NOUS41 KWBC 251119 AAC PNSWSH

Technical Implementation Notice 13-15 Amended National Weather Service Headquarters Washington DC 719 AM EDT Thu Jul 25 2013

- To: Subscribers: -Family of Services -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Rebecca Cosgrove Acting Chief, Production Management Branch NCEP Central Operations

Subject: Amended: NCEP Production Suite Operational on WCOSS: Effective July 25, 2013

Amended to reschedule the effective date from July 30, 2013 to July 25, 2013. The switch is being made prior to the July 30, 2013 date due to concerns that tropical weather will result in a declaration of Critical Weather Day (CWD) for some or all of next week.

Users are encouraged to review the website given below which documents all known changes to the Production Suite, including any changes in delivery time of products due to the change in computers.

Effective on or about Thursday, July 25, 2013, with the 1200 Coordinated Universal Time (UTC) cycle, the National Centers for Environmental Prediction (NCEP) will transition the NCEP Production Suite to the new Weather and Climate Operational Supercomputing System (WCOSS). All models and applications in the NCEP Production Suite will be run on the WCOSS and disseminated from those systems.

Users should take note of the following:

- The model solutions on the WCOSS differ from those on the current operational supercomputing system due to significant machine differences and small differences in data timing.

- There are some modifications to output products and product content. Those differences are outlined below.

NCEP conducted two live tests of the WCOSS system on Tuesday, June 25, and Tuesday, July 2, 2013, during the 1200 UTC model cycle. The test started with the 0600 UTC Global Data Assimilation System (GDAS) and ran through the 1500 UTC Short-Range Ensemble Forecast (SREF) run. During the live test, data was disseminated operationally from only the WCOSS system via NOAAPort and the NWS/NCEP ftp servers. The transition to WCOSS will not affect how data is disseminated to users. Data will continue to be available on NOAAPort and the NWS and NCEP ftp servers where it is currently available.

As mentioned above, there are some differences in the output format and content of the NCEP Production Suite. The highlights are as follows:

- Major upgrades to the Hurricane Weather Research and Forecast (HWRF) and Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) models with smaller enhancements/bug fixes to the SREF and North American Mesoscale (NAM) models. The Global Real-Time Ocean Forecast System (RTOFS) will be expanded to produce output for eight days, up from the current six days.

- Some filename and compression changes for the Wave models, Northern Gulf of Mexico Operational Forecast System (NGOFS) model, NAM, and NCEP Fleet Numerical Meteorology and Oceanography Center (FNMOC) combined ensemble.

- Some larger-sized files from the hurricane wave model will now be compressed, while files from the NGOFS will be broken up by forecast hour.

- Some changes to the order of fields in files, and changes to precision of some fields in the Climate Forecast System (CFS).

- Some Climate Data Assimilation System (CDAS) ocean files will no longer contain FORTRAN blocking.

- The Climate Diagnostic Center (CDC) products on the NCEP ftp server will be discontinued, along with a few output files from the NOAA WaveWatch 3 (NWW3) wave model that have alternate wave model output to replace them.

- The delivery times of some products may change - mostly in the direction of products coming out earlier. This is still being refined as we do final tuning and will be posted at the webpage below.

All of the known changes are outlined at:

http://www.nco.ncep.noaa.gov/pmb/changes/docs/wcosseval.shtml

As part of this transition, NCEP has been making the output from the WCOSS runs of the NCEP Production Suite available to the public for evaluation. We will continue to do this until WCOSS goes operational.

The gridded binary (GRIB), Binary Universal Form for the Representation of meteorological data (BUFR) and text output is available for download at:

http://ftpt.ncep.noaa.gov/com

Imagery of the model output from a Model Analysis and Guidance (MAG)-like website is online at:

http://magpara.ncep.noaa.gov

If you have technical questions or comments, please contact:

Rebecca Cosgrove NWS/NCEP Central Operations College Park, MD rebecca.cosgrove@noaa.gov

National Technical Implementation Notices are online at:

https://www.weather.gov/notification/archive

\$\$ NNNN