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PNSWSH

Technical Implementation Notice 14-12
National Weather Service Headquarters Washington DC
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From: Mark Tew
Chief, Marine and Coastal Weather Services Branch

Subject: Experimental Probabilistic Tropical Cyclone Storm Surge
and Tide above Datum Products Will Transition To
Operational

Effective May 28, 2014, Experimental Probabilistic Tropical
Cyclone Storm Surge and Tide above North American Vertical Datum
of 1988 (NAVD-88) will become operational and be made available
over the Satellite Broadcast Network (SBN) and NOAAPORT.

This is a replacement of the older P-Surge model that did not
incorporate tide and used older National Geodetic Vertical Datum
of 1929 (NGVD-29) bathymetry and topography data.

The Probabilistic Tropical Cyclone Storm Surge and Tide above
North American Vertical Datum of 1988 (NAVD-88) guidance consists
of two suites of products for the Gulf of Mexico and Atlantic
coastal areas:

- a) Probabilities, in percent, of storm surge exceeding 2
through 25 feet above NAVD-88, at 1 foot intervals (e.g. 2,
3, 4, ..., 25 feet).
- b) Heights, above NAVD-88, that are exceeded by specific
probabilities ranging from 10 to 90 percent at 10 percent
intervals.

Each of the probabilistic products mentioned will be provided out
to 78 hours as a cumulative probability, defined as the overall
probability the event will occur at each grid cell from
the start of the run until 78 hours.

The products are based on an ensemble of Sea, Lake, and Overland
Surge from Hurricanes (SLOSH) model runs using the National
Hurricane Center (NHC) official advisory and account for track,
size, and intensity errors based on historic errors.

The products will be generated when hurricane watches and/or

warnings are in effect for the Atlantic and Gulf Coasts of the continental United States and on a case by case basis for tropical storms.

The products will be available over the Satellite Broadcast Network (SBN) and NOAAPORT in GRIB2 format. The WMO Headers used by the older P-Surge model (which did not consider tides and used the NGVD-29 datum) will be reused by the newer P-Surge model. A complete list of WMO Headers can be found online at:

http://www.nws.noaa.gov/os/notification/mc/psurge_abvdatum.pdf

Graphical versions of the products will be posted online at:

<http://www.nws.noaa.gov/mdl/psurge2.0/>

GRIB2, ESRI shape files, and KMZ formats will be available for download from the above website.

For questions regarding this notice...please contact

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National Technical Information Notices are online at:

<http://www.weather.gov/os/notif.htm>

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