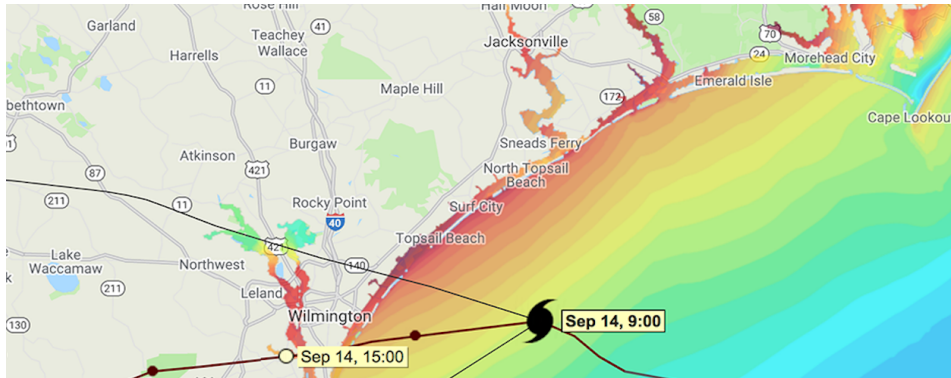


COASTAL HAZARDS MODELING

# ADCIRC Prediction System™

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Source: cera.coastalrisk.live

Storm surge is often the single biggest threat to life, property and infrastructure from coastal storms. Accurate predictions of coastal flooding are needed to protect lives and property. The ADCIRC Prediction System™ (APS™) provides life- and cost-saving storm surge predictions for coastal communities.

APS™ helps to ensure that coastal communities have the best possible information about their flood risk and helps officials, from the Department of Homeland Security to local officials, get people and property out of the way of life-threatening conditions. It includes:

- ADCIRC model: A system of computer programs for solving time dependent, free surface circulation and wave (if coupled to the SWAN wave model) problems in two and three dimensions.
- ADCIRC Surge Guidance System: Automates the operation of ADCIRC each time new storm forecast information is released.
- Visualization capabilities including the Coastal Emergency Risks Assessment (CERA) web portal, downscaled GIS shapefiles and water level time series plots to allow effective access to storm surge, wind, wave and other hazard guidance for decision-making.

## APS™ HAS BEEN USED:

- + In White House emergency response briefings during Hurricane Dorian.
- + By USCG for continuity of operations decisions and to position personnel and equipment to maximize post storm response for recent hurricane events.
- + By FEMA and multiple states, including TX, LA, FL, SC, NC and MD for emergency preparedness during recent hurricane events.

## ADCIRC HAS BEEN USED:

- + For FEMA coastal flood hazard maps from New England to Texas.
- + To design the levee system protecting New Orleans and evaluate proposed systems for Houston/Galveston.

For more information, visit [ADCIRCPrediction.org](http://ADCIRCPrediction.org)