

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:

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NCEP/EMC Engineering and Implementation Branch  
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For questions regarding the data flow aspects, please contact:

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National Service Change Notices are online at:

<https://www.weather.gov/notification>

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