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- To: Subscribers: -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Brian Gross, Acting Director NCEP/Environmental Modeling Center

Subject: Soliciting Comments on the Proposed Upgrade of the RTMA/URMA/RTMA-RU through June 18, 2018

The Environmental Modeling Center (EMC) is proposing to upgrade the Real Time Mesoscale Analysis (RTMA), the UnRestricted Mesoscale Analysis (URMA), and the RTMA with Rapid Updates (RTMA-RU) in mid-fall of 2018. The NWS is seeking comments on this proposed change through June 18, 2018.

On May 9, 2018, EMC began disseminating experimental RTMA/URMA/RTMA-RU v2.7 guidance to users. This change was announced in an evaluation letter distributed on May 7, 2018.

Evaluation pages may be found online at:

Public: Parallel Graphics for v2.7 (RTMA/URMA/RTMA-RU): http://www.emc.ncep.noaa.gov/mmb/jcarley/rtma urma/v2p7/URMA

Precipitation URMA: http://www.emc.ncep.noaa.gov/mmb/ylin/pcpanl/urma/v2p7/

Graphics for the control run of v2.6 (RTMA/URMA/RTMA-RU): http://www.emc.ncep.noaa.gov/mmb/jcarley/rtma urma/ctl/URMA/

NOAA-only: https://veritas.nws.noaa.gov/blend/

The RTMA/URMA systems will be upgraded to:

- Include a sky cover analysis for all domains.

- Use the High-Resolution Rapid Refresh (HRRR)-Alaska domain for the computation of the background field in Alaska.

- Offer an improved ceiling and visibility analysis.

- Extend the significant wave height analysis for all outside the contiguous U.S. (OCONUS) URMA domains.

- Improve background error covariance for temperature in complex terrain.

- Provide a closer fit to assimilated observations.

- Update wind quality control.

In addition, the RTMA Guam domain will be extended from its current 3hourly cadence to an hourly cycle by replacing the downscaled 13 km Global Forecast System (GFS) background with a downscaled background from the convection-allowing HiRes Window ARW.

The precipitation URMA is being upgraded to fill in data coverage gaps along contiguous U.S. (CONUS) coastlines, especially in western region, using Multi-Radar Multi-Sensor (MRMS) Climate Prediction Center (CPC) morphing technique (CMORPH) data as appropriate.

The RTMA-RU system, which is CONUS only, will feature the same improved ceiling and visibility analysis implemented into RTMA/URMA as well as the updated wind quality control, updated temperature background error covariance, and changes to provide a closer fit to assimilated observations.

Furthermore, the RTMA-RU will feature a reduced latency in product delivery, featuring products ready within 15 minutes of cycle time. This reduced latency will not be fully realized under the test conducted by EMC and will only be detectable once the RTMA-RU is running and managed in a pre-operational/operational environment facilitated by NCEP Central Operations (NCO).

Current location of parallel v2.7 URMA output: ftp://ftp.emc.ncep.noaa.gov/mmb/rtma/v2.7.0/urma/para/

Current location of parallel v2.7 RTMA/RTMA-RU output: ftp://ftp.emc.ncep.noaa.gov/mmb/rtma/v2.7.0/rtma/para/

Important note: The control run for this upgrade package is NCO parallel RTMA/URMA/RTMA-RU system being run in support of the ongoing new RAP/HRRR implementation. Users should note that the control run is part of the ongoing RAP/HRRR upgrade that will be implemented shortly after this evaluation period, regardless of feedback on this evaluation. Output for the new RAP/HRRR driven v2.6.5 RTMA/URMA/RTMA-RU may be found here:

ftp://ftp.emc.ncep.noaa.gov/mmb/rtma/v2.6.5/

More information on the RAP/HRRR upgrade can be found at: http://www.nws.noaa.gov/os/notification/pns17-40rap_hrrr.htm

The NWS will evaluate all comments to determine whether to proceed with this upgrade.

Send comments on this proposal by June 18, 2018 to:

Jacob Carley, EMC jacob.carley@noaa.gov

or via the VLab discussion list: rtma.feedback.vlab@noaa.gov National Public Information Statements are online at:

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

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