Current Watches and Warnings

A **Tropical Storm Warning** is in effect for the coast of South Carolina from Edisto Beach to South Santee River

Current Details from the National Hurricane Center (NHC)

COORDINATES: 32.7° north, 79.4° west

LOCATION: 30 miles (50 kilometers) south-southeast of Charleston, South Carolina

MOVEMENT: northwest at 9 mph (15 kph)

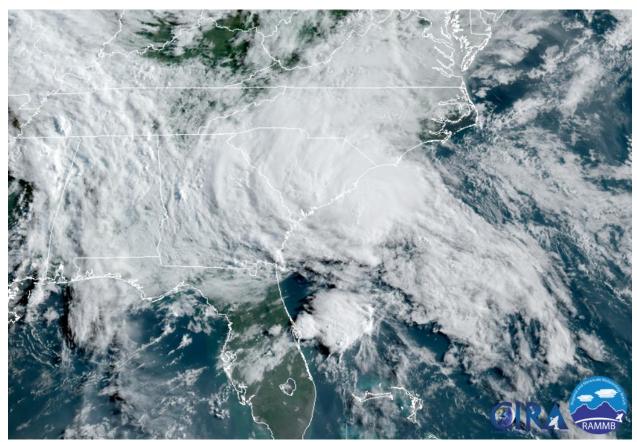
WINDS: 45 mph (75 kph) with gusts to 60 mph (95 kph)

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

MINIMUM CENTRAL PRESSURE: 1009 millibars SAFFIR-SIMPSON SCALE RANKING*: Tropical Storm

FORECAST LANDFALL LOCATION: near Charleston, South Carolina FORECAST LANDFALL TIMEFRAME: Wednesday late morning local time

Latest Satellite Picture



Source: NOAA & Colorado State University (RAMMB)



Discussion

Tropical Storm Bertha, located approximately 30 miles (50 kilometers) south-southeast of Charleston, South Carolina, is currently tracking northwest at 9 mph (15 kph). A cluster of thunderstorms and heavy rainfall that the National Hurricane Center (NHC) had yesterday (Tuesday) declared was not expected to develop into a tropical system has rapidly organized in the past few hours. Radar and satellite images show that the circulation has become substantially better organized than expected and a new center has developed just offshore of the South Carolina coastline. Recent Doppler radar data from Charleston and a nearby offshore buoy indicates that the system is currently producing tropical storm-force wind gusts. Thus, the NHC has begun initiating advisories on Tropical Storm Bertha, the second named storm of the 2020 Atlantic Hurricane Season.

Bertha will be moving inland near Charleston, South Carolina within the next few hours, and there is little (if any) additional strengthening expected. Once inland, the storm should rapidly weaken and be fully dissipated over North Carolina by Thursday.

The best guess motion of Bertha is towards the northwest, and this general motion should continue as it wraps around the western edge of a ridge of high pressure located in the western Atlantic Ocean. The forecast model guidance is in good agreement – with both the GFS (U.S.) and ECMWF (European) ensemble output showing the same scenario – and the NHC has followed suit.

2020 becomes the third year in the satellite era (1965-present) in which two named storms developed in the Atlantic Ocean prior to June 1. The other two years were 2012 (Alberto, Beryl) and 2016 (Alex, Bonnie).

Key Messages from the National Hurricane Center

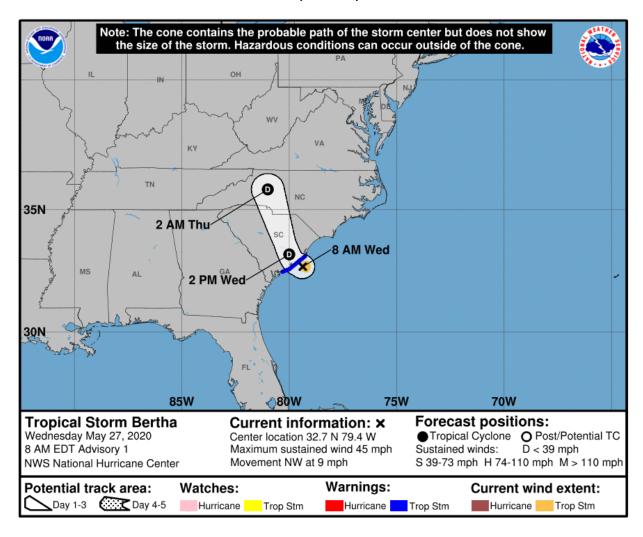
- 1. Bertha is expected to produce heavy rainfall across portions of eastern and central South Carolina, west-central to far southeastern North Carolina, and southwest Virginia. This rainfall may produce life-threatening flash flooding.
- 2. Bertha is expected to bring tropical storm winds to portions of the South Carolina coast within the warning area in the next few hours.

Additional Information

RAINFALL: Bertha is expected to produce total rain accumulation of 2 to 4 inches with isolated totals of 8 inches across eastern and central South Carolina into west central to far southeastern North Carolina and southwest Virginia. This rainfall may produce life-threatening flash flooding.

WIND: Tropical storm conditions are expected to reach the coast within the warning area in the next couple of hours.

National Hurricane Center (NHC) Forecast

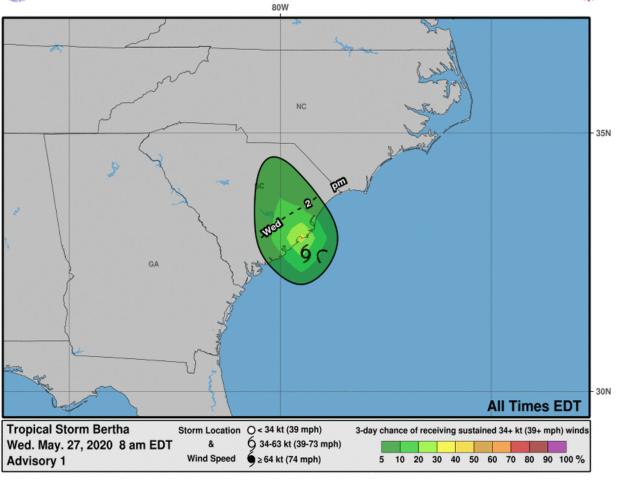


Most Likely Arrival Time of Tropical Storm-Force Winds



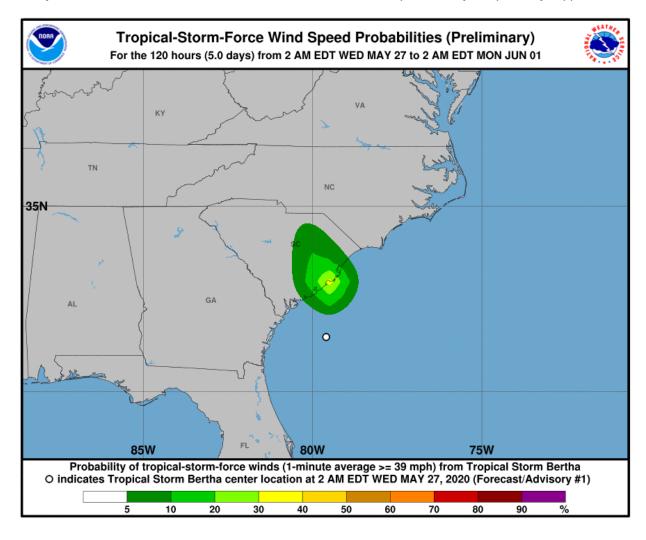
0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



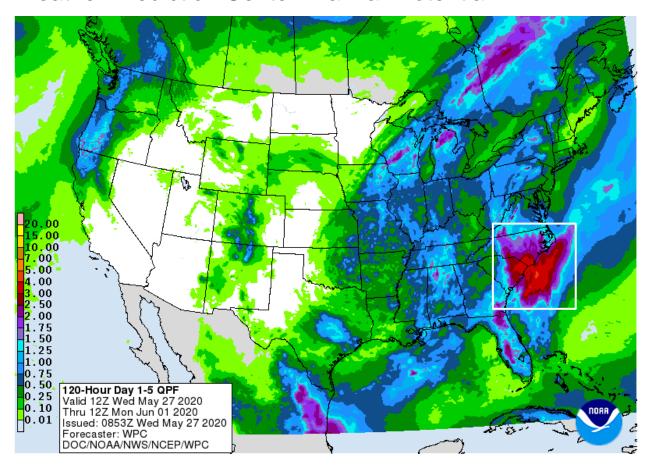


National Hurricane Center: Wind Speed Probabilities

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



Weather Prediction Center: Rainfall Potential



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: Since landfall is imminent, this will be the final Cat Alert on Tropical Storm Bertha. Full details can be found in this week's Weekly Cat Report.

*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	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					Very Intense Tropical Cyclone	Super Cyclonic Storm
125	145	230							
130	150	240		Super Typhoon					
135	155	250							
140	160	260	Cat. 5 Major Hurricane						
>140	>160	>260							

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