

National Hurricane Center updates National Storm Surge Hazard Maps

Hawaii, U.S. Virgin Islands and Hispaniola added

NOAA's National Hurricane Center (NHC) has updated its National Storm Surge Hazard Maps. The improvements include:

- The addition of the Hawaiian Islands, the U.S. Virgin Islands and Hispaniola
- Updated topography data (Digital Elevation Model)

This new addition will continue to be hosted by NOAA's GeoPlatform and be accessible via NHC's webpage at www.hurricanes.gov/nationalsurge. The first version was issued in 2014 and covered the U.S coastline from Texas to Maine. Puerto Rico was added in a second version in 2017.

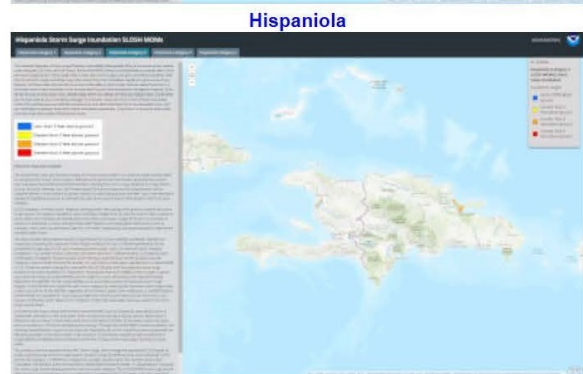
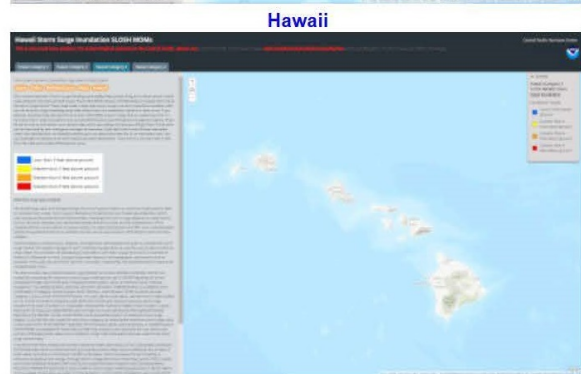
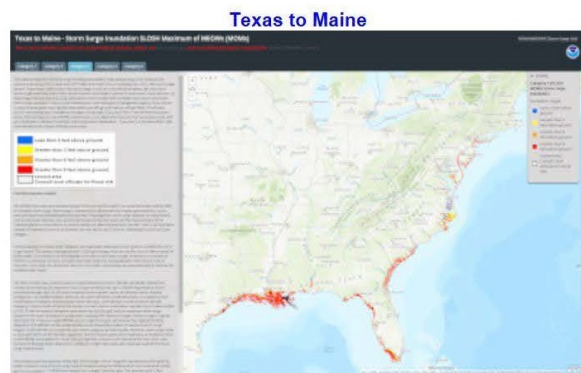
These storm surge hazard maps enable people living in hurricane-prone coastal areas to evaluate their risk of coastal flooding due to storm surge. These maps make it clear that storm surge is not just a beachfront problem, with the risk of storm surge extending many miles inland from the immediate coastline in some areas.

"This is an important tool to help individuals determine their vulnerability to the most deadly part of a hurricane. Understanding this risk gives you the time to take action when emergency managers tell you to evacuate", said Ken Graham, Director of NOAA's National Hurricane Center.

NHC uses the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) hydrodynamic model to simulate storm surge along hurricane-prone portions of the U.S. coastline and has begun an effort to do the same along some international coastlines within the Caribbean region. Based on climatology, hundreds of thousands of hypothetical hurricanes are simulated and the potential storm surges are calculated. Composites of the resulting storm surges are created and high-resolution inundation maps are created using local topography.

In locations that have a steep and narrow continental shelf, such as islands, waves can be a substantial contributor to the total water level rise observed during a tropical cyclone. For these areas, SLOSH has been coupled with a wave model to enable a more complete and accurate analysis of flood risk. Additionally, through a partnership with USAID and the World Meteorological Organization, these modeling advances were developed and tested within Haiti and the Dominican Republic via the Coastal Inundation Forecasting Demonstration Project for the Caribbean Sea (CIFDP-C).

"Through this multi-year partnership with USAID and the World Meteorological Organization, we're able to bring the same life-saving technology used in the United States to Haiti and the Dominican Republic," said Jamie Rhome, NHC Storm Surge Specialist.



The site is linked at: www.hurricanes.gov/nationalsurge

NOAA's GeoPlatform site is linked at:
<http://noaa.maps.arcgis.com/apps/StorytellingTextLegend/index.html?appid=b1a20ab5eec149058bafc059635a82ee>

World Meteorological Organization site is linked at:
https://www.jcomm.info/index.php?option=com_content&view=article&id=188

USAID site is linked at:
<https://www.usaid.gov/>

Additional information:

- Storm Surge Can Be Deadly - 10 Tips to Be Ready –
 English: <http://www.nhc.noaa.gov/surge/StormSurgeCanBeDeadly10tips-single.pdf> Spanish:
<http://www.nhc.noaa.gov/surge/StormSurgeCanBeDeadly10tips-single-spanish.pdf>
- NHC Storm Surge website: <http://www.nhc.noaa.gov/surge>

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