

Current Watches and Warnings

A *Hurricane Watch* is in effect for the Northwestern Bahamas

Current Details from the National Hurricane Center (NHC)

COORDINATES: 24.5° north, 69.8° west

LOCATION: 660 miles (1,060 kilometers) east of West Palm Beach, Florida

MOVEMENT: northwest at 10 mph (17 kph)

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

RADIUS OF TROPICAL STORM-FORCE WINDS: 105 miles (165 kilometers)

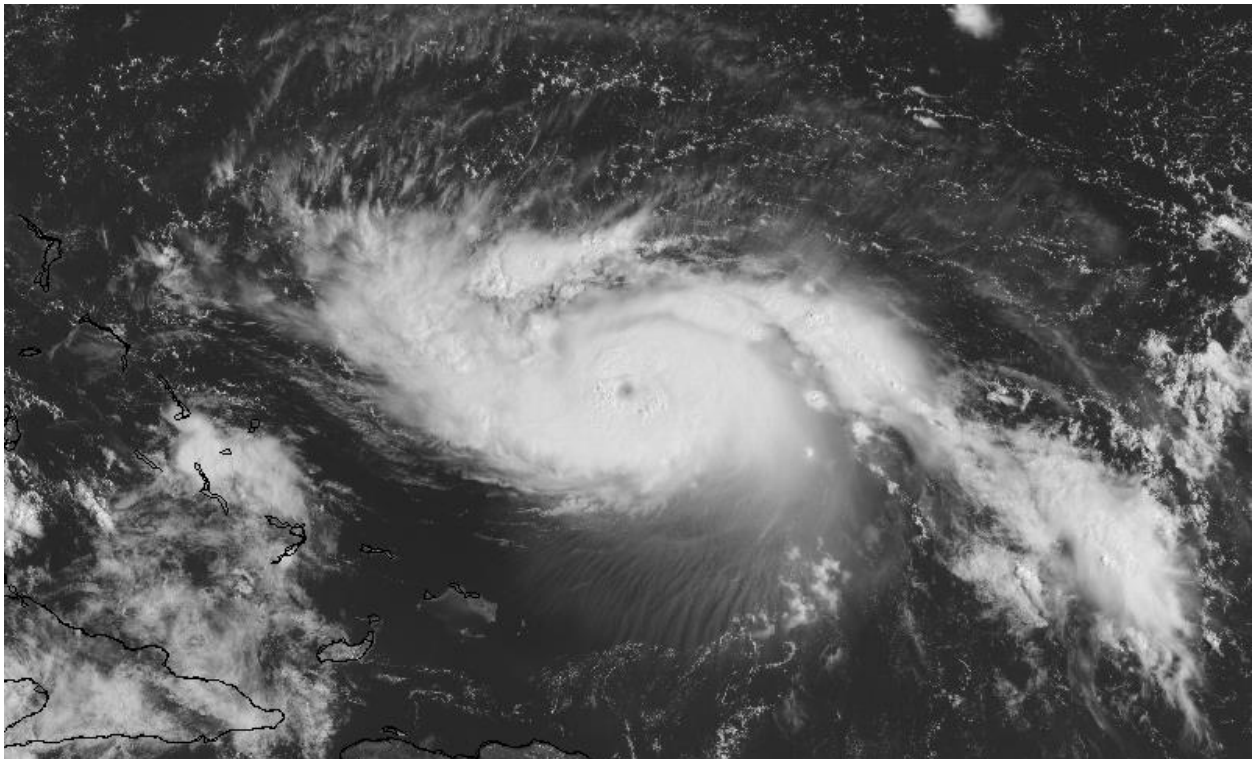
RADIUS OF HURRICANE-FORCE WINDS: 25 miles (35 kilometers)

MINIMUM CENTRAL PRESSURE: 972 millibars

SAFFIR-SIMPSON SCALE RANKING*: Category 2

24-HOUR LANDFALL POTENTIAL: NONE

Latest Satellite Picture



Source: NASA/NOAA

Discussion

Hurricane Dorian, located approximately 660 miles (1,060 kilometers) east of West Palm Beach, Florida, is currently tracking northwest at 10 mph (17 kph). Both Air Force and NOAA aircraft have been flying into Dorian this morning and providing valuable data. The flight-level and surface-adjusted wind speeds from both planes show that the storm has strengthened since yesterday, and the minimum central pressure has been oscillating between 972 and 976 millibars. Based on these data points, the NHC has set an initial intensity at 110 mph (175 kph) – just shy of becoming a Category 3 storm on the Saffir-Simpson Scale. The upper-level area of low pressure currently over Cuba, which has been inducing some wind shear over Dorian, is now moving away from the hurricane. This is allowing the upper-level flow pattern to become more favorable for development. In fact, the eye is now visible on satellite and suggests continued structural improvement and the possibility of more strengthening. Thus, the NHC forecast calls for further intensification, and Dorian is expected to become an extremely dangerous major hurricane with expected additional strengthening as it heads for the northwestern Bahamas and the Florida peninsula.

Dorian is now moving towards the northwest at a slightly slower speed. As the previously noted upper-low over Cuba moves westward and a strong ridge of high pressure builds over the western Atlantic Ocean as indicated by global models, the hurricane should be forced to turn west-northwestward and westward on a track toward the northwestern Bahamas and the Florida peninsula. By the end of the forecast period, the ridge is forecast to erode and the steering currents will weaken, resulting in Dorian to considerably slow down near and over the Florida peninsula. This only further increases the uncertainty in the track forecast during the Day 4 and Day 5 period and would also will lead to a prolonged duration of wind, storm surge, and rainfall. The official NHC forecast has been very consistent so far, and this one is very similar to the previous release. It follows the multi-model consensus guidance, and is in the middle of the guidance envelope.

Key Messages from the National Hurricane Center

1. Life-threatening storm surge and devastating hurricane-force winds are likely in portions of the northwestern Bahamas, where a hurricane watch is in effect. Residents should execute their hurricane plan and listen to advice given by local emergency officials.
2. Life-threatening storm surge and devastating hurricane-force winds are likely along portions of the Florida east coast by early next week, but it is too soon to determine where the highest storm surge and winds will 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. A prolonged period of storm surge, high winds and rainfall is likely in portions of Florida into next week, including the possibility of hurricane-force winds over inland portions of the Florida peninsula.
4. Heavy rains are expected over portions of the Bahamas, Florida, and elsewhere in the southeastern United States this weekend into the middle of next week.

Additional Information

WIND: Hurricane conditions are possible in the northwestern Bahamas by Sunday, with tropical storm conditions possible by Saturday night or Sunday morning.

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.

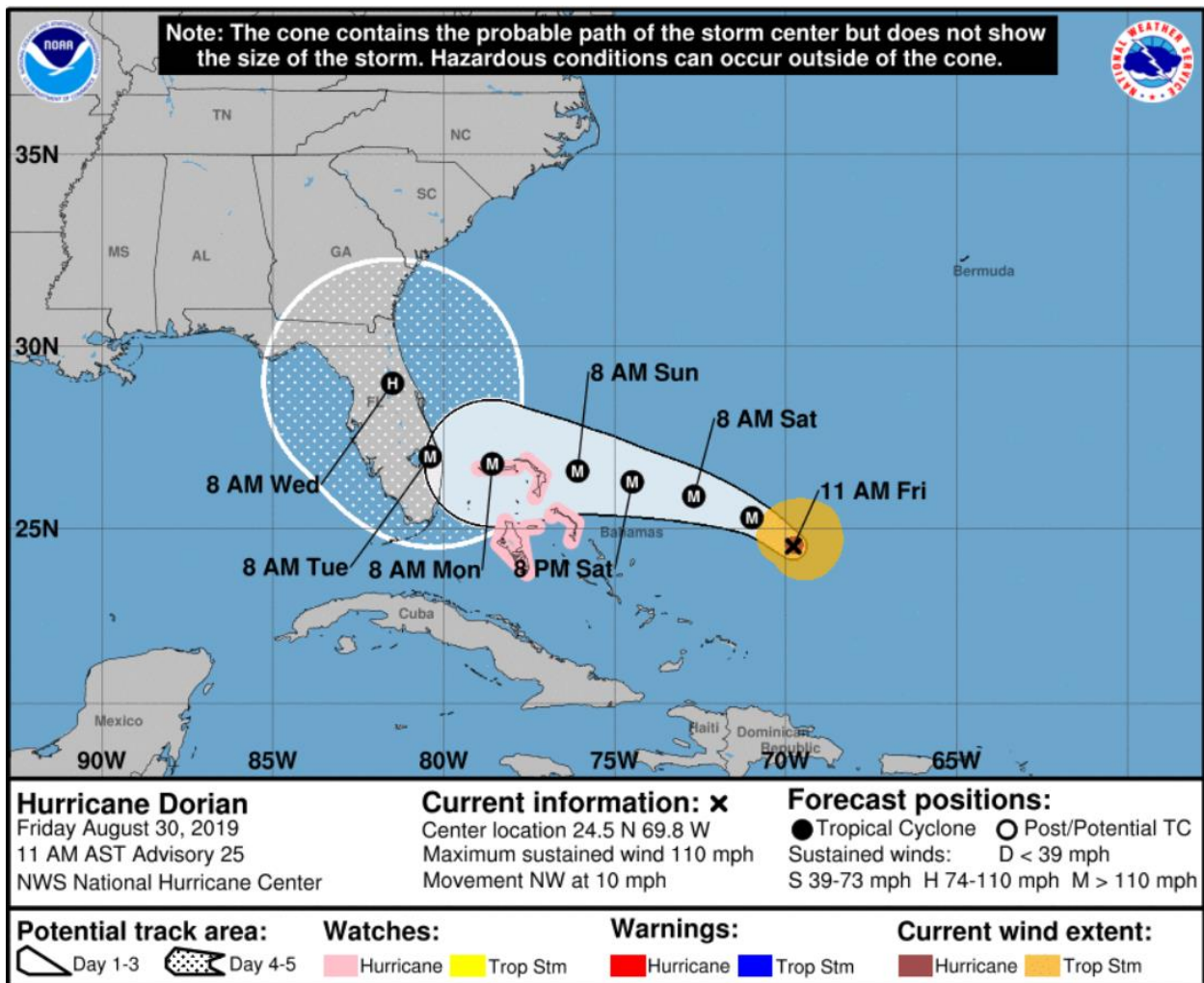
RAINFALL: Dorian is expected to produce the following rainfall accumulations this weekend into the middle of next week:

Northwestern Bahamas and coastal sections of the U.S. Southeast: 6 to 12 inches, isolated 18 inches
Central Bahamas: 1 to 2 inches, isolated 4 inches

This rainfall may cause life-threatening flash floods.

SURF: Swells are likely to begin affecting 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.

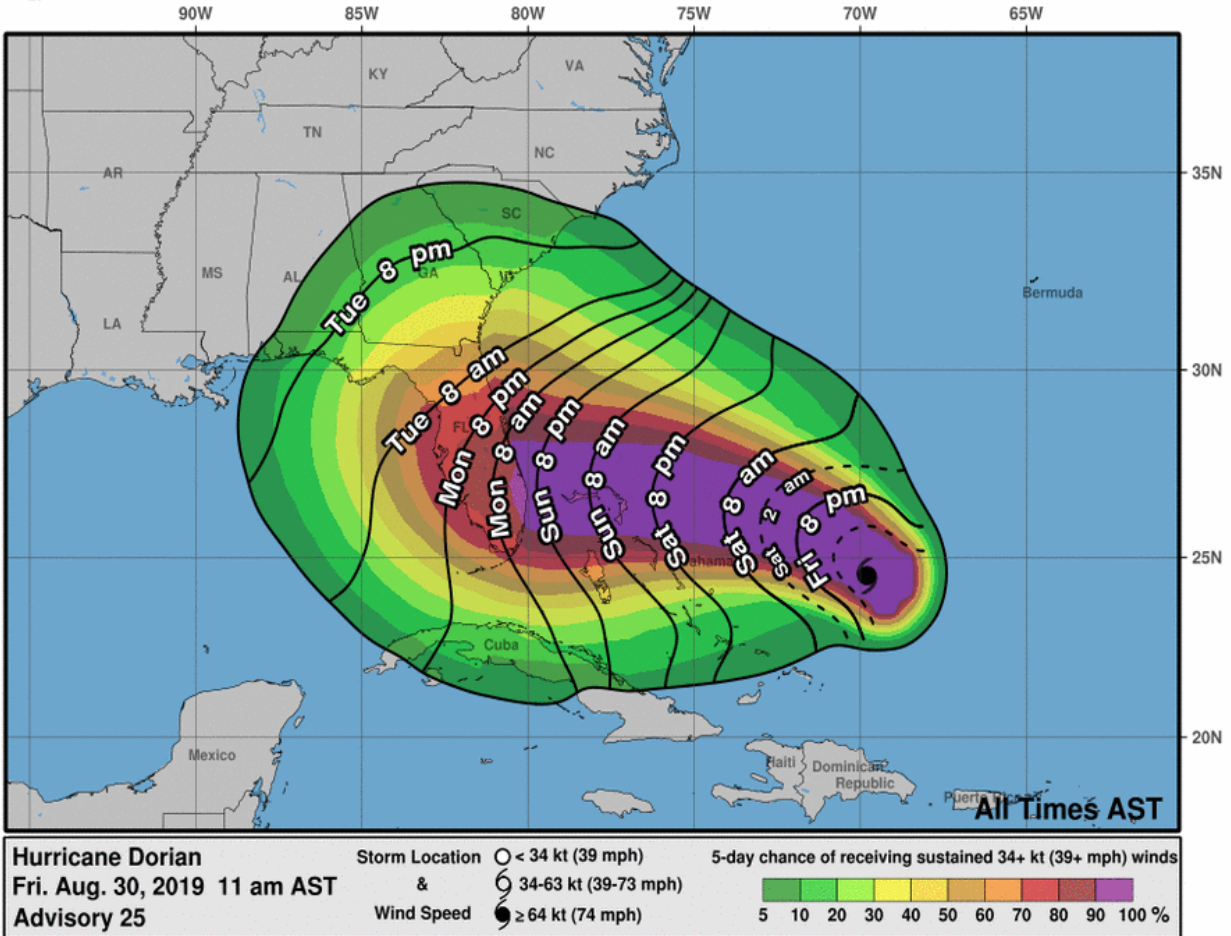
National Hurricane Center (NHC) Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds

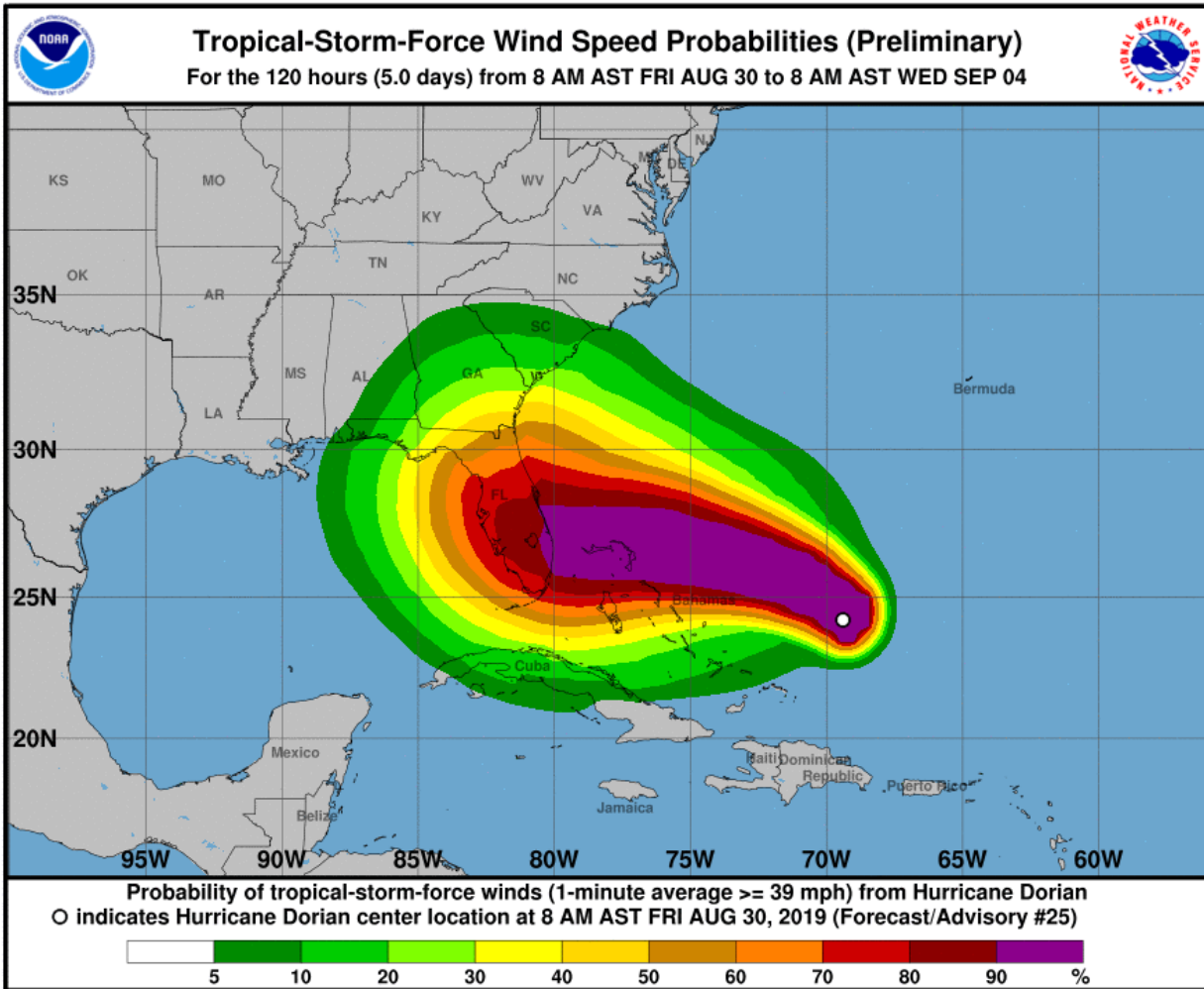


Most Likely Arrival Time of Tropical-Storm-Force Winds

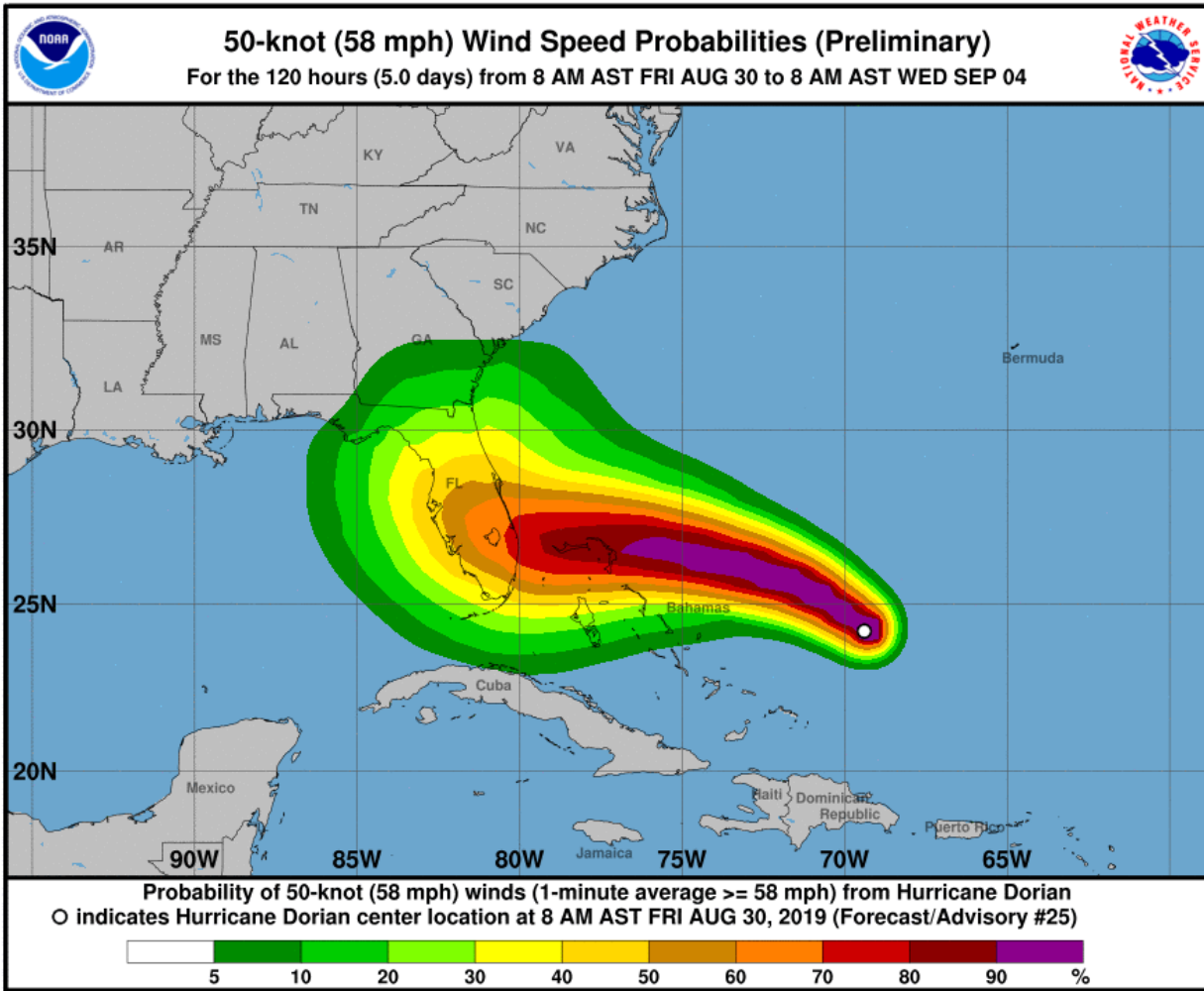


National Hurricane Center: Wind Speed Probabilities

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



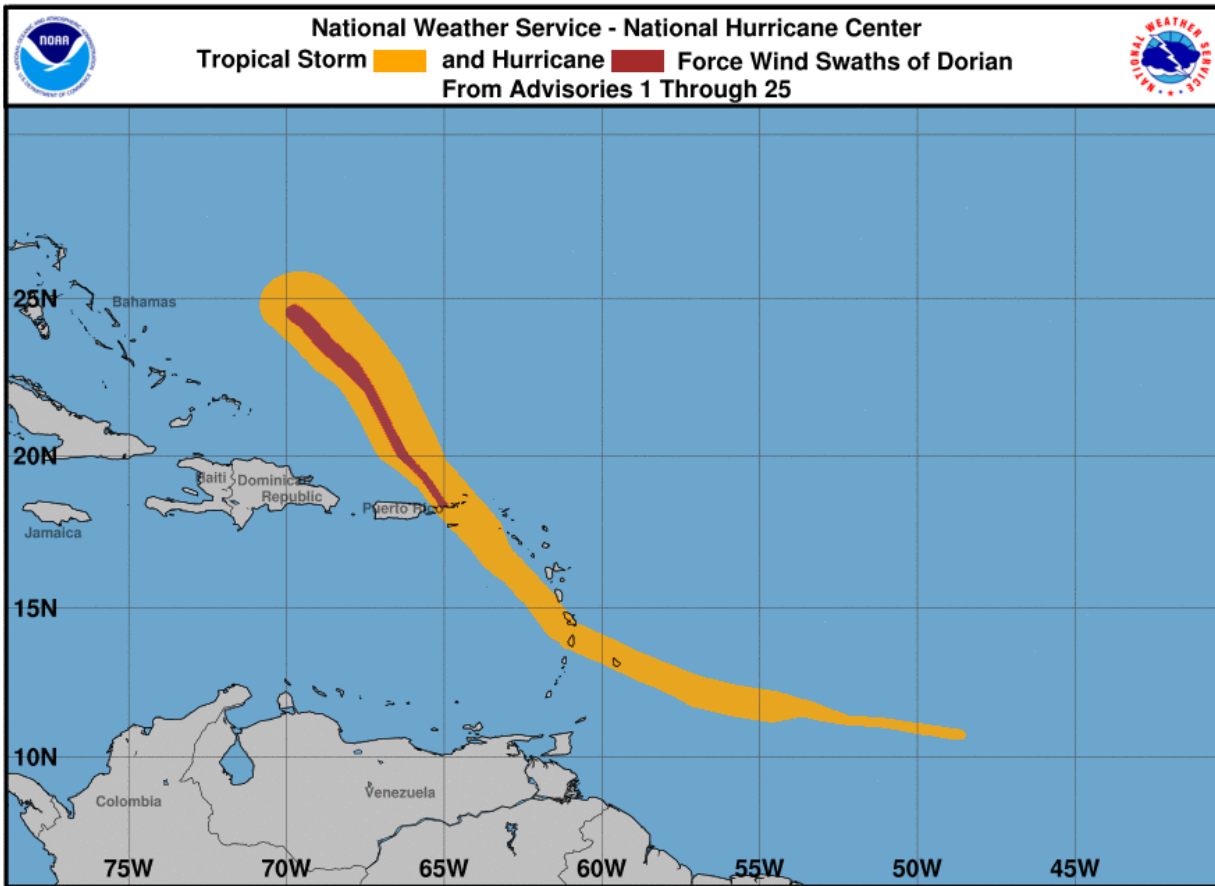
Wind Probabilities (≥ 60 mph (95 kph))



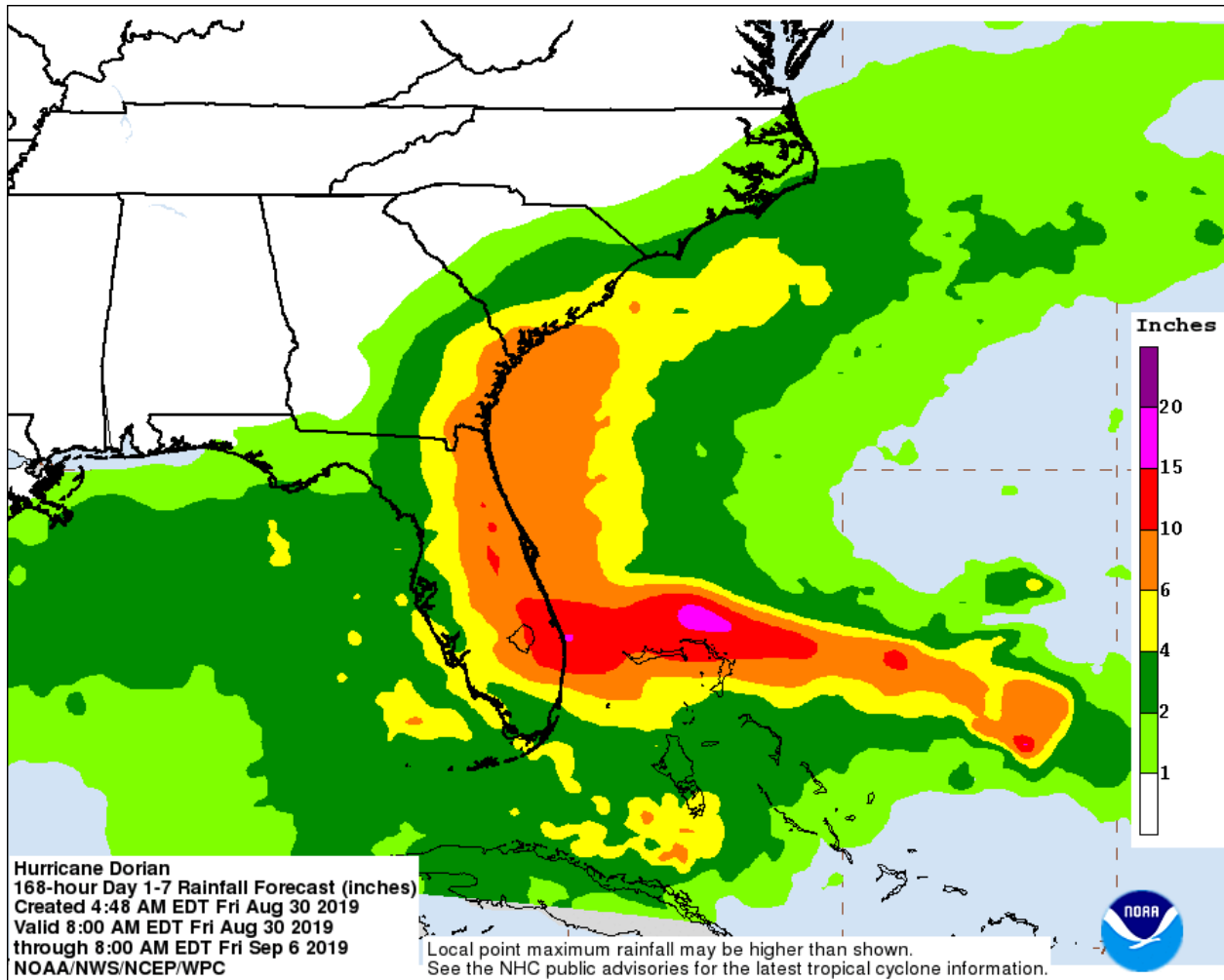
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



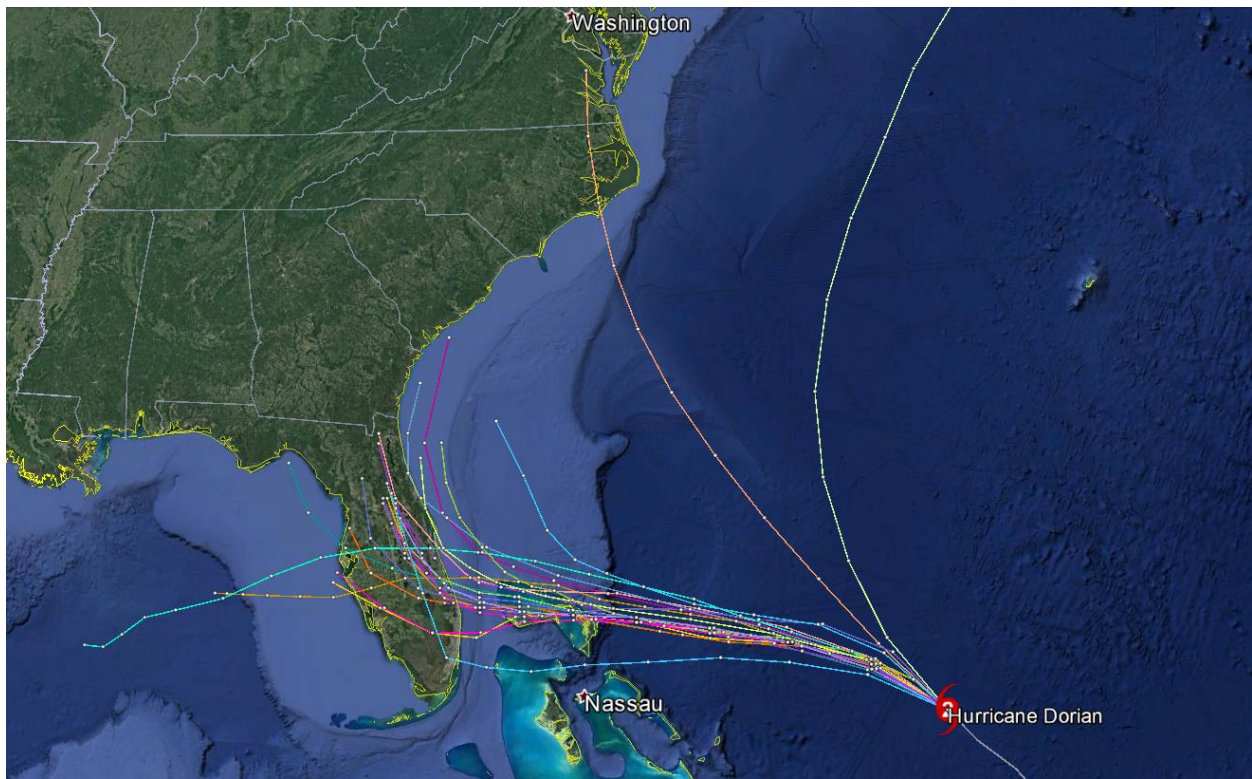
Wind Swath History



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: Saturday 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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