PRODUCT DESCRIPTION DOCUMENT

Experimental Tropical Cyclone Impacts Graphics

Approved by: David Caldwell Director, Office of Climate, Water and Weather Services Date: August 2012

Experimental Tropical Cyclone Impact Graphics

Part I - Mission Connection

a. <u>Product Description</u> - The Tropical Cyclone Impacts Graphics is an experimental, internet-based, product suite consisting of four hazard graphics: wind, tornado, coastal flood, and inland flood. These are potential impacts graphics, with a primary goal to communicate "what to prepare for." These WFO-generated graphics provide qualitative forecasts for the primary tropical cyclone hazards based on the track, intensity, and uncertainties in the official forecasts from the National Hurricane Center (NHC), Storm Prediction Center, and Hydrometeorological Prediction Center. These are cumulative graphics, summarizing the total impact expected for the duration of the storm. In a new era marked by deterministic and probabilistic forecasts, the hazards graphics provide users with local products tailored by the wide-ranging knowledge and years of experience of the local WFO for their area of responsibility.

In addition, a companion experimental graphic is an interactive Graphical Hurricane Local Statement (HLS). The graphic enables users of the HLS text product to extract the desired segmented information for supporting time and location specific decisions.

- <u>Purpose</u> Customers have requested additional tropical cyclone graphics to supplement the text products provided by WFOs. In addition, the hazards graphics will help to emphasize the wide-ranging impacts of tropical cyclones, particularly for areas away from the immediate coastline. Through the experimental period from June 15, 2012 November 30, 2012, the intent is to receive input from users to determine the benefit and usefulness of the product and the product formats.
- c. <u>Audience</u> The general public is the primary target audience. However, we expect the product will be widely used by federal, state, and local government agencies; state and local emergency managers; and media.
- d. <u>Presentation Format</u> Graphical products will be displayed at <u>http://www.weather.gov/tcig</u> for all coastal WFOs in Eastern and Southern Regions. The default graphic will use a KML format displayed on an interactive Google Earth background map. A .png file will also be available. The data can also be downloaded in netCDF and KML format. The companion Graphical HLS can be found at <u>http://www.nws.noaa.gov/ghls</u>
- e. <u>Feedback Method</u> Continuous feedback is available via the following web page:

http://www.weather.gov/survey/nws-survey.php?code=tcig

Technical and policy questions may be addressed to: National Weather Service Attn: John F. Kuhn W/OS21 1325 East West Highway Silver Spring, MD 20910 or e-mail to: john.f.kuhn@noaa.gov

Part II – Technical Description

- a. <u>Format & Science Basis</u> The products are based on the official forecasts provided by WFOs, in association with official forecasts and model guidance provided by the National Centers for Environmental Prediction. The graphics will generally provide a resolution down to the county level. The suite of graphics provides an "at-a-glance summary" for the forecast, cumulative impacts for each hazard. The Impacts scale ranges from None-Low-Moderate-High-Extreme. The products are also available in netCDF format for download.
- b. <u>Product Availability</u> These products will be provided by the coastal WFOs when tropical cyclone watches and warnings are in effect for their respective County Warning Area, as issued by the National Hurricane Center. That is, the product will generally commence and cease when the WFO's Hurricane Local Statements commence and cease.

Static examples are provided online at:

http://www.weather.gov/tcig

c. <u>Additional Information</u>

A full description of other NWS Tropical Cyclone Weather Services Program Products in provided in NWSI 10-601, which is available online at:

http://www.nws.noaa.gov/directives/sym/pd01006001curr.pdf