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Technical Implementation Notice 15-29
National Weather Service Headquarters Washington DC
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To: Subscribers
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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 (NCEI) 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/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:

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