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Service Change Notice 22-40 Updated National Weather Service Headquarters Silver Spring MD 230 PM EDT Mon May 9 2022

- To: Subscribers: -NOAA Weather Wire Service -Emergency Managers Weather Information Network -NOAAPort Other NWS Partners, Users and Employees
- From: Mike Farrar, Director National Centers for Environmental Prediction

Subject: Updated: Migration and Go-Live of NCEP Model Production Suite to New Version of WCOSS: Effective June 28, 2022, with Two Test Periods Scheduled June 1 and June 14, 2022

Updated to fix the incorrect go-live date. Go-live is scheduled for Tuesday, June 28, 2022.

On or about Tuesday, June 28, 2022, starting with the 1200 Coordinated Universal Time (UTC) cycle, the National Centers for Environmental Prediction (NCEP) will move all models and post-processing in the production suite from the current Weather and Climate Operational Supercomputing System (WCOSS) to the second version of WCOSS. The new version of WCOSS encompasses new hardware in new physical locations, with expanded calculation capacity for future model upgrades, as advertised in this press release: <u>https://www.noaa.gov/media-release/us-to-triple-</u> <u>operational-weather-and-climate-supercomputing-capacity</u>. With the migration, there will be some changes on the NOAA Operational Model Archive and Distribution System (NOMADS) and FTPPRD.

Important Note: There will be two 24-hour tests where the new WCOSS will be running as production, during which time the changes noted below will go live. After the 24-hour test completes, the changes detailed below will revert back to the current status until the next test or the golive. These tests are scheduled for June 1 and June 14, 2022.

Full List of Changes:

Please see this link for the full list of changes, including any known timing changes:

https://www.nco.ncep.noaa.gov/pmb/changes/docs/wcoss2 transition.php

Users should check back on this list regularly.

Models Being Moved:

Some models will be moving to a new directory structure with the migration to the new WCOSS. These changes will take place on both NOMADS and FTPPRD under the top-level "com" directory.

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

Some of the highlights include the following, but see the link above for the full list. Where YYYY is year, MM is month, and DD is day.

The Binary Universal Form for the Representation (BUFR) Observations processed within the Global Forecast System (GFS), Global Data Assimilation System (GDAS), North American Mesoscale Model (NAM), Rapid Refresh (RAP) and Real-Time Mesoscale Analysis (RTMA) are moving to a new "obsproc" directory. Details on which filenames are affected are in the page linked below.

-> obsproc/{ENV}/{model}.YYYYMMDD Where ENV is both prod and v1.0, and model is one of gdas, gfs, nam, rap, rap_e, rap_p, rtma2p5_ru or rtma_ru.

UltraViolet Index (UVI): hourly/prod/uv.YYYYMMDD -> uvi/{ENV}/uvi.YYYYMMDD Where ENV is both prod and v1.1.

NAM Model Output Statistics (MOS): nam/prod/nam_mos.YYYYMMDD -> nam_mos/{ENV}/nam_mos.YYYYMMDD Where ENV is both prod and v3.5.

GFS Model Output Statistics (MOS): gfs/prod/gfsmos.YYYYMMDD -> gfs_mos/{ENV}/gfs_mos.YYYYMMDD Where ENV is both prod and v5.3

High-Resolution Ensemble Forecast (HREF): hiresw/prod/href.YYYYMMDD -> href/{ENV}/href.YYYYMMDD Where ENV is both prod and v3.1.

Climate Forecast System (CFS): Elimination of redundant cfs/ directory cfs/prod/cfs/cfs.YYYYMMDD -> cfs/{ENV}/cfs.YYYYMMDD Where ENV is both prod and v2.3.

Fleet Numerical Meteorology and Oceanography Center (FNMOC) Wave: fnmoc/prod/fnmoc_wave.YYYYMMDD -> fnmoc_wave/{ENV}/fnmoc_wave.YYYYMMDD Where ENV is both prod and v1.1.

Great Lakes Operational Forecast System (GLOFS): nos/prod/glofs.YYYYMMMDD -> glofs/{ENV}/glofs.YYYYMMDD Where ENV is both prod and v2.1. (Near) Sea Surface Temperature (SST/NSST): gfs/prod/sst.YYYYMMDD -> nsst/{ENV}/nsst.YYYYMMDD Where ENV is both prod and v1.2.

Air Quality Model (AQM): aqm/prod/aqm.YYYYMMDD -> aqm/{ENV}/cs.YYYYMMDD aqm/prod/AK.YYYYMMDD -> aqm/{ENV}/ak.YYYYMMDD aqm/prod/HI.YYYYMMDD -> aqm/{ENV}/hi.YYYYMMDD Where ENV is both prod and v6.1.

Test Data:

Users can see and test data from the new WCOSS suite at the following link:

https://para-nomads-cprk.ncep.noaa.gov/pub/data/nccf/com/

Please note that only 24hr of data will be kept on disk at this location. As well, this data will not update during the two 24-hour tests currently scheduled for June 1 and June 14, 2022.

NCEP encourages all users to ensure their decoders are flexible and are able to adequately handle changes in content order, parameter fields changing order, changes in the scaling factor component within the Product Definition Section (PDS) of the gridded binary (GRIB) files and also any volume changes which may be forthcoming. These elements may change with future NCEP model implementations. NCEP will make every attempt to alert users to these changes prior to any implementation.

Users should sign up for direct communication of ongoing events related to NOMADS/FTPPRD and the modeling suite through this listserv:

https://www.lstsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.nomads-ftpprd

Questions, comments or requests regarding this change should be directed to the contact below:

Carissa Klemmer, Chief NCO Implementation and Data Services Branch idp.feedback@noaa.gov

We will review any feedback we receive, and make notifications of additional information as needed.

National Service Change Notices are online at:

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

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