

Current Watches and Warnings

A *Hurricane Warning* is in effect from the Savannah River to the North Carolina/Virginia border; Pamlico and Albemarle Sounds (NC)

A *Storm Surge Warning* is in effect from Edisto Beach, SC to Poquoson, VA; Pamlico and Albemarle Sounds (NC); Neuse and Pamlico Rivers (NC); Hampton Roads (VA)

A *Tropical Storm Warning* is in effect from the North Carolina/Virginia border to Fenwick Island, DE; Chesapeake Bay from Drum Point southward; Tidal Potomac south of Cobb Island; Altamaha Sound, GA to Savannah River

A *Tropical Storm Watch* is in effect from Woods Hole to Sagamore Beach, MA; Nantucket and Martha's Vineyard, MA

Current Details from the National Hurricane Center (NHC)

COORDINATES: 32.5° north, 79.1° west

LOCATION: 50 miles (80 kilometers) east-southeast of Charleston, South Carolina

MOVEMENT: north-northeast at 8 mph (13 kph)

WINDS: 110 mph (175 kph) with gusts to 130 mph (210 kph)

RADIUS OF TROPICAL STORM-FORCE WINDS: 195 miles (315 kilometers)

RADIUS OF HURRICANE-FORCE WINDS: 60 miles (95 kilometers)

MINIMUM CENTRAL PRESSURE: 958 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 2

1st LANDFALL LOCATION: Elbow Cay, Great Abaco Island, Bahamas

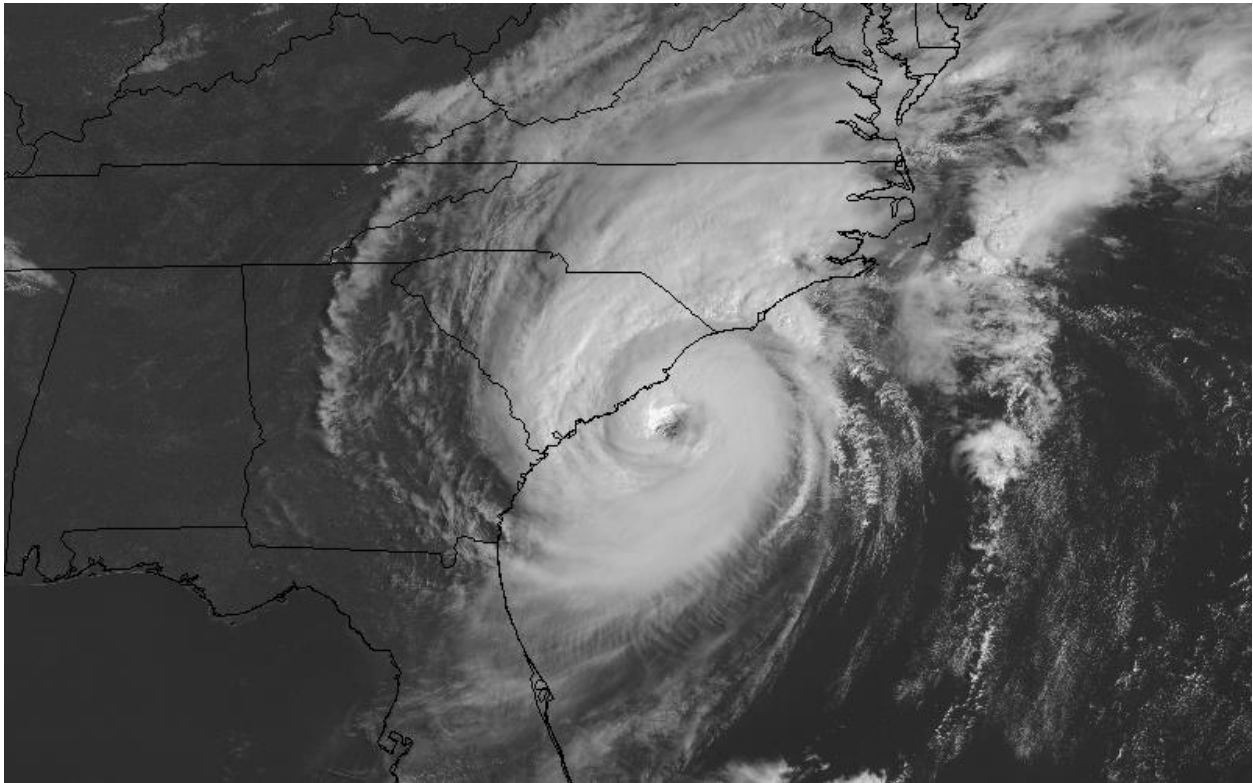
1st LANDFALL TIMEFRAME: approximately 12:40 PM local time (16:40 UTC) September 1

1st LANDFALL INTENSITY: 185 mph (295 kph) – Category 5*

*Tied the 1935 Labor Day Hurricane as the strongest hurricane on record to make landfall in the Atlantic Ocean

24-HOUR LANDFALL POTENTIAL: HIGH (South Carolina or North Carolina coastline)

Latest Satellite Picture



Source: NASA/NOAA

Discussion

Hurricane Dorian, located approximately 50 miles (80 kilometers) east-southeast of Charleston, South Carolina and is currently tracking north-northeast at 8 mph (13 kph). The latest data from NOAA Doppler radar and Air Force Reserve and NOAA Hurricane Hunter aircraft indicate that Dorian continues to maintain a well-defined eye feature. This eye is currently just off the South Carolina coast. The aircraft data just obtained indicates that flight-level and surface-adjusted wind speeds have slightly decreased since 12 hours ago, and the central pressure has also similarly risen. Based on this data, the NHC has lowered the initial intensity down to 110 mph (175 kph); a Category 2 hurricane. This wind speed may be generous. The minimum central pressure of 958 millibars is based partly on data from NOAA Buoy 41004, which is currently inside the eye.

Dorian has slightly shifted eastward in the past few hours as it is now moving into the mid-latitude westerlies. It is expected to turn northeastward with an increase in forward speed during the next few hours. This track will bring the eye near or over the coasts of eastern South Carolina and southeast North Carolina during the next 24-hour cycle. After that time, Dorian is forecast to move quickly across the northwest Atlantic Ocean and near the Canadian Maritimes/Atlantic provinces in about three days.

Dorian is forecast to slowly weaken as it moves along the South and North Carolina coasts. An extratropical transition should begin and complete with in the next 48 to 72 hours, though it is likely to maintain hurricane-force winds during the transition. After 72 hours, the extratropical low should weaken over the far north Atlantic.

Key Messages from the National Hurricane Center

1. Life-threatening storm surge and dangerous winds are expected along portions the coasts of South Carolina and North Carolina, and portions of southeast Virginia and the southern Chesapeake Bay, regardless of the exact track of Dorian's center. Water levels could rise well in advance of the arrival of strong winds. Residents in these areas should follow advice given by local emergency officials.
2. Flash flooding will become more widespread across the eastern Carolinas and far southeast Virginia today into tonight. There is a high risk of flash flooding over these areas, where significant, life-threatening, flash flooding is expected.

Additional Information

WIND: Tropical storm conditions are currently affecting portions of the Georgia and South Carolina coasts. Hurricane conditions are expected along portions of the South Carolina coast during the next several hours.

Tropical storm conditions are spreading along the coast of North Carolina, and hurricane conditions are expected to begin later today.

Tropical storm conditions are expected in the Tropical Storm Warning area in the Mid-Atlantic states by Friday, with tropical storm conditions possible in the Tropical Storm Watch area Friday or Friday night.

Tropical storm conditions are possible over portions of southeastern Massachusetts by late Friday or early Saturday.

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 could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide:

Awendaw, SC to Myrtle Beach, SC: 5 to 8 feet

Myrtle Beach, SC to Duck, NC, including Pamlico and Albemarle Sounds and the Neuse and Pamlico Rivers: 4 to 7 feet

Duck, NC to Poquoson, VA, including Hampton Roads: 2 to 4 feet

Edisto Beach, SC to Awendaw, SC: 2 to 4 feet

Water levels could begin to rise well in advance of the arrival of strong winds. The surge will be accompanied by large and destructive waves. Surge-related flooding depends on the how close the center of Dorian comes to the coast and can vary greatly over short distances.

RAINFALL: Dorian is expected to produce the following rainfall totals through Friday:

Coastal Carolinas: 6 to 12 inches, isolated 15 inches

Far southeast Virginia: 3 to 8 inches

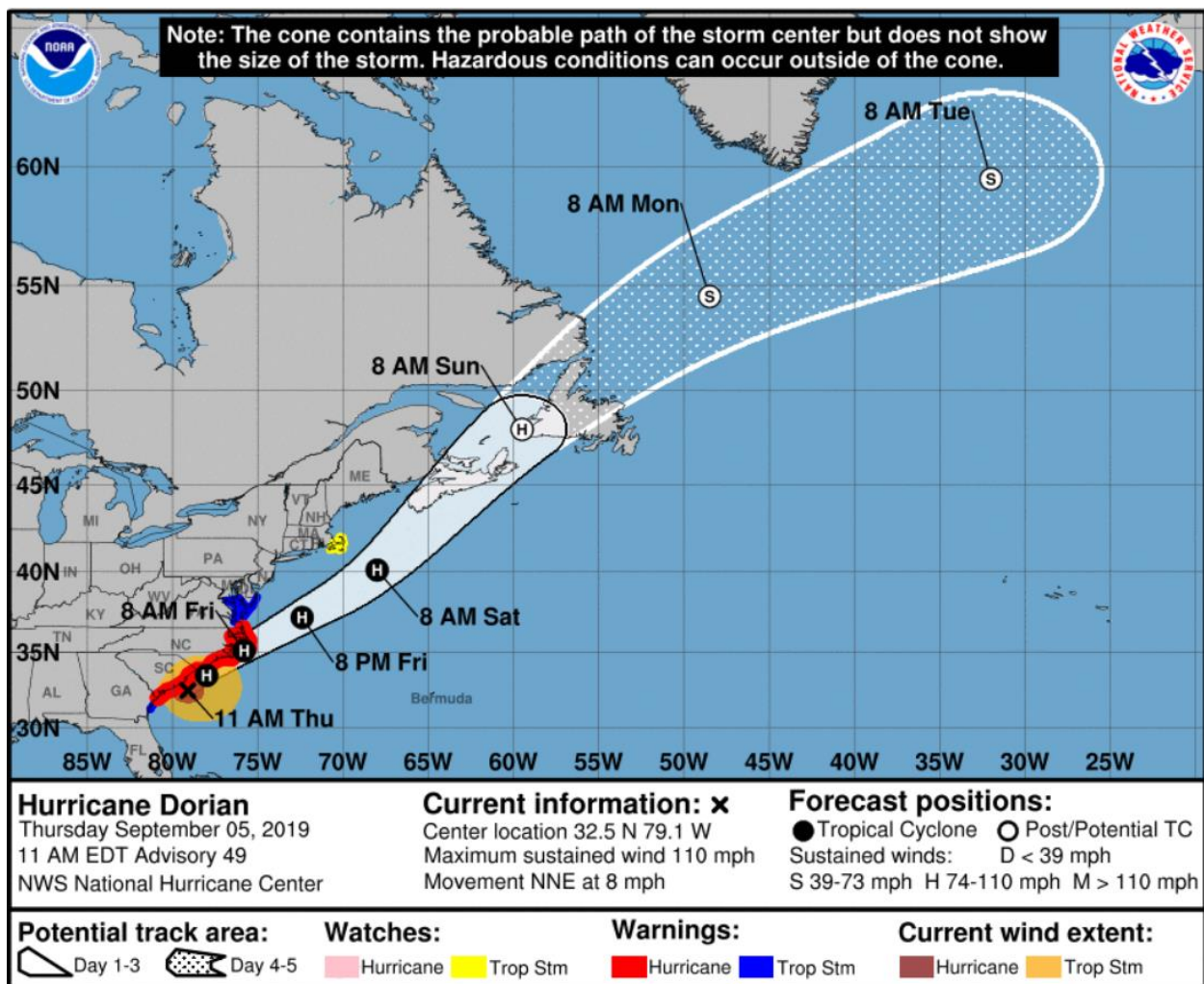
Extreme southeastern New England: 2 to 4 inches

This rainfall may cause life-threatening flash floods.

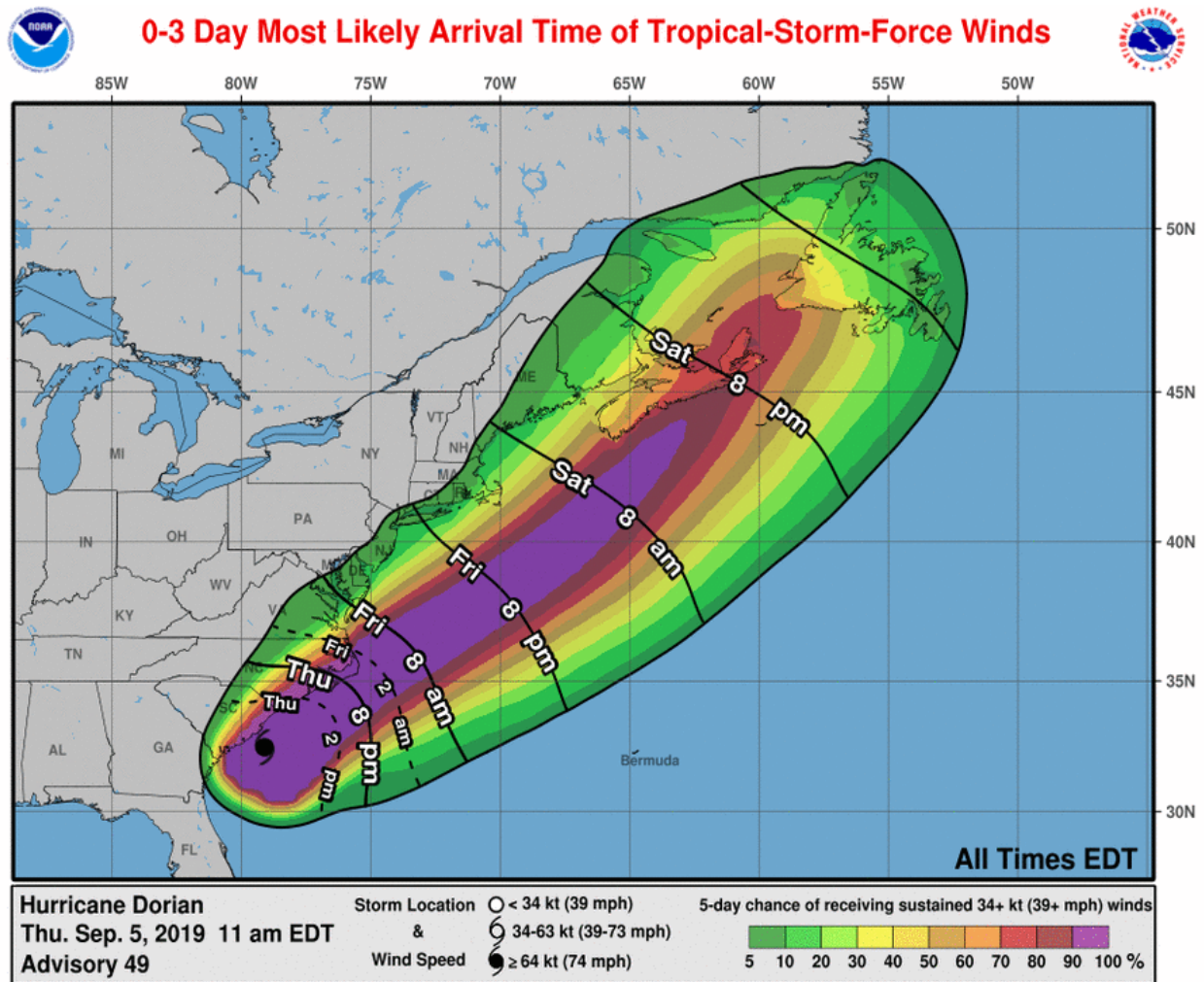
SURF: Large swells will affect the northwestern Bahamas, and the entire southeastern United States coast from Florida through North Carolina during the next few days. These swells are likely to cause life-threatening surf and rip current conditions.

TORNADOES: Tornadoes are possible through this afternoon across eastern North Carolina and the upper South Carolina coast. The tornado threat will continue tonight across eastern North Carolina into southeast Virginia.

National Hurricane Center Forecast

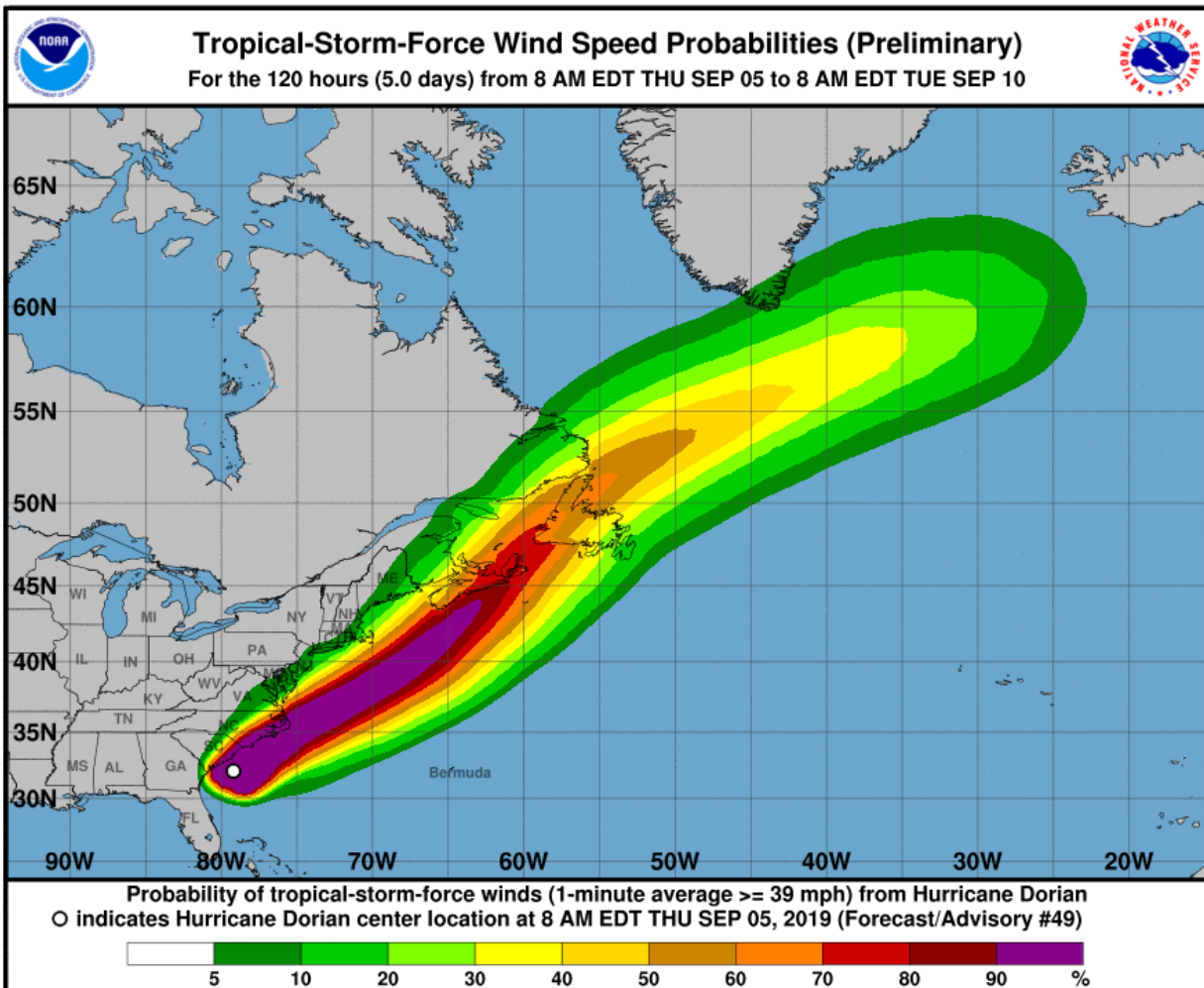


Most Likely Arrival Time of Tropical Storm-Force Winds

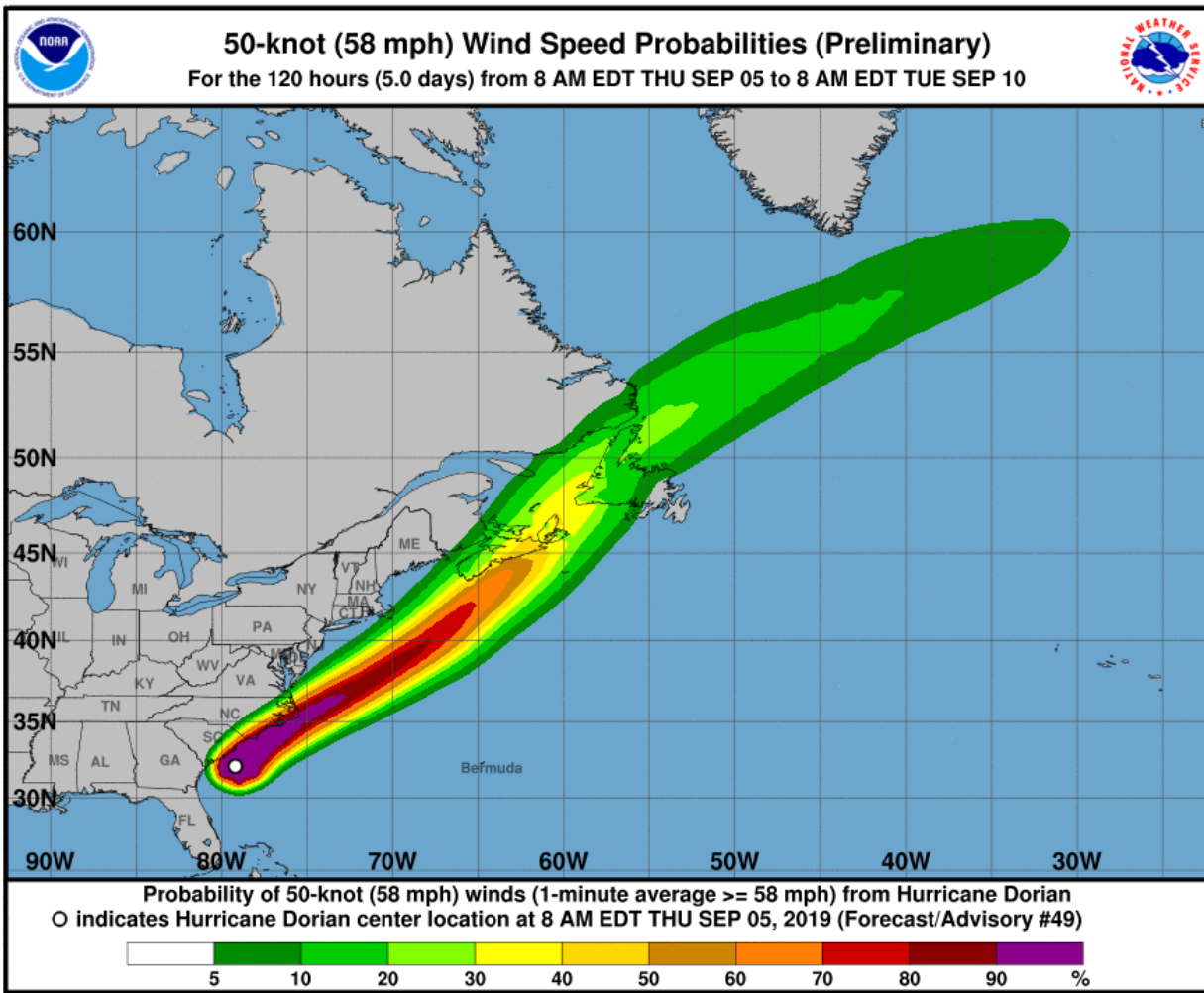


National Hurricane Center: Wind Speed Probabilities

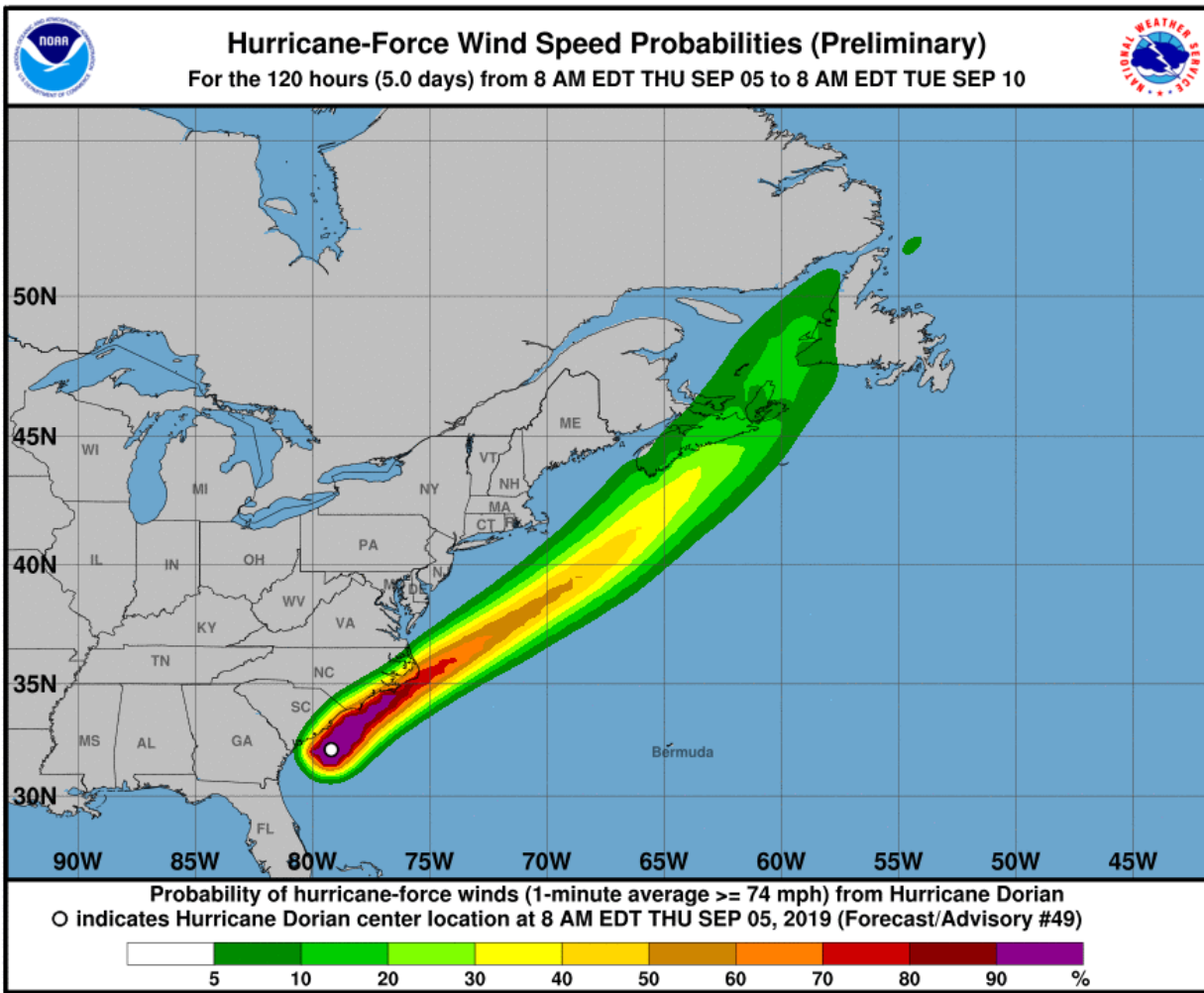
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



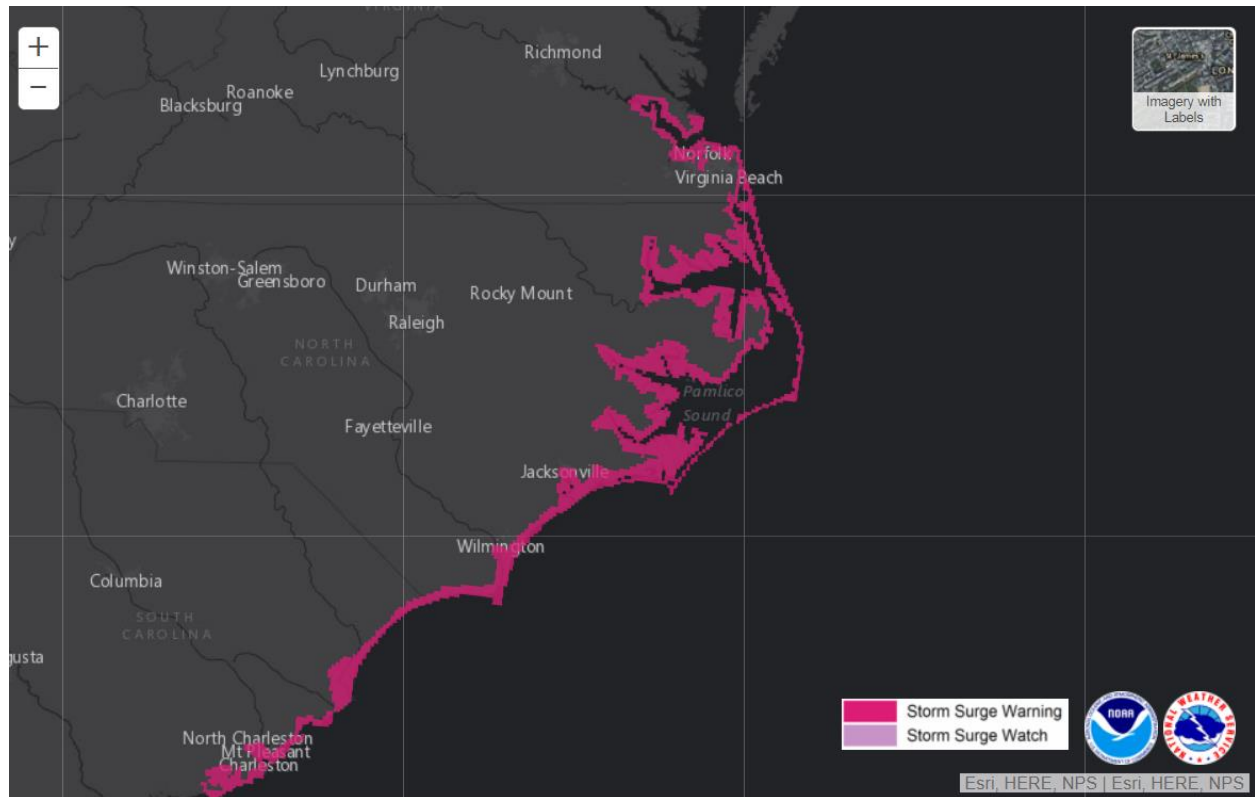
Wind Probabilities (≥ 60 mph (95 kph))



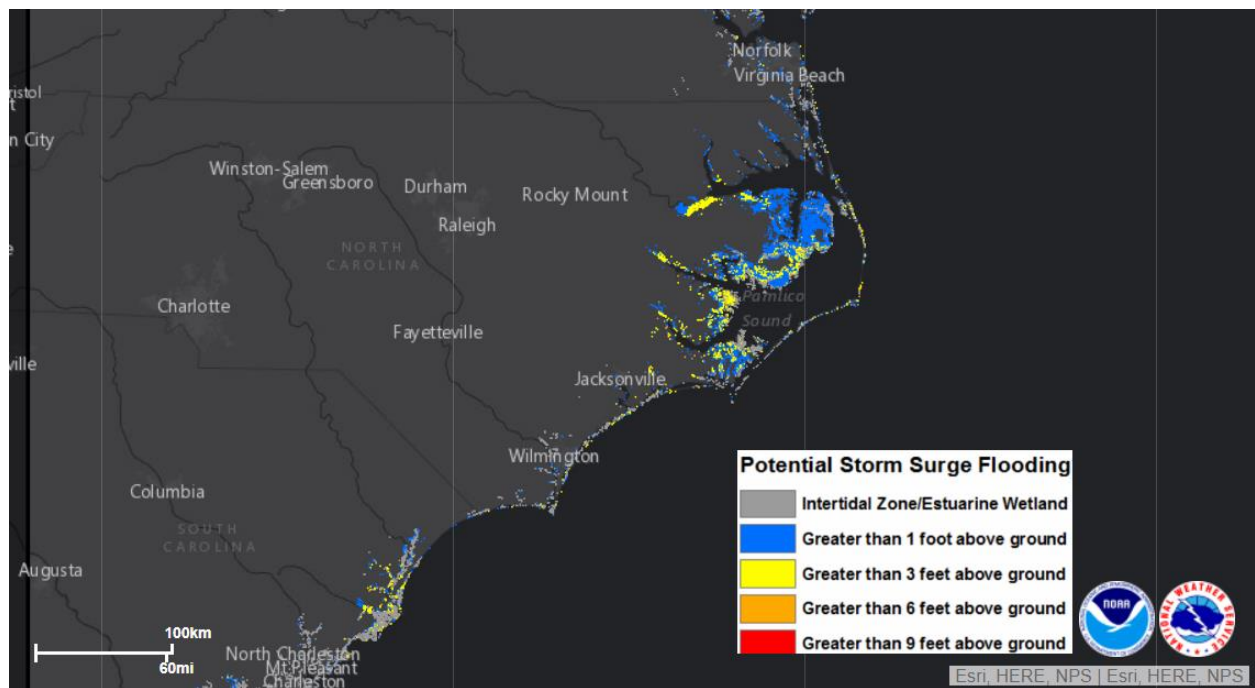
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



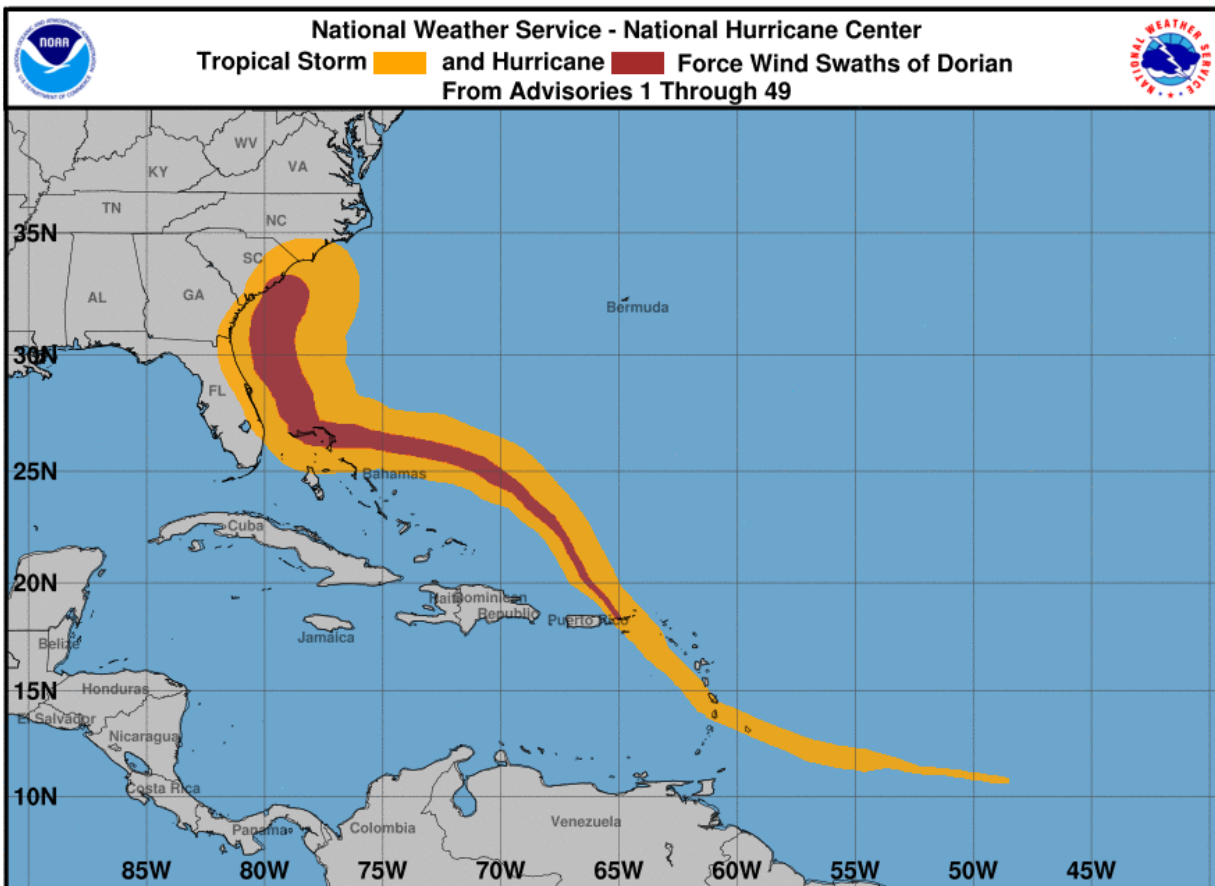
United States: Storm Surge Watches & Warnings



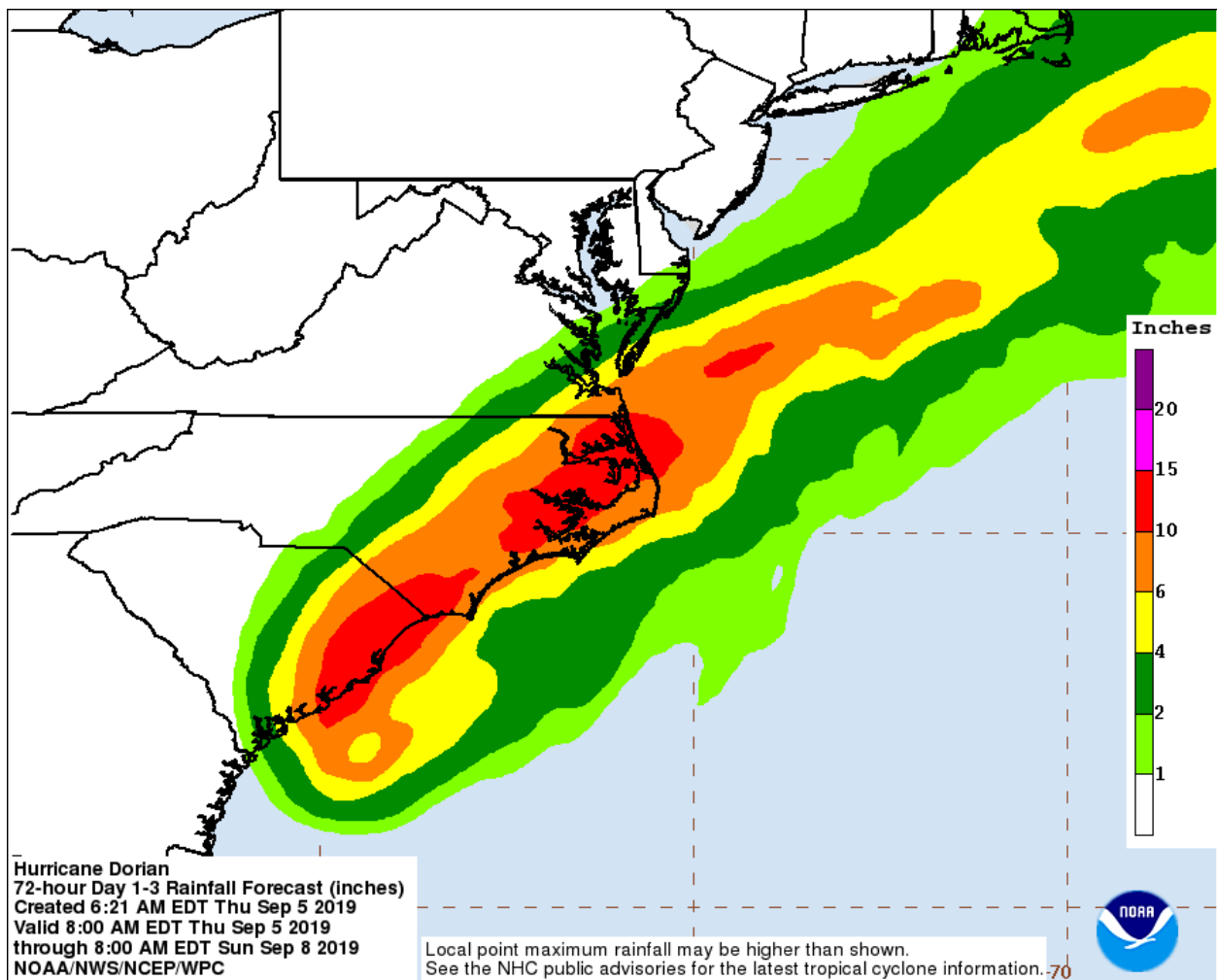
United States: Storm Surge Inundation



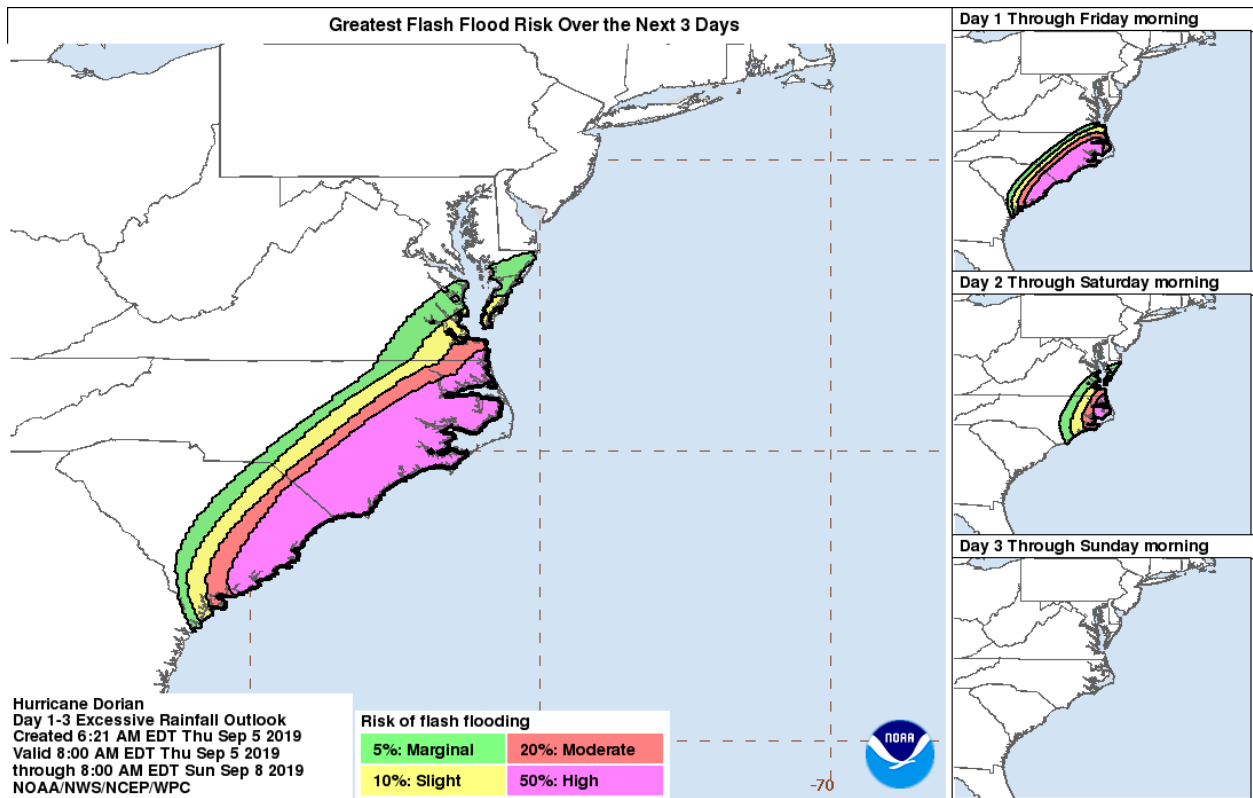
Wind Swath History



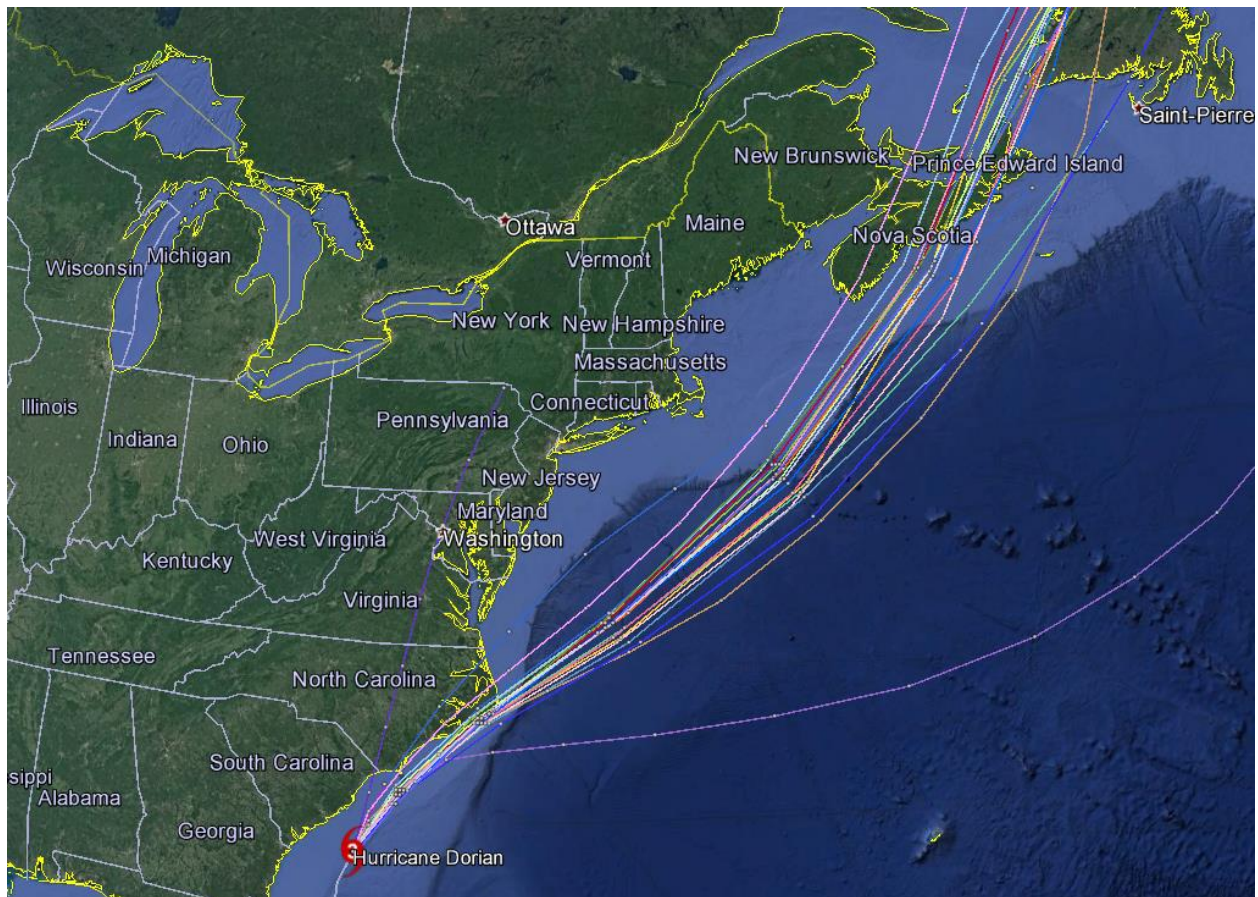
Weather Prediction Center: U.S. Rainfall Forecast



United States: Flash Flood Potential



Current 'Spaghetti' Model Output Data



Source: NHC

Additional Information and Update Schedule

Wind intensity forecasts and forecast track information can be found via the National Hurricane Center at www.nhc.noaa.gov

NEXT CAT ALERT: Thursday afternoon after 4:00 PM Central Time (21:00 UTC).

*Tropical Cyclone Intensity Classifications for Global Basins

WIND SPEED			BASINS AND MONITORING BUREAU							
KTS ¹	MPH ¹	KPH ¹	NE Pacific, Atlantic	NW Pacific	NW Pacific	SW Pacific	Australia	SW Indian	North Indian	
			National Hurricane Center (NHC)	Joint Typhoon Warning Center (JTWC)	Japan Meteorological Agency (JMA)	Fiji Meteorological Service (FMS)	Bureau Of Meteorology (BOM)	Meteo-France (MF)	India Meteorological Department (IMD)	
30	35	55	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Low	Tropical Depression	Deep Depression	
35	40	65	Tropical Storm	Tropical Storm	Tropical Storm	Cat. 1 Tropical Cyclone	Cat. 1 Tropical Cyclone	Moderate Tropical Storm	Cyclonic Storm	
40	45	75								
45	50	85			Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm	Severe Cyclonic Storm	
50	60	95								
55	65	100								
60	70	110								
65	75	120	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm	
70	80	130								
75	85	140								
80	90	150	Cat. 2 Hurricane			Intense Tropical Cyclone				
85	100	160								
90	105	170								
95	110	175	Cat. 3 Major Hurricane			Super Typhoon				
100	115	185								
105	120	195								
110	125	205	Cat. 4 Major Hurricane							
115	130	210								
120	140	220								
125	145	230								
130	150	240	Cat. 5 Major Hurricane							
135	155	250								
140	160	260								
>140	>160	>260								

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