NOUS41 KWBC 091500 PNSWSH

Public Information Statement 25-22 National Weather Service Headquarters Silver Spring MD  $1100~\mathrm{AM}~\mathrm{EDT}~\mathrm{Wed}~\mathrm{Apr}~9~2025$ 

To: Subscribers:

-NOAA Weather Wire Service

-Emergency Managers Weather Information Network

-NOAAPort

Other NWS Partners, Users and Employees

From: Daryl Kleist

Acting Chief, Model Dynamics and Coupling Group

Modeling and Data Assimilation Branch NCEP/Environmental Modeling Center

Subject: Soliciting Comments through May 10, 2025 on the Proposed Upgrade of the Real-Time Ocean Forecast System (RTOFS) to version 2.5

NWS is soliciting comments through May 10, 2025, on a proposed upgrade of the operational RTOFS to version 2.5.

RTOFS consists of Hybrid Coordinate Ocean Model (HYCOM), Community Ice CodE (CICE) version 4 and data assimilation for both sea ice and ocean. RTOFS version 2.5 includes the following changes:

- Added climatological constraints for temperature and salinity for sea surface height (SSH) assimilation in the analysis (to reduce subsurface negative salinity bias in the Caribbean Sea)
- Modifications in the assimilation to provide increments on HYCOM hybrid layers versus the depth-fixed layers to reduce the error during mapping of the increments onto the HYCOM vertical grid
- Added assimilation of velocity observations from drifting buoys and high frequency (HF) Radar installations
- Added two-dimensional variational retrieval (2D-VAR) assimilation of SSH for verification of ocean front and eddy feature locations  $\,$

No product changes are introduced by the proposed upgrade. RTOFS products will continue to be available from the NOAA Operational Model Archive and Distribution Services (NOMADS)/FTPPRD web services.

Please submit comments, questions, or requests on science aspects of the proposed upgrade to:

Santha Akella
NWS/NCEP Environment Modeling Center
santha.akella@noaa.gov
301-683-3373

National Public Information Statements are online at:

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

NNNN