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Public Information Statement 20-38
National Weather Service Headquarters Silver Spring MD
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From: Vijay Tallapragada
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 NCEP/Environmental Modeling Center

Subject: Soliciting Public Comments on the Proposed Upgrade of the
Nearshore Wave Prediction System through July 15, 2020

The National Centers for Environmental Prediction (NCEP) is soliciting comments on changes to the Nearshore Wave Prediction System (NWPS) in December 2020. The NWS is seeking comments on this proposed change through July 15, 2020.

Changes to the NWPS include:

- Improved algorithm for wave system tracking guidance (all 36 Weather Forecast Office (WFO) domains).
- For 12 WFO domains (Houston/Galveston, TX (HGX), Mobile, AL (MOB), Tallahassee, FL (TAE), Key West, FL (KEY), Melbourne, FL (MLB), Jacksonville, FL (JAX), Charleston, SC (CHS), Wilmington, NC (ILM), Philadelphia, PA/Mt. Holly, NJ (PHI), Portland/Gray, ME (GYX), Albany, NY ALY, Tiyan, Guam (GUM)), computation on unstructured domain meshes with variable resolution of 5 km to 200 m. (These are, however, interpolated onto existing regular CG1-CG5 output grids for Advanced Weather Interactive Processing System (AWIPS) ingest.).
- For 9 WFO domains (HGX, MOB, TAE, MLB, JAX, CHS, ILM, PHI, GYX), the addition of rip current and runup (erosion/overwash) guidance. For WFOs KEY and GUM, only rip current guidance is added.
- Inclusion of wave field transect output graphics.

Expected benefits of the above changes:

- Improved quality of wave system tracking guidance to aid in the production of separate wind sea and swell forecasts.
- For 12 unstructured WFO domains: Higher nearshore grid resolution improves representation of the coastal geography and nearshore wave growth and propagation.

- For 12 unstructured WFO domains: High resolution enables the computation of rip current and erosion/overwash guidance to aid in the production of coastal hazard forecasts.
- Transect output provides improved view on the wave guidance along high-impact tracks.

Examples of these proposed changes to the product suite can be viewed at the following URL:

<ftp://polar.ncep.noaa.gov/pub/nwps/dev/>

The NWS will evaluate all comments to determine whether to proceed with this upgrade.

If these model changes are approved, a Service Change Notice will be issued giving 30 days' notice.

Please send comments on this proposal through July 15, 2020 to:

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For questions on the data flow aspects, please contact:

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National Public Information Statements are online at:

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

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