

NOUS41 KWBC 051905 AAA
PNSWSH

Service Change Notice 18-95 Updated
National Weather Service Headquarters Silver Spring MD
305 PM EST Mon Nov 5 2018

To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPORT
 Other NWS Partners, Users and Employees

From: Carissa Klemmer
 Acting Chief, NCEP Central Operations
 Implementation and Data Services Branch

Subject: Updated: Upgrade Multi-Radar, Multi-Sensor Application
 Effective November 7, 2018

Updated to remove the activation of FLASH data onto the SBN/NOAAPORT. FLASH data will only be available through the Web Services or on MRMS LDM.

Effective on or about Wednesday, November 7, 2018, the National Centers for Environmental Prediction (NCEP) will upgrade the Multi-Radar, Multi-Sensor (MRMS) Integrated Dissemination Program (IDP) application to Version 11.6.1.

The MRMS output can be found

1. On the NCEP Web Services here:
<http://mrms.ncep.noaa.gov/data/>
2. On the NCEP Local Data Manager (LDM) by requesting access here:
https://www.nssl.noaa.gov/projects/mrms/MRMS_data.php
3. On SBN/NOAAPORT

The technical enhancements include the following:

- Increasing the AutoNowCaster (ANC) product resolution from 0.05 x 0.05 degrees (~5km) to 0.01 x 0.01 degrees (~1km). Users should expect the ANC file sizes to increase by an order of magnitude. Product timing, filenames, domain bounds and access methods will remain unchanged. File patterns like:

MRMS_ANC_FinalForecast
MRMS_ANC_ConvectiveLikelihood

- Modifying color maps used by RIDGE2 to remove the differentiation between "no coverage" versus missing values. This product is only available on MRMS LDM.

- Updating the FLASH GRIB2 internal compression from "complex packing" to "PNG" reducing the volume by 50 percent. Currently this data is available on LDM only. At this time, the FLASH data will not be made available on SBN/NOAAPORT because there are

bandwidth limitations preventing the addition of this data volume. The data will be available via the Web Services and LDM.

FLASH is a system with automated algorithms that are forced by rainfall estimates from MRMS Quantitative Precipitation Estimates (QPEs). FLASH converts the MRMS QPEs into Average Recurrence Intervals (ARIs) of rainfall, ratios of rainfall exceeding flash flood guidance, and forecasts of streamflow. The streamflow forecasts are produced by a suite of distributed hydrologic models with different representations of surface runoff mechanisms. All FLASH products are generated on the same grid as MRMS products and are updated every 2-10 min. The FLASH system encompasses the latest tools for rainfall-driven flash flooding to rapidly evolve services for flash flood forecasting. A product reference guide and training for users are publicly available from the NWS Warning Decision Training Division website at:

<https://training.weather.gov/wdtd/courses/ffawoc/IC3/flash-bp/presentation.html>

FLASH products are generated on a 1km grid over the Contiguous United States (CONUS) domain and updated as frequently as every 2 minutes. Data volume will vary, depending on the current meteorological conditions, but could be as high as 6.25GB per day.

WMO Headers and official WMO title for the new products are as follows:

YAUE01 QPE-CREST Unit Streamflow
YAUE02 QPE-CREST Streamflow
YAUE03 QPE-CREST Soil Saturation
YAUE04 QPE-SAC Unit Streamflow
YAUE05 QPE-SAC Streamflow
YAUE06 QPE-SAC Soil Saturation
YAUE07 QPE-Hydrophobic Unit Streamflow
YAUE08 QPE-Hydrophobic Streamflow
YAUE09 Precipitation Average Recurrence Interval 30min, 1H, 3H, 6H, 12H, 24H, Max
YAUE10 QPE-to-FFG Ratio 1H, 3H, 6H, Max
Where CCCC = KWNR

Sample data can be requested by emailing the Onboarding Team below.

Sample data for V11.6.1 is available here:

<http://mrmst.ncep.noaa.gov/data/>

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 which may be forthcoming. These elements may change with future NCEP application upgrades. NCEP will make every attempt to alert

users to these changes prior to any implementations.

NCEP will evaluate all comments to determine whether to proceed with this upgrade. For questions regarding these changes, please contact:

Ken Howard
National Severe Storms Lab
Norman, OK
405-535-9863
Kenneth.Howard@noaa.gov

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

Anwar Al-Mallah
NCEP/NCO Onboarding Team Lead
College Park, MD
301-683-3902
Idp-support@noaa.gov

NWS Service Change Notices are online at:

<https://www.weather.gov/notification>

NNNN