

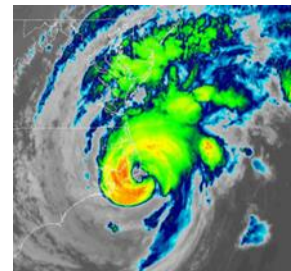
# eVENT Hurricane Tracking Advisory

WillisRe 

## Hurricane Dorian

### Information from NHC Advisory 52A, 8:00 AM EDT Fri Sep 06, 2019

On the forecast track, the center of Dorian will move near or over the coast of North Carolina during the next few hours. The center should move to the southeast of extreme southeastern New England tonight and Saturday morning, and then across Nova Scotia late Saturday or Saturday night. Maximum sustained winds are near 90 mph (150 km/h) with higher gusts. Dorian should remain a powerful hurricane as it moves near or along the coast of North Carolina during the next few hours. Dorian is forecast to become a post-tropical cyclone with hurricane-force winds by Saturday night as it approaches Nova Scotia.

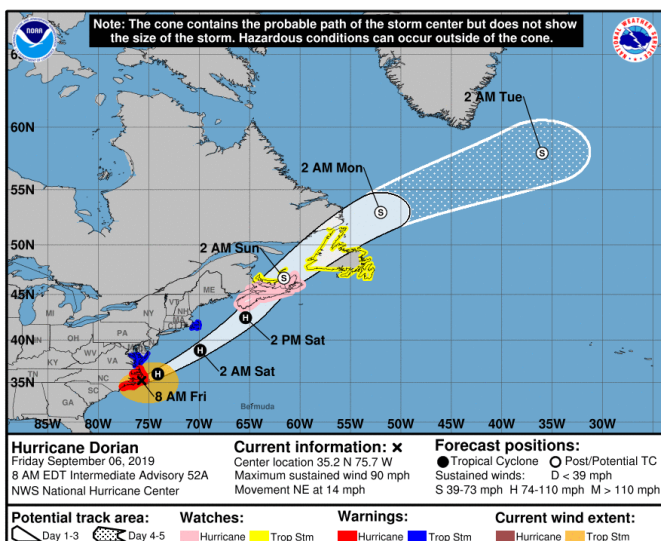


Intensity Measures		Position & Heading		U.S. Landfall (NHC)	
Max Sustained Wind Speed:	90 mph (Category 1)	Position Relative to Land:	10 mi WSW of Cape Hatteras NC	Est. Time & Region:	Possibly the Carolinas over the next few hours
Min Central Pressure:	956 mb	Coordinates:	35.2 N, 75.7 W		
Trop. Storm Force Winds Extent:	220 miles	Bearing/Speed:	NE or 50 degrees at 14 mph	Est. Max Sustained Wind Speed:	90 mph (Category 1)

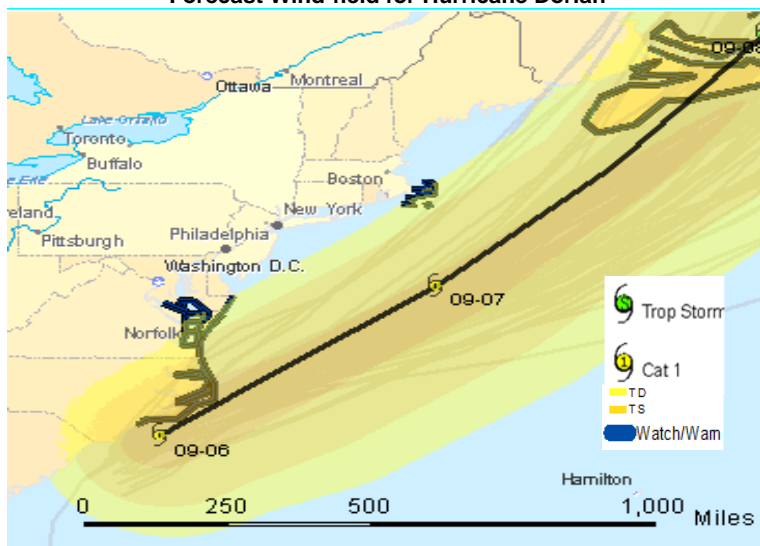
### Forecast Summary

- The NHC forecast map (below left) and the wind-field map (below right), which is based on the NHC's forecast track, both show Dorian continuing to move close to the North Carolina coast before bypassing extreme southeastern New England and heading toward Nova Scotia. To illustrate the uncertainty in Dorian's forecast track, forecast tracks for all current models are shown on the windfield map in pale gray.
- Hurricane conditions should continue along portions of the North Carolina coast for the next few hours. Tropical storm conditions are spreading onto the Virginia coast in the warning area.
- The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide: 4 to 7 ft from Salter Path to Duck NC, including Pamlico and Albemarle Sounds and the Neuse and Pamlico Rivers; 2 to 4 ft from Duck NC to Poquoson VA, including Hampton Roads.
- Dorian is expected to produce the following rainfall totals through Saturday: 3 to 8 inches, isolated 15 inches in northeastern North Carolina; 3 to 8 inches in far southeast Virginia; 2 to 4 inches in extreme southeastern New England; 3 to 5 inches in Nova Scotia and Prince Edward Island; 1 to 2 inches in Newfoundland.
- Large swells will affect much of the southeastern U.S. coast from northern Florida through North Carolina during the next couple of days. These swells are likely to cause life-threatening surf and rip current conditions. Tornadoes are possible through early Friday across eastern North Carolina into southeast Virginia.

Forecast Track for Hurricane Dorian



Forecast Wind-field for Hurricane Dorian



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Hazard and damage potential maps produced by Willis are based on numerical modeling results from Kinetic Analysis Corporation.



## Coastal Watches and Warnings

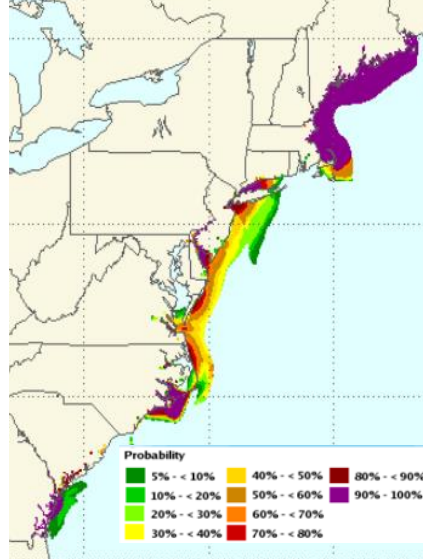
A Hurricane Warning – meaning that hurricane conditions are expected somewhere within the warning area- is in effect for Surf City to the North Carolina/Virginia border and Pamlico and Albemarle Sounds. A Hurricane Watch – meaning hurricane conditions are possible within the watch area – is in effect for Nova Scotia. A Tropical Storm Warning – meaning tropical storm conditions are expected within the warning area within 36 hours – is in effect for North Carolina/Virginia border to Fenwick Island DE, Chesapeake Bay from Drum Point southward, Tidal Potomac south of Cobb Island, Woods Hole to Sagamore Beach MA, Nantucket and Martha’s Vineyard MA. A Tropical Storm Watch – meaning tropical storm conditions are possible within the watch area – is in effect for Prince Edward Island, Magdalen Islands, Fundy National Park to Shediac, Francois to Boat Harbour.

## Storm Surge Watches, Warnings, and Potential

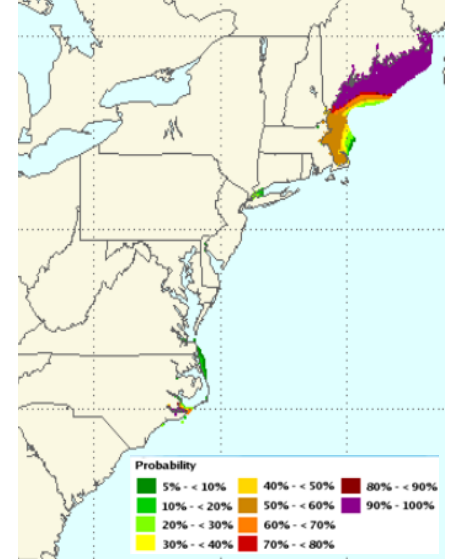
The images at right show the NHC’s probabilities for a storm surge exceeding 3 feet (near right) and 5 feet (far right). For the 77 hours from 01 AM EST Fri Sep 6 to 7 AM EST Mon Sep 10. Probabilities for a surge exceeding 5 feet are highest along the coasts of Massachusetts (50-60%), and Maine (90-100%).

A Storm Surge warning – meaning there is a danger of life-threatening inundation, from rising water moving inland from the coastline during the next 36 hours – is in effect for: Salter Path NC to Poquoson VA, Pamlico and Albemarle Sounds, Neuse and Pamlico Rivers, Hampton Roads.

Probability of Surge exceeding 3 feet



Probability of Surge exceeding 5 feet

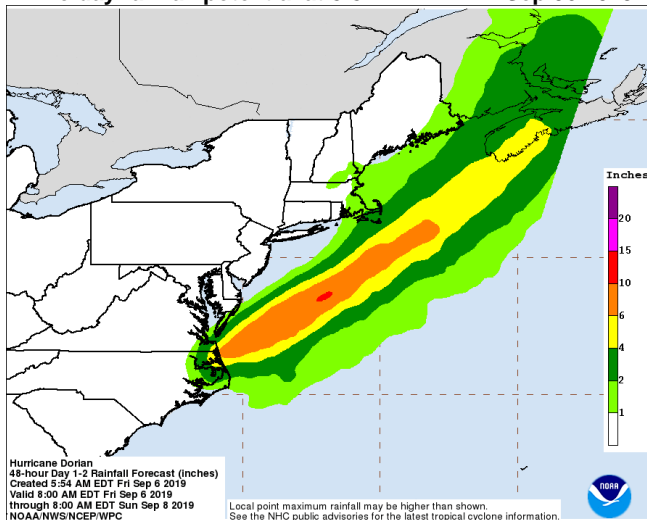


## Rainfall Potential and Most Likely Arrival Time of Tropical Storm Force Winds

### 48-Hour Rainfall Potential

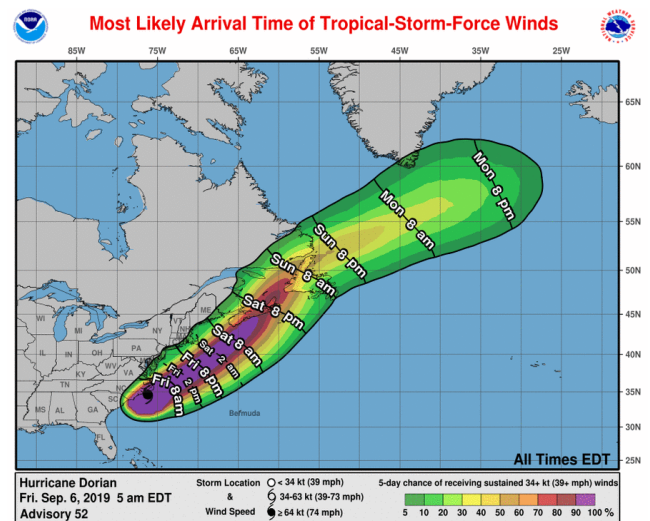
The graphic below shows rainfall potential over the next two days. Dorian could bring upwards of 10 inches of rain in the coming days to certain areas.

Two day rainfall potential at 5:54AM EDT Fri Sep 06 2019



### Most Likely Arrival Time of Tropical-Storm-Force Winds

The graphic below shows the most likely arrival time of tropical storm force winds - the time before or after which the onset of tropical-storm-force winds is equally likely. It also shows probabilities of sustained (1-minute average) surface wind speeds equal to or exceeding 34 kt (39 mph) for the next five days. This graphic is based on the official National Hurricane Center (NHC) track, intensity, and wind radii forecasts, and on NHC forecast error statistics for those forecast variables during recent years.



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