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 WFO domains).

- For 12 WFO domains (HGX, MOB, TAE, KEY, MLB, JAX, CHS, ILM, PHI, GYX, ALU, 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 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 of notice.

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

Vijay Tallapragada  
NWS/NCEP Environment Modeling Center College Park, MD  
Vijay.Tallapragada@noaa.gov

For questions on the data flow aspects, please contact:

Anne Myckow  
NWS/NCEP Central Operations College Park, MD  
ncep.pmb.dataflow@noaa.gov

National Public Information Statements are online at:  
https://www.weather.gov/notification/