

EXPERIMENTAL: Global Tropics Benefits / Hazards Assessment
NWS Product Definition Document (PDD)
December 17, 2007

Part 1 - Mission Connection

- a. Product Description: The experimental Global Tropics Benefits / Hazards Assessment, issued by the Climate Prediction Center (CPC), provides an outlook for the upcoming week 1 and week 2 time periods for areas expecting extensive and persistent enhanced / suppressed rainfall and regions where conditions are especially favorable / unfavorable for tropical cyclogenesis.
- b. Purpose: The product supports the NOAA mission in three primary ways: (1) assess and forecast important changes in the distribution of tropical convection that can lead to modification of the extratropical circulation across the US and communicate this information to National Weather Service (NWS) forecasters, (2) provide advance notice of potential hazards related to climate, weather and hydrological events across the global tropics (including tropical cyclone risks for several NWS regions), and (3) provide an additional resource to aid various sectors of the US economy (finance, energy, agriculture, water resource management) that have foreign interests.
- c. Audience: The audience includes NWS forecasters and staff at other US government agencies, US emergency managers and regional planners and the public with interests across the global tropics.
- d. Presentation Format: The product is presented on the CPC web site located at <http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ghazards/ghaz.shtml> and includes outlook images (thumbnail and full versions) in addition to the complete product in PDF format.
- e. Feedback Method: Comments and feedback will be accepted through November 3, 2008 at <http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ghazards/NWS-feedback-form.html>

Part II - Technical Description

- a. Science and Format: The Global Tropics Benefits / Hazards Assessment synthesizes information and expert analysis from a number of CPC assessment activities as well as other operational and routine monitoring products. The physical basis for the outlooks include the El Nino-Southern Oscillation (ENSO) cycle, the Madden-Julian Oscillation (MJO), other coherent subseasonal tropical variability and interactions with the extratropical circulation. The product is generated with input from other NOAA centers including the Earth System Research Laboratory (ESRL), the National Hurricane Center (NHC), and select NWS Weather Forecast Offices among other collaborators.

Numbered tropical benefits and hazards will appear on two images (week 1 and week 2 respectively) and include a text description below the map explaining the nature and rationale for the highlighted region. Images can be made larger by clicking on the heading labels.

- b. Product Availability: CPC issues the product once a week on Monday by 4:00 PM Eastern local time.
- c. Additional Information:

Detailed description of this product is available on the CPC web site. See:
<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ghazards/ghaz.shtml>

Various information and forecast tools used in developing the global tropics benefits / hazards assessment are available at the following CPC web site. See:
<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/index.primjo.html>

At the close of the comment period (November 3, 2008), these experimental elements will be evaluated using objective (e.g., statistical and technical aspects) and subjective (e.g., internal and external feedback) criteria to determine if the elements are ready to be upgraded to operational status.