

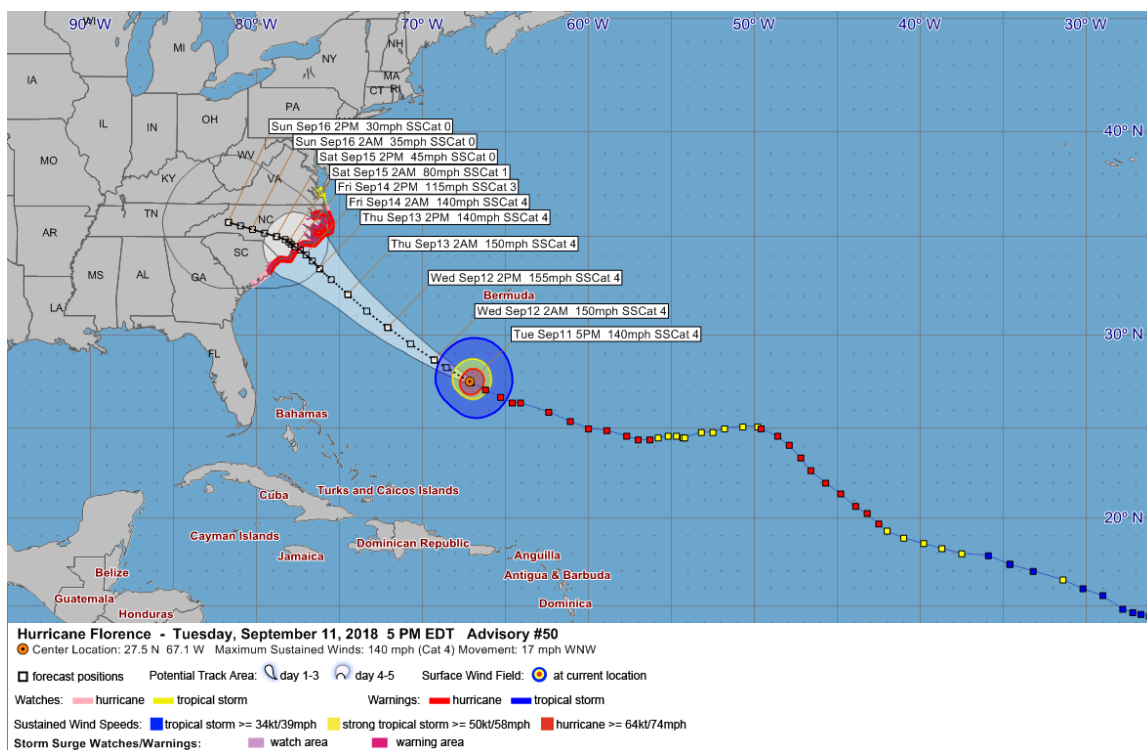
# Storm Summary for Hurricane Florence

Tuesday, September 11, 2018 at 5 PM EDT

(Output from Hurrevac, based on National Hurricane Center Forecast Advisory #50)

Florence is currently a Category 4 major hurricane on the Saffir-Simpson Hurricane Wind Scale, with maximum sustained winds of 140 mph (120 kts), moving west-northwest at 17 mph. The estimated minimum central pressure is 945 mb. Hurricane-force winds extend outward up to 60 miles (95 km) from the storm center. Tropical storm-force winds extend outward up to 175 miles (280 km) from the storm center.

Certain coastal locations are under Hurricane Warning, Hurricane Watch, and Tropical Storm Watch. The geographic extents of these watches and warnings are detailed in the advisory text at the end of this report.



## **Wind Analysis for Va Beach, VA**

*(Based upon Hurricane FLORENCE Advisory #50)*

### Wind Probabilities

Norfolk, VA, the closest reporting location, has within the 5-day forecast period of this advisory, a 8% chance of hurricane-force (64kt/74mph or greater) winds, a 19% chance of at least strong tropical storm-force (50kt/58mph) winds, and a 63% chance of at least tropical storm-force (34kt/39mph) winds.

### Peak Wind\*

Winds in Va Beach, VA are projected to peak at 36kt/41mph around 7 AM on Friday, September 14, 2018

### Wind Arrival and Duration\*

Tropical storm-force winds (34kt/39mph) are forecast to begin in Va Beach, VA on Friday, September 14, 2018 at 1 AM. Winds of this magnitude or higher are forecast to continue for 17 or more hours.

50kt/58mph winds are not forecast for <select county>.

64kt/74mph winds are not forecast for <select county>.

\* These wind estimations are limited to the first 72 hours (3 days) following advisory issuance, and are subject to considerable forecast uncertainty and generalization, especially if the storm is distant. Maximum sustained winds (the highest surface wind maintained over a 1 minute period) are reported here. Wind gusts and winds at higher elevations will be greater.

## **Evacuation Timing for Virginia Beach, VA US58 Heavy Scenario**

*(Based upon Hurricane FLORENCE Advisory #50)*

An evacuation start time for Virginia Beach, VA cannot be calculated because no winds are predicted for this location within the 72-hour forecast period.

Hurrevac calculates evacuation start times based on a worst case, direct hit scenario. The reporting of a start time by the program does not necessarily imply that evacuation is necessary, only that if an evacuation under this scenario was needed, actions would need to be initiated by this time in order to allow enough time for completion before arrival of tropical storm-force winds.

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WTNT31 KNHC 112040  
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BULLETIN  
Hurricane Florence Advisory Number 50  
NWS National Hurricane Center Miami FL AL062018  
500 PM AST Tue Sep 11 2018

...DANGEROUS FLORENCE EXPECTED TO BRING LIFE-THREATENING STORM  
SURGE AND RAINFALL TO PORTIONS OF THE CAROLINAS AND MID-ATLANTIC...

SUMMARY OF 500 PM AST...2100 UTC...INFORMATION

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LOCATION...27.5N 67.1W  
ABOUT 360 MI...580 KM SSW OF BERMUDA  
ABOUT 785 MI...1260 KM ESE OF CAPE FEAR NORTH CAROLINA  
MAXIMUM SUSTAINED WINDS...140 MPH...220 KM/H  
PRESENT MOVEMENT...WNW OR 300 DEGREES AT 17 MPH...28 KM/H  
MINIMUM CENTRAL PRESSURE...945 MB...27.91 INCHES

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

A Storm Surge Warning has been issued from South Santee River, South Carolina, to Duck, North Carolina, and the Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers.

A Hurricane Warning has been issued from South Santee River, South Carolina, to Duck, North Carolina, and the Albemarle and Pamlico Sounds.

A Tropical Storm Watch has been issued from north of the North Carolina/Virginia border to Cape Charles Light, Virginia, and for the Chesapeake Bay south of New Point Comfort.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...  
\* South Santee River South Carolina to Duck North Carolina  
\* Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers

A Storm Surge Watch is in effect for...  
\* Edisto Beach South Carolina to South Santee River South Carolina  
\* North of Duck North Carolina to the North Carolina/Virginia border

A Hurricane Warning is in effect for...  
\* South Santee River South Carolina to Duck North Carolina  
\* Albemarle and Pamlico Sounds

A Hurricane Watch is in effect for...  
\* Edisto Beach South Carolina to South Santee River South Carolina  
\* North of Duck North Carolina to the North Carolina/Virginia border

A Tropical Storm Watch is in effect for...  
\* North of the North Carolina/Virginia border to Cape Charles Light

Virginia

\* Chesapeake Bay south of New Point Comfort

Interests elsewhere in the southeastern and mid-Atlantic states should monitor the progress of Florence. Additional watches and warnings may be required tonight or Wednesday.

A Storm Surge Warning means there is a danger of life-threatening inundation, from rising water moving inland from the coastline, during the next 36 hours in the indicated locations. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at [hurricanes.gov](http://hurricanes.gov). This is a life-threatening situation. Persons located within these areas should take all necessary actions to protect life and property from rising water and the potential for other dangerous conditions. Promptly follow evacuation and other instructions from local officials.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. A warning is typically issued 36 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

## DISCUSSION AND OUTLOOK

At 500 PM AST (2100 UTC), the center of the eye of Hurricane Florence was located by satellite near latitude 27.5 North, longitude 67.1 West. Florence is moving toward the west-northwest near 17 mph (28 km/h). A motion toward the west-northwest and northwest is expected through early Thursday. Florence is expected to slow down considerably by late Thursday into Friday. On the forecast track, the center of Florence will move over the southwestern Atlantic Ocean between Bermuda and the Bahamas through Wednesday, and approach the coast of North Carolina or South Carolina in the hurricane warning area on Thursday and Friday.

Maximum sustained winds have increased to near 140 mph (220 km/h) with higher gusts. Florence is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Further strengthening is forecast tonight and Wednesday. While some weakening is expected on

Thursday, Florence is forecast to be an extremely dangerous major hurricane through landfall.

Hurricane-force winds extend outward up to 60 miles (95 km) from the center and tropical-storm-force winds extend outward up to 175 miles (280 km).

The estimated minimum central pressure is 945 mb (27.91 inches).

#### HAZARDS AFFECTING LAND

**STORM SURGE:** 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 has the potential to reach the following heights above ground if peak surge occurs at the time of high tide...

Cape Fear to Cape Lookout, including the Neuse and Pamlico Rivers...9-13 ft  
North Myrtle Beach to Cape Fear...6-9 ft  
Cape Lookout to Ocracoke Inlet...6-9 ft  
South Santee River to North Myrtle Beach...4-6 ft  
Ocracoke Inlet to North Carolina/Virginia Border...4-6 ft  
Edisto Beach to South Santee River...2-4 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

**RAINFALL:** Florence is expected to produce total rainfall accumulations of 15 to 25 inches with isolated maximum amounts of 35 inches near the storm's track over portions of the Carolinas and Mid-Atlantic States from late this week into early next week. This rainfall would produce catastrophic flash flooding and significant river flooding.

**WIND:** Hurricane conditions are expected to reach the coast within the hurricane warning area on Friday. Winds are expected to first reach tropical storm strength on Thursday, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

**SURF:** Swells generated by Florence are affecting Bermuda and portions of the U.S. East Coast. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

#### NEXT ADVISORY

Next intermediate advisory at 800 PM AST.  
Next complete advisory at 1100 PM AST.

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Forecaster Stewart

