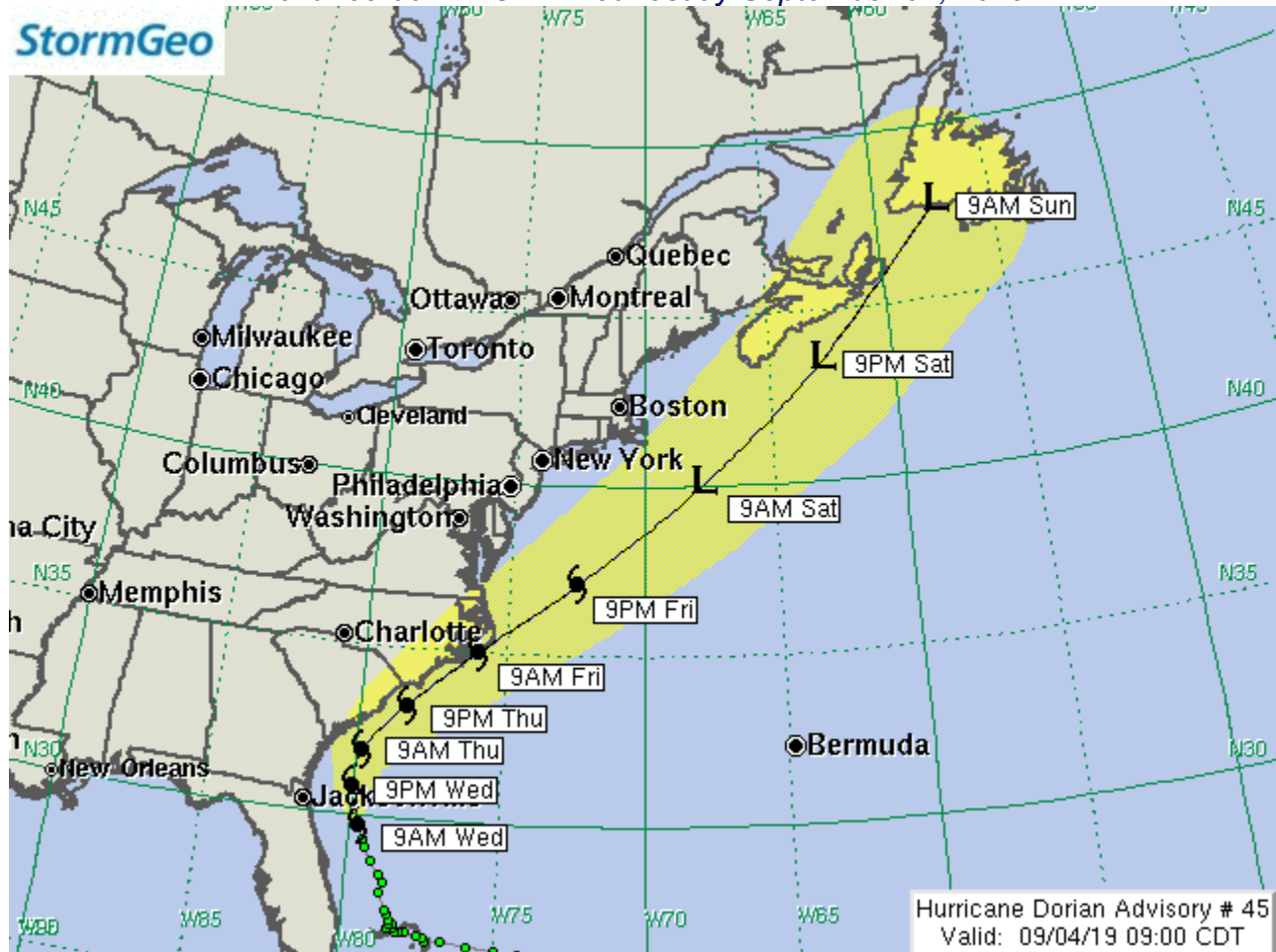


## Hurricane Dorian Advisory 45

Valid: 09:00 AM CDT Wednesday September 04, 2019



**Current Location:** 29.7N, 79.7W

**Geographic Reference:** 180 miles south of Charleston, SC

**Movement:** North-northwest at 7 mph

**Max Winds:** 100 mph gusting to 120 mph

**Current Hurricane Severity Index:** 21 out of a possible 50 points (13 size, 8 intensity)

**Max Predicted Hurricane Severity Index:** 22 out of a possible 50 points (14 size, 8 intensity)

**Current Radius of Tropical Storm-Force Winds:** 175 miles

**Max Predicted Radius of Tropical Storm-Force Winds:** 295 miles

**Organizational Trend:** Steady

**Forecast Confidence:** Average

### Key Points

1. Tropical storm force winds are expected today for areas north of Cape Canaveral to the coast of Georgia.
2. Hurricane conditions are expected for coastal North Carolina tomorrow evening until around

midday Friday.

3. Significant impacts are likely for Atlantic Canada over the weekend.

### **Our Forecast**

The last reconnaissance plane found that Dorian's max sustained winds were in the 90 mph to 95 mph range. However, Dorian looks slightly better organized since then, so we are keeping the max sustained winds at 100 mph. We do not expect much change in Dorian's winds over the next 36 hours.

Dorian remains on-track this morning on a path that will take the center about 85 miles east of Jacksonville, FL this afternoon and about 55 miles offshore of Charleston, SC tomorrow morning as the hurricane turns northeastward. The center of Dorian may pass very close to the coast of North Carolina between Thursday night and Friday morning with winds of 90 mph to 100 mph, although Dorian's strongest winds will likely remain offshore to the south of the track.

As Dorian is moving along the coast of the Carolinas on Thursday and Friday, it will begin the process of transitioning into an extratropical storm. This process should be completed by Saturday morning as it passes east of Cape Cod on its way to Nova Scotia and Newfoundland. During an extratropical transition, a hurricane will lose its inner core and the wind field will expand to double or triple its former size. Tropical storm-force winds will cover a very large area by the time Dorian reaches the Canadian Maritimes this weekend.

### **Expected Impacts Onshore**

**Northeast Florida and Georgia Coasts:** Scattered power outages are possible for coastal areas of Florida. More widespread power outages are likely for the Georgia coastal counties.

**Carolinas:** Widespread power outages are expected along the coast, along with moderate wind damage. Moderate to major damage from the tidal surge is likely. The heaviest damage could occur along the North Carolina coast. Inland flooding due to heavy rainfall is also likely.

**Nova Scotia and Newfoundland:** Dorian will be transitioning into a large non-tropical storm by the time it reaches Nova Scotia on Saturday afternoon. Widespread strong tropical storm-force winds will likely result in power outages.

We will issue an intermediate advisory at 1 PM EDT. Our next full advisory will be issued by 4 PM EDT

Meteorologists: Chris Hebert / Joe Basciani

Forecast Confidence: Average							Hurricane Severity Index		
Fcst Hour	Valid	Lat.	Lon.	Max Sustained Winds	Max Gusts	Category	Size	Intensity	Total
0	9AM CDT Wed Sep 04	29.70N	79.70W	100 mph	120 mph	Category 2	13	8	21
12	9PM CDT Wed Sep 04	30.80N	80.00W	100 mph	120 mph	Category 2	13	8	21

<b>24</b>	9AM CDT Thu Sep 05	31.90N	79.80W	100 mph	120 mph	Category 2	14	8	22
<b>36</b>	9PM CDT Thu Sep 05	33.30N	78.40W	100 mph	120 mph	Category 2	14	8	22
<b>48</b>	9AM CDT Fri Sep 06	35.00N	76.00W	90 mph	115 mph	Category 1	12	7	19
<b>60</b>	9PM CDT Fri Sep 06	37.10N	72.50W	90 mph	110 mph	Category 1	15	7	22
<b>72</b>	9AM CDT Sat Sep 07	39.90N	68.00W	85 mph	105 mph	Extratropical Storm	14	6	20
<b>84</b>	9PM CDT Sat Sep 07	43.40N	63.00W	80 mph	100 mph	Extratropical Storm	15	5	20
<b>96</b>	9AM CDT Sun Sep 08	47.60N	57.60W	75 mph	90 mph	Extratropical Storm	11	5	16

*The yellow cone represents track error from the previous five years. Over the past five tropical cyclone seasons, the center of the storm tracked within the yellow cone 75% of the time. The cone does not represent the forecast uncertainty in the current advisory for this storm. In addition, strong winds, very high tides, large waves, and heavy rainfall can often extend well outside the yellow cone.*

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