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Service Change Notice 23-02 National Weather Service Headquarters Silver Spring MD 420 PM EST Thu Jan 5 2023

To: Subscribers:

-NOAA Weather Wire Service

-Emergency Managers Weather Information Network

-NOAAPort

Other NWS Partners, Users and Employees

From: Mike Farrar

Director, National Centers for Environmental Prediction

Subject: Minor RTMA and URMA Upgrade to Flag Mesonet Winds and Wind Gust from the CWOP and AWS Providers; Fix a Bug in Reading in the Observation Reject and Accept Lists; and Add Surface Pressure to the "RTMA Weather Status List" for the FAA: Effective on or about February 7, 2023

Effective on or about February 7, 2023, beginning with the 1500 Coordinated Universal Time (UTC) cycle, the National Centers for Environmental Prediction (NCEP) will upgrade the Real-Time Mesoscale Analysis (RTMA), its 15-minute updating counterpart, RTMA with Rapid Updates (RTMA-RU), and the Unrestricted Mesoscale Analysis (URMA). In case of Critical Weather Day or Enhanced Caution Event, the upgrade will be delayed until the next clear weather day. The changes consist of:

- 1. Removing all mesonet stations from the Citizen Weather Observer Program (CWOP) and Automated Weather Source (AWS) providers from the "accept lists" for wind and wind gust, except for select stations that field forecasters consider to be of good quality. This change is expected to have a positive impact on the URMA-based bias correction of the National Blend of Models.
- 2. Fixing a bug that prevented mesonet observations of wind gust from being quality controlled via the blacklist mechanism when the report had a missing surface pressure.
- 3. All RTMA gridded binary version two (GRIB2) files on NCEP servers will have index files added to NCEP web services. Index files are text files which contain variable information for their corresponding GRIB file. The GRIB file and their corresponding index file will have the following naming convention:

GRIB File: <<RTMA output filename>>.(grb2|grb2_wexp)
Associated Index File: <<RTMA output filename>>.(grb2|grb2 wexp).idx

4. Expanding the "RTMA weather status list" file intended for the Federal Aviation Administration (FAA) to include surface pressure values at select airport sites. These files are located in the airport_temps sub-directory and have the following format:

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(rtma_sector).FAA_T_stn_analysis_values.txt
Where rtma sector is: akrtma, gurtma, hirtma, prrtma, rtma2p5.
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More information about the RTMA, URMA and RTMA-RU is available at:

https://vlab.noaa.gov/web/715073/home

A consistent parallel feed of data will be available on the NCEP server beginning January 3, 2023 via the following URLs:

https://nomads.ncep.noaa.gov/pub/data/nccf/com/rtma/para/https://nomads.ncep.noaa.gov/pub/data/nccf/com/urma/para/ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/rtma/para/ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/urma/para/

NCEP encourages users to ensure their decoders are flexible and are able to adequately handle changes in content order, changes in the scaling factor component within the product definition section (PDS) of the GRIB files, and any volume changes that may be forthcoming. These elements may change with future NCEP model implementations. NCEP will make every attempt to alert users to these changes prior to any implementations.

Questions, comments or requests regarding this change should be directed to the contacts below. We will review feedback and decide whether to proceed.

For questions regarding science changes, please contact:

Daryl Kleist NCEP/EMC Modeling and Data Assimilation Branch College Park, MD rtma.feedback.vlab@noaa.gov

For questions regarding the data flow aspects of these data sets, please contact:

Anne Myckow NCEP Central Operations Dataflow Team Lead ncep.pmb.dataflow@noaa.gov

National Service Change Notices are online at:

https://www.weather.gov/notification

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