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Public Information Statement, Comment Request National Weather Service Headquarters Washington DC 300 PM EDT Thu Jun 28 2012

- To: Subscribers: -Family of Services -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Geoff DiMego, Chief Mesoscale Modeling Branch NCEP/Environmental Modeling Center

Subject: Soliciting Public Comments through August 12, 2012 on Removal of the Obsolete RUC Surface Analysis

The National Centers for Environmental Prediction (NCEP) is seeking comments through August 12, 2012, on discontinuing the legacy analysis system known as Rapid Update Cycle Surface (RUCS), also known as RUC Surface Assimilation System (RSAS). All output products from this system would also be discontinued.

This system is based on old technology and analysis grids of equal or better resolution and quality are readily available (see below). In addition, NCEP wants to conserve resources, not only the compute resource, but also the personnel resource needed to port the code to the new Weather and Climate Operational Supercomputing System (WCOSS).

The RUCS analysis uses optimum interpolation in 2-Dimensions to update its hourly products. This is done multiple times each hour with the latest result overwriting the previous result. Output products are for 12 surface parameters on four grids with 15, 40, 60 and 80 km spacing. The 15 km grid is polar-stereographic, covers North America and is Gridded Binary (GRIB) grid #88. The 40 km grid is Lambert conformal, covers the Contiguous United States (CONUS) and is GRIB grid #212. The 60 km grid is polar-stereographic, covers CONUS and is GRIB grid #87. The 80 km grid is Lambert conformal, covers CONUS and is GRIB grid #211.

Three operational systems within the NCEP production suite produce similar analyses of surface parameters using the state-of-the-art Gridpoint Statistical Interpolation (GSI) analysis scheme. These systems are:

North American Mesoscale (NAM) at 12 km, including NAM's CONUS nest at 4 $\rm km$

- NAM's Alaska nest at 6 km
- NAM's Hawaii nest at 3 km
- NAM's Puerto Rico nest at 3 km
- The 13 km North American Rapid Refresh (RAP), which replaced the CONUSbased Rapid Update Cycle (RUC) in May 2012

- Real Time Mesoscale Analysis (RTMA) at 2.5 km over CONUS, Hawaii, Guam and Puerto Rico, and at 3 km over Alaska.

Both the RAP and RTMA are updated hourly, and both RAP and NAM use GSI in 3-Dimensions.

The RUCS output is disseminated via the NWS and NCEP file transfer protocol (FTP) servers. No RUCS products are sent on NOAAPort. Details about the exact RUCS files and the products they contain that are being considered for removal can be found at:

http://www.nco.ncep.noaa.gov/pmb/products/rsas/

More information about the NAM, RAP and RTMA products that are available as replacements can be found at:

http://www.nco.ncep.noaa.gov/pmb/products/nam/ http://www.nco.ncep.noaa.gov/pmb/products/rap/ http://www.nco.ncep.noaa.gov/pmb/products/rtma/

NWS will evaluate all comments to determine whether to proceed with this change. If approved, a Technical Implementation Notice (TIN) will be issued containing implementation dates.

Send comments on this proposal by August 12, 2012 to:

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National Public Information Statements are online at:

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

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