

# **PRODUCT DESCRIPTION DOCUMENT**

## **Maximum Tropical Cyclone Wind Speed Probability Table**

**Approved by** David B. Caldwell **Date** 4/17/08

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## Maximum Tropical Cyclone Wind Speed Probability Table

### Part I - Mission Connection

- a. Product Description - The Maximum Wind Speed (Intensity) Probability Table, provides probabilities, in percent, for the maximum sustained (1-minute average) surface (10 meter elevation) wind speed of a tropical cyclone for various intensity categories. The National Hurricane Center (NHC) issues this product for tropical cyclones in the Atlantic and Eastern Pacific basins. This product is also issued for subtropical storms.
- b. Purpose - National Weather Service (NWS) customer feedback indicates a desire for probabilistic products.
- c. Audience - The product is used by the general public, other NWS National Centers and Weather Forecast Offices, other federal, state, and local government agencies; federal, state, and local emergency managers; maritime interests; and the media.
- d. Presentation Format - This is a text product provided in a table format available on the internet.
- e. Feedback Method – Continuous feedback is welcomed via existing NWS feedback mechanisms, such as an e-mail via the NHC webmaster --  
<http://www.nhc.noaa.gov/contact.shtml>.

Technical and policy questions and comments may be directed to:

National Weather Service  
Attn: Scott Kiser, W/OS21  
Tropical Cyclone Program Manager  
1325 East-West Highway, Room 13126  
Silver Spring, MD 20910-3285

or e-mail questions and comments to: [Scott.Kiser@noaa.gov](mailto:Scott.Kiser@noaa.gov)

### Part II - Technical Description

- a. Format & Science Basis - The probabilities in this product are statistically based on the errors in the official track and intensity forecasts issued during the past five years by NHC . The product provides maximum wind speed (intensity) probabilities at standard forecast hours (12, 24, 36, 48, 72, 96, and 120) for various stages of a tropical cyclone (dissipated, depression, tropical storm and hurricane) and for the five categories of the Saffir-Simpson Hurricane Scale. The table also includes the official deterministic maximum wind speed (intensity) forecast in miles per hour (mph) for reference.

- b. Product Availability - The product is disseminated at 0300, 0900, 1500, and 2100 Coordinated Universal Time (UTC) with valid position times corresponding to the advisory time and whenever a special advisory package is issued.
- c. Product Examples - The product will be posted on the NHC web pages when there are tropical cyclones in NHC's area of responsibility. A static example is posted on line at:  
  
<http://www.nhc.noaa.gov/aboutnhcgraphics.shtml>
- d. Additional Information - A full description this and other NWS Tropical Cyclone Weather Services Program Products is provided in NWSI 10-601, which is available on line at:  
  
[http://www.nws.noaa.gov/directives/010/operation\\_services.htm](http://www.nws.noaa.gov/directives/010/operation_services.htm)