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Service Change Notice 26-76
National Weather Service Headquarters Silver Spring MD
955 AM EDT Wed Sep 9 2026

To: Subscribers:
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 -Emergency Managers Weather Information Network
 -NOAAPort
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From: David Michaud, Director
 NWS Central Operations

Subject: Upgrade to Hurricane Analysis and Forecast System (HAFS) to
version 2.2: Effective Oct 13, 2026

HAFS consists of two model configurations for global (HAFS-A) and basin-scale (HAFS-B) tropical storm prediction, which are built upon NOAA's Unified Forecast System (UFS). HAFS version 2.2 is expected to improve forecasting skill for track and intensity of tropical cyclones (TCs) worldwide (HAFS-A) as well as in the North Atlantic and Eastern and Central North Pacific basins (HAFS-B).

HAFS version 2.2 includes the following science changes:

- Model code updates based on the latest UFS revision as of February 12, 2026.

- Atmospheric physics updates:

- * Scale-aware 3D-TKE EDMF planetary boundary layer (PBL) scheme
- * Noah-MP land surface model
- * Transition from RRTMG to RRTMG radiation scheme
- * Variable PBL mixing length scales with wind speed and PBL height

- Ocean model updates:

- * Latest MOM6 submodule with updated parameter options
- * Updated WW3 submodule

- Vortex Initialization (VI) and Data Assimilation (DA) improvements:

- * Adjusted warm cycling threshold
- * VI related changes with storm perturbation smoothing
- * Sync up with the latest GSI submodule as of February 4, 2026.
- * Adjusted IAU window
- * hafs_datool updates: fix related to uv_rotation, use of MPI
- * TDR superobbing
- * Additional obs: Commercial GPS RO and sUAS observation data

- Postprocess

- * Updated GFDL hurricane tracker

HAFS version 2.2 includes the following product changes:

A new variable, wind gust at 10 m above the ground, is added to the grib2 product. There are no other product changes. HAFS products will continue to be available from the NOAA Operational Model Archive and Distribution Services (NOMADS) web services.

The HAFSv2.2.0 system has been fully tested and compared with the forecast skill of 2025 operational HAFSv2.1, demonstrating overall improved tropical cyclone track and intensity forecast guidance in all global oceanic basins.

Product Timing Changes:

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

Data files for the HAFS remain at their current location on NOMADS web services at:

<https://nomads.ncep.noaa.gov/pub/data/nccf/com/hafs/prod>

An event driven parallel feed of HAFSv2.2.0 data will be available after Oct 9, 2026 the NCEP sites at the following URL:

<https://nomads.ncep.noaa.gov/pub/data/nccf/com/hafs/para>

Sample HAFS products from HAFSv2.2 are available at:

https://www.emc.ncep.noaa.gov/gc_wmb/vxt/zack/HAFS_Sample_Files/HFSA_sample/hafs/v2.2/

https://www.emc.ncep.noaa.gov/gc_wmb/vxt/zack/HAFS_Sample_Files/HFSB_sample/hafs/v2.2/

NCEP encourages users to ensure their decoders are flexible and are able to adequately handle changes in content order, changes in the scaling factor component within the product definition section (PDS) of the Gridded Binary (GRIB) files, and 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.

Any questions, comments or requests regarding this implementation should be directed to the contacts below.

For questions regarding these model changes, please contact:

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National Service Change Notices are online at:

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

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