NOUS41 KWBC 281330 PNSWSH

Service Change Notice 23-95 National Weather Service Headquarters Silver Spring MD 930 AM EDT Thu Sep 28 2023

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: Hurricane Analysis and Forecast System Upgrades (HAFSv1.0.5): Effective October 4, 2023

Effective on or about Monday, September 25, 2023 with the 1200 Coordinated Universal Time (UTC) cycle, the National Centers for Environmental Prediction (NCEP) Central Operations (NCO) will be implementing Hurricane Analysis and Forecast System version 1.0.5 (HAFSv1.0.5). This version is intended to fix bugs in the current operational HAFSv1 products, in which two HAFS products are changed. No downstream impacts are expected.

This release addresses the following issues in the current operational HAFSv1.0.4:

To prevent model instability at steep terrain regions for JTWC basin storms:

- The moving frequency of the nest domain is reduced from (0,2) to (0,4).
- The max slope configuration option is also changed from 0.15 to 0.12.

Vortex initialization related source codes and scripts are changed to better handle special case when a TC is located exactly at 180W

Two bugs reported by users are fixed, including:

- Removing the extra "," in the HAFS ATCF track record at columns 138-139.
- Dropping off the duplicated PRATE and CPRAT gridded binary version two (grib2) records in the HAFS swath grib2 files.

All above changes will not affect HAFS products users.

There will be no changes on the HAFS product delivery time for Users of public data on the NOAA Operational Model Archive and Distribution $System \ (NOMADS)$.

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 these model changes, please contact:

Dr. Avichal Mehra
Chief, Dynamics and Coupled Modeling Group
NOAA/NCEP/Environmental Modeling Center
National Centers for Weather and Climate Prediction
College Park, MD
301-683-3746
avichal.mehra@noaa.gov

For questions regarding the data flow aspects of these datasets, contact:

William Boll
NCEP/NCO Implementation and Data Services Branch
College Park, MD
301-683-0567
ncep.pmb.dataflow@noaa.gov

National Service Change Notices are online at:

https://www.weather.gov/notification

NNNN