	37.3	95.1	257.3	0.706	0.205	7.06	8.83						GR
11	4	90	308	17.3	6.43	19.4	194.5	283.0	0.669	0.132	8.33	8.26						GR
11	4	90	308	20.3	7.05	24.5	271.0	282.5	0.720	0.226	8.26	8.26						GR
11	4	90	308	23.3	6.89	21.4	343.2	293.7	0.714	0.158	9.66	10.24						GR
11	5	90	309	2.3	6.24	33.6	92.6	270.3	0.758	0.176	9.75	11.13						GR
11	5	90	309	5.3	6.44	16.8	198.0	292.7	0.705	0.143	8.53	9.48						GR
11	5	90	309	8.3	7.22	31.2	286.2	275.6	0.713	0.244	8.26	8.83						GR
11	5	90	309	11.3													M	
11	5	90	309	14.8	6.04	47.9	74.2	276.1	0.800	0.290	9.94	11.13						GR
11	5	90	309	17.8	6.03	15.4	162.9	272.9	0.754	0.240	7.11	9.48						GR
11	5	90	309	20.8	6.65	15.5	262.2	284.1	0.826	0.308	7.59	8.26						GR
11	5	90	309	23.8	6.62	16.2	348.5	281.7	0.703	0.208	8.26	11.13						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	6	90	310	2.8	5.99	38.8	79.6	273.8	0.749	0.200	9.75	12.19					GR	
11	6	90	310	5.8	6.02	21.7	159.2	284.9	0.648	0.118	9.48	8.83					GR	
11	6	90	310	8.8	6.77	30.5	256.1	270.8	0.788	0.299	7.70	7.31					GR	
11	6	90	310	11.8	7.10	22.3	325.1	302.2	0.825	0.292	9.85	8.83					GR	
11	6	90	310	14.8	6.47	16.5	46.7	201.7	0.583	0.190	4.36	3.94					GR	
11	6	90	310	17.8	6.19	23.8	120.9	153.9	0.574	0.228	5.57	5.45					GR	
11	6	90	310	20.8	6.62	15.7	220.4	299.7	0.591	0.187	7.11	8.83					GR	
11	6	90	310	23.8	6.87	11.8	293.1	202.7	0.630	0.331	4.21	4.06					GR	
11	7	90	311	2.8	6.41	27.1	79.7	201.9	0.691	0.387	4.55	4.83					GR	
11	7	90	311	5.8	6.11	28.9	126.2	207.0	0.645	0.255	4.15	4.20					GR	
11	7	90	311	8.8	6.59	20.3	238.2	290.4	0.570	0.245	6.10	7.31					GR	
11	7	90	311	11.8	6.93	28.9	314.9	299.1	0.719	0.233	6.74	7.76					GR	
11	7	90	311	14.8	6.46	23.0	10.4	278.4	0.708	0.182	6.74	8.83					GR	
11	7	90	311	17.8	6.02	29.6	96.1	287.0	0.741	0.170	8.98	6.92					GR	
11	7	90	311	20.8	6.26	15.9	205.8	287.9	0.706	0.156	7.16	8.26					GR	
11	7	90	311	23.8	6.71	19.2	273.8	282.8	0.790	0.207	7.70	8.26					GR	
11	8	90	312	2.8	6.60	12.1	104.2	196.0	0.836	0.588	4.51	4.49					GR	
11	8	90	312	5.8	6.23	42.6	134.3	193.6	0.744	0.837	5.07	5.02					GR	
11	8	90	312	8.8	6.52	25.4	202.0	190.6	0.843	0.693	4.92	5.22					GR	
11	8	90	312	11.8	6.99	25.3	297.9	197.9	0.618	0.541	4.65	5.45					GR	
11	8	90	312	14.8	6.86	26.6	335.6	251.1	0.556	0.317	5.45	6.24					GR	
11	8	90	312	17.8	6.34	32.2	69.6	227.6	0.597	0.261	5.36	4.49					GR	
11	8	90	312	20.8	6.32	9.4	151.5	214.7	0.689	0.420	4.18	3.71					GR	
11	8	90	312	23.8	6.77	21.9	278.1	280.2	0.557	0.300	6.02	6.56					GR	
11	9	90	313	2.8	6.83	30.1	320.7	281.2	0.608	0.280	5.99	3.32					GR	
11	9	90	313	5.8	6.36	24.6	46.7	253.2	0.612	0.208	5.33	3.82					GR	
11	9	90	313	8.8	6.31	14.1	110.1	290.2	0.687	0.211	6.21	8.26					GR	
11	9	90	313	11.8	6.84	23.8	271.0	282.5	0.724	0.249	7.31	8.26					GR	
11	9	90	313	14.8	6.96	23.8	323.1	298.8	0.797	0.192	7.16	6.92					GR	
11	9	90	313	17.8	6.57	18.4	4.2	278.7	0.706	0.409	4.83	3.82					GR	
11	9	90	313	20.8	6.29	24.3	105.2	279.0	0.851	0.400	5.12	4.83					GR	
11	9	90	313	23.8	6.68	13.7	247.8	276.0	0.758	0.431	5.42	5.02					GR	
11	10	90	314	2.8	6.83	19.3	290.7	280.0	0.811	0.584	5.31	5.69					GR	
11	10	90	314	5.8	6.48	16.5	36.1	280.5	0.859	0.542	6.02	6.56					GR	
11	10	90	314	8.8	6.15	28.0	103.9	277.8	0.863	0.576	6.78	7.76					GR	
11	10	90	314	11.8	6.46	5.8	153.7	285.8	0.863	0.767	7.26	8.83					GR	
11	10	90	314	14.8	6.79	13.3	248.0	289.2	0.846	0.596	8.33	11.13					GR	
11	10	90	314	17.8	6.59	16.6	85.1	223.9	0.583	0.398	4.97	3.94					GR	
11	10	90	314	20.8	6.26	39.3	129.8	208.0	0.603	0.308	4.63	3.71					GR	
11	10	90	314	23.8	6.34	20.6	190.3	189.8	0.634	0.316	5.00	3.71					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	11	90	315	2.8	6.72	17.0	272.4	245.5	0.529	0.225	5.95	11.13					GR	
11	11	90	315	5.8	6.65	17.7	337.5	259.2	0.570	0.198	7.06	10.24					GR	
11	11	90	315	8.8	6.16	37.5	93.6	253.7	0.639	0.167	11.25	12.19					GR	
11	11	90	315	11.8	6.33	11.2	175.2	302.1	0.541	0.150	6.87	9.48					GR	
11	11	90	315	14.8	6.69	16.9	278.7	189.9	0.590	0.227	4.76	4.06					GR	
11	11	90	315	17.8	6.62	21.7	324.4	257.7	0.654	0.207	4.97	11.13					GR	
11	11	90	315	20.8	5.93	49.0	71.9	253.7	0.786	0.204	11.25	10.24					GR	
11	11	90	315	23.8	5.77	24.0	91.8	231.2	0.786	0.218	5.72	2.75					GR	
11	12	90	316	2.8	6.32	22.1	225.0	253.9	0.679	0.126	6.87	9.48					GR	
11	12	90	316	5.8	6.49	6.0	306.3	272.3	0.711	0.108	8.13	10.24					GR	
11	12	90	316	8.8	6.20	21.1	107.3	182.6	0.647	0.125	4.06	2.94					GR	
11	12	90	316	11.8	6.01	28.9	154.2	189.0	0.763	0.206	4.72	3.94					GR	
11	12	90	316	14.8	6.35	20.4	234.4	223.1	0.612	0.169	6.24	3.94					GR	
11	12	90	316	17.8	6.48	13.5	320.8	295.1	0.775	0.165	6.92	6.92					GR	
11	12	90	316	20.8	6.00	21.7	72.1	255.2	0.638	0.129	7.59	9.48					GR	
11	12	90	316	23.8	5.93	23.7	149.8	201.3	0.793	0.334	3.61	3.16					GR	
11	13	90	317	2.8	6.32	21.2	233.2	196.2	0.670	0.321	4.68	4.20					GR	
11	13	90	317	5.8	6.64	28.5	315.3	321.9	0.601	0.224	5.69	3.71					GR	
11	13	90	317	8.8	6.26	20.3	19.3	294.7	0.534	0.157	6.44	7.31					GR	
11	13	90	317	11.8	5.89	30.9	114.5	206.1	0.762	0.291	4.20	3.82					GR	
11	13	90	317	14.8	6.15	9.5	200.2	194.4	0.702	0.257	4.32	4.83					GR	
11	13	90	317	17.8	6.49	21.0	294.7	195.4	0.706	0.255	4.28	4.20					GR	
11	13	90	317	20.8	6.28	13.3	25.9	197.7	0.852	0.366	3.95	3.94					GR	
11	13	90	317	23.8	6.00	31.9	122.0	199.5	0.882	0.508	4.97	5.02					GR	
11	14	90	318	2.8	6.32	20.3	207.1	187.0	0.879	0.725	4.63	5.02					GR	
11	14	90	318	5.8	6.81	20.9	283.2	187.5	0.687	0.482	4.70	4.49					GR	
11	14	90	318	8.8	6.64	22.0	346.4	195.4	0.755	0.441	4.76	5.45					GR	
11	14	90	318	11.8	6.09	28.2	81.6	208.1	0.694	0.275	4.61	5.45					GR	
11	14	90	318	14.8	6.22	8.6	214.6	242.3	0.553	0.231	5.12	4.83					GR	
11	14	90	318	17.8	6.63	21.2	294.6	287.7	0.680	0.221	6.02	6.56					GR	
11	14	90	318	20.8	6.50	23.8	344.8	254.9	0.588	0.161	6.83	7.76					GR	
11	14	90	318	23.8	6.05	34.0	69.8	267.6	0.851	0.180	9.06	7.31					GR	
11	15	90	319	2.8	6.28	9.8	211.0	279.8	0.872	0.195	6.36	6.24					GR	
11	15	90	319	5.8	6.83	30.9	310.8	280.3	0.772	0.210	6.78	15.06					GR	
11	15	90	319	8.8	6.78	30.3	326.1	297.1	0.769	0.183	9.85	36.57					GR	
11	15	90	319	11.8	6.19	28.9	84.8	269.0	0.763	0.115	7.94	7.31					GR	
11	15	90	319	14.8	6.20	18.3	152.9	274.6	0.612	0.095	6.87	6.24					GR	
11	15	90	319	17.8	6.65	15.4	272.5	267.7	0.710	0.176	8.53	8.83					GR	
11	15	90	319	20.8	6.58	10.1	359.9	281.6	0.757	0.152	7.94	8.83					GR	
11	15	90	319	23.8	6.08	25.0	91.2	262.8	0.667	0.096	9.75	28.44					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	16	90	320	2.8	6.11	20.2	149.5	297.3	0.603	0.078	9.75	15.06					GR	
11	16	90	320	5.8	6.63	22.7	255.2	277.0	0.770	0.118	8.39	6.92					GR	
11	16	90	320	8.8	6.70	22.3	324.1	296.1	0.775	0.137	8.06	15.06					GR	
11	16	90	320	11.8	6.14	14.8	72.3	276.8	0.736	0.083	7.88	17.07					GR	
11	16	90	320	14.8	5.93	22.7	147.7	299.3	0.627	0.081	7.01	5.22					GR	
11	16	90	320	17.8	6.40	17.0	261.0	280.5	0.741	0.105	8.19	8.83					GR	
11	16	90	320	20.8	6.48	17.2	329.1	290.8	0.818	0.142	8.33	15.06					GR	
11	16	90	320	23.8	6.01	13.1	63.3	273.2	0.620	0.085	7.70	10.24					GR	
11	17	90	321	2.8	5.89	16.1	126.0	285.4	0.721	0.119	7.76	15.06					GR	
11	17	90	321	5.8	6.46	21.4	256.9	288.8	0.686	0.169	6.83	5.69					GR	
11	17	90	321	8.8	6.84	25.9	320.0	172.3	0.667	0.266	4.79	3.82					GR	
11	17	90	321	11.8	6.35	13.0	51.1	200.3	0.911	0.447	4.36	4.49					GR	
11	17	90	321	14.8	6.08	29.2	125.2	204.1	0.840	0.388	4.36	4.49					GR	
11	17	90	321	17.8	6.51	21.0	228.3										S	
11	17	90	321	20.8	6.81	23.0	316.8	192.0	0.679	0.377	4.59	5.02					GR	
11	17	90	321	23.8	6.61	13.6	19.9	202.8	0.798	0.791	4.70	5.45					GR	
11	18	90	322	2.8	6.44	26.2	136.3	195.4	0.810	1.137	5.39	6.24					GR	
11	18	90	322	5.8	6.89	15.6	256.6	199.4	0.742	1.336	5.20	5.95					GR	
11	18	90	322	8.8	7.28	32.0	320.1	199.6	0.642	0.999	5.33	6.24					GR	
11	18	90	322	11.8	6.90	27.2	348.8	207.4	0.699	0.747	5.45	6.24					GR	
11	18	90	322	14.8	6.39	31.0	74.8	223.0	0.644	0.415	5.51	5.95					GR	
11	18	90	322	17.8	6.61	1.7	22.9	276.5	0.555	0.364	6.69	8.26					GR	
11	18	90	322	20.8	6.96	20.9	312.9	276.2	0.625	0.404	6.48	8.83					GR	
11	18	90	322	23.8	6.78	17.9	358.8	242.0	0.632	0.493	5.85	10.24					GR	
11	19	90	323	2.8	6.43	22.5	73.5	256.9	0.574	0.364	6.92	10.24					GR	
11	19	90	323	5.8	6.71	6.6	231.4	295.4	0.675	0.470	7.53	9.48					GR	
11	19	90	323	8.8	7.19	30.2	302.5	283.4	0.834	0.742	8.26	10.24					GR	
11	19	90	323	11.8	6.94	24.0	343.8	274.5	0.691	0.385	9.06	11.13					GR	
11	19	90	323	14.8	6.40	36.2	76.6	266.7	0.741	0.318	9.39	12.19					GR	
11	19	90	323	17.8	6.54	13.1	145.8	284.0	0.800	0.503	9.06	12.19					GR	
11	19	90	323	20.8	6.95	18.4	275.0	283.8	0.754	0.403	8.61	11.13					GR	
11	19	90	323	23.8	6.81	18.6	357.9	275.9	0.824	0.336	9.14	12.19					GR	
11	20	90	324	2.8	6.42	28.9	93.1	282.6	0.824	0.256	10.56	13.47					GR	
11	20	90	324	5.8	6.63	16.4	185.7	286.3	0.764	0.226	8.68	11.13					GR	
11	20	90	324	8.8	7.17	20.2	270.8	287.3	0.827	0.370	10.04	11.13					GR	
11	20	90	324	11.8	7.09	15.3	11.6	252.3	0.584	0.302	7.42	12.19					GR	
11	20	90	324	14.8	6.57	27.5	87.8	214.2	0.656	0.342	4.68	3.94					GR	
11	20	90	324	17.8	6.50	14.9	125.8	262.0	0.584	0.215	6.87	10.24					GR	
11	20	90	324	20.8	6.85	8.7	266.1	281.3	0.781	0.233	7.26	10.24					GR	
11	20	90	324	23.8	6.86	13.8	12.0	272.6	0.658	0.203	7.37	11.13					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	21	90	325	2.8	6.47	21.2	74.7	256.9	0.660	0.186	6.44	10.24					GR	
11	21	90	325	5.8	6.50	12.8	152.7	287.1	0.757	0.169	7.16	10.24					GR	
11	21	90	325	8.8	6.95	17.0	263.6										S	
11	21	90	325	11.8	6.99	28.4	326.4	295.3	0.788	0.259	6.97	10.24					GR	
11	21	90	325	14.8	6.50	17.8	50.7	281.5	0.786	0.178	6.28	10.24					GR	
11	21	90	325	17.8	6.37	16.6	122.7	290.6	0.821	0.172	7.06	10.24					GR	
11	21	90	325	20.8	6.68	11.5	233.7	288.2	0.788	0.199	6.56	5.69					GR	
11	21	90	325	23.8	6.79	4.9	337.4	285.4	0.836	0.217	6.69	8.83					GR	
11	22	90	326	2.8	6.42	15.0	76.0	279.3	0.807	0.144	7.21	10.24					GR	
11	22	90	326	5.8	6.33	18.6	127.6	291.0	0.820	0.155	7.47	9.48					GR	
11	22	90	326	8.8	6.73	18.5	240.7	284.8	0.774	0.189	7.26	8.26					GR	
11	22	90	326	11.8	6.92	20.7	319.5	292.4	0.776	0.176	8.90	8.83					GR	
11	22	90	326	14.8	6.54	17.9	8.5	275.4	0.773	0.151	7.37	7.31					GR	
11	22	90	326	17.8	6.30	20.4	86.9	277.3	0.804	0.180	7.94	8.26					GR	
11	22	90	326	20.8	6.55	13.1	212.3	279.4	0.772	0.205	6.13	5.69					GR	
11	22	90	326	23.8	6.75	13.5	342.9	280.8	0.731	0.203	6.40	8.26					GR	
11	23	90	327	2.8	6.46	12.9	2.0	278.9	0.710	0.133	7.21	8.26					GR	
11	23	90	327	5.8	6.25	26.2	117.1	287.1	0.796	0.144	7.16	8.83					GR	
11	23	90	327	8.8	6.57	14.1	208.5	279.9	0.770	0.180	6.92	7.76					GR	
11	23	90	327	11.8	6.85	7.5	251.2	283.8	0.784	0.201	7.31	7.31					GR	
11	23	90	327	14.8	6.59	12.4	11.7	288.5	0.766	0.174	7.88	9.48					GR	
11	23	90	327	17.8	6.28	22.1	88.1	280.7	0.823	0.139	7.59	7.31					GR	
11	23	90	327	20.8	6.39	8.9	112.6	290.5	0.844	0.157	7.59	7.76					GR	
11	23	90	327	23.8	6.69	12.5	262.8	280.9	0.776	0.172	7.26	8.83					GR	
11	24	90	328	2.8	6.53	15.0	356.8	254.9	0.708	0.150	6.65	10.24					GR	
11	24	90	328	5.8	6.27	26.8	94.5	276.8	0.695	0.125	9.31	9.48					GR	
11	24	90	328	8.8	6.46	20.8	227.8	280.1	0.541	0.108	6.24	9.48					GR	
11	24	90	328	11.8	6.72	20.0	278.6	263.1	0.724	0.165	6.36	11.13					GR	
11	24	90	328	14.8	6.60	5.7	317.9	272.5	0.755	0.141	7.06	12.19					GR	
11	24	90	328	17.8	6.18	34.3	72.1	264.9	0.799	0.123	11.13	9.48					GR	
11	24	90	328	20.8	6.19	13.0	121.1	303.2	0.708	0.103	9.66	11.13					GR	
11	24	90	328	23.8	6.53	9.0	248.5	267.1	0.765	0.166	7.21	11.13					GR	
11	25	90	329	2.8	6.49	8.6	28.0	266.6	0.738	0.137	6.32	10.24					GR	
11	25	90	329	5.8	6.08	26.1	70.4	262.9	0.799	0.108	8.61	11.13					GR	
11	25	90	329	8.8	6.06	17.8	111.9	308.6	0.674	0.132	7.47	9.48					GR	
11	25	90	329	11.8	6.40	12.1	248.5	271.8	0.768	0.113	6.87	9.48					GR	
11	25	90	329	14.8	6.53	9.4	320.9	263.1	0.757	0.123	6.44	10.24					GR	
11	25	90	329	17.8	6.16	13.1	48.3	273.1	0.740	0.077	8.13	17.07					GR	
11	25	90	329	20.8	6.02	21.5	121.0	294.6	0.714	0.117	10.34	23.27					WR	
11	25	90	329	23.8	6.40	13.1	223.7	296.3	0.729	0.141	6.65	7.31					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
11	26	90	330	2.8	6.61	3.4	274.0	281.9	0.809	0.143	6.83	17.07					GR	
11	26	90	330	5.8	6.29	15.0	73.3	277.1	0.801	0.121	7.42	17.07					GR	
11	26	90	330	8.8	6.08	23.4	99.5	274.9	0.687	0.119	8.98	17.07					GR	
11	26	90	330	11.8	6.38	17.2	226.1	295.8	0.755	0.146	6.83	15.06					GR	
11	26	90	330	14.8	6.64	13.3	318.8	291.8	0.791	0.146	8.53	15.06					GR	
11	26	90	330	17.8	6.39	14.7	53.2	266.9	0.655	0.103	8.68	19.69					GR	
11	26	90	330	20.8	6.08	21.8	113.1	280.3	0.728	0.108	9.48	17.07					GR	
11	26	90	330	23.8	6.43	5.6	255.6	285.1	0.776	0.135	8.53	17.07					GR	
11	27	90	331	2.8	6.80	19.2	300.6	273.3	0.747	0.164	12.19	15.06					GR	
11	27	90	331	5.8	6.58	17.8	337.7	278.7	0.668	0.158	9.57	17.07					GR	
11	27	90	331	8.8	6.21	28.2	78.9	263.0	0.793	0.169	11.38	15.06					GR	
11	27	90	331	11.8	6.33	9.8	139.5	280.3	0.797	0.154	10.14	17.07					GR	
11	27	90	331	14.8	6.71	11.0	318.5	284.8	0.817	0.176	9.66	15.06					GR	
11	27	90	331	17.8	6.56	10.2	39.7	288.6	0.827	0.197	9.39	15.06					GR	
11	27	90	331	20.8	6.07	38.6	85.0	276.9	0.820	0.189	11.91	15.06					GR	
11	27	90	331	23.8	6.20	12.3	167.9	286.2	0.745	0.135	8.13	13.47					GR	
11	28	90	332	2.8	6.74	18.2	287.4	256.7	0.796	0.253	6.13	13.47					GR	
11	28	90	332	5.8	6.74	17.9	328.6	284.3	0.772	0.163	8.98	13.47					GR	
11	28	90	332	8.8	6.24	23.2	72.4	271.1	0.861	0.148	9.75	15.06					GR	
11	28	90	332	11.8	6.18	19.0	96.6	279.4	0.769	0.155	9.06	13.47					GR	
11	28	90	332	14.8	6.56	13.4	278.4	280.9	0.764	0.185	6.02	12.19					GR	
11	28	90	332	17.8	6.68	8.5	316.5	273.0	0.719	0.191	6.21	15.06					GR	
11	28	90	332	20.8	6.09	39.7	80.0	272.9	0.703	0.163	11.01	13.47					GR	
11	28	90	332	23.8	6.01	18.8	140.3	298.8	0.709	0.123	7.59	12.19					GR	
11	29	90	333	2.8	6.52	26.4	255.3	270.7	0.806	0.210	6.48	12.19					GR	
11	29	90	333	5.8	6.75	12.4	342.8	281.3	0.765	0.176	6.44	5.69					GR	
11	29	90	333	8.8	6.48	16.7	83.9	204.9	0.843	0.510	3.98	3.82					GR	
11	29	90	333	11.8	6.15	38.9	142.2	198.3	0.812	0.735	4.55	4.83					GR	
11	29	90	333	14.8	6.53	23.8	220.8	197.1	0.802	0.439	4.74	4.49					GR	
11	29	90	333	17.8	6.81	18.4	300.6	204.5	0.727	0.495	4.55	4.20					GR	
11	29	90	333	20.8	6.43	33.0	85.1	196.9	0.806	0.545	4.38	5.02					GR	
11	29	90	333	23.8	6.21	36.3	134.2	201.3	0.835	0.835	4.63	5.02					GR	
11	30	90	334	2.8	6.61	19.9	230.1	194.0	0.749	0.546	4.72	4.49					GR	
11	30	90	334	5.8	7.12	33.4	310.4	192.7	0.692	0.536	4.83	5.45					GR	
11	30	90	334	8.8	6.86	26.9	343.9	201.7	0.791	0.790	4.97	5.45					GR	
11	30	90	334	11.8	6.23	31.9	82.8	218.6	0.658	0.351	5.20	5.69					GR	
11	30	90	334	14.8	6.33	1.2	204.1	279.3	0.562	0.253	6.06	6.24					GR	
11	30	90	334	17.8	6.82	31.1	302.4	284.2	0.700	0.239	7.42	6.24					GR	
11	30	90	334	20.8	6.61	30.4	2.4	265.3	0.616	0.152	7.64	9.48					GR	
11	30	90	334	23.8	6.08	31.5	77.4	267.0	0.810	0.151	9.23	8.26					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	1	90	335	2.8	6.31	12.4	239.6	288.0	0.786	0.160	6.78	7.76					GR	
12	1	90	335	5.8	6.99	43.0	305.6	290.3	0.729	0.223	9.66	13.47					GR	
12	1	90	335	8.8	6.88	24.9	332.6	273.9	0.715	0.169	7.06	7.76					GR	
12	1	90	335	11.8	6.11	54.5	80.0	265.1	0.716	0.217	10.34	36.57					GR	
12	1	90	335	14.8	6.11	20.6	158.9	320.2	0.655	0.090	8.06	9.48					GR	
12	1	90	335	17.8	6.69	20.8	262.4	287.7	0.776	0.166	8.39	8.26					GR	
12	1	90	335	20.8	6.67	15.0	336.9	275.2	0.753	0.154	7.64	11.13					GR	
12	1	90	335	23.8	6.05	41.3	98.1	272.5	0.734	0.159	13.30	23.27					GR	
12	2	90	336	2.8	6.03	20.8	166.6	322.9	0.586	0.072	8.53	36.57					GR	
12	2	90	336	5.8	6.80	31.7	276.1	282.4	0.775	0.187	10.45	8.83					GR	
12	2	90	336	8.8	6.98	26.8	331.4	286.8	0.714	0.170	8.39	11.13					GR	
12	2	90	336	11.8	6.31	23.4	66.7	268.9	0.758	0.108	9.57	13.47					GR	
12	2	90	336	14.8	5.99	25.5	134.0	307.8	0.726	0.103	9.39	11.13					GR	
12	2	90	336	17.8	6.55	13.4	269.0	291.8	0.743	0.141	7.94	9.48					GR	
12	2	90	336	20.8	6.84	20.4	325.7	292.2	0.797	0.147	9.85	10.24					GR	
12	2	90	336	23.8	6.35	17.0	52.5	275.9	0.784	0.128	9.39	11.13					GR	
12	3	90	337	2.8	6.11	21.4	136.2	231.3	0.727	0.230	3.78	3.01					GR	
12	3	90	337	5.8	6.79	28.6	264.5										S	
12	3	90	337	8.8	7.33	54.1	314.9	289.2	0.790	0.490	6.74	4.83					GR	
12	3	90	337	11.8	6.82	28.6	7.3	271.7	0.785	0.379	5.36	5.45					GR	
12	3	90	337	14.8	6.15	26.8	95.6	280.7	0.828	0.322	5.69	6.56					GR	
12	3	90	337	17.8	6.49	10.5	228.9	290.3	0.825	0.383	4.95	5.69					GR	
12	3	90	337	20.8	6.96	26.3	302.0	287.3	0.854	0.470	5.63	5.69					GR	
12	3	90	337	23.8	6.73	17.6	9.0	277.5	0.776	0.338	6.28	6.56					GR	
12	4	90	338	2.8	6.12	30.8	94.1	280.7	0.799	0.388	6.69	8.83					GR	
12	4	90	338	5.8	6.40	17.2	228.2	286.8	0.764	0.388	6.32	6.92					GR	
12	4	90	338	8.8	7.05	31.0	291.0	281.8	0.797	0.478	8.19	7.76					GR	
12	4	90	338	11.8	6.92	16.5	340.7	282.9	0.777	0.306	9.66	15.06					GR	
12	4	90	338	14.8	6.38	42.5	114.8	277.8	0.764	0.265	10.89	10.24					GR	
12	4	90	338	17.8	6.35	27.9	168.4	173.2	0.637	0.223	6.02	4.06					GR	
12	4	90	338	20.8	6.91	22.6	224.7	290.1	0.609	0.275	8.26	10.24					GR	
12	4	90	338	23.8	6.82	11.8	108.6	210.3	0.533	0.239	4.68	3.82					GR	
12	5	90	339	2.8	6.25	38.2	110.2	249.8	0.601	0.156	7.47	36.57					GR	
12	5	90	339	5.8	6.18	25.2	158.5	163.3	0.643	0.109	7.42	36.57					GR	
12	5	90	339	8.8	6.79	22.8	274.0	190.8	0.559	0.225	4.76	4.06					GR	
12	5	90	339	11.8	6.92	22.4	329.6										S	
12	5	90	339	14.8	6.33	27.0	82.2	235.1	0.584	0.148	6.40	5.02					GR	
12	5	90	339	17.8	6.10	23.3	144.1	208.1	0.700	0.189	4.97	3.94					GR	
12	5	90	339	20.8	6.47	18.6	258.3	276.3	0.736	0.127	9.31	8.26					GR	
12	5	90	339	23.8	6.66	17.6	322.7	283.2	0.675	0.126	8.90	11.13					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	6	90	340	2.8	6.18	19.8	45.1	271.5	0.706	0.094	9.31	12.19					GR	
12	6	90	340	5.8	5.94	16.6	129.3	257.7	0.688	0.116	7.82	11.13					GR	
12	6	90	340	8.8	6.47	21.9	260.1	252.5	0.763	0.189	7.31	11.13					GR	
12	6	90	340	11.8	6.78	35.7	322.4	298.0	0.744	0.179	11.77	13.47					GR	
12	6	90	340	14.8	6.31	22.5	16.1	272.1	0.641	0.123	9.31	15.06					GR	
12	6	90	340	17.8	5.96	22.6	117.6	286.6	0.691	0.094	11.38	15.06					GR	
12	6	90	340	20.8	6.24	16.6	209.8	280.3	0.671	0.122	8.53	12.19					GR	
12	6	90	340	23.8	6.67	18.3	279.9	277.5	0.811	0.171	9.66	13.47					GR	
12	7	90	341	2.8	6.42	14.3	29.4	277.9	0.806	0.154	11.25	13.47					GR	
12	7	90	341	5.8	6.02	25.0	102.2	284.3	0.701	0.104	11.25	13.47					GR	
12	7	90	341	8.8	6.40	17.6	224.0	289.4	0.636	0.120	8.26	13.47					GR	
12	7	90	341	11.8	6.90	22.6	302.0	254.1	0.627	0.184	8.33	12.19					GR	
12	7	90	341	14.8	6.69	24.6	334.7	287.8	0.730	0.156	9.06	13.47					GR	
12	7	90	341	17.8	6.19	32.4	79.3	270.4	0.735	0.156	12.49	12.19					GR	
12	7	90	341	20.8	6.31	11.0	167.3	283.2	0.703	0.122	9.57	12.19					GR	
12	7	90	341	23.8	6.83	15.5	289.1	286.5	0.778	0.161	9.48	11.13					GR	
12	8	90	342	2.8	6.86	30.5	323.9	306.9	0.773	0.183	12.96	12.19					GR	
12	8	90	342	5.8	6.39	15.9	46.7	217.4	0.716	0.231	4.16	3.61					GR	
12	8	90	342	8.8	6.44	15.5	162.9	200.0	0.761	0.339	4.25	3.82					GR	
12	8	90	342	11.8	7.01	20.0	251.7	196.0	0.777	0.548	4.59	4.65					GR	
12	8	90	342	14.8	7.02	11.3	12.9	201.7	0.656	0.591	4.68	4.83					GR	
12	8	90	342	17.8	6.50	28.9	76.8	239.7	0.620	0.431	5.22	5.45					GR	
12	8	90	342	20.8	6.37	17.3	116.1	210.6	0.563	0.358	4.38	3.94					GR	
12	8	90	342	23.8	6.75	7.5	321.2	292.8	0.744	0.352	6.61	5.95					GR	
12	9	90	343	2.8	7.11	17.1	332.5	170.4	0.568	0.440	4.53	4.20					GR	
12	9	90	343	5.8	6.74	16.0	60.9	216.5	0.637	0.552	5.00	5.22					GR	
12	9	90	343	8.8	6.49	17.8	102.4	240.6	0.566	0.421	5.72	7.31					GR	
12	9	90	343	11.8	6.79	4.7	261.1	293.5	0.666	0.422	6.56	6.92					GR	
12	9	90	343	14.8	6.94	15.7	336.2	288.9	0.728	0.334	7.21	7.76					GR	
12	9	90	343	17.8	6.55	20.2	40.6	280.7	0.784	0.220	7.76	8.83					GR	
12	9	90	343	20.8	6.19	25.6	93.3	278.0	0.840	0.215	10.34	8.83					GR	
12	9	90	343	23.8	6.51	10.4	245.9	287.5	0.885	0.234	7.88	8.26					GR	
12	10	90	344	2.8	6.83	12.7	304.8	291.0	0.831	0.253	8.26	9.48					GR	
12	10	90	344	5.8	6.53	12.5	6.4	277.0	0.799	0.160	8.75	10.24					GR	
12	10	90	344	8.8	6.18	27.5	96.3	275.1	0.750	0.175	11.13	9.48					GR	
12	10	90	344	11.8	6.27	13.9	181.0	292.4	0.689	0.127	7.82	8.83					GR	
12	10	90	344	14.8	6.61	10.7	262.4	281.2	0.811	0.163	9.75	8.83					GR	
12	10	90	344	17.8	6.44	15.7	54.6	276.7	0.751	0.114	8.83	10.24					GR	
12	10	90	344	20.8	6.09	26.4	108.9	285.9	0.695	0.117	13.30	11.13					GR	
12	10	90	344	23.8	6.26	22.3	190.7	325.1	0.547	0.105	8.26	11.13					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	11	90	345	2.8	6.77	17.9	246.3	201.8	0.668	0.233	4.53	3.51					GR	
12	11	90	345	5.8	6.81	11.3	16.6	202.3	0.851	0.520	4.65	5.45					GR	
12	11	90	345	8.8	6.37	24.1	83.0	221.6	0.645	0.427	4.57	5.45					GR	
12	11	90	345	11.8	6.28	13.1	99.6	230.3	0.539	0.265	4.53	4.34					GR	
12	11	90	345	14.8	6.60	10.5	293.3	293.8	0.734	0.245	5.82	7.31					GR	
12	11	90	345	17.8	6.59	23.9	329.7	296.5	0.791	0.216	7.64	7.76					GR	
12	11	90	345	20.8	6.17	29.2	57.2	264.4	0.721	0.153	7.59	6.92					GR	
12	11	90	345	23.8	6.15	9.7	87.3	280.2	0.821	0.167	6.28	13.47					GR	
12	12	90	346	2.8	6.59	14.2	258.3	276.6	0.840	0.182	7.16	6.56					GR	
12	12	90	346	5.8	6.76	32.1	320.8	306.8	0.771	0.172	10.78	36.57					GR	
12	12	90	346	8.8													M	
12	12	90	346	11.8													M	
12	12	90	346	12.5	6.20	13.5	133.9	285.9	0.790	0.157	8.61	12.19					GR	
12	12	90	346	15.5	6.59	10.9	288.7	294.9	0.814	0.166	7.59	13.47					GR	
12	12	90	346	18.5	6.59	10.7	341.9	285.6	0.829	0.166	7.82	13.47					GR	
12	12	90	346	21.5	6.14	18.6	90.0	283.7	0.820	0.155	7.06	12.19					GR	
12	13	90	347	0.5	6.08	18.0	151.0	288.1	0.783	0.110	7.16	11.13					GR	
12	13	90	347	3.5	6.54	24.4	264.2	291.4	0.756	0.146	8.46	12.19					GR	
12	13	90	347	6.5	6.69	29.6	311.0	291.7	0.726	0.142	8.90	13.47					GR	
12	13	90	347	9.5	6.23	13.8	15.0	284.3	0.728	0.114	7.76	13.47					GR	
12	13	90	347	12.5	5.98	22.1	121.8	287.2	0.770	0.107	8.83	11.13					GR	
12	13	90	347	15.5	6.32	17.2	249.3	284.9	0.817	0.146	6.83	10.24					GR	
12	13	90	347	18.5	6.54	17.9	322.9	303.4	0.723	0.173	7.21	7.76					GR	
12	13	90	347	21.5	6.20	14.4	53.7	274.2	0.799	0.126	7.06	8.26					GR	
12	14	90	348	0.5	6.23	24.0	183.0	203.4	0.821	0.497	3.91	3.71					GR	
12	14	90	348	3.5	6.67	26.4	220.1	192.8	0.864	0.830	5.04	5.22					GR	
12	14	90	348	6.5	7.14	22.4	288.7	185.5	0.748	0.868	5.12	5.95					GR	
12	14	90	348	9.5	6.85	16.6	15.4	180.1	0.608	0.709	4.85	5.22					GR	
12	14	90	348	12.5	6.35	22.3	95.2	202.8	0.616	0.383	4.59	5.45					GR	
12	14	90	348	15.5	6.50	3.9	290.3	291.1	0.655	0.331	5.17	8.26					GR	
12	14	90	348	18.5	6.77	25.7	307.1	288.5	0.790	0.333	6.36	7.76					GR	
12	14	90	348	21.5	6.54	18.5	23.2	276.9	0.717	0.220	5.85	5.95					GR	
12	15	90	349	0.5	6.18	17.7	96.0	281.2	0.719	0.230	6.06	6.92					GR	
12	15	90	349	3.5	6.50	19.9	260.8	289.0	0.788	0.235	5.28	6.92					GR	
12	15	90	349	6.5	6.92	27.4	305.7	289.8	0.833	0.291	5.89	7.76					GR	
12	15	90	349	9.5	6.73	26.3	335.8	285.8	0.810	0.257	5.66	5.69					GR	
12	15	90	349	12.5	6.21	28.0	86.7	282.6	0.754	0.189	7.88	5.69					GR	
12	15	90	349	15.5	6.23	9.6	171.9	289.8	0.869	0.197	6.36	5.95					GR	
12	15	90	349	18.5	6.63	20.7	284.3	295.3	0.810	0.241	6.87	5.95					GR	
12	15	90	349	21.5	6.43	19.0	327.6	291.3	0.804	0.192	6.97	6.92					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	16	90	350	0.5	6.02	22.3	82.8	283.1	0.820	0.192	7.06	7.31						GR
12	16	90	350	3.5	6.16	10.6	193.6	284.8	0.812	0.184	6.87	6.92						GR
12	16	90	350	6.5	6.67	22.7	271.6	287.5	0.750	0.199	7.70	7.31						GR
12	16	90	350	9.5	6.69	20.1	329.5	288.1	0.804	0.171	8.06	6.92						GR
12	16	90	350	12.5	6.12	28.4	101.5	274.7	0.780	0.147	9.39	8.26						GR
12	16	90	350	15.5	6.13	19.3	144.1	302.1	0.622	0.081	7.37	6.92						GR
12	16	90	350	18.5	6.63	27.1	249.6	281.8	0.757	0.202	7.59	7.76						GR
12	16	90	350	21.5	6.65	7.5	329.8	287.0	0.788	0.157	7.37	8.26						GR
12	17	90	351	0.5	6.21	25.5	103.4	194.1	0.663	0.273	4.32	3.51						GR
12	17	90	351	3.5	6.17	12.3	154.7	196.0	0.740	0.224	4.13	3.82						GR
12	17	90	351	6.5	6.68	25.4	275.7	296.0	0.643	0.201	6.65	7.31						GR
12	17	90	351	9.5	6.78	35.5	320.6	315.8	0.697	0.169	8.75	13.47						GR
12	17	90	351	12.5	6.20	15.9	54.4	263.7	0.726	0.123	7.16	8.83						GR
12	17	90	351	15.5	5.99	16.6	126.0	285.0	0.647	0.108	8.39	7.31						GR
12	17	90	351	18.5	6.43	19.7	259.3	289.1	0.768	0.169	6.78	7.31						GR
12	17	90	351	21.5	6.54	26.3	315.0	289.6	0.732	0.148	7.76	8.26						GR
12	18	90	352	0.5	6.11	12.4	40.9	276.0	0.788	0.123	7.59	8.26						GR
12	18	90	352	3.5	5.95	11.2	121.2	288.7	0.848	0.159	7.21	8.83						GR
12	18	90	352	6.5	6.44	26.8	278.4	290.7	0.778	0.184	8.13	7.31						GR
12	18	90	352	9.5	6.70	36.4	309.5	313.1	0.732	0.183	7.82	7.31						GR
12	18	90	352	12.5	6.22	14.1	4.9	292.2	0.733	0.150	9.57	8.83						GR
12	18	90	352	15.5	5.82	25.2	102.1	294.1	0.713	0.181	7.88	5.22						GR
12	18	90	352	18.5	6.20	17.3	233.2	287.9	0.704	0.191	6.17	7.31						GR
12	18	90	352	21.5	6.46	14.7	293.8	284.7	0.787	0.207	5.72	7.76						GR
12	19	90	353	0.5	6.17	15.2	74.5	286.7	0.819	0.223	6.74	6.24						GR
12	19	90	353	3.5	5.98	23.8	132.7	294.8	0.690	0.123	7.42	8.83						GR
12	19	90	353	6.5	6.41	26.8	238.0	277.0	0.802	0.210	7.01	6.92						GR
12	19	90	353	9.5	6.84	18.4	300.4	290.7	0.842	0.250	6.83	7.31						GR
12	19	90	353	12.5	6.58	16.7	21.3	187.3	0.730	0.275	4.05	3.51						GR
12	19	90	353	15.5	6.16	25.4	119.3	202.6	0.667	0.226	4.03	3.61						GR
12	19	90	353	18.5	6.40	17.9	229.1	299.1	0.588	0.170	7.06	8.83						GR
12	19	90	353	21.5	6.80	21.2	297.8	299.9	0.680	0.236	5.89	5.02						GR
12	20	90	354	0.5	6.61	17.5	26.2	237.7	0.567	0.269	4.41	3.94						GR
12	20	90	354	3.5	6.30	17.1	115.1	199.8	0.684	0.360	4.34	4.20						GR
12	20	90	354	6.5	6.56	18.6	240.3	276.6	0.523	0.313	5.45	5.22						GR
12	20	90	354	9.5	7.08	28.2	308.8	286.3	0.772	0.502	4.97	5.69						GR
12	20	90	354	12.5	6.86	32.4	339.1	288.7	0.750	0.332	5.63	6.92						GR
12	20	90	354	15.5	6.36	21.6	75.5	265.1	0.685	0.374	4.88	3.71						GR
12	20	90	354	18.5	6.49	6.3	231.8	289.6	0.799	0.393	5.66	6.24						GR
12	20	90	354	21.5	6.89	19.9	290.2	291.8	0.851	0.552	5.60	6.24						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	21	90	355	0.5	6.80	16.4	335.3	291.0	0.854	0.459	6.10	6.92					GR	
12	21	90	355	3.5	6.34	18.6	92.7	281.7	0.814	0.283	6.17	6.92					GR	
12	21	90	355	6.5	6.48	10.9	216.4	289.5	0.824	0.287	6.36	7.76					GR	
12	21	90	355	9.5	6.96	20.1	277.5	292.0	0.842	0.448	6.44	6.56					GR	
12	21	90	355	12.5	6.90	23.3	318.0	296.7	0.788	0.353	7.37	7.76					GR	
12	21	90	355	15.5	6.33	26.3	87.7	281.9	0.825	0.294	8.00	8.83					GR	
12	21	90	355	18.5	6.32	12.3	155.4	291.1	0.837	0.285	6.74	7.31					GR	
12	21	90	355	21.5	6.73	15.3	292.7	298.0	0.887	0.528	7.11	6.92					GR	
12	22	90	356	0.5	6.77	11.4	340.6	292.2	0.749	0.376	7.26	8.26					GR	
12	22	90	356	3.5	6.32	13.9	80.4	283.5	0.823	0.267	7.37	8.26					GR	
12	22	90	356	6.5	6.29	12.6	164.9	291.7	0.845	0.238	7.47	8.26					GR	
12	22	90	356	9.5	6.73	17.8	277.4	298.1	0.872	0.416	7.11	7.31					GR	
12	22	90	356	12.5	6.79	16.5	318.6	290.6	0.851	0.320	7.26	7.76					GR	
12	22	90	356	15.5	6.30	15.2	55.8	287.0	0.804	0.205	7.70	8.26					GR	
12	22	90	356	18.5	6.16	13.0	146.6	288.9	0.790	0.189	7.64	7.31					GR	
12	22	90	356	21.5	6.54	22.5	256.4	291.4	0.811	0.271	6.97	6.92					GR	
12	23	90	357	0.5	6.71	24.7	310.5	297.3	0.830	0.299	7.31	7.31					GR	
12	23	90	357	3.5	6.31	13.2	10.7	287.5	0.792	0.170	7.47	8.26					GR	
12	23	90	357	6.5	6.06	14.0	126.3	303.1	0.810	0.199	7.37	5.45					GR	
12	23	90	357	9.5	6.40	18.2	249.0	291.9	0.774	0.215	6.69	7.76					GR	
12	23	90	357	12.5	6.61	19.3	312.0	290.0	0.813	0.266	7.31	8.26					GR	
12	23	90	357	15.5	6.20	9.6	43.7	282.6	0.758	0.177	8.00	8.83					GR	
12	23	90	357	18.5	5.96	16.1	131.8	296.8	0.794	0.180	8.46	11.13					GR	
12	23	90	357	21.5	6.23	16.9	227.0	295.5	0.791	0.198	6.65	7.31					GR	
12	24	90	358	0.5	6.56	21.0	296.7	294.3	0.714	0.247	6.40	6.92					GR	
12	24	90	358	3.5	6.27	20.3	344.1	284.9	0.690	0.187	7.21	10.24					GR	
12	24	90	358	6.5	5.87	19.4	81.8	286.8	0.696	0.176	8.53	8.83					GR	
12	24	90	358	9.5	6.12	11.7	232.7	280.3	0.726	0.173	6.69	7.76					GR	
12	24	90	358	12.5	6.69	17.8	251.6	216.2	0.528	0.292	4.95	4.20					GR	
12	24	90	358	15.5	6.55	19.1	136.9	195.9	0.844	0.785	4.70	4.65					GR	
12	24	90	358	18.5	6.22	33.4	136.5	196.3	0.817	0.535	4.76	4.83					GR	
12	24	90	358	21.5	6.30	15.7	198.4	195.1	0.672	0.350	4.49	3.82					GR	
12	25	90	359	0.5	6.78	26.0	281.9	168.5	0.598	0.352	4.65	3.82					GR	
12	25	90	359	3.5	6.69	22.6	338.2	188.2	0.702	0.463	4.72	5.02					GR	
12	25	90	359	6.5	6.28	16.2	86.7	202.5	0.718	0.376	4.57	5.02					GR	
12	25	90	359	9.5	6.25	11.3	164.4	198.3	0.660	0.335	4.51	4.65					GR	
12	25	90	359	12.5	6.55	22.9	277.2	293.7	0.653	0.268	6.83	12.19					GR	
12	25	90	359	15.5	6.49	21.3	332.8	284.4	0.765	0.218	8.61	12.19					GR	
12	25	90	359	18.5	6.10	27.5	68.8	277.9	0.759	0.249	8.90	12.19					GR	
12	25	90	359	21.5	6.09	7.1	158.6	286.7	0.797	0.199	9.57	12.19					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	26	90	360	0.5	6.62	26.5	281.0	296.5	0.796	0.304	9.66	10.24						GR
12	26	90	360	3.5	6.79	33.5	311.8	294.9	0.871	0.302	10.34	12.19						GR
12	26	90	360	6.5	6.42	17.8	0.1	288.0	0.787	0.183	9.75	12.19						GR
12	26	90	360	9.5	6.29	15.1	109.9	288.5	0.767	0.196	9.06	11.13						GR
12	26	90	360	12.5	6.66	19.9	246.7	288.5	0.785	0.289	9.06	11.13						GR
12	26	90	360	15.5	6.82	16.2	325.6	298.5	0.633	0.239	7.88	11.13						GR
12	26	90	360	18.5	6.44	16.2	66.3	255.5	0.617	0.192	6.21	12.19						GR
12	26	90	360	21.5	6.23	18.9	133.8	207.2	0.588	0.178	4.18	3.51						GR
12	27	90	361	0.5	6.69	27.5	250.1	252.8	0.574	0.322	5.85	9.48						GR
12	27	90	361	3.5	7.06	23.6	322.5	289.7	0.615	0.333	5.31	11.13						GR
12	27	90	361	6.5	6.84	25.4	334.8	206.4	0.600	0.417	4.41	4.06						GR
12	27	90	361	9.5	6.45	20.6	114.3	201.8	0.661	0.468	4.38	4.83						GR
12	27	90	361	12.5	6.54	4.2	173.2	182.3	0.523	0.372	4.59	4.06						GR
12	27	90	361	15.5	6.87	17.4	279.6	188.8	0.584	0.499	4.63	4.65						GR
12	27	90	361	18.5	6.73	15.5	11.0	294.7	0.584	0.423	5.15	4.34						GR
12	27	90	361	21.5	6.30	24.2	96.9	285.5	0.765	0.421	6.17	6.24						GR
12	28	90	362	0.5	6.60	15.5	259.5	294.7	0.856	0.882	6.28	6.92						GR
12	28	90	362	3.5	7.16	44.2	296.6	291.4	0.874	1.254	7.64	8.83						GR
12	28	90	362	6.5	7.08	36.5	330.4	293.0	0.808	0.723	8.33	10.24						GR
12	28	90	362	9.5	6.58	18.7	71.0	275.8	0.782	0.326	8.13	8.26						GR
12	28	90	362	12.5	6.48	14.3	158.0	298.4	0.718	0.264	8.26	8.26						GR
12	28	90	362	15.5	6.92	16.1	276.1	294.2	0.802	0.352	7.53	7.76						GR
12	28	90	362	18.5	6.98	17.8	333.0	283.9	0.780	0.265	8.00	7.31						GR
12	28	90	362	21.5	6.45	24.4	96.7	283.6	0.738	0.198	10.14	8.83						GR
12	29	90	363	0.5	6.46	11.8	161.9	290.1	0.800	0.208	8.26	9.48						GR
12	29	90	363	3.5	7.08	30.4	284.9	294.3	0.800	0.335	7.82	8.83						GR
12	29	90	363	6.5	7.27	42.7	315.7	298.6	0.756	0.292	10.24	10.24						GR
12	29	90	363	9.5	6.74	19.6	14.6	285.3	0.828	0.263	9.23	12.19						WR
12	29	90	363	12.5	6.38	19.8	112.1	295.5	0.832	0.249	9.85	10.24						GR
12	29	90	363	15.5	6.76	18.5	253.6	294.6	0.839	0.333	8.68	10.24						GR
12	29	90	363	18.5	7.01	20.3	325.8	291.4	0.829	0.304	8.61	10.24						GR
12	29	90	363	21.5	6.48	11.7	97.7	286.9	0.837	0.204	9.39	11.13						GR
12	30	90	364	0.5	6.15	22.6	134.3	290.6	0.715	0.123	9.48	9.48						GR
12	30	90	364	3.5	6.70	26.2	244.1	277.6	0.830	0.259	8.53	7.76						GR
12	30	90	364	6.5	7.14	28.7	313.7	298.9	0.792	0.252	9.57	10.24						GR
12	30	90	364	9.5	6.72	25.2	334.6	285.4	0.787	0.194	10.34	12.19						GR
12	30	90	364	12.5	6.04	31.0	110.1	296.6	0.709	0.139	11.51	11.13						GR
12	30	90	364	15.5	6.20	9.1	201.9	310.8	0.824	0.232	7.16	10.24						GR
12	30	90	364	18.5	6.74	21.7	300.0	291.0	0.782	0.222	8.83	11.13						GR
12	30	90	364	21.5	6.43	12.2	11.6	288.3	0.779	0.166	8.83	11.13						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
12	31	90	365	0.5	5.79	27.0	115.2	285.4	0.713	0.130	10.67	11.13						GR
12	31	90	365	3.5	6.11	23.0	218.3	315.4	0.678	0.163	7.76	9.48						GR
12	31	90	365	6.5	7.09	33.7	258.6	280.7	0.628	0.305	7.76	11.13						GR
12	31	90	365	9.5	7.05	7.7	3.4	197.8	0.715	0.491	4.55	4.20						GR
12	31	90	365	12.5	6.32	39.2	111.4	200.9	0.863	0.752	4.83	5.22						GR
12	31	90	365	15.5	6.31	24.1	167.3	192.3	0.788	0.481	4.79	4.34						GR
12	31	90	365	18.5	6.90	27.0	272.0	184.9	0.530	0.380	4.68	4.83						GR
12	31	90	365	21.5	6.93	23.6	327.3	173.9	0.561	0.359	4.95	4.20						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	1	91	1	0.5	6.30	24.8	86.6	209.8	0.590	0.312	4.49	4.65						GR
1	1	91	1	3.5	6.27	15.8	168.3	208.3	0.657	0.365	4.28	3.71						GR
1	1	91	1	6.5	7.04	37.7	287.3	293.5	0.707	0.377	6.78	10.24						GR
1	1	91	1	9.5	7.25	52.8	317.6	312.1	0.666	0.302	7.88	12.19						GR
1	1	91	1	12.5	6.54	25.2	40.8	276.0	0.648	0.216	7.70	12.19						GR
1	1	91	1	15.5	6.19	18.6	121.7	303.6	0.548	0.145	8.39	12.19						GR
1	1	91	1	18.5	6.81	27.5	269.7	288.6	0.752	0.285	7.01	9.48						GR
1	1	91	1	21.5	7.07	31.9	319.8	292.6	0.709	0.238	7.42	12.19						GR
1	2	91	2	0.5	6.53	15.6	32.8	238.5	0.594	0.207	5.51	3.71						GR
1	2	91	2	3.5	6.22	22.6	137.3										S	
1	2	91	2	6.5	6.91	32.5	261.9	310.6	0.581	0.349	5.75	6.92						GR
1	2	91	2	9.5	7.37	37.8	324.6	297.4	0.634	0.315	6.48	11.13						GR
1	2	91	2	12.5	6.85	18.7	7.1	200.9	0.713	0.375	4.45	4.20						GR
1	2	91	2	15.5	6.29	27.8	109.7	210.8	0.731	0.318	4.41	3.94						GR
1	2	91	2	18.5	6.67	13.6	249.3	290.1	0.678	0.267	6.69	6.56						GR
1	2	91	2	21.5	7.11	31.6	305.4	291.8	0.860	0.318	6.83	5.45						GR
1	3	91	3	0.5	6.72	15.1	342.2	287.2	0.823	0.205	7.37	7.31						GR
1	3	91	3	3.5	6.17	29.4	109.5	287.7	0.766	0.150	10.14	7.31						GR
1	3	91	3	6.5	6.59	14.5	235.9	302.1	0.778	0.203	6.83	9.48						GR
1	3	91	3	9.5	7.20	33.6	298.0	293.4	0.822	0.269	7.21	10.24						GR
1	3	91	3	12.5	6.95	38.8	333.1	300.2	0.754	0.222	9.14	11.13						GR
1	3	91	3	15.5	6.24	35.3	94.3	289.8	0.762	0.199	9.94	28.44						GR
1	3	91	3	18.5	6.45	17.2	196.9	299.3	0.784	0.153	7.82	10.24						GR
1	3	91	3	21.5	7.12	22.7	290.8	299.0	0.793	0.212	7.31	9.48						GR
1	4	91	4	0.5	6.99	20.5	356.7	295.5	0.644	0.197	7.06	8.83						GR
1	4	91	4	3.5	6.40	24.2	101.7	203.7	0.743	0.293	4.02	3.82						GR
1	4	91	4	6.5	6.54	21.6	189.0	204.3	0.811	0.443	4.27	3.94						GR
1	4	91	4	9.5	7.20	28.1	274.7	211.7	0.546	0.361	4.74	4.34						GR
1	4	91	4	12.5	7.18	21.8	340.9	188.2	0.569	0.334	4.43	4.49						GR
1	4	91	4	15.5	6.48	25.9	81.3	206.3	0.669	0.270	4.34	3.71						GR
1	4	91	4	18.5	6.39	12.6	146.8	207.9	0.647	0.189	4.36	3.94						GR
1	4	91	4	21.5	6.95	24.6	273.2	290.3	0.716	0.214	6.32	9.48						GR
1	5	91	5	0.5	7.07	21.6	328.6	299.8	0.833	0.200	6.44	5.45						GR
1	5	91	5	3.5	6.55	16.3	57.1	232.8	0.675	0.267	4.28	3.71						GR
1	5	91	5	6.5	6.40	13.7	133.0	301.7	0.564	0.173	5.95	9.48						GR
1	5	91	5	9.5	6.91	23.5	262.6	289.4	0.710	0.214	6.44	8.83						GR
1	5	91	5	12.5	7.10	30.4	327.5	284.8	0.801	0.249	6.06	4.65						GR
1	5	91	5	15.5	6.57	13.3	65.1	276.1	0.825	0.184	5.92	4.83						GR
1	5	91	5	18.5	6.32	20.0	121.3	287.2	0.800	0.169	6.74	9.48						GR
1	5	91	5	21.5	6.73	21.0	244.9	280.1	0.770	0.183	6.36	5.02						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	6	91	6	0.5	7.05	26.1	312.5	290.2	0.807	0.246	6.52	8.83						GR
1	6	91	6	3.5	6.64	18.4	350.3	291.0	0.836	0.182	7.26	6.92						GR
1	6	91	6	6.5	6.25	30.1	105.0	282.7	0.760	0.184	8.75	7.76						GR
1	6	91	6	9.5	6.57	18.4	226.7	304.1	0.715	0.151	6.36	5.22						GR
1	6	91	6	12.5	6.95	15.7	292.5	293.4	0.795	0.169	7.26	6.24						GR
1	6	91	6	15.5	6.60	13.8	17.7	288.0	0.795	0.121	7.31	9.48						GR
1	6	91	6	18.5	6.26	20.4	117.7	287.4	0.776	0.125	8.00	7.31						GR
1	6	91	6	21.5	6.52	14.3	219.4	302.6	0.686	0.123	7.06	8.26						GR
1	7	91	7	0.5	7.02	23.7	281.7	286.0	0.798	0.213	8.26	7.76						GR
1	7	91	7	3.5	6.88	20.7	343.4	297.5	0.728	0.181	7.94	8.26						GR
1	7	91	7	6.5	6.49	10.9	69.8	189.4	0.712	0.284	4.10	3.61						GR
1	7	91	7	9.5	6.69	12.4	221.2	191.3	0.748	0.450	4.59	4.34						GR
1	7	91	7	12.5	7.15	25.0	276.7	161.5	0.570	0.707	5.00	5.22						GR
1	7	91	7	15.5	7.14	20.2	317.6	298.7	0.642	0.913	6.40	7.31						GR
1	7	91	7	18.5	6.81	14.4	88.5	295.3	0.589	0.816	7.26	8.83						GR
1	7	91	7	21.5	6.87	14.4	184.8	154.3	0.555	0.917	5.99	7.76						GR
1	8	91	8	0.5	7.33	27.3	267.8	300.2	0.689	1.251	6.74	8.83						GR
1	8	91	8	3.5	7.37	13.2	313.7	299.1	0.686	1.041	7.37	8.83						GR
1	8	91	8	6.5	6.98	20.7	81.8	279.2	0.552	0.812	6.87	8.83						GR
1	8	91	8	9.5	6.86	21.0	143.2	153.5	0.558	0.836	5.82	8.26						GR
1	8	91	8	12.5	7.18	21.5	242.5	302.1	0.688	1.092	7.64	8.83						GR
1	8	91	8	15.5	7.28	15.3	304.3	297.5	0.734	1.145	7.42	8.26						GR
1	8	91	8	18.5	7.02	16.6	44.1	290.4	0.789	1.126	7.88	10.24						GR
1	8	91	8	21.5	6.92	24.5	139.9	308.0	0.612	0.938	7.59	9.48						GR
1	9	91	9	0.5	7.28	18.3	262.6	298.7	0.726	1.276	8.39	11.13						GR
1	9	91	9	3.5	7.50	28.9	311.8	292.1	0.790	1.415	8.83	11.13						GR
1	9	91	9	6.5	7.20	12.1	11.5	302.5	0.562	0.775	8.53	11.13						GR
1	9	91	9	9.5	6.87	23.0	92.1	283.1	0.567	0.522	9.14	10.24						GR
1	9	91	9	12.5	6.98	3.0	221.4	283.0	0.765	0.782	9.14	11.13						GR
1	9	91	9	15.5	7.13	21.4	331.0	291.2	0.777	0.714	8.46	9.48						GR
1	9	91	9	18.5	6.93	23.6	348.0	286.6	0.772	0.435	8.46	11.13						GR
1	9	91	9	21.5	6.60	7.2	93.9	276.0	0.821	0.288	9.23	11.13						GR
1	10	91	10	0.5	6.85	16.9	251.7	284.4	0.832	0.368	8.46	9.48						GR
1	10	91	10	3.5	7.20	24.3	319.0	291.0	0.824	0.347	7.82	9.48						GR
1	10	91	10	6.5	7.09	23.5	328.0	293.8	0.712	0.248	8.53	11.13						GR
1	10	91	10	9.5	6.78	13.1	16.1	270.7	0.621	0.244	7.26	11.13						GR
1	10	91	10	12.5	6.81	6.1	49.1	286.0	0.706	0.262	6.78	10.24						GR
1	10	91	10	15.5	7.07	10.6	317.0	291.0	0.727	0.318	6.40	11.13						GR
1	10	91	10	18.5	6.99	2.9	23.5	283.2	0.760	0.245	6.56	10.24						GR
1	10	91	10	21.5	6.64	16.2	111.2	286.2	0.817	0.171	7.53	9.48						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	11	91	11	0.5	6.76	8.2	239.7	296.9	0.650	0.184	7.26	9.48						GR
1	11	91	11	3.5	7.21	21.8	278.4	285.7	0.742	0.340	5.69	10.24						GR
1	11	91	11	6.5	7.25	23.4	334.9	282.8	0.749	0.538	5.36	4.83						GR
1	11	91	11	9.5	6.93	18.9	6.0	290.6	0.808	1.061	5.99	7.31						GR
1	11	91	11	12.5	6.69	8.7	118.6	288.9	0.843	0.898	6.87	7.31						GR
1	11	91	11	15.5	6.93	17.6	235.7	295.6	0.869	0.902	6.78	7.31						GR
1	11	91	11	18.5	6.99	1.9	302.5	289.7	0.856	0.715	6.61	7.31						GR
1	11	91	11	21.5	6.60	10.7	71.1	283.5	0.857	0.488	6.44	8.26						GR
1	12	91	12	0.5	6.51	22.7	99.6	285.1	0.918	0.811	7.94	8.26						GR
1	12	91	12	3.5	6.96	20.1	250.5	291.7	0.855	1.041	7.47	8.83						GR
1	12	91	12	6.5	7.15	29.9	313.6	288.3	0.865	0.831	8.46	9.48						GR
1	12	91	12	9.5	6.80	13.0	46.1	286.1	0.838	0.411	8.98	10.24						GR
1	12	91	12	12.5	6.55	22.0	113.3	292.7	0.892	0.306	9.06	10.24						GR
1	12	91	12	15.5	6.77	9.9	290.6	289.9	0.831	0.351	8.26	9.48						GR
1	12	91	12	18.5	7.06	12.9	308.4	292.7	0.793	0.403	7.94	8.26						GR
1	12	91	12	21.5	6.71	14.9	58.9	282.0	0.741	0.240	8.53	9.48						GR
1	13	91	13	0.5	6.58	14.6	103.7	308.8	0.526	0.222	7.01	9.48						GR
1	13	91	13	3.5	6.90	12.2	314.2	294.4	0.715	0.293	7.53	9.48						GR
1	13	91	13	6.5	7.28	21.3	304.7	309.7	0.596	0.295	7.26	9.48						GR
1	13	91	13	9.5	7.03	16.8	45.4	200.6	0.748	0.472	4.88	5.22						GR
1	13	91	13	12.5	6.62	26.1	104.4	204.2	0.702	0.351	4.53	4.65						GR
1	13	91	13	15.5	6.71	3.7	249.2	196.3	0.686	0.302	4.41	3.94						GR
1	13	91	13	18.5	7.06	19.0	301.7	294.6	0.604	0.226	6.83	11.13						GR
1	13	91	13	21.5	6.87	13.0	349.2	261.5	0.530	0.173	6.69	9.48						GR
1	14	91	14	0.5	6.50	22.0	88.7	229.6	0.599	0.178	6.32	3.41						GR
1	14	91	14	3.5	6.74	10.6	254.9	286.5	0.722	0.179	7.94	8.83						GR
1	14	91	14	6.5	7.15	24.4	312.7	290.1	0.844	0.268	7.42	8.83						GR
1	14	91	14	9.5	7.02	27.9	328.5	305.1	0.657	0.165	9.85	12.19						GR
1	14	91	14	12.5	6.38	53.7	72.1	257.8	0.705	0.231	12.96	9.48						GR
1	14	91	14	15.5	6.38	8.7	154.0	278.3	0.818	0.142	8.75	8.26						GR
1	14	91	14	18.5	6.82	12.5	235.4	282.2	0.721	0.175	7.64	8.26						GR
1	14	91	14	21.5	6.75	25.9	337.9	288.3	0.798	0.169	9.14	15.06						GR
1	15	91	15	0.5	6.28	27.8	102.3	274.2	0.754	0.088	9.85	10.24						GR
1	15	91	15	3.5	6.39	25.3	211.0	164.1	0.689	0.097	8.61	13.47						GR
1	15	91	15	6.5	6.95	27.5	240.0	269.2	0.852	0.230	7.47	15.06						GR
1	15	91	15	9.5	6.96	25.0	325.8	287.9	0.876	0.207	18.96	17.07						GR
1	15	91	15	12.5	6.34	17.6	59.7	272.3	0.777	0.107	9.94	10.24						GR
1	15	91	15	15.5	6.28	12.2	177.3	280.4	0.822	0.137	9.31	15.06						GR
1	15	91	15	18.5	6.79	20.3	255.8	287.3	0.819	0.195	9.14	8.26						GR
1	15	91	15	21.5	6.86	23.9	324.3	291.2	0.778	0.128	9.23	15.06						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	16	91	16	0.5	6.38	11.4	72.6	280.1	0.811	0.134	8.33	15.06					GR	
1	16	91	16	3.5	6.31	11.9	145.6	284.6	0.792	0.228	5.66	8.26					GR	
1	16	91	16	6.5	6.89	17.5	262.8	280.9	0.836	0.298	5.39	8.26					GR	
1	16	91	16	9.5	7.01	33.6	321.8	302.9	0.699	0.225	8.19	8.26					GR	
1	16	91	16	12.5	6.48	15.2	347.9	284.3	0.825	0.295	8.26	9.48					GR	
1	16	91	16	15.5	6.26	26.3	109.3	283.8	0.864	0.313	8.83	8.26					GR	
1	16	91	16	18.5	6.74	21.9	252.2	286.5	0.825	0.409	7.26	9.48					GR	
1	16	91	16	21.5	6.98	17.6	303.2	284.9	0.814	0.310	9.14	8.83					GR	
1	17	91	17	0.5	6.51	15.2	55.6	275.7	0.802	0.190	8.19	9.48					GR	
1	17	91	17	3.5	6.30	28.3	114.0	289.8	0.766	0.162	9.94	8.83					GR	
1	17	91	17	6.5	6.79	25.7	290.1	297.0	0.795	0.193	8.00	8.26					GR	
1	17	91	17	9.5	7.10	10.1	270.4	285.6	0.751	0.199	7.21	9.48					GR	
1	17	91	17	12.5	6.63	19.2	41.7	263.6	0.769	0.130	7.88	11.13					GR	
1	17	91	17	15.5	6.28	25.4	117.5	276.2	0.698	0.154	16.00	9.48					GR	
1	17	91	17	18.5	6.71	21.8	302.6	299.4	0.808	0.150	8.33	9.48					GR	
1	17	91	17	21.5	6.96	12.6	282.8	288.5	0.791	0.147	8.46	8.83					GR	
1	18	91	18	0.5	6.60	18.9	26.6	286.2	0.671	0.111	7.82	8.83					GR	
1	18	91	18	3.5	6.16	33.2	116.2	284.9	0.760	0.130	11.51	28.44					GR	
1	18	91	18	6.5	6.51	15.3	241.0	277.2	0.729	0.146	8.33	8.26					GR	
1	18	91	18	9.5	6.87	16.4	294.9	280.9	0.772	0.148	6.87	8.26					GR	
1	18	91	18	12.5	6.56	24.7	338.6	263.8	0.549	0.110	5.95	12.19					GR	
1	18	91	18	15.5	6.06	32.2	115.0	288.5	0.780	0.147	16.00	36.57					GR	
1	18	91	18	18.5	6.36	9.7	225.2	308.0	0.571	0.076	7.53	9.48					GR	
1	18	91	18	21.5	6.76	16.7	257.3	241.2	0.641	0.143	8.06	10.24					GR	
1	19	91	19	.0.5	6.50	15.0	347.3	201.9	0.527	0.091	9.57	12.19					GR	
1	19	91	19	3.5	6.01	24.5	98.6	272.6	0.605	0.094	13.47	28.44					GR	
1	19	91	19	6.5	6.28	18.4	221.9	176.2	0.683	0.103	7.11	9.48					GR	
1	19	91	19	9.5	6.76	17.3	262.3	273.8	0.728	0.104	7.26	7.31					GR	
1	19	91	19	12.5	6.61	24.9	330.0	314.3	0.701	0.097	13.65	36.57					GR	
1	19	91	19	15.5	6.02	22.6	71.2	291.2	0.584	0.104	12.34	36.57					GR	
1	19	91	19	18.5	6.16	13.8	212.2	175.5	0.978	0.410	9.06	36.57					GR	
1	19	91	19	21.5	6.64	16.5	284.7	281.9	0.825	0.112	9.75	13.47					GR	
1	20	91	20	0.5	6.59	26.9	322.1	313.1	0.672	0.108	9.94	11.13					GR	
1	20	91	20	3.5	6.07	14.8	74.5	275.4	0.744	0.082	8.46	11.13					GR	
1	20	91	20	6.5	6.23	4.7	284.0	285.1	0.799	0.119	7.70	8.26					GR	
1	20	91	20	9.5	6.78	22.7	301.8	274.7	0.749	0.160	13.47	9.48					GR	
1	20	91	20	12.5	6.82	17.6	332.1	290.5	0.712	0.117	10.04	10.24					GR	
1	20	91	20	15.5	6.20	27.2	94.4	262.7	0.696	0.110	9.48	17.07					GR	
1	20	91	20	18.5	6.33	12.1	107.0	288.0	0.810	0.119	9.66	9.48					GR	
1	20	91	20	21.5	6.78	26.1	288.0	294.2	0.743	0.193	8.83	13.47					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	21	91	21	0.5	6.94	27.3	312.3	285.2	0.741	0.144	8.83	10.24					GR	
1	21	91	21	3.5	6.41	10.3	359.1	282.2	0.773	0.122	9.75	11.13					GR	
1	21	91	21	6.5	6.28	21.2	87.4	275.6	0.806	0.143	11.91	10.24					GR	
1	21	91	21	9.5	6.68	9.5	325.3	289.7	0.739	0.223	5.39	10.24					GR	
1	21	91	21	12.5	6.93	17.7	266.3	184.1	0.691	0.222	4.49	4.06					GR	
1	21	91	21	15.5													M	
1	21	91	21	18.5													M	
1	21	91	21	21.5													M	
1	22	91	22	0.5													M	
1	22	91	22	3.5													M	
1	22	91	22	6.5													M	
1	22	91	22	9.5													M	
1	22	91	22	12.5													M	
1	22	91	22	15.5													M	
1	22	91	22	18.5													M	
1	22	91	22	21.5													M	
1	23	91	23	0.5													M	
1	23	91	23	3.5													M	
1	23	91	23	6.5													M	
1	23	91	23	9.5													M	
1	23	91	23	12.5													M	
1	23	91	23	15.5													M	
1	23	91	23	18.5													M	
1	23	91	23	21.5													M	
1	24	91	24	0.5													M	
1	24	91	24	3.5													M	
1	24	91	24	6.5													M	
1	24	91	24	9.5													M	
1	24	91	24	13.4	7.02	15.5	239.4	256.6	0.716	0.089	9.85	10.24					GR	
1	24	91	24	16.4	6.84	2.7	59.7	284.4	0.800	0.143	8.61	10.24					GR	
1	24	91	24	19.4	6.38	22.0	104.3	289.1	0.720	0.103	8.46	11.13					GR	
1	24	91	24	22.4	6.45	11.2	199.0	287.7	0.715	0.146	6.06	11.13					GR	
1	25	91	25	1.4	7.17	22.7	254.6										S	
1	25	91	25	4.4	7.34	22.6	341.8	190.6	0.866	0.742	4.65	5.22					GR	
1	25	91	25	7.4	6.95	17.7	59.6	197.5	0.856	0.787	5.00	5.69					GR	
1	25	91	25	10.4	6.67	23.8	113.0	194.4	0.811	0.501	4.59	5.02					GR	
1	25	91	25	13.4	6.97	10.7	264.4	195.8	0.564	0.262	4.08	3.51					GR	
1	25	91	25	16.4	7.08	23.8	326.8	290.8	0.606	0.232	5.95	5.95					GR	
1	25	91	25	19.4	6.64	26.1	66.9	268.4	0.593	0.197	6.56	7.76					GR	
1	25	91	25	22.4	6.44	19.2	99.0	285.6	0.748	0.203	6.48	6.92					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	26	91	26	1.4	6.99	18.1	279.8	292.6	0.833	0.218	6.52	6.56						GR
1	26	91	26	4.4	7.32	28.5	294.1	303.0	0.583	0.211	7.59	9.48						GR
1	26	91	26	7.4	7.00	23.3	351.0	292.0	0.704	0.174	7.01	7.76						GR
1	26	91	26	10.4	6.57	32.1	81.3	271.9	0.757	0.173	8.13	8.26						GR
1	26	91	26	13.4	6.72	10.4	219.4	284.2	0.852	0.205	6.24	7.31						GR
1	26	91	26	16.4	7.06	13.0	313.9	258.2	0.621	0.241	7.42	7.76						GR
1	26	91	26	19.4	6.77	21.1	32.3	278.4	0.689	0.180	7.16	7.76						GR
1	26	91	26	22.4	6.30	24.4	93.3	272.0	0.705	0.134	7.82	7.76						GR
1	27	91	27	1.4	6.60	18.1	230.3	283.1	0.804	0.131	6.83	6.92						GR
1	27	91	27	4.4	7.17	20.9	312.1	265.2	0.685	0.135	7.64	7.76						GR
1	27	91	27	7.4	7.10	20.8	332.0	278.7	0.756	0.134	8.39	8.26						GR
1	27	91	27	10.4	6.54	28.8	108.8	277.3	0.725	0.082	9.14	9.48						GR
1	27	91	27	13.4	6.50	18.4	163.3	288.4	0.651	0.083	8.26	8.26						GR
1	27	91	27	16.4	6.97	18.7	277.1	292.5	0.793	0.155	5.95	7.31						GR
1	27	91	27	19.4	6.93	15.6	359.5	284.1	0.752	0.150	5.75	7.31						GR
1	27	91	27	22.4	6.30	35.8	75.1	266.1	0.710	0.167	6.87	36.57						GR
1	28	91	28	1.4	6.30	14.3	184.4	290.4	0.764	0.110	6.02	6.56						GR
1	28	91	28	4.4	7.01	23.5	286.2	274.1	0.781	0.176	6.52	7.31						GR
1	28	91	28	7.4	7.20	32.6	314.2	296.9	0.640	0.152	9.14	8.83						GR
1	28	91	28	10.4	6.60	17.8	50.6	281.5	0.761	0.170	7.11	6.92						GR
1	28	91	28	13.4	6.32	35.4	115.0	293.1	0.714	0.133	8.68	7.31						GR
1	28	91	28	16.4	6.83	19.2	255.3	290.8	0.735	0.181	6.87	7.31						GR
1	28	91	28	19.4	7.10	20.6	318.4	282.2	0.770	0.187	7.21	7.31						GR
1	28	91	28	22.4	6.55	25.9	61.5	290.4	0.697	0.160	8.53	7.31						GR
1	29	91	29	1.4	6.31	24.0	124.5	289.3	0.687	0.115	9.85	8.83						GR
1	29	91	29	4.4	6.96	27.9	260.9	294.7	0.714	0.226	7.88	6.56						GR
1	29	91	29	7.4	7.41	44.6	319.3	299.4	0.672	0.247	11.13	9.48						GR
1	29	91	29	10.4	6.96	25.7	0.1	291.3	0.714	0.191	8.83	10.24						GR
1	29	91	29	13.4	6.33	30.4	102.2	290.0	0.671	0.129	9.66	10.24						GR
1	29	91	29	16.4	6.69	8.8	243.6	292.7	0.807	0.182	7.21	8.83						GR
1	29	91	29	19.4	7.22	25.2	310.2	284.5	0.690	0.215	6.74	8.83						GR
1	29	91	29	22.4	6.86	20.7	17.1	281.4	0.784	0.183	6.21	8.83						GR
1	30	91	30	1.4	6.26	30.5	109.5	289.1	0.828	0.131	9.14	8.83						GR
1	30	91	30	4.4	6.68	14.0	256.8	295.9	0.775	0.170	5.89	6.56						GR
1	30	91	30	7.4	7.33	32.0	307.0	280.8	0.667	0.284	6.87	7.31						GR
1	30	91	30	10.4	7.09	27.1	331.8	287.0	0.730	0.206	7.42	7.76						GR
1	30	91	30	13.4	6.29	41.6	88.0	272.0	0.774	0.189	10.78	36.57						GR
1	30	91	30	16.4	6.40	12.3	182.9	302.5	0.681	0.112	6.24	6.92						GR
1	30	91	30	19.4	7.08	22.6	289.8	274.9	0.711	0.187	7.26	5.95						GR
1	30	91	30	22.4	6.94	24.0	336.5	288.4	0.742	0.161	8.75	8.83						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
1	31	91	31	1.4	6.21	39.8	86.6	271.4	0.759	0.157	14.03	36.57					GR	
1	31	91	31	4.4	6.34	17.8	174.6	305.1	0.681	0.083	8.61	7.31					GR	
1	31	91	31	7.4	7.22	28.0	278.4	287.8	0.729	0.190	8.26	7.76					GR	
1	31	91	31	10.4	7.22	26.0	350.3	178.3	0.588	0.214	5.09	3.51					GR	
1	31	91	31	13.4	6.45	36.8	81.8	247.7	0.659	0.188	8.83	4.06					GR	
1	31	91	31	16.4	6.35	27.6	157.4										S	
1	31	91	31	19.4	7.07	13.2	254.1	226.2	0.700	0.140	5.28	3.71					GR	
1	31	91	31	22.4	7.21	8.5	342.1	186.5	0.791	0.357	4.32	3.82					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	1	91	32	1.4	6.58	31.1	86.2	214.4	0.698	0.278	4.36	4.65						GR
2	1	91	32	4.4	6.32	13.0	136.5	180.0	0.676	0.133	4.95	4.83						GR
2	1	91	32	7.4	6.91	25.5	260.8	294.4	0.661	0.208	6.97	7.76						GR
2	1	91	32	10.4	7.13	35.0	321.6	296.9	0.765	0.198	9.39	5.02						GR
2	1	91	32	13.4	6.48	22.5	48.6	269.5	0.749	0.127	6.52	9.48						GR
2	1	91	32	16.4	6.10	16.7	125.7	299.8	0.742	0.066	9.75	19.69						GR
2	1	91	32	19.4	6.64	21.4	244.7	287.8	0.726	0.147	7.64	6.92						GR
2	1	91	32	22.4	7.00	9.2	320.7	307.0	0.745	0.105	7.01	5.69						GR
2	2	91	33	1.4	6.55	14.0	17.9	288.8	0.719	0.137	6.17	8.26						GR
2	2	91	33	4.4	6.07	21.5	118.0	286.3	0.817	0.097	8.26	28.44						GR
2	2	91	33	7.4	6.59	19.2	240.6	282.6	0.639	0.134	8.06	9.48						GR
2	2	91	33	10.4	7.04	19.2	315.2	307.7	0.749	0.150	7.16	6.56						GR
2	2	91	33	13.4	6.61	14.6	0.6	309.1	0.735	0.100	7.53	10.24						GR
2	2	91	33	16.4	6.09	21.8	118.0	300.3	0.783	0.103	7.88	36.57						GR
2	2	91	33	19.4	6.42	12.4	224.3	266.3	0.575	0.130	7.42	8.83						GR
2	2	91	33	22.4	6.99	15.5	303.9	278.5	0.656	0.161	7.88	9.48						GR
2	3	91	34	1.4	6.75	9.8	347.7	306.7	0.747	0.067	9.23	9.48						GR
2	3	91	34	4.4	6.16	11.4	62.3	227.3	0.745	0.098	7.76	10.24						GR
2	3	91	34	7.4	6.33	8.0	171.4	302.1	0.712	0.087	7.70	9.48						GR
2	3	91	34	10.4	6.89	5.1	287.0	263.3	0.766	0.088	9.23	10.24						GR
2	3	91	34	13.4	6.65	17.5	349.9	309.6	0.699	0.124	9.31	11.13						GR
2	3	91	34	16.4	6.06	30.4	84.9	265.8	0.813	0.171	12.34	10.24						GR
2	3	91	34	19.4	6.22	13.6	172.4	299.4	0.751	0.100	8.06	9.48						GR
2	3	91	34	22.4	6.78	9.9	269.1	265.7	0.824	0.117	9.85	9.48						GR
2	4	91	35	1.4	6.77	25.5	336.3	318.9	0.718	0.113	13.47	10.24						GR
2	4	91	35	4.4	6.22	15.7	76.1	269.6	0.834	0.120	9.66	11.13						GR
2	4	91	35	7.4	6.20	14.5	139.1	284.8	0.709	0.112	8.26	10.24						GR
2	4	91	35	10.4	6.72	17.1	276.9	267.5	0.697	0.153	9.94	8.26						GR
2	4	91	35	13.4	6.71	18.2	331.9	268.4	0.696	0.153	7.82	10.24						GR
2	4	91	35	16.4	6.19	14.0	89.1	257.3	0.667	0.132	6.97	9.48						GR
2	4	91	35	19.4	6.19	12.5	123.1	279.8	0.720	0.130	8.53	10.24						GR
2	4	91	35	22.4	6.69	20.6	269.1	278.1	0.783	0.165	9.23	8.26						GR
2	5	91	36	1.4	6.91	24.0	313.5	301.6	0.700	0.113	9.57	8.83						GR
2	5	91	36	4.4	6.51	9.4	3.2	281.1	0.690	0.117	8.46	11.13						GR
2	5	91	36	7.4	6.35	27.7	84.8	272.5	0.620	0.152	9.39	8.26						GR
2	5	91	36	10.4	6.71	12.2	274.5	282.5	0.771	0.158	7.82	8.26						GR
2	5	91	36	13.4	6.87	18.5	327.9	278.9	0.727	0.151	8.75	8.83						GR
2	5	91	36	16.4	6.50	16.0	24.1	272.6	0.708	0.129	8.19	8.26						GR
2	5	91	36	19.4	6.37	31.9	89.8	257.5	0.820	0.240	14.63	10.24						GR
2	5	91	36	22.4	6.71	18.4	248.4	285.4	0.748	0.182	7.82	7.76						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	6	91	37	1.4	7.05	21.1	316.9	265.2	0.678	0.170	9.39	8.26						GR
2	6	91	37	4.4	6.79	24.3	351.8	281.7	0.735	0.150	8.75	9.48						GR
2	6	91	37	7.4	6.45	23.1	74.7	283.7	0.646	0.132	10.14	10.24						GR
2	6	91	37	10.4	6.66	5.3	110.1	286.7	0.836	0.168	8.26	8.83						GR
2	6	91	37	13.4	6.90	17.4	238.0	302.6	0.739	0.182	8.06	9.48						GR
2	6	91	37	16.4	6.65	23.9	96.1	308.0	0.754	0.167	7.64	5.69						WR
2	6	91	37	19.4	6.42	18.5	97.5	281.2	0.842	0.153	12.05	9.48						GR
2	6	91	37	22.4	6.58	8.7	215.8	290.5	0.838	0.227	6.65	5.95						GR
2	7	91	38	1.4	6.98	16.8	286.1	287.2	0.807	0.211	8.39	8.83						GR
2	7	91	38	4.4	6.87	29.8	353.1	280.9	0.774	0.158	8.33	10.24						GR
2	7	91	38	7.4	6.51	30.3	49.5	287.8	0.680	0.150	8.33	7.76						GR
2	7	91	38	10.4	6.57	14.8	316.9	293.3	0.747	0.171	9.66	8.26						GR
2	7	91	38	13.4	6.83	19.1	316.4	269.4	0.725	0.190	7.37	8.83						GR
2	7	91	38	16.4	6.79	27.8	342.7	276.7	0.817	0.192	7.06	8.83						GR
2	7	91	38	19.4	6.54	12.3	77.2	284.6	0.840	0.150	8.00	8.83						GR
2	7	91	38	22.4	6.58	14.2	112.4	279.9	0.764	0.161	7.01	7.76						GR
2	8	91	39	1.4	7.08	20.7	268.3	178.6	0.612	0.305	4.74	3.82						GR
2	8	91	39	4.4	7.14	15.2	330.9	193.2	0.694	0.425	4.49	4.65						GR
2	8	91	39	7.4	6.82	18.8	107.3	199.9	0.781	0.569	4.39	4.65						GR
2	8	91	39	10.4	6.76	11.3	70.8	198.0	0.767	0.576	4.68	4.34						GR
2	8	91	39	13.4	6.97	15.1	267.5	164.1	0.553	0.451	5.00	5.95						GR
2	8	91	39	16.4	7.01	19.9	344.7	293.6	0.659	0.491	6.28	7.31						GR
2	8	91	39	19.4	6.72	25.9	47.7	226.5	0.570	0.330	4.41	4.06						GR
2	8	91	39	22.4	6.48	23.5	82.0	284.5	0.698	0.200	6.74	8.83						GR
2	9	91	40	1.4	6.82	11.8	172.1	285.2	0.797	0.292	6.44	7.76						GR
2	9	91	40	4.4	7.02	8.0	335.5	291.0	0.740	0.279	6.65	8.26						GR
2	9	91	40	7.4	6.79	25.2	9.2	211.9	0.649	0.261	5.60	8.26						GR
2	9	91	40	10.4	6.50	18.1	71.3	267.9	0.609	0.180	6.83	8.83						GR
2	9	91	40	13.4	6.67	7.0	39.8	217.0	0.520	0.213	4.53	3.71						GR
2	9	91	40	16.4	6.89	11.2	316.7	312.1	0.535	0.266	6.48	8.26						GR
2	9	91	40	19.4	6.72	19.2	48.3	287.2	0.671	0.213	6.24	7.76						GR
2	9	91	40	22.4	6.39	12.4	94.7	283.8	0.727	0.164	6.74	9.48						GR
2	10	91	41	1.4	6.63	11.4	252.4	288.4	0.651	0.172	6.65	8.26						GR
2	10	91	41	4.4	7.01	18.3	288.7	286.5	0.701	0.214	6.97	7.76						GR
2	10	91	41	7.4	6.92	19.1	345.3	191.5	0.626	0.232	4.16	3.61						GR
2	10	91	41	10.4	6.53	25.2	61.6	203.2	0.725	0.283	4.41	4.20						GR
2	10	91	41	13.4	6.53	8.6	75.2	206.7	0.625	0.258	4.49	4.20						GR
2	10	91	41	16.4	6.83	10.1	314.0	290.4	0.645	0.185	6.69	6.92						GR
2	10	91	41	19.4	6.79	17.0	47.8	293.7	0.776	0.179	7.88	9.48						GR
2	10	91	41	22.4	6.42	19.8	77.7	282.3	0.776	0.172	8.00	7.76						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	11	91	42	1.4	6.52	6.0	229.6	288.8	0.713	0.129	7.01	6.92						GR
2	11	91	42	4.4	6.97	10.6	277.5	290.5	0.773	0.163	6.97	8.83						GR
2	11	91	42	7.4	7.02	23.7	338.4	275.4	0.700	0.153	7.47	9.48						GR
2	11	91	42	10.4	6.60	30.3	65.5	196.6	0.602	0.181	3.95	3.41						GR
2	11	91	42	13.4	6.50	27.6	81.7	205.0	0.662	0.201	4.34	4.20						GR
2	11	91	42	16.4	6.85	19.1	350.3	205.7	0.582	0.182	4.13	3.71						GR
2	11	91	42	19.4	7.02	13.7	337.7	203.1	0.708	0.263	4.21	3.94						GR
2	11	91	42	22.4	6.63	18.8	81.1	203.0	0.841	0.392	4.16	4.65						GR
2	12	91	43	1.4	6.54	27.0	145.4	195.6	0.845	0.391	4.32	4.20						GR
2	12	91	43	4.4	7.01	21.0	223.6	194.4	0.845	0.567	4.81	5.45						GR
2	12	91	43	7.4	7.17	19.1	329.6	192.3	0.772	0.544	4.74	4.65						GR
2	12	91	43	10.4	6.75	23.6	48.6	198.5	0.802	0.474	4.70	5.02						GR
2	12	91	43	13.4	6.38	31.6	90.2	214.9	0.761	0.281	5.04	4.65						GR
2	12	91	43	16.4	6.64	11.5	105.4	301.0	0.596	0.210	6.69	4.34						GR
2	12	91	43	19.4	6.88	17.5	348.2	283.0	0.741	0.176	7.11	6.92						GR
2	12	91	43	22.4	6.47	32.7	45.8	272.7	0.635	0.173	7.47	8.83						GR
2	13	91	44	1.4	6.09	34.4	82.1	278.4	0.759	0.197	7.37	7.31						GR
2	13	91	44	4.4	6.44	20.5	24.9	276.1	0.721	0.171	7.11	6.92						GR
2	13	91	44	7.4	6.79	24.4	312.2	286.6	0.591	0.129	7.21	6.92						GR
2	13	91	44	10.4	6.50	14.3	348.7	242.8	0.613	0.123	10.34	13.47						GR
2	13	91	44	13.4	6.13	40.6	114.8	278.9	0.750	0.104	7.11	13.47						GR
2	13	91	44	16.4	6.41	2.3	160.3	290.5	0.740	0.127	6.40	6.56						GR
2	13	91	44	19.4	6.82	26.3	283.4	282.9	0.804	0.152	7.16	7.31						GR
2	13	91	44	22.4	6.53	13.3	67.2	286.7	0.642	0.155	6.61	6.56						GR
2	14	91	45	1.4	6.11	35.2	82.3	246.5	0.676	0.179	10.45	36.57						GR
2	14	91	45	4.4	6.40	7.6	315.9	298.2	0.761	0.212	5.72	5.02						GR
2	14	91	45	7.4	6.83	32.6	298.8	260.6	0.579	0.204	7.94	9.48						GR
2	14	91	45	10.4	6.66	25.0	330.7	254.7	0.731	0.289	5.57	10.24						GR
2	14	91	45	13.4	6.00	47.3	78.9	258.5	0.665	0.205	11.13	10.24						GR
2	14	91	45	16.4	6.27	11.7	195.4	282.8	0.715	0.182	7.21	11.13						GR
2	14	91	45	19.4	6.89	21.1	287.5	282.6	0.760	0.229	8.00	7.31						GR
2	14	91	45	22.4	6.81	15.2	340.9	282.2	0.695	0.185	9.57	12.19						GR
2	15	91	46	1.4	6.15	47.7	76.3	257.7	0.685	0.191	16.79	11.13						GR
2	15	91	46	4.4	6.22	23.9	136.9	274.9	0.616	0.134	8.75	9.48						GR
2	15	91	46	7.4	6.82	23.0	271.9	254.0	0.694	0.183	5.04	10.24						GR
2	15	91	46	10.4	6.81	17.3	357.7	231.9	0.620	0.224	4.79	3.82						GR
2	15	91	46	13.4	6.22	24.9	104.3	223.2	0.557	0.107	4.97	12.19						GR
2	15	91	46	16.4	6.23	20.9	162.1	207.6	0.630	0.218	5.31	3.16						GR
2	15	91	46	19.4	6.82	20.6	248.4	182.5	0.656	0.245	4.63	3.94						GR
2	15	91	46	22.4	6.78	11.1	37.5	201.4	0.808	0.426	4.25	4.49						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	16	91	47	1.4	6.30	34.2	104.2	198.7	0.724	0.345	4.76	4.34						GR
2	16	91	47	4.4	6.15	23.1	165.8	196.3	0.736	0.308	5.20	4.83						GR
2	16	91	47	7.4	6.67	23.0	268.7	209.1	0.693	0.254	4.72	4.20						GR
2	16	91	47	10.4	6.85	17.2	343.1	193.8	0.748	0.356	4.41	4.83						GR
2	16	91	47	13.4	6.28	18.9	75.9	206.2	0.778	0.236	4.72	5.02						GR
2	16	91	47	16.4	6.02	26.9	129.1	185.8	0.655	0.190	5.39	4.49						GR
2	16	91	47	19.4	6.55	25.1	284.5	244.1	0.598	0.134	5.92	12.19						GR
2	16	91	47	22.4	6.72	42.2	321.6	315.9	0.538	0.166	9.66	3.51						GR
2	17	91	48	1.4	6.21	30.1	22.0	229.8	0.628	0.115	9.06	13.47						GR
2	17	91	48	4.4	5.87	19.3	109.7	281.1	0.661	0.074	8.19	11.13						GR
2	17	91	48	7.4	6.29	21.6	243.9	247.4	0.558	0.127	6.87	13.47						GR
2	17	91	48	10.4	6.62	38.1	319.3	257.6	0.630	0.244	4.81	3.61						GR
2	17	91	48	13.4	6.15	15.4	34.1	241.5	0.677	0.139	4.76	10.24						GR
2	17	91	48	16.4	5.87	32.3	138.9	313.6	0.697	0.111	12.96	36.57						GR
2	17	91	48	19.4	6.40	28.0	235.8	282.6	0.654	0.125	9.85	11.13						GR
2	17	91	48	22.4	6.85	24.0	301.3	282.4	0.597	0.139	8.00	4.49						GR
2	18	91	49	1.4	6.51	22.9	356.1	302.9	0.691	0.122	9.31	36.57						GR
2	18	91	49	4.4	6.04	25.9	106.8	288.7	0.737	0.113	9.75	36.57						GR
2	18	91	49	7.4	6.40	1.6	213.5	286.0	0.786	0.158	6.02	4.34						GR
2	18	91	49	10.4	6.85	28.1	299.4	287.5	0.656	0.154	11.77	36.57						GR
2	18	91	49	13.4	6.50	21.0	358.5	286.8	0.720	0.111	8.19	17.07						GR
2	18	91	49	16.4	6.01	27.0	104.6	317.4	0.691	0.122	14.42	36.57						GR
2	18	91	49	19.4	6.38	9.1	270.7	286.4	0.775	0.124	7.64	12.19						GR
2	18	91	49	22.4	6.88	26.9	300.5	150.8	0.560	0.143	10.67	36.57						GR
2	19	91	50	1.4	6.75	25.2	320.3	291.6	0.616	0.129	11.38	13.47						GR
2	19	91	50	4.4	6.16	32.7	80.8	283.3	0.670	0.150	11.25	36.57						GR
2	19	91	50	7.4	6.37	11.2	202.2	284.0	0.757	0.125	7.26	10.24						GR
2	19	91	50	10.4	6.89	16.4	290.2	272.7	0.745	0.156	7.42	11.13						GR
2	19	91	50	13.4	6.71	16.8	352.9	286.6	0.684	0.151	7.47	13.47						GR
2	19	91	50	16.4	6.16	28.6	96.2	273.0	0.651	0.131	7.64	6.56						GR
2	19	91	50	19.4	6.32	11.1	188.6	284.8	0.789	0.158	5.66	5.95						GR
2	19	91	50	22.4	6.85	23.3	283.5	283.6	0.780	0.175	6.24	12.19						GR
2	20	91	51	1.4	6.78	25.9	330.2	276.5	0.693	0.174	9.48	6.92						GR
2	20	91	51	4.4	6.20	32.8	109.6	282.6	0.751	0.106	7.53	6.24						GR
2	20	91	51	7.4	6.11	13.0	110.6	281.3	0.603	0.105	6.28	5.95						GR
2	20	91	51	10.4	6.51	14.7	252.1	260.8	0.587	0.168	4.83	6.24						GR
2	20	91	51	13.4	6.56	7.8	332.7	282.4	0.770	0.183	5.48	6.24						GR
2	20	91	51	16.4	6.06	33.1	108.1	294.4	0.753	0.157	8.98	36.57						GR
2	20	91	51	19.4	6.06	23.9	169.6	322.7	0.673	0.096	11.64	36.57						GR
2	20	91	51	22.4	6.59	27.7	238.9	284.4	0.675	0.158	8.06	5.95						GR

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	21	91	52	1.4	6.85	26.2	331.9	275.7	0.762	0.203	6.24	6.92					GR	
2	21	91	52	4.4	6.40	25.8	23.6	260.7	0.687	0.113	6.97	6.56					GR	
2	21	91	52	7.4	6.12	19.2	109.4	293.0	0.863	0.146	7.21	5.22					GR	
2	21	91	52	10.4	6.47	10.7	270.0	288.4	0.808	0.140	6.36	6.24					GR	
2	21	91	52	13.4	6.68	20.8	330.9	284.3	0.773	0.178	7.21	5.95					GR	
2	21	91	52	16.4	6.26	19.2	38.7	280.1	0.797	0.170	6.17	6.24					GR	
2	21	91	52	19.4	6.02	20.6	115.9	293.0	0.737	0.143	7.06	8.26					GR	
2	21	91	52	22.4	6.41	14.5	251.9	295.3	0.808	0.157	6.65	6.92					GR	
2	22	91	53	1.4	6.78	25.8	317.4	296.6	0.830	0.171	10.04	10.24					GR	
2	22	91	53	4.4	6.55	17.7	345.5	277.2	0.725	0.128	8.46	10.24					GR	
2	22	91	53	7.4	6.09	31.9	88.1	272.2	0.734	0.149	8.39	9.48					GR	
2	22	91	53	10.4	6.24	7.2	177.3	289.2	0.737	0.123	7.47	8.83					GR	
2	22	91	53	13.4	6.55	13.4	284.7	283.6	0.852	0.170	7.88	8.26					GR	
2	22	91	53	16.4	6.40	11.5	11.1	282.2	0.773	0.122	8.13	9.48					GR	
2	22	91	53	19.4	6.00	24.7	98.3	275.6	0.639	0.094	8.53	10.24					GR	
2	22	91	53	22.4	6.29	21.4	200.9										S	
2	23	91	54	1.4	6.98	26.7	295.6	192.9	0.858	0.701	4.65	4.65					GR	
2	23	91	54	4.4	6.98	23.9	356.4	194.9	0.741	0.463	4.38	5.02					GR	
2	23	91	54	7.4	6.58	18.7	66.6	193.9	0.712	0.531	4.49	4.83					GR	
2	23	91	54	10.4	6.46	14.0	126.8	203.8	0.752	0.522	4.36	5.02					GR	
2	23	91	54	13.4	6.82	20.7	272.7	183.1	0.563	0.406	4.45	4.65					GR	
2	23	91	54	16.4	6.89	18.6	337.9	280.8	0.657	0.512	5.07	5.95					GR	
2	23	91	54	19.4	6.56	16.9	51.1	269.7	0.627	0.729	4.90	4.49					GR	
2	23	91	54	22.4	6.40	13.6	116.5	258.1	0.585	0.494	4.97	6.56					GR	
2	24	91	55	1.4	6.83	20.3	274.0	285.9	0.662	0.499	5.48	5.45					GR	
2	24	91	55	4.4	7.09	27.0	310.6	282.2	0.654	0.505	4.95	4.20					GR	
2	24	91	55	7.4	6.74	19.7	9.3	283.1	0.641	0.371	5.57	6.24					GR	
2	24	91	55	10.4	6.37	24.1	105.9	292.8	0.614	0.233	6.32	5.69					GR	
2	24	91	55	13.4	6.60	9.1	217.6	271.9	0.527	0.245	5.79	6.92					GR	
2	24	91	55	16.4	6.87	16.4	342.6	298.9	0.571	0.310	6.17	6.56					GR	
2	24	91	55	19.4	6.62	24.2	28.7	278.6	0.665	0.273	6.36	7.31					GR	
2	24	91	55	22.4	6.24	23.6	106.0	288.5	0.836	0.275	7.76	8.83					GR	
2	25	91	56	1.4	6.62	10.0	284.4	297.8	0.823	0.433	6.74	7.31					GR	
2	25	91	56	4.4	7.05	21.4	307.0	284.1	0.787	0.426	7.01	8.83					GR	
2	25	91	56	7.4	6.90	36.5	348.2	296.3	0.721	0.296	7.76	8.83					GR	
2	25	91	56	10.4	6.34	32.2	79.4	276.0	0.714	0.215	9.06	9.48					GR	
2	25	91	56	13.4	6.41	11.2	158.8	243.1	0.606	0.268	4.90	8.83					GR	
2	25	91	56	16.4	6.89	18.9	277.5	301.1	0.589	0.332	5.92	7.31					GR	
2	25	91	56	19.4	6.83	26.3	351.5	294.5	0.597	0.238	6.74	8.26					GR	
2	25	91	56	22.4	6.28	23.4	87.2	277.3	0.754	0.165	7.88	8.26					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
2	26	91	57	1.4	6.41	13.5	176.4	290.2	0.797	0.193	7.21	8.26					GR	
2	26	91	57	4.4	7.12	28.7	271.1	195.9	0.732	0.553	4.63	4.49					GR	
2	26	91	57	7.4	7.16	21.8	348.3	200.1	0.664	0.531	4.70	5.22					GR	
2	26	91	57	10.4	6.60	22.5	62.3	207.1	0.681	0.516	4.53	4.83					GR	
2	26	91	57	13.4	6.38	24.0	120.6	201.4	0.709	0.417	4.39	4.83					GR	
2	26	91	57	16.4	6.83	15.9	327.0	315.8	0.539	0.277	5.89	7.31					GR	
2	26	91	57	19.4	7.00	28.9	330.3	282.3	0.653	0.249	6.61	8.83					GR	
2	26	91	57	22.4	6.44	24.5	53.8	283.8	0.631	0.163	7.31	8.83					GR	
2	27	91	58	1.4	6.25	25.9	127.6	192.6	0.595	0.173	4.20	3.61					GR	
2	27	91	58	4.4	6.79	21.7	268.3	202.9	0.736	0.278	4.21	4.06					GR	
2	27	91	58	7.4	7.13	37.0	316.4	321.9	0.573	0.202	7.53	9.48					GR	
2	27	91	58	10.4	6.60	16.3	17.2	306.0	0.736	0.170	7.16	9.48					GR	
2	27	91	58	13.4	6.12	30.7	108.4	309.0	0.639	0.136	15.52	28.44					GR	
2	27	91	58	16.4	6.62	17.8	255.3	290.1	0.604	0.118	8.33	8.26					GR	
2	27	91	58	19.4	7.06	32.6	315.1	278.0	0.681	0.157	9.06	8.83					GR	
2	27	91	58	22.4	6.63	23.7	22.5	265.3	0.746	0.104	8.90	8.83					GR	
2	28	91	59	1.4	6.08	34.1	105.9	292.7	0.593	0.114	10.45	10.24					GR	
2	28	91	59	4.4	6.53	15.6	226.1	284.7	0.741	0.100	8.68	8.83					GR	
2	28	91	59	7.4	7.11	26.9	304.3	296.7	0.636	0.153	7.94	9.48					GR	
2	28	91	59	10.4	6.78	27.8	354.5	296.9	0.659	0.113	9.23	10.24					GR	
2	28	91	59	13.4	6.12	35.1	109.2	294.4	0.753	0.117	10.89	28.44					GR	
2	28	91	59	16.4	6.35	13.1	186.5	308.7	0.616	0.110	6.02	8.26					GR	
2	28	91	59	19.4	6.97	18.3	288.6	284.1	0.772	0.221	6.21	10.24					GR	
2	28	91	59	22.4	6.77	26.4	353.1	294.8	0.693	0.128	9.06	11.13					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	1	91	60	1.4	6.10	34.0	96.7	265.1	0.638	0.130	10.04	10.24					GR	
3	1	91	60	4.4	6.28	13.1	199.0	299.1	0.679	0.107	6.36	9.48					GR	
3	1	91	60	7.4	7.00	22.8	282.5	275.7	0.837	0.165	10.24	8.83					GR	
3	1	91	60	10.4	6.91	28.1	353.1	293.2	0.706	0.170	8.53	10.24					GR	
3	1	91	60	13.4	6.19	31.0	80.0	270.4	0.729	0.137	10.67	10.24					GR	
3	1	91	60	16.4	6.20	12.7	171.5	305.7	0.783	0.184	4.68	8.83					GR	
3	1	91	60	19.4	6.90	30.1	280.0	280.5	0.756	0.186	8.68	8.26					GR	
3	1	91	60	22.4	6.89	42.6	335.9	292.3	0.674	0.196	8.98	9.48					GR	
3	2	91	61	1.4	6.21	26.0	63.2	278.7	0.764	0.131	8.06	11.13					GR	
3	2	91	61	4.4	6.07	16.4	147.6	308.6	0.769	0.229	4.74	3.16					GR	
3	2	91	61	7.4	6.70	24.3	272.6	286.3	0.814	0.370	6.97	7.31					GR	
3	2	91	61	10.4	6.83	29.6	331.7	287.0	0.767	0.311	8.33	8.83					GR	
3	2	91	61	13.4	6.20	21.2	103.0	280.9	0.798	0.205	7.88	9.48					GR	
3	2	91	61	16.4	5.99	21.1	144.6	294.8	0.815	0.193	8.00	9.48					GR	
3	2	91	61	19.4	6.63	22.1	265.8	294.8	0.820	0.330	6.87	9.48					GR	
3	2	91	61	22.4	6.90	25.7	339.0	285.3	0.762	0.327	6.61	6.56					GR	
3	3	91	62	1.4	6.32	14.2	39.0	280.6	0.662	0.175	7.70	10.24					GR	
3	3	91	62	4.4	5.99	21.3	131.4	285.3	0.794	0.146	8.53	9.48					GR	
3	3	91	62	7.4	6.48	15.6	253.0	293.7	0.790	0.192	7.06	8.26					GR	
3	3	91	62	10.4	6.84	17.3	298.2	288.3	0.776	0.276	8.00	9.48					GR	
3	3	91	62	13.4	6.34	19.4	44.8	283.3	0.768	0.174	7.16	10.24					GR	
3	3	91	62	16.4	5.97	20.1	122.5	285.1	0.794	0.175	7.53	9.48					GR	
3	3	91	62	19.4	6.40	14.7	258.1	295.5	0.800	0.233	6.48	9.48					GR	
3	3	91	62	22.4	6.83	32.7	318.7	283.6	0.761	0.351	7.31	9.48					GR	
3	4	91	63	1.4	6.48	23.0	353.6	283.6	0.717	0.258	6.83	10.24					GR	
3	4	91	63	4.4	5.88	27.2	90.6	291.1	0.722	0.240	8.06	10.24					GR	
3	4	91	63	7.4	6.20	7.6	252.3	293.5	0.679	0.282	6.78	10.24					GR	
3	4	91	63	10.4	6.69	16.6	273.5	273.1	0.758	0.309	6.61	10.24					GR	
3	4	91	63	13.4	6.41	15.3	349.2	275.9	0.777	0.222	10.14	12.19					GR	
3	4	91	63	16.4	6.06	34.0	122.5	285.2	0.671	0.204	10.24	11.13					GR	
3	4	91	63	19.4	6.36	20.5	208.9	289.5	0.731	0.248	9.39	12.19					GR	
3	4	91	63	22.4	6.99	19.5	277.1	287.0	0.824	0.326	8.61	10.24					GR	
3	5	91	64	1.4	6.82	21.0	5.2	283.2	0.676	0.238	8.90	12.19					GR	
3	5	91	64	4.4	6.27	24.8	82.4	276.1	0.686	0.198	9.85	12.19					GR	
3	5	91	64	7.4	6.39	13.0	185.6	286.5	0.769	0.210	9.31	11.13					GR	
3	5	91	64	10.4	6.84	13.8	290.9	294.8	0.778	0.264	9.23	11.13					GR	
3	5	91	64	13.4	6.71	18.4	356.5	281.2	0.757	0.215	10.78	11.13					GR	
3	5	91	64	16.4	6.23	17.9	84.6	281.2	0.696	0.140	8.83	12.19					GR	
3	5	91	64	19.4	6.31	10.9	138.0	285.4	0.774	0.168	9.75	10.24					GR	
3	5	91	64	22.4	6.81	19.3	250.0	293.2	0.762	0.247	9.48	10.24					GR	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	6	91	65	1.4	6.80	21.0	322.5	280.2	0.814	0.223	9.57	11.13						GR
3	6	91	65	4.4	6.29	20.7	72.8	281.3	0.772	0.175	9.75	10.24						GR
3	6	91	65	7.4	6.21	19.1	135.1	287.4	0.824	0.173	9.39	9.48						GR
3	6	91	65	10.4	6.58	17.8	239.0	302.2	0.775	0.212	8.06	9.48						GR
3	6	91	65	14.5	6.36	14.5	27.6	294.4	0.675	0.201	8.90	10.24	11.53	63.15	6.16	7.96	11.19	G
3	6	91	65	17.5	5.97	20.5	91.9	291.5	0.800	0.261	4.53	10.24	15.08	21.79	7.24	10.22	45.66	G
3	6	91	65	20.5	6.08	7.4	127.2	302.1	0.729	0.287	5.00	10.24	7.24	34.65	4.56	15.24	38.31	G
3	6	91	65	23.5	6.49	16.3	283.6	285.2	0.791	0.257	7.59	9.48	3.56	73.24	6.91	8.90	7.39	G
3	7	91	66	2.5	6.49	26.1	323.9	289.4	0.788	0.216	9.31	10.24	10.32	70.14	8.76	4.70	6.07	G
3	7	91	66	5.5	6.12	11.0	158.3	285.8	0.788	0.148	9.94	10.24	10.39	76.68	8.04	3.75	1.15	G
3	7	91	66	8.5	6.16	17.7	165.0	297.9	0.712	0.141	8.19	10.24	7.48	70.48	11.08	7.98	2.98	G
3	7	91	66	11.5	6.50	16.2	242.5	294.1	0.758	0.212	7.82	10.24	6.64	63.33	13.72	9.28	7.03	G
3	7	91	66	14.5	6.53	15.6	187.8	286.1	0.715	0.207	6.32	10.24	7.97	39.57	21.11	14.57	16.78	G
3	7	91	66	17.5	6.22	15.1	143.4	297.6	0.754	0.153	7.64	10.24	8.81	37.73	16.99	22.62	13.86	G
3	7	91	66	20.5	6.28	18.4	173.9	289.1	0.757	0.161	8.33	10.24	6.37	63.11	16.54	9.01	4.97	G
3	7	91	66	23.5	6.66	15.7	250.0	303.0	0.587	0.232	6.52	8.83	6.09	44.47	13.66	11.60	24.18	G
3	8	91	67	2.5	6.79	14.1	331.6	186.3	0.653	0.296	5.51	4.34	8.64	17.58	8.25	43.42	22.11	G
3	8	91	67	5.5	6.41	14.7	52.7	193.9	0.784	0.329	4.68	4.83	6.85	7.28	2.24	61.02	22.60	G
3	8	91	67	8.5	6.26	18.8	125.8	193.5	0.727	0.258	4.88	4.20	6.95	14.24	6.45	44.15	28.21	G
3	8	91	67	11.5	6.40	5.3	103.3	205.4	0.598	0.258	5.22	4.20	7.07	20.65	6.18	45.99	20.11	G
3	8	91	67	14.5	6.50	9.2	22.5	289.1	0.678	0.231	6.10	10.24	5.58	27.13	15.70	40.14	11.45	G
3	8	91	67	17.5	6.23	13.4	65.2	286.1	0.636	0.155	6.74	10.24	13.60	38.79	12.02	16.96	18.64	G
3	8	91	67	20.5	6.11	18.2	145.5	292.7	0.734	0.129	7.11	10.24	11.24	52.27	10.61	14.38	11.50	G
3	8	91	67	23.5	6.45	20.6	222.9	287.6	0.577	0.130	7.31	8.83	8.74	51.94	17.68	14.98	6.65	G
3	9	91	68	2.5	6.71	18.0	253.1	190.3	0.723	0.315	4.85	4.34	7.11	23.83	9.82	31.28	27.95	G
3	9	91	68	5.5	6.51	6.3	62.3	190.2	0.786	0.419	4.57	5.02	5.17	8.36	3.14	65.79	17.55	G
3	9	91	68	8.5	6.26	18.4	112.5	137.0	0.537	0.254	4.59	4.65	7.45	11.34	9.70	39.03	32.49	S
3	9	91	68	11.5	6.36	11.9	98.2	301.2	0.564	0.194	5.04	9.48	8.17	25.90	6.23	32.40	27.30	G
3	9	91	68	14.5	6.56	10.9	307.9	295.7	0.680	0.209	6.06	5.45	3.86	22.23	25.51	34.71	13.70	G
3	9	91	68	17.5	6.42	15.2	2.4	285.4	0.744	0.189	6.61	5.69	6.09	21.32	15.84	45.17	11.59	G
3	9	91	68	20.5	6.15	14.1	93.5	274.6	0.754	0.147	6.92	11.13	9.67	29.85	19.58	27.44	13.46	G
3	9	91	68	23.5	6.28	10.0	269.2	283.7	0.801	0.182	6.28	7.31	4.78	28.04	28.60	23.93	14.66	G
3	10	91	69	2.5	6.61	25.9	302.0	287.3	0.745	0.179	6.87	6.56	6.93	24.72	33.96	23.85	10.54	G
3	10	91	69	5.5	6.61	21.5	320.2	298.9	0.768	0.171	7.47	11.13	7.82	38.35	32.63	17.87	3.33	G
3	10	91	69	8.5	6.36	4.8	345.8	284.3	0.750	0.159	7.42	10.24	10.01	30.28	27.25	24.65	7.81	G
3	10	91	69	11.5	6.42	12.8	285.7	284.9	0.655	0.192	5.31	6.56	4.80	22.48	26.26	23.61	22.84	G
3	10	91	69	14.5	6.76	22.3	267.0	184.9	0.615	0.381	4.81	4.34	3.27	8.85	7.91	55.17	24.80	G
3	10	91	69	17.5	6.77	14.7	326.4	186.2	0.568	0.371	5.02	4.49	3.44	10.99	13.96	52.20	19.41	G
3	10	91	69	20.5	6.43	22.7	105.4	185.7	0.748	0.256	4.63	4.65	5.03	9.18	11.83	42.46	31.51	G
3	10	91	69	23.5	6.42	18.7	72.2	196.1	0.872	0.376	4.32	4.65	3.05	2.02	3.29	61.58	30.06	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	11	91	70	2.5	6.75	25.7	303.2	196.4	0.852	0.408	4.59	4.83	2.63	1.99	5.42	68.97	20.98	G
3	11	91	70	5.5	6.94	29.0	323.8	192.1	0.779	0.397	4.70	5.02	4.28	3.07	9.51	64.03	19.11	G
3	11	91	70	8.5	6.61	17.1	358.6	191.7	0.833	0.383	4.83	4.65	2.09	6.94	8.06	65.35	17.56	G
3	11	91	70	11.5	6.40	18.7	125.6	189.1	0.798	0.432	4.49	5.02	2.12	2.99	9.74	66.55	18.60	G
3	11	91	70	14.5	6.63	15.1	263.6	174.1	0.686	0.414	4.92	5.22	3.56	3.61	25.50	47.93	19.40	G
3	11	91	70	17.5	6.78	16.6	315.9	180.8	0.721	0.344	5.25	4.83	3.51	9.61	18.92	52.61	15.36	G
3	11	91	70	20.5	6.54	16.6	353.4	191.7	0.748	0.319	4.85	4.34	3.73	7.61	11.78	54.95	21.93	G
3	11	91	70	23.5	6.31	6.6	36.7	196.1	0.820	0.276	4.70	5.22	2.39	5.32	9.16	62.05	21.08	G
3	12	91	71	2.5	6.62	24.5	304.9	191.7	0.704	0.327	4.70	4.83	3.45	5.34	13.92	54.31	22.99	G
3	12	91	71	5.5	6.94	32.4	314.5	187.2	0.657	0.370	5.15	4.83	2.95	8.12	18.48	53.99	16.46	G
3	12	91	71	8.5	6.76	24.1	319.5	189.2	0.715	0.401	4.88	4.06	2.73	10.31	8.69	62.23	16.04	G
3	12	91	71	11.5	6.38	8.3	102.5	205.7	0.587	0.275	5.36	5.02	3.59	14.64	14.35	54.47	12.96	G
3	12	91	71	14.5	6.55	11.3	247.8	316.9	0.561	0.252	5.89	10.24	2.56	27.01	17.81	39.23	13.39	G
3	12	91	71	17.5	6.84	25.2	297.4	286.2	0.704	0.279	7.01	9.48	6.31	41.56	18.19	26.90	7.04	G
3	12	91	71	20.5	6.64	12.7	331.7	285.7	0.794	0.223	7.70	11.13	7.33	46.22	27.76	15.22	3.47	G
3	12	91	71	23.5	6.29	10.0	6.0	281.1	0.775	0.145	8.39	10.24	6.59	59.23	18.02	10.82	5.34	G
3	13	91	72	2.5	6.51	13.7	249.4	294.7	0.860	0.202	8.26	8.26	8.91	47.72	34.84	7.59	0.93	G
3	13	91	72	5.5	6.95	31.8	311.4	296.6	0.805	0.284	8.98	12.19	34.85	27.97	20.18	15.39	1.60	G
3	13	91	72	8.5	6.80	12.4	310.0	282.0	0.787	0.253	10.04	15.06	56.10	29.07	10.19	3.38	1.26	G
3	13	91	72	11.5	6.35	34.4	108.3	281.3	0.838	0.253	7.06	13.47	32.04	27.75	8.35	4.83	27.04	G
3	13	91	72	14.5	6.46	14.2	198.9	290.8	0.829	0.299	6.61	9.48	17.96	34.45	8.04	27.23	12.31	G
3	13	91	72	17.5	6.91	24.8	250.8	287.8	0.686	0.338	6.65	10.24	17.67	37.24	6.51	10.26	28.32	G
3	13	91	72	20.5	6.80	7.1	90.7	298.7	0.591	0.296	5.75	10.24	20.14	27.70	7.74	18.78	25.64	G
3	13	91	72	23.5	6.37	16.5	109.1	156.5	0.564	0.269	5.28	3.94	11.51	19.85	4.63	30.03	33.98	G
3	14	91	73	2.5	6.44	4.5	191.0	177.8	0.638	0.400	4.95	6.24	8.70	13.77	15.07	36.43	26.03	G
3	14	91	73	5.5	6.97	28.3	303.4	293.9	0.726	0.633	6.83	7.76	2.68	21.80	48.58	22.34	4.60	G
3	14	91	73	8.5	6.91	29.1	350.6	289.5	0.698	0.465	7.11	8.26	4.09	51.82	15.34	22.75	6.00	G
3	14	91	73	11.5	6.33	24.9	79.1	294.3	0.586	0.252	6.69	10.24	5.55	38.65	24.20	20.63	10.98	G
3	14	91	73	14.5	6.35	13.5	87.3	319.6	0.581	0.239	5.82	7.76	5.01	15.13	38.96	19.70	21.20	G
3	14	91	73	17.5	6.95	22.6	306.2	327.4	0.614	0.365	5.31	7.76	3.21	21.76	35.52	20.73	18.77	G
3	14	91	73	20.5	7.04	22.2	331.1	299.4	0.651	0.406	6.92	8.83	2.57	51.43	20.68	19.03	6.29	G
3	14	91	73	23.5	6.57	22.3	47.5	300.6	0.654	0.372	8.13	11.13	7.72	63.74	7.08	12.43	9.03	G
3	15	91	74	2.5	6.44	17.4	113.3	297.6	0.645	0.445	7.31	9.48	4.61	61.64	9.60	11.60	12.55	G
3	15	91	74	5.5	7.02	29.3	289.2	298.2	0.738	0.632	7.64	10.24	3.20	61.07	16.39	14.38	4.96	G
3	15	91	74	8.5	7.22	28.2	315.5	310.4	0.612	0.614	6.83	10.24	6.53	35.81	14.62	33.04	10.00	G
3	15	91	74	11.5	6.66	22.5	59.7	323.2	0.558	0.417	6.65	11.13	3.79	44.28	9.01	31.29	11.63	G
3	15	91	74	14.5	6.48	15.1	94.4	327.9	0.560	0.425	6.56	10.24	4.90	44.63	12.42	16.92	21.13	G
3	15	91	74	17.5	7.02	20.8	306.8	300.9	0.622	0.634	6.83	9.48	2.75	40.49	18.38	31.86	6.52	G
3	15	91	74	20.5	7.29	26.2	322.1	297.9	0.697	0.565	7.88	8.83	19.67	40.05	11.97	18.03	10.28	G
3	15	91	74	23.5	6.78	17.0	38.5	334.0	0.540	0.426	7.11	12.19	33.06	23.23	9.19	15.94	18.58	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	16	91	75	2.5	6.53	20.6	125.8	193.5	0.680	0.520	5.89	12.19	19.05	15.36	9.89	39.43	16.27	G
3	16	91	75	5.5	6.96	14.6	246.8	296.8	0.771	0.724	7.88	10.24	13.53	52.75	12.55	16.98	4.19	G
3	16	91	75	8.5	7.31	29.1	314.7	289.3	0.705	0.711	8.75	11.13	24.25	41.31	12.18	16.78	5.47	G
3	16	91	75	11.5	6.86	15.9	34.3	321.7	0.582	0.452	7.42	10.24	14.36	24.98	23.98	25.25	11.44	G
3	16	91	75	14.5	6.42	24.0	118.4	303.1	0.617	0.356	7.76	12.19	25.89	35.68	11.99	14.81	11.64	G
3	16	91	75	17.5	6.88	11.5	285.6	298.5	0.761	0.511	8.06	11.13	11.89	45.96	23.97	12.52	5.67	G
3	16	91	75	20.5	7.30	36.8	312.1	296.2	0.823	0.543	9.57	10.24	20.97	43.07	20.28	13.93	1.75	G
3	16	91	75	23.5	6.85	16.8	8.0	287.7	0.789	0.294	9.23	13.47	28.57	35.51	23.62	10.67	1.63	G
3	17	91	76	2.5	6.29	32.8	111.1	305.3	0.706	0.212	10.24	12.19	38.35	46.75	9.70	4.29	0.90	G
3	17	91	76	5.5	6.65	12.7	232.9	294.9	0.865	0.298	9.23	12.19	28.59	52.01	9.72	8.97	0.71	G
3	17	91	76	8.5	7.20	23.3	288.8	286.5	0.836	0.399	9.57	12.19	36.93	36.14	13.88	11.92	1.13	G
3	17	91	76	11.5	6.81	13.8	30.3	290.7	0.775	0.220	9.57	11.13	39.81	32.55	14.77	9.87	3.00	G
3	17	91	76	14.5	6.25	27.2	116.0	295.0	0.755	0.213	9.94	13.47	62.91	23.25	6.07	1.92	5.86	G
3	17	91	76	17.5	6.63	9.9	222.0	298.7	0.840	0.356	8.75	12.19	30.03	34.06	21.81	7.29	6.81	G
3	17	91	76	20.5	7.16	38.0	301.9	293.7	0.762	0.385	9.31	13.47	39.23	33.87	14.27	10.93	1.70	G
3	17	91	76	23.5	6.89	32.4	334.3	299.2	0.784	0.231	9.14	12.19	43.20	29.13	11.80	13.07	2.80	G
3	18	91	77	2.5	6.19	32.3	94.5	289.2	0.781	0.197	9.94	11.13	36.00	42.18	12.17	4.27	5.38	G
3	18	91	77	5.5	6.37	16.8	200.6	295.2	0.825	0.260	8.53	12.19	25.11	47.35	16.94	4.13	6.46	G
3	18	91	77	8.5	6.97	19.5	275.3	285.6	0.806	0.351	7.76	11.13	11.31	49.15	17.12	14.15	8.26	G
3	18	91	77	11.5	6.83	20.8	338.8	292.2	0.771	0.269	9.48	13.47	41.97	33.25	8.37	12.04	4.37	G
3	18	91	77	14.5	6.13	31.5	95.6	286.1	0.814	0.180	8.61	12.19	42.13	25.44	20.27	10.30	1.86	G
3	18	91	77	17.5	6.34	14.0	204.4	294.3	0.813	0.276	7.70	7.76	9.53	37.01	37.39	15.36	0.70	G
3	18	91	77	20.5	7.07	25.3	278.9	286.6	0.865	0.551	7.42	6.56	11.78	30.60	36.77	17.07	3.77	G
3	18	91	77	23.5	7.01	21.9	344.7	290.3	0.836	0.411	8.90	8.83	15.55	61.65	8.70	10.41	3.69	G
3	19	91	78	2.5	6.31	25.9	79.0	287.2	0.776	0.215	9.85	9.48	29.49	43.71	16.37	8.66	1.76	G
3	19	91	78	5.5	6.28	16.7	157.5	297.5	0.773	0.163	8.83	11.13	25.52	41.34	22.91	9.18	1.05	G
3	19	91	78	8.5	6.85	21.1	275.4	302.9	0.743	0.310	8.26	10.24	15.01	45.39	16.20	7.90	15.50	G
3	19	91	78	11.5	6.94	9.1	17.4	178.1	0.736	0.367	5.89	12.19	28.99	17.54	5.29	22.60	25.57	G
3	19	91	78	14.5	6.34	36.4	109.7	181.6	0.676	0.272	5.60	12.19	21.14	22.97	1.45	33.84	20.61	G
3	19	91	78	17.5	6.27	23.9	162.5	157.0	0.596	0.186	5.48	9.48	15.56	38.34	3.03	17.79	25.28	G
3	19	91	78	20.5	6.93	31.7	265.5	300.6	0.682	0.261	7.94	9.48	10.63	60.85	8.79	8.62	11.11	G
3	19	91	78	23.5	7.05	32.6	327.0	307.6	0.652	0.164	9.31	13.47	42.18	39.22	4.73	9.80	4.07	G
3	20	91	79	2.5	6.42	17.5	37.1	301.6	0.547	0.138	9.75	12.19	49.12	33.69	2.50	7.97	6.72	G
3	20	91	79	5.5	6.13	24.3	118.6	290.4	0.616	0.100	9.48	11.13	42.19	42.87	2.40	2.60	9.95	G
3	20	91	79	8.5	6.57	14.2	242.6	296.1	0.686	0.166	8.53	11.13	16.83	57.98	5.20	11.28	8.71	G
3	20	91	79	11.5	6.85	18.1	307.4	286.7	0.682	0.147	9.75	12.19	44.23	41.98	4.87	5.16	3.77	G
3	20	91	79	14.5	6.39	9.3	62.0	305.6	0.662	0.105	10.24	13.47	50.79	31.25	4.81	9.21	3.94	G
3	20	91	79	17.5	6.13	23.6	147.6	304.1	0.732	0.084	9.48	10.24	36.56	43.94	4.43	6.05	9.02	G
3	20	91	79	20.5	6.64	17.9	261.4	289.3	0.791	0.158	9.85	11.13	35.57	46.05	10.72	4.12	3.53	G
3	20	91	79	23.5	7.05	27.8	318.9	300.3	0.720	0.135	10.24	11.13	36.48	48.41	5.41	6.46	3.25	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	21	91	80	2.5	6.62	21.1	351.1	273.0	0.661	0.146	10.78	12.19	60.68	26.17	4.34	6.34	2.48	G
3	21	91	80	5.5	6.17	28.3	106.1	295.6	0.788	0.146	11.51	15.06	60.11	32.66	3.68	2.12	1.43	G
3	21	91	80	8.5	6.43	12.7	197.9	291.1	0.727	0.154	9.94	13.47	38.77	42.24	6.42	9.94	2.64	G
3	21	91	80	11.5	6.83	16.1	297.4	284.4	0.730	0.188	9.94	13.47	54.11	29.78	5.93	6.19	3.99	G
3	21	91	80	14.5	6.53	10.2	41.1	289.5	0.702	0.164	9.06	13.47	59.72	19.56	5.41	6.86	8.45	G
3	21	91	80	17.5	6.03	27.9	103.1	280.8	0.691	0.129	7.42	13.47	49.98	18.30	4.56	9.28	17.88	G
3	21	91	80	20.5	6.38	16.3	207.7	291.5	0.786	0.186	7.16	11.13	27.12	31.86	5.81	15.07	20.14	G
3	21	91	80	23.5	6.85	27.4	276.9	278.4	0.800	0.200	7.64	13.47	41.37	26.22	3.86	20.69	7.86	G
3	22	91	81	2.5	6.77	23.2	324.9	289.8	0.686	0.185	8.75	12.19	51.05	15.19	3.32	28.01	2.44	G
3	22	91	81	5.5	6.25	23.8	95.4	284.9	0.772	0.119	9.57	13.47	50.59	28.45	6.09	12.24	2.63	G
3	22	91	81	8.5	6.28	17.8	166.7	294.3	0.774	0.135	8.75	11.13	31.85	37.29	13.94	10.64	6.28	G
3	22	91	81	11.5	6.72	20.5	260.0	269.1	0.760	0.185	8.06	13.47	37.27	33.32	7.38	16.96	5.06	G
3	22	91	81	14.5	6.67	20.6	329.2	288.1	0.842	0.190	8.33	13.47	45.30	20.01	19.80	8.79	6.10	G
3	22	91	81	17.5	6.24	23.9	92.6	282.4	0.881	0.128	9.48	15.06	45.69	26.14	15.42	8.59	4.16	G
3	22	91	81	20.5	6.32	18.4	167.5	287.0	0.737	0.127	8.53	10.24	26.22	29.57	28.10	11.11	5.00	G
3	22	91	81	23.5	6.93	31.7	263.0	279.7	0.782	0.260	5.57	11.13	18.03	20.20	11.98	13.86	35.93	G
3	23	91	82	2.5	7.08	28.6	323.9	285.4	0.714	0.232	5.22	3.82	15.99	17.01	9.71	16.51	40.78	G
3	23	91	82	5.5	6.68	22.0	26.9	281.5	0.654	0.215	6.02	13.47	27.55	11.43	10.13	24.01	26.88	G
3	23	91	82	8.5	6.44	21.8	114.9	272.7	0.576	0.253	5.22	4.49	15.21	16.75	6.80	38.60	22.64	G
3	23	91	82	11.5	6.76	11.4	279.2	291.9	0.715	0.243	6.44	6.92	11.10	17.30	38.54	14.69	18.38	G
3	23	91	82	14.5	6.89	10.7	325.8	282.2	0.759	0.260	7.06	6.56	11.77	15.93	43.92	23.52	4.86	G
3	23	91	82	17.5	6.57	16.9	55.6	288.1	0.745	0.246	7.42	8.83	9.22	47.07	21.67	17.35	4.69	G
3	23	91	82	20.5	6.30	29.3	98.5	286.2	0.779	0.209	7.76	9.48	13.19	48.15	20.32	15.79	2.55	G
3	23	91	82	23.5	6.70	13.0	215.2	293.0	0.812	0.299	7.21	8.83	6.89	26.57	37.10	25.75	3.68	G
3	24	91	83	2.5	7.04	19.3	282.7	286.9	0.829	0.332	8.19	8.83	11.30	55.00	21.79	9.19	2.72	G
3	24	91	83	5.5	6.77	23.9	341.4	285.8	0.780	0.253	8.53	11.13	13.57	50.51	21.23	12.72	1.98	G
3	24	91	83	8.5	6.38	34.9	89.9	285.8	0.803	0.190	8.90	8.83	9.20	65.86	15.95	7.16	1.82	G
3	24	91	83	11.5	6.46	10.6	88.3	290.3	0.776	0.208	7.70	7.76	8.36	40.40	35.26	11.07	4.91	G
3	24	91	83	14.5	6.83	4.9	289.6	285.4	0.749	0.289	7.16	8.83	7.28	44.39	24.71	14.79	8.82	G
3	24	91	83	17.5	6.73	14.4	353.5	281.9	0.673	0.227	7.26	7.76	13.57	33.71	33.67	8.59	10.47	G
3	24	91	83	20.5	6.42	29.8	101.5	335.2	0.599	0.166	5.36	12.19	21.88	24.53	10.11	5.89	37.59	G
3	24	91	83	23.5	6.54	24.9	194.6	196.1	0.785	0.350	4.57	4.20	7.73	14.39	8.67	36.22	32.99	G
3	25	91	84	2.5	6.96	15.2	267.8	164.9	0.590	0.364	5.57	5.22	5.27	16.76	9.37	49.66	18.94	G
3	25	91	84	5.5	6.91	15.6	359.7	290.3	0.596	0.257	6.10	11.13	8.15	39.89	11.88	24.26	15.82	G
3	25	91	84	8.5	6.42	19.5	71.1	198.9	0.530	0.156	6.21	11.13	11.22	37.09	10.25	12.44	29.00	G
3	25	91	84	11.5	6.28	24.1	112.3	304.9	0.714	0.108	5.82	7.31	6.89	30.43	21.11	10.46	31.10	G
3	25	91	84	14.5	6.76	12.3	299.8	290.1	0.704	0.175	8.00	10.24	5.53	58.81	17.75	10.50	7.40	G
3	25	91	84	17.5	6.86	15.4	346.1	290.4	0.734	0.160	8.33	9.48	15.67	50.56	16.47	11.58	5.71	G
3	25	91	84	20.5	6.44	19.4	66.7	312.2	0.575	0.136	9.06	10.24	27.53	54.17	10.21	4.35	3.74	G
3	25	91	84	23.5	6.30	24.0	147.8	292.8	0.784	0.113	8.13	8.26	19.75	44.96	26.62	5.38	3.30	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	26	91	85	2.5	6.87	25.1	254.1	289.0	0.778	0.154	8.46	9.48	12.12	55.64	19.90	10.20	2.14	G
3	26	91	85	5.5	7.12	35.6	305.2	285.0	0.696	0.115	8.90	10.24	23.32	43.67	21.71	9.19	2.11	G
3	26	91	85	8.5	6.71	23.5	36.3	309.6	0.555	0.151	8.33	11.13	20.54	51.51	10.79	5.69	11.47	G
3	26	91	85	11.5	6.36	30.7	110.9	274.5	0.727	0.121	7.70	10.24	12.70	53.63	14.52	8.51	10.64	G
3	26	91	85	14.5	6.76	18.9	248.7	296.5	0.747	0.211	7.47	10.24	7.37	57.72	14.95	8.04	11.92	G
3	26	91	85	17.5	7.08	30.7	290.3	281.9	0.729	0.203	6.78	11.13	7.92	53.92	11.70	11.64	14.81	G
3	26	91	85	20.5	6.72	13.0	34.6	303.6	0.641	0.163	8.33	12.19	34.46	35.05	12.07	12.54	5.88	G
3	26	91	85	23.5	6.28	33.1	105.0	292.6	0.776	0.168	6.69	11.13	3.94	41.34	26.23	6.20	22.30	G
3	27	91	86	2.5	6.67	13.1	229.9	291.6	0.758	0.223	6.44	9.48	5.64	45.36	15.29	10.79	22.92	G
3	27	91	86	5.5	7.06	22.9	304.2	287.0	0.840	0.278	8.19	10.24	8.86	48.91	16.58	9.50	16.15	G
3	27	91	86	8.5	6.79	18.7	348.3	281.8	0.763	0.225	7.70	12.19	24.10	36.42	11.50	16.68	11.29	G
3	27	91	86	11.5	6.24	38.8	104.9	287.3	0.739	0.152	6.78	9.48	8.77	34.52	15.41	35.03	6.27	G
3	27	91	86	14.5	6.46	9.8	198.6	291.4	0.780	0.176	7.82	10.24	6.83	55.30	18.87	16.51	2.48	G
3	27	91	86	17.5	7.00	18.3	263.3	291.3	0.836	0.348	6.52	11.13	6.88	42.77	10.81	29.02	10.52	G
3	27	91	86	20.5	6.74	14.5	33.3	285.0	0.824	0.272	6.69	8.83	14.40	31.76	17.94	27.60	8.29	G
3	27	91	86	23.5	6.06	38.9	97.0	290.6	0.725	0.164	8.19	11.13	28.33	44.00	13.37	7.51	6.79	G
3	28	91	87	2.5	6.14	11.1	201.9	288.4	0.681	0.169	7.11	11.13	6.76	41.48	15.65	31.34	4.76	G
3	28	91	87	5.5	6.74	20.9	259.1	282.4	0.777	0.303	7.31	11.13	11.62	46.61	16.30	14.78	10.69	G
3	28	91	87	8.5	6.69	14.1	332.2	273.9	0.745	0.233	7.21	12.19	25.03	32.74	16.31	14.03	11.88	G
3	28	91	87	11.5	6.06	38.3	95.7	290.8	0.746	0.122	8.33	12.19	42.46	23.57	22.13	8.30	3.54	G
3	28	91	87	14.5	6.08	18.2	155.6	308.4	0.738	0.111	7.21	10.24	7.59	43.76	20.70	20.19	7.75	G
3	28	91	87	17.5	6.77	29.7	243.8	293.5	0.743	0.259	7.21	10.24	5.08	52.69	15.17	20.79	6.27	G
3	28	91	87	20.5	6.84	13.9	355.3	285.1	0.804	0.238	7.42	12.19	16.77	34.33	16.82	26.10	5.98	G
3	28	91	87	23.5	6.17	19.7	80.6	286.0	0.737	0.113	8.75	10.24	37.11	33.67	15.01	10.80	3.41	G
3	29	91	88	2.5	6.01	24.4	165.3	293.9	0.733	0.094	7.59	10.24	12.50	37.38	20.38	23.14	6.60	G
3	29	91	88	5.5	6.67	25.4	260.0	290.6	0.784	0.219	7.59	10.24	9.05	42.21	24.91	14.66	9.18	G
3	29	91	88	8.5	6.86	25.1	332.2	289.8	0.810	0.211	7.47	11.13	14.23	36.00	19.01	22.31	8.45	G
3	29	91	88	11.5	6.25	25.4	63.3	277.5	0.560	0.133	8.39	13.47	32.24	33.95	17.45	11.78	4.58	G
3	29	91	88	14.5	6.06	24.2	151.6	183.7	0.820	0.167	4.05	3.08	10.78	24.83	4.84	6.31	53.24	G
3	29	91	88	17.5	6.71	26.2	251.9	311.9	0.593	0.259	5.69	11.13	11.03	28.87	19.03	16.67	24.40	G
3	29	91	88	20.5	7.01	29.2	322.7	297.4	0.677	0.290	6.32	8.26	9.22	28.74	21.84	25.57	14.63	G
3	29	91	88	23.5	6.37	17.1	52.1	275.7	0.624	0.196	7.06	4.06	17.70	28.61	19.61	22.37	11.71	G
3	30	91	89	2.5	6.11	27.5	127.0	296.1	0.566	0.177	6.69	7.76	12.84	35.86	22.74	12.59	15.97	G
3	30	91	89	5.5	6.66	19.4	251.3	309.3	0.634	0.294	6.69	9.48	8.04	37.00	21.42	13.93	19.61	G
3	30	91	89	8.5	7.26	21.3	277.4	190.9	0.852	0.850	5.09	4.65	3.93	11.31	5.29	66.81	12.66	G
3	30	91	89	11.5	6.91	30.3	121.5	194.4	0.856	0.783	5.57	5.69	4.90	3.61	16.40	62.53	12.56	G
3	30	91	89	14.5	6.42	32.2	119.4	190.1	0.691	0.396	5.20	5.45	4.17	8.95	6.29	60.40	20.18	G
3	30	91	89	17.5	6.87	15.4	262.8	300.1	0.676	0.456	6.61	10.24	2.34	29.69	29.73	27.62	10.63	G
3	30	91	89	20.5	7.31	30.3	314.0	294.5	0.723	0.397	6.36	7.31	5.36	26.18	30.77	26.75	10.94	G
3	30	91	89	23.5	6.90	29.2	2.3	294.4	0.516	0.319	5.95	9.48	9.38	29.39	20.07	21.59	19.56	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
3	31	91	90	2.5	6.31	31.8	96.6	286.8	0.639	0.273	5.66	8.83	5.08	38.59	13.57	19.47	23.29	G
3	31	91	90	5.5	6.63	7.8	223.9	287.9	0.622	0.248	5.85	10.24	4.27	31.77	18.68	15.75	29.52	G
3	31	91	90	8.5	7.13	22.6	301.8	289.9	0.743	0.344	6.65	7.76	3.06	37.05	26.85	19.26	13.79	G
3	31	91	90	11.5	6.81	16.8	12.3	284.8	0.729	0.228	6.52	8.83	4.57	50.15	13.46	15.43	16.39	G
3	31	91	90	14.5	6.30	22.3	111.4	279.8	0.767	0.199	5.39	9.48	3.61	39.51	12.97	23.12	20.80	G
3	31	91	90	17.5	6.60	8.9	206.2	297.7	0.800	0.245	5.60	6.92	1.91	21.87	33.46	28.64	14.12	G
3	31	91	90	20.5	7.18	29.0	298.6	292.2	0.808	0.328	6.44	8.26	1.66	28.47	23.26	37.46	9.15	G
3	31	91	90	23.5	6.93	27.9	328.4	296.7	0.810	0.216	7.21	8.83	5.38	43.05	17.63	26.24	7.70	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
4	1	91	91	2.5	6.29	27.9	90.2	284.7	0.809	0.170	7.06	9.48	6.19	41.11	26.90	20.80	5.00	G
4	1	91	91	5.5	6.42	16.1	187.3	294.3	0.770	0.140	7.06	8.26	5.19	39.24	27.66	24.18	3.73	G
4	1	91	91	8.5	6.92	18.8	265.6	288.3	0.864	0.324	6.92	7.76	1.17	24.13	45.31	25.96	3.44	G
4	1	91	91	11.5	6.79	17.7	345.3	276.8	0.766	0.203	7.31	9.48	7.34	36.97	29.14	13.67	12.88	G
4	1	91	91	14.5	6.21	31.9	94.8	286.6	0.748	0.125	7.82	9.48	9.30	42.89	33.94	10.51	3.35	G
4	1	91	91	17.5	6.38	10.4	171.5	308.6	0.738	0.164	7.88	7.76	1.91	37.72	48.45	9.15	2.77	G
4	1	91	91	20.5	7.01	27.7	273.3	285.1	0.847	0.285	7.01	7.31	2.08	28.26	41.30	24.96	3.39	G
4	1	91	91	23.5	6.98	23.4	335.7	293.3	0.785	0.180	7.59	8.26	2.12	55.47	26.59	12.71	3.10	G
4	2	91	92	2.5	6.37	20.4	79.7	297.7	0.683	0.116	7.31	9.48	7.47	39.78	26.71	14.57	11.47	G
4	2	91	92	5.5	6.32	20.0	160.6	289.6	0.699	0.128	7.11	7.76	3.48	28.10	45.76	10.33	12.33	G
4	2	91	92	8.5	6.80	20.9	244.9	294.6	0.712	0.223	6.78	8.83	1.95	31.70	34.37	26.14	5.85	G
4	2	91	92	11.5	6.84	17.2	338.6	286.8	0.774	0.173	7.47	8.26	3.17	40.72	37.80	15.30	3.03	G
4	2	91	92	14.5	6.33	17.6	91.7	279.8	0.812	0.119	6.83	8.83	5.64	44.61	22.37	12.04	15.35	G
4	2	91	92	17.5	6.33	20.4	162.7	303.9	0.672	0.123	5.92	7.31	7.21	13.40	42.44	15.44	21.52	G
4	2	91	92	20.5	6.90	27.3	246.7	187.8	0.536	0.221	5.22	7.31	2.98	26.10	26.57	16.43	27.93	G
4	2	91	92	23.5	7.04	23.5	337.5	288.1	0.699	0.195	6.74	9.48	3.28	53.50	18.70	9.87	14.64	G
4	3	91	93	2.5	6.51	19.7	53.4	337.4	0.555	0.122	6.92	8.83	5.01	48.75	22.36	10.72	13.16	G
4	3	91	93	5.5	6.31	21.4	132.3	229.0	0.558	0.104	5.57	7.31	8.99	21.23	26.22	14.15	29.41	G
4	3	91	93	8.5	6.70	19.3	235.5	292.6	0.639	0.165	6.02	8.83	5.32	26.15	39.80	11.48	17.26	G
4	3	91	93	11.5	6.90	14.6	314.4	283.5	0.682	0.175	6.48	9.48	5.29	35.85	29.89	13.85	15.12	G
4	3	91	93	14.5	6.46	15.9	64.2	235.9	0.587	0.164	4.95	9.48	7.21	38.98	12.15	6.27	35.39	G
4	3	91	93	17.5	6.26	17.4	146.3	302.0	0.713	0.134	6.56	9.48	10.76	30.80	17.39	27.41	13.65	G
4	3	91	93	20.5	6.66	20.9	227.8	293.9	0.708	0.155	5.99	7.31	14.29	24.36	24.85	11.48	25.04	G
4	3	91	93	23.5	6.93	29.6	316.7	287.9	0.753	0.133	7.82	8.26	22.02	33.41	18.51	9.04	17.02	G
4	4	91	94	2.5	6.55	18.1	346.8	283.0	0.707	0.134	7.88	11.13	17.14	38.08	21.15	13.13	10.50	G
4	4	91	94	5.5	6.22	25.1	125.7	279.7	0.753	0.148	7.47	12.19	31.88	27.19	15.03	10.50	15.41	G
4	4	91	94	8.5	6.48	15.3	212.5	290.0	0.742	0.152	7.59	11.13	17.16	33.20	27.18	15.13	7.33	G
4	4	91	94	11.5	6.78	8.3	285.6	286.5	0.772	0.175	8.61	11.13	11.67	50.62	18.65	13.49	5.57	G
4	4	91	94	14.5	6.49	14.2	58.3	292.4	0.655	0.157	6.52	11.13	34.22	28.54	9.09	8.99	19.16	G
4	4	91	94	17.5	6.21	15.5	137.7	283.1	0.807	0.164	5.17	12.19	21.11	23.37	9.96	6.97	38.59	G
4	4	91	94	20.5	6.48	15.7	221.1	295.5	0.787	0.201	7.16	10.24	8.52	52.03	13.15	10.68	15.62	G
4	4	91	94	23.5	6.81	20.3	305.7	288.0	0.717	0.210	8.19	10.24	24.96	47.59	7.86	9.64	9.95	G
4	5	91	95	2.5	6.58	26.1	334.2	289.5	0.722	0.143	9.85	12.19	36.74	41.60	10.81	6.34	4.50	G
4	5	91	95	5.5	6.21	30.2	87.7	287.1	0.825	0.169	9.75	12.19	38.63	36.83	10.65	11.65	2.24	G
4	5	91	95	8.5	6.27	16.0	140.1	292.6	0.738	0.137	8.46	11.13	14.48	54.51	12.19	14.08	4.74	G
4	5	91	95	11.5	6.61	14.9	275.2	275.6	0.709	0.195	7.31	11.13	12.93	44.93	8.78	27.94	5.43	G
4	5	91	95	14.5	6.47	17.4	5.2	295.2	0.663	0.151	9.31	11.13	28.03	47.66	8.64	9.08	6.59	G
4	5	91	95	17.5	6.12	7.6	98.6	280.2	0.893	0.132	7.47	11.13	10.30	57.03	4.60	18.48	9.59	G
4	5	91	95	20.5	6.22	21.4	189.0	280.8	0.777	0.165	6.87	11.13	13.12	46.87	9.92	19.46	10.63	G
4	5	91	95	23.5	6.61	12.7	283.3	287.9	0.823	0.178	7.94	9.48	48.18	22.84	13.63	7.40	G	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
4	6	91	96	2.5	6.56	23.0	333.4	289.8	0.746	0.163	8.39	11.13	14.79	55.60	11.48	8.94	9.19	G
4	6	91	96	5.5	6.17	15.9	20.9	286.2	0.786	0.112	9.48	10.24	25.79	50.17	9.92	10.00	4.13	G
4	6	91	96	8.5	6.16	14.1	186.4	269.4	0.567	0.165	7.06	10.24	8.49	41.32	8.56	39.13	2.50	G
4	6	91	96	11.5	6.48	15.1	256.7	284.2	0.806	0.171	7.31	10.24	6.82	46.77	20.67	18.91	6.82	G
4	6	91	96	14.5	6.50	17.2	324.6	290.2	0.770	0.154	7.26	9.48	6.47	49.75	23.46	13.09	7.24	G
4	6	91	96	17.5	6.22	17.4	52.4	281.8	0.752	0.132	7.88	9.48	10.33	43.60	37.11	6.67	2.29	G
4	6	91	96	20.5	6.18	11.5	232.3	304.5	0.801	0.175	8.39	7.31	14.01	16.58	25.04	38.68	5.70	G
4	6	91	96	23.5	6.53	24.4	277.9	282.2	0.835	0.149	8.46	9.48	13.98	42.70	31.29	10.54	1.49	G
4	7	91	97	2.5	6.64	22.0	316.5	290.5	0.790	0.150	8.68	9.48	13.00	46.59	30.30	9.01	1.11	G
4	7	91	97	5.5	6.36	22.1	329.2	291.6	0.737	0.134	8.68	7.76	20.94	32.80	31.08	13.43	1.75	G
4	7	91	97	8.5	6.19	7.2	221.2	299.9	0.764	0.128	7.47	9.48	14.14	34.78	16.72	27.82	6.53	G
4	7	91	97	11.5	6.44	17.8	283.3	283.2	0.772	0.157	7.64	6.56	9.44	33.02	47.29	7.25	3.00	G
4	7	91	97	14.5	6.61	13.8	234.4	291.2	0.764	0.155	7.42	7.76	8.56	34.20	35.46	18.06	3.72	G
4	7	91	97	17.5	6.41	11.8	116.5	287.5	0.800	0.137	8.26	8.83	12.63	43.36	33.65	9.04	1.32	G
4	7	91	97	20.5	6.21	11.7	139.2	288.1	0.683	0.095	9.14	10.24	21.69	59.11	11.38	5.43	2.38	G
4	7	91	97	23.5	6.43	31.5	244.4	256.3	0.596	0.127	8.39	9.48	23.30	33.41	29.82	9.20	4.27	G
4	8	91	98	2.5	6.67	15.1	255.1	283.6	0.706	0.113	8.19	8.83	18.33	39.92	28.18	9.33	4.24	G
4	8	91	98	5.5	6.50	21.5	322.3	288.9	0.725	0.101	8.98	15.06	28.55	42.59	21.38	4.13	3.34	G
4	8	91	98	8.5	6.20	5.0	81.2	273.2	0.771	0.093	8.19	15.06	28.28	31.46	18.75	14.16	7.36	G
4	8	91	98	11.5	6.33	18.4	230.9	317.6	0.717	0.120	7.47	8.83	10.01	34.29	33.36	18.91	3.42	G
4	8	91	98	14.5	6.61	28.1	249.3	281.1	0.746	0.162	7.64	8.26	15.19	50.77	8.26	18.74	7.04	G
4	8	91	98	17.5	6.51	10.3	312.6	277.4	0.833	0.166	6.48	5.02	16.31	27.83	9.34	28.67	17.86	G
4	8	91	98	20.5	6.20	14.7	72.8	296.4	0.606	0.110	6.97	9.48	19.82	45.55	6.70	14.17	13.76	G
4	8	91	98	23.5	6.30	6.7	257.5	275.9	0.820	0.127	8.26	11.13	19.48	27.38	27.88	18.34	6.91	G
4	9	91	99	2.5	6.60	28.3	271.2	283.2	0.858	0.130	7.76	9.48	15.07	46.77	23.02	11.26	3.88	G
4	9	91	99	5.5	6.59	22.7	323.8	289.2	0.804	0.123	7.53	7.76	15.53	31.13	30.14	15.13	8.06	G
4	9	91	99	8.5	6.20	16.2	353.2	283.5	0.798	0.127	8.00	9.48	29.25	37.11	14.08	16.49	3.06	G
4	9	91	99	11.5	6.20	15.2	163.3	288.7	0.827	0.139	7.47	8.26	13.35	35.50	23.18	21.84	6.13	G
4	9	91	99	14.5	6.56	12.9	226.8	288.8	0.827	0.211	6.40	5.95	8.47	15.55	25.46	45.24	5.28	G
4	9	91	99	17.5	6.60	7.3	300.4	283.6	0.842	0.161	6.13	6.24	15.07	13.05	28.16	28.58	15.15	G
4	9	91	99	20.5	6.21	25.2	100.9	277.4	0.857	0.136	6.78	10.24	12.58	26.14	27.90	22.65	10.74	G
4	9	91	99	23.5	6.11	19.4	115.5	276.8	0.742	0.122	7.64	9.48	13.98	31.02	27.66	17.09	10.24	G
4	10	91	100	2.5	6.45	11.4	257.9	280.0	0.795	0.202	6.36	6.24	5.62	11.50	43.86	33.61	5.42	G
4	10	91	100	5.5	6.61	5.1	174.6	285.9	0.774	0.175	6.87	7.31	7.25	25.78	40.77	18.42	7.77	G
4	10	91	100	8.5	6.22	12.8	55.6	275.3	0.739	0.153	6.83	6.56	6.67	16.39	53.88	16.13	6.93	G
4	10	91	100	11.5													M	
4	10	91	100	13.0	6.25	24.7	182.9	282.6	0.817	0.154	6.69	6.92	10.72	8.02	51.83	22.82	6.61	G
4	10	91	100	16.0	6.68	14.9	266.9	252.6	0.820	0.161	6.40	7.76	9.01	11.85	38.26	31.80	9.07	S
4	10	91	100	19.0	6.61	13.2	27.4	274.7	0.686	0.151	7.70	8.83	27.39	23.47	20.73	20.89	7.51	G
4	10	91	100	22.0	6.21	31.1	59.4	253.1	0.604	0.110	8.39	7.76	31.69	22.53	28.76	10.93	6.09	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
4	11	91	101	1.0	6.60	6.6	229.4	217.4	0.727	0.584	4.34	4.49	16.85	6.53	6.50	47.51	22.60	S
4	11	91	101	4.0	6.97	4.2	320.4	242.5	0.774	0.400	4.59	4.83	3.99	2.18	7.05	66.32	20.46	S
4	11	91	101	7.0	6.93	2.1	328.3	245.8	0.784	0.374	4.83	5.45	4.26	4.50	5.64	68.74	16.87	S
4	11	91	101	10.0	6.46	27.6	70.9	229.1	0.676	0.328	4.63	5.02	3.60	3.04	8.22	65.00	20.13	G
4	11	91	101	13.0	6.36	17.9	115.1	221.5	0.650	0.236	4.83	4.65	5.76	6.15	8.51	57.71	21.87	G
4	11	91	101	16.0	6.77	8.1	186.3	272.0	0.644	0.189	5.89	8.83	15.81	17.43	15.54	37.14	14.07	G
4	11	91	101	19.0	6.82	34.5	353.8	273.9	0.773	0.136	6.28	8.26	11.77	23.37	18.09	33.48	13.29	G
4	11	91	101	22.0	6.31	40.0	70.0	261.8	0.640	0.111	8.53	8.83	21.43	35.64	17.81	18.53	6.58	G
4	12	91	102	1.0	6.13	32.4	118.9	280.0	0.757	0.115	8.53	7.76	21.00	35.05	36.00	6.06	1.89	G
4	12	91	102	4.0	6.70	23.7	217.5	266.2	0.698	0.150	6.65	6.56	7.33	9.57	56.85	20.97	5.28	G
4	12	91	102	7.0	7.04	9.6	328.8	234.1	0.801	0.446	4.23	4.06	6.56	6.64	8.27	53.47	25.06	S
4	12	91	102	10.0	6.59	23.5	76.9	255.1	0.739	0.438	4.79	3.94	3.13	1.80	8.54	60.85	25.68	S
4	12	91	102	13.0	6.33	22.1	137.5	258.3	0.750	0.301	5.09	5.69	3.56	2.34	16.99	58.92	18.19	S
4	12	91	102	16.0	6.81	10.3	304.6	268.5	0.819	0.262	5.09	5.45	2.97	3.26	14.78	58.62	20.37	S
4	12	91	102	19.0	7.05	20.2	317.4	259.8	0.906	0.235	5.92	6.92	3.56	9.16	49.27	27.82	10.18	S
4	12	91	102	22.0	6.54	27.9	42.0	258.8	0.908	0.197	4.95	7.31	6.28	9.28	23.17	25.18	36.09	S
4	13	91	103	1.0	6.16	26.7	114.2	259.4	0.863	0.257	4.43	4.06	4.24	5.76	13.27	46.27	30.46	S
4	13	91	103	4.0	6.59	11.9	257.2	260.1	0.906	0.248	4.21	3.94	6.79	4.26	11.06	32.98	44.91	S
4	13	91	103	7.0	6.93	25.6	319.1	266.2	0.803	0.277	5.12	5.95	4.20	6.68	13.43	53.63	22.06	S
4	13	91	103	10.0	6.55	15.8	76.2	258.1	0.909	0.227	5.07	5.22	4.70	6.52	13.44	49.08	26.26	S
4	13	91	103	13.0	6.14	26.0	116.5	256.4	0.872	0.179	4.61	6.24	3.12	5.05	19.77	46.11	25.96	S
4	13	91	103	16.0	6.62	10.2	265.2	279.5	0.734	0.213	5.45	6.56	2.61	6.24	29.55	45.45	16.15	G
4	13	91	103	19.0	7.11	21.3	311.7	261.8	0.802	0.286	5.79	7.31	2.83	12.71	33.78	38.95	11.72	S
4	13	91	103	22.0	6.75	17.0	352.9	270.5	0.765	0.208	6.56	7.31	2.82	21.40	48.18	21.54	6.06	G
4	14	91	104	1.0	6.20	38.8	108.3	277.2	0.726	0.122	6.48	6.24	2.91	14.48	48.80	30.75	3.06	G
4	14	91	104	4.0	6.49	5.5	162.5	258.4	0.861	0.183	6.02	5.69	3.40	9.93	31.02	47.88	7.76	S
4	14	91	104	7.0	7.05	19.2	330.7	256.4	0.898	0.274	5.51	8.83	3.04	18.66	22.14	41.68	14.48	S
4	14	91	104	10.0	6.90	19.9	64.8	259.2	0.840	0.298	4.74	6.92	7.12	11.76	24.84	15.82	40.47	S
4	14	91	104	13.0	6.42	23.1	109.6	249.0	0.826	0.374	4.39	4.20	4.48	6.32	51.03	30.75	S	
4	14	91	104	16.0	6.76	18.8	250.2	256.8	0.731	0.874	4.76	5.69	1.00	1.31	7.08	72.01	18.60	S
4	14	91	104	19.0	7.42	46.3	309.6	278.2	0.705	0.979	5.42	4.65	1.36	5.80	22.67	59.25	10.92	G
4	14	91	104	22.0	7.22	27.7	341.6	270.6	0.680	0.547	5.89	7.76	8.56	19.29	22.78	38.94	10.43	G
4	15	91	105	1.0	6.41	42.1	86.8	253.2	0.862	0.333	5.95	9.48	4.01	32.69	17.87	22.59	22.83	S
4	15	91	105	4.0	6.40	13.2	147.8	255.6	0.829	0.304	6.83	7.76	2.49	39.49	32.48	11.57	13.97	S
4	15	91	105	7.0	7.01	12.9	303.5	280.4	0.781	0.665	7.42	8.26	3.10	34.08	38.50	19.84	4.48	G
4	15	91	105	10.0	6.96	12.4	19.6	279.2	0.770	0.473	8.13	8.83	12.22	43.23	24.22	17.33	3.00	G
4	15	91	105	13.0	6.26	29.6	98.6	254.2	0.877	0.224	7.82	8.26	17.79	37.47	25.05	15.58	4.11	S
4	15	91	105	16.0	6.37	15.9	182.1	292.8	0.743	0.170	7.76	10.24	5.58	42.27	30.95	19.34	1.86	G
4	15	91	105	19.0	7.03	28.3	285.4	285.1	0.731	0.384	7.16	11.13	2.28	34.52	34.63	24.92	3.66	G
4	15	91	105	22.0	7.12	33.0	340.6	269.3	0.659	0.245	7.64	10.24	5.00	40.19	27.51	21.77	5.52	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
4	16	91	106	1.0	6.40	34.9	75.0	270.0	0.730	0.156	8.06	11.13	9.39	41.18	27.84	18.25	3.35	G
4	16	91	106	4.0	6.21	24.5	146.7	301.4	0.692	0.085	7.64	8.83	10.31	47.44	18.86	19.03	4.36	G
4	16	91	106	7.0	6.82	18.7	283.9	251.1	0.827	0.221	6.69	8.83	2.29	22.90	42.58	28.24	3.99	S
4	16	91	106	10.0	7.00	10.9	13.8	279.4	0.749	0.272	6.83	9.48	3.20	30.26	29.16	32.58	4.80	G
4	16	91	106	13.0	6.37	25.4	81.4	269.4	0.689	0.127	7.70	7.76	6.61	41.95	38.24	10.07	3.13	G
4	16	91	106	16.0	6.18	19.7	151.1	74.0	0.830	0.088	6.24	8.83	8.40	23.84	31.56	24.40	11.80	S
4	16	91	106	19.0	6.84	19.0	278.2	247.9	0.849	0.221	6.74	7.76	4.14	21.40	47.82	22.19	4.46	S
4	16	91	106	22.0	7.13	35.4	329.3	264.5	0.679	0.145	7.16	8.83	6.22	40.40	31.62	14.92	6.85	S
4	17	91	107	1.0	6.51	19.5	39.2	254.2	0.815	0.133	7.82	8.83	10.53	47.67	25.49	13.52	2.80	S
4	17	91	107	4.0	6.06	25.3	129.3	72.8	0.798	0.070	7.64	8.83	25.53	23.91	23.59	21.33	5.64	S
4	17	91	107	7.0	6.49	15.3	233.1	268.7	0.586	0.255	7.42	5.02	11.64	7.85	16.75	61.82	1.94	S
4	17	91	107	10.0	6.89	16.2	329.1	287.7	0.768	0.216	6.83	7.31	13.38	19.11	36.61	26.37	4.52	G
4	17	91	107	13.0	6.44	14.7	43.0	272.6	0.727	0.143	6.87	7.31	10.53	26.24	34.56	24.49	4.18	G
4	17	91	107	16.0	6.03	23.1	133.6	72.1	0.875	0.078	7.06	6.56	23.10	21.97	25.52	24.37	5.04	S
4	17	91	107	19.0	6.57	18.1	265.5	252.4	0.837	0.271	6.10	8.83	24.53	28.27	16.94	19.28	10.99	S
4	17	91	107	22.0	7.04	39.7	320.6	357.1	0.546	0.150	6.56	15.06	26.10	20.66	19.71	11.66	21.87	G
4	18	91	108	1.0	6.88	22.6	339.3	251.2	0.843	0.128	9.23	12.19	46.50	30.65	12.75	5.33	4.77	S
4	18	91	108	4.0	6.31	34.5	108.7	248.4	0.864	0.262	4.28	3.94	13.22	7.19	3.94	29.87	45.78	S
4	18	91	108	7.0	6.59	13.7	199.0	247.2	0.867	0.293	4.51	4.65	8.53	8.22	7.18	38.14	37.93	S
4	18	91	108	10.0	7.17	21.4	316.2	263.1	0.800	0.468	5.48	5.02	14.05	3.16	6.06	63.48	13.26	S
4	18	91	108	13.0	6.99	31.7	350.1	270.0	0.662	0.387	4.97	4.83	4.28	2.39	18.33	56.13	18.87	S
4	18	91	108	16.0	6.51	16.4	85.2	254.7	0.877	0.568	4.57	4.20	9.04	3.65	11.43	62.07	13.81	S
4	18	91	108	19.0	6.77	12.5	237.1	257.5	0.837	0.587	5.00	6.92	3.06	2.34	31.97	40.25	22.38	S
4	18	91	108	22.0	7.39	30.5	299.9	265.9	0.793	0.784	5.51	6.56	3.23	6.88	34.18	40.39	15.32	S
4	19	91	109	1.0	7.29	31.8	339.6	263.0	0.689	0.696	5.79	6.24	1.97	16.01	33.54	35.59	12.90	G
4	19	91	109	4.0	6.70	30.3	77.9	254.6	0.863	0.579	5.02	4.06	2.35	8.92	13.60	61.66	13.48	S
4	19	91	109	7.0	6.67	17.6	138.9	253.3	0.827	0.583	5.04	4.20	2.56	14.53	15.34	46.27	21.30	S
4	19	91	109	10.0	7.21	16.4	286.5	259.8	0.807	0.821	5.36	6.92	1.63	11.75	31.11	43.28	12.24	S
4	19	91	109	13.0	7.20	13.0	16.1	257.1	0.771	0.709	5.12	4.20	2.06	5.35	18.81	54.86	18.92	S
4	19	91	109	16.0	6.74	18.8	103.1	260.3	0.834	0.838	5.15	5.02	2.31	7.23	16.88	59.22	14.36	S
4	19	91	109	19.0	6.73	13.7	159.9	259.7	0.823	0.873	5.12	4.20	1.38	9.02	16.23	59.55	13.83	G
4	19	91	109	22.0	7.28	24.7	277.3	260.2	0.847	1.015	5.15	4.65	2.62	6.91	21.87	55.87	12.73	G
4	20	91	110	1.0	7.47	28.0	339.1	264.8	0.717	0.913	5.15	4.65	3.32	10.27	16.38	58.48	11.55	G
4	20	91	110	4.0	6.98	17.6	55.2	259.4	0.654	0.876	5.66	6.24	4.83	7.65	24.31	56.86	6.35	G
4	20	91	110	7.0	6.72	24.7	121.6	257.1	0.675	0.726	5.51	5.02	3.04	14.52	14.85	52.09	15.50	G
4	20	91	110	10.0	7.09	10.6	239.6	258.2	0.822	1.072	5.00	4.34	2.31	10.20	10.22	62.83	14.44	G
4	20	91	110	13.0	7.40	8.6	311.2	259.5	0.771	1.208	6.13	6.24	2.27	18.01	20.93	53.24	5.55	G
4	20	91	110	16.0	7.12	14.3	47.1	264.7	0.781	1.145	6.32	7.76	4.25	20.40	25.20	44.20	5.94	G
4	20	91	110	19.0	6.80	26.4	121.6	260.9	0.701	0.892	6.40	8.83	3.19	30.57	24.22	33.76	8.26	G
4	20	91	110	22.0	7.16	11.3	228.2	260.4	0.772	0.989	6.61	7.76	3.67	19.82	41.77	25.30	9.44	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
4	21	91	111	1.0	7.53	12.8	307.1	259.9	0.779	1.092	6.87	9.48	9.18	33.85	23.16	28.84	4.97	G
4	21	91	111	4.0	7.22	18.7	29.2	249.9	0.704	0.642	6.36	9.48	6.83	26.64	21.88	37.78	6.86	G
4	21	91	111	7.0	6.72	32.6	88.8	253.5	0.813	0.460	6.52	8.83	13.77	32.11	14.91	28.39	10.82	S
4	21	91	111	10.0	6.77	6.6	156.3	256.2	0.826	0.405	7.37	8.26	3.70	49.26	27.76	11.75	7.52	S
4	21	91	111	13.0	7.12	15.5	307.2	278.6	0.735	0.409	7.42	7.76	6.83	35.92	32.59	18.99	5.67	G
4	21	91	111	16.0	6.99	21.2	356.6	264.4	0.787	0.313	7.88	11.13	12.87	51.96	19.48	11.49	4.20	G
4	21	91	111	19.0	6.52	15.9	70.4	253.3	0.888	0.170	7.59	8.83	7.77	62.21	11.58	11.15	7.29	S
4	21	91	111	22.0	6.63	14.5	118.5	76.3	0.942	0.184	7.42	8.26	11.23	45.36	24.84	10.48	8.08	S
4	22	91	112	1.0	7.13	13.7	318.4	276.0	0.613	0.214	7.70	8.26	5.06	50.92	21.59	15.20	7.23	G
4	22	91	112	4.0	7.05	17.6	337.7	269.5	0.642	0.187	7.94	8.83	12.37	51.37	13.75	10.48	12.03	G
4	22	91	112	7.0	6.53	28.7	74.8	74.9	0.939	0.121	8.46	11.13	22.77	54.84	6.21	3.85	12.34	S
4	22	91	112	10.0	6.39	24.9	142.6	285.8	0.713	0.106	9.06	11.13	19.08	58.72	14.83	3.99	3.37	G
4	22	91	112	13.0	6.90	20.5	221.5	285.3	0.773	0.171	8.46	7.76	4.66	54.10	33.33	6.26	1.65	G
4	22	91	112	16.0	7.00	9.2	271.8	296.9	0.753	0.186	9.14	12.19	30.49	43.78	9.24	14.11	2.38	G
4	22	91	112	19.0	6.51	34.4	72.9	73.2	0.928	0.130	10.14	11.13	25.61	61.03	5.84	2.93	4.59	S
4	22	91	112	22.0	6.34	25.7	129.8	277.2	0.681	0.081	8.39	8.26	12.62	56.79	16.85	10.30	3.45	G
4	23	91	113	1.0	6.86	14.2	271.1	293.4	0.743	0.204	8.33	9.48	6.18	62.88	23.12	6.53	1.29	G
4	23	91	113	4.0	7.09	14.8	334.4	299.1	0.716	0.216	8.61	8.26	9.02	73.40	9.71	5.13	2.74	G
4	23	91	113	7.0	6.70	14.2	40.4	263.5	0.749	0.160	9.14	9.48	20.98	63.51	9.04	3.74	2.73	G
4	23	91	113	10.0	6.34	25.2	133.1	72.8	0.923	0.148	8.68	8.26	19.49	46.57	13.72	18.56	1.66	S
4	23	91	113	13.0	6.74	12.5	243.3	254.8	0.888	0.196	7.88	8.83	6.03	43.09	40.66	7.15	3.07	S
4	23	91	113	16.0	7.10	27.2	312.4	267.7	0.714	0.176	7.11	8.26	8.04	47.69	24.92	9.42	9.93	G
4	23	91	113	19.0	6.77	28.2	22.3	246.1	0.731	0.163	8.53	9.48	12.51	70.62	5.19	4.38	7.30	G
4	23	91	113	22.0	6.31	28.6	109.0	75.9	0.953	0.141	8.68	8.26	18.76	59.11	9.32	5.13	7.67	S
4	24	91	114	1.0	6.61	14.8	213.1	267.3	0.745	0.173	8.06	7.31	6.93	44.44	40.18	4.21	4.23	G
4	24	91	114	4.0	7.07	13.0	289.0	256.8	0.841	0.199	8.26	7.76	8.83	52.24	31.40	5.29	2.26	S
4	24	91	114	7.0	6.87	12.4	10.7	256.4	0.845	0.180	8.98	10.24	17.28	57.68	17.94	4.52	2.58	S
4	24	91	114	10.0	6.33	35.3	95.8	75.5	0.920	0.165	7.76	6.56	11.93	27.06	46.56	9.69	4.77	S
4	24	91	114	13.0	6.56	8.7	191.8	256.3	0.762	0.159	8.00	7.31	11.80	39.63	38.94	5.63	3.99	G
4	24	91	114	16.0	7.11	20.9	280.7	257.2	0.883	0.214	7.88	11.13	8.82	49.87	29.20	9.42	2.70	S
4	24	91	114	19.0	7.23	10.7	344.1	249.7	0.775	0.383	4.47	4.06	9.62	14.92	8.23	32.16	35.07	S
4	24	91	114	22.0	6.61	44.6	114.5	246.1	0.857	0.410	4.85	5.22	3.85	6.82	5.51	59.40	24.42	S
4	25	91	115	1.0	6.55	18.0	145.3	244.4	0.837	0.267	4.57	4.49	13.44	5.01	5.86	43.00	32.68	S
4	25	91	115	4.0	6.99	18.9	273.2	75.0	0.933	0.232	5.66	4.49	6.32	17.30	21.29	31.11	23.98	S
4	25	91	115	7.0	7.06	21.6	338.0	247.3	0.828	0.238	5.42	4.06	11.01	20.63	7.96	36.66	23.74	S
4	25	91	115	10.0	6.53	23.1	82.8	73.9	0.938	0.171	4.61	3.94	13.71	18.52	7.33	25.65	34.79	S
4	25	91	115	13.0	6.50	17.6	141.8	247.7	0.912	0.171	5.02	7.76	17.73	27.04	14.02	9.13	32.08	S
4	25	91	115	16.0	6.97	15.0	289.6	251.7	0.919	0.163	7.42	8.26	16.49	33.38	23.73	13.27	13.14	S
4	25	91	115	19.0	7.16	33.0	316.0	336.5	0.590	0.120	8.46	12.19	42.09	31.33	9.97	9.57	7.04	G
4	25	91	115	22.0	6.56	17.2	45.6	281.0	0.810	0.128	10.14	12.19	53.13	27.51	9.46	8.16	1.73	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C	
4	26	91	116	1.0	6.37	17.9	134.0	280.7	0.726	0.132	8.53	12.19	32.03	33.39	22.68	10.89	1.01	G
4	26	91	116	4.0	6.83	18.5	237.9	256.1	0.892	0.164	8.19	10.24	14.20	43.40	25.14	14.42	2.84	S
4	26	91	116	7.0	7.08	18.6	333.0	264.0	0.769	0.165	7.82	12.19	30.95	28.40	23.82	11.06	5.77	G
4	26	91	116	10.0	6.63	10.3	72.8	255.2	0.903	0.167	8.39	12.19	29.04	21.99	15.93	18.13	14.91	S
4	26	91	116	13.0	6.38	20.2	136.8	73.3	0.955	0.088	7.16	7.76	15.34	41.48	23.16	8.39	11.64	S
4	26	91	116	16.0	6.90	13.8	273.8	253.4	0.895	0.229	6.06	10.24	7.60	24.69	32.27	6.47	28.96	S
4	26	91	116	19.0	7.23	32.2	314.3	250.0	0.553	0.146	7.64	11.13	9.71	33.36	33.38	17.87	5.67	G
4	26	91	116	22.0	6.76	11.2	359.7	263.6	0.807	0.148	8.75	10.24	18.80	44.09	25.74	10.18	1.19	G
4	27	91	117	1.0	6.28	31.4	114.9	72.6	0.932	0.110	8.26	12.19	18.13	34.08	31.08	13.92	2.79	S
4	27	91	117	4.0	6.62	14.8	224.7	264.7	0.711	0.145	8.00	8.26	7.13	50.76	23.30	14.10	4.71	G
4	27	91	117	7.0	7.06	16.9	298.1	284.1	0.810	0.180	8.13	11.13	15.26	41.14	21.25	15.59	6.75	G
4	27	91	117	10.0	6.71	11.7	35.0	252.4	0.868	0.160	8.39	11.13	18.62	46.76	10.58	19.72	4.33	S
4	27	91	117	13.0	6.26	24.9	113.3	71.0	0.891	0.118	8.53	11.13	18.72	43.32	18.54	15.44	3.97	S
4	27	91	117	16.0	6.66	20.0	231.3	269.0	0.729	0.171	8.13	8.83	6.17	54.82	28.09	7.54	3.37	G
4	27	91	117	19.0	7.18	24.2	315.0	267.7	0.616	0.214	7.59	10.24	5.81	54.58	13.39	8.44	17.79	G
4	27	91	117	22.0	6.88	21.4	2.6	297.5	0.747	0.180	10.78	11.13	30.50	56.09	6.85	3.07	3.49	G
4	28	91	118	1.0	6.26	36.5	99.2	271.6	0.672	0.116	7.94	11.13	31.39	34.66	10.28	14.38	9.29	G
4	28	91	118	4.0	6.45	12.7	192.9	296.0	0.758	0.131	9.23	10.24	26.08	53.05	11.44	7.75	1.67	G
4	28	91	118	7.0	6.99	20.3	285.7	281.8	0.719	0.233	8.83	12.19	25.13	42.65	19.43	8.11	4.68	G
4	28	91	118	10.0	6.81	13.3	30.1	251.0	0.926	0.172	8.83	12.19	35.06	38.74	9.98	12.07	4.15	S
4	28	91	118	13.0	6.33	24.4	111.4	71.6	0.937	0.136	7.42	12.19	30.45	24.26	10.78	21.23	13.28	S
4	28	91	118	16.0	6.55	9.7	178.6	250.9	0.902	0.140	8.26	11.13	19.03	33.94	25.24	12.70	9.09	S
4	28	91	118	19.0	7.22	26.5	298.9	258.8	0.826	0.202	7.53	11.13	18.53	44.25	10.01	16.24	10.97	S
4	28	91	118	22.0	7.21	31.3	318.3	252.8	0.535	0.232	4.97	12.19	26.87	22.87	2.72	10.69	36.85	G
4	29	91	119	1.0	6.55	28.8	84.6	253.5	0.923	0.195	5.89	3.82	19.67	18.51	9.30	21.50	31.03	S
4	29	91	119	4.0	6.56	15.1	140.5	252.0	0.878	0.190	5.89	11.13	12.85	25.28	9.44	31.44	20.98	S
4	29	91	119	7.0	7.13	14.8	290.2	251.6	0.873	0.233	6.02	8.83	10.27	31.45	14.41	24.27	19.60	S
4	29	91	119	10.0	7.09	15.5	355.0	284.0	0.824	0.269	6.17	5.69	6.71	7.58	37.97	42.63	5.11	G
4	29	91	119	13.0	6.55	24.8	97.1	257.0	0.842	0.213	7.11	7.76	6.68	9.03	59.82	19.35	5.12	S
4	29	91	119	16.0	6.60	10.9	158.1	274.2	0.721	0.197	6.61	7.31	6.89	9.88	49.05	30.34	3.83	G
4	29	91	119	19.0	7.21	16.5	289.4	258.7	0.833	0.363	6.32	6.56	5.37	6.47	46.95	35.18	6.03	S
4	29	91	119	22.0	7.29	15.6	356.5	287.9	0.758	0.328	7.11	8.83	5.62	32.86	33.94	23.38	4.21	G
4	30	91	120	1.0	6.64	33.2	73.6	281.6	0.739	0.201	7.42	8.26	12.21	33.21	37.36	15.09	2.12	G
4	30	91	120	4.0	6.43	17.4	126.7	297.2	0.800	0.185	8.13	6.92	14.20	32.39	36.27	15.85	1.29	G
4	30	91	120	7.0	6.89	11.0	256.6	273.4	0.679	0.277	6.65	6.24	6.29	24.45	33.49	29.69	6.09	G
4	30	91	120	10.0	7.07	14.5	329.3	289.8	0.719	0.259	7.06	6.56	9.66	23.01	44.60	18.76	3.97	G
4	30	91	120	13.0	6.55	17.1	86.7	248.9	0.900	0.149	7.42	6.24	21.01	22.37	35.39	17.20	4.04	S
4	30	91	120	16.0	6.42	22.8	140.5	261.9	0.736	0.131	7.47	6.24	12.59	31.40	32.22	21.32	2.48	G
4	30	91	120	19.0	6.93	11.2	282.5	294.5	0.794	0.206	7.06	7.31	13.34	21.17	32.32	28.44	4.73	G
4	30	91	120	22.0	7.19	22.1	327.5	296.6	0.594	0.186	7.26	6.92	12.55	28.73	30.65	24.58	3.50	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	1	91	121	1.0	6.68		49.1	267.6	0.771	0.147	8.19	15.06	28.49	17.46	28.80	18.17	7.09	G
5	1	91	121	4.0	6.38		113.0	266.6	0.653	0.123	7.42	13.47	35.58	14.48	24.76	20.50	4.68	G
5	1	91	121	7.0	6.76		239.8	272.6	0.780	0.150	8.06	5.69	27.71	22.74	24.43	22.92	2.20	G
5	1	91	121	10.0	7.06		324.1	296.0	0.719	0.193	7.37	6.92	26.35	19.04	30.06	20.04	4.51	G
5	1	91	121	13.0	6.69		54.7	252.4	0.846	0.145	8.75	12.19	36.27	29.17	18.05	13.82	2.69	G
5	1	91	121	16.0	6.39		114.0	251.0	0.907	0.133	8.00	11.13	26.62	28.73	22.61	11.09	10.95	S
5	1	91	121	19.0	6.80		221.8	262.8	0.755	0.160	8.13	12.19	33.59	23.58	21.47	15.35	6.01	G
5	1	91	121	22.0	7.14		313.4	256.6	0.865	0.152	8.90	12.19	45.96	25.40	12.81	9.60	6.24	S
5	2	91	122	1.0	6.83		346.6	287.8	0.739	0.142	9.23	15.06	39.33	28.76	20.61	6.05	5.25	G
5	2	91	122	4.0	6.49		112.9	288.4	0.783	0.117	9.14	13.47	49.75	20.90	13.70	7.79	7.87	G
5	2	91	122	7.0	6.70		77.1	249.6	0.919	0.160	5.25	12.19	24.99	14.70	8.46	9.17	42.68	S
5	2	91	122	10.0	7.08		316.1	69.5	0.925	0.230	5.79	12.19	23.20	13.74	10.32	25.51	27.23	S
5	2	91	122	13.0	6.81		79.8	250.8	0.910	0.168	7.37	13.47	28.41	13.39	19.31	31.92	6.95	S
5	2	91	122	16.0	6.43		105.4	69.6	0.933	0.123	6.83	12.19	37.22	14.94	15.38	11.47	20.99	S
5	2	91	122	19.0	6.70		163.2	254.6	0.800	0.144	8.13	13.47	28.78	24.35	30.89	11.59	4.38	S
5	2	91	122	22.0	7.11		304.9	284.2	0.787	0.177	8.46	12.19	28.51	21.78	29.94	15.01	4.76	G
5	3	91	123	1.0	6.89		8.6	282.7	0.734	0.133	8.26	13.47	36.50	37.09	11.59	6.87	7.95	G
5	3	91	123	4.0	6.36		76.7	253.4	0.656	0.123	9.75	12.19	48.59	31.31	14.26	4.30	1.54	G
5	3	91	123	7.0	6.45		125.0	69.4	0.907	0.145	8.68	11.13	27.10	29.48	28.72	9.76	4.94	S
5	3	91	123	10.0	6.99		248.7	75.2	0.916	0.245	4.74	3.71	11.62	15.01	13.11	17.66	42.60	S
5	3	91	123	13.0	6.96		22.3	251.1	0.914	0.235	5.02	5.45	14.36	12.83	10.99	28.05	33.77	S
5	3	91	123	16.0	6.51		102.8	71.1	0.917	0.274	4.41	4.83	11.46	5.63	2.06	53.79	27.07	S
5	3	91	123	19.0	6.59		125.0	250.9	0.934	0.166	5.31	11.13	14.79	24.68	11.36	13.14	36.04	S
5	3	91	123	22.0	7.01		291.0	68.5	0.925	0.144	7.88	11.13	26.39	35.41	11.19	13.45	13.57	S
5	4	91	124	1.0	6.94		332.2	307.0	0.532	0.091	8.39	13.47	31.60	36.84	9.79	12.25	9.51	G
5	4	91	124	4.0	6.49		70.2	286.4	0.686	0.111	9.75	10.24	41.27	25.40	10.67	18.64	4.01	G
5	4	91	124	7.0	6.50		123.2	75.0	0.964	0.122	6.83	12.19	26.84	24.90	11.24	10.66	26.36	S
5	4	91	124	10.0	6.87		335.2	251.5	0.882	0.165	5.79	8.83	17.82	24.17	15.93	7.78	34.30	S
5	4	91	124	13.0	6.93		342.3	249.8	0.893	0.124	6.40	11.13	22.93	30.93	13.23	17.91	15.00	S
5	4	91	124	16.0	6.53		91.3	253.1	0.949	0.127	6.87	9.48	29.71	25.27	11.20	18.83	14.99	S
5	4	91	124	19.0	6.49		131.1	69.9	0.926	0.120	7.01	9.48	15.82	32.44	23.05	14.26	14.43	S
5	4	91	124	22.0	6.86		238.8	261.3	0.844	0.137	7.01	5.69	20.68	24.62	18.44	28.45	7.81	S
5	5	91	125	1.0	6.99		309.9	285.1	0.738	0.121	6.97	17.07	31.73	16.28	9.30	36.55	6.14	G
5	5	91	125	4.0	6.61		84.6	71.3	0.931	0.121	7.01	5.95	20.21	18.02	20.95	31.45	9.37	S
5	5	91	125	7.0	6.44		125.5	70.6	0.939	0.106	6.56	15.06	23.60	20.44	23.52	23.78	8.65	S
5	5	91	125	10.0	6.75		238.7	71.1	0.935	0.139	6.83	6.56	15.94	23.39	23.41	25.98	11.28	S
5	5	91	125	13.0	6.98		287.7	253.2	0.886	0.159	5.69	12.19	35.78	14.80	9.61	14.47	25.34	S
5	5	91	125	16.0	6.71		50.4	260.1	0.857	0.244	4.51	3.82	15.43	12.48	9.35	22.08	40.66	S
5	5	91	125	19.0	6.55		107.9	257.6	0.917	0.226	4.57	4.20	8.79	15.10	4.22	37.16	34.73	S
5	5	91	125	22.0	6.82		241.6	256.9	0.901	0.202	4.95	11.13	9.55	23.08	14.47	22.42	30.48	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	6	91	126	1.0	7.04		327.6	255.6	0.838	0.175	5.07	3.61	17.49	20.20	5.93	15.74	40.64	S
5	6	91	126	4.0	6.80		335.2	264.4	0.784	0.140	6.24	9.48	15.44	25.64	12.30	27.66	18.96	G
5	6	91	126	7.0	6.51		98.9	253.3	0.884	0.118	6.10	8.26	8.19	26.69	15.90	32.98	16.24	S
5	6	91	126	10.0	6.65		115.1	255.0	0.897	0.163	6.32	5.22	17.22	14.00	18.56	40.29	9.93	S
5	6	91	126	13.0	6.94		228.3	266.8	0.852	0.254	5.92	5.69	3.00	6.67	27.59	53.11	9.63	G
5	6	91	126	16.0	6.76		145.2	253.3	0.915	0.256	5.63	4.65	10.18	10.01	14.68	56.39	8.74	S
5	6	91	126	19.0	6.48		185.8	258.7	0.807	0.193	5.89	5.95	4.58	7.80	19.57	64.69	3.35	S
5	6	91	126	22.0	6.70		201.9	252.9	0.847	0.172	5.92	5.95	5.18	5.13	29.17	57.98	2.54	S
5	7	91	127	1.0	7.00		248.3	283.3	0.831	0.263	5.85	6.92	3.56	5.31	44.18	39.50	7.45	G
5	7	91	127	4.0	7.10		89.0	253.9	0.887	0.257	5.89	6.24	21.03	10.85	30.27	34.70	3.14	S
5	7	91	127	7.0	6.62		116.6	243.4	0.879	0.333	4.02	3.82	5.68	5.50	16.43	15.47	56.92	S
5	7	91	127	10.0	6.69		180.8	238.4	0.832	0.370	4.57	4.65	4.41	4.38	11.10	53.01	27.09	S
5	7	91	127	13.0	6.96		278.1	250.8	0.850	0.244	5.42	7.76	7.07	12.36	29.06	26.33	25.18	S
5	7	91	127	16.0	6.94		23.6	252.4	0.912	0.204	6.48	6.24	10.39	13.37	27.94	32.89	15.41	S
5	7	91	127	19.0	6.55		71.7	250.9	0.921	0.147	6.40	8.26	12.23	21.82	26.29	25.11	14.55	S
5	7	91	127	22.0	6.45		117.3	73.4	0.950	0.137	6.92	7.31	9.11	23.02	39.45	22.53	5.89	S
5	8	91	128	1.0	6.80		263.2	252.9	0.799	0.177	7.06	7.76	6.08	32.68	33.43	21.78	6.03	S
5	8	91	128	4.0	6.89		6.4	253.7	0.841	0.153	7.82	8.83	14.83	38.22	27.59	15.09	4.27	S
5	8	91	128	7.0	6.54		86.7	256.0	0.767	0.133	6.92	7.76	8.66	26.04	44.22	15.48	5.59	S
5	8	91	128	10.0	6.43		142.6	271.4	0.761	0.149	6.87	6.92	9.08	19.88	47.45	19.88	3.71	G
5	8	91	128	13.0	6.81		290.2	291.4	0.714	0.184	6.97	6.56	3.70	33.12	35.95	21.98	5.26	G
5	8	91	128	16.0	6.96		8.9	253.2	0.899	0.195	6.56	6.56	8.71	18.18	33.25	30.87	9.00	S
5	8	91	128	19.0	6.60		69.8	260.1	0.794	0.145	8.06	7.31	11.44	30.76	41.19	11.52	5.08	G
5	8	91	128	22.0	6.36		129.3	71.7	0.917	0.146	7.42	6.24	6.37	29.71	45.17	16.15	2.60	S
5	9	91	129	1.0	6.68		205.7	255.9	0.821	0.142	7.11	6.56	6.99	16.29	45.50	26.81	4.41	G
5	9	91	129	4.0	6.91		297.1	291.8	0.781	0.159	7.06	10.24	7.26	35.30	28.07	25.66	3.70	G
5	9	91	129	7.0	6.61		59.7	249.4	0.873	0.126	7.16	6.24	7.87	29.90	32.92	24.34	4.98	S
5	9	91	129	10.0	6.36		110.9	250.3	0.848	0.102	7.06	10.24	11.60	30.39	19.68	33.21	5.12	S
5	9	91	129	13.0	6.71		270.0	255.8	0.764	0.140	6.10	6.56	5.68	16.04	37.39	33.92	6.98	S
5	9	91	129	16.0	7.07		306.5	275.8	0.725	0.178	6.32	4.65	7.12	24.95	21.31	36.59	10.03	G
5	9	91	129	19.0	6.84		43.5	252.2	0.928	0.178	7.47	7.76	10.85	29.15	31.58	22.97	5.45	S
5	9	91	129	22.0	6.40		94.1	255.8	0.913	0.139	7.42	7.76	11.29	25.30	41.78	9.63	12.01	S
5	10	91	130	1.0	6.60		133.6	259.2	0.863	0.161	6.74	8.83	4.37	28.46	27.77	34.08	5.31	S
5	10	91	130	4.0	6.97		281.4	276.7	0.757	0.172	7.16	8.83	6.78	43.17	27.47	17.15	5.43	G
5	10	91	130	7.0	6.79		17.6	254.7	0.915	0.148	7.06	7.31	9.93	26.42	29.06	28.17	6.42	S
5	10	91	130	10.0	6.35		102.9	266.7	0.811	0.125	7.16	7.31	7.23	32.91	32.39	23.27	4.21	G
5	10	91	130	13.0	6.57		73.2	263.3	0.786	0.141	6.74	7.76	4.15	22.60	44.96	23.47	4.82	G
5	10	91	130	16.0	7.07		306.8	257.0	0.848	0.202	6.17	7.76	3.52	25.91	35.06	23.60	11.90	S
5	10	91	130	19.0	6.99		46.5	251.5	0.909	0.143	7.42	7.76	9.94	39.70	26.27	16.18	7.91	S
5	10	91	130	22.0	6.55		90.4	257.0	0.909	0.664	4.45	4.20	3.05	6.09	3.31	73.37	14.17	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	11	91	131	1.0	6.57		138.2	264.0	0.790	0.449	4.59	4.83	2.15	3.27	3.80	71.00	19.78	S
5	11	91	131	4.0	7.02		272.3	269.1	0.765	0.310	4.38	4.34	3.75	9.70	10.60	55.36	20.59	G
5	11	91	131	7.0	7.02		316.0	255.0	0.884	0.218	5.00	5.45	6.95	13.48	11.55	40.27	27.76	S
5	11	91	131	10.0	6.49		96.2	252.5	0.888	0.174	5.39	6.24	3.34	7.84	29.83	42.90	16.09	S
5	11	91	131	13.0	6.48		111.7	247.9	0.835	0.173	5.89	6.56	8.69	10.21	23.78	44.93	12.39	S
5	11	91	131	16.0	7.06		281.2	281.3	0.746	0.234	5.79	7.31	4.60	10.92	40.40	30.25	13.84	G
5	11	91	131	19.0	7.12		331.3	271.6	0.767	0.268	6.24	8.26	2.45	22.90	34.36	30.68	9.60	G
5	11	91	131	22.0	6.51		78.3	73.3	0.942	0.145	6.92	7.76	6.80	24.86	35.52	27.66	5.16	S
5	12	91	132	1.0	6.25		130.6	251.3	0.808	0.139	6.92	7.76	3.24	25.70	39.97	25.32	5.77	S
5	12	91	132	4.0	6.72		296.9	270.5	0.695	0.209	7.16	7.76	3.02	33.84	40.66	16.86	5.62	G
5	12	91	132	7.0	6.93		2.5	285.2	0.751	0.241	6.97	8.83	4.20	41.90	28.13	21.23	4.54	G
5	12	91	132	10.0	6.43		95.8	258.0	0.845	0.139	8.26	10.24	5.94	67.73	14.46	7.67	4.21	G
5	12	91	132	13.0	6.23		145.6	271.9	0.699	0.083	6.69	9.48	6.27	41.42	29.03	7.09	16.18	G
5	12	91	132	16.0	6.79		241.1	264.3	0.731	0.245	7.06	8.83	3.80	34.55	33.99	24.23	3.43	G
5	12	91	132	19.0	7.15		301.5	287.5	0.760	0.219	7.64	10.24	10.95	40.32	22.86	18.11	7.76	G
5	12	91	132	22.0	6.64		53.8	250.6	0.884	0.171	10.04	11.13	21.45	68.02	6.16	3.08	1.29	S
5	13	91	133	1.0	6.11		114.0	252.6	0.845	0.099	8.90	11.13	13.74	61.49	17.97	5.58	1.23	S
5	13	91	133	4.0	6.47		248.8	287.0	0.726	0.181	7.70	9.48	5.16	54.46	13.10	26.11	1.17	G
5	13	91	133	7.0	6.93		277.4	260.2	0.841	0.204	7.59	10.24	8.68	60.60	7.88	15.41	7.42	G
5	13	91	133	10.0	6.55		67.0	255.9	0.831	0.129	8.39	10.24	19.52	47.85	18.12	9.92	4.59	G
5	13	91	133	13.0	6.06		130.9	251.3	0.741	0.080	7.01	10.24	17.43	43.09	14.09	9.48	15.91	G
5	13	91	133	16.0	6.54		253.2	302.3	0.699	0.159	7.70	8.83	7.26	53.84	23.40	12.13	3.37	G
5	13	91	133	19.0	7.16		312.3	267.3	0.778	0.180	9.14	11.13	24.18	54.44	6.55	8.82	6.01	G
5	13	91	133	22.0	6.88		352.6	285.5	0.641	0.155	10.67	12.19	51.85	41.00	2.84	2.76	1.56	G
5	14	91	134	1.0	6.15		99.1	279.1	0.759	0.099	10.34	12.19	40.72	52.15	3.71	2.25	1.17	G
5	14	91	134	4.0	6.31		184.7	291.0	0.699	0.110	8.39	10.24	7.60	58.75	10.87	19.70	3.08	G
5	14	91	134	7.0	6.94		295.9	274.7	0.798	0.131	8.13	10.24	6.28	60.23	10.36	12.97	10.16	G
5	14	91	134	10.0	7.74		337.2	308.6	0.599	0.130	6.83	11.13	22.56	41.57	6.67	11.71	17.49	G
5	14	91	134	13.0	6.14		99.1	251.7	0.857	0.101	6.52	5.22	9.25	26.95	9.44	36.67	17.69	S
5	14	91	134	16.0	6.37		196.5	248.4	0.642	0.101	7.47	8.26	7.80	49.40	15.06	20.57	7.17	G
5	14	91	134	19.0	7.14		299.1	269.9	0.690	0.110	6.40	10.24	12.26	39.92	7.50	17.30	23.02	G
5	14	91	134	22.0	7.10		325.5	347.8	0.758	0.090	6.92	11.13	18.80	38.22	6.49	20.32	16.18	G
5	15	91	135	1.0	6.33		83.5	257.8	0.735	0.080	8.98	11.13	12.68	63.08	10.91	9.73	3.61	G
5	15	91	135	4.0	6.25		140.2	250.2	0.659	0.051	7.76	9.48	21.76	34.73	10.95	24.72	7.84	G
5	15	91	135	7.0	6.89		284.3	251.5	0.853	0.142	6.48	7.76	9.75	31.12	25.95	16.93	16.25	S
5	15	91	135	10.0													M	
5	15	91	135	13.0	6.11	40.4	100.5	286.9	0.693	0.083	6.61	10.24	16.25	28.18	13.54	32.60	9.42	G
5	15	91	135	16.0	6.10	30.2	138.7	308.6	0.636	0.069	6.92	4.34	34.95	13.97	6.82	35.85	8.41	G
5	15	91	135	19.0	6.88	21.2	262.2	274.9	0.748	0.136	4.49	4.83	10.02	12.97	11.58	34.14	31.29	G
5	15	91	135	22.0	7.12	26.5	323.8	200.1	0.562	0.123	4.76	4.06	9.75	14.74	6.27	37.88	31.36	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	16	91	136	1.0	6.48	23.9	64.9	238.1	0.761	0.156	5.39	4.49	5.16	18.41	10.39	54.44	11.60	G
5	16	91	136	4.0	6.10	38.6	115.9	135.8	0.800	0.132	4.97	4.65	6.65	8.90	14.59	50.01	19.84	S
5	16	91	136	7.0	6.59	8.6	191.1	289.8	0.708	0.179	5.42	5.95	4.82	9.00	21.66	45.88	18.65	G
5	16	91	136	10.0	6.96	7.2	321.4	281.1	0.697	0.208	5.20	5.22	4.18	10.73	16.49	56.79	11.81	G
5	16	91	136	13.0	6.44	28.6	83.4	293.8	0.757	0.138	5.95	5.02	8.62	15.95	28.47	37.41	9.54	S
5	16	91	136	16.0	6.05	39.2	123.9	241.2	0.603	0.143	4.85	6.56	12.23	5.38	39.46	20.45	22.47	S
5	16	91	136	19.0	6.66	17.4	232.7	301.7	0.773	0.156	5.72	6.92	5.79	13.64	40.20	22.44	17.94	G
5	16	91	136	22.0	7.13	20.1	314.8	294.5	0.730	0.191	6.32	6.56	4.78	11.18	54.08	18.53	11.43	G
5	17	91	137	1.0	6.70	15.7	24.6	288.7	0.770	0.167	6.83	7.31	4.32	15.57	46.22	28.04	5.85	G
5	17	91	137	4.0	6.06	43.5	107.5	132.4	0.847	0.127	6.21	7.31	4.77	10.60	45.07	30.87	8.69	S
5	17	91	137	7.0	6.31	19.9	160.5	311.8	0.880	0.150	5.89	5.02	3.94	7.54	29.47	51.59	7.46	S
5	17	91	137	10.0	6.89	7.9	293.9	294.5	0.767	0.205	5.82	6.56	5.21	10.61	25.59	44.33	14.26	S
5	17	91	137	13.0	6.59	13.5	38.3	293.1	0.797	0.165	6.40	6.56	4.74	17.52	33.85	37.37	6.52	S
5	17	91	137	16.0	6.01	36.7	110.2	136.0	0.772	0.084	6.06	7.31	8.57	15.42	24.68	28.85	22.48	S
5	17	91	137	19.0	6.29	18.0	171.6	278.5	0.807	0.122	5.99	4.20	9.31	22.66	19.16	35.55	13.32	G
5	17	91	137	22.0	6.99	18.3	267.2	266.6	0.791	0.177	5.25	4.83	11.50	10.63	18.78	43.76	15.33	G
5	18	91	138	1.0	6.82	24.2	343.0	296.8	0.618	0.126	7.06	8.83	13.53	35.13	17.81	26.99	6.54	G
5	18	91	138	4.0	6.15	42.0	95.4	128.7	0.734	0.121	6.52	8.26	10.95	30.60	18.49	35.01	4.95	S
5	18	91	138	7.0	6.18	31.2	144.6	150.8	0.722	0.075	6.92	6.24	8.30	22.73	28.55	32.30	8.12	S
5	18	91	138	10.0	6.81	18.1	247.8	281.2	0.639	0.168	6.32	8.83	5.47	25.16	30.76	30.27	8.34	G
5	18	91	138	13.0	7.00	2.6	254.4	291.3	0.708	0.824	4.32	4.49	3.60	2.18	2.51	74.40	17.31	S
5	18	91	138	16.0	6.64	15.5	91.7	296.5	0.649	1.336	5.28	5.69	0.58	0.67	24.55	67.80	6.40	S
5	18	91	138	19.0	6.71	20.5	177.4	281.2	0.668	0.989	5.20	6.92	1.07	1.66	31.24	54.39	11.65	S
5	18	91	138	22.0	7.25	24.6	273.8	291.1	0.795	1.149	5.99	7.31	1.64	6.05	38.45	45.27	8.60	S
5	19	91	139	1.0	7.43	36.0	330.7	288.5	0.774	0.796	6.17	8.83	2.02	31.65	21.93	36.14	8.26	S
5	19	91	139	4.0	6.94	27.5	294.5	0.752	0.827	5.72	4.49	1.80	21.02	22.93	49.17	5.08	S	
5	19	91	139	7.0	6.72	39.2	284.6	0.737	1.218	5.63	6.24	1.58	13.12	28.32	46.97	10.01	S	
5	19	91	139	10.0	7.22	20.5	290.2	0.715	1.332	5.85	6.56	1.98	14.08	23.28	52.46	8.20	S	
5	19	91	139	13.0	7.44	9.2	297.0	0.744	1.108	6.13	7.76	1.77	9.66	48.01	34.57	5.98	S	
5	19	91	139	16.0	6.99	39.2	313.9	0.702	0.832	5.79	5.95	1.67	15.34	23.60	46.43	12.96	S	
5	19	91	139	19.0	6.70	47.0	310.8	0.688	0.558	5.25	4.20	3.10	19.72	19.10	35.00	23.08	S	
5	19	91	139	22.0	7.13	22.4	284.5	0.700	0.707	5.54	9.48	2.00	24.47	27.58	27.42	18.53	S	
5	20	91	140	1.0	7.45	2.9	300.3	0.730	0.698	6.17	7.76	4.32	15.13	23.22	40.30	17.02	S	
5	20	91	140	4.0	7.08	24.2	307.9	0.789	0.552	6.10	6.92	2.95	24.53	30.09	27.25	15.18	S	
5	20	91	140	7.0	6.62	44.6	311.1	0.792	0.433	5.75	10.24	5.81	24.09	14.83	26.78	28.49	S	
5	20	91	140	10.0	6.84	33.2	304.5	0.751	0.451	5.66	10.24	3.49	33.91	22.02	24.53	16.05	S	
5	20	91	140	13.0	7.22	11.1	279.3	0.744	0.546	6.78	9.48	4.63	31.14	20.56	35.56	8.11	S	
5	20	91	140	16.0	7.00	26.7	139.5	0.844	0.381	6.13	11.13	6.96	23.90	24.91	28.88	15.36	S	
5	20	91	140	19.0	6.49	40.1	310.4	0.821	0.253	5.75	5.69	7.76	19.57	23.75	29.79	19.13	S	
5	20	91	140	22.0	6.66	32.4	288.8	0.783	0.280	6.56	8.83	3.94	38.41	23.69	22.38	11.58	S	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	21	91	141	1.0	7.12	9.9		301.1	0.800	0.357	6.61	8.26	1.62	32.62	24.63	33.83	7.29	S
5	21	91	141	4.0	6.97	19.3		288.9	0.784	0.264	6.78	8.83	5.46	32.40	26.45	28.23	7.45	S
5	21	91	141	7.0	6.42	45.8		270.6	0.669	0.205	6.61	10.24	9.11	30.75	24.95	24.67	10.52	S
5	21	91	141	10.0	6.43	34.1		303.1	0.738	0.190	6.36	8.83	3.40	32.66	23.85	17.44	22.65	G
5	21	91	141	13.0	6.93	10.8		271.7	0.666	0.281	6.44	7.76	3.32	22.28	30.81	35.29	8.30	G
5	21	91	141	16.0	6.94	10.5		300.7	0.686	0.279	6.61	8.83	14.93	31.76	18.40	24.01	10.90	S
5	21	91	141	19.0	6.41	39.6		270.4	0.707	0.172	7.21	10.24	6.40	39.35	23.00	24.75	6.49	G
5	21	91	141	22.0	6.29	35.0		306.9	0.850	0.167	6.83	7.76	3.44	23.66	38.43	28.71	5.76	S
5	22	91	142	1.0	6.77	16.1		281.4	0.699	0.209	6.83	6.24	2.46	29.45	33.78	28.84	5.47	G
5	22	91	142	4.0	6.88	13.3		287.6	0.797	0.210	7.11	8.26	4.43	29.79	30.58	30.82	4.38	G
5	22	91	142	7.0	6.41	32.9		290.5	0.716	0.170	6.97	7.76	4.67	26.79	47.72	12.06	8.75	G
5	22	91	142	10.0	6.20	46.1		294.2	0.758	0.104	7.53	6.92	4.45	32.13	43.90	13.54	5.98	G
5	22	91	142	13.0	6.66	18.1		296.6	0.767	0.216	6.69	7.76	1.93	23.88	41.60	27.51	5.08	G
5	22	91	142	16.0	6.94	10.5		281.7	0.689	0.223	6.87	8.26	4.62	45.88	18.71	22.25	8.54	G
5	22	91	142	19.0	6.58	29.4		270.8	0.698	0.172	7.88	8.83	4.65	45.24	31.95	11.97	6.19	G
5	22	91	142	22.0	6.18	46.6		304.8	0.831	0.112	7.82	8.83	5.71	38.80	40.94	9.99	4.55	S
5	23	91	143	1.0	6.48	22.9		127.0	0.787	0.128	6.87	6.92	4.76	31.23	43.18	15.01	5.81	S
5	23	91	143	4.0	6.83	6.5		314.3	0.829	0.161	7.31	8.26	5.70	31.04	41.78	15.82	5.66	S
5	23	91	143	7.0	6.55	24.0		292.2	0.659	0.140	7.06	8.83	3.36	34.32	47.39	10.53	4.40	G
5	23	91	143	10.0	6.19	51.5		287.7	0.728	0.131	7.94	8.26	4.31	43.68	39.81	10.82	1.38	G
5	23	91	143	13.0	6.55	18.1		293.9	0.695	0.180	6.36	7.76	4.25	11.60	41.31	26.34	16.51	G
5	23	91	143	16.0	7.04	6.4		294.1	0.739	0.170	6.97	8.26	5.87	37.10	32.46	15.66	8.91	G
5	23	91	143	19.0	6.89	18.6		296.5	0.671	0.133	7.88	8.26	8.89	49.36	29.83	6.77	5.16	G
5	23	91	143	22.0	6.35	50.0		126.5	0.778	0.136	7.94	8.83	13.68	40.41	33.41	5.97	6.54	S
5	24	91	144	1.0	6.47	33.0		303.6	0.740	0.152	7.76	7.76	11.60	35.00	40.73	10.63	2.04	S
5	24	91	144	4.0	6.96	10.4		285.3	0.735	0.163	7.94	7.31	9.36	30.60	42.37	15.56	2.12	G
5	24	91	144	7.0	6.87	17.0		288.2	0.693	0.139	7.94	7.76	15.74	38.62	33.12	8.05	4.47	G
5	24	91	144	10.0	6.38	47.6		128.1	0.830	0.121	7.37	7.76	13.87	28.20	32.37	18.49	7.07	S
5	24	91	144	13.0	6.49	37.2		310.0	0.794	0.158	7.01	7.31	11.24	21.73	35.20	26.41	5.43	S
5	24	91	144	16.0	7.02	8.3		288.5	0.652	0.219	6.83	6.56	9.16	19.35	46.23	12.74	12.51	G
5	24	91	144	19.0	7.01	7.5		297.6	0.695	0.139	8.00	8.26	20.70	35.42	23.48	14.65	5.75	G
5	24	91	144	22.0	6.42	42.5		122.5	0.800	0.129	8.26	9.48	14.12	27.16	39.40	13.20	6.13	S
5	25	91	145	1.0	6.26	39.1		134.6	0.852	0.095	8.98	15.06	32.81	21.64	26.27	15.05	4.24	S
5	25	91	145	4.0	6.69	12.7		312.9	0.828	0.144	7.64	7.31	19.72	17.71	43.13	15.43	4.01	S
5	25	91	145	7.0	6.80	22.2		305.7	0.860	0.184	6.97	8.26	11.23	25.65	34.21	17.21	11.71	S
5	25	91	145	10.0	6.35	35.2		123.6	0.878	0.131	7.16	7.76	17.98	17.17	32.12	21.24	11.49	S
5	25	91	145	13.0	6.23	34.5		138.4	0.855	0.087	7.76	15.06	34.56	16.92	25.72	15.02	7.78	S
5	25	91	145	16.0	6.75	15.1		311.0	0.806	0.272	6.32	6.24	12.72	5.53	39.25	35.87	6.64	S
5	25	91	145	19.0	6.97	13.2		281.7	0.814	0.187	5.99	15.06	16.16	14.28	22.99	29.51	17.07	G
5	25	91	145	22.0	6.49	34.7		276.5	0.710	0.134	8.00	7.31	18.60	34.45	24.60	9.82	12.53	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	26	91	146	1.0	6.10	42.7		129.0	0.902	0.109	7.88	7.76	20.69	23.46	42.40	9.06	4.39	S
5	26	91	146	4.0	6.49	21.6		319.2	0.714	0.145	7.53	7.76	19.62	15.46	38.06	20.91	5.95	G
5	26	91	146	7.0	6.81	11.2		288.2	0.768	0.234	6.61	5.95	9.37	9.70	36.71	39.27	4.96	G
5	26	91	146	10.0	6.44	23.5		126.9	0.831	0.158	7.37	8.26	14.80	30.97	18.62	26.52	9.09	S
5	26	91	146	13.0	6.16	42.1		129.6	0.823	0.144	6.56	7.31	9.34	14.16	51.20	17.32	7.98	S
5	26	91	146	16.0	6.65	14.2		335.0	0.599	0.228	5.33	6.56	11.94	5.51	41.91	14.34	26.30	S
5	26	91	146	19.0	7.05	5.5		296.9	0.731	0.159	6.74	7.76	18.03	12.20	31.38	23.24	15.14	G
5	26	91	146	22.0	6.74	18.7		293.2	0.719	0.137	8.13	8.83	27.26	36.73	18.47	8.12	9.42	G
5	27	91	147	1.0	6.22	54.5		127.8	0.814	0.144	8.00	7.76	18.25	18.28	53.92	7.43	2.12	S
5	27	91	147	4.0	6.51	29.5		302.1	0.786	0.176	7.47	6.92	20.00	8.98	49.50	18.98	2.53	G
5	27	91	147	7.0	6.95	10.0		283.7	0.738	0.199	7.82	7.76	22.85	7.68	36.69	28.88	3.90	G
5	27	91	147	10.0	6.71	16.7		303.4	0.787	0.150	7.88	13.47	33.12	16.27	31.17	12.26	7.18	S
5	27	91	147	13.0	6.29	45.8		130.3	0.926	0.123	8.53	7.76	37.20	10.52	36.57	9.64	6.07	S
5	27	91	147	16.0	6.59	29.9		141.1	0.899	0.192	7.47	15.06	33.72	14.61	24.43	24.49	2.75	S
5	27	91	147	19.0	7.09	8.5		131.2	0.766	0.163	6.61	15.06	23.37	13.08	16.44	25.75	21.36	S
5	27	91	147	22.0	6.88	13.7		293.8	0.740	0.129	9.31	17.07	55.37	17.41	15.36	7.01	4.85	G
5	28	91	148	1.0	6.27	46.7		127.3	0.837	0.118	9.23	15.06	50.38	14.28	14.95	12.46	7.93	S
5	28	91	148	4.0	6.36	39.7		295.9	0.710	0.113	9.57	12.19	40.97	16.23	25.03	16.02	1.76	G
5	28	91	148	7.0	6.86	8.7		289.0	0.742	0.161	7.88	12.19	31.33	14.12	22.90	24.70	6.95	G
5	28	91	148	10.0	6.76	26.5		288.1	0.687	0.172	8.98	15.06	50.07	8.77	20.88	14.89	5.39	G
5	28	91	148	13.0	6.31	48.8		288.2	0.765	0.173	7.53	13.47	28.49	5.76	19.46	43.82	2.47	G
5	28	91	148	16.0	6.45	28.4		281.9	0.679	0.128	9.14	13.47	49.10	16.79	14.38	15.65	4.09	G
5	28	91	148	19.0	7.00	13.0		286.2	0.689	0.208	7.82	13.47	33.81	8.15	18.12	32.56	7.35	G
5	28	91	148	22.0	6.99	12.4		301.5	0.880	0.141	10.04	13.47	63.78	13.16	9.89	7.76	5.41	S
5	29	91	149	1.0	6.39	44.2		303.4	0.742	0.127	10.45	13.47	61.35	22.70	8.90	5.98	1.07	G
5	29	91	149	4.0	6.30	37.2		305.4	0.752	0.168	9.66	13.47	61.57	12.93	10.52	12.09	2.90	G
5	29	91	149	7.0	6.80	9.8		305.1	0.711	0.169	8.83	12.19	43.37	14.52	28.07	11.04	3.00	S
5	29	91	149	10.0	6.87	16.7		322.2	0.823	0.162	8.53	13.47	48.02	12.61	14.12	18.24	7.00	S
5	29	91	149	13.0	6.40	38.6		287.9	0.623	0.133	10.67	13.47	64.13	14.37	12.08	6.06	3.36	S
5	29	91	149	16.0	6.37	33.8		134.9	0.868	0.150	8.53	12.19	41.80	15.48	17.21	16.45	9.05	S
5	29	91	149	19.0	6.91	12.0		303.7	0.628	0.201	10.14	12.19	51.01	25.92	15.14	6.76	1.18	G
5	29	91	149	22.0	7.06	7.3		291.3	0.722	0.113	9.94	12.19	52.93	28.85	11.09	5.00	2.14	G
5	30	91	150	1.0	6.52	31.1		283.7	0.844	0.134	10.67	12.19	52.44	34.09	7.96	3.94	1.57	G
5	30	91	150	4.0	6.29	49.6		274.5	0.708	0.147	10.04	12.19	54.91	32.44	5.71	6.04	0.90	G
5	30	91	150	7.0	6.72	22.4		281.0	0.662	0.178	9.06	11.13	23.46	39.10	13.87	17.90	5.67	G
5	30	91	150	10.0	6.90	13.7		287.3	0.743	0.166	9.85	13.47	43.60	31.90	14.30	7.74	2.47	G
5	30	91	150	13.0	6.48	45.9		264.5	0.684	0.147	8.33	11.13	29.93	30.65	12.90	15.91	10.61	G
5	30	91	150	16.0	6.28	50.5		270.1	0.645	0.155	8.61	12.19	33.93	20.88	14.82	26.00	4.37	G
5	30	91	150	19.0	6.72	22.1		265.4	0.778	0.170	7.59	4.65	26.96	17.44	20.60	27.98	7.03	G
5	30	91	150	22.0	6.98	3.5		280.2	0.746	0.165	8.98	12.19	43.05	31.27	9.59	7.42	8.67	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
5	31	91	151	1.0	6.59	19.5		313.4	0.731	0.129	11.01	13.47	52.98	31.95	8.83	4.04	2.19	S
5	31	91	151	4.0	6.20	57.6		128.7	0.794	0.106	9.66	8.83	25.94	51.05	12.83	7.94	2.23	S
5	31	91	151	7.0	6.54	23.9		300.3	0.784	0.144	8.83	10.24	26.50	52.00	10.03	10.05	1.42	S
5	31	91	151	10.0	6.88	16.7		295.9	0.656	0.204	7.70	11.13	12.54	37.61	22.87	21.68	5.30	G
5	31	91	151	13.0	6.57	38.4		281.9	0.828	0.156	8.13	8.26	26.88	28.45	19.18	17.10	8.39	G
5	31	91	151	16.0	6.27	36.9		286.1	0.732	0.131	8.06	11.13	26.17	31.11	22.97	16.10	3.65	G
5	31	91	151	19.0	6.65	24.1		302.5	0.574	0.167	8.90	13.47	35.40	25.77	18.03	16.88	3.92	S
5	31	91	151	22.0	7.00	7.3		133.3	0.709	0.286	5.17	3.82	13.34	17.42	5.25	33.31	30.69	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	1	91	152	1.0	6.75	27.8		271.9	0.631	0.126	9.14	15.06	44.70	31.55	10.97	4.27	8.51	G
6	1	91	152	4.0	6.33	45.3		123.9	0.834	0.133	9.48	12.19	33.18	36.69	22.65	3.93	3.56	S
6	1	91	152	7.0	6.50	30.3		127.8	0.897	0.138	8.19	13.47	25.22	29.24	27.57	7.87	10.11	S
6	1	91	152	10.0	6.93	12.8		306.3	0.815	0.164	8.39	12.19	24.75	34.93	26.43	9.41	4.49	G
6	1	91	152	13.0	6.73	38.5		300.1	0.881	0.137	8.98	11.13	29.94	37.87	17.13	9.19	5.87	S
6	1	91	152	16.0	6.39	35.2		122.3	0.861	0.126	9.14	15.06	38.07	36.51	14.39	7.67	3.37	S
6	1	91	152	19.0	6.68	21.3		139.4	0.822	0.124	9.31	13.47	39.40	37.73	13.40	6.97	2.50	S
6	1	91	152	22.0	7.05	8.9		303.2	0.738	0.153	7.94	10.24	14.42	47.81	11.27	15.36	11.14	S
6	2	91	153	1.0	6.94	21.8		320.6	0.665	0.127	8.13	8.83	28.23	38.31	13.71	3.94	15.80	G
6	2	91	153	4.0	6.42	34.5		126.1	0.826	0.154	8.33	15.06	41.36	32.16	7.45	3.49	15.54	S
6	2	91	153	7.0	6.50	36.5		136.3	0.842	0.149	8.06	8.83	21.94	48.29	15.61	3.18	10.97	S
6	2	91	153	10.0	7.01	13.6		317.6	0.835	0.196	8.68	10.24	36.28	40.80	10.53	7.21	5.18	S
6	2	91	153	13.0	6.89	30.6		124.8	0.847	0.187	9.66	11.13	30.23	53.28	9.35	4.55	2.60	S
6	2	91	153	16.0	6.65	42.9		300.1	0.791	0.123	9.57	15.06	41.57	33.65	17.28	4.75	2.75	S
6	2	91	153	19.0	6.62	30.1		306.9	0.828	0.142	10.04	10.24	18.88	59.96	15.61	3.52	2.02	S
6	2	91	153	22.0	7.06	20.1		297.6	0.867	0.218	10.34	9.48	32.62	48.90	12.81	4.21	1.46	G
6	3	91	154	1.0	7.03	17.8		300.0	0.876	0.239	10.89	11.13	31.69	59.36	5.21	3.00	0.73	S
6	3	91	154	4.0	6.54	35.2		127.2	0.836	0.154	10.24	12.19	56.49	22.19	6.55	13.21	1.56	S
6	3	91	154	7.0	6.44	43.9		301.3	0.764	0.161	9.66	12.19	32.90	48.70	7.66	9.25	1.48	G
6	3	91	154	10.0	6.88	18.2		280.9	0.821	0.207	9.14	11.13	16.34	49.73	15.82	13.05	5.06	G
6	3	91	154	13.0	6.96	37.5		285.0	0.751	0.244	9.31	12.19	41.63	40.81	10.06	5.01	2.49	G
6	3	91	154	16.0	6.58	40.7		309.5	0.834	0.156	8.53	12.19	29.91	42.69	8.12	9.45	9.83	S
6	3	91	154	19.0	6.47	31.2		318.4	0.845	0.151	8.46	10.24	22.79	47.56	11.93	11.13	6.59	S
6	3	91	154	22.0	6.86	22.5		290.4	0.865	0.185	8.53	9.48	15.88	62.23	11.79	6.48	3.62	G
6	4	91	155	1.0	6.99	11.2		283.3	0.820	0.184	8.46	8.83	9.71	57.69	18.19	11.26	3.15	G
6	4	91	155	4.0	6.60	30.4		301.7	0.795	0.178	8.00	10.24	14.56	39.36	14.60	26.96	4.52	G
6	4	91	155	7.0	6.38	48.0		301.6	0.718	0.157	8.13	10.24	11.12	49.62	20.74	16.59	1.92	G
6	4	91	155	10.0	6.79	15.1		307.5	0.774	0.203	5.69	8.26	10.43	34.24	14.53	11.65	29.15	S
6	4	91	155	13.0	7.13	17.2		152.3	0.662	0.510	5.04	5.02	4.64	5.60	4.00	75.62	10.15	G
6	4	91	155	16.0	6.98	25.4		134.0	0.739	0.655	4.72	5.22	2.89	2.88	3.46	75.77	15.01	S
6	4	91	155	19.0	6.71	34.6		144.2	0.739	0.567	4.65	5.22	2.61	1.96	5.86	72.83	16.73	G
6	4	91	155	22.0	6.91	15.3		134.3	0.716	0.566	4.92	4.20	3.27	3.00	21.13	58.14	14.46	G
6	5	91	156	1.0	7.19	4.2		303.4	0.806	0.442	5.07	6.92	1.97	6.73	39.74	33.84	17.73	G
6	5	91	156	4.0	6.98	22.7		306.0	0.776	0.345	4.88	4.34	2.26	5.07	22.36	53.36	16.95	G
6	5	91	156	7.0	6.62	33.3		302.5	0.812	0.438	5.04	4.83	2.51	4.19	20.55	46.66	26.08	G
6	5	91	156	10.0	6.82	24.2		306.1	0.838	0.441	5.69	7.76	2.06	11.86	30.07	40.43	15.58	G
6	5	91	156	13.0	7.21	10.2		304.6	0.796	0.556	6.40	7.31	7.27	17.54	28.33	33.56	13.30	G
6	5	91	156	16.0	7.14	22.9		297.9	0.817	0.339	5.82	8.83	4.96	18.26	18.49	43.08	15.20	G
6	5	91	156	19.0	6.73	35.4		297.7	0.805	0.305	4.97	4.20	2.47	12.74	20.30	39.34	25.15	G
6	5	91	156	22.0	6.80	20.8		123.5	0.869	0.288	6.02	8.26	2.51	30.17	19.64	33.42	14.26	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	6	91	157	1.0	7.16	13.6		306.8	0.848	0.430	7.94	9.48	3.79	59.02	18.73	14.07	4.39	G
6	6	91	157	4.0	7.10	11.1		301.9	0.894	0.376	8.90	8.83	13.67	48.51	20.64	14.28	2.90	G
6	6	91	157	7.0	6.69	31.9		303.7	0.871	0.381	9.06	12.19	43.44	35.56	8.82	9.87	2.30	S
6	6	91	157	10.0	6.76	12.5		125.2	0.867	0.285	8.39	11.13	8.80	56.94	19.52	10.65	4.08	S
6	6	91	157	13.0	7.22			302.0	0.799	0.498	8.33	11.13	10.80	53.72	14.01	15.91	5.55	G
6	6	91	157	16.0	7.23			297.6	0.805	0.459	7.37	12.19	27.04	26.85	13.76	21.51	10.85	S
6	6	91	157	19.0	6.79			303.6	0.854	0.402	6.48	11.13	10.74	22.71	9.19	38.84	18.52	S
6	6	91	157	22.0	6.62			126.9	0.905	0.242	6.87	11.13	10.15	40.89	16.26	22.54	10.16	S
6	7	91	158	1.0	6.97			305.0	0.871	0.328	7.21	9.48	11.32	30.11	26.24	25.28	7.06	S
6	7	91	158	4.0	7.04			296.2	0.842	0.298	7.47	11.13	5.54	46.67	23.51	16.33	7.95	S
6	7	91	158	7.0	6.67			127.2	0.867	0.250	6.28	11.13	13.69	29.36	11.93	19.10	25.91	S
6	7	91	158	10.0	6.60			306.7	0.814	0.275	6.17	6.92	2.86	28.76	36.53	14.58	17.27	S
6	7	91	158	13.0	7.03			295.7	0.813	0.361	5.69	6.56	3.01	20.30	20.78	36.57	19.34	S
6	7	91	158	16.0	7.19			296.3	0.802	0.310	6.69	11.13	6.14	26.32	28.99	23.85	14.70	S
6	7	91	158	19.0	6.77			306.1	0.867	0.265	6.87	5.45	7.23	26.21	25.09	35.62	5.85	S
6	7	91	158	22.0	6.44			298.5	0.903	0.185	7.11	7.31	2.52	31.64	32.08	29.88	3.89	S
6	8	91	159	1.0	6.71			299.3	0.936	0.225	6.97	6.92	2.41	28.25	37.26	27.86	4.22	S
6	8	91	159	4.0	6.97			298.0	0.903	0.260	6.65	8.26	2.55	34.89	25.24	29.69	7.63	S
6	8	91	159	7.0	6.68		76.4	299.0	0.873	0.215	7.26	9.48	4.50	32.13	32.97	19.23	11.17	S
6	8	91	159	10.0	6.37		111.9	120.3	0.914	0.140	7.01	7.31	3.36	19.80	56.48	16.96	3.40	S
6	8	91	159	13.0	6.70		191.3	123.9	0.877	0.181	7.21	7.76	5.12	23.18	44.68	22.96	4.05	S
6	8	91	159	16.0	7.11		350.5	302.0	0.852	0.204	6.83	7.76	2.94	31.77	32.72	23.85	8.72	G
6	8	91	159	19.0	6.87		45.8	131.4	0.848	0.192	7.88	8.26	4.76	52.47	28.08	11.48	3.20	S
6	8	91	159	22.0	6.31		78.3	123.4	0.889	0.120	8.26	10.24	3.81	55.19	32.01	6.61	2.37	S
6	9	91	160	1.0	6.40		132.2	133.1	0.798	0.114	7.88	8.83	3.61	45.80	35.05	13.73	1.81	S
6	9	91	160	4.0	6.84		284.8	294.3	0.724	0.142	7.26	6.92	6.55	30.24	44.10	14.45	4.66	S
6	9	91	160	7.0	6.73		30.4	294.1	0.808	0.139	7.53	7.76	5.29	45.76	36.46	5.76	6.72	G
6	9	91	160	10.0	6.28		96.2	125.4	0.885	0.089	7.88	9.48	5.79	61.39	18.68	5.18	8.96	S
6	9	91	160	13.0	6.48		149.9	141.6	0.877	0.110	7.11	8.26	3.98	41.05	33.76	15.57	5.65	S
6	9	91	160	16.0	7.09		309.7	284.4	0.792	0.177	7.37	7.31	6.10	33.20	40.95	13.92	5.83	G
6	9	91	160	19.0	7.07		17.7	282.9	0.685	0.131	8.46	10.24	4.92	70.97	17.03	4.71	2.36	G
6	9	91	160	22.0	6.45		63.8	122.3	0.905	0.121	9.31	10.24	10.49	71.48	11.87	4.25	1.90	S
6	10	91	161	1.0	6.30		115.1	124.1	0.883	0.100	8.53	8.26	12.06	41.58	39.91	4.58	1.87	S
6	10	91	161	4.0	6.82		286.2	286.0	0.759	0.161	8.00	8.26	6.79	38.11	47.17	5.68	2.24	S
6	10	91	161	7.0	6.93		320.8	285.4	0.774	0.137	8.26	7.31	9.95	53.20	28.60	4.23	4.02	G
6	10	91	161	10.0	6.42		85.1	296.3	0.849	0.124	9.31	9.48	32.14	43.62	11.73	10.39	2.11	S
6	10	91	161	13.0	6.37		125.7	298.8	0.847	0.098	8.33	6.92	8.47	49.34	32.74	6.73	2.72	G
6	10	91	161	16.0	7.02		313.1	287.9	0.738	0.167	7.82	8.83	3.75	48.91	33.63	10.32	3.39	G
6	10	91	161	19.0	7.22		327.1	277.1	0.791	0.160	8.68	10.24	19.46	54.19	15.98	4.68	5.69	G
6	10	91	161	22.0	6.62		57.2	121.6	0.869	0.129	9.39	11.13	25.62	58.59	6.27	2.82	6.69	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	11	91	162	1.0	6.16	97.4	121.4	0.876	0.119	10.78	8.26	44.49	43.23	6.33	3.09	2.86	G	
6	11	91	162	4.0	6.55	143.7	246.4	0.613	0.109	8.19	8.83	12.06	50.36	27.11	4.91	5.56	G	
6	11	91	162	7.0	6.91	341.3	122.2	0.873	0.136	7.64	10.24	5.16	61.64	15.84	8.37	8.98	S	
6	11	91	162	10.0	6.48	63.7	297.9	0.832	0.093	8.61	10.24	6.98	62.62	18.16	6.84	5.40	G	
6	11	91	162	13.0	6.13	126.9	138.4	0.894	0.045	8.13	9.48	16.58	48.42	12.95	7.04	15.01	S	
6	11	91	162	16.0	6.68	234.3	251.8	0.695	0.148	7.47	8.26	4.77	39.85	38.07	13.20	4.11	G	
6	11	91	162	19.0	7.15	333.2	296.3	0.822	0.152	7.47	7.76	3.88	44.21	29.67	15.18	7.06	G	
6	11	91	162	22.0	6.73	17.5	121.3	0.806	0.117	7.53	9.48	18.30	50.07	7.10	12.42	12.11	G	
6	12	91	163	1.0	6.00	85.8	123.0	0.917	0.057	7.31	10.24	15.94	52.92	5.17	11.26	14.70	S	
6	12	91	163	4.0	6.21	146.8	309.8	0.815	0.098	7.70	8.83	6.45	51.29	22.07	13.72	6.48	S	
6	12	91	163	7.0	6.81	292.9	120.8	0.871	0.137	7.82	8.83	4.39	56.56	16.80	12.11	10.14	S	
6	12	91	163	10.0	6.60	4.0	125.9	0.931	0.132	8.33	9.48	9.76	58.55	16.44	7.67	7.58	S	
6	12	91	163	13.0	6.01	96.6	127.5	0.859	0.066	7.88	10.24	7.94	51.16	9.62	26.18	5.10	S	
6	12	91	163	16.0	6.31	204.3	138.6	0.874	0.104	7.82	8.83	6.72	47.02	32.02	9.98	4.25	S	
6	12	91	163	19.0	7.08	287.6	283.7	0.704	0.121	7.42	8.26	6.07	56.64	19.15	11.18	6.96	G	
6	12	91	163	22.0	7.01	324.0	283.9	0.766	0.087	8.90	10.24	27.37	51.09	8.09	6.35	7.10	G	
6	13	91	164	1.0	6.22	74.8	119.8	0.927	0.079	9.85	10.24	18.20	62.04	10.74	5.52	3.50	S	
6	13	91	164	4.0	6.21	140.4	140.8	0.898	0.061	8.46	10.24	15.61	43.46	23.05	13.28	4.60	S	
6	13	91	164	7.0	6.97	251.6	124.0	0.764	0.300	4.47	8.26	5.36	17.53	11.95	27.85	37.32	S	
6	13	91	164	10.0	7.01	6.5	119.6	0.731	0.276	4.95	5.02	2.91	9.74	6.71	52.42	28.23	S	
6	13	91	164	13.0	6.34	75.7	123.8	0.921	0.160	4.92	10.24	6.13	29.27	8.23	20.82	35.54	S	
6	13	91	164	16.0	6.27	121.9	130.5	0.888	0.130	4.90	8.83	8.35	22.17	14.80	15.75	38.93	S	
6	13	91	164	19.0	7.04	273.5	285.8	0.752	0.214	5.63	4.83	5.72	13.07	11.79	57.15	12.26	S	
6	13	91	164	22.0	7.21	332.5	289.5	0.754	0.135	6.78	9.48	7.00	32.86	23.03	28.98	8.13	G	
6	14	91	165	1.0	6.49	59.5	294.5	0.744	0.136	8.83	8.83	12.52	56.77	16.06	12.66	2.00	S	
6	14	91	165	4.0	6.14	115.8	128.4	0.934	0.096	7.31	5.45	11.12	10.73	5.52	66.69	5.93	S	
6	14	91	165	7.0	6.69	239.8	319.4	0.831	0.150	7.11	8.26	4.50	34.29	31.56	25.04	4.60	S	
6	14	91	165	10.0	7.08	324.8	288.1	0.781	0.124	6.78	9.48	6.85	37.61	20.71	24.03	10.80	G	
6	14	91	165	13.0	6.52	57.4	124.2	0.886	0.116	7.26	9.48	8.50	45.06	18.64	18.93	8.87	S	
6	14	91	165	16.0	6.18	128.9	123.3	0.907	0.112	4.16	3.71	7.02	15.48	8.04	11.74	57.72	S	
6	14	91	165	19.0	6.83	261.8	124.6	0.886	0.175	5.82	7.76	7.78	20.31	31.30	10.51	30.11	S	
6	14	91	165	22.0	7.21	332.4	295.0	0.918	0.112	7.11	10.24	10.89	37.41	24.01	12.83	14.86	S	
6	15	91	166	1.0	6.74	9.4	300.6	0.899	0.113	8.39	10.24	17.05	42.38	25.05	7.73	7.79	S	
6	15	91	166	4.0	6.13	101.5	128.8	0.899	0.073	7.42	7.31	18.30	31.92	22.61	18.39	8.78	S	
6	15	91	166	7.0	6.42	168.8	134.2	0.903	0.121	8.00	8.83	20.87	30.75	18.26	20.53	9.60	S	
6	15	91	166	10.0	7.01	313.9	289.0	0.682	0.127	6.61	8.26	7.42	41.57	20.56	23.07	7.38	G	
6	15	91	166	13.0	6.70	2.6	304.0	0.763	0.133	9.57	10.24	36.95	38.17	10.71	9.06	5.11	G	
6	15	91	166	16.0	6.15	90.0	123.8	0.793	0.073	7.94	9.48	26.96	31.80	6.23	21.03	13.97	S	
6	15	91	166	19.0	6.46	211.8	131.6	0.873	0.111	7.82	7.76	9.06	32.82	45.02	9.59	3.51	S	
6	15	91	166	22.0	7.07	301.7	300.9	0.817	0.132	6.78	7.31	12.44	17.97	38.32	15.57	15.70	S	

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	16	91	167	1.0	6.83		352.5	295.6	0.863	0.117	8.68	8.26	19.05	46.26	16.27	11.36	7.06	S
6	16	91	167	4.0	6.13		84.6	122.9	0.908	0.086	9.48	9.48	33.11	37.55	19.24	7.16	2.95	S
6	16	91	167	7.0	6.18		166.3	128.1	0.875	0.106	6.61	8.83	7.00	24.23	20.90	33.06	14.81	S
6	16	91	167	10.0	6.90		268.8	289.7	0.771	0.148	6.61	7.76	8.23	17.70	49.30	16.93	7.84	G
6	16	91	167	13.0	6.83		354.6	293.0	0.751	0.152	7.16	8.83	12.82	41.50	16.06	20.48	9.14	G
6	16	91	167	16.0	6.18		83.9	297.9	0.929	0.130	7.21	8.83	10.43	44.59	11.22	28.91	4.85	S
6	16	91	167	19.0	6.25		153.8	121.6	0.901	0.109	6.06	5.22	17.90	8.50	17.18	43.23	13.19	S
6	16	91	167	22.0	6.93		269.6	299.3	0.872	0.158	6.24	7.76	14.81	15.19	30.59	24.16	15.25	S
6	17	91	168	1.0	6.89		318.7	289.1	0.808	0.118	8.06	8.26	26.66	29.71	20.26	12.53	10.83	G
6	17	91	168	4.0	6.34		61.3	132.2	0.861	0.092	9.06	8.26	29.26	36.35	21.99	8.82	3.58	S
6	17	91	168	7.0	6.20		130.1	315.0	0.796	0.104	7.53	5.95	13.38	18.38	20.22	43.44	4.58	S
6	17	91	168	10.0	6.79		260.2	290.2	0.750	0.160	6.87	6.92	8.63	22.23	30.89	32.35	5.89	G
6	17	91	168	14.2	6.64	27.3	328.1	285.9	0.717	0.124	7.26	8.83	14.93	24.41	29.33	24.44	6.89	Q
6	17	91	168	17.2	6.05	23.6	97.9	275.1	0.795	0.150	8.33	9.48	11.90	48.03	29.29	7.54	3.23	G
6	17	91	168	20.2	6.13	16.4	167.0	293.7	0.761	0.138	7.76	15.06	27.74	28.25	26.93	11.07	6.02	G
6	17	91	168	23.2	6.75	17.7	267.8	292.1	0.752	0.193	6.97	8.26	13.35	26.50	36.15	18.05	5.95	G
6	18	91	169	2.2	6.71	19.0	326.3	288.1	0.686	0.132	8.46	7.31	22.49	30.81	31.45	8.73	6.52	G
6	18	91	169	5.2	6.22	25.9	113.2	291.9	0.644	0.155	9.06	8.26	21.88	33.04	33.57	6.33	5.18	G
6	18	91	169	8.2	6.18	19.2	133.4	292.3	0.790	0.140	8.00	8.26	18.08	43.44	21.40	14.04	3.04	G
6	18	91	169	11.2	6.80	17.0	279.5	297.8	0.780	0.202	7.31	7.76	14.08	28.17	30.14	19.90	7.71	G
6	18	91	169	14.2	6.97	12.3	344.7	286.3	0.790	0.200	7.26	11.13	16.87	33.40	16.66	25.17	7.90	G
6	18	91	169	17.2	6.53	20.6	73.4	286.3	0.758	0.155	8.68	12.19	27.55	42.22	20.51	6.95	2.77	G
6	18	91	169	20.2	6.32	23.8	122.7	300.8	0.631	0.174	6.52	10.24	9.48	34.72	18.85	15.83	21.11	G
6	18	91	169	23.2	6.75	12.0	259.8	300.7	0.662	0.276	5.79	6.24	5.35	14.52	29.52	37.66	12.95	G
6	19	91	170	2.2	6.97	17.0	306.9	274.4	0.636	0.283	6.44	7.31	8.08	20.55	33.96	24.58	12.82	G
6	19	91	170	5.2	6.54	26.8	63.5	182.4	0.537	0.255	5.95	7.76	11.68	14.45	26.51	22.46	24.89	G
6	19	91	170	8.2	6.24	30.0	110.9	311.6	0.609	0.166	5.57	10.24	17.53	28.23	14.66	14.54	25.04	G
6	19	91	170	11.2	6.63	3.9	294.3	285.8	0.727	0.185	7.01	8.83	10.53	27.55	27.95	23.78	10.19	G
6	19	91	170	14.2	7.02	18.0	311.4	278.3	0.761	0.206	6.97	10.24	12.15	24.73	22.64	33.40	7.08	G
6	19	91	170	17.2	6.68	26.2	31.9	246.9	0.523	0.215	7.53	11.13	18.70	38.20	16.67	11.65	14.78	G
6	19	91	170	20.2	6.25	23.9	95.9	268.6	0.662	0.141	7.88	9.48	16.72	44.25	14.30	14.68	10.04	G
6	19	91	170	23.2	6.47	4.8	142.0	290.4	0.727	0.173	7.59	7.76	13.61	30.66	31.07	20.61	4.05	G
6	20	91	171	2.2	6.84	11.8	298.8	283.1	0.773	0.228	6.78	10.24	6.48	34.84	16.89	36.89	4.90	G
6	20	91	171	5.2	6.60	17.8	27.3	271.7	0.765	0.181	7.88	9.48	12.51	29.47	16.03	37.53	4.47	G
6	20	91	171	8.2	6.16	25.0	95.0	271.5	0.714	0.108	8.00	13.47	29.95	32.47	16.00	16.75	4.83	G
6	20	91	171	11.2	6.38	8.2	161.6	283.3	0.652	0.160	7.26	10.24	11.62	34.33	21.40	26.83	5.81	G
6	20	91	171	14.2	6.88	18.2	284.3	279.1	0.769	0.213	7.11	9.48	9.58	38.46	28.13	19.04	4.79	G
6	20	91	171	17.2	6.76	20.9	331.4	276.9	0.797	0.169	8.33	9.48	12.16	41.41	25.78	16.05	4.59	G
6	20	91	171	20.2	6.22	26.9	81.0	269.7	0.733	0.136	8.00	8.83	12.30	40.09	32.54	11.69	3.39	G
6	20	91	171	23.2	6.20	13.7	144.6	284.3	0.782	0.167	7.37	8.26	9.13	38.04	30.44	19.05	3.34	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	21	91	172	2.2	6.65	13.5	260.3	292.1	0.677	0.178	7.16	7.31	12.82	26.44	37.87	18.94	3.94	G
6	21	91	172	5.2	6.62	9.8	343.9	279.2	0.779	0.164	7.94	13.47	25.18	30.43	28.20	12.54	3.65	G
6	21	91	172	8.2	6.18	21.0	88.2	279.2	0.717	0.118	7.76	8.26	18.99	41.90	21.73	10.27	7.12	G
6	21	91	172	11.2	6.19	13.9	150.2	282.6	0.703	0.128	7.94	6.56	12.11	26.55	46.73	9.49	5.12	G
6	21	91	172	14.2	6.72	13.8	258.1	278.1	0.727	0.217	6.74	6.56	6.06	23.29	31.68	29.81	9.17	G
6	21	91	172	17.2	6.80	14.8	331.1	273.3	0.762	0.146	7.53	6.92	12.19	23.13	40.88	18.34	5.47	G
6	21	91	172	20.2	6.34	23.4	30.9	263.7	0.695	0.120	8.39	12.19	28.80	27.51	30.28	11.12	2.29	G
6	21	91	172	23.2	6.12	19.5	98.8	269.2	0.744	0.142	8.83	8.26	16.26	53.78	24.29	4.39	1.28	G
6	22	91	173	2.2	6.47	4.1	190.9	281.9	0.794	0.144	7.70	6.92	13.13	27.08	44.06	13.38	2.35	G
6	22	91	173	5.2	6.65	10.9	297.0	272.1	0.753	0.151	8.33	12.19	30.80	33.64	24.72	7.83	3.02	G
6	22	91	173	8.2	6.30	18.0	65.0	278.7	0.689	0.141	8.39	7.76	22.48	30.21	38.34	6.04	2.92	G
6	22	91	173	11.2	6.13	18.9	118.4	33.8	0.651	0.169	7.53	6.92	20.18	9.02	25.50	28.24	17.07	G
6	22	91	173	14.2	6.60	17.4	233.0	301.6	0.544	0.257	5.12	7.76	8.18	18.99	24.66	20.86	27.31	G
6	22	91	173	17.2	6.92	27.6	293.8	278.1	0.759	0.189	6.10	11.13	12.92	22.98	21.00	21.81	21.29	G
6	22	91	173	20.2	6.54	21.2	13.7	266.8	0.867	0.206	6.21	4.34	13.64	26.80	5.35	44.39	9.81	G
6	22	91	173	23.2	6.21	31.5	94.8	264.2	0.732	0.162	7.01	4.83	10.15	28.41	16.08	42.36	3.01	G
6	23	91	174	2.2	6.50	3.2	178.9	285.1	0.638	0.204	6.24	7.31	7.65	29.63	32.77	12.10	17.86	G
6	23	91	174	5.2	6.90	11.0	323.1	288.3	0.587	0.277	6.44	8.26	3.44	30.42	25.26	19.02	21.87	G
6	23	91	174	8.2	6.75	14.0	57.3	269.8	0.770	0.391	5.33	5.45	3.92	13.74	10.82	54.25	17.26	G
6	23	91	174	11.2	6.48	19.3	106.9	247.0	0.520	0.359	5.07	5.69	4.03	10.70	12.52	44.11	28.64	G
6	23	91	174	14.2	6.88	24.5	217.8	185.6	0.666	0.662	4.85	4.65	2.86	2.99	7.93	68.71	17.50	G
6	23	91	174	17.2	7.32	26.9	307.1	281.5	0.705	0.800	5.89	4.65	2.98	7.92	25.41	52.90	10.79	G
6	23	91	174	20.2	7.21	27.7	321.6	291.2	0.606	0.275	5.82	7.76	8.94	14.61	20.75	46.38	9.32	G
6	23	91	174	23.2	6.70	28.8	62.8	267.7	0.610	0.585	6.56	8.83	2.24	24.99	30.27	33.47	9.02	G
6	24	91	175	2.2	6.60	18.0	103.6	287.1	0.677	0.385	7.06	8.83	5.43	42.87	26.23	16.97	8.50	G
6	24	91	175	5.2	7.03	9.7	264.5	291.0	0.619	0.497	7.31	9.48	6.29	44.17	20.78	20.92	7.85	G
6	24	91	175	8.2	7.00	2.9	84.1	285.2	0.613	0.500	7.26	9.48	7.50	31.52	16.09	32.57	12.32	G
6	24	91	175	11.2	6.55	23.1	93.6	279.5	0.653	0.336	7.16	10.24	10.70	30.16	13.87	32.99	12.28	G
6	24	91	175	14.2	6.63	11.7	126.8	291.5	0.712	0.279	6.74	8.26	4.75	41.25	22.11	22.34	9.55	G
6	24	91	175	17.2	7.09	17.7	275.4	284.3	0.721	0.447	7.21	7.31	4.26	29.82	43.39	18.17	4.37	G
6	24	91	175	20.2	7.09	23.7	325.5	281.1	0.849	0.307	8.06	10.24	16.67	35.84	22.18	22.26	3.05	G
6	24	91	175	23.2	6.50	24.5	64.8	280.9	0.807	0.189	8.19	12.19	22.16	28.71	29.56	16.31	3.26	G
6	25	91	176	2.2	6.38	14.3	120.9	285.4	0.842	0.164	8.61	11.13	12.27	51.67	19.19	14.06	2.80	G
6	25	91	176	5.2	6.79	8.8	260.0	281.7	0.823	0.284	8.33	10.24	7.37	53.89	14.17	20.16	4.41	G
6	25	91	176	8.2	6.86	6.9	338.4	279.8	0.796	0.288	8.53	10.24	17.12	45.76	18.56	14.46	4.10	G
6	25	91	176	11.2	6.47	15.0	81.5	283.8	0.772	0.188	8.53	9.48	13.81	48.02	17.05	14.19	6.93	G
6	25	91	176	14.2	6.44	13.0	159.1	277.3	0.713	0.189	6.69	11.13	18.54	34.62	11.56	18.01	17.26	S
6	25	91	176	17.2	6.96	22.9	260.7	269.9	0.589	0.189	7.16	9.48	22.86	24.33	13.54	25.59	13.68	G
6	25	91	176	20.2	7.04	32.9	314.1	277.3	0.811	0.318	7.82	13.47	35.66	15.86	13.65	29.03	5.81	G
6	25	91	176	23.2	6.57	23.1	30.8	264.4	0.774	0.206	7.64	13.47	27.81	21.03	19.48	23.52	8.16	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
6	26	91	177	2.2	6.25	18.1	117.3	294.3	0.681	0.208	6.74	12.19	18.32	21.33	21.54	26.72	12.08	G
6	26	91	177	5.2	6.61	8.2	205.5	281.4	0.652	0.206	8.19	11.13	27.42	34.78	6.88	24.86	6.06	G
6	26	91	177	8.2	6.86	9.2	307.1	274.9	0.778	0.231	8.13	13.47	32.08	22.34	18.91	17.33	9.34	G
6	26	91	177	11.2	6.52	13.6	72.5	281.5	0.788	0.199	7.70	13.47	34.18	25.44	22.38	9.50	8.50	G
6	26	91	177	14.2	6.31	15.2	126.2	285.1	0.596	0.140	6.78	12.19	19.36	19.83	25.96	13.39	21.46	G
6	26	91	177	17.2	6.78	23.8	239.9	345.6	0.569	0.155	7.82	9.48	19.77	36.94	13.64	20.49	9.16	S
6	26	91	177	20.2	7.01	28.8	300.1	285.8	0.770	0.230	7.94	13.47	37.27	25.82	10.80	18.63	7.48	G
6	26	91	177	23.2	6.66	19.6	2.3	276.1	0.795	0.168	8.75	12.19	35.37	25.15	25.65	10.47	3.37	G
6	27	91	178	2.2	6.21	18.1	104.3	285.7	0.603	0.151	7.88	12.19	22.48	28.65	33.29	12.84	2.75	G
6	27	91	178	5.2	6.50	7.1	204.3	281.7	0.776	0.222	7.76	6.56	16.79	28.09	34.87	18.26	2.00	G
6	27	91	178	8.2	6.87	7.4	298.9	276.4	0.750	0.275	7.47	7.31	17.14	27.02	27.16	23.33	5.35	G
6	27	91	178	11.2	6.61	10.5	47.3	277.6	0.746	0.214	8.53	13.47	31.79	17.65	26.54	17.67	6.36	G
6	27	91	178	14.2	6.27	16.7	113.6	298.3	0.588	0.109	8.90	13.47	35.99	24.63	23.75	8.76	6.87	G
6	27	91	178	17.2	6.60	14.5	222.6	224.4	0.508	0.130	7.59	12.19	28.56	17.63	25.39	20.09	8.33	G
6	27	91	178	20.2	6.97	20.7	289.5	275.5	0.821	0.140	7.76	12.19	30.34	14.60	27.42	21.61	6.03	G
6	27	91	178	23.2	6.73	20.8	337.9	277.4	0.789	0.109	10.78	12.19	50.39	25.81	13.26	8.11	2.43	G
6	28	91	179	2.2	6.15	23.0	95.1	273.9	0.803	0.109	7.82	12.19	18.15	26.20	36.51	17.34	1.80	G
6	28	91	179	5.2	6.30	13.3	161.6	278.7	0.759	0.130	7.88	10.24	13.15	30.67	40.49	13.71	1.97	G
6	28	91	179	8.2	6.78	15.1	255.2	280.8	0.753	0.217	7.53	10.24	10.95	26.46	29.36	29.67	3.56	G
6	28	91	179	11.2	6.59	9.2	23.6	273.6	0.760	0.146	8.46	12.19	24.39	24.77	32.65	12.50	5.69	G
6	28	91	179	14.2	6.18	16.5	98.3	273.9	0.715	0.085	9.06	11.13	23.96	30.05	27.34	12.87	5.78	G
6	28	91	179	17.2	6.36	13.3	187.0	272.7	0.637	0.091	8.68	10.24	30.39	25.51	17.46	17.31	9.33	G
6	28	91	179	20.2	6.79	17.7	269.0	287.5	0.610	0.123	7.64	8.26	23.35	29.21	25.13	14.71	7.60	G
6	28	91	179	23.2	6.71	24.1	322.3	270.2	0.763	0.082	10.67	13.47	43.20	26.02	20.02	7.79	2.96	G
6	29	91	180	2.2	6.14	31.5	71.3	253.4	0.715	0.061	14.42	11.13	72.56	18.04	6.19	1.91	1.30	G
6	29	91	180	5.2	6.15	15.2	144.0	279.6	0.690	0.069	17.96	7.31	82.58	8.81	5.87	1.79	0.94	G
6	29	91	180	8.2	6.65	19.3	242.5	336.1	0.540	0.081	9.23	11.13	29.46	31.97	25.09	10.80	2.67	G
6	29	91	180	11.2	6.61	10.5	340.8	276.4	0.785	0.070	8.46	7.76	14.03	41.47	31.53	8.96	4.00	G
6	29	91	180	14.2	6.18	20.5	87.0	284.1	0.580	0.082	12.34	12.19	47.51	30.15	12.96	3.99	5.40	G
6	29	91	180	17.2	6.22	11.2	163.6	279.4	0.713	0.064	8.75	7.76	17.68	25.51	38.36	14.52	3.93	G
6	29	91	180	20.2	6.68	12.0	267.5	283.5	0.783	0.122	8.26	9.48	8.20	46.84	32.26	8.83	3.88	G
6	29	91	180	23.2	6.76	17.7	315.8	271.3	0.694	0.081	9.23	7.76	22.35	41.01	24.81	7.10	4.73	G
6	30	91	181	2.2	6.21	28.2	55.4	263.2	0.806	0.078	11.51	12.19	65.43	24.13	6.13	2.65	1.66	G
6	30	91	181	5.2	6.07	18.3	116.9	287.6	0.753	0.106	8.83	8.83	11.12	70.29	14.75	2.70	1.14	G
6	30	91	181	8.2	6.56	12.9	255.2	277.0	0.598	0.120	8.33	8.26	9.12	48.66	32.45	7.35	2.42	G
6	30	91	181	11.2	6.67	21.5	301.8	279.3	0.732	0.065	9.66	8.83	22.39	48.39	17.32	8.11	3.79	G
6	30	91	181	14.2	6.32	10.5	35.1	274.6	0.759	0.075	10.45	9.48	40.28	42.18	10.41	3.31	3.82	G
6	30	91	181	17.2	6.21	18.3	96.4	268.1	0.707	0.083	9.66	8.26	32.68	42.80	14.68	7.17	2.66	G
6	30	91	181	20.2	6.59	10.5	281.2	286.2	0.774	0.113	20.90	11.13	74.98	13.58	7.04	3.81	0.60	G
6	30	91	181	23.2	6.91	21.2	297.1	304.9	0.701	0.066	10.04	11.13	35.86	50.10	8.34	3.89	1.81	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	1	91	182	2.2	6.44	13.5	0.8	294.0	0.626	0.074	9.14	8.83	25.63	56.69	9.83	2.57	5.28	G
7	1	91	182	5.2	6.22	20.3	96.6	265.2	0.723	0.081	10.34	8.83	29.08	53.41	8.39	5.08	4.04	G
7	1	91	182	8.2	6.71	13.9	269.6	281.0	0.524	0.080	8.19	11.13	21.08	40.93	13.71	15.70	8.58	G
7	1	91	182	11.2	6.98	6.2	340.1	260.3	0.642	0.131	6.52	8.83	13.15	37.99	18.09	9.51	21.26	G
7	1	91	182	14.2	6.72	20.3	37.6	263.5	0.805	0.137	6.83	10.24	20.01	23.11	10.16	23.59	23.13	G
7	1	91	182	17.2	6.42	20.3	98.0	265.6	0.746	0.180	4.97	3.51	11.28	15.08	8.42	31.67	33.56	G
7	1	91	182	20.2	6.70	15.1	213.5	251.3	0.585	0.167	6.65	8.26	8.40	32.91	13.01	27.75	17.93	G
7	1	91	182	23.2	6.94	11.7	304.7	267.6	0.636	0.118	8.98	10.24	39.17	23.52	8.33	20.13	8.84	G
7	2	91	183	2.2	6.60	10.8	338.0	266.6	0.855	0.114	6.21	5.69	11.71	22.17	17.96	40.92	7.24	G
7	2	91	183	5.2	6.28	37.9	94.0	265.8	0.676	0.070	9.14	11.13	45.48	19.29	7.18	21.31	6.75	G
7	2	91	183	8.2	6.55	3.2	184.2	277.1	0.651	0.071	7.82	9.48	28.00	25.50	18.67	20.67	7.16	G
7	2	91	183	11.2	6.87	11.2	230.1	283.1	0.838	0.112	7.11	6.92	7.40	28.99	28.99	29.03	5.58	G
7	2	91	183	14.2	6.68	11.7	126.1	274.6	0.796	0.093	7.42	7.31	18.93	21.20	24.86	27.29	7.71	G
7	2	91	183	17.2	6.30	18.5	99.1	263.3	0.720	0.057	9.48	7.76	36.40	15.40	16.81	25.92	5.47	G
7	2	91	183	20.2	6.49	7.1	147.2	284.1	0.547	0.140	4.97	3.82	24.18	18.21	10.32	11.75	35.54	G
7	2	91	183	23.2	6.81	16.5	273.6	276.0	0.711	0.068	8.83	9.48	24.55	32.36	26.91	10.32	5.87	G
7	3	91	184	2.2	6.61	14.8	351.5	284.2	0.709	0.079	10.04	10.24	28.73	38.18	23.08	5.26	4.76	G
7	3	91	184	5.2	6.24	25.2	98.0	291.6	0.743	0.093	9.75	5.02	31.68	16.03	6.76	40.38	5.15	W
7	3	91	184	8.2	6.38	10.4	131.1	282.2	0.777	0.089	8.33	6.24	29.06	20.40	27.08	21.60	1.85	G
7	3	91	184	11.2	6.86	13.8	222.9	280.2	0.778	0.151	6.36	5.95	7.82	19.34	22.45	45.34	5.05	G
7	3	91	184	14.2	6.80	5.2	60.5	273.8	0.786	0.097	7.21	9.48	10.88	37.42	15.12	29.35	7.23	G
7	3	91	184	17.2	6.38	20.1	80.9	274.0	0.704	0.087	8.39	9.48	17.81	40.87	24.75	10.80	5.77	G
7	3	91	184	20.2	6.43	9.0	101.3	277.6	0.786	0.105	7.70	6.92	13.59	23.71	43.70	15.48	3.52	G
7	3	91	184	23.2	6.86	10.9	281.4	283.5	0.783	0.140	7.11	6.92	10.06	30.12	29.72	23.43	6.67	G
7	4	91	185	2.2	6.86	2.2	30.3	269.8	0.747	0.116	7.31	9.48	15.52	37.18	21.15	17.96	8.20	G
7	4	91	185	5.2	6.46	16.5	77.8	262.6	0.766	0.221	5.31	8.26	10.74	26.07	10.62	11.47	41.11	G
7	4	91	185	8.2	6.49	11.0	147.0	205.9	0.613	0.235	4.72	3.71	6.42	17.57	21.36	11.40	43.26	S
7	4	91	185	11.2	6.94	19.0	251.3	256.1	0.663	0.211	5.33	17.07	14.75	18.27	18.74	17.48	30.76	G
7	4	91	185	14.2	7.03	24.8	313.4	271.9	0.752	0.128	5.99	17.07	28.76	12.75	11.65	18.27	28.57	G
7	4	91	185	17.2	6.60	21.2	46.3	260.9	0.790	0.177	5.75	7.76	16.06	16.50	18.83	15.83	32.79	G
7	4	91	185	20.2	6.44	17.2	116.7	269.2	0.775	0.229	5.12	8.26	10.28	19.11	12.13	28.16	30.32	G
7	4	91	185	23.2	6.81	13.9	218.5	251.0	0.586	0.209	5.09	4.06	8.55	14.09	19.89	31.88	25.58	G
7	5	91	186	2.2	6.94	6.8	338.1	277.1	0.822	0.164	6.48	6.56	10.61	12.81	37.34	26.59	12.65	G
7	5	91	186	5.2	6.50	20.9	82.6	269.4	0.836	0.109	7.06	7.76	15.74	19.31	27.42	31.34	6.19	G
7	5	91	186	8.2	6.39	16.4	119.5	284.0	0.832	0.082	7.94	5.95	16.37	14.36	24.08	39.27	5.91	G
7	5	91	186	11.2	6.81	10.1	248.3	284.3	0.753	0.152	6.87	5.69	14.32	5.47	25.64	50.17	4.40	G
7	5	91	186	14.2	7.05	12.2	321.0	276.2	0.831	0.171	6.74	15.06	17.83	10.57	27.88	37.89	5.82	G
7	5	91	186	17.2	6.74	12.8	3.5	270.8	0.806	0.110	8.19	15.06	37.04	15.98	23.98	19.94	3.06	G
7	5	91	186	20.2	6.40	22.0	96.4	271.7	0.746	0.108	8.33	6.92	26.42	12.89	43.29	15.40	1.99	G
7	5	91	186	23.2	6.64	1.9	109.6	278.7	0.862	0.139	7.76	15.06	26.36	10.96	29.14	30.11	3.44	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	6	91	187	2.2	6.92	11.1	296.1	277.6	0.843	0.162	7.70	6.24	17.19	14.31	33.17	29.90	5.43	G
7	6	91	187	5.2	6.66	17.7	56.9	276.5	0.780	0.132	7.16	8.26	15.08	23.81	21.47	36.02	3.63	G
7	6	91	187	8.2	6.33	17.5	103.8	280.5	0.742	0.110	7.42	7.31	20.29	12.76	40.15	22.77	4.03	G
7	6	91	187	11.2	6.62	5.3	213.0	278.9	0.808	0.182	7.31	6.56	28.03	5.85	34.86	27.63	3.63	G
7	6	91	187	14.2	7.07	5.8	296.3	276.3	0.765	0.179	6.36	5.69	12.21	8.44	29.44	41.35	8.56	G
7	6	91	187	17.2	6.90	9.0	25.5	272.1	0.739	0.145	7.31	7.31	17.71	22.56	32.11	19.35	8.28	G
7	6	91	187	20.2	6.39	23.8	74.3	260.8	0.733	0.131	7.59	7.76	20.20	34.66	25.97	13.44	5.73	G
7	6	91	187	23.2	6.44	9.6	158.1	267.7	0.705	0.149	8.75	6.56	17.72	41.46	29.22	10.11	1.49	G
7	7	91	188	2.2	6.84	8.4	280.6	279.0	0.854	0.189	7.53	8.26	10.18	36.75	31.83	18.65	2.58	G
7	7	91	188	5.2	6.74	7.6	27.4	273.5	0.803	0.161	7.76	10.24	11.93	36.29	38.58	10.52	2.67	G
7	7	91	188	8.2	6.28	26.5	94.0	266.3	0.730	0.125	7.47	6.92	16.07	32.33	29.61	11.90	10.09	G
7	7	91	188	11.2	6.37	10.3	132.3	286.3	0.796	0.133	8.19	8.26	21.42	29.74	32.01	13.36	3.47	G
7	7	91	188	14.2	6.93	13.2	261.8	285.6	0.772	0.218	7.42	9.48	5.44	37.64	29.07	22.86	4.99	G
7	7	91	188	17.2	6.94	11.0	327.4	279.3	0.795	0.201	7.42	10.24	9.69	47.33	21.66	13.29	8.03	G
7	7	91	188	20.2	6.32	16.4	77.2	266.3	0.811	0.152	9.57	10.24	18.40	60.19	13.95	5.05	2.41	G
7	7	91	188	23.2	6.15	19.5	111.4	280.9	0.767	0.151	8.46	8.83	13.58	53.32	25.84	4.36	2.90	G
7	8	91	189	2.2	6.61	7.9	249.2	283.8	0.746	0.189	7.59	8.83	10.94	39.05	28.92	17.08	4.02	G
7	8	91	189	5.2	6.76	8.9	320.5	279.2	0.802	0.184	7.88	8.83	14.49	44.66	29.39	7.18	4.29	G
7	8	91	189	8.2	6.35	14.6	83.0	273.8	0.775	0.118	8.68	8.83	11.62	63.76	15.26	6.24	3.13	G
7	8	91	189	11.2	6.20	13.9	129.5	276.7	0.728	0.093	8.00	8.26	17.72	31.43	37.33	11.14	2.38	G
7	8	91	189	14.2	6.72	15.7	254.2	285.9	0.758	0.243	7.47	6.92	9.81	20.36	40.24	22.46	7.13	G
7	8	91	189	17.2	6.99	19.7	310.2	274.3	0.796	0.177	8.00	8.26	14.52	45.65	24.76	10.56	4.51	G
7	8	91	189	20.2	6.78	15.3	344.2	280.9	0.729	0.166	10.24	13.47	39.73	46.53	9.14	3.09	1.52	G
7	8	91	189	23.2	6.15	25.0	91.0	268.7	0.747	0.148	7.26	9.48	17.83	36.37	12.20	5.30	28.30	G
7	9	91	190	2.2	6.43	4.1	130.4	279.4	0.758	0.159	8.19	7.76	17.28	35.82	32.96	5.19	8.75	G
7	9	91	190	5.2	6.88	10.7	300.8	287.9	0.693	0.183	8.06	9.48	13.03	48.40	21.98	8.62	7.97	G
7	9	91	190	8.2	6.58	15.2	72.9	204.5	0.753	0.275	4.88	13.47	17.67	28.07	3.01	23.59	27.66	G
7	9	91	190	11.2	6.18	24.2	117.6	159.8	0.570	0.170	4.76	8.26	12.65	26.86	4.62	15.82	40.05	G
7	9	91	190	14.2	6.56	16.4	224.8	274.4	0.576	0.195	6.21	7.31	12.50	29.45	24.68	8.74	24.64	G
7	9	91	190	17.2	7.13	22.0	293.8	280.1	0.797	0.163	6.97	8.83	15.32	34.00	13.85	22.21	14.62	G
7	9	91	190	20.2	6.89	25.8	324.4	281.6	0.679	0.122	8.39	13.47	38.83	39.97	5.25	8.92	7.03	G
7	9	91	190	23.2	6.21	30.6	81.4	266.7	0.782	0.123	8.83	10.24	31.94	44.93	10.46	7.49	5.19	G
7	10	91	191	2.2	6.26	10.2	143.4	278.6	0.750	0.113	9.06	12.19	32.07	44.88	17.80	2.79	2.45	G
7	10	91	191	5.2	6.87	13.8	253.9	284.7	0.736	0.197	8.19	10.24	11.40	64.55	10.58	5.26	8.21	G
7	10	91	191	8.2	6.80	11.2	324.5	264.9	0.740	0.245	5.57	11.13	11.23	34.56	4.64	14.16	35.41	G
7	10	91	191	11.2													M	
7	10	91	191	14.6	6.26	9.2	173.2	290.1	0.699	0.154	5.60	4.06	10.60	33.26	10.77	21.27	24.10	G
7	10	91	191	17.6	6.92	26.1	284.9	280.5	0.728	0.121	7.11	9.48	13.11	34.49	12.08	9.50	30.82	G
7	10	91	191	20.6	6.89	37.5	332.2	302.1	0.689	0.068	8.61	10.24	29.97	44.96	5.57	9.31	10.18	G
7	10	91	191	23.6	6.24	37.8	75.4	259.6	0.710	0.072	9.75	10.24	44.28	38.72	4.00	10.04	2.96	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	11	91	192	2.6	6.11	17.5	147.0	288.5	0.728	0.051	8.83	10.24	22.93	50.29	5.96	16.94	3.88	G
7	11	91	192	5.6	6.73	18.4	277.7	293.3	0.745	0.113	8.75	7.76	13.55	44.81	34.73	4.35	2.56	G
7	11	91	192	8.6	6.85	20.1	329.1	276.2	0.750	0.080	8.61	8.83	22.72	54.89	8.48	8.14	5.76	G
7	11	91	192	11.6	6.23	23.7	82.1	277.0	0.604	0.065	9.57	9.48	19.45	60.79	4.72	10.36	4.69	G
7	11	91	192	14.6	6.08	22.9	154.1	26.9	0.761	0.079	6.36	11.13	33.53	22.52	3.19	8.71	32.05	S
7	11	91	192	17.6	6.84	27.9	263.9	251.4	0.601	0.116	7.59	11.13	10.30	46.90	16.57	13.09	13.14	G
7	11	91	192	20.6	7.09	38.8	324.7	297.6	0.632	0.076	8.90	12.19	38.70	42.41	8.50	5.67	4.71	G
7	11	91	192	23.6	6.47	24.3	30.2	279.1	0.701	0.066	10.34	12.19	41.89	47.25	4.42	3.65	2.79	G
7	12	91	193	2.6	6.05	28.4	120.2	27.9	0.620	0.043	8.61	12.19	27.05	40.41	6.93	14.15	11.46	S
7	12	91	193	5.6	6.55	11.2	259.5	290.3	0.689	0.093	7.82	7.76	14.01	27.16	41.43	10.00	7.40	G
7	12	91	193	8.6	6.96	23.9	301.7	290.6	0.540	0.095	8.13	13.47	43.64	22.45	9.97	14.89	9.04	G
7	12	91	193	11.6	6.43	20.3	33.9	268.9	0.683	0.099	8.06	13.47	35.02	21.22	8.68	27.83	7.26	G
7	12	91	193	14.6	6.00	27.8	132.6	213.5	0.562	0.074	4.21	10.24	12.01	16.74	4.04	13.77	53.44	G
7	12	91	193	17.6	6.56	27.4	251.8	29.5	0.803	0.143	5.85	8.83	7.71	34.54	19.81	11.57	26.37	S
7	12	91	193	20.6	7.07	47.2	309.5	264.6	0.583	0.095	7.16	10.24	11.38	48.03	6.67	9.00	24.92	G
7	12	91	193	23.6	6.67	24.6	355.7	214.9	0.646	0.081	8.90	11.13	29.42	46.81	5.86	5.37	12.54	G
7	13	91	194	2.6	5.99	33.4	101.7	206.3	0.558	0.075	6.13	12.19	18.14	24.26	11.71	28.86	17.03	G
7	13	91	194	5.6	6.23	17.1	196.2	239.1	0.592	0.128	6.28	10.24	6.31	37.11	12.52	31.61	12.45	S
7	13	91	194	8.6	6.86	24.4	290.5	214.5	0.625	0.141	5.33	4.49	6.67	21.38	11.04	45.10	15.80	G
7	13	91	194	11.6	6.62	21.4	342.1	262.6	0.564	0.112	7.21	11.13	16.33	32.78	12.55	32.74	5.60	G
7	13	91	194	14.6	6.02	39.0	109.2	261.5	0.591	0.084	6.87	5.69	12.85	16.08	13.27	49.66	8.14	G
7	13	91	194	17.6	6.26	22.9	198.1	234.4	0.603	0.081	6.28	5.22	11.12	28.09	7.40	42.28	11.11	S
7	13	91	194	20.6	7.00	24.3	282.0	300.5	0.528	0.215	5.48	5.69	10.75	16.24	11.26	51.68	10.07	G
7	13	91	194	23.6	6.87	30.2	345.6	281.0	0.554	0.127	6.65	6.24	5.09	14.22	39.36	37.93	3.40	G
7	14	91	195	2.6	6.10	43.0	80.0	257.0	0.678	0.087	7.37	6.92	12.34	13.93	54.00	17.37	2.36	G
7	14	91	195	5.6	6.13	23.2	163.6	236.6	0.598	0.058	7.94	9.48	9.57	46.13	17.39	23.45	3.46	G
7	14	91	195	8.6	6.88	28.6	258.0	256.4	0.567	0.123	7.16	8.26	8.56	36.01	25.32	25.68	4.44	G
7	14	91	195	11.6	6.94	23.7	353.9	203.6	0.596	0.107	6.52	10.24	17.41	26.74	16.79	18.79	20.27	G
7	14	91	195	14.6	6.27	23.2	86.9	209.6	0.642	0.119	5.45	11.13	14.92	18.66	20.84	10.57	35.00	G
7	14	91	195	17.6	6.22	24.3	145.0	33.8	0.884	0.089	4.76	3.16	10.76	13.16	18.87	12.78	44.43	S
7	14	91	195	20.6	6.91	29.2	262.7	211.8	0.671	0.149	6.74	7.31	9.62	14.64	44.90	14.87	15.98	G
7	14	91	195	23.6	7.02	32.9	332.8	296.9	0.610	0.111	7.64	7.31	9.96	30.41	39.45	11.23	8.94	G
7	15	91	196	2.6	6.37	21.4	49.5	289.9	0.723	0.086	8.39	11.13	13.53	38.66	29.80	12.44	5.56	G
7	15	91	196	5.6	6.15	27.0	134.8	43.1	0.744	0.047	7.94	8.83	27.73	22.79	24.49	15.09	9.91	S
7	15	91	196	8.6	6.74	23.3	249.2	221.8	0.630	0.128	6.92	7.76	6.22	17.84	45.45	26.68	3.81	G
7	15	91	196	11.6	7.06	20.9	323.4	261.0	0.648	0.120	7.21	7.76	13.60	29.93	32.30	18.12	6.06	G
7	15	91	196	14.6	6.53	17.8	20.0	264.8	0.662	0.119	8.06	9.48	10.95	42.16	28.65	11.31	6.93	G
7	15	91	196	17.6	6.19	27.2	132.3	28.2	0.598	0.072	6.83	8.26	16.80	25.35	28.52	9.30	20.03	S
7	15	91	196	20.6	6.68	13.6	238.2	224.1	0.660	0.136	6.78	6.92	7.40	18.46	49.09	14.58	10.46	G
7	15	91	196	23.6	7.03	26.7	315.8	287.7	0.643	0.154	7.37	7.31	9.98	18.62	36.59	27.72	7.09	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	16	91	197	2.6	6.56	19.0	13.3	294.3	0.720	0.122	8.68	10.24	10.45	53.96	25.94	7.55	2.10	G
7	16	91	197	5.6	6.15	27.9	114.7	310.6	0.520	0.079	8.98	10.24	23.66	41.09	18.28	9.11	7.86	G
7	16	91	197	8.6	6.53	9.4	216.2	309.1	0.584	0.228	7.82	8.26	21.75	17.21	23.77	30.07	7.20	G
7	16	91	197	11.6	7.06	22.6	296.0	296.4	0.656	0.215	7.16	8.83	3.95	50.33	19.24	18.40	8.09	G
7	16	91	197	14.6	6.73	24.4	352.1	293.7	0.591	0.150	7.53	9.48	6.59	51.40	15.48	17.96	8.57	G
7	16	91	197	17.6	6.20	27.4	98.5	278.0	0.607	0.166	6.36	10.24	5.45	31.79	15.52	16.44	30.80	G
7	16	91	197	20.6	6.40	11.4	200.1	310.0	0.586	0.170	6.69	7.31	6.54	35.36	26.14	19.69	12.27	G
7	16	91	197	23.6	6.90	22.3	282.1	260.2	0.599	0.189	7.16	8.26	6.03	34.25	29.22	17.69	12.80	G
7	17	91	198	2.6	6.66	22.4	351.2	303.5	0.630	0.138	8.26	9.48	7.32	59.90	14.62	11.38	6.78	G
7	17	91	198	5.6	6.16	31.1	87.3	278.3	0.694	0.128	7.59	9.48	7.94	50.52	11.43	22.94	7.16	G
7	17	91	198	8.6	6.29	16.7	179.2	294.9	0.740	0.121	7.47	6.92	5.59	31.44	43.06	16.82	3.08	G
7	17	91	198	11.6	6.91	25.4	275.1	248.0	0.578	0.200	6.97	8.83	3.69	33.45	38.66	16.49	7.70	G
7	17	91	198	14.6	6.79	28.8	335.9	223.6	0.583	0.135	7.70	9.48	10.39	51.95	12.80	19.95	4.91	G
7	17	91	198	17.6	6.20	32.4	71.7	279.2	0.638	0.136	6.61	10.24	9.11	38.70	15.74	20.44	16.01	G
7	17	91	198	20.6	6.15	14.0	140.1	303.3	0.641	0.133	6.61	8.83	8.66	29.45	16.64	22.41	22.83	G
7	17	91	198	23.6	6.61	15.7	254.6	222.0	0.673	0.216	6.52	8.83	5.08	42.23	20.80	20.78	11.11	S
7	18	91	199	2.6	6.57	10.3	354.8	302.8	0.544	0.117	8.39	8.83	21.24	32.66	21.70	15.49	8.91	G
7	18	91	199	5.6	6.12	28.9	91.6	283.1	0.620	0.096	8.61	8.26	13.39	60.72	13.88	7.89	4.12	G
7	18	91	199	8.6	6.06	22.7	156.0	324.3	0.724	0.052	8.33	8.83	16.47	47.93	21.10	11.24	3.26	G
7	18	91	199	11.6	6.57	27.4	240.0	215.2	0.566	0.133	7.59	8.26	9.45	43.59	27.58	16.07	3.31	G
7	18	91	199	14.6	6.75	13.1	299.9	215.7	0.600	0.144	6.74	9.48	11.03	35.76	22.75	13.47	16.99	G
7	18	91	199	17.6	6.26	10.1	12.9	267.3	0.540	0.119	8.61	9.48	9.40	69.34	8.45	8.15	4.66	S
7	18	91	199	20.6	6.02	20.1	91.4	305.0	0.594	0.117	8.83	8.83	13.19	63.09	19.18	2.50	2.03	S
7	18	91	199	23.6	6.32	4.7	274.1	328.7	0.579	0.113	8.06	7.31	8.47	42.36	36.19	4.42	8.55	S
7	19	91	200	2.6	6.53	14.1	318.5	31.4	0.734	0.117	7.37	8.83	13.45	49.89	20.49	3.86	12.30	S
7	19	91	200	5.6	6.16	13.9	354.8	320.2	0.609	0.083	8.98	10.24	11.27	68.14	10.39	4.08	6.13	G
7	19	91	200	8.6	5.98	21.8	107.7	298.5	0.537	0.100	8.33	9.48	10.55	58.17	21.67	4.50	5.11	G
7	19	91	200	11.6	6.37	14.8	242.9	31.7	0.785	0.127	7.47	8.26	6.23	41.97	39.04	6.81	5.95	S
7	19	91	200	14.6	6.75	23.7	299.5	46.7	0.572	0.113	6.74	8.83	6.85	46.06	18.47	11.29	17.32	S
7	19	91	200	17.6	6.43	17.7	336.2	33.3	0.747	0.078	7.76	9.48	15.77	50.44	11.59	14.82	7.38	S
7	19	91	200	20.6	6.09	29.9	102.5	267.2	0.562	0.074	8.61	8.83	14.05	64.06	12.68	3.84	5.37	G
7	19	91	200	23.6	6.21	13.7	151.2	212.9	0.558	0.127	8.00	8.83	9.58	46.36	32.80	4.85	6.41	G
7	20	91	201	2.6	6.53	7.7	276.5	226.4	0.525	0.112	8.13	8.26	7.29	51.18	32.03	5.47	4.03	S
7	20	91	201	5.6	6.33	28.3	340.9	3.4	0.681	0.098	7.82	9.48	23.13	29.37	18.75	15.63	13.12	S
7	20	91	201	8.6	6.06	32.4	107.9	41.4	0.748	0.059	8.46	9.48	18.22	43.94	21.69	10.76	5.38	S
7	20	91	201	11.6	6.32	9.2	228.2	211.4	0.594	0.113	7.59	7.76	8.30	33.31	37.64	15.44	5.30	G
7	20	91	201	14.6	6.79	16.8	266.2	235.5	0.625	0.153	6.92	7.31	6.89	22.28	41.11	18.93	10.79	S
7	20	91	201	17.6	6.67	14.2	338.6	212.4	0.663	0.117	7.59	9.48	8.17	51.30	12.77	17.72	10.04	G
7	20	91	201	20.6	6.20	23.5	55.4	235.3	0.678	0.078	8.98	9.48	23.87	44.13	14.71	13.96	3.32	G
7	20	91	201	23.6	6.21	16.9	94.7	270.3	0.736	0.105	8.00	7.31	8.86	30.63	51.36	8.06	1.10	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	21	91	202	2.6	6.56	12.8	254.7	230.8	0.670	0.114	8.39	8.26	11.91	50.70	26.53	8.90	1.96	G
7	21	91	202	5.6	6.51	28.0	331.7	212.5	0.620	0.107	7.82	7.76	13.50	34.21	31.96	13.74	6.59	G
7	21	91	202	8.6	6.20	20.3	97.1	220.4	0.763	0.092	7.64	9.48	11.71	45.36	27.01	11.05	4.87	S
7	21	91	202	11.6	6.23	13.3	147.8	304.9	0.660	0.102	7.31	8.26	12.14	31.57	27.51	22.39	6.38	G
7	21	91	202	14.6	6.69	28.3	256.7	34.8	0.717	0.159	6.52	8.83	9.82	23.84	26.62	30.29	9.42	S
7	21	91	202	17.6	6.79	14.3	324.4	223.3	0.716	0.108	8.19	8.26	20.41	50.18	12.16	9.08	8.17	G
7	21	91	202	20.6	6.36	18.0	46.8	291.3	0.573	0.093	8.13	8.26	20.34	43.89	20.28	8.04	7.46	G
7	21	91	202	23.6	6.11	31.0	106.7	237.0	0.642	0.084	8.83	6.92	22.30	45.29	25.37	4.95	2.10	G
7	22	91	203	2.6	6.43	10.1	252.8	289.5	0.732	0.115	8.00	8.26	7.05	34.39	49.05	7.96	1.55	G
7	22	91	203	5.6	6.65	7.8	353.3	252.4	0.595	0.116	8.19	8.83	17.39	35.87	32.85	10.39	3.49	G
7	22	91	203	8.6	6.31	27.7	43.5	292.2	0.650	0.101	7.94	8.83	17.85	38.77	19.34	21.55	2.48	G
7	22	91	203	11.6	6.17	18.3	135.0	296.1	0.775	0.134	7.01	8.26	12.14	36.62	27.45	17.88	5.91	G
7	22	91	203	14.6	6.58	5.6	289.3	268.7	0.655	0.173	6.74	6.92	3.25	20.26	53.03	17.47	6.00	G
7	22	91	203	17.6	6.88	16.3	314.7	219.8	0.744	0.120	7.59	8.83	9.97	46.81	25.21	12.81	5.20	G
7	22	91	203	20.6	6.54	17.7	11.6	270.6	0.729	0.104	8.61	6.24	15.07	43.57	32.09	7.45	1.81	G
7	22	91	203	23.6	6.15	27.1	91.9	238.9	0.699	0.090	8.83	9.48	9.52	70.24	13.04	5.08	2.12	G
7	23	91	204	2.6	6.38	8.4	75.5	280.5	0.722	0.119	8.13	7.76	10.27	32.24	48.68	7.85	0.96	G
7	23	91	204	5.6	6.68	7.8	339.7	300.0	0.697	0.125	8.06	8.83	9.32	39.68	32.58	13.75	4.67	G
7	23	91	204	8.6	6.47	21.7	357.7	302.0	0.642	0.128	7.82	9.48	8.48	46.62	27.33	10.17	7.40	G
7	23	91	204	11.6	6.19	19.6	104.5	288.3	0.770	0.087	7.94	8.83	27.43	26.85	19.76	19.89	6.07	G
7	23	91	204	14.6	6.42	4.8	328.5	289.7	0.714	0.147	7.53	7.31	16.37	19.02	45.56	14.68	4.37	G
7	23	91	204	17.6	6.83	21.1	280.1	267.8	0.585	0.178	7.42	8.83	8.53	28.11	27.09	30.25	6.02	G
7	23	91	204	20.6	6.64	22.0	341.4	244.7	0.595	0.105	8.33	8.26	13.49	57.34	19.04	6.74	3.39	G
7	23	91	204	23.6	6.14	36.0	71.9	245.0	0.758	0.097	8.98	8.83	28.81	42.83	20.75	5.98	1.62	G
7	24	91	205	2.6	6.28	13.2	150.9	240.6	0.597	0.112	8.61	13.47	31.24	17.09	30.69	19.39	1.59	G
7	24	91	205	5.6	6.70	12.7	292.6	278.4	0.686	0.186	6.56	7.31	15.24	14.43	32.55	27.92	9.86	G
7	24	91	205	8.6	6.66	16.6	85.3	316.0	0.620	0.174	7.47	8.83	23.11	25.66	16.81	19.00	15.43	G
7	24	91	205	11.6	6.28	18.0	104.0	272.6	0.566	0.209	4.70	3.61	12.31	10.76	12.15	19.33	45.45	G
7	24	91	205	14.6	6.36	8.6	102.6	296.1	0.727	0.220	5.60	5.22	7.01	9.13	25.16	37.75	20.95	G
7	24	91	205	17.6	6.88	20.7	287.4	268.9	0.631	0.206	5.92	13.47	17.29	9.02	27.28	29.47	16.94	G
7	24	91	205	20.6	6.83	29.4	347.6	213.5	0.640	0.131	6.97	12.19	24.51	26.43	12.00	23.08	13.98	G
7	24	91	205	23.6	6.28	38.6	55.0	250.2	0.726	0.133	7.01	9.48	19.89	23.43	23.49	28.59	4.60	G
7	25	91	206	2.6	6.20	18.6	96.6	262.1	0.663	0.137	8.13	8.26	23.55	27.46	22.76	21.73	4.50	G
7	25	91	206	5.6	6.61	2.4	249.4	295.7	0.578	0.202	6.74	7.76	15.17	20.46	29.97	27.76	6.64	G
7	25	91	206	8.6	6.68	17.1	335.2	285.0	0.715	0.159	8.61	13.47	35.24	32.00	20.18	9.58	3.00	G
7	25	91	206	11.6	6.31	18.8	84.3	279.6	0.710	0.151	7.47	12.19	35.81	20.96	17.68	11.67	13.88	G
7	25	91	206	14.6	6.32	14.7	161.5	246.8	0.524	0.139	7.16	13.47	28.63	23.14	19.35	12.98	15.90	G
7	25	91	206	17.6	6.75	7.1	307.0	274.5	0.610	0.230	6.32	7.76	10.70	16.94	35.18	13.69	23.50	G
7	25	91	206	20.6	6.85	9.3	342.2	269.5	0.726	0.258	6.02	4.83	10.95	16.51	14.38	47.97	10.18	G
7	25	91	206	23.6	6.36	23.5	54.7	278.2	0.724	0.163	7.64	13.47	35.46	27.31	14.26	10.72	12.25	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	26	91	207	2.6	6.16	19.0	107.3	265.4	0.671	0.154	8.13	11.13	13.13	40.98	19.42	17.19	9.28	G
7	26	91	207	5.6	6.59	6.6	321.7	279.1	0.732	0.179	6.74	6.92	18.67	18.78	24.12	29.35	9.07	G
7	26	91	207	8.6	6.80	14.7	333.7	271.2	0.681	0.243	6.61	12.19	21.93	22.38	15.79	30.63	9.28	G
7	26	91	207	11.6	6.40	15.7	28.4	268.1	0.692	0.165	7.06	13.47	30.34	19.24	10.83	26.09	13.49	G
7	26	91	207	14.6	6.08	21.5	107.1	284.9	0.695	0.153	6.44	11.13	16.73	30.05	13.53	19.91	19.78	G
7	26	91	207	17.6	6.53	8.5	271.0	276.2	0.728	0.243	6.10	7.76	6.77	16.05	30.59	36.48	10.11	G
7	26	91	207	20.6	6.91	21.5	307.6	268.8	0.565	0.178	8.13	12.19	24.72	31.48	15.19	17.85	10.75	G
7	26	91	207	23.6	6.52	9.8	33.8	287.1	0.706	0.160	9.48	13.47	31.99	38.21	18.65	9.13	2.02	G
7	27	91	208	2.6	6.15	22.7	100.0	293.2	0.656	0.112	9.85	12.19	40.75	28.12	19.94	9.82	1.36	G
7	27	91	208	5.6	6.48	7.6	250.3	277.0	0.699	0.190	6.78	6.24	7.40	20.17	33.65	34.84	3.95	G
7	27	91	208	8.6	6.87	8.0	281.2	259.9	0.634	0.221	7.31	7.76	8.15	29.68	33.15	20.14	8.88	G
7	27	91	208	11.6	6.53	17.4	69.7	250.0	0.640	0.176	7.37	11.13	10.04	32.68	30.51	17.88	8.89	G
7	27	91	208	14.6	6.31	23.3	151.2	195.6	0.696	0.258	4.25	3.24	10.94	11.78	11.12	20.13	46.03	S
7	27	91	208	17.6	6.60	16.9	253.5	213.4	0.759	0.267	4.97	10.24	7.39	19.63	9.81	43.60	19.57	G
7	27	91	208	20.6	7.04	17.3	320.1	257.9	0.615	0.375	5.17	4.20	6.24	18.23	13.66	42.68	19.18	G
7	27	91	208	23.6	6.76	19.2	7.3	277.1	0.549	0.281	6.10	6.24	15.25	13.25	26.11	27.37	18.02	G
7	28	91	209	2.6	6.25	18.7	73.4	273.0	0.711	0.234	6.40	11.13	11.71	25.34	20.37	25.78	16.79	G
7	28	91	209	5.6	6.52	7.4	232.7	217.4	0.696	0.276	4.81	3.24	9.60	15.20	9.90	27.29	38.00	G
7	28	91	209	8.6	6.98	14.4	302.9	216.4	0.592	0.304	5.31	11.13	8.90	21.38	7.07	36.14	26.51	G
7	28	91	209	11.6	6.75	10.1	7.1	214.2	0.640	0.263	5.54	5.95	13.68	15.93	14.38	34.76	21.25	G
7	28	91	209	14.6	6.27	14.9	88.9	262.9	0.640	0.313	4.92	12.19	18.46	15.02	7.39	28.20	30.92	G
7	28	91	209	17.6	6.51	7.9	238.3	220.3	0.750	0.278	4.90	3.24	14.99	15.61	15.22	20.42	33.76	S
7	28	91	209	20.6	7.03	15.7	320.6	221.4	0.696	0.260	6.02	11.13	15.73	23.16	13.40	29.64	18.07	G
7	28	91	209	23.6	6.87	15.0	339.5	212.1	0.695	0.238	5.95	5.45	17.49	17.99	8.65	39.65	16.23	S
7	29	91	210	2.6	6.31	17.2	81.4	260.3	0.649	0.261	5.72	17.07	25.80	13.09	7.02	25.34	28.76	G
7	29	91	210	5.6	6.45	5.6	166.2	236.4	0.613	0.265	5.75	15.06	20.51	13.20	10.15	26.69	29.45	G
7	29	91	210	8.6	6.93	11.4	268.6	214.5	0.707	0.305	5.72	15.06	20.15	17.81	5.93	36.97	19.13	S
7	29	91	210	11.6	6.89	8.0	3.7	200.9	0.580	0.275	6.52	5.69	16.81	11.03	7.26	51.86	13.03	G
7	29	91	210	14.6	6.46	20.5	116.4	188.7	0.805	0.576	4.74	4.65	7.79	3.86	8.47	58.47	21.41	G
7	29	91	210	17.6	6.56	8.4	179.5	215.5	0.674	0.387	4.95	5.22	9.12	6.21	5.67	55.95	23.04	G
7	29	91	210	20.6	7.05	16.0	285.8	245.1	0.648	0.571	5.89	6.56	9.18	5.30	33.28	37.30	14.94	G
7	29	91	210	23.6	7.06	21.8	329.6	228.2	0.604	0.461	6.40	8.26	7.43	32.96	20.30	31.23	8.09	G
7	30	91	211	2.6	6.48	18.3	45.9	265.4	0.679	0.307	6.40	8.26	8.29	34.02	16.13	33.88	7.68	G
7	30	91	211	5.6	6.42	6.4	97.9	287.7	0.729	0.288	6.74	7.31	5.15	16.43	51.81	16.18	10.43	G
7	30	91	211	8.6	6.90	9.0	302.0	225.6	0.644	0.372	6.74	6.56	12.61	10.77	35.85	33.88	6.90	G
7	30	91	211	11.6	7.01	11.6	346.9	216.1	0.635	0.324	7.47	8.83	11.33	30.34	33.53	20.92	3.88	G
7	30	91	211	14.6	6.52	12.0	57.2	271.6	0.687	0.239	7.21	9.48	21.61	36.27	15.16	14.88	12.09	G
7	30	91	211	17.6	6.38	9.8	137.2	278.0	0.732	0.234	7.21	7.31	21.70	27.53	29.85	6.96	13.96	G
7	30	91	211	20.6	6.87	9.3	266.4	29.6	0.751	0.256	7.31	6.56	20.96	22.30	33.11	17.90	5.73	S
7	30	91	211	23.6	7.00	10.8	336.3	215.6	0.734	0.235	7.88	8.83	18.35	36.63	25.38	15.56	4.08	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
7	31	91	212	2.6	6.47	12.0	46.4	269.7	0.615	0.164	9.23	15.06	25.86	36.34	25.79	10.63	1.38	G
7	31	91	212	5.6	6.31	9.3	118.2	258.6	0.635	0.151	8.61	12.19	39.08	25.13	19.90	14.02	1.87	G
7	31	91	212	8.6	6.82	10.1	272.3	230.3	0.652	0.228	8.13	12.19	26.14	16.19	37.62	17.91	2.14	G
7	31	91	212	11.6	7.03	10.7	338.2	218.0	0.712	0.258	8.39	13.47	20.77	44.12	19.98	9.23	5.90	S
7	31	91	212	14.6	6.60	13.0	40.4	266.9	0.637	0.187	8.75	13.47	34.95	38.90	10.97	11.21	3.98	G
7	31	91	212	17.6	6.31	12.0	113.5	232.7	0.607	0.142	8.68	12.19	29.73	43.39	16.62	8.17	2.10	G
7	31	91	212	20.6	6.67	5.3	260.2	228.3	0.688	0.236	7.21	7.31	16.55	20.59	39.70	18.25	4.91	G
7	31	91	212	23.6	6.93	8.8	329.3	218.9	0.719	0.217	7.88	13.47	27.13	24.54	24.37	17.68	6.29	S

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
8	1	91	213	2.6	6.52		37.4		0.650	0.166	9.23	8.83	24.26	40.11	26.83	6.27	2.53	G
8	1	91	213	5.6	6.21		115.7		0.624	0.117	7.94	12.19	23.34	32.09	21.57	15.51	7.49	G
8	1	91	213	8.6	6.61		250.2		0.598	0.173	8.39	12.19	26.72	30.82	26.67	11.98	3.82	G
8	1	91	213	11.6	6.98		323.5		0.775	0.220	7.59	12.19	20.90	22.02	27.47	23.83	5.79	S
8	1	91	213	14.6	6.68		12.5		0.545	0.188	8.61	12.19	27.75	37.30	21.12	11.13	2.70	G
8	1	91	213	17.6	6.21		78.4		0.634	0.136	8.61	13.47	34.59	34.22	20.28	6.17	4.74	G
8	1	91	213	20.6	6.41		237.4		0.657	0.152	7.94	11.13	12.67	44.85	29.05	9.56	3.86	G
8	1	91	213	23.6	6.78		310.0		0.851	0.155	7.82	12.19	23.17	30.99	28.36	13.00	4.48	S
8	2	91	214	2.6	6.51		351.7		0.714	0.135	8.83	12.19	37.15	31.20	23.11	3.97	4.56	G
8	2	91	214	5.6	6.09		94.1		0.701	0.107	9.66	12.19	38.04	28.05	25.14	4.99	3.78	G
8	2	91	214	8.6	6.33		214.5		0.685	0.135	8.61	11.13	13.28	46.49	25.35	11.69	3.19	G
8	2	91	214	11.6	6.84		278.2		0.875	0.152	7.21	7.76	17.87	27.55	31.68	16.04	6.86	S
8	2	91	214	14.6	6.68		335.4		0.837	0.133	8.33	11.13	23.37	43.01	11.95	9.53	12.14	S
8	2	91	214	17.6	6.18		56.3		0.584	0.112	10.14	12.19	61.57	22.68	8.74	3.74	3.27	G
8	2	91	214	20.6	6.17		143.7		0.747	0.106	8.61	8.26	22.13	40.32	26.50	5.92	5.13	G
8	2	91	214	23.6	6.58		285.9		0.879	0.137	7.64	10.24	11.34	53.32	11.79	7.83	15.71	G
8	3	91	215	2.6	6.57		342.7		0.775	0.137	9.23	11.13	21.05	52.43	14.97	5.73	5.82	S
8	3	91	215	5.6	6.12		95.7		0.617	0.098	8.75	8.26	20.70	47.03	21.50	7.70	3.07	G
8	3	91	215	8.6	6.17		156.5		0.698	0.096	8.06	11.13	15.30	45.40	18.39	15.38	5.53	G
8	3	91	215	11.6	6.72		255.0		0.801	0.171	6.83	7.76	10.60	25.09	37.38	20.01	6.92	S
8	3	91	215	14.6	6.81		325.3		0.867	0.140	7.06	17.07	23.30	26.95	10.06	20.95	18.73	S
8	3	91	215	17.6	6.37		18.9		0.616	0.129	9.06	17.07	40.44	30.58	14.38	7.08	7.52	G
8	3	91	215	20.6	6.18		105.5		0.788	0.154	9.23	10.24	25.59	53.49	7.48	12.40	1.04	G
8	3	91	215	23.6	6.55		247.3		0.710	0.148	8.83	15.06	29.80	23.60	33.66	11.25	1.71	G
8	4	91	216	2.6	6.71		324.0		0.675	0.130	8.90	10.24	24.43	44.86	23.05	6.40	1.25	G
8	4	91	216	5.6	6.34		42.3		0.580	0.129	8.46	10.24	27.78	29.55	22.26	14.34	6.08	G
8	4	91	216	8.6	6.17		118.6		0.730	0.116	8.53	6.92	36.71	16.85	35.33	8.11	3.00	G
8	4	91	216	11.6	6.65		270.8		0.828	0.182	8.68	13.47	39.51	15.28	27.94	11.53	5.74	G
8	4	91	216	14.6	6.99		318.1		0.729	0.148	8.39	15.06	45.52	18.33	20.70	8.75	6.70	G
8	4	91	216	17.6	6.66		20.8		0.623	0.136	9.85	15.06	51.83	24.13	13.49	6.72	3.84	G
8	4	91	216	20.6	6.26		75.9		0.771	0.126	9.48	13.47	52.98	15.74	21.08	6.52	3.67	G
8	4	91	216	23.6	6.47		264.9		0.592	0.155	9.39	13.47	50.74	22.29	10.39	9.77	6.81	G
8	5	91	217	2.6	6.83		324.3		0.834	0.164	9.23	11.13	39.92	36.16	14.95	7.15	1.82	G
8	5	91	217	5.6	6.68		35.2		0.597	0.197	6.78	13.47	31.47	15.62	8.00	21.74	23.17	G
8	5	91	217	8.6	6.33		124.6		0.779	0.339	4.39	4.20	15.34	3.80	1.55	34.21	45.09	G
8	5	91	217	11.6	6.58		240.3		0.843	0.205	5.28	13.47	25.20	19.50	3.50	20.69	31.11	S
8	5	91	217	14.6	7.05		302.9		0.785	0.186	8.33	13.47	36.02	38.54	5.46	6.71	13.28	G
8	5	91	217	17.6	6.92		345.3		0.849	0.142	9.23	13.47	51.18	24.07	5.87	7.95	10.93	G
8	5	91	217	20.6	6.37		59.5		0.709	0.151	10.34	15.06	49.75	25.57	7.13	13.54	4.01	G
8	5	91	217	23.6	6.35		120.9		0.665	0.144	9.23	10.24	38.38	38.42	8.26	9.36	5.58	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
8	6	91	218	2.6	6.77	312.0			0.740	0.169	8.98	13.47	42.19	30.21	10.89	11.65	5.06	G
8	6	91	218	5.6	6.79	345.2			0.839	0.166	9.39	11.13	46.55	27.13	6.76	14.69	4.86	G
8	6	91	218	8.6	6.32	98.6			0.760	0.136	8.90	15.06	46.67	16.76	9.20	21.46	5.91	G
8	6	91	218	11.6	6.33	140.5			0.721	0.135	8.68	13.47	28.42	24.54	5.35	15.04	26.64	G
8	6	91	218	14.6	6.94	265.5			0.769	0.189	8.39	12.19	50.21	26.26	7.30	8.32	7.92	S
8	6	91	218	17.6	7.08	335.0			0.897	0.138	9.75	17.07	49.21	29.03	5.35	11.66	4.75	S
8	6	91	218	20.6	6.55	32.0			0.543	0.140	9.39	15.06	49.76	23.70	12.52	11.50	2.52	G
8	6	91	218	23.6	6.26	103.2			0.672	0.150	9.94	9.48	41.03	40.22	4.74	9.19	4.82	G
8	7	91	219	2.6	6.66	261.1			0.739	0.182	8.46	12.19	36.93	25.98	10.68	20.96	5.46	G
8	7	91	219	5.6	6.92	311.3			0.837	0.168	8.00	9.48	21.28	43.63	11.80	15.39	7.90	S
8	7	91	219	8.6	6.42	57.3			0.769	0.275	5.02	17.07	22.76	14.82	2.83	11.96	47.64	S
8	7	91	219	11.6	6.12	125.7			0.584	0.325	4.74	4.49	13.65	5.95	2.10	53.86	24.43	G
8	7	91	219	14.6	6.67	242.9			0.917	0.279	4.72	4.49	17.76	26.02	7.26	21.53	27.43	S
8	7	91	219	17.6	7.12	326.5			0.847	0.225	6.48	15.06	31.07	21.21	7.02	14.73	25.97	S
8	7	91	219	20.6	6.73	342.3			0.857	0.183	10.14	15.06	49.11	33.12	4.16	8.26	5.35	S
8	7	91	219	23.6	6.18	105.9			0.688	0.147	9.39	13.47	45.15	29.65	8.51	11.92	4.77	G
8	8	91	220	2.6	6.41	209.9			0.739	0.194	8.53	13.47	35.33	41.07	10.27	7.79	5.53	G
8	8	91	220	5.6	6.94	290.6			0.932	0.257	7.16	8.83	25.73	38.15	10.77	14.25	11.10	S
8	8	91	220	8.6	6.68	8.3			0.749	0.196	8.83	11.13	26.97	39.89	11.31	13.49	8.34	G
8	8	91	220	11.6	6.09	108.1			0.819	0.126	8.33	15.06	28.43	29.29	3.74	25.80	12.74	G
8	8	91	220	14.6	6.35	202.0			0.869	0.221	7.21	12.19	26.13	27.64	13.33	18.35	14.55	S
8	8	91	220	17.6	7.03	289.1			0.890	0.234	7.70	9.48	23.90	42.64	9.01	7.04	17.41	S
8	8	91	220	20.6	6.94	334.6			0.847	0.169	9.06	13.47	38.89	39.61	8.52	9.23	3.75	S
8	8	91	220	23.6	6.16	58.0			0.881	0.172	7.76	15.06	33.36	27.18	4.45	28.07	6.93	G
8	9	91	221	2.6	6.14	159.9			0.842	0.190	6.24	4.65	12.21	28.12	8.06	40.80	10.81	G
8	9	91	221	5.6	6.77	266.3			0.838	0.374	5.85	5.02	9.63	17.95	5.82	54.91	11.69	S
8	9	91	221	8.6	6.81	330.0			0.916	0.220	6.65	12.19	30.52	19.33	5.11	30.55	14.49	G
8	9	91	221	11.6	6.09	57.4			0.801	0.225	5.79	5.69	18.27	7.80	7.68	40.87	25.39	S
8	9	91	221	14.6	6.00	160.7			0.785	0.307	5.39	5.22	8.71	5.54	3.94	66.05	15.75	G
8	9	91	221	17.6	6.77	257.3			0.925	0.380	5.82	9.48	18.26	23.16	8.50	39.91	10.17	S
8	9	91	221	20.6	7.00	333.2			0.886	0.234	6.44	5.45	16.67	13.24	9.42	49.66	11.01	S
8	9	91	221	23.6	6.30	56.4			0.774	0.182	7.31	7.31	13.67	9.76	53.89	19.07	3.61	G
8	9	91	222	2.6	6.03	140.4			0.851	0.104	6.92	6.24	13.62	18.78	35.60	27.43	4.57	G
8	10	91	222	5.6	6.67	234.7			0.901	0.219	6.21	5.45	10.00	19.94	12.54	53.21	4.32	S
8	10	91	222	8.6	7.04	291.1			0.880	0.232	7.47	12.19	24.50	25.59	11.38	34.77	3.75	S
8	10	91	222	11.6	6.51	41.9			0.645	0.166	7.59	13.47	29.52	20.59	24.92	17.97	6.99	G
8	10	91	222	14.6	6.08	125.9			0.896	0.136	5.48	10.24	14.34	28.22	14.01	15.48	27.95	S
8	10	91	222	17.6	6.70	241.4			0.932	0.242	6.52	10.24	8.03	37.54	10.35	29.18	14.90	S
8	10	91	222	20.6	7.15	325.3			0.892	0.187	7.31	10.24	14.08	36.17	10.64	31.00	8.12	S
8	10	91	222	23.6	6.65	357.8			0.652	0.172	9.31	13.47	58.11	20.33	11.32	7.38	2.87	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
8	11	91	223	2.6	6.07		117.1		0.679	0.090	9.23	12.19	34.43	41.61	11.78	6.53	5.65	G
8	11	91	223	5.6	6.54		232.7		0.784	0.193	8.83	10.24	5.56	59.76	17.52	14.90	2.26	G
8	11	91	223	8.6	7.14		294.0		0.923	0.281	6.65	11.13	12.77	37.09	8.65	18.84	22.66	S
8	11	91	223	11.6	6.78		354.7		0.828	0.237	6.36	12.19	21.21	21.38	12.09	33.06	12.25	S
8	11	91	223	14.6	6.10		100.4		0.829	0.145	5.22	11.13	12.51	18.00	10.04	26.58	32.87	G
8	11	91	223	17.6	6.40		246.2		0.901	0.159	7.82	10.24	7.75	55.12	18.91	10.43	7.79	G
8	11	91	223	20.6	7.06		320.0		0.944	0.229	8.61	11.13	6.11	69.37	13.64	7.55	3.32	S
8	11	91	223	23.6	6.84		341.5		0.914	0.196	10.04	12.19	33.12	51.50	6.33	7.75	1.30	S
8	12	91	224	2.6	6.10		79.1		0.683	0.125	9.57	12.19	31.66	56.41	6.92	3.84	1.18	G
8	12	91	224	5.6	6.26		186.1		0.634	0.150	8.68	10.24	4.95	62.15	19.47	9.81	3.63	G
8	12	91	224	8.6	6.98		273.6		0.903	0.229	8.06	9.48	5.00	41.67	36.14	14.43	2.77	S
8	12	91	224	11.6	6.91		341.6		0.895	0.219	9.31	10.24	16.99	67.79	7.53	6.91	0.79	S
8	12	91	224	14.6	6.19		50.9		0.736	0.140	9.23	11.13	17.00	62.70	13.22	3.88	3.20	G
8	12	91	224	17.6	6.20		173.2		0.753	0.142	8.46	10.24	6.46	55.60	23.13	10.53	4.27	G
8	12	91	224	20.6	6.86		260.5		0.963	0.248	7.64	10.24	3.30	43.68	40.35	8.24	4.42	S
8	12	91	224	23.6	6.92		337.5		0.916	0.198	8.61	9.48	12.31	53.73	22.37	10.26	1.33	S
8	13	91	225	2.6	6.20		44.6		0.695	0.158	9.23	12.19	32.24	46.41	14.37	4.97	2.01	G
8	13	91	225	5.6	6.15		153.4		0.677	0.127	8.39	8.83	5.76	58.68	25.04	8.75	1.77	G
8	13	91	225	8.6	6.83		262.1		0.904	0.235	7.16	9.48	6.64	34.57	34.48	12.59	11.73	S
8	13	91	225	11.6	7.00		335.4		0.838	0.247	6.48	11.13	6.82	34.98	23.25	28.33	6.62	S
8	13	91	225	14.6	6.38		32.0		0.692	0.164	7.37	11.13	12.74	38.27	11.79	31.16	6.04	G
8	13	91	225	17.6	6.14		122.9		0.812	0.141	7.31	8.83	20.63	36.83	9.97	21.33	11.23	G
8	13	91	225	20.6	6.69		301.7		0.907	0.245	6.17	8.26	3.94	31.08	15.48	31.51	17.99	S
8	13	91	225	23.6	6.92		329.9		0.944	0.197	6.56	10.24	5.55	31.40	18.18	33.77	11.10	S
8	14	91	226	2.6	6.40		17.1		0.825	0.165	8.33	10.24	18.98	42.82	12.05	24.15	2.01	G
8	14	91	226	5.6	6.13		123.9		0.852	0.109	7.76	5.69	12.53	34.02	20.81	29.76	2.88	G
8	14	91	226	8.6	6.64		294.4		0.899	0.203	7.94	9.48	18.36	46.86	13.74	14.83	6.21	G
8	14	91	226	11.6	7.03		332.8		0.944	0.142	7.16	10.24	16.24	33.21	17.34	22.14	11.06	S
8	14	91	226	14.6	6.60		349.4		0.886	0.175	8.53	10.24	13.15	65.49	9.80	4.95	6.60	G
8	14	91	226	17.6	6.16		72.0		0.595	0.117	7.70	8.83	17.46	41.32	18.41	13.09	9.72	G
8	14	91	226	20.6	6.44		289.6		0.940	0.142	7.94	10.24	14.46	34.94	30.11	11.51	8.98	G
8	14	91	226	23.6	6.85		329.3		0.867	0.143	7.53	10.24	16.75	38.57	13.94	13.86	16.89	G
8	15	91	227	2.6	6.51		3.9		0.923	0.144	8.46	10.24	19.75	51.12	11.73	5.29	12.11	G
8	15	91	227	5.6	6.09		73.0		0.622	0.086	9.31	9.48	30.03	44.62	12.56	9.31	3.48	G
8	15	91	227	8.6	6.37		283.6		0.908	0.107	7.94	15.06	37.04	22.42	15.38	18.49	6.67	G
8	15	91	227	11.6	6.89		307.9		0.947	0.133	6.65	8.83	24.52	28.80	8.96	23.48	14.23	S
8	15	91	227	14.6	6.66		336.1		0.924	0.129	9.66	10.24	30.47	45.88	10.89	7.09	5.67	G
8	15	91	227	17.6	6.15		79.8		0.680	0.121	7.94	8.26	24.68	34.63	12.76	13.37	14.56	G
8	15	91	227	20.6	6.23		149.4		0.673	0.109	8.75	8.26	32.53	29.83	21.77	9.70	6.17	G
8	15	91	227	23.6	6.70		324.5		0.849	0.135	8.61	8.83	24.02	51.40	12.30	8.20	4.07	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
8	16	91	228	2.6	6.57	342.0			0.927	0.141	8.98	9.48	38.64	33.44	9.47	10.30	8.16	G
8	16	91	228	5.6	6.16	37.7			0.604	0.115	9.75	9.48	33.24	50.94	7.32	5.76	2.74	G
8	16	91	228	8.6	6.25	216.5			0.871	0.115	8.39	13.47	42.30	28.62	15.58	8.80	4.70	G
8	16	91	228	11.6	6.78	260.9			0.915	0.188	8.53	8.26	19.89	37.25	30.67	7.71	4.48	S
8	16	91	228	14.6	6.78	334.8			0.936	0.133	8.39	15.06	40.41	28.23	12.40	10.07	8.90	S
8	16	91	228	17.6	6.31	25.2			0.666	0.139	9.23	10.24	26.19	54.16	11.70	5.70	2.25	G
8	16	91	228	20.6	6.19	103.0			0.655	0.150	9.14	13.47	36.33	40.03	11.06	7.98	4.60	G
8	16	91	228	23.6	6.56	267.0			0.899	0.175	8.68	8.83	22.22	51.99	17.92	4.96	2.90	G
8	17	91	229	2.6	6.61	334.6			0.919	0.150	9.31	9.48	35.32	43.72	15.42	3.84	1.70	G
8	17	91	229	5.6	6.25	15.5			0.611	0.137	9.66	9.48	33.53	50.36	10.68	3.83	1.59	G
8	17	91	229	8.6	6.18	118.3			0.622	0.162	9.23	8.83	36.96	41.64	12.52	2.37	6.51	G
8	17	91	229	11.6	6.62	273.5			0.819	0.178	8.33	8.26	14.39	43.65	31.97	6.83	3.16	G
8	17	91	229	14.6	6.81	323.8			0.918	0.166	8.83	8.26	24.25	48.77	12.53	7.40	7.05	S
8	17	91	229	17.6	6.48	31.4			0.732	0.166	8.68	9.48	27.20	52.42	9.27	3.55	7.56	G
8	17	91	229	20.6	6.17	65.8			0.679	0.139	9.48	9.48	30.13	50.64	9.02	5.89	4.32	G
8	17	91	229	23.6	6.42	1.0			0.833	0.172	8.61	7.76	28.36	21.28	43.19	4.74	2.43	G
8	18	91	230	2.6	6.63	332.9			0.761	0.151	8.98	12.19	39.46	24.21	28.26	5.18	2.88	G
8	18	91	230	5.6	6.42	0.3			0.586	0.148	8.83	7.31	32.15	25.70	33.55	6.10	2.50	G
8	18	91	230	8.6	6.19	111.7			0.650	0.129	7.64	10.24	21.99	32.73	25.61	13.99	5.68	G
8	18	91	230	11.6	6.47	243.8			0.722	0.249	6.36	6.56	6.35	11.91	30.38	43.15	8.21	G
8	18	91	230	14.6	6.81	258.5			0.891	0.342	6.65	5.95	11.57	17.15	23.60	40.74	6.94	G
8	18	91	230	17.6	6.66	356.9			0.795	0.285	6.97	7.31	20.98	20.51	25.78	20.75	11.98	G
8	18	91	230	20.6	6.39	27.7			0.904	0.293	6.06	13.47	33.12	10.96	14.54	13.99	27.39	G
8	18	91	230	23.6	6.54	231.7			0.880	0.820	4.83	5.02	7.24	5.28	8.50	53.91	25.08	G
8	19	91	231	2.6	6.87	263.3			0.830	1.012	6.13	5.45	19.54	6.51	11.75	54.16	8.04	G
8	19	91	231	5.6	6.81	344.0			0.867	0.667	7.37	8.26	12.37	27.82	22.90	33.24	3.67	G
8	19	91	231	8.6	6.49	11.4			0.669	0.371	7.42	11.13	13.66	32.59	28.24	21.94	3.58	G
8	19	91	231	11.6	6.58	335.7			0.545	0.314	7.37	8.83	15.46	30.62	31.38	18.54	4.01	G
8	19	91	231	14.6	7.01	337.3			0.802	0.369	6.97	7.76	5.69	28.03	43.39	18.48	4.42	G
8	19	91	231	17.6	6.96	343.0			0.868	0.272	7.88	7.31	8.03	44.97	30.22	15.30	1.48	S
8	19	91	231	20.6	6.53	348.1			0.688	0.191	8.75	10.24	16.17	47.30	24.23	9.34	2.97	G
8	19	91	231	23.6	6.28	54.4			0.803	0.173	7.82	8.83	6.96	47.33	28.94	13.01	3.75	G
8	20	91	232	2.6	6.67	359.1			0.627	0.211	7.31	6.92	6.78	16.68	60.25	11.17	5.12	G
8	20	91	232	5.6	6.81	334.4			0.762	0.181	8.26	6.92	20.74	22.36	40.72	12.02	4.16	G
8	20	91	232	8.6	6.46	105.4			0.665	0.149	7.76	6.92	16.68	20.87	48.55	10.13	3.77	G
8	20	91	232	11.6	6.43	169.3			0.604	0.133	6.83	6.56	16.51	12.20	41.06	25.97	4.26	G
8	20	91	232	14.6	6.64	219.7			0.767	0.263	5.60	5.45	6.40	6.73	20.74	54.92	11.20	S
8	20	91	232	17.6	6.73	285.7			0.825	0.243	6.24	6.56	5.52	14.64	27.93	39.18	12.74	G
8	20	91	232	20.6	6.41	58.5			0.753	0.170	6.52	7.31	9.59	14.46	43.59	25.40	6.96	G
8	20	91	232	23.6	6.19	106.5			0.685	0.112	6.69	6.56	9.01	12.00	38.99	37.34	2.67	G

Mon	Day	Yr	JDAY	Time (EST)	Depth (m)	MC_SPD (cm/s)	MC_DIR (degT)	WavDIR (degT)	Rvar	Hmo(m)	Tz(sec)	Tp(sec)	%E>12s	%E12-8s	%E8-6s	%E6-4s	%E<4s	C
8	21	91	233	2.6	6.44		265.8		0.834	0.181	6.69	6.92	4.48	17.33	45.37	29.04	3.79	G
8	21	91	233	5.6	6.73		281.4		0.817	0.258	6.74	7.31	2.36	16.06	54.37	22.97	4.23	S
8	21	91	233	8.6	6.48		353.1		0.812	0.191	6.83	7.31	4.33	24.58	47.83	17.89	5.37	S
8	21	91	233	11.6	6.29		49.6		0.742	0.139	6.44	6.92	4.07	10.88	44.48	34.03	6.53	G
8	21	91	233	14.6	6.60		297.8		0.888	0.226	6.32	6.56	14.18	8.11	29.22	38.15	10.34	G
8	21	91	233	17.6	6.91		329.0		0.905	0.202	6.21	6.92	6.17	8.18	54.66	19.36	11.62	S
8	21	91	233	20.6	6.66		359.0		0.924	0.147	7.16	7.31	10.70	21.29	45.19	17.36	5.47	S
8	21	91	233	23.6	6.25		51.8		0.608	0.147	7.06	7.76	5.90	16.64	50.66	19.63	7.17	G
8	22	91	234	2.6	6.47		173.7		0.813	0.208	6.78	5.95	7.46	8.58	38.51	42.70	2.74	S
8	22	91	234	5.6	6.86		267.2		0.892	0.205	6.56	6.92	4.26	15.18	38.84	39.17	2.55	S
8	22	91	234	8.6	6.68		5.1		0.876	0.210	6.36	6.92	9.39	13.05	37.47	22.39	17.69	S
8	22	91	234	11.6	6.33		100.5		0.765	0.153	6.21	6.92	7.44	11.02	44.16	25.46	11.92	S
8	22	91	234	14.6	6.54		183.6		0.865	0.184	6.48	6.56	6.42	8.19	44.87	34.00	6.52	S
8	22	91	234	17.6	6.96		294.7		0.943	0.164	6.97	6.56	11.46	16.55	37.09	20.88	14.02	S
8	22	91	234	20.6	6.82		342.6		0.949	0.150	7.21	6.92	10.12	18.67	48.55	18.92	3.74	S
8	22	91	234	23.6	6.31		55.8		0.745	0.144	7.76	6.92	12.29	22.24	54.07	9.42	1.99	S
8	23	91	235	2.6	6.39		125.4		0.794	0.163	6.97	6.56	10.25	12.59	44.47	31.28	1.40	S
8	23	91	235	5.6	6.85		285.5		0.874	0.208	6.36	5.22	4.23	21.83	25.82	43.37	4.75	S