Effective on or about May 11, 2021, starting with the 1200
Coordinated Universal Time (UTC) cycle, the National Centers for
Environmental Prediction (NCEP) will upgrade the Probabilistic
Tropical Cyclone Storm Surge model (P-Surge) to version 2.9.

P-Surge is based on an ensemble of Sea, Lake, and Overland Surge
from Hurricanes (SLOSH) model runs which are derived from the
National Hurricane Center (NHC) official advisory along with
historic errors in its track, size, and intensity. P-Surge has
historically been run when NHC hurricane watches were in effect
for the Atlantic and Gulf Coasts of the continental United
States (i.e., up to 48 hours before the onset of tropical storm
force winds), and on a case by case basis for tropical storms
too weak to warrant a hurricane watch. P-Surge will now be run
on a case-by-case basis up to 60 hours before the onset of
tropical storm force winds.

P-Surge version 2.9 includes the following updates:

A. Initialize the wind ensemble members based on an NHC forecast
of the radius of maximum winds rather than assuming either the
storm's central pressure or size will remain constant.

B. Expansion of pre-computed tide-only computations, used to
optimize run-times, to November 2023.

C. Various code optimizations.
Dissemination Changes: None

NOAAPort/SBN:
The products are available over the Satellite Broadcast Network (SBN) and NOAAPort in gridded binary version 2 (GRIB2) format. A complete list of World Meteorological Organization (WMO) Headers for the products can be found online at the top of the Meteorological Development Laboratory's (MDL's) storm surge technical notices here:

https://vlab.ncep.noaa.gov/web/mdl/storm-surge-technical-notices

or more directly at:

https://vlab.ncep.noaa.gov/documents/6609493/7858383/P-Surge-v2.8_Headers.pdf/5fb7d90e-52fc-a0ee-8358-368576c9bde5?t=1617296643219

Any questions, comments or requests regarding this implementation should be directed to the contacts below. We will review any feedback and decide whether to proceed.

For questions regarding the science changes, please contact

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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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