### **Current Watches and Warnings**

There are currently no tropical storm or hurricane watches in effect.

#### Current Details from the National Hurricane Center (NHC)

COORDINATES: 20.5° north, 66.6° west

LOCATION: 425 miles (685 kilometers) east-southeast of the southeastern Bahamas

**MOVEMENT:** northwest at 13 mph (20 kph)

**WINDS:** 85 mph (140 kph) with gusts to 105 mph (165 kph)

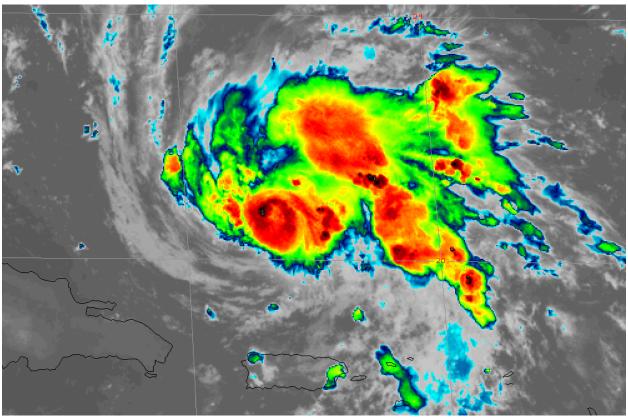
RADIUS OF TROPICAL STORM-FORCE WINDS: 90 miles (150 kilometers)

RADIUS OF HURRICANE-FORCE WINDS: 15 miles (30 kilometers)

MINIMUM CENTRAL PRESSURE: 991 millibars SAFFIR-SIMPSON SCALE RANKING\*: Category 1

**24-HOUR LANDFALL POTENTIAL: NONE** 

#### Latest Satellite Picture



Source: NASA/NOAA



#### Discussion

Hurricane Dorian, located approximately 425 miles (685 kilometers) east-southeast of the southeastern Bahamas, is currently tracking northwest at 13 mph (20 kph). The satellite appearance of the storm has become slightly less impressive this morning as some dry air has penetrated the southeastern portion of center of the circulation and with the eye becoming cloud- and rain-filled. Dropsonde data from the Air Force Reserve mission indicated that the central pressure had slightly risen to 991 millibars. However, the plane still measured surface-adjusted wind speeds between 80 and 85 mph (130 and 140 kph), and the NHC has maintained the initial intensity at 85 mph (140 kph) for this advisory.

Dorian continues northwestward, and the NHC confidence in the track forecast is fairly high for the first 48 hours. The cyclone is expected to continue moving northwestward and then begin to turn west-northwestward between a mid-level ridge of high pressure located to the north and a mid- to upper-level area of low pressure retrograding westward across the Straits of Florida. The forecast computer models continue to diverge after 48 hours and have not changed much from their respective solutions compared to yesterday. The GFS (U.S.) model is a northern outlier from the rest of the guidance, showing a weaker ridge and bringing Dorian close to the Florida/Georgia border; while the UKMET (UK) and ECMWF (European) models show stronger ridges and remain the southernmost solutions near South Florida. Given the spread in the guidance, the new NHC forecast blends the previous forecast with the multi-model consensus. The most notable change in the new forecast is that it is a little bit slower than the previous one as Dorian approaches Florida. This could enhance the rainfall and flood potential.

Various wind shear analyses are indicating low to moderate levels of southwesterly wind shear over Dorian at the moment, but the global models show this shear diminishing within the next 12 to 24 hours. With lower wind shear and very warm waters, all of the intensity models forecast Dorian to begin strengthening again soon, and rapid intensification is within the realm of possibility. The updated NHC intensity forecast has been increased from the previous one. After 48 hours, the official forecast is near or just above the intensity consensus, but it remains lower than many of the guidance solutions. Dorian is likely to reach major hurricane strength in the next day or two and is forecast to maintain that status until it reaches land.

#### Key Messages from the National Hurricane Center

- 1. The risk of dangerous storm surge and hurricane-force winds later this week and this weekend continues to increase in the central and northwestern Bahamas and along the Florida east coast, although it is too soon to determine where these hazards will occur. Residents in these areas should ensure they have their hurricane plan in place and not focus on the exact forecast track of Dorian's center.
- 2. Heavy rains are expected to occur over portions of the Bahamas, Florida, and elsewhere in the southeastern United States later this week and into early next week.

#### Additional Information

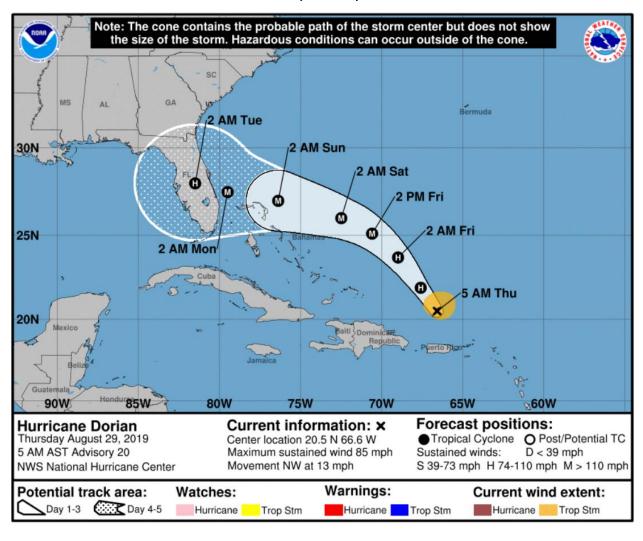
RAINFALL: Dorian is expected to produce the following rainfall accumulations this weekend into early next week:

Central Bahamas: 2 to 4 inches, isolated 6 inches
Northwestern Bahamas & coastal sections of the Southeast U.S.: 4 to 8 inches, isolated 12 inches

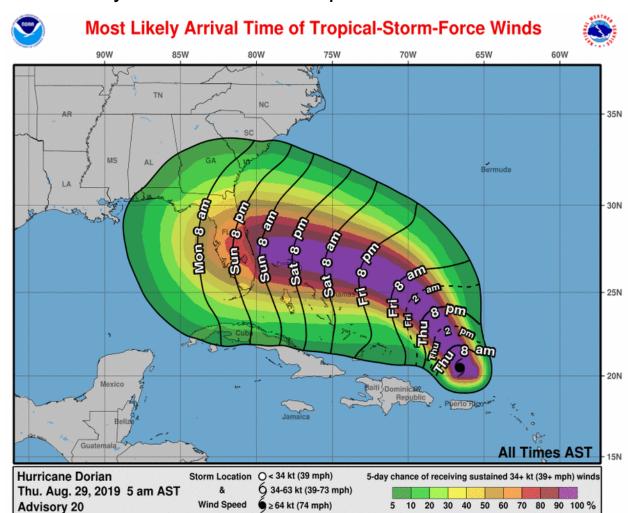
This rainfall may cause life-threatening flash floods.

SURF: Swells around the U.S. and British Virgin Islands and Puerto Rico should gradually diminish today. Swells are likely to begin affecting the east-facing shores of the Bahamas 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

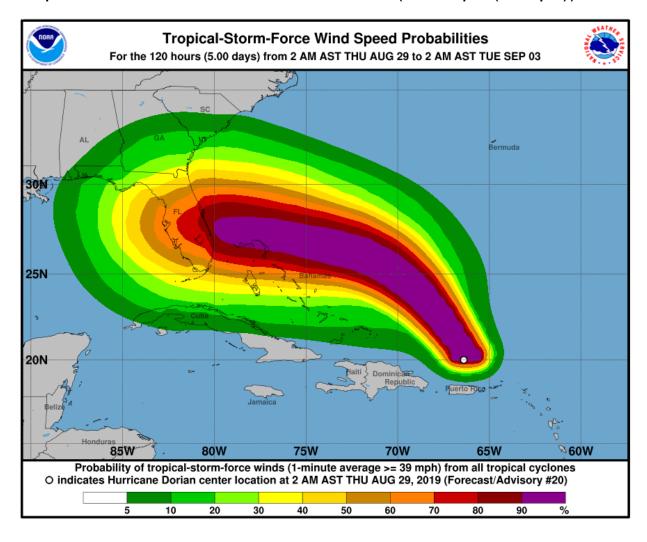


### Most Likely Arrival Time of Tropical Storm-Force Winds

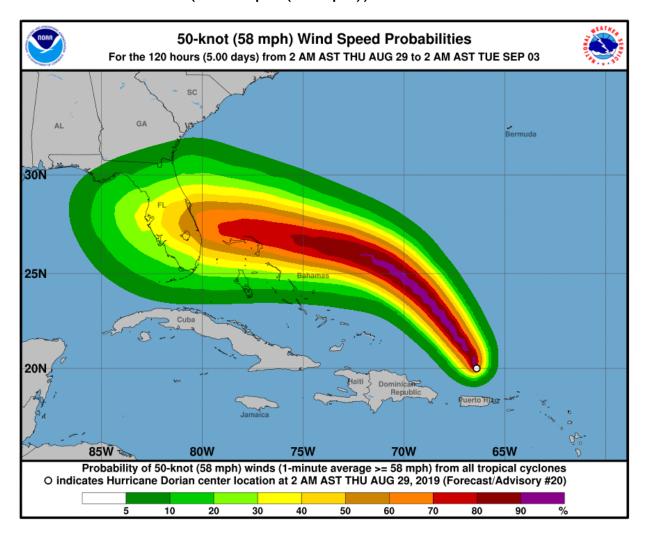


# National Hurricane Center: Wind Speed Probabilities

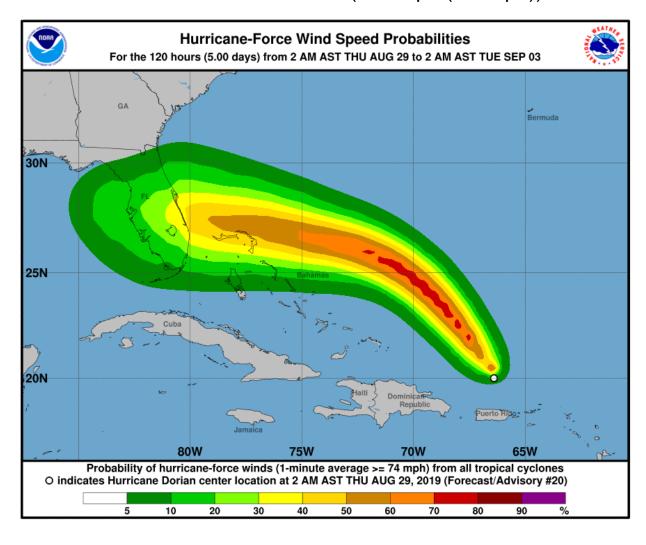
Tropical Storm-Force Wind Probabilities (≥40 mph (65 kph))



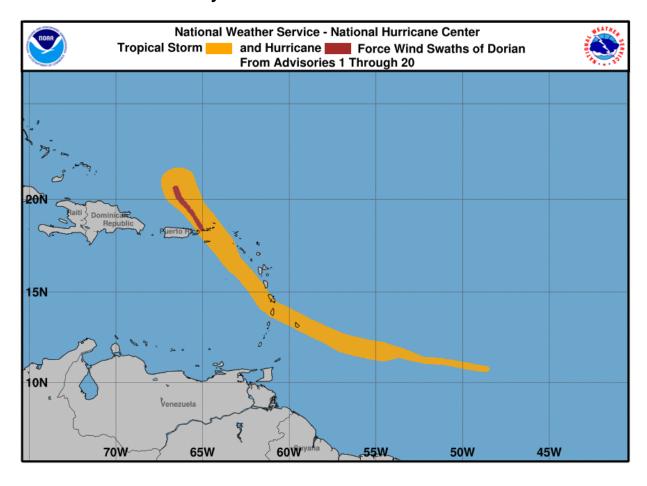
### Wind Probabilities (≥60 mph (95 kph))



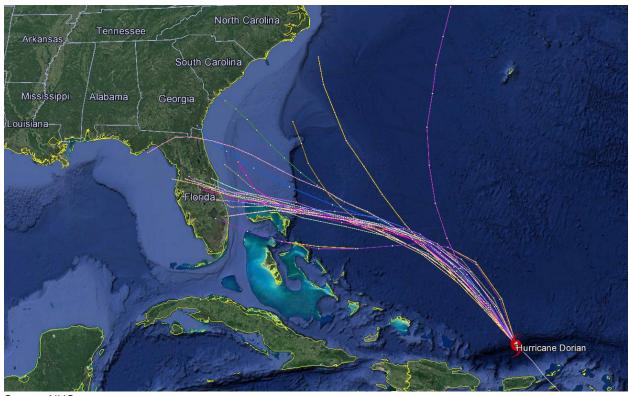
### Hurricane-Force Wind Probabilities (≥75 mph (120 kph))



## Wind Swath History



### 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  $\underline{www.nhc.noaa.gov}$ 

**NEXT CAT ALERT**: Friday morning after 10:00 AM Central Time (15:00 UTC).

# \*Tropical Cyclone Intensity Classifications for Global Basins

WIND SPEED			BASINS AND MONITORING BUREAU						
KTS <sup>1</sup>	MPH <sup>1</sup>	KPH <sup>1</sup>	NE Pacific, Atlantic	NW Pacific	NW Pacific	SW Pacific	Australi a	SW Indian	North Indian
			National Hurricane Center (NHC)	Joint Typhoon Warning Center (JTWC)	Japan Meteorological Agency (JMA)	Fiji Meteorologica I Service (FMS)	Bureau Of Meteorology (BOM)	Meteo-France (MF)	India Meteorologica I Department (IMD)
30	35	55	Tropical Depressio n	Tropical Depressio n	Tropical Depression	Tropical Depression	Tropical Low	Tropical Depressio n	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			Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm	Severe Cyclonic Storm
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							
85	100	160	Cat. 2 Hurricane						
90	105	170				Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	
95	110	175							
100	115	185	Cat. 3 Major Hurricane						
105	120	195							
110	125	205				Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		
115	130	210							
120	140	220	Cat. 4 Major Hurricane Cat. 5 Major Hurricane					Very Intense Tropical Cyclone	Super Cyclonic Storm
125	145	230							
130	150	240		Super Typhoon					
135	155	250							
140	160	260							
>140	>160	>260							

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