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Hurricane Commentary

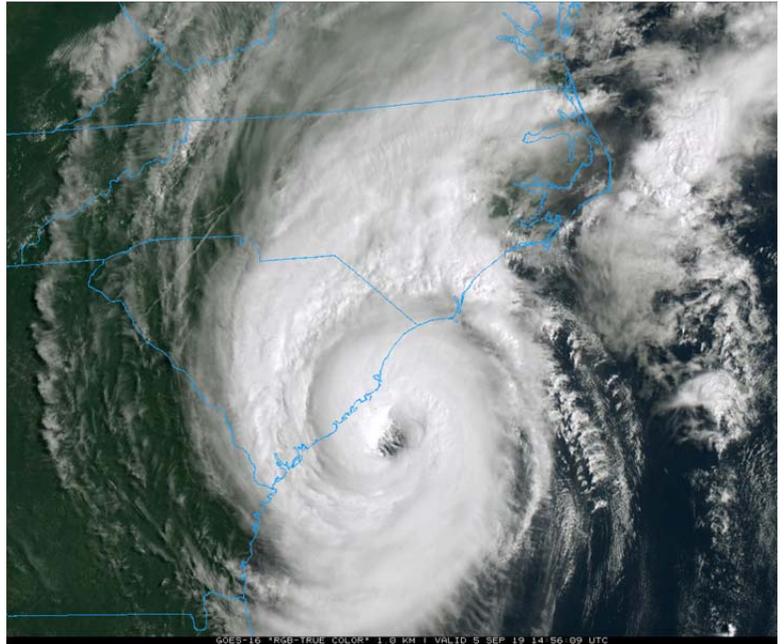
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Major Hurricane Dorian

Executive Summary

Dorian intensified overnight back to major hurricane status. Forecasts agree on a gradual weakening trend as it tracks parallel to, or over, the coasts of the Carolinas. Even so, Dorian's large shield of strong winds will likely drive life-threatening storm surge. Flooding rains and destructive hurricane force winds are likely in coastal regions.

Date/Time	11am EDT Sep 5, 2019
Location	32.5N, 79.1W
Windspeed/Pressure	110mph, 958mb
Speed/Direction	8mph NNE



Forecast Summary

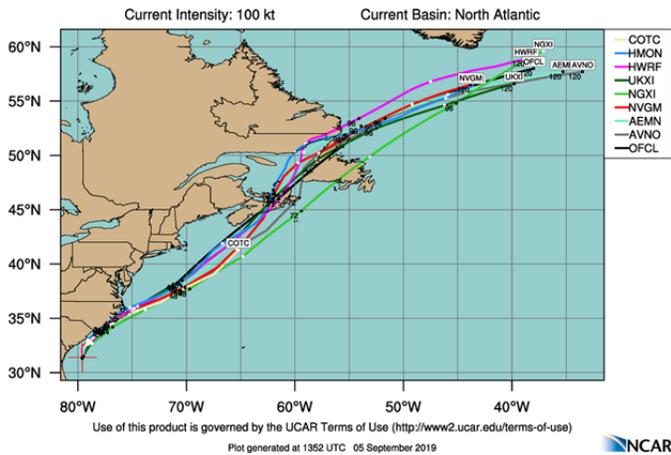
The warm waters of the Gulf Stream provided enough support for Dorian to strengthen back to major hurricane status late yesterday and overnight. Dorian's central pressure also fell back to 955mb. Dorian is currently a borderline category 2/category 3 hurricane and is predicted to gradually weaken over the next 24-36 hours as it parallels the coasts of the Carolinas (Figure 1). But Dorian is still predicted to be a large and dangerous category 1 storm as it exits the North Carolina Coast.

Now moving north-northeast, Dorian will turn further to the east today as moves into a region of westerly winds (Figure 1). Dorian has a 45-mile wide eye and the eye wall is very close to the South Carolina coast. Dorian is producing clusters of tornadoes over coastal regions of the Carolinas. The strong wind shear, particular at the point of landfall where winds slow down over land, is very supportive of tornadoes. Yesterday saw 7 confirmed tornado reports along coastal counties along the border of the Carolinas. Today has seen 5 confirmed tornado reports at the time of writing centered around coastal Onslow County, North Carolina. Tornado watches are likely to be in place for the rest of today. Tornadoes typically favor the front right quadrant of a hurricane and so any more tornadoes will likely be confined to coastal regions.

The area of damaging winds is now very large with tropical storm force winds extending out to about 200 miles and hurricane force winds extending out about 50 miles. The eye is expected to move very close to, or over, the coasts of eastern South Carolina and North Carolina later today, before moving quickly towards the Canadian Maritimes. Expected impacts include hurricane-force winds for some coastal counties, life-threatening storm surge up to 8 feet, and flash flooding up to 15 inches of rain.

MAJOR HURRICANE DORIAN (AL05)

Late-cycle track guidance initialized at 0600 UTC, 05 September 2019



MAJOR HURRICANE DORIAN (AL05)

Early-cycle intensity guidance
initialized at 1200 UTC, 05 September 2019

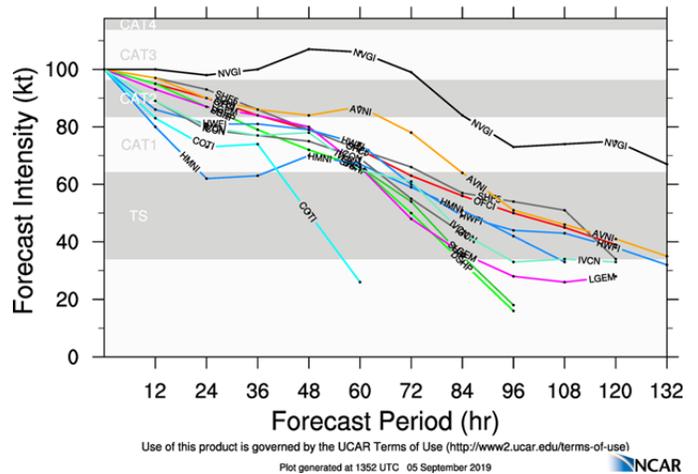


Figure 1: The latest model forecast tracks and intensity for Hurricane Dorian. Source: NCAR/TCGP. For updated forecasts, please visit: <http://www.ral.ucar.edu/hurricanes/realtime/current/>

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