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

Table 1. World Meteorological Organization (WMO) Headers and product names for MRMS products proposed for addition to MRMS SBN.
Contiguous United States (CONUS) Products to be added to the MRMS SBN

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)

Alaska Products to be added to the MRMS SBN

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

Hawaii Products to be added to the MRMS SBN

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.

CONUS Products to be retained on the MRMS SBN

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

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.
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:

Tabitha Huntemann  
NWS/Office of Science and Technology Integration  
Silver Spring, MD  
Tabitha.Huntemann@noaa.gov

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