NOUS41 KWBC 031830
PNSWSH

Service Change Notice 21-80
National Weather Service Headquarters Silver Spring MD
230 PM EDT Fri Sep 3 2021

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

From: Jason Levit
          Chief, Verification, Post-Processing and Product
          Generation Branch, Environmental Modeling Center
          National Centers for Environmental Prediction

Subject: Update to High-Resolution Window (HIRESW): Effective September
8, 2021

Effective on or about September 8, 2021, beginning with the 1200
Coordinated Universal Time (UTC) run, the National Centers for
Environmental Prediction (NCEP) will upgrade the HIRESW system to correct
an issue with Binary Universal Form for the Representation of
meteorological data (BUFR) output products. In the event that the
implementation date is declared a Critical Weather Day (CWD) or
significant weather is occurring or is anticipated to occur,
implementation of this change will occur at 1200 UTC on the next weekday
not declared a CWD and when no significant weather is occurring.

HIRESW BUFR output product change

A correction is made to the generation of BUFR output from both the
Advanced Research Weather Research and Forecasting (WRF-ARW) and Finite
Volume Cubed Sphere (FV3) members of HIRESW. This correction will change
values for the following fields:

HLCY: Estimated storm-relative helicity
USTM: Estimated storm motion (U-component)
VSTM: Estimated storm motion (V-component)

Also, these categorical weather types are corrected but only show a
change if one of the categories has a non-zero value:

WXTS: categorical weather type (snow)
WXTP: categorical weather type (ice pellets)
WXTZ: categorical weather type (freezing rain)
WXTR: categorical weather type (rain)

These changes will be present in the files noted below on both the NOAA
Operational Model Archive and Distribution System (NOMADS) and
ftpprd web services:

https://nomads.ncep.noaa.gov/pub/data/nccf/com/hiresw/prod/
ftp://ftpprd.ncep.noaa.gov/data/nccf/com/hiresw/prod

Note: The ftpprd link only works for FTP-enabled web browsers.

hiresw.tCCz.DOMfv3.class1.bufr
hiresw.tCCz.DOMarw.class1.bufr
hiresw.tCCz.DOMmem2arw.class1.bufr

hiresw.tCCz.DOMfv3.bufrsnd.tar.gz
hiresw.tCCz.DOMarw.bufrsnd.tar.gz
hiresw.tCCz.DOMmem2arw.bufrsnd.tar.gz

Where CC is the cycle time, DOM is the domain (conus|guam|hi|pr|ak), and
DOMmem2 is (conus|hi|pr|ak).

and

bufr.DOMfv3CC/DOMfv3bufr.ST.YYYYMMDDCC
bufr.DOMarwCC/DOMarwbufr.ST.YYYYMMDDCC
bufr.DOMmem2arwCC/DOMmem2arwbufr.ST.YYYYMMDDCC

Where ST is the station number, and YYYYMMDDCC is the year, month, day
and cycle of the forecast.

NCEP urges all users to ensure their decoders can handle changes in
content order, changes in the scaling factor component within the product
definition section (PDS) of the gridded binary (GRIB) files, and volume
changes. These elements may change with future NCEP model
implementations. NCEP will make every attempt to alert users to these
changes before implementation.

Any questions, comments or requests regarding this implementation should
be directed to the contacts below. We will review any feedback and
decide whether to proceed.

For questions regarding the model, please contact:

Matthew Pyle
NCEP/EMC Engineering and Implementation Branch
College Park, MD
matthew.pyle@noaa.gov

For questions regarding the data flow aspects, please contact:

Anne Myckow
NCEP/NCO Dataflow Team Lead
College Park, MD
ncep.pmb.dataflow@noaa.gov

National Service Change Notices are online at:

https://www.weather.gov/notification

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