

NOUS41 KWBC 191740  
PNSWSH

Public Information Statement 20-86  
National Weather Service Headquarters Silver Spring MD  
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To:           Subscribers:  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPort  
              Other NWS partners and NWS Employees

From:         Stephan Smith  
              Acting Director  
              NWS Office of Science and Technology Integration

Subject:      Soliciting public comments through December 19, 2020,  
              on proposed changes to MRMS products available on SBN  
              and the removal of binary products from the MRMS system

The NWS is soliciting comments through December 19, 2020, on adding or removing certain Multi-Radar Multi-Sensor (MRMS) products from the Satellite Broadcast Network (SBN) and the removal of binary products from the MRMS system. NWS intends these changes to result in a more efficient, reliable delivery process for new and future NWS products.

Tables 1-3 below contain descriptions of the recommended SBN actions for MRMS products. Products removed from the SBN will remain available on

1. The National Centers for Environmental Prediction (NCEP) Web Services:  
<https://mrms.ncep.noaa.gov/data/>
2. The NCEP Local Data Manager (LDM) by requesting access:  
[https://www.nssl.noaa.gov/projects/mrms/MRMS\\_data.php](https://www.nssl.noaa.gov/projects/mrms/MRMS_data.php)

Table 1. World Meteorological Organization (WMO) Headers and product names for MRMS products proposed for addition to MRMS SBN.

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Contiguous United States (CONUS) Products to be added to  
the MRMS SBN  
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YAUE01 Flooded Locations and Simulated Hydrographs (FLASH)  
Coupled Routing and Excess Storage (CREST)  
Unit Streamflow  
YAUE04 FLASH Sacramento Soil Moisture Accounting (SAC)  
Unit Streamflow  
YAUE06 FLASH SAC Soil Saturation  
YAUE09 FLASH Precipitation Average Recurrence Interval  
YAUE10 FLASH Quantitative Precipitation Estimate to  
Flash Flood Guidance (QPE-to-FFG) Ratio  
YAUS09 Probability of Severe Hail  
YAUF01 Probability of Severe (JSON format)

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Alaska Products to be added to the MRMS SBN  
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YAAC01 Composite Reflectivity  
YAAP02 PrecipRate  
YAAP03 RadarOnly\_QPE\_01H, 03H, 06H, 12H, 24H, 48H, 72H  
YAAP04 MultiSensor\_QPE\_[01,03,06,12,24,48,72]H\_Pass1  
YAAP06 MultiSensor\_QPE\_[01,03,06,12,24,48,72]H\_Pass2

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Hawaii Products to be added to the MRMS SBN  
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YAHP02 PrecipRate  
YAHP03 RadarOnly\_QPE\_01H, 03H, 06H, 12H, 24H, 48H, 72H  
YAHP04 MultiSensor\_QPE\_[01,03,06,12,24,48,72]H\_Pass1  
YAHP06 MultiSensor\_QPE\_[01,03,06,12,24,48,72]H\_Pass2

Table 2. WMO Headers and product names for MRMS products currently on MRMS SBN to be retained.

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CONUS Products to be retained on the MRMS SBN  
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YAUC01 Composite Reflectivity  
YAUP01 Surface Precipitation Type (Convective, Stratiform,  
Tropical, Hail, Snow)

YAUP02	Precipitation Rate
YAUP03	Radar precipitation accumulation
YAUP04	MultiSensor_QPE_[01,03,06,12,24,48,72]H_Pass1
YAUP06	MultiSensor_QPE_[01,03,06,12,24,48,72]H_Pass2
YAUQ01	Mosaic Base Reflectivity (optimal method)
YAUS04	Low-Level Rotation Tracks (30, 60, ... min. accum.)
YAUS06	Mid-Level Rotation Tracks (30, 60, ... min. accum.)
YAUS10	Maximum Estimated Size of Hail (MESH)
YAUS11	MESH Hail Swath (* min)
YAUS15	Vertically Integrated Ice (VII)
YAUS22	Reflectivity At Lowest Altitude (RALA)

Table 3. WMO Headers and product names for MRMS products proposed for removal from MRMS SBN.

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CONUS Products to be removed from the MRMS SBN
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YAUC02  Composite Reflectivity Height
YAUC03  Composite Reflectivity [0-4 km]
YAUD01  Radar Quality Index
YAUD02  Seamless Hybrid Scan Reflectivity (HSR)
YAUL01  Cloud-to-Ground Lightning Density (1, 5, 15, 30 min.)
YAUL02  Cloud-to-Ground Lightning Probability (0-30 min.)
YAUM03  Probability of warm rain
YAUS13  Vertically Integrated Liquid (VIL)
YAUS16  xx dBZ Echo Top (ET)
YAUS17  Height of 50dBZ Echo Above -20C
YAUS18  Height of 50dBZ Echo Above 0C
YAUS20  Height of 60dBZ Echo Above 0C
YAUS21  Reflectivity at xC

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NWS is also proposing to remove binary data products from the MRMS LDM feed. These products are available in GRIdded Binary version 2 (GRIB2) format. The binary data files being proposed for removal from the MRMS Local Data Manager (LDM) feed and their equivalent GRIB2 data files are listed in Table 4 below.

Table 4. Product identifiers for the MRMS files being proposed for removal from the MRMS LDM and their equivalent in GRIB2 format.

Binary	GRIB2
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cref/CREF	MergedReflectivityQCComposite
etp18/ETP18	EchoTop_18
etp30/ETP30	EchoTop_30
posh/POSH	POSH
shi/SHI	SHI
vil/VIL	VIL
tile01/mrefl/MREF3D33L	MergedReflectivityQC*
tile02/mrefl/MREF3D33L	MergedReflectivityQC*
tile03/mrefl/MREF3D33L	MergedReflectivityQC*
tile04/mrefl/MREF3D33L	MergedReflectivityQC*

The intermediate binary format of these products are available only for the CONUS and only via LDM (feedtype: NOTHER). They are not distributed by any other method.

There are 33 2D MergedReflectivityQC products (one per vertical level of the MRMS 3D reflectivity mosaic). The intermediate binary files are 3D products covering a quarter of the CONUS each. Tile 01, 02, 03, and 04 represent the CONUS northwest, northeast, southwest, and southeast tiles, respectively.

These changes will occur when NCEP implements the next version of MRMS, Version 12.1, into operations. NWS will collect comments on these proposed product changes for 30 days. If product changes are approved, NWS will issue a Service Change Notice at least 30 days before implementing these changes.

Send comments on this proposal to:

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

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