

Current Watches and Warnings

A *Hurricane Warning* is in effect for Grand Bahama and the Abacos Islands in the northwestern Bahamas; Jupiter Inlet, FL to Ponte Vedra Beach, FL; north of Edisto Beach, SC to South Santee, River SC

A *Hurricane Watch* is in effect from north of Ponte Vedra Beach, FL to Edisto Beach, SC; north of South Santee River, SC to Duck, NC; Albemarle and Pamlico Sounds (NC)

A *Tropical Storm Warning* is in effect from north of Deerfield Beach, FL to Jupiter Inlet, FL; north of Ponte Vedra Beach, FL to Edisto Beach, SC

A *Storm Surge Warning* is in effect from Jupiter Inlet, FL to South Santee River, SC

A *Storm Surge Watch* is in effect from north of South Santee River, SC to Cape Lookout, NC

A *Tropical Storm Watch* is in effect for Lake Okeechobee

Current Details from the National Hurricane Center (NHC)

COORDINATES: 27.1° north, 78.6° west

LOCATION: 45 miles (70 kilometers) north of Freeport, Grand Bahama Island

MOVEMENT: northwest at 2 mph (4 kph)

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

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

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

MINIMUM CENTRAL PRESSURE: 955 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 2

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

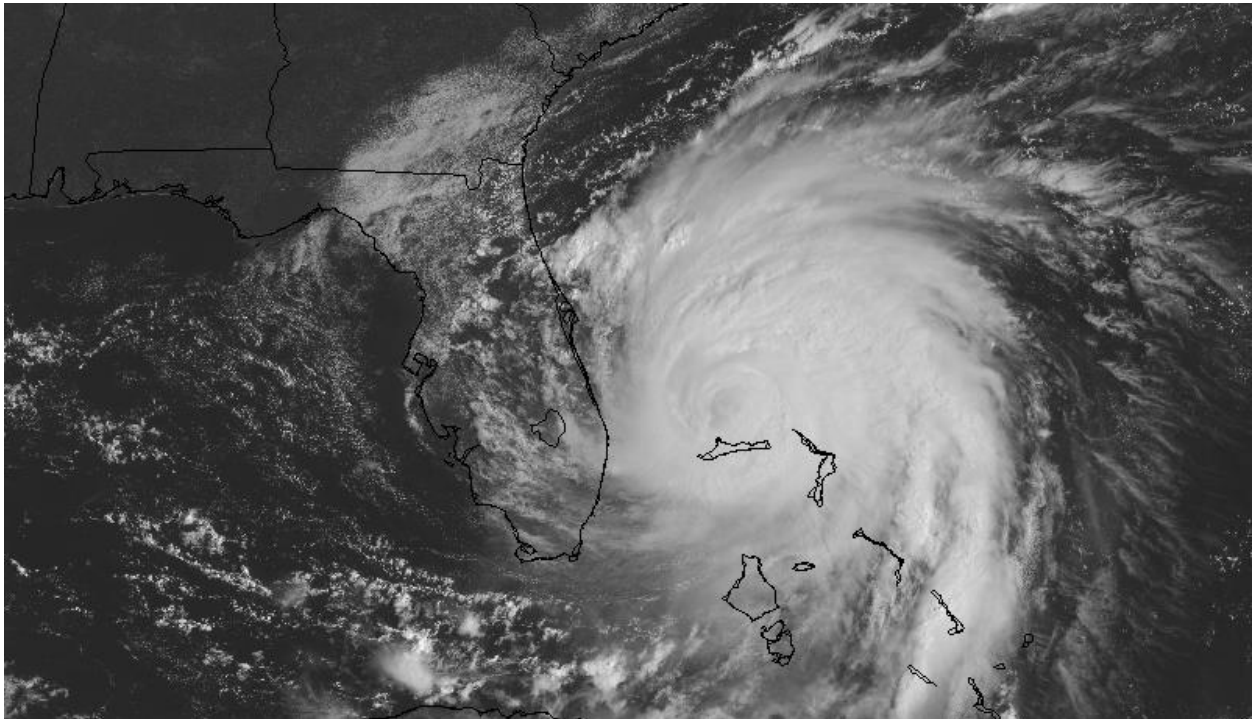
1st LANDFALL TIMEFRAME: approximately 12:45 PM local time (16:45 UTC) September 1

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 45 miles (70 kilometers) north of Freeport, Grand Bahama Island and is currently tracking northwest at 2 mph (4 kph). Recent radar and aircraft data show that Dorian has finally begun to move slowly northwestward, but dangerous winds and life-threatening storm surge will continue over Grand Bahama Island for much of today. The eye has become cloud filled, and also a bit more ragged looking despite increasing in size. Recent reports from reconnaissance aircraft and data buoys indicate that the overall wind field of the hurricane is slowly expanding, while the peak winds have slightly decreased. The NHC has set an initial intensity at 110 mph (175 kph); now a Category 2 hurricane. As Dorian moves near the east coast of Florida during the next day or two, little overall change in intensity is anticipated. After that time, increasing wind shear should result in a gradual decrease in the peak wind speed while the hurricane gains latitude and grows in size.

As mentioned, the initial motion now slowly towards the northwest. An upper-level frontal boundary moving into the Great Lakes region is forecast to amplify another dip in the jet stream along the east coast of the United States on Wednesday. This should allow Dorian to begin moving slightly faster toward the north-northwest during the next 36 hours, followed by a northward and then northeastward motion near or over the coasts of South and North Carolina. After moving offshore of the Outer Banks, Dorian should get caught in the mid-latitude westerlies and accelerate northeastward. The NHC track is along the western edge of the track models through 36 hours, and a blend of the faster GFS (U.S.) and slower ECMWF (Euro) models.

Although the official NHC forecast does not show Dorian making landfall along the Florida east coast, the increasing size of Dorian's wind field along with any deviation to the left of the forecast track will bring hurricane-force winds onshore along portions of the Florida east coast.

The new NHC forecast has necessitated numerous changes to watches and warnings along the U.S. Southeast coast.

Key Messages from the National Hurricane Center

1. Dangerous winds and storm surge will continue to affect Grand Bahama Island for several more hours. Everyone there should remain in shelter.
2. Life-threatening storm surge and dangerous winds are expected along portions of the Florida east coast and the coasts of Georgia and South Carolina, regardless of the exact track of Dorian's center. Water levels could begin to rise well in advance of the arrival of strong winds. Residents in these areas should follow advice given by local emergency officials.
3. The risk of life-threatening storm surge and hurricane-force winds continues to increase along the coast of North Carolina. Residents in these areas should follow advice given by local emergency officials.
4. The flash flood threat will increase today and tonight along the Florida peninsula, then spread up the southeast and mid-Atlantic coast during the middle and latter part of the week.

Additional Information

WIND: Tropical storm and hurricane conditions will continue on Grand Bahama Island through tonight.

Hurricane conditions are expected within the Hurricane Warning area in Florida by this evening. Hurricane conditions are possible in the Hurricane Watch area as early as Wednesday and could spread northward within the watch through Thursday.

In South Florida, tropical storm conditions are expected within the Tropical Storm Warning area through today. Along the coast of northeastern Florida and Georgia, tropical storm conditions are expected within the Tropical Storm Warning area on Wednesday.

STORM SURGE: A life-threatening storm surge will raise water levels by as much as 10 to 15 feet above normal tide levels in areas of onshore winds on Grand Bahama Island. Near the coast, the surge will be accompanied by large and destructive waves. Water levels should very slowly subside on the Abaco Islands today.

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:

Flagler/Volusia County Line FL to Cape Lookout NC: 4 to 7 feet
Jupiter Inlet FL to the Flagler/Volusia County Line FL: 3 to 5 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:

Northwestern Bahamas: additional 2 to 4 inches, isolated storm totals over 30 inches

Coastal Carolinas: 5 to 10 inches, isolated 15 inches

Atlantic Coast from the Florida peninsula north of West Palm Beach (FL) through Georgia: 3 to 6 inches, isolated 9 inches

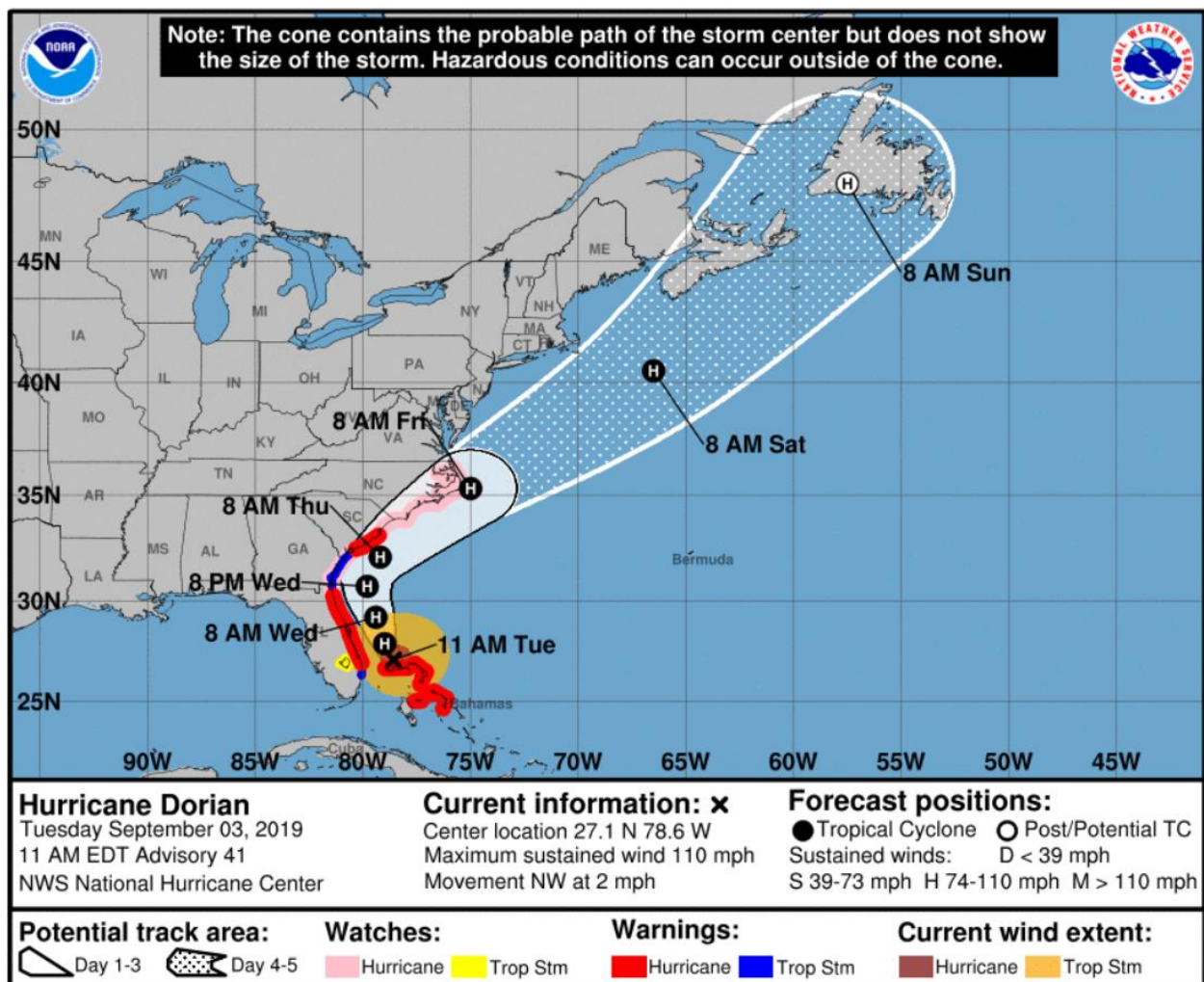
Southeast Virginia: 2 to 4 inches, isolated 6 inches

This rainfall may cause life-threatening flash floods.

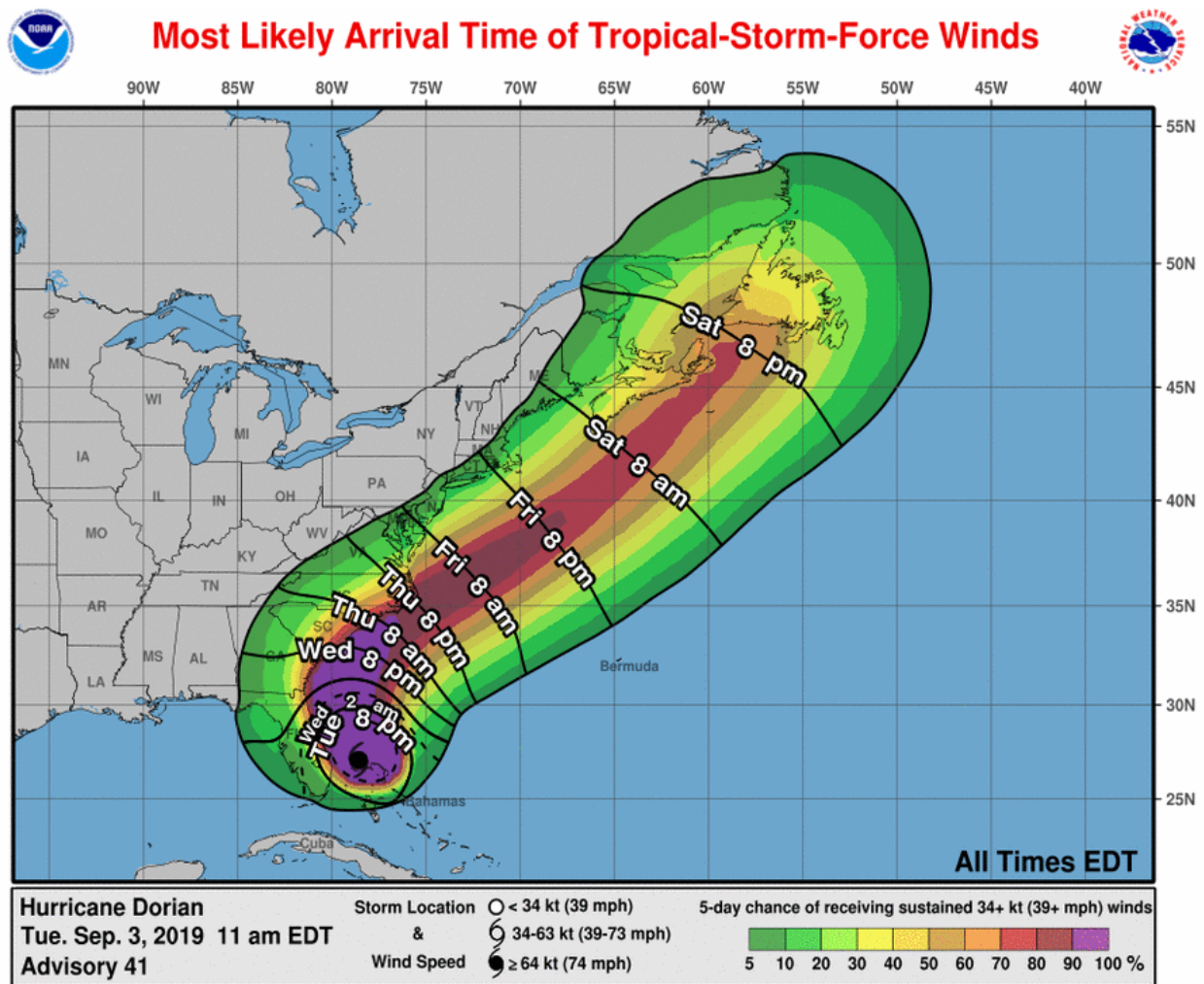
SURF: Large swells are affecting the northwestern Bahamas, the Florida east coast, and the coast of Georgia. These swells are expected to spread northward along much of the remainder of the southeastern United States coast during the next couple of days. These swells are likely to cause life-threatening surf and rip current conditions.

TORNADOES: A tornado or two are possible near the immediate east coast of Florida through tonight. This risk will shift to along the immediate coastal Georgia and the coastal Carolinas on Wednesday into Thursday.

National Hurricane Center (NHC) Forecast

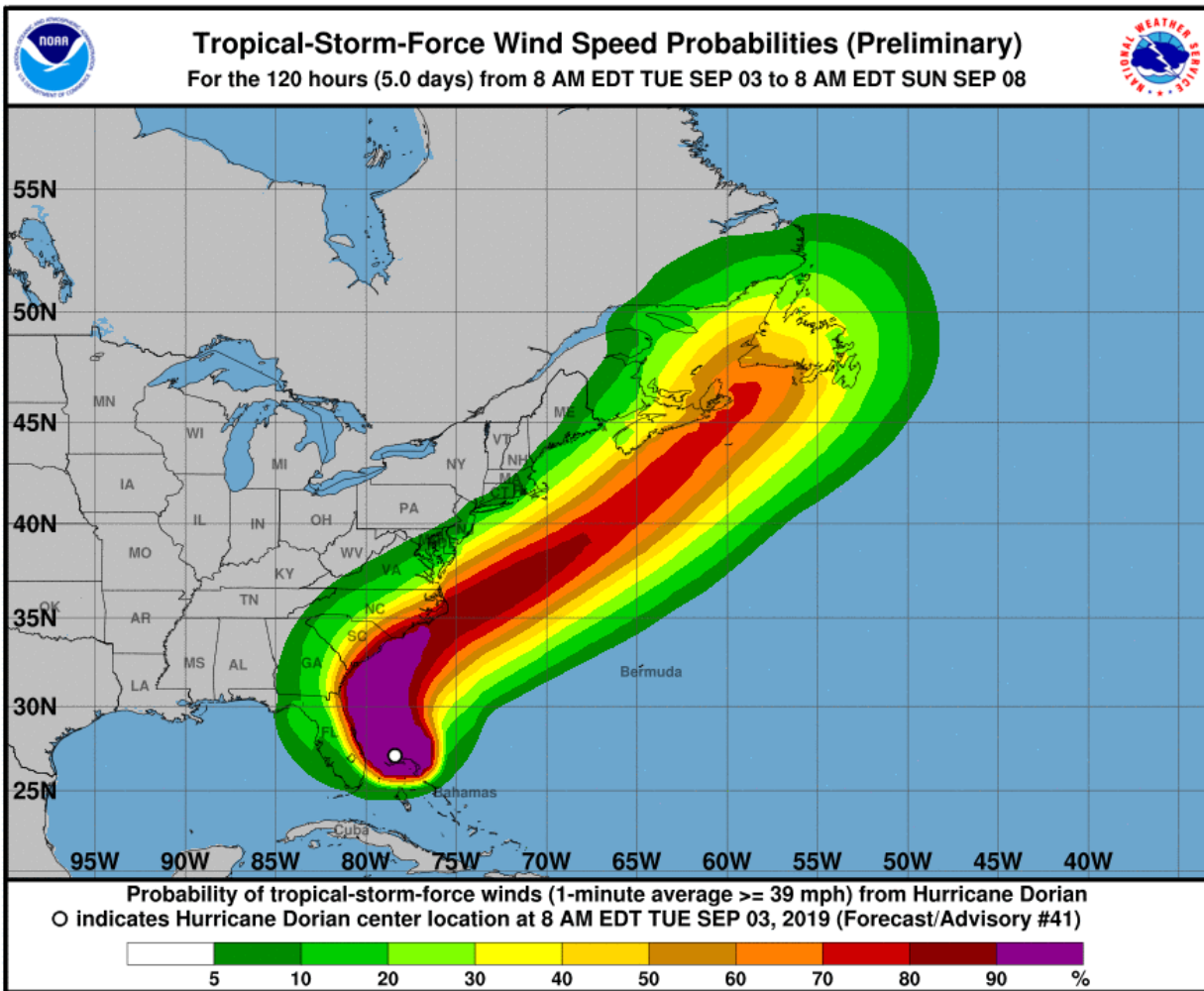


Most Likely Arrival Time of Tropical Storm-Force Winds

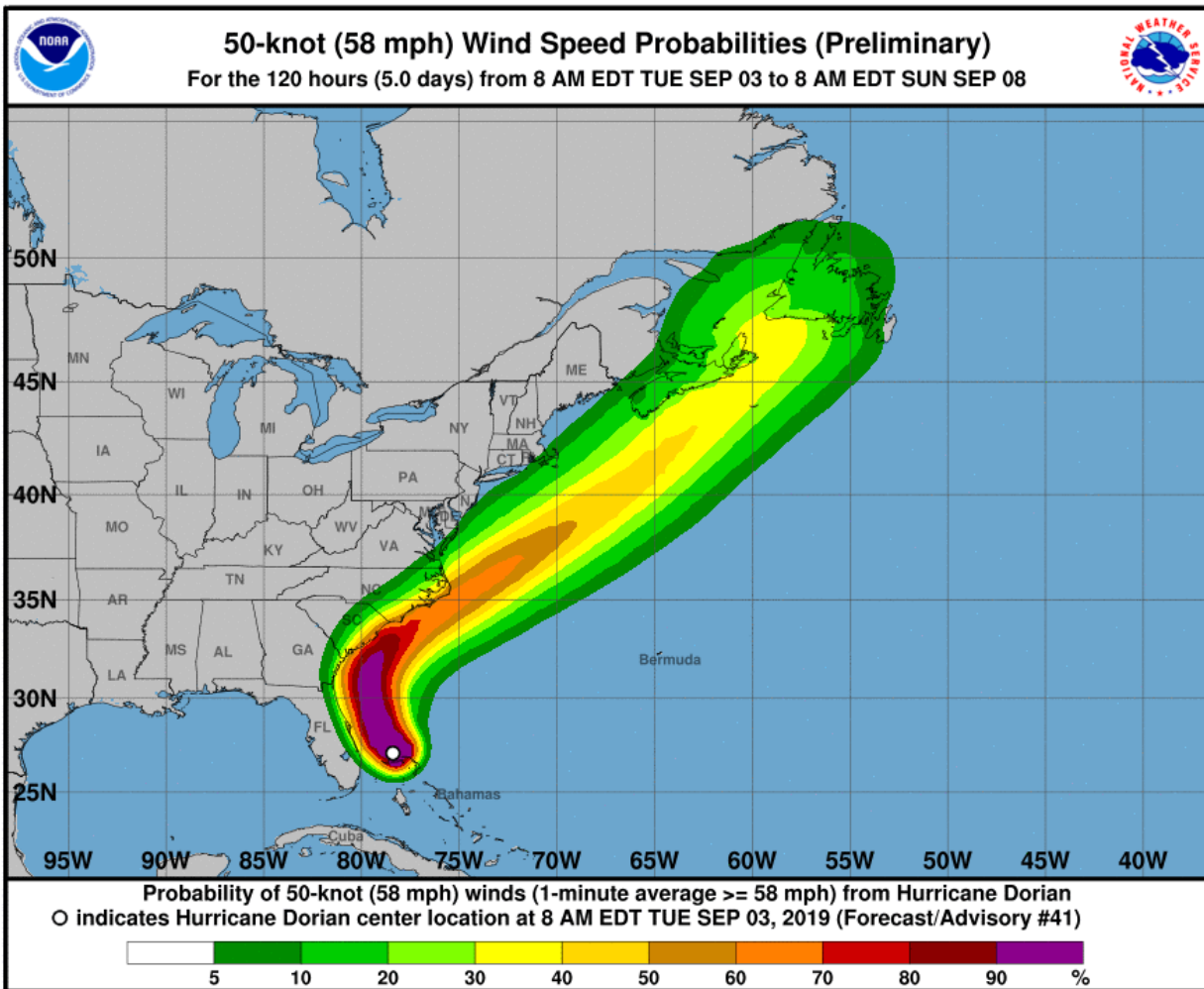


National Hurricane Center: Wind Speed Probabilities

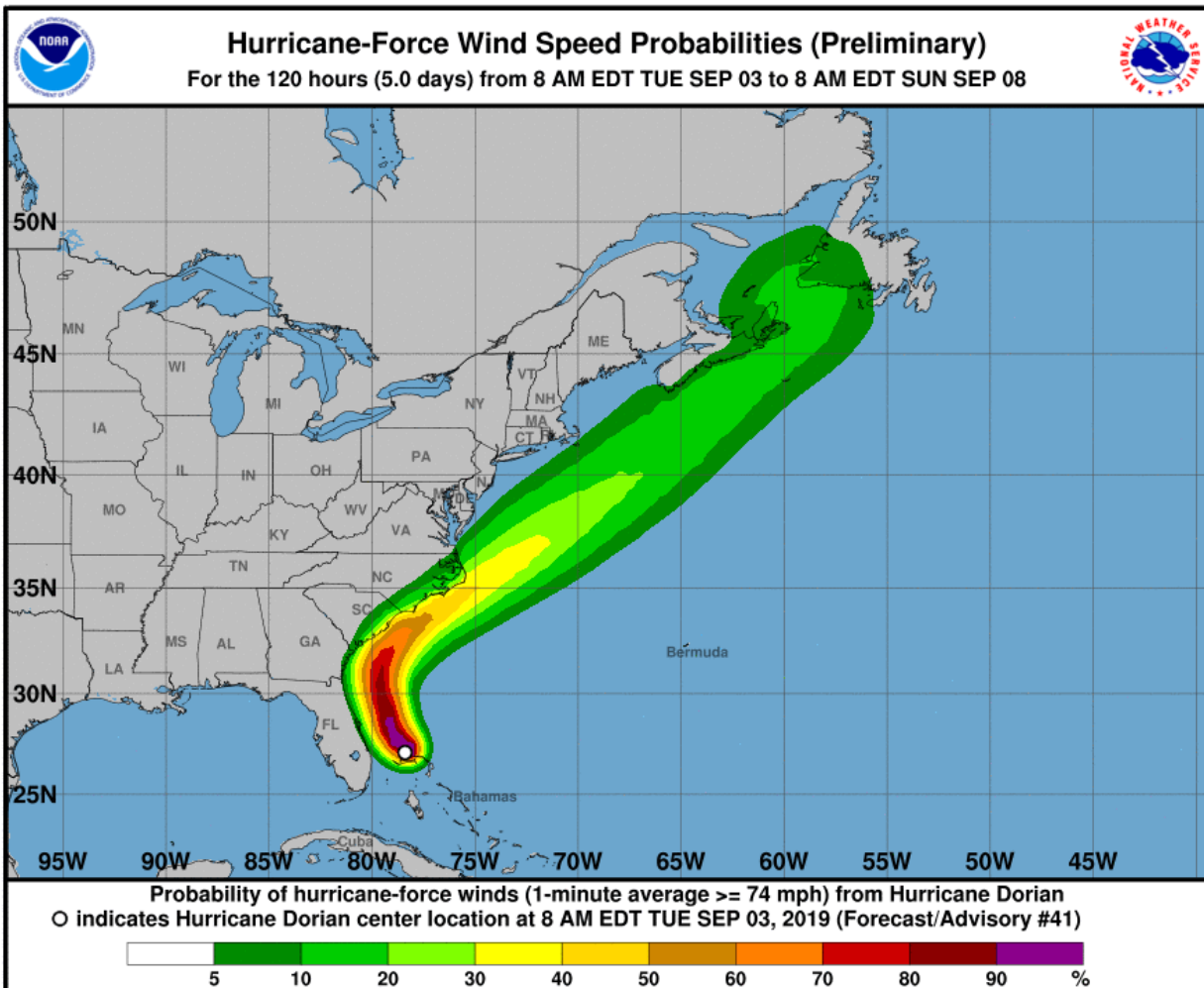
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



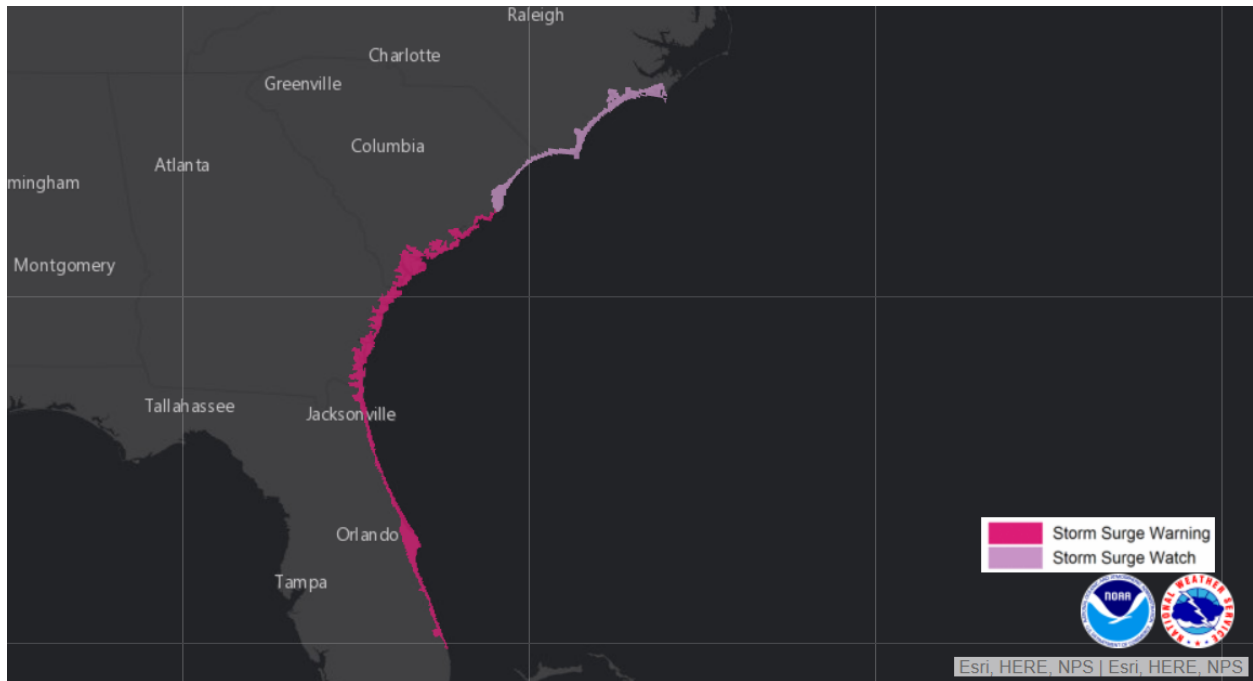
Wind Probabilities (≥ 60 mph (95 kph))



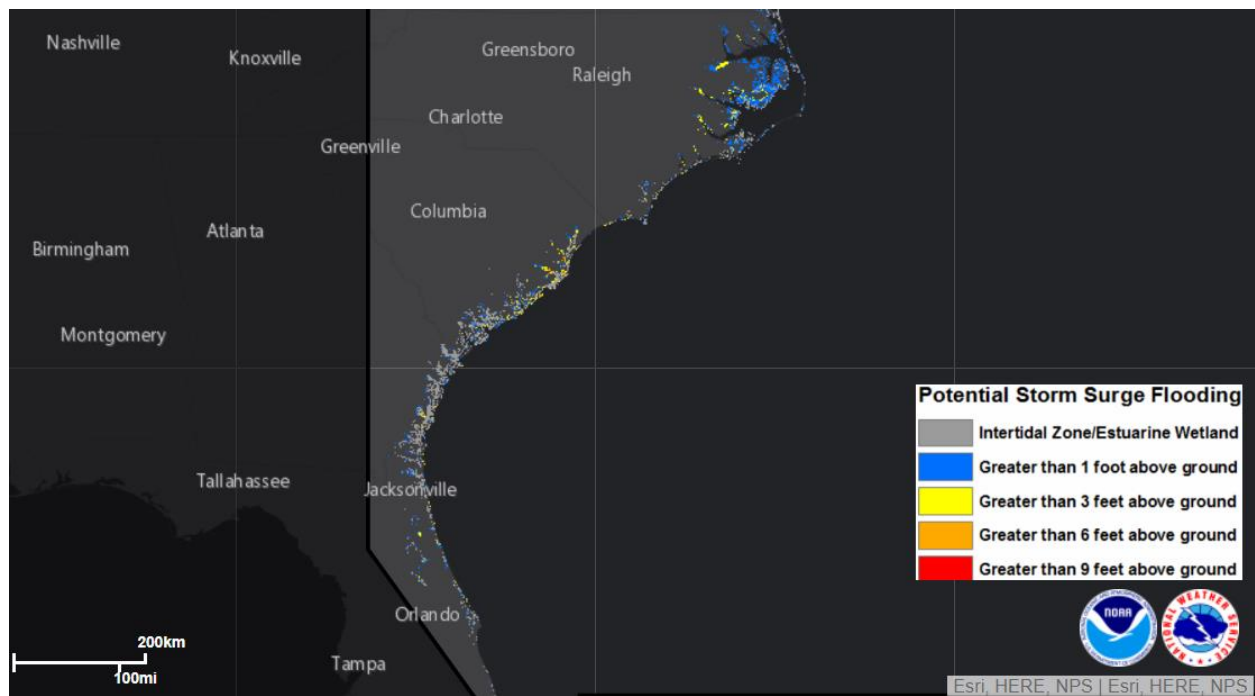
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



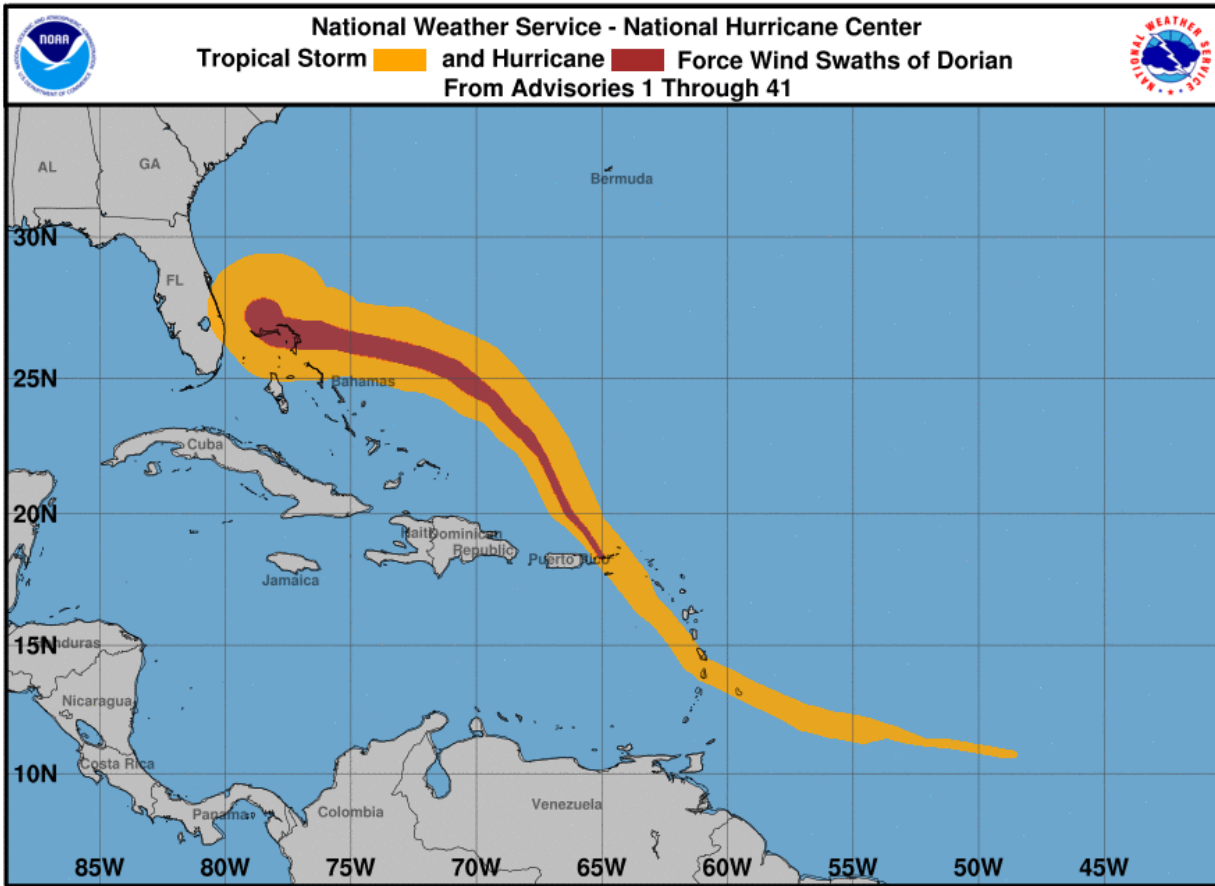
United States: Storm Surge Watches & Warnings



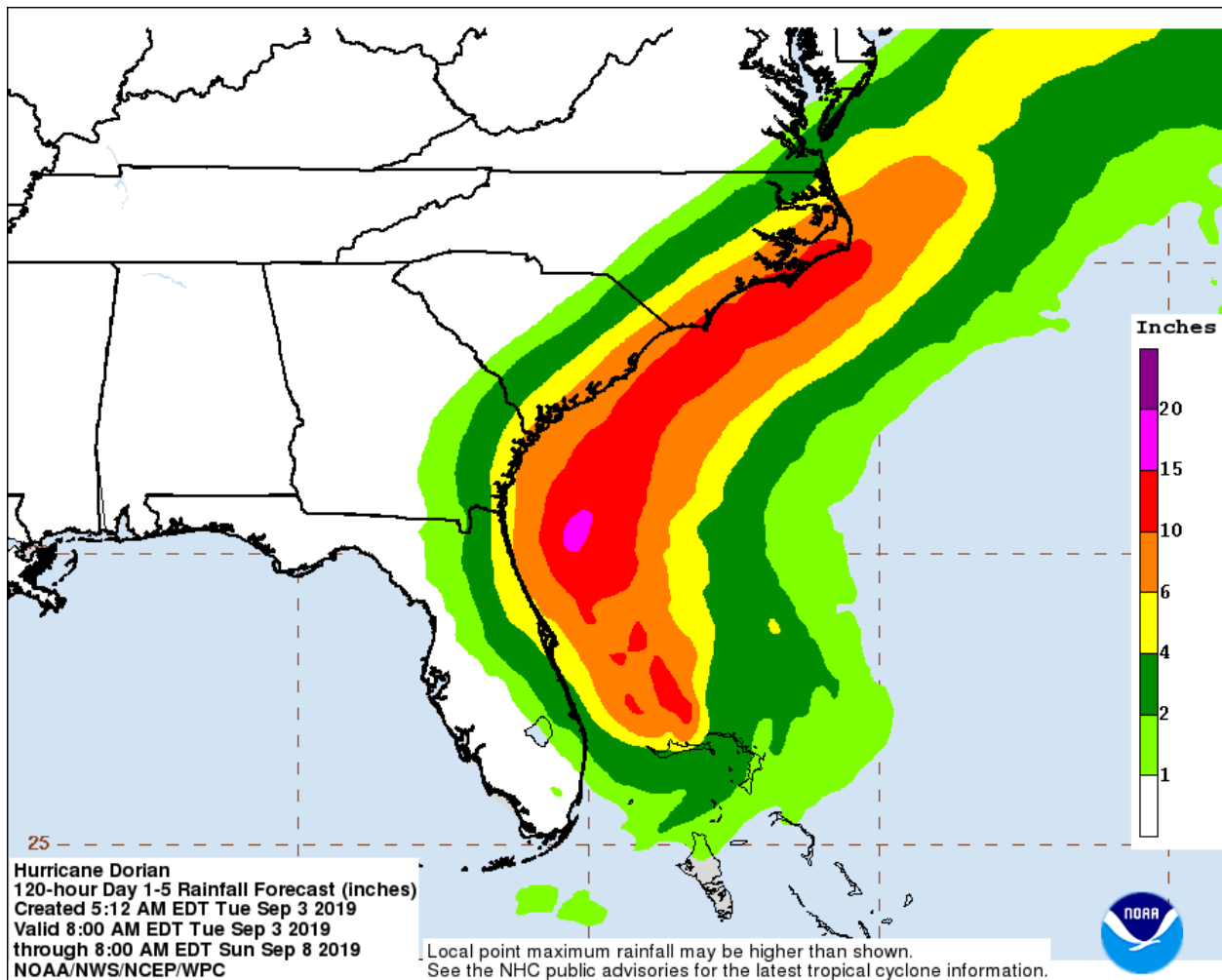
United States: Storm Surge Inundation



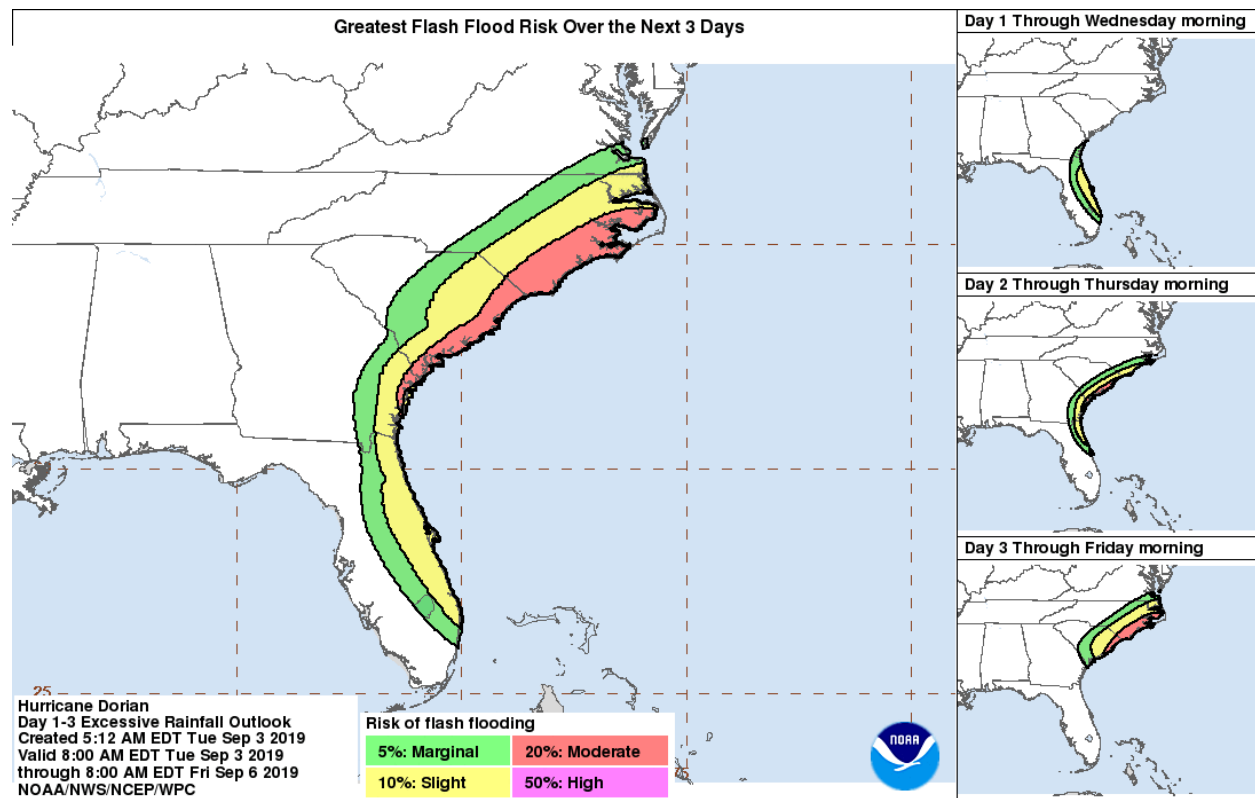
Wind Swath History



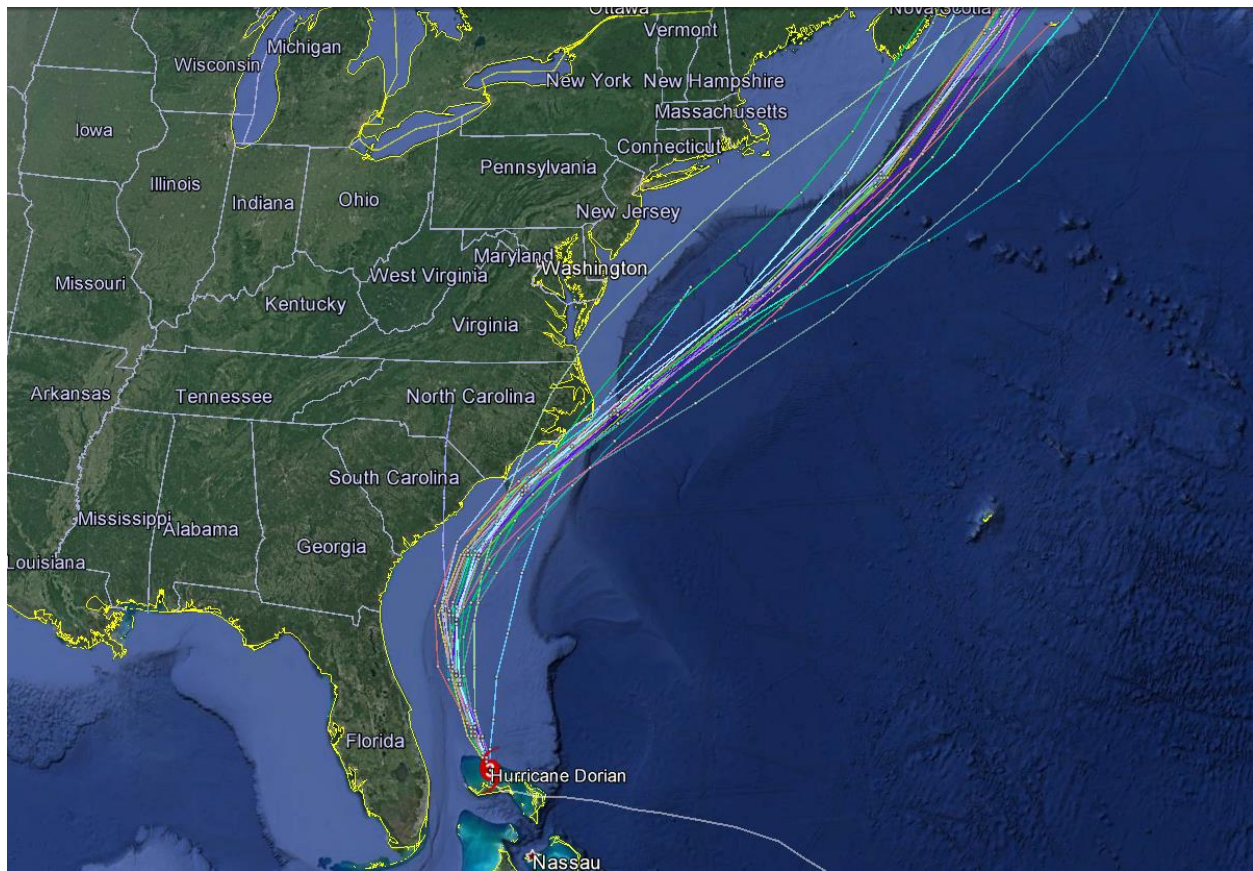
Weather Prediction Center: U.S. Rainfall Forecast



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: Tuesday 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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