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PNSWSH

Service Change Notice 18-36 Updated
National Weather Service Headquarters Silver Spring MD
1025 AM EDT Fri Sep 21 2018

To: Subscribers:
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Dave Myrick
 NWS Office of Science and Technology Integration

Subject: Update: Probabilistic Tropical Cyclone Storm Surge (P-Surge)
Update to NDGD NWS Web Service: Effective October 23, 2018

Updated to correct storm identification number as a sub-directory on the NWS National Digital Graphical Database (NDGD) Web Services. This update refers to the P-Surge upgrade on May 7, 2018. On October 23, 2018, NCEP will correct the routing of data into that directory and users should be looking for NDGD data in the following location:

<http://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndgd/CYC/>
<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndgd/CYC/>

Where CYC is the cycle output time (00 Coordinated Universal Time (UTC), 06 UTC, 12 UTC, 18 UTC) and the sub-directory labeling with "basin" "storm ID" (al01, al02, etc.) will be removed.

Effective on or about May 7, 2018, starting with the 1200 Coordinated Universal Time (UTC) cycle, the National Centers for Environmental Prediction (NCEP) upgraded the Probabilistic Hurricane Storm Surge model (P-Surge) to version 2.7.

P-Surge is based on an ensemble of Sea, Lake, and Overland Surge from Hurricanes (SLOSH) model runs derived from the National Hurricane Center (NHC) official advisory along with historic errors in its track, size and intensity. P-Surge is run when hurricane watches and/or warnings are in effect for the Atlantic and Gulf Coasts of the continental United States (CONUS) and on a case-by-case basis for tropical storms.

P-Surge version 2.7 includes the following updates:

- NOAAPort/Satellite Broadcast Network (SBN) major World Meteorological Organization (World Meteorological Organization (WMO) header changes)
- NDGD Web directory changes
- Removal of some probability of surge + tide products
- New exceedance products
- Updated climatological error statistics

NOAAPort/SBN Changes:

1. Begin disseminating extended forecast hours from hour 78 to 102 for the CONUS grid over NOAAPort.
2. Change every P-Surge WMO header to mimic the Probabilistic Extra-Tropical Storm Surge (P-ETSS) structure.

A complete list of all new WMO Headers for all products can be found here:

<https://slosh.nws.noaa.gov/psurgeDocs/P-Surge-2.7-Headers.pdf>

Web Product Changes:

The NWS NDGD Web Service:

<http://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndgd/>
<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/DF.gr2/DC.ndgd/>

The NCEP NOAA National Operational Model Archive and Distribution System (NOMADS) Web Service:

<http://nomads.ncep.noaa.gov/pub/data/nccf/com/psurge>
<ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/psurge>

1. NWS NDGD directory structure changes:

- A. Adding "Cycle" sub-directories
- B. Change directory from "slosh" to "psurge"

NDGD Web Services: /DC.ndgd/GT.psurge/AR.conus/CYC/
Where CYC is the cycle run time.

2. Generate new 90% exceedance products:

- A. 6-hourly to hour 102, cumulative above ground level
NDGD File: VD.agl/ds.psurgeexcd90cum.bin
NCEP File: psurge.tDATEz.IDYYYY_e90_cum_agl.hFFF.conus_625m.grib2
- B. 6-hourly to hour 102, incremental above ground level
NDGD File: VD.agl/ds.psurgeexcd90inc.bin
NCEP File: psurge.tDATEz.IDYYYY_e90_inc_agl.hFFF.conus_625m.grib2
- C. 1-hourly to hour 102, incremental above NAVD-88 (datum)
NDGD File: ds.psurgeexcd90inc.bin
NCEP File: psurge.tDATEz.IDYYYY_e90_inc_dat.hFFF.conus_625m.grib2

Where DATE is Year, Month, Day, Cycle; where ID is Storm Identification; where YYYY is year; and where FFF is forecast hour.

3. Discontinue producing probability of surge + tide greater than 20 feet above North American Vertical Datum of 1988 (NAVD-88; cumulative grouping):

Remove NDGD File: ds.psurgeabvPP.bin
Remove NCEP File:
psurge.tDATEz.IDYYYY_gtPP_cum_dat.hFFF.conus_625m.grib2

Where PP is the respective probability (21, 22, 23, 24, 25) for 0-80 hours and 0-102 hours.

4. The output time of the meta file has changed to disseminate at the end of the operational portion of the P-Surge run, allowing it to be used as a trigger for downstream applications by users:

NDGD File: ds.psurge.txt

NCEP File: psurge_DATE_IDYYYY.meta

A sample set of parallel data is available on the NCEP server via the following URL:

<http://para.nomads.ncep.noaa.gov>

Graphical versions as well as ESRI shape files of the products will be posted online at:

<http://slosh.nws.noaa.gov/psurge2.0>

NCEP urges all users to ensure their decoders can handle changes in WMO headers and volume changes. These elements may change with future NCEP model implementations. NCEP will make every attempt to alert users to these changes before implementation.

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 this notice, please contact:

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National Service Change Notices are online at:

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

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