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Technical Implementation Notice 12-52
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From: Jay Lawrimore
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 National Climatic Data Center

Subject: Surface Temperature (Infrared) Calibration Revision for the
Hourly02 and Daily01 Products: Effective January 7, 2013

Effective Monday, January 7, 2013, at approximately 1500 Coordinated Universal Time (UTC), The National Climatic Data Center (NCDC) will add a surface temperature type field in the hourly02 (CRNH02) and daily01 (CRND01) products. These revisions will affect the reported surface temperature (Infrared) for stations of the U.S. Climate Reference Network (USCRN) and the U.S. Historical Climatology Network-Modernization (USHCN-M).

Presently, the surface temperatures values in these fields are being reported as uncorrected measurements; however, due to an ongoing equipment refresh to a new infrared surface temperature sensor model, USCRN is now also reporting corrected surface temperature measurements for some stations. These changes will impact previous users of the data because the corrected values will differ from uncorrected values.

To distinguish between uncorrected (raw) and corrected surface temperature measurements, a surface temperature type field will be added to the hourly02 and daily01 products. This new field will be one character in length and will immediately precede the existing surface temperature fields. For the hourly02, the new field will be inserted at column 125 with any following fields shifted forward by two characters.

For the daily01, the new field will be inserted at column 88, with any following fields shifted forward by two characters. The possible values of the new field will be "R" to denote raw surface temperature measurements, "C" to denote corrected surface temperature measurements, and "U" for unknown when measurements are missing.

The details of these changes will be online at:

ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/daily01/New_IR_Sensor.txt

ftp://ftp.ncdc.noaa.gov/pub/data/uscrn/products/hourly02/New_IR_Sensor.txt

For both products, the fields for average, maximum, and minimum surface temperature will remain seven characters in length with one decimal place of precision, and report the temperature in degrees Celsius.

The documentation for the products will also be revised to clearly explain the purpose of the new surface temperature type field.

If you have questions or feedback, please contact:

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