

Current Watches and Warnings

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

A *Storm Surge Warning* is in effect from north of Port Canaveral, FL to the North Carolina/Virginia border; Pamlico and Albemarle Sounds (NC); Neuse and Pamlico Rivers (NC)

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 Volusia/Brevard County, FL line to Savannah River

A *Storm Surge Watch* is in effect from the North Carolina/Virginia border to Poquoson, VA, including Hampton Roads

A *Tropical Storm Watch* is in effect from the North Carolina/Virginia border to Chincoteague, VA; Chesapeake Bay from Smith Point southward

Current Details from the National Hurricane Center (NHC)

COORDINATES: 29.8° north, 79.7° west

LOCATION: 205 miles (335 kilometers) south of Charleston, South Carolina

MOVEMENT: north-northwest at 9 mph (15 kph)

WINDS: 105 mph (165 kph) with gusts to 125 mph (205 kph)

RADIUS OF TROPICAL STORM-FORCE WINDS: 175 miles (280 kilometers)

RADIUS OF HURRICANE-FORCE WINDS: 70 miles (110 kilometers)

MINIMUM CENTRAL PRESSURE: 964 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 2

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

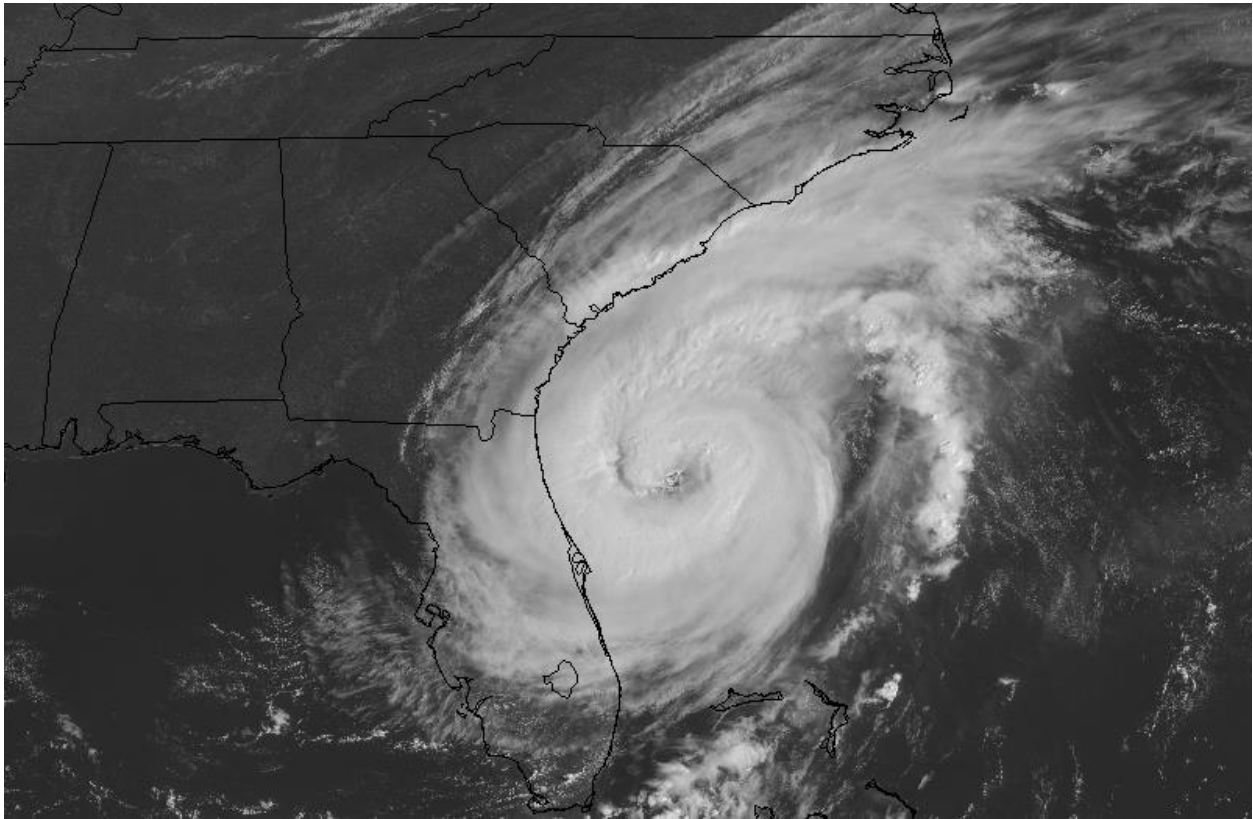
1st LANDFALL TIMEFRAME: approximately 12:40 PM local time (16:40 UTC) September 1

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: LOW/MEDIUM

Latest Satellite Picture



Source: NASA/NOAA

Discussion

Hurricane Dorian, located approximately 205 miles (335 kilometers) south of Charleston, South Carolina and is currently tracking north-northwest at 9 mph (15 kph). Satellite imagery indicates that the cloud tops in the eyewall of Dorian have cooled significantly during the past few hours, with the eye becoming better defined in NOAA Doppler radar data. Despite the better appearance, recent data from an Air Force Reserve Hurricane Hunter aircraft show that the hurricane has changed little in intensity, with maximum winds remaining near 105 mph (165 kph) and the central pressure near 964 millibars. Hurricane-force winds remain about 55 miles (90 kilometers) offshore the coast of northeast Florida, though surface observations show that tropical storm-force winds are now affecting this area.

Dorian is moving at a slightly faster north-northwest pace as it rounds the western periphery of a ridge of high pressure. It will start to recurve north and northeastward into the mid-latitude westerlies during the next 24 to 48 hours. This motion should bring the center of Dorian near or over the coast of North Carolina in the next 36 to 48 hours. After that time, the cyclone is forecast to accelerate northeastward into the Atlantic toward the Canadian Maritimes, with a quick northeast motion continuing for the remainder of the cyclone's life. Since the forecast model track guidance is very tightly clustered, the NHC has made only minor changes from the previous forecast. It remains worth mentioning that the track remains very close and nearly parallel to the U.S. Southeast coastline. Any slight wobble or deviation to the left could bring the center of Dorian 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 during the next two days. Due to these conditions, the storm should maintain Category 2 intensity as it passes very near the U.S. Southeast coast. After 48 hours, the combination of increasing wind shear and entrainment of dry air into the storm's circulation should cause a weakening trend. An extratropical transition should begin in about three days, where the NHC forecasts Dorian to become a hurricane-force extratropical low as it tracks near or over 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 surge 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 and the coasts of Georgia, South Carolina, North Carolina, 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. The risk of dangerous storm surge, wind, and rain impacts along portions of the Virginia coast and the southern Chesapeake Bay continues to increase. Residents in these areas should continue to monitor the progress of Dorian.
3. 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 northeastern coast of Florida and should begin along the Georgia coast later this morning.

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

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

Volusia/Brevard County Line, FL to Savannah River: 3 to 5 feet

North of Port Canaveral, FL to Volusia/Brevard County Line, FL: 2 to 4 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 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: 5 to 10 inches, isolated 15 inches

Atlantic Coast from Daytona Beach, Florida to the Georgia-South Carolina border: 3 to 6 inches, with isolated 9 inches near the Georgia coast

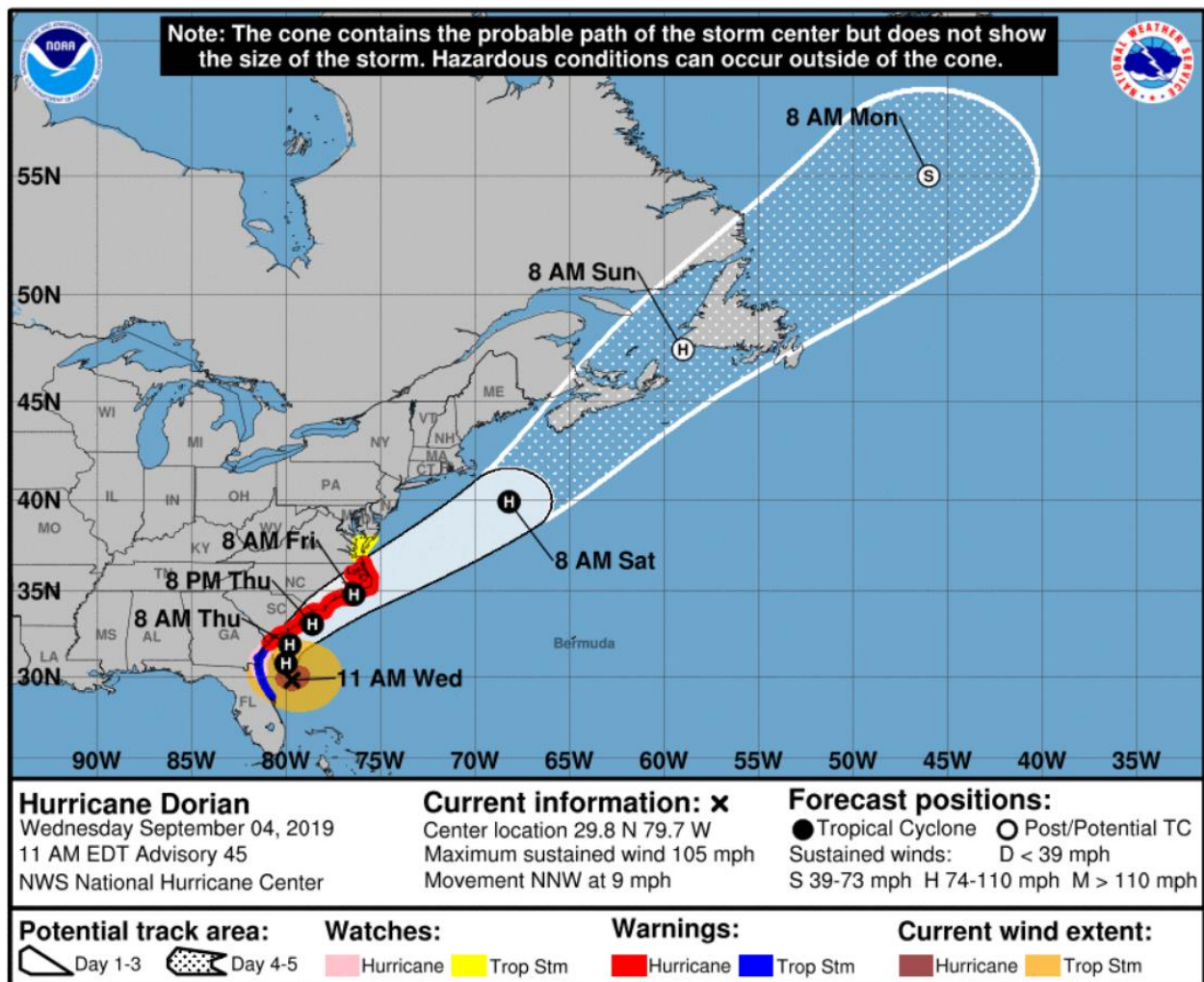
Southeast Virginia: 3 to 6 inches

This rainfall may cause life-threatening flash floods.

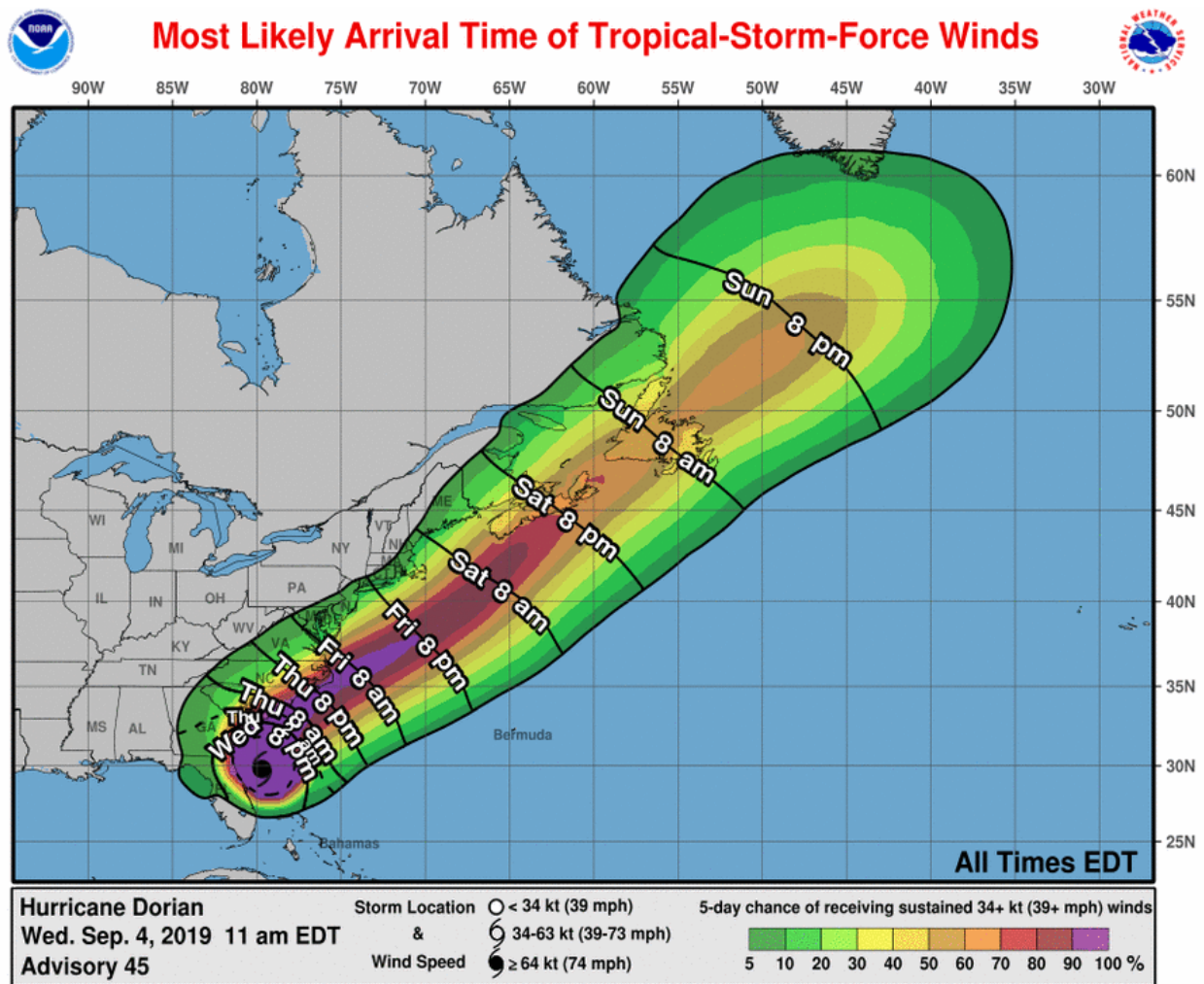
SURF: Large swells will affect the northwestern Bahamas, and the entire southeastern United States coast from Florida through North Carolina during the next several days. These swells are likely to cause life-threatening surf and rip current conditions.

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

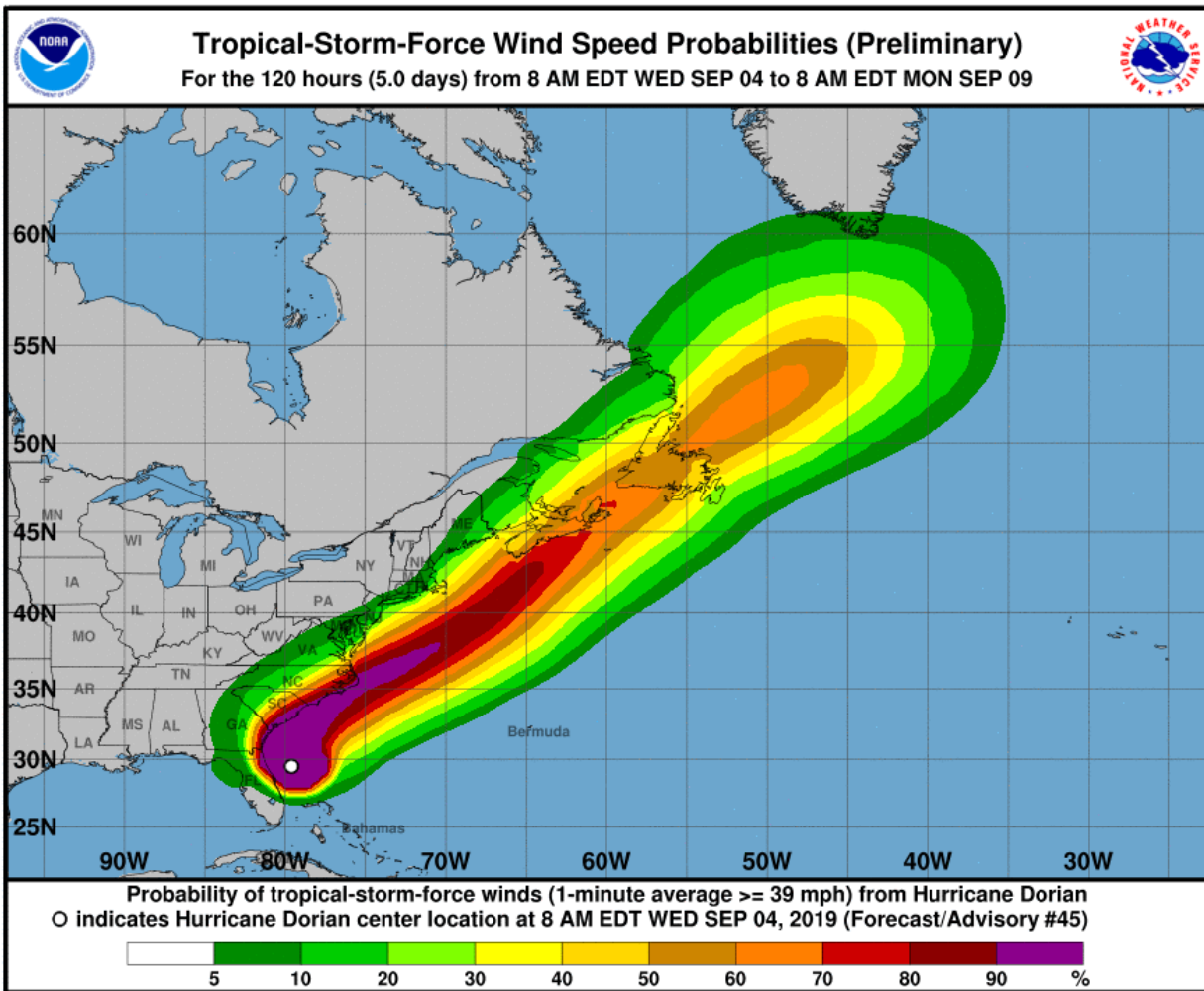


Most Likely Arrival Time of Tropical Storm-Force Winds

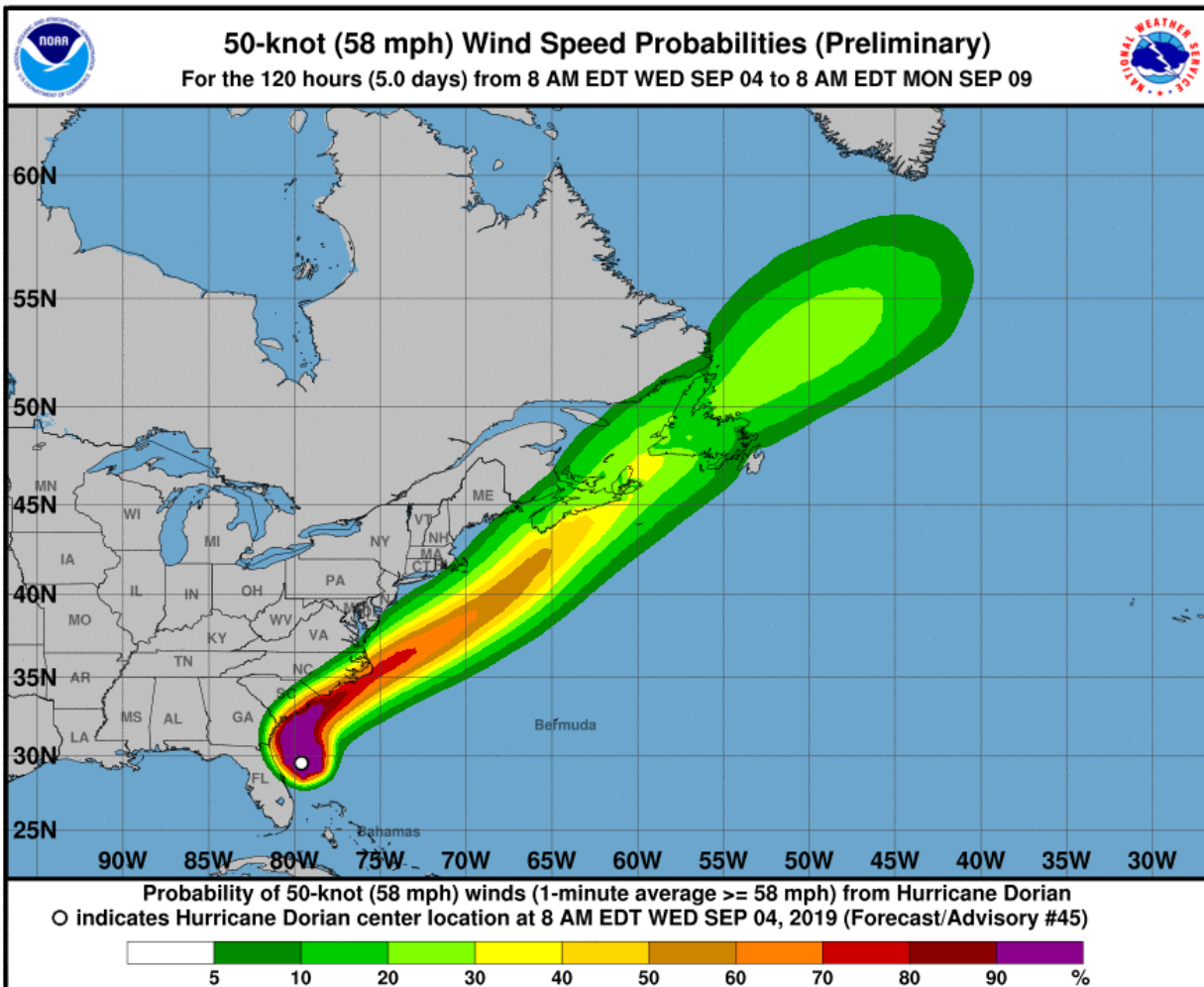


National Hurricane Center: Wind Speed Probabilities

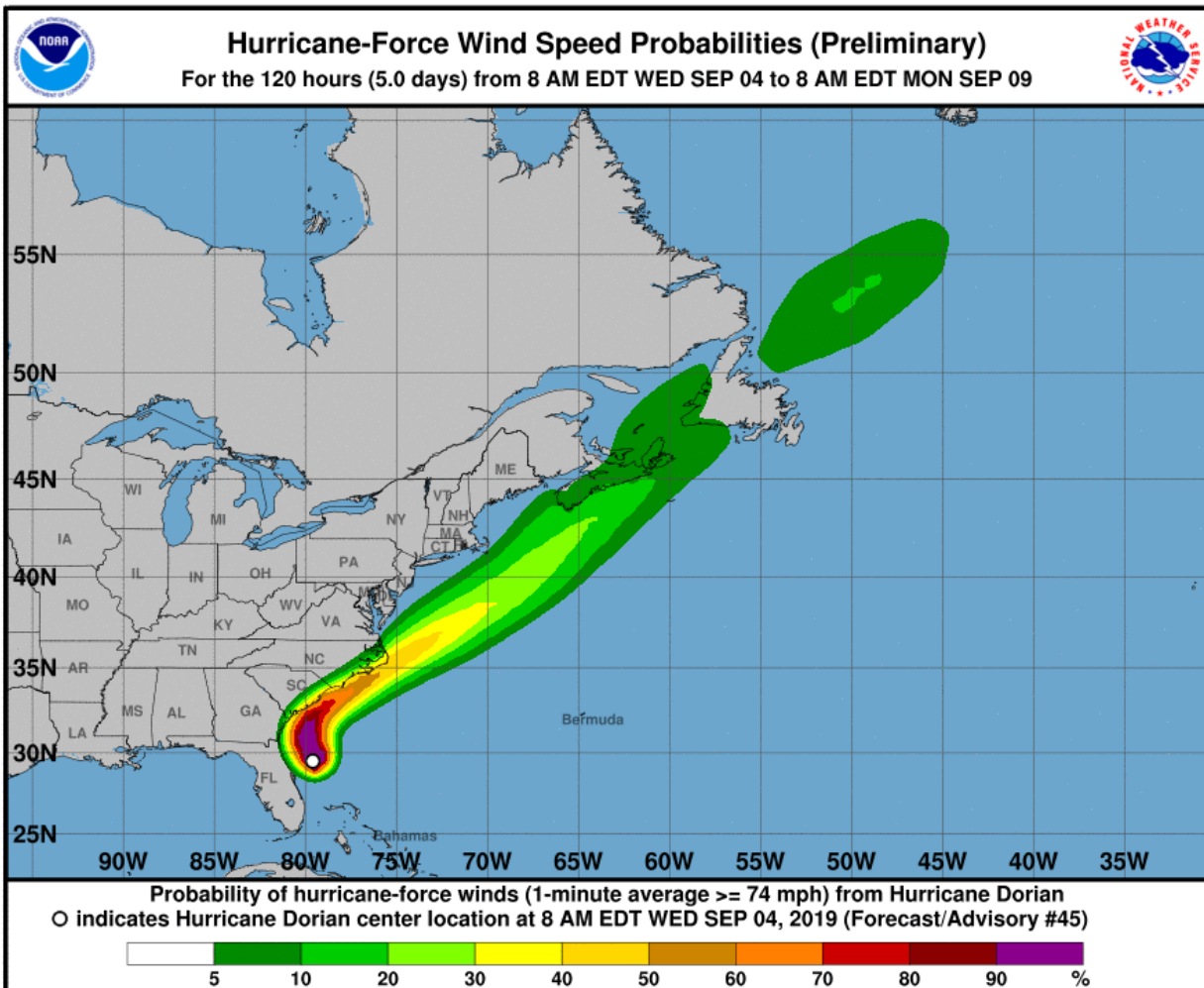
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



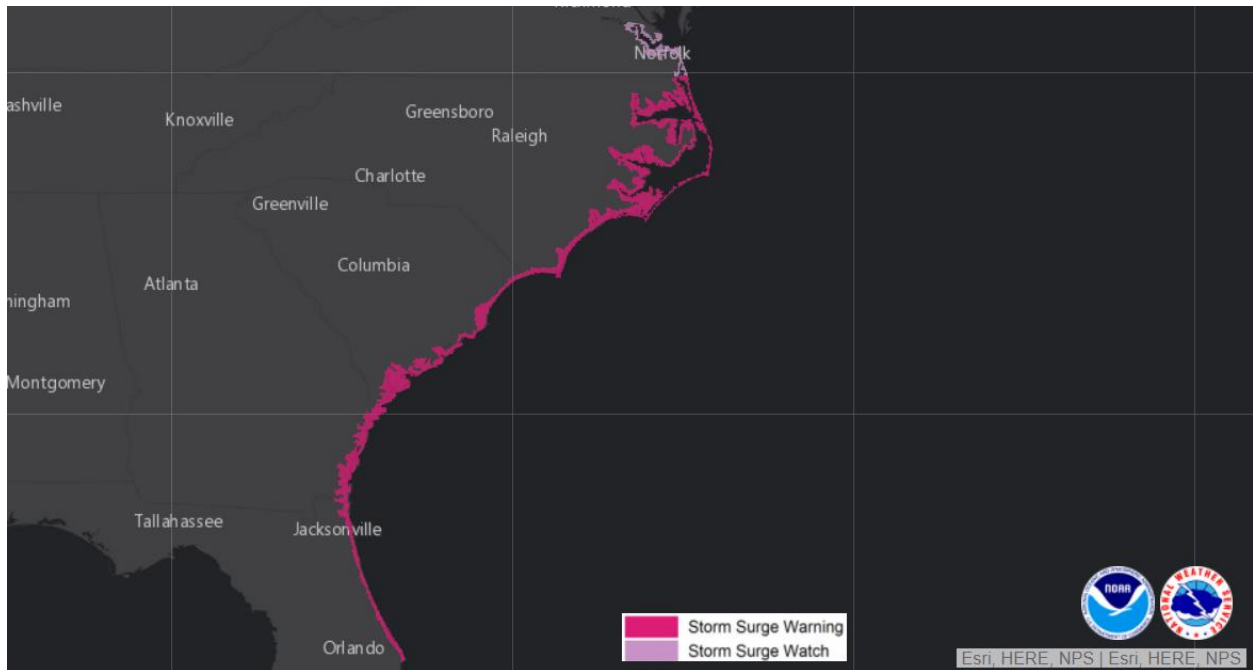
Wind Probabilities (≥ 60 mph (95 kph))



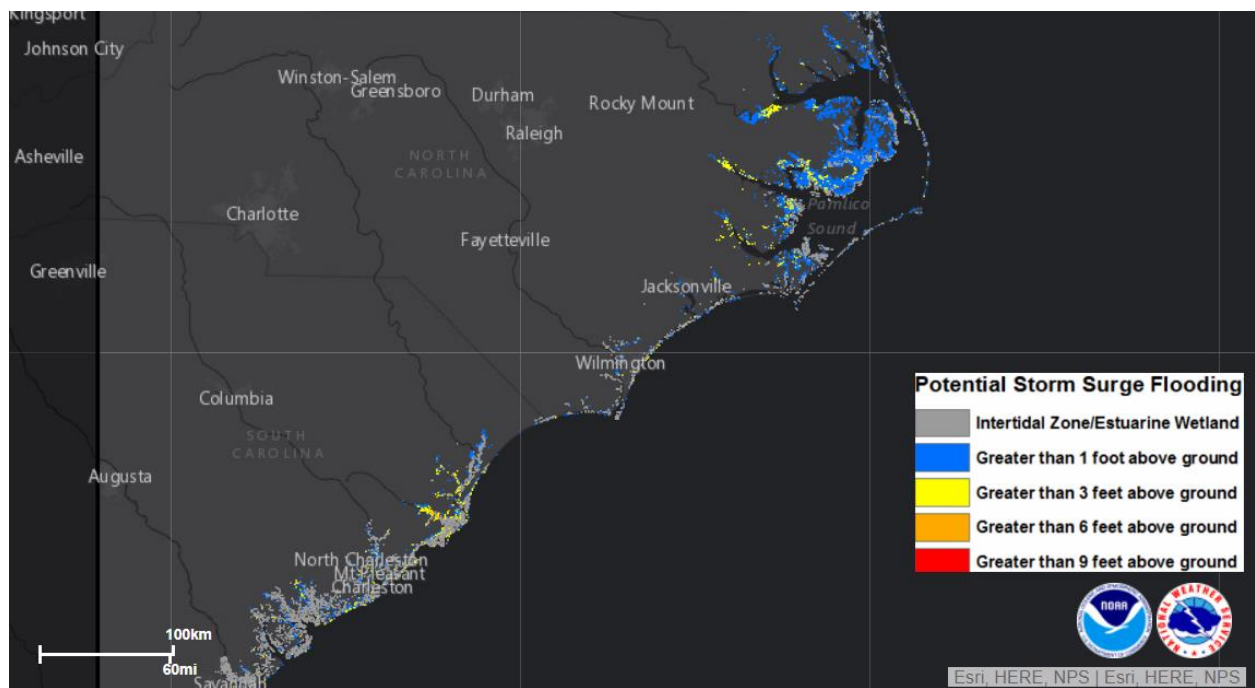
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



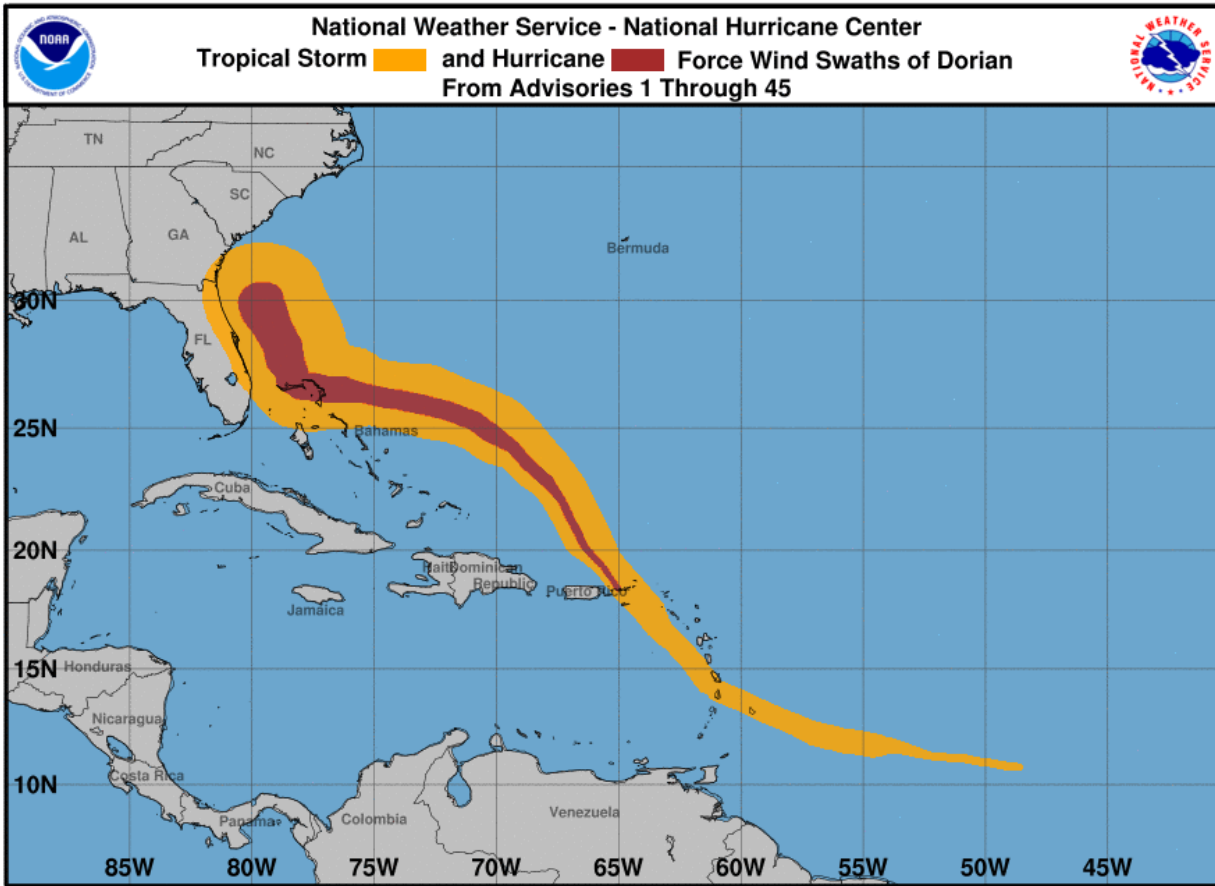
United States: Storm Surge Watches & Warnings



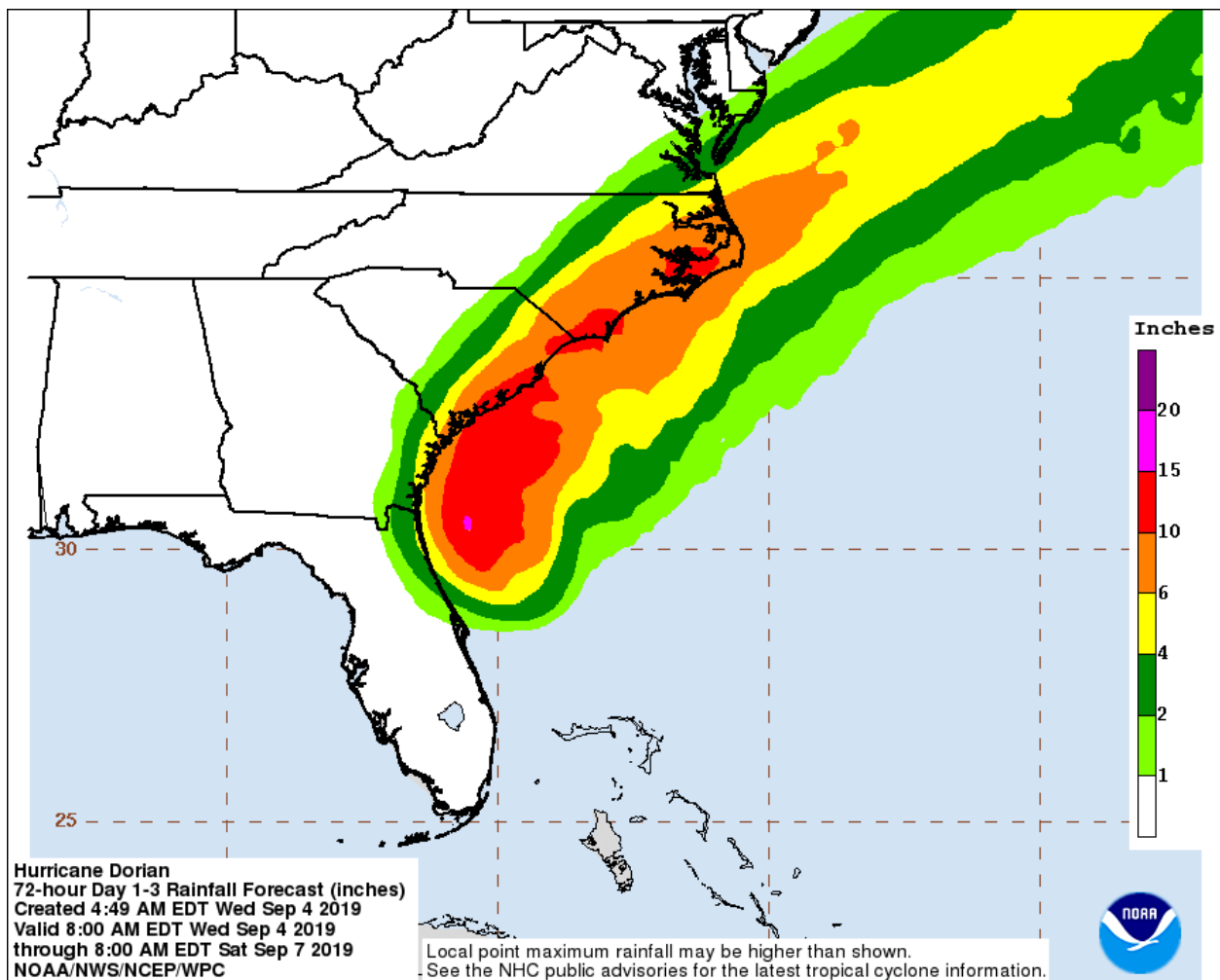
United States: Storm Surge Inundation



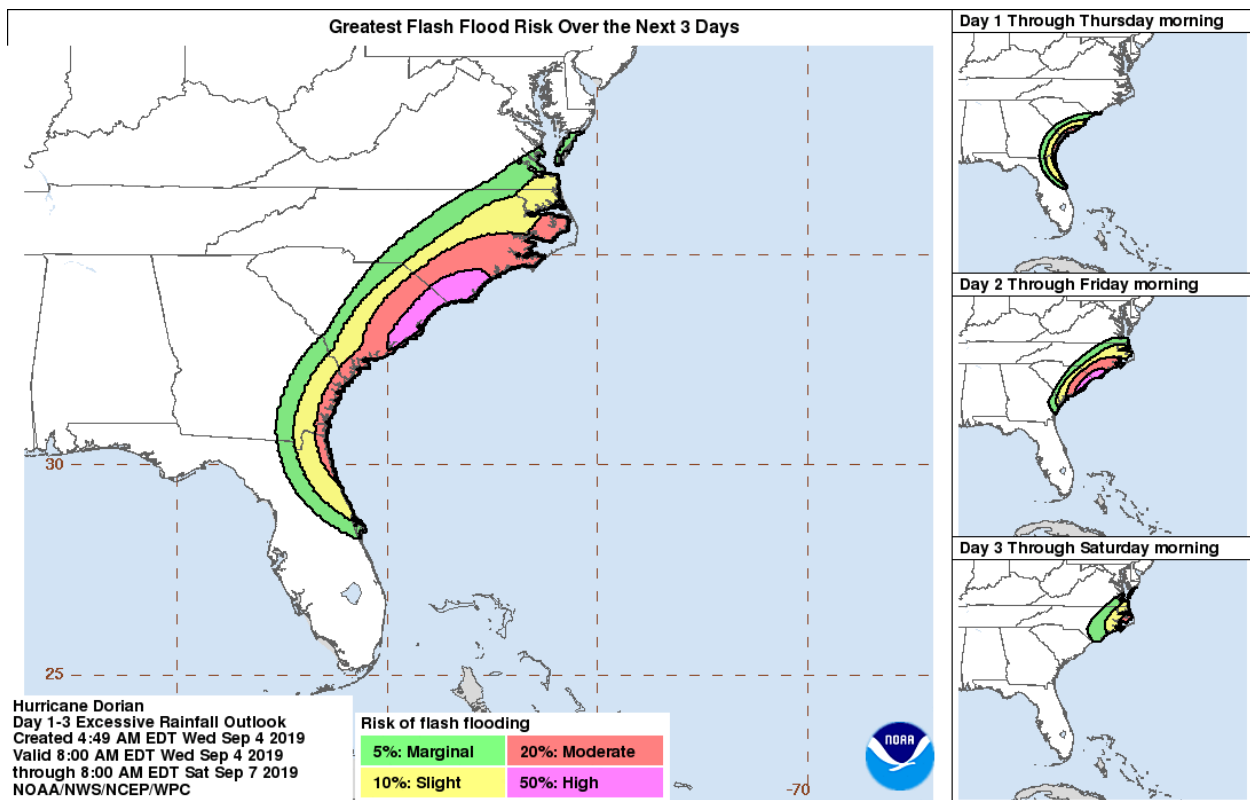
Wind Swath History



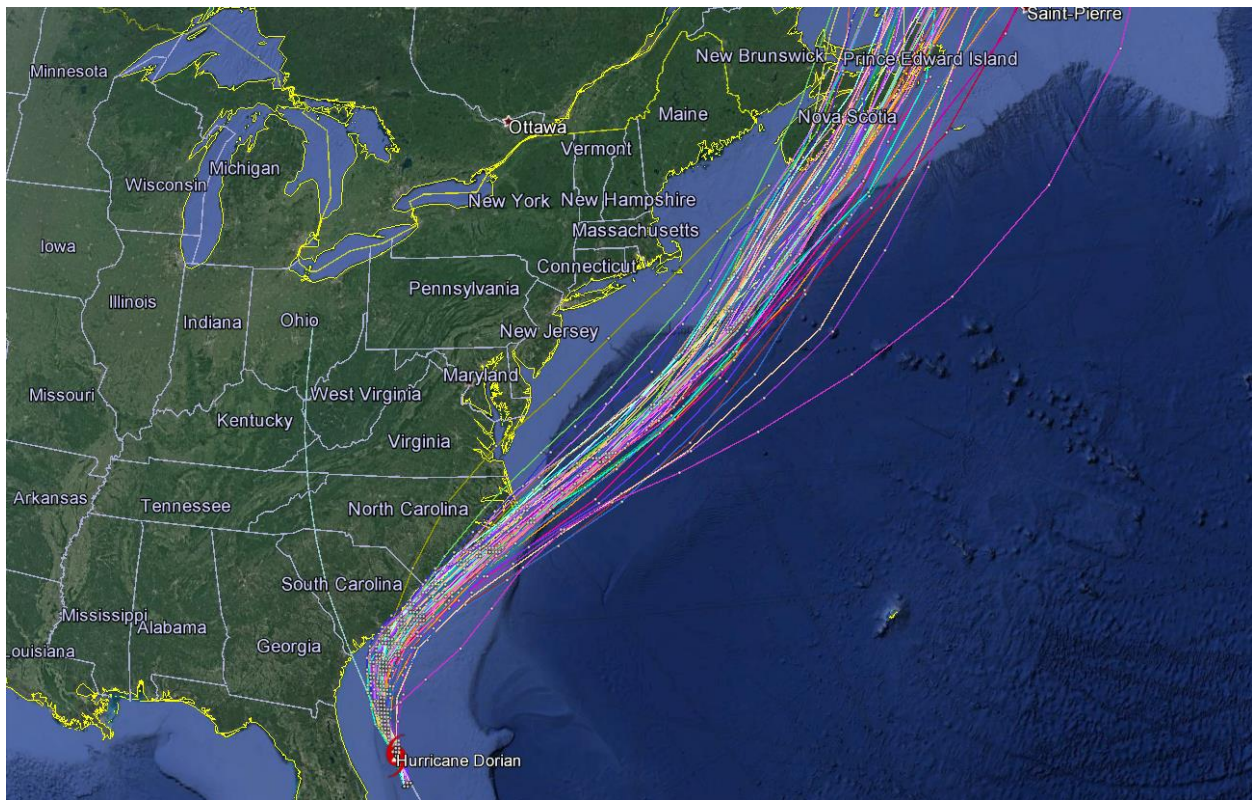
Weather Prediction Center: U.S. Rainfall Forecast



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: Wednesday 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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