

Current Watches and Warnings

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

A *Storm Surge Warning* is in effect from the Flagler/Volusia County line, FL to Poquoson, VA; Pamlico and Albemarle Sounds (NC); Neuse and Pamlico Rivers (NC); Hampton Roads (VA)

A *Hurricane Watch* is in effect from north of Ponte Vedra Beach, FL to Savannah River

A *Tropical Storm Warning* is in effect from the Flagler/Volusia County, FL line to Savannah River; North Carolina/Virginia border to Chincoteague, VA; Chesapeake Bay from Smith Point southward

A *Tropical Storm Watch* is in effect from north of Chincoteague, VA to Fenwick Island, DE; Chesapeake Bay from Smith Point to Drum Point; Tidal Potomac south of Cobb Island

Current Details from the National Hurricane Center (NHC)

COORDINATES: 30.6° north, 79.8° west

LOCATION: 150 miles (245 kilometers) south of Charleston, South Carolina

MOVEMENT: north-northwest 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: 70 miles (110 kilometers)

MINIMUM CENTRAL PRESSURE: 961 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 2

1st LANDFALL LOCATION: Elbow Cay, Abaco Islands, Bahamas

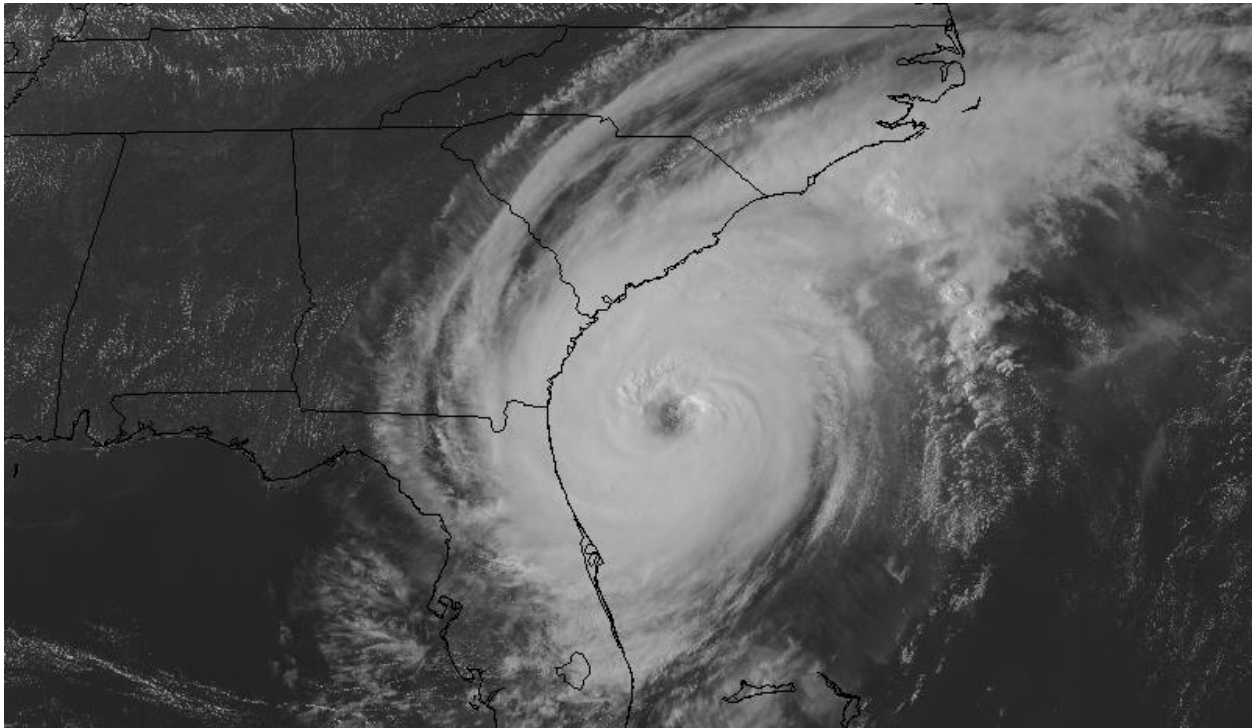
1st LANDFALL TIMEFRAME: approximately 12:40 PM local time (16:40 UTC) September 1

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 150 miles (245 kilometers) south of Charleston, South Carolina and is currently tracking north-northwest at 8 mph (13 kph). Dorian has started to become a little better organized again during the past few hours, with the central eye feature showing better organization and is clearly distinct in satellite imagery. An Air Force Reserve Hurricane Hunter aircraft has twice noted increased flight-level and surface-adjusted wind speeds since early this morning, and the minimum central pressure has fallen again to 961 millibars. Based on a blend of all of these data points, the NHC has increased the initial intensity to 110 mph (175 kph) – just shy of Category 3 (major hurricane) strength. The aircraft data further shows that hurricane-force winds are just off the northeast Florida coastline and tropical storm-force winds are entering coastal sections of Georgia and South Carolina.

The initial motion continues to pick up forward speed as it rounds the western periphery of the steering ridge of high pressure. It is still expected to recurve north and northeastward into the mid-latitude westerlies during the next 12 to 36 hours. This motion should bring the center of Dorian very near the coast of South Carolina in roughly 24 hours, and also near or over the coast of North Carolina in roughly 36 to 48 hours. After that time, the cyclone is forecast to accelerate northeastward into the Atlantic Ocean toward the Canadian Maritimes, with a quick northeastward motion continuing through the end of the 5-day forecast NHC track. The computer model track guidance remains very tightly clustered. It is once again worth repeating that the track of Dorian is extremely close to and almost parallel to the coast of the U.S. Southeast, and any deviation to the left could bring the center onshore anywhere in the Carolinas.

Dorian is expected to remain in an environment of light to moderate vertical wind shear and warm sea surface temperatures for the next day. None of the model guidance shows significant strengthening during this time, and the NHC forecast is only slightly stronger than the previous advisory. It is entirely possible that Dorian could briefly regain major hurricane strength during the next 24-hour period. Once the storm passes the U.S. Southeast coast, it is expected to begin a weakening trend due to increasing wind shear and dry air entrainment into the core of the system. Extratropical transition is now expected to begin during the 48 to 72 hour window, and be complete after that time. Soon after this transition occurs, Dorian should be a hurricane-force low as it moves towards Nova Scotia and Newfoundland in Canada.

Since the NHC track prediction continues to take Dorian dangerously close to the U.S. Southeast coast, all interests from northeast Florida to the Carolinas should remain vigilant to the possibility of experiencing destructive winds, flooding rains, and life-threatening storm surges from this hurricane.

Key Messages from the National Hurricane Center

1. Life-threatening storm surge and dangerous winds are expected along portions of the Florida east coast, the coasts of Georgia, 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 increasingly likely across coastal Georgia into the eastern Carolinas tonight into Friday. There is a high risk of flash flooding over coastal sections of the Carolinas, where significant, life-threatening, flash flooding is expected.

Additional Information

WIND: Tropical storm conditions are currently affecting portions of the Georgia and southern South Carolina coasts, and should begin along other portions of the South Carolina coast during the next several hours.

Tropical storm conditions will begin elsewhere within the Hurricane Warning area in the Carolinas later today, with hurricane conditions beginning by late tonight and Thursday.

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 along the northeastern Florida coast should subside tonight.

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:

Isle of Palms to Myrtle Beach SC: 5 to 8 feet

Savannah River to Isle of Palms SC: 4 to 7 feet

Myrtle Beach SC to Cape Lookout NC: 4 to 7 feet

Cape Lookout NC to Duck NC, including Pamlico and Albemarle Sounds and the Neuse and Pamlico Rivers: 4 to 6 feet

Flagler/Volusia County Line FL to Savannah River: 3 to 5 feet
Duck NC to Poquoson VA, including Hampton Roads: 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 6 inches

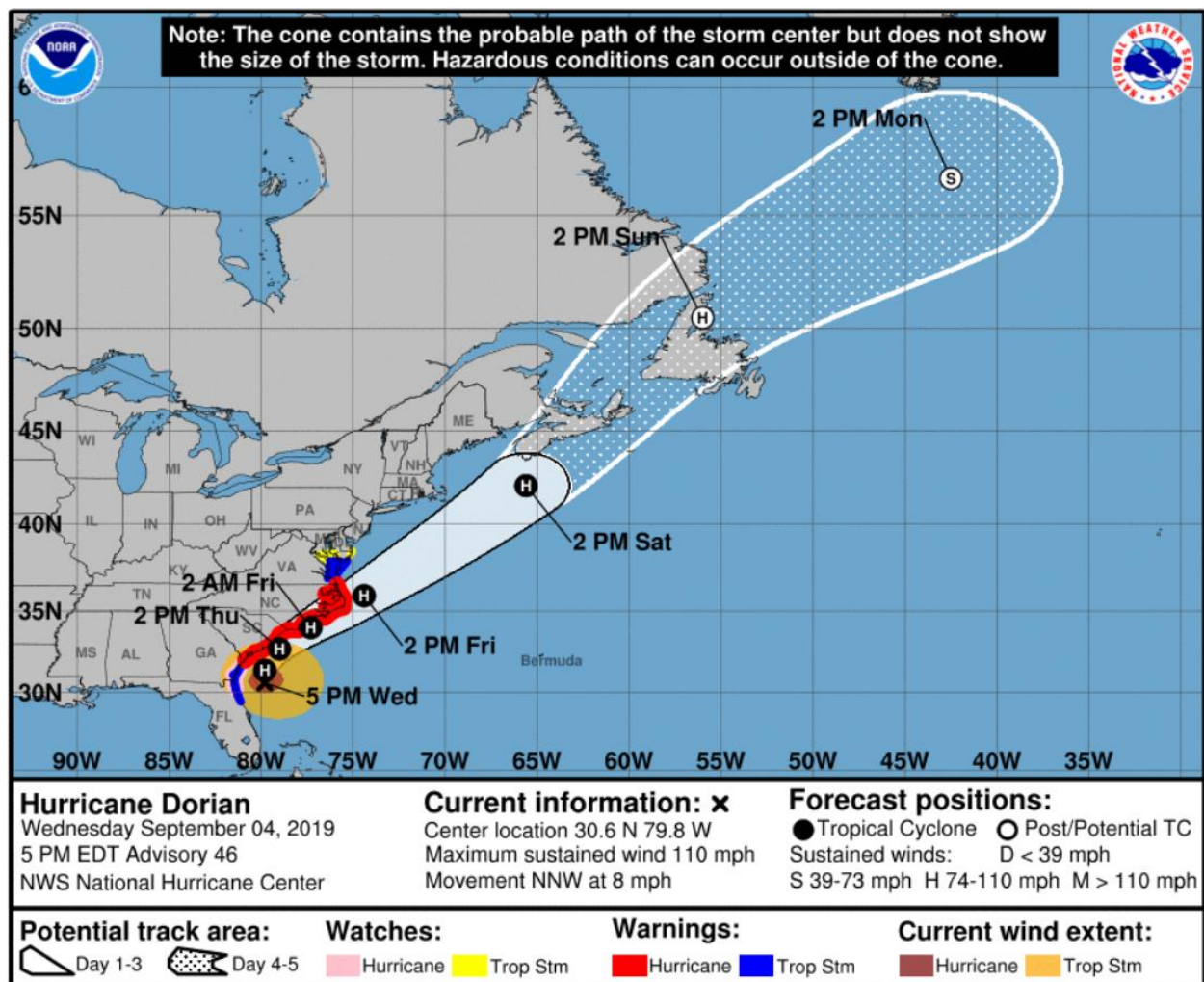
Atlantic Coast from Daytona Beach, Florida to the Georgia-South Carolina border: 2 to 4 inches, isolated 6 inches

This rainfall may cause life-threatening flash floods.

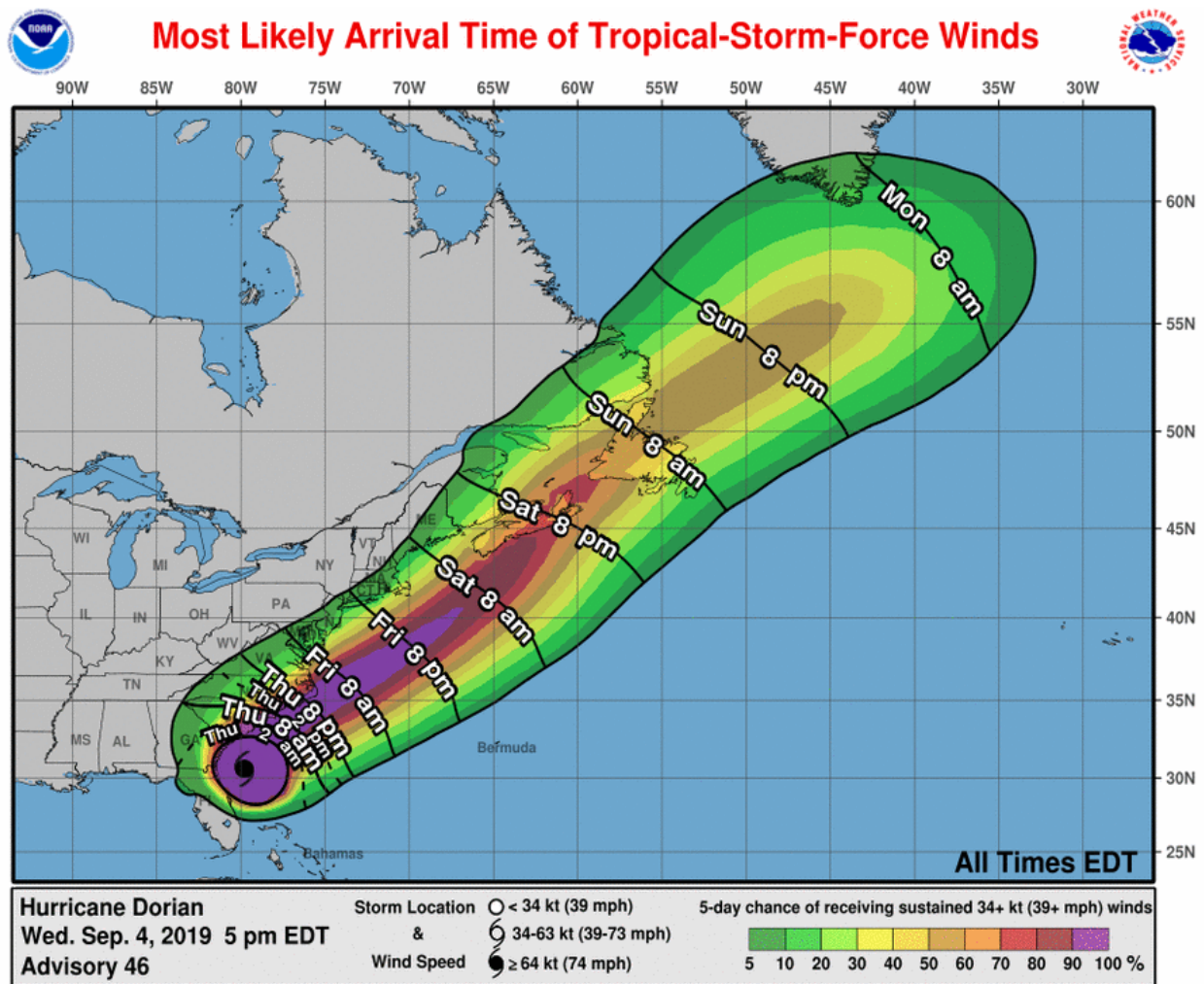
SURF: Large swells will affect the northwestern Bahamas, and the entire southeastern United States coast from Florida through North Carolina during the next several days. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather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

TORNADOES: A tornado or two are possible along the immediate coast of Georgia this afternoon. Isolated tornadoes are possible from this evening through Thursday across the coastal Carolinas.

National Hurricane Center Forecast

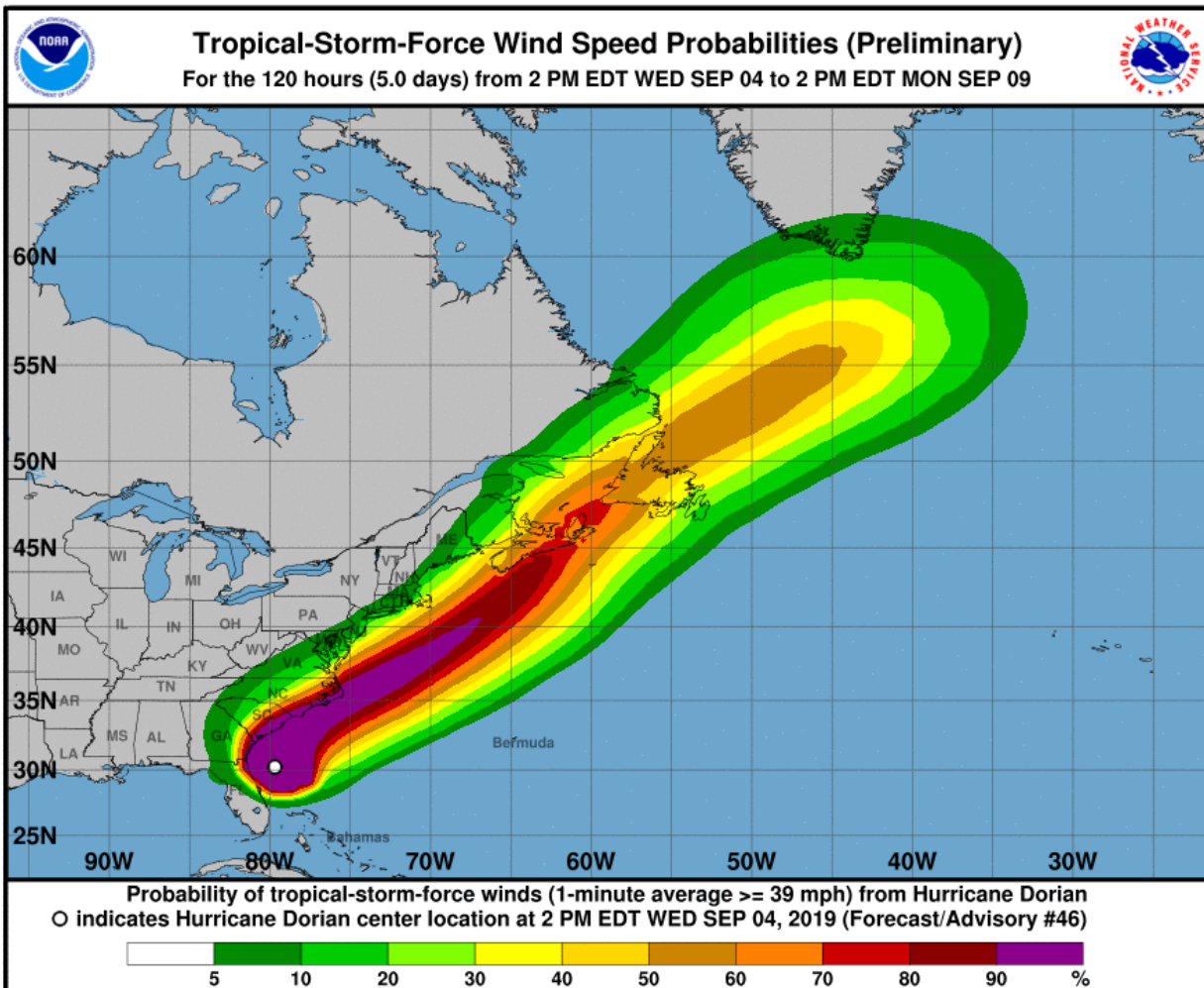


Most Likely Arrival Time of Tropical Storm-Force Winds

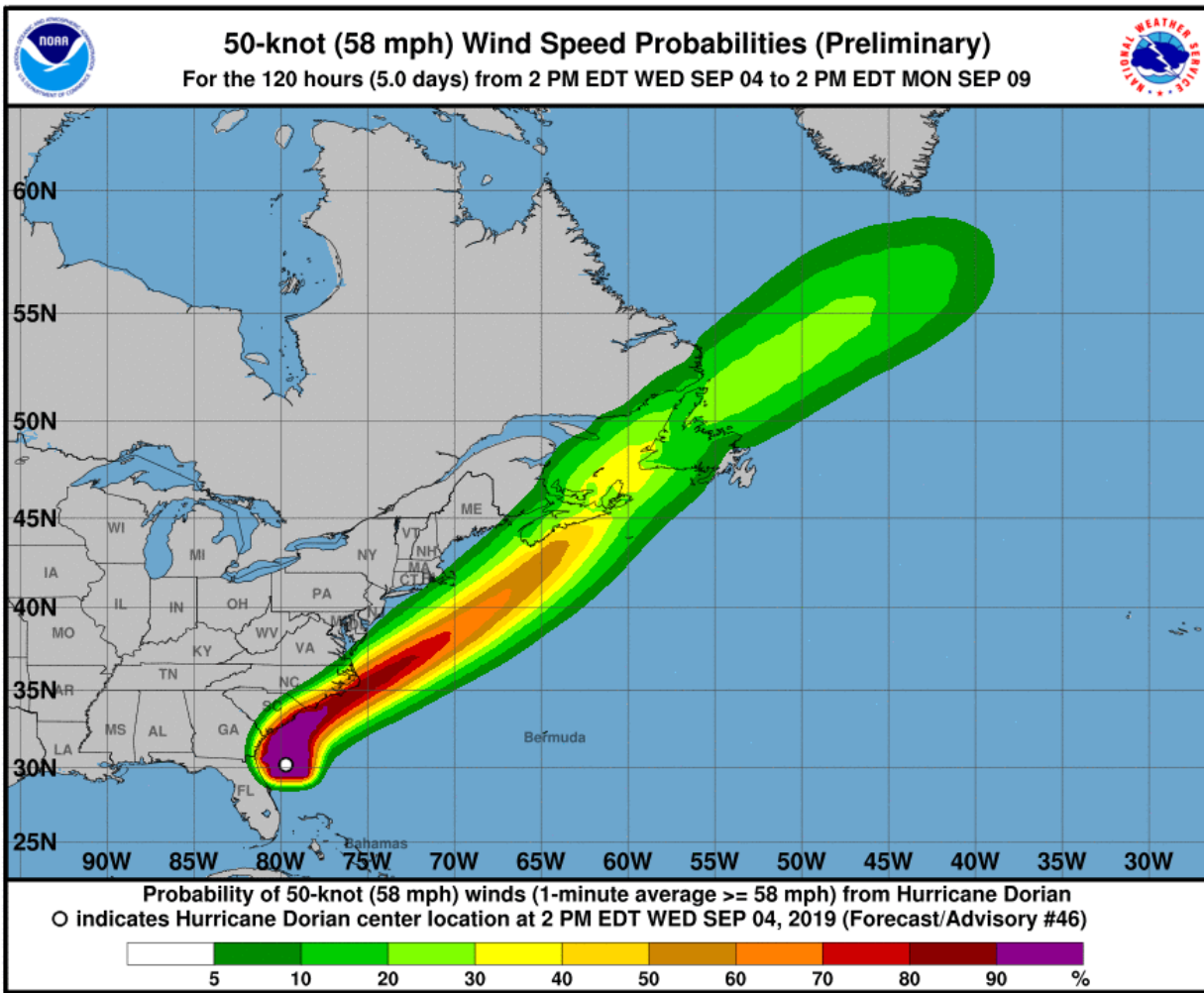


National Hurricane Center: Wind Speed Probabilities

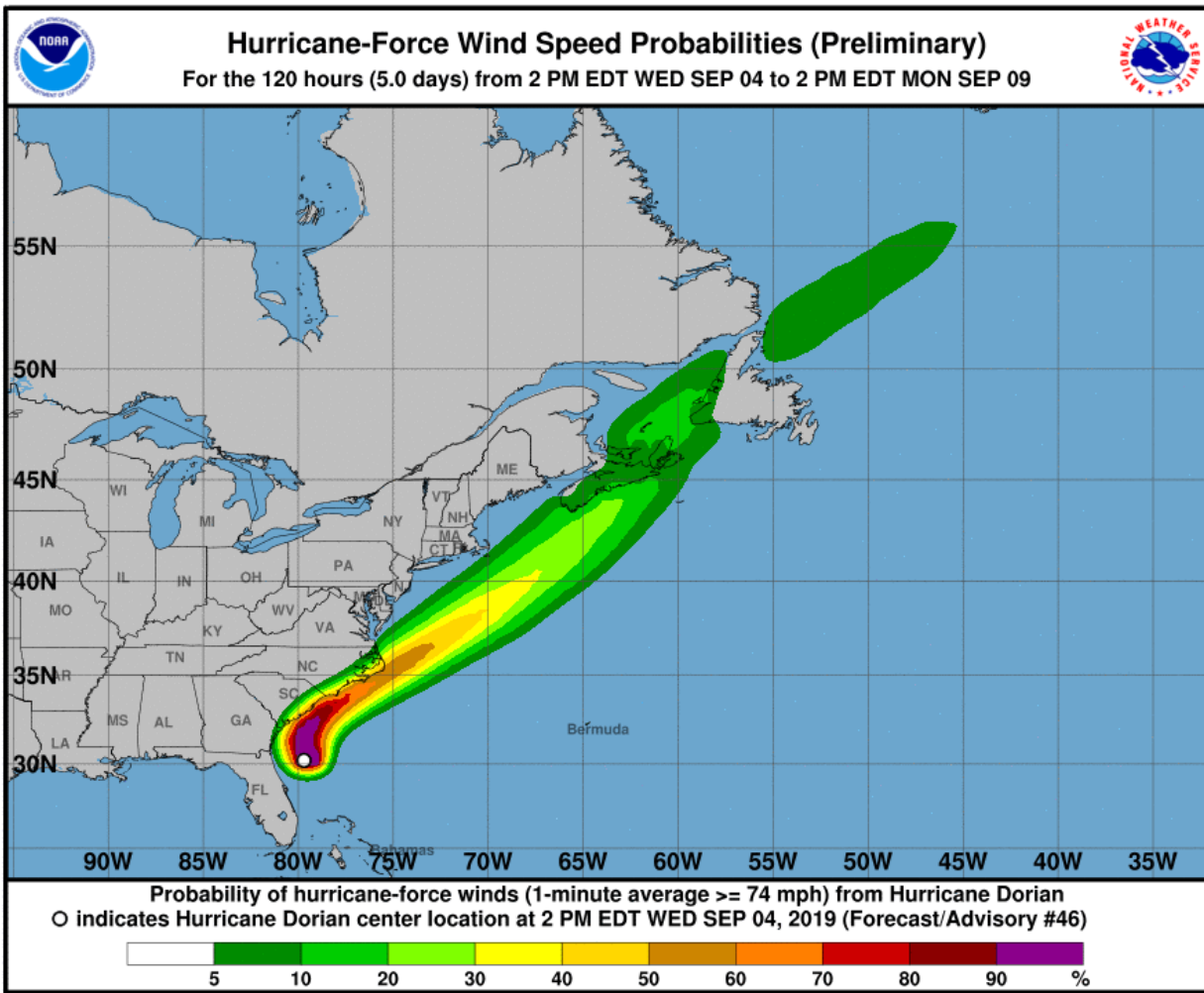
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



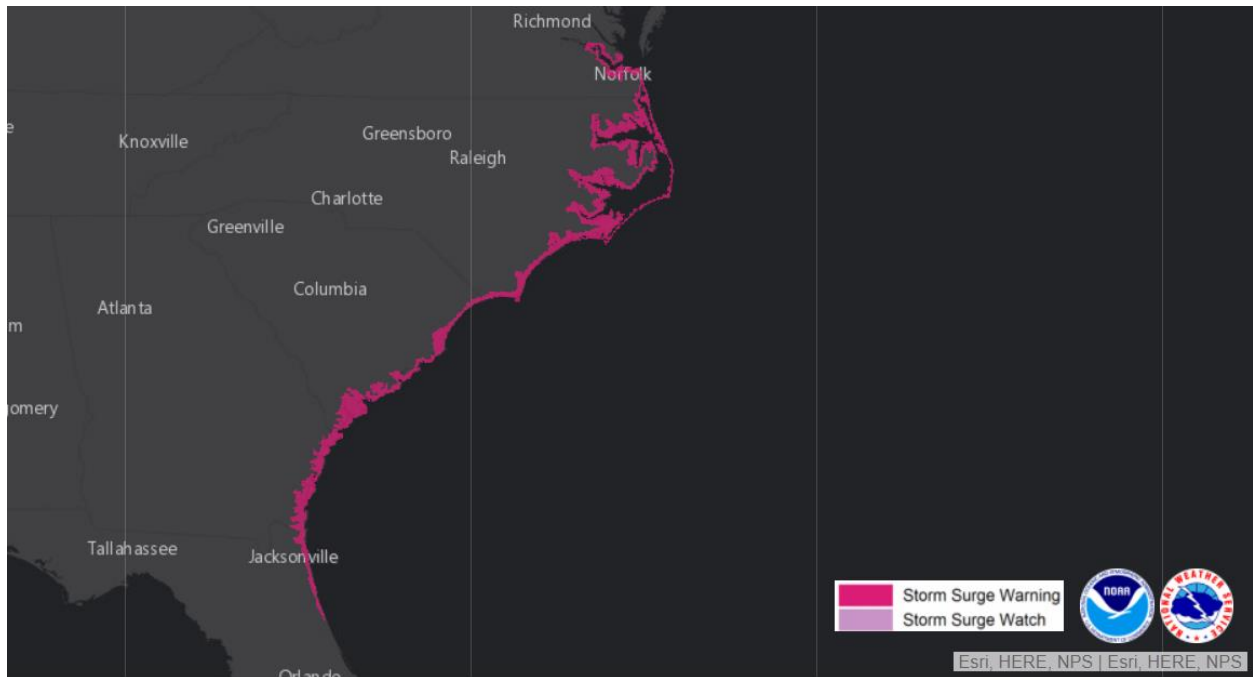
Wind Probabilities (≥ 60 mph (95 kph))



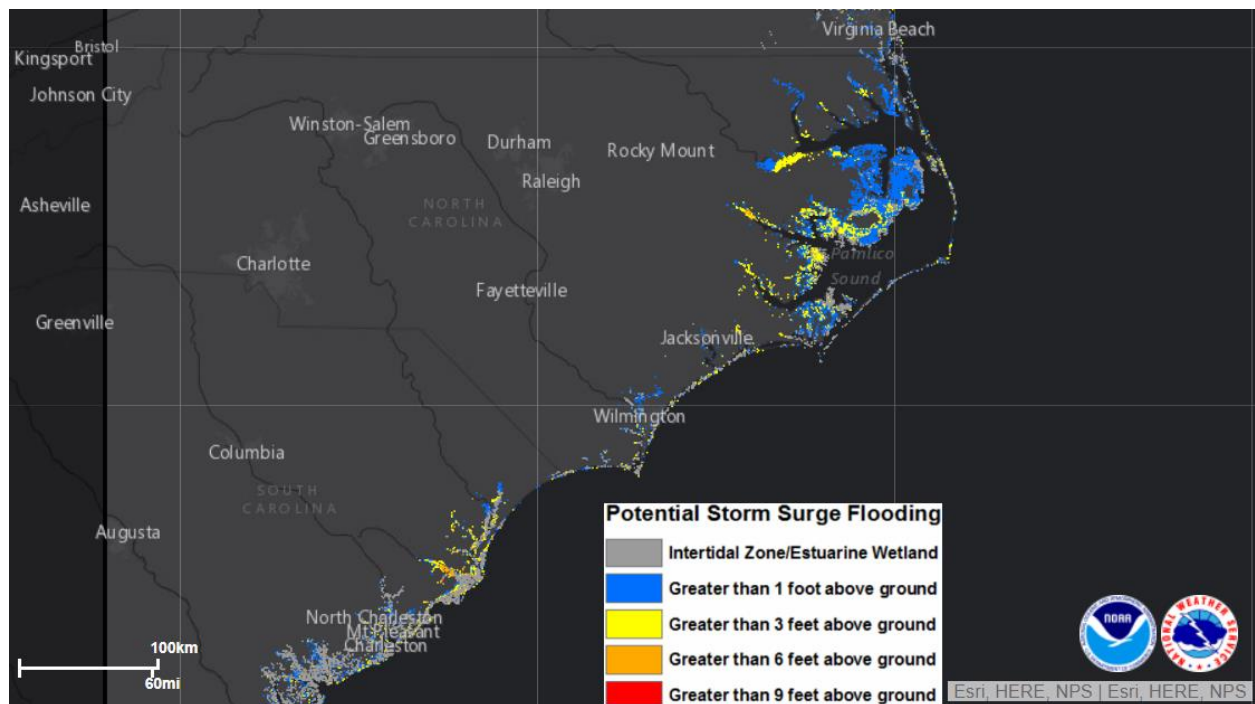
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



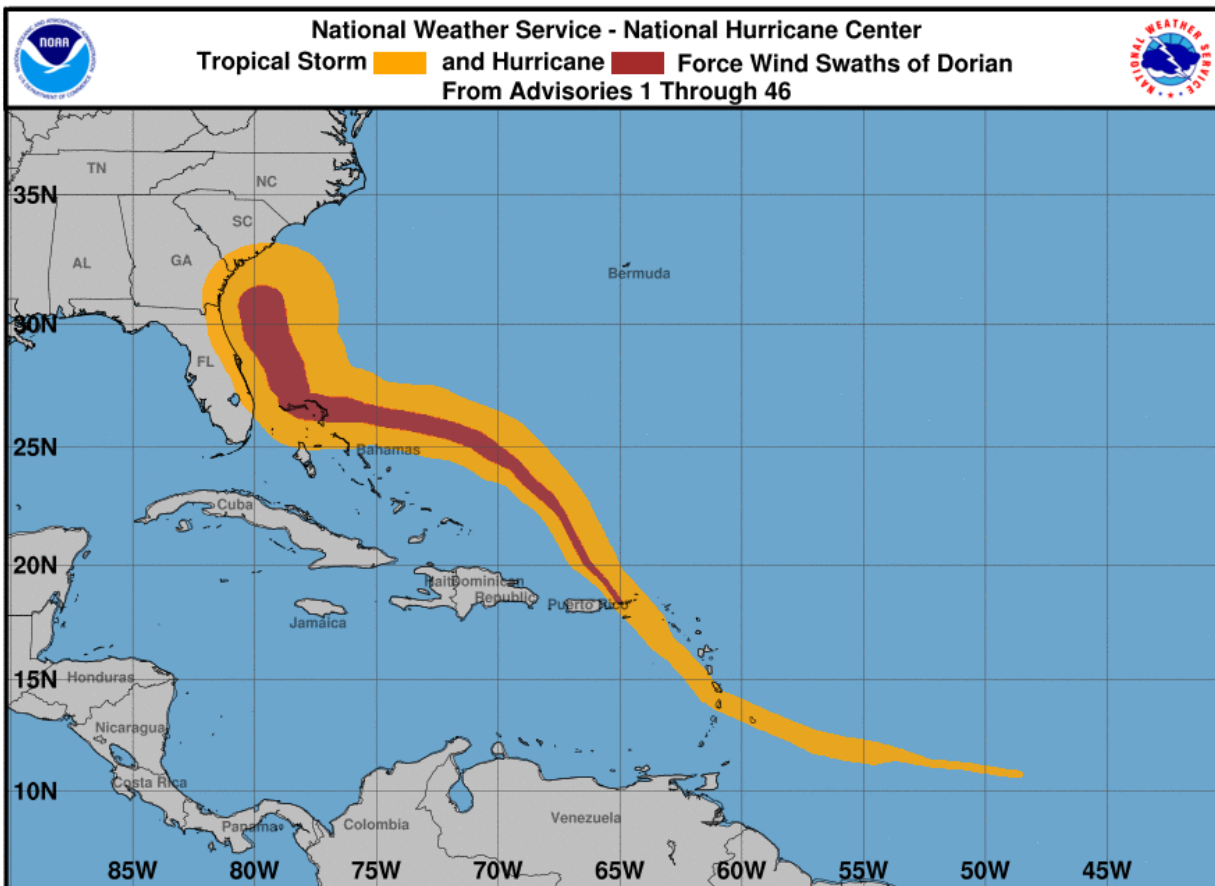
United States: Storm Surge Watches & Warnings



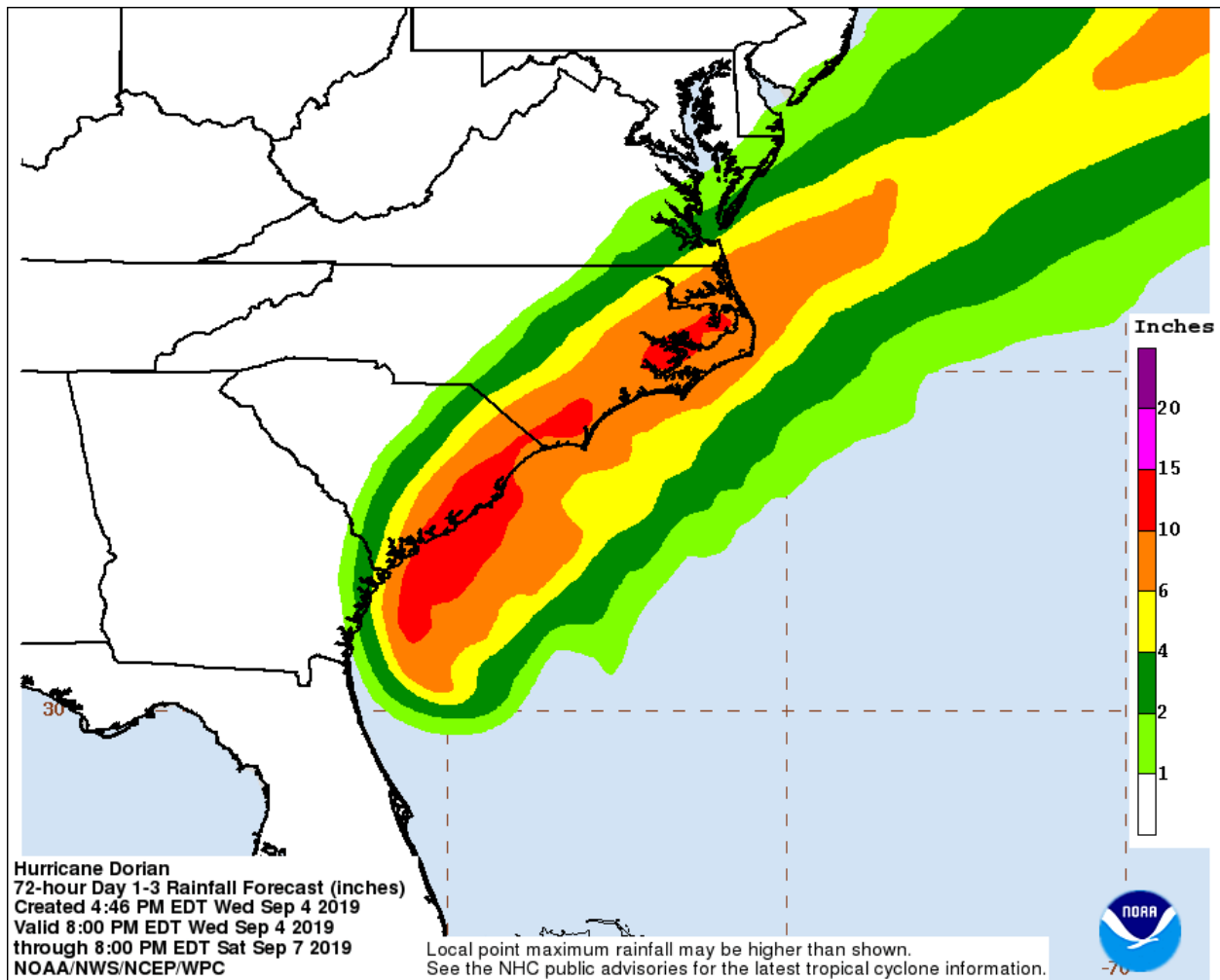
United States: Storm Surge Inundation



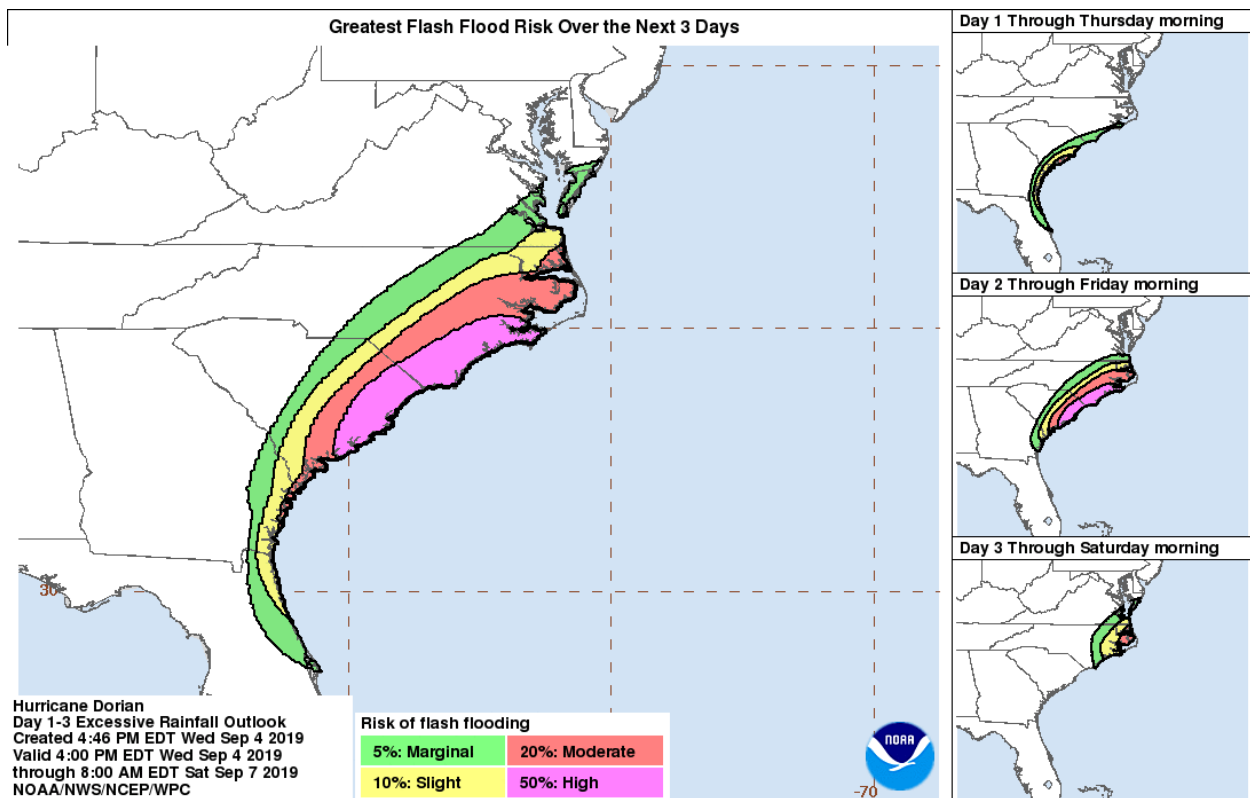
Wind Swath History



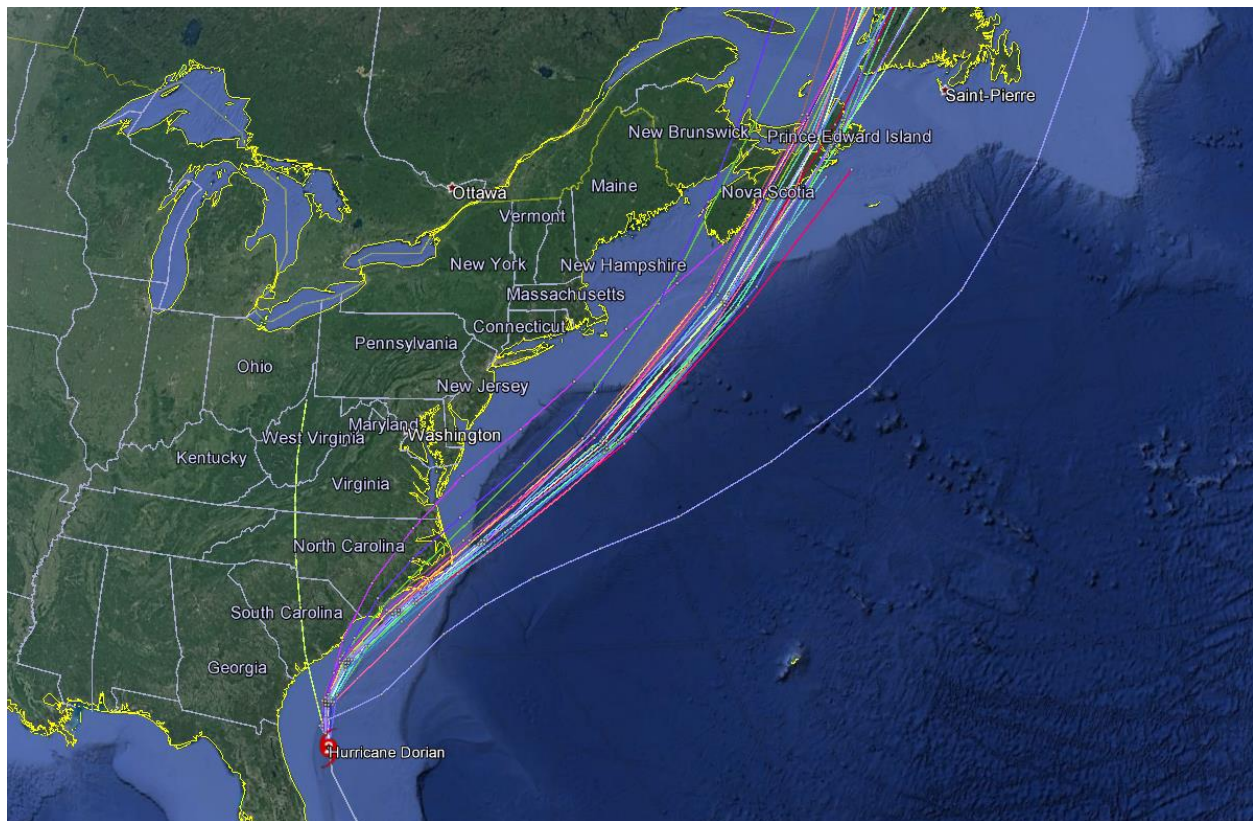
Weather Prediction Center: U.S. Rainfall Forecast



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 morning after 10:00 AM Central Time (15:00 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			Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone			
85	100	160									
90	105	170									
95	110	175	Cat. 3 Major Hurricane			Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone			Very Intense Tropical Cyclone	Super Cyclonic Storm
100	115	185									
105	120	195									
110	125	205									
115	130	210	Cat. 4 Major Hurricane			Super Typhoon					
120	140	220									
125	145	230									
130	150	240									
135	155	250	Cat. 5 Major Hurricane								
140	160	260									
>140	>160	>260									

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