

Current Watches and Warnings

A *Hurricane Warning* is in effect for the Northwestern Bahamas, excluding Andros Island

A *Hurricane Watch* is in effect for the Bahamas (Andros Island)

Current Details from the National Hurricane Center (NHC)

COORDINATES: 26.0° north, 73.4° west

LOCATION: 415 miles (670 kilometers) east of West Palm Beach, Florida

MOVEMENT: west at 8 mph (13 kph)

WINDS: 150 mph (240 kph) with gusts to 185 mph (295 kph)

RADIUS OF TROPICAL STORM-FORCE WINDS: 115 miles (185 kilometers)

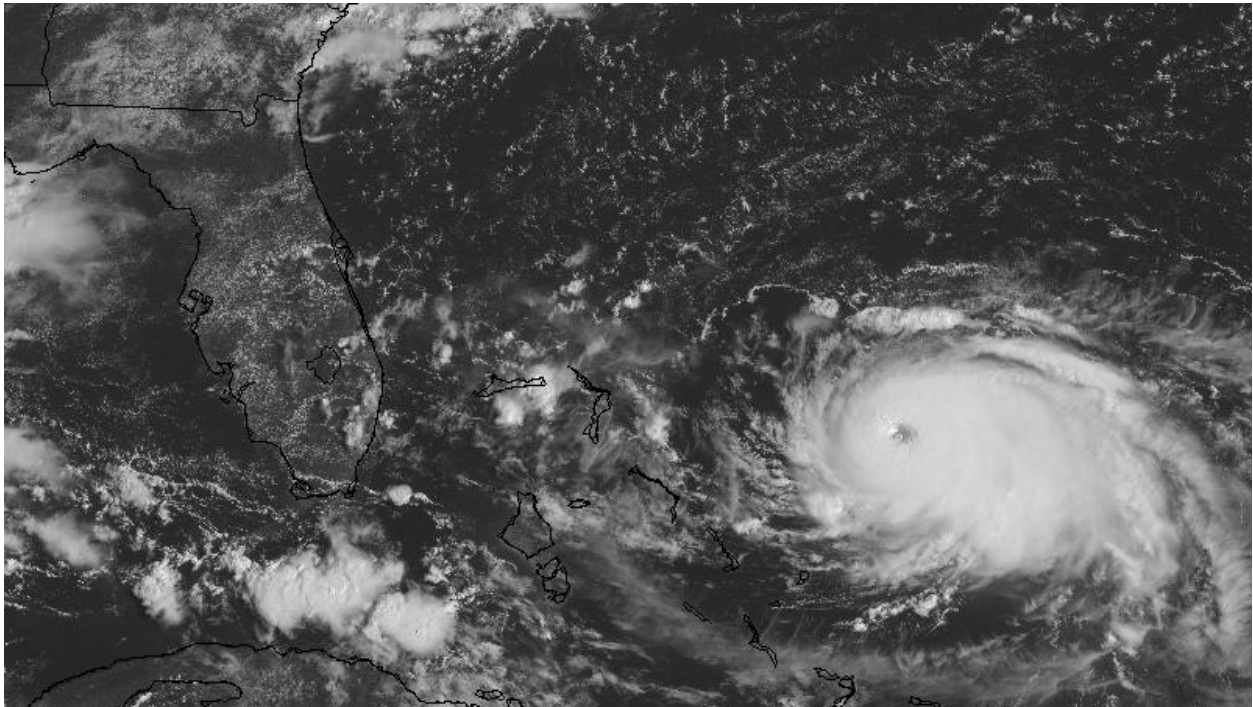
RADIUS OF HURRICANE-FORCE WINDS: 30 miles (45 kilometers)

MINIMUM CENTRAL PRESSURE: 945 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 4

24-HOUR LANDFALL POTENTIAL: MEDIUM

Latest Satellite Picture



Source: NASA/NOAA

Discussion

Hurricane Dorian, located approximately 415 miles (670 kilometers) east of West Palm Beach, Florida, is currently tracking west at 8 mph (13 kph). Dorian's satellite presentation continues to show the signs of a very powerful hurricane, including a distinct eye feature. Both NOAA and Air Force Hurricane Hunter planes have been penetrating the eye this morning, and based on a blend of the recorded flight-level and surface-adjusted winds, the NHC has upwardly adjusted the initial intensity to 150 mph (240 kph). This makes Dorian a very strong Category 4 hurricane on the Saffir-Simpson Scale. The storm is forecast to move over a deep layer of very warm waters, which is a major source of fuel for hurricanes to develop and/or maintain intensity. The combination of the warm ocean and the prevailing low wind shear environment along Dorian's path should favor some additional strengthening. However, there are likely to be some fluctuations in intensity as it undergoes eyewall replacement cycles that are difficult to predict. Beyond Day 3, as the hurricane begins to gain latitude it is expected that gradual weakening will occur.

Dorian is now moving towards the west at a slightly slower speed. It continues to be steered by weak flow to the south of the ridge of high pressure located in the western Atlantic Ocean. Most of the forecast models shift the high eastward and deepen a trough over the eastern United States after two days' time. This steering flow would typically favor a gradual turn of the hurricane to the northwest and north, though there is large uncertainty in the exact location and timing of this northward turn. Although the latest guidance has shifted a little bit eastward again this morning away from the U.S. coastline, there are still ECMWF (European) and GFS (United States) ensemble members that do not forecast the northward turn so soon. On this basis, NHC has only slightly shifted the track forecast to the right of the previous one, and the new official forecast lies along the western edge of the guidance envelope. This will allow for further adjustments in the track during future forecast cycles.

All interests from Florida to North Carolina are advised to keep close watch on Dorian's track.

Key Messages from the National Hurricane Center

1. A prolonged period of life-threatening storm surge and devastating hurricane-force winds are expected in portions of the northwestern Bahamas, particularly on the Abaco Islands and Grand Bahama Island. A Hurricane Warning is in effect for these areas, and residents should listen to advice given by local emergency officials and have their hurricane preparations completed today.
2. Life-threatening storm surge and dangerous hurricane-force winds are still possible along portions of the Florida east coast by the early to middle part of next week, but since Dorian is forecast to slow down and turn northward near or just offshore of the coast, it is too soon to determine when or where the highest surge and winds could occur. Residents should have their hurricane plan in place, know if they are in a hurricane evacuation zone, and listen to advice given by local emergency officials.
3. The risk of strong winds and dangerous storm surge is increasing along the coasts of Georgia, South Carolina, and North Carolina during the middle of next week. Residents in these areas should continue to monitor the progress of Dorian.
4. Heavy rains, capable of life-threatening flash floods, are expected over portions of the Bahamas and coastal sections of the southeastern United States this weekend through much of next week.

Additional Information

WIND: Hurricane conditions are expected in the Hurricane Warning area across the northwestern Bahamas by Sunday, with tropical storm winds beginning tonight.

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 in the northwestern Bahamas. Near the coast, the surge will be accompanied by large and destructive waves.

RAINFALL: Dorian is expected to produce the following rainfall accumulations this weekend into the middle of next week:

Northwestern Bahamas: 10 to 15 inches, isolated 25 inches

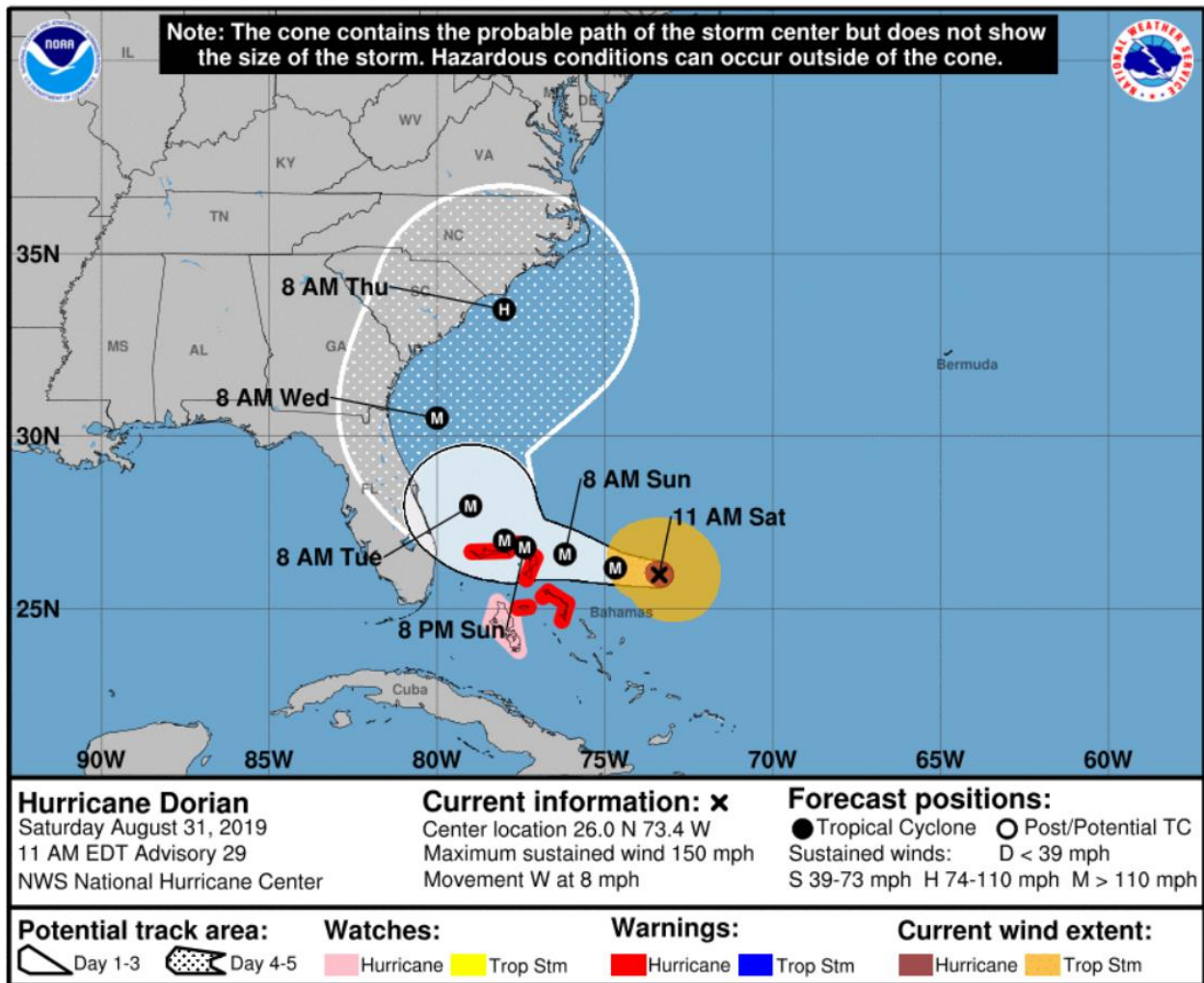
Coastal sections of the U.S. Southeast: 4 to 8 inches, isolated 12 inches

Central Bahamas: 2 to 4 inches, isolated 6 inches

This rainfall may cause life-threatening flash floods.

SURF: Swells will begin affect the east-facing shores of the Bahamas, the Florida east coast, and the southeastern United States coast during the next few days. These swells are likely to cause life-threatening surf and rip current conditions.

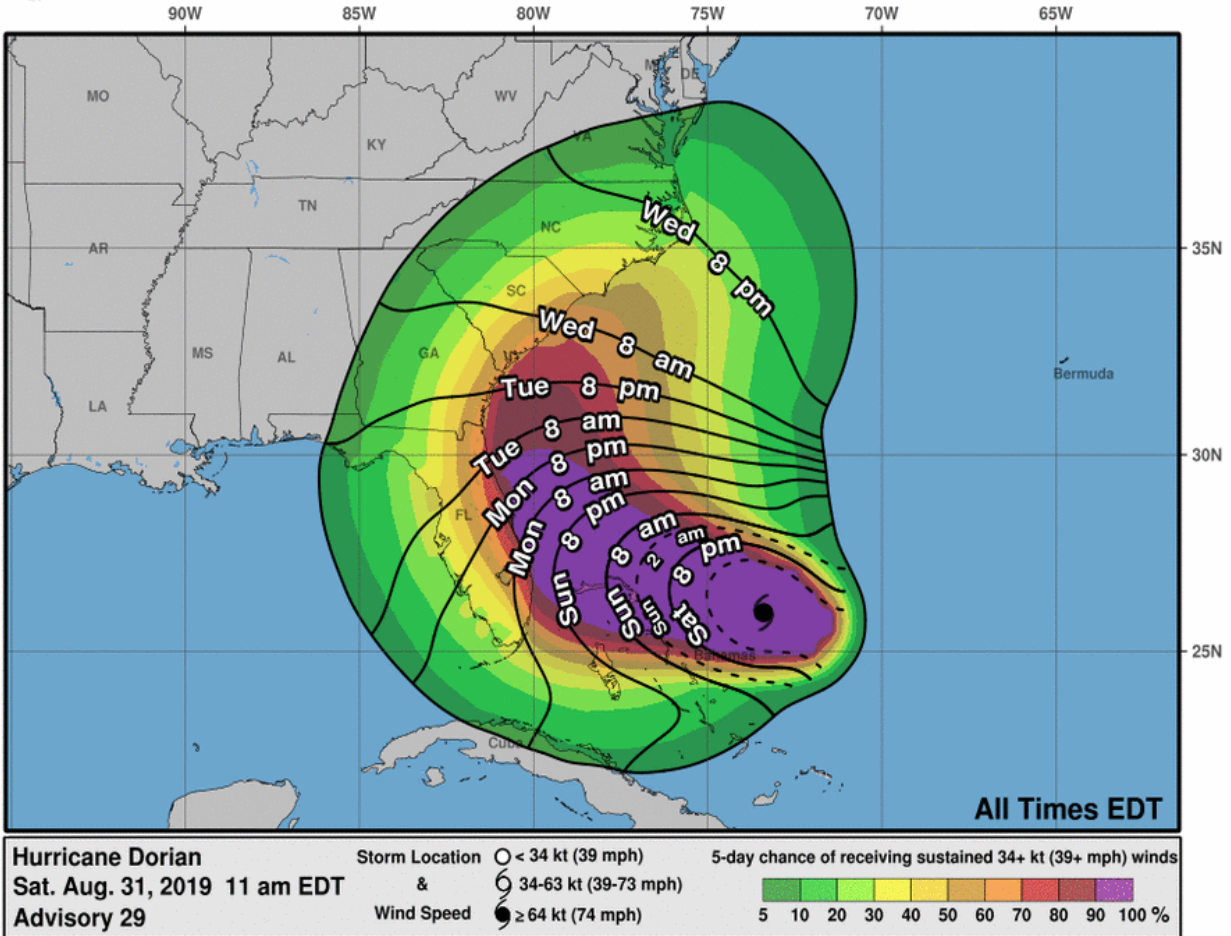
National Hurricane Center (NHC) Forecast



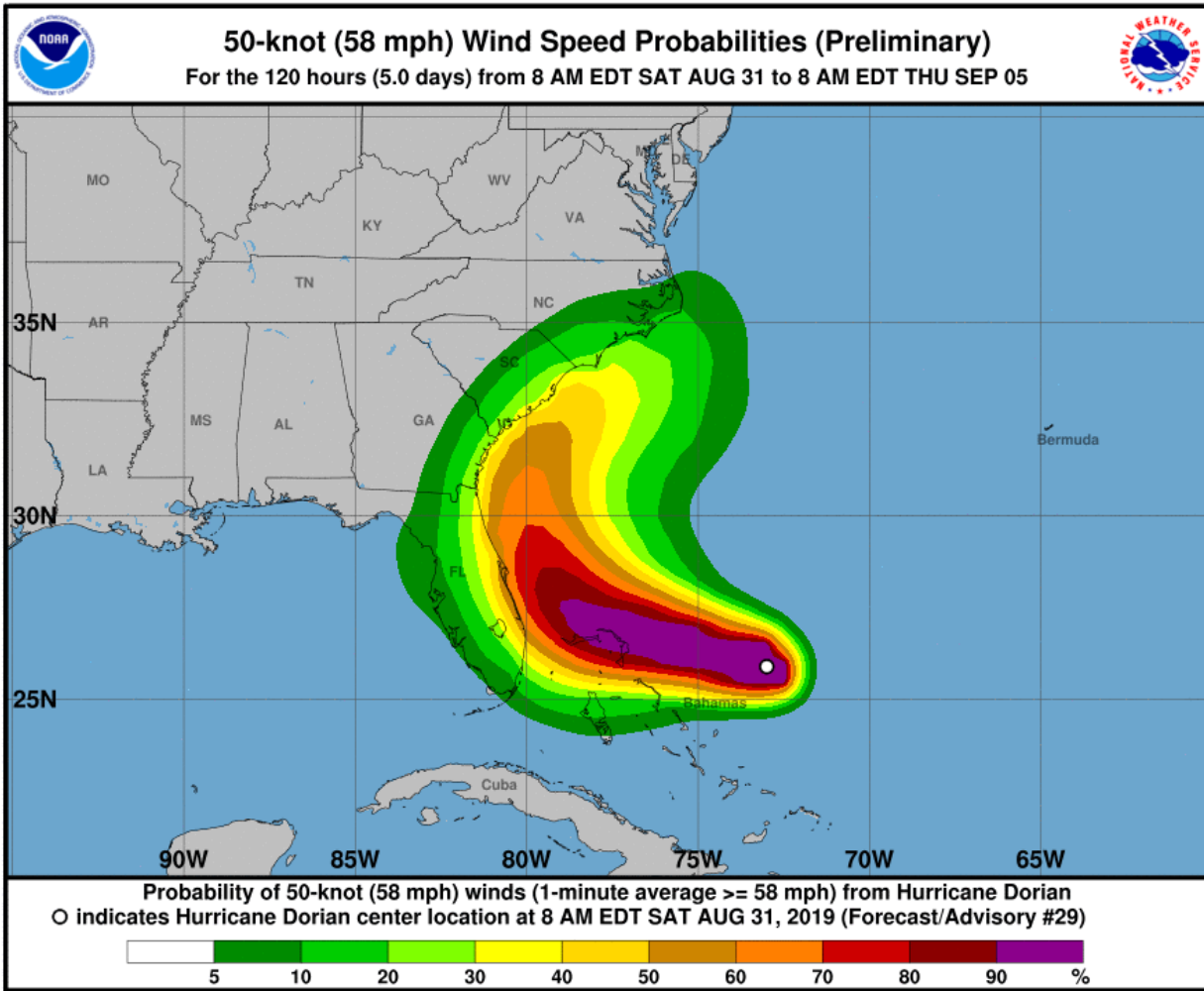
Most Likely Arrival Time of Tropical Storm-Force Winds



Most Likely Arrival Time of Tropical-Storm-Force Winds



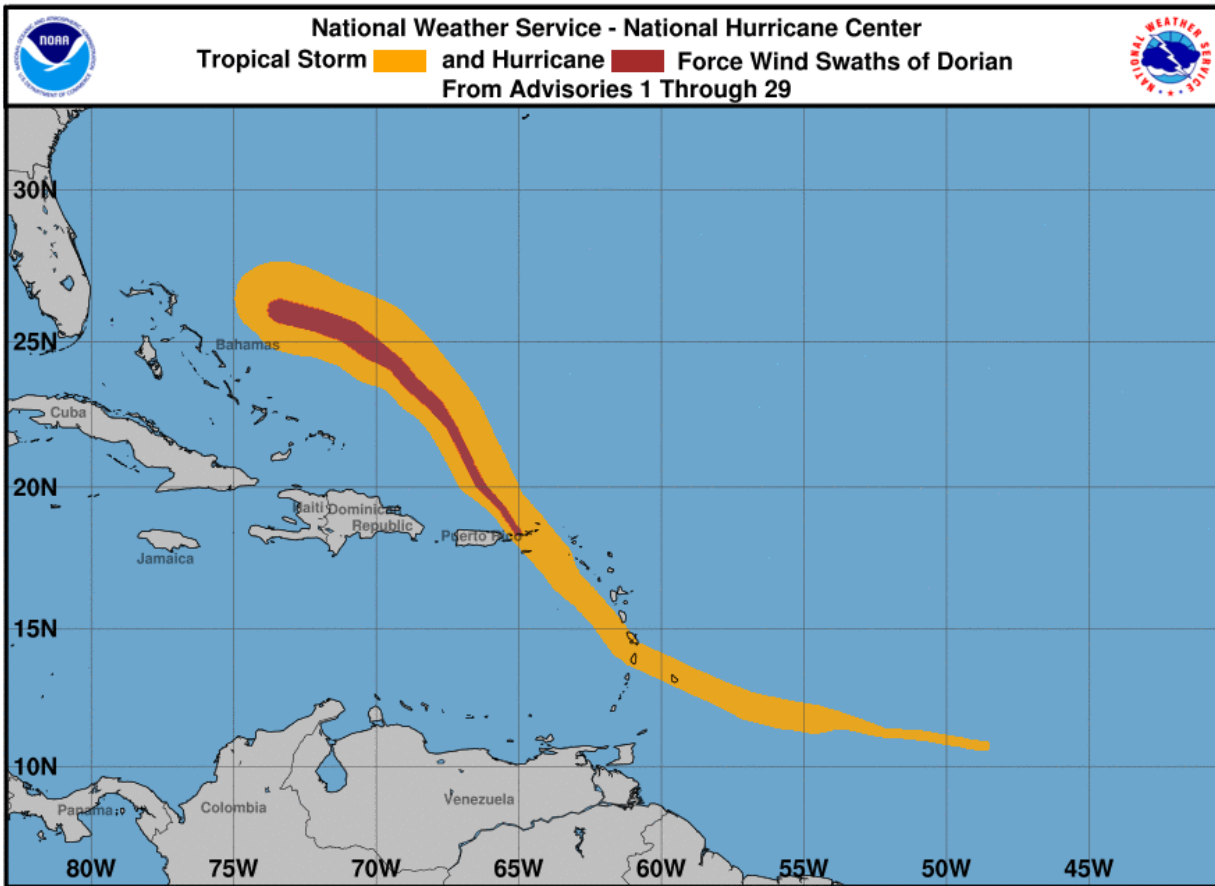
Wind Probabilities (≥ 60 mph (95 kph))



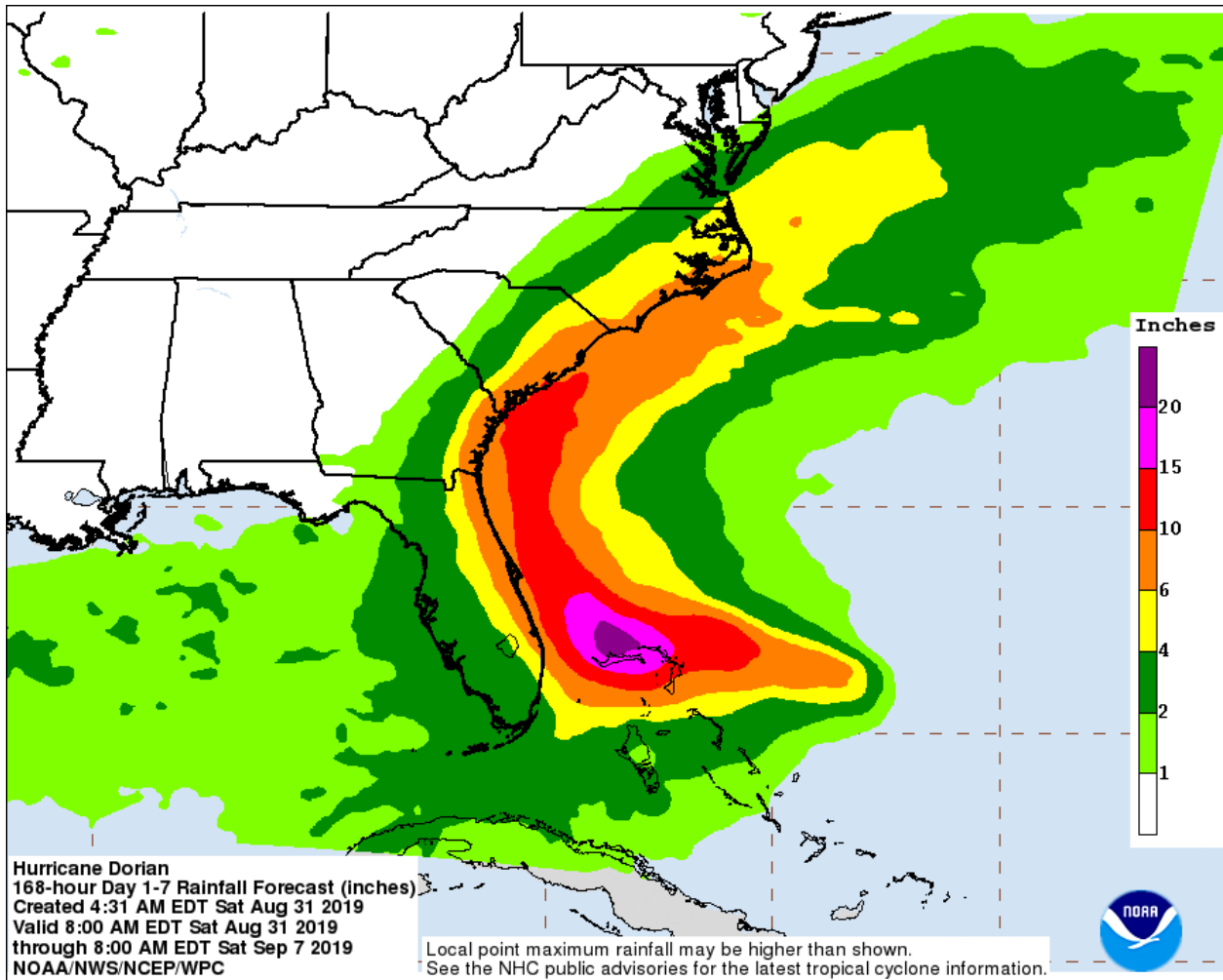
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



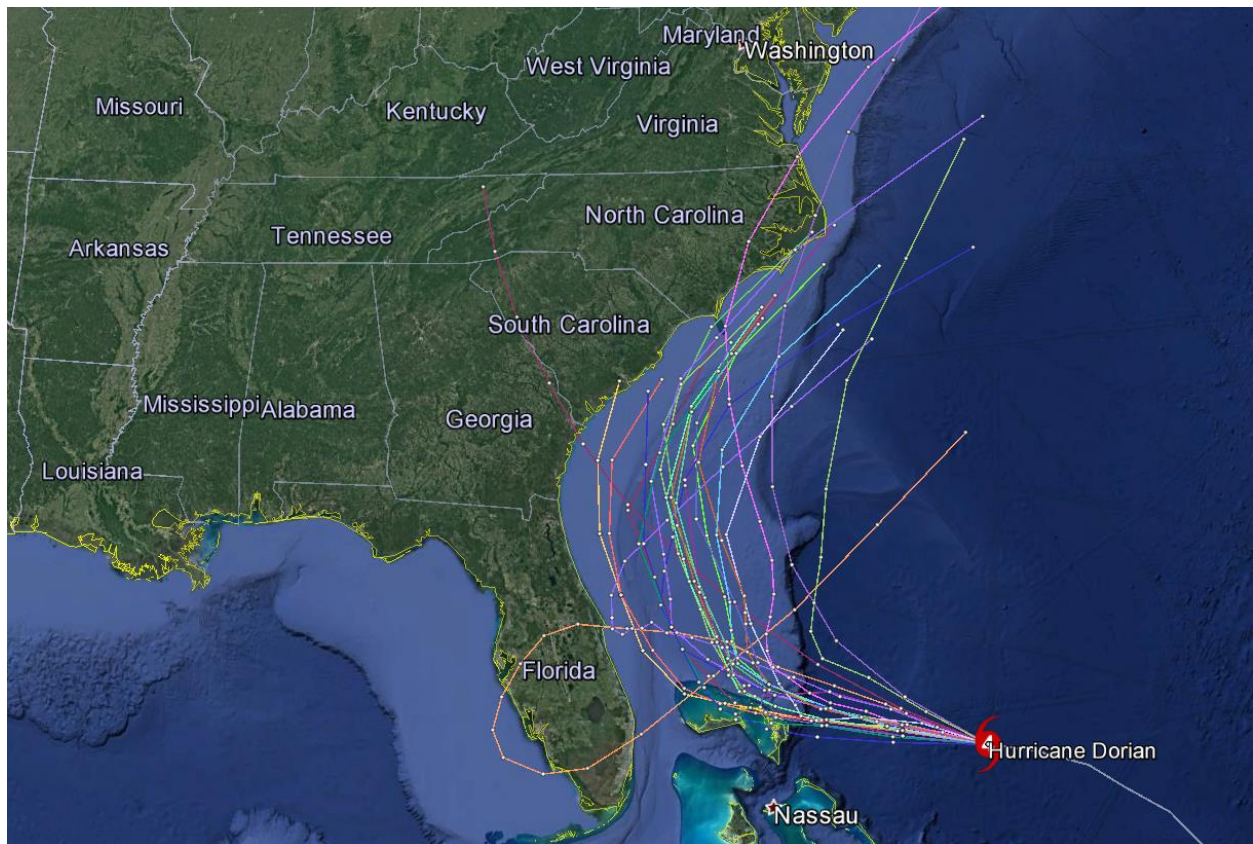
Wind Swath History



Weather Prediction Center: U.S. Rainfall Forecast



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: Sunday 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							
50	60	95							
55	65	100							
60	70	110	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm
65	75	120							
70	80	130							
75	85	140							
80	90	150							
85	100	160	Cat. 2 Hurricane	Typhoon	Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	Very Severe Cyclonic Storm
90	105	170							
95	110	175	Cat. 3 Major Hurricane	Typhoon	Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	Very Severe Cyclonic Storm
100	115	185							
105	120	195							
110	125	205	Cat. 4 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm
115	130	210							
120	140	220							
125	145	230							
130	150	240	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm
135	155	250							
140	160	260							
>140	>160	>260	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm

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