NOUS41 KWBC 101838 PNSWSH

Technical Implementation Notice 14-17 National Weather Service Headquarters Washington DC 238 PM EDT Thu Apr 10 2014

To: Subscribers: -Family of Services -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPORT Other NWS Partners and NWS Employees

From: Mark Tew Chief, Marine and Coastal Weather Services Branch

Subject: Multi-grid Hurricane Wave Model Added to SBN and NOAAPORT: Effective June 24, 2014

Effective June 24, 2014, with the 1200 Coordinated Universal Time (UTC) run, the Multi-grid Hurricane Wave model produced by the National Centers for Environmental Prediction will be added to the SBN and NOAAPORT.

The Multi-grid Hurricane Wave model is run as a mosaic of 10 grids:

1) 0.5 degree global domain grid

- 2) 0.25 degree regional domain for North Atlantic
- 3) 0.25 degree regional domain for North Pacific
- 4) 10 arc min grid for the North Atlantic regional waters
- 5) 10 arc min grid for the North Pacific regional waters
- 6) 10 arc min grid for the Pacific Islands and Hawaii
- 7) 10x15 arc min grid for the Alaskan waters
- 8) 4 arc min grid for the US East Coast
- 9) 4 arc min grid for the US West Coast (including the coastal waters of Hawaii)
- 10) 8x4 arc min grid for the Alaskan coast

The grids have internal two-way coupling, and exchange information during the computational cycle.

Wind forcing for the global, Alaskan and Pacific Island grids will be from the Global Forecast System (GFS) winds. All the other grids are using a blend of the GFS and GFDL hurricane model winds. The only exception is the Hawaiian Islands, part of the Pacific Island grid, which also will have a blend of GFS and hurricane model wind forcings.

The forecast interval will be provided over the SBN and NOAAPORT as follows: 0 to 72 hours: 3 hours; 72 to 126 hours: 6 hours.

GRIB2 files will be available 5 hours after the synoptic time: 00, 06, 12, 18 UTC. The per cycle data volume will be approximately 900 MB.

The WMO Heading for these products will be as follows:

T1: DATA FORMAT OF GRIB2 /E/

T2: PARAMETER CODE /ONE OF ABCJKLMNOPQRWY/

A1: GRID CODE /ONE OF ABCDEFGHMQ /

A2: FORECAST TIME /ONE OF ABCDEFGHIJKLMNOPQRSTUVWXYZ/

II: LAYER OR LEVEL /88/

CCCC: KWBU

Information on WMO Headers and NECP GRIB messages is online at:

http://www.nco.ncep.noaa.gov/pmb/docs/on388/appendixa.html

For a complete listing of WMO Headings please refer to:

http://www.nws.noaa.gov/os/notification/mc/hurr\_wave.pdf

For questions concerning the Multi-grid Hurricane Wave model contact:

Hendrik Tolman NCEP/EMC Chief Marine Modeling and Analysis Branch 5830 University Research Ct College Park, MD Phone: (301) 683-3748 Email: Hendrik.Tolman@noaa.gov

For questions regarding SBN and NOAAPORT activation contact:

John Kuhn Marine and Coastal Services Branch Silver Spring, MD Phone: (301) 713-1677 x121 Email: John.F.Kuhn@noaa.gov

National Public Information Statements are online at:

http://www.weather.gov/os/notif.htm

\$\$