Service Change Notice 20-32
National Weather Service Headquarters Silver Spring MD
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From:    Ben Kyger
          Director, NCEP Central Operations

Subject: Upgrade of IDP National Water Model Post-Processing
Effective April 28, 2020

Effective on or about April 28, 2020, beginning at 1500 Coordinated Universal Time (UTC), the National Centers for Environmental Prediction (NCEP) will upgrade the National Water Model (NWM) Post-Processing application on the Integrated Dissemination Platform (IDP) to Version 2.0.3.

The IDP NWM Post-Processing application processes NWM output across all channel routing, land, and forcing data files; creating subset data files, derived variables, and data transformations for NWS River Forecast Centers (RFC) and other partners. The Post-Processing also supports the Office of Water Prediction (OWP) web services with NWM image products and map service data for select NWM variables.

All raw data output for NWM Post-Processing products can be found on NOMADS:
https://nomads.ncep.noaa.gov/pub/data/nccf/com/nwm/post-processed

All Web Map Service (WMS) products available:
https://water.noaa.gov

(A) Data Additions

1) New subdirectories on NOMADS for the Web Map Service:
   /WMS/analysis_assim/
   /WMS/long_range/
   /WMS/medium_range/
   /WMS/short_range/
   Where subdirectories for each include:
   channel_rt: ensemble mean channel routing data files available for all subdirectories
   fe: forcing data files for analysis assimilation, medium range, and short range subdirectories.
   Land: land data files is available for analysis assimilation and short range subdirectories
- New products: Ensemble mean products for NWM medium range (MR) and long range (LR) channel routing and land forecasts are available as WMS. The ensemble mean is a mean forecast of all individual ensemble forecasts for a given NWM variable from a MR or LR model run.
  - Type: gridded raster NetCDF4 files

2) New Imagery directory and products on NOMADS:
   /IMAGES/analysis_assim/
   /IMAGES/long_range/
   /IMAGES/medium_range/
   /IMAGES/short_range/
  - Function: Provides standalone NWM imagery products for the OWP water website for streamflow, streamflow anomaly, and soil saturation.
  - Type: PNG files

(B) Output Changes

1) Modified the Hawaii streamflow scale in image products
   - Previously, Hawaii streamflow images used the same color scale to represent streamflow data as is used in CONUS streamflow images. This update applies a color scale of smaller range to Hawaii streamflow images. The change provides improved visualization over the previous version for Hawaii streamflow images.

2) Corrected erroneous projection reference in post-processed forcing products to match land products.

For parallel data users can download test data here: https://nomads.ncep.noaa.gov/pub/data/nccf/com/nwm/para/post-processed

Users should refer to the current NWM v2.0 Service Change Notice, and also the previous V1.2, V1.1 and V1.0 notices for further information on NWM filenames and raw data directory locations. https://www.weather.gov/notification

NCEP encourages all users to ensure their decoders are flexible and are able to adequately handle changes in content order 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 implementations.

For more general information about the NWM, please see: http://water.noaa.gov/about/nwm

We will evaluate any feedback and decide whether to proceed.

For questions on the science aspects of NWM data, please contact:
  Brian Cosgrove
  OWP/Analysis and Prediction Division
  Silver Spring, MD
  301-427-9513
  brian.cosgrove@noaa.gov
For questions on post-processing derived variables and general product format and processing, please contact:
   Trey Flowers
   OWP/Analysis and Prediction Division
   Tuscaloosa, AL
   205-347-1450
   trey.flowers@noaa.gov

For questions regarding the data flow aspects of these datasets, please contact:
   Carissa Klemmer
   NCEP/NCO IDSB
   College Park, Maryland
   idp-support@noaa.gov

NWS National Service Change Notices are online at:
   https://www.weather.gov/notification/