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PNSWSH

Service Change Notice 25-46 Updated
National Weather Service Headquarters Silver Spring MD
300 PM EDT Mon Jul 16 2025

To: Subscribers:
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From: George Jungbluth
 Director, Office of Dissemination

Subject: Updated: Upgrade of Multi-Radar Multi-Sensor (MRMS) to version
12.3: Effective on August 5, 2025

Updated to reflect new implementation date of August 5, 2025.

Effective on or about August 5, 2025, the National Centers for
Environmental Prediction (NCEP) Central Operations (NCO) will upgrade the
Multi-Radar, Multi-Sensor (MRMS) Integrated Dissemination Program (IDP)
application to Version 12.3.0 (v12.3).

The technical enhancements with v12.3 include the following:

- 1) Support for NWS radar Volume Coverage Pattern (VCP) 34
- This change enables MRMS to ingest and fully process data from
WSR-88Ds (Weather Surveillance Radar-1988 Doppler) running in VCP 34.
- 2) Upgrade the ProbSevere (PS) Portion of MRMS ProbSevere
- PSv3 outputs are more statistically reliable than PSv2 outputs and
exhibit better probability of detection of severe storms and decreased
false alarms. This upgrade also re-enables the inclusion of GOES-East
ABI (Advanced Baseline Imager) data in the ProbSevere output generation
process.
- 3) Multi-PRF Dealiasing Algorithm (MPDA) Support
- MRMS Rotation Tracks products will benefit from improved radial
velocity data processing when MPDA is turned on for a WSR-88D operating
in either VCP 212 or 215.
- 4) Lightning Scale Parameter Changes
- An internal parameter used to generate MRMS lightning probabilities is
being modified in this release to reduce the computational footprint
required for these products. This change will improve the timeliness of
MRMS lightning products.
- 5) Quantitative Precipitation Estimate (QPE) Improvements:
- MRMS QPEs will benefit from better melting layer delineation. The Radar
Quality Index will also be modified to improve the performance of Multi-
Sensor QPE products in the warm season.

6) Improvements to MRMS Quality Control (QC)

- MRMS QC routines will be updated to improve handling of excessive ground clutter and beam blockage at certain radar sites. New wind farm location tables will also be implemented in this release.

For details about format changes to ProbSevere v3 outputs (item 2 above), please see the following URL:

[https://www.weather.gov/idp/MRMS_v12.3 Supplemental](https://www.weather.gov/idp/MRMS_v12.3_Supplemental)

For a real-time feed of data that includes all the changes listed in this notice, please see the following URL:

<https://mrms-ga.ncep.noaa.gov>

To report problems or operational issues with MRMS, please contact:
NCEP Central Operations Tech Control nco.ops@noaa.gov

For questions related to the updates, please contact:
corey.pieper@noaa.gov

Please send all other comments and questions to:
nws.webfeedback@noaa.gov

National Public Information Statements are online at:
<https://www.weather.gov/notification/>

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