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PNSWSH

Service Change Notice 16-08: Corrected  
National Weather Service Headquarters Washington DC  
1010 AM EDT Mon Mar 14 2016

TO:           Subscribers:  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPORT  
              Other NWS partners and employees

FROM:         Mary Mullusky  
              Chief, Water Resources Services Branch

SUBJECT:      Corrected:   Experimental Forecast of Reference Crop  
              Evapotranspiration (FRET) for Short Canopy  
              Vegetation Will Become Operational Effective  
              April 13, 2016

Corrected URLs for downloading FRET GRIB2 files

Effective April 13, 2016, the FRET for Short Canopy Vegetation will transition to operational. FRET is the expected depth of water (in hundredths of inches) that would evaporate and transpire from a reference crop under the forecast weather conditions on a daily and weekly basis over the next 7 days.

FRET is calculated using the Penman-Monteith Reference Evapotranspiration Equation and NWS gridded forecasts of temperature, relative humidity, wind, and cloud cover. The FRET is for short crops with an approximate height of 12 cm similar to full cover grasses. The intent of this product is to provide our stakeholders with enhanced detail on the amount of evapotranspiration to make better water resource management decisions. The FRET's target audience includes water managers, academia, media, and the general public.

Since 2014, NWS Weather Forecast Offices (WFO) began providing on an experimental basis three FRET grids for the CONUS in the National Digital Forecast Database (NDFD). Based on positive feedback for the experimental product, the following FRET grids for the CONUS will be added to the NDFD on an operational basis:

- Daily FRET grids for the next 7 days
- Total Weekly FRET grids for the 7-day period
- Daily FRET departure from normal grids

FRET grids for the CONUS will be available from the NDFD in the following standard methods:

- Gridded Binary Version 2 (GRIB2) files via Hypertext Transfer Protocol (HTTP) and File Transfer Protocol (FTP)
- Extensible Markup Language (XML) via Simple Object Access Protocol (SOAP)
- Graphics via web browser

The GRIB2 files for the CONUS sector will be available for download at:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.001-003/ds.fret.bin>

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.fret.bin>

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.frettot.bin>

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.001-003/ds.fretdep.bin>

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.fretdep.bin>

<http://weather.noaa.gov/pub/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.001-003/ds.fret.bin>

<http://weather.noaa.gov/pub/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.fret.bin>

<http://weather.noaa.gov/pub/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.frettot.bin>

<http://weather.noaa.gov/pub/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.001-003/ds.fretdep.bin>

<http://weather.noaa.gov/pub/SL.us008001/ST.opnl/DF.gr2/DC.ndfd/AR.conus/VP.004-007/ds.fretdep.bin>

Images of the grids can be viewed online at the following URL:

<http://digital.weather.gov>

under the following names:

- Daily FRET (ds.fret.bin)
- Total Weekly FRET (ds.frettot.bin)
- Daily FRET departure from Normal (ds.fretdep.bin)

For users who key on the World Meteorological Organization (WMO) super heading to access NDFD elements, the super headings are:

Geographical Area	Element	WMO Headers
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CONUS	Daily FRET	ZEUZ98 KWBN and ZEUZ97 KWBN
CONUS	Total Weekly FRET	ZZUZ97 KWBN
CONUS	FRET Departure from Normal	ZLUZ98 KWBN and ZLUZ97 KWBN

Evapotranspiration Table (ETT) text products from 28 WFOs composed of daily FRET values for particular locations for the next seven days will also be available (Table 1).

Table 1: Communication identifiers for NWS offices providing the Experimental Evapotranspiration Table text products

Issuing WFO	WMO Header	AWIPS Id
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Las Vegas, NV	AXUS95 KWBN	ETTVEF
Tucson, AZ	AXUS95 KWBN	ETTTWC
Sacramento, CA	AXUS95 KWBN	ETTSTO
Great Falls, MT	AXUS95 KWBN	ETTTFX
Salt Lake City, UT	AXUS95 KWBN	ETTSLC
Reno, NV	AXUS95 KWBN	ETTREV
Phoenix, AZ	AXUS95 KWBN	ETTPSR
Portland, OR	AXUS95 KWBN	ETTPQR
Raleigh, NC	AXUS95 KWBN	ETTRAH
San Diego, CA	AXUS95 KWBN	ETTSGX
Flagstaff, AZ	AXUS95 KWBN	ETTFGZ
Blacksburg, VA	AXUS95 KWBN	ETTRNK
Monterey, CA	AXUS95 KWBN	ETTMTR
Hanford, CA	AXUS95 KWBN	ETTHNX
Missoula, MT	AXUS95 KWBN	ETTMSO
Elko, NV	AXUS95 KWBN	ETTLKN
Glasgow, MT	AXUS95 KWBN	ETTGGW
Billings, MT	AXUS95 KWBN	ETTBYZ
Wakefield, VA	AXUS95 KWBN	ETTAKQ
Medford, OR	AXUS95 KWBN	ETTMFR
Spokane, WA	AXUS95 KWBN	ETTOTX

Albuquerque, NM	AXUS95 KWBN	ETTABQ
Los Angeles/Oxnard, CA	AXUS95 KWBN	ETTLOX
Greenville-Spartanburg, SC	AXUS95 KWBN	ETTGSP
Newport/Morehead City, NC	AXUS95 KWBN	ETTMHX
Boise, ID	AXUS95 KWBN	ETTBOI
Wilmington, NC	AXUS95 KWBN	ETTILM
Pendleton, OR	AXUS95 KWBN	ETTPDT

Effective April 13, 2016, websites depicting experimental FRET for WFOs in Western and Central Region will be discontinued. A list of some of these websites is available at:

<http://www.nws.noaa.gov/os/notification/pns12evapo.txt>.

If you have any questions, you may contact:

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NWS Service Change Notices are online at:

<http://www.nws.noaa.gov/om/notify.htm/>

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