Service Change Notice 25-47 Updated
National Weather Service Headquarters Silver Spring MD
300 PM EDT Tue Jul 22 2025

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          -NOAA Weather Wire Service
          -Emergency Managers Weather Information Network
          -NOAAPort
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From: David Michaud, Director
          NCEP Central Operations

Subject: Updated: Upgrade of the Real-Time Ocean Forecast System (RTOFS)
to Version 2.5: Effective July 29, 2025

Updated to reflect new implementation date of Jul 29, 2025.

Effective on or about Tuesday, July 29, 2025 with the 0000 Coordinated
Universal Time (UTC) cycle, The National Centers for Environmental
Prediction (NCEP) Central Operations (NCO) will upgrade RTOFS to version
2.5. In the event that the implementation date is declared a Critical
Weather Day (CWD), an Enhanced Caution Event (ECE), or other significant
weather is occurring or is anticipated to occur, implementation of this
change will take place at 1200 UTC on the next weekday not declared a CWD
and when no significant weather is occurring.

RTOFS consists of Hybrid Coordinate Ocean Model (HYCOM), Community Ice
CodE (CICE) version 4 and data assimilation (DA) for both sea ice and
ocean.

RTOFS version 2.5 introduces the following changes:

1. Add climatological constraints to the assimilation of sea
surface height (SSH);

2. Update conversion of DA increments applied to HYCOM;

3. Add assimilation of velocity observations from drifting
buoys and high-frequency (HF) radar installations.

The above changes are expected to:

- Reduce subsurface negative salinity bias in the Caribbean Sea
- Preserve HYCOM layer structure
- Provide additional observational constraints for DA

No product changes are introduced by this upgrade.
Current model data is available here:
https://nomads.ncep.noaa.gov/pub/data/nccf/com/rtofs/prod/
ftp://ftp.ncep.noaa.gov/data/nccf/com/rtofs/prod/

Parallel data will be available on the NCEP sites at the following URLs:
https://nomads.ncep.noaa.gov/pub/data/nccf/com/rtofs/para/
ftp://ftp.ncep.noaa.gov/data/nccf/com/rtofs/para/

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.

Please submit comments, questions, or requests pertaining to this upgrade to:

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For questions about the dataflow aspects, please contact:

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National Service Change Notices are online at:

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

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