

NOUS41 KWBC DDHHMM
PNSWSH

Technical Implementation Notice 15-28
National Weather Service Headquarters Washington DC
855 AM EDT Tue June 9 2015

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

From: Jay Lawrimore
Chief, Dataset Branch
National Centers for Environmental Information

SUBJECT: Precipitation Calculation Algorithm Change for the
Hourly02 and Daily01 USCRN Products
Effective August 17, 2015

Effective August 17, 2015, at approximately 1500 Coordinated Universal Time (UTC), The National Centers for Environmental Information will implement a change in the precipitation calculation algorithm used to produce precipitation data for both the hourly02 (CRNH02) and daily01 (CRND01) products. These revisions will affect the reported precipitation for stations of the U.S. Climate Reference Network (USCRN) and associated legacy networks.

Presently, the precipitation calculation is performed by matching rates of rise of redundant measurements of depth in a weighing bucket rain gauge to ensure they agree to a required specification of 0.01 inches. The new calculation algorithm will be using a combination of redundant measurements of gauge depth that are inversely weighted according to their distance from the initial average of the gauge depth changes. The new approach yields slightly more total precipitation (+1.6 percent) with a more realistic distribution within event intervals.

The details of these changes will be reported in:

<[ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/daily01/
New_Precipitation_Calculation.txt](ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/daily01/New_Precipitation_Calculation.txt)>

<[ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/hourly02/
New_Precipitation_Calculation.txt](ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/hourly02/New_Precipitation_Calculation.txt)>

There are no changes planned for the format or headers of the hourly02 (CRNH02) and daily01 (CRND01) products.

If you have questions or feedback, please contact:

Scott Embler

National Centers for Environmental Information
151 Patton Ave
Asheville, NC 28803
828-350-2027
Scott.Embler@noaa.gov

NWS Technical Implementation Notices are online at:

<http://www.weather.gov/os/notif.htm>

\$\$