

POST TROPICAL CYCLONE REPORT

Storm Name Tropical Storm Debby

NWS Office Newport/Morehead City, NC

Begin/End Date 8/6/2024 - 8/9/2024

Fatalities 0 Direct
0 Indirect

Tornadoes

Event Summary

Tropical Storm Debby came ashore in South Carolina after stalling off the southeast coast for several days. Debby gradually progressed northward through central North Carolina and eventually into southern Virginia. The circulation brought strong moisture advection to eastern NC priming conditions for a long duration rainfall and flash flooding event. Strong low level wind shear and helicity lead to an environment that yielded rotating cells within rainbands. Impacts included a widespread 3-10 inches of rain across the forecast area and flash flooding in several locations. An EF-2 tornado was confirmed in Greene County with peak winds of 125 mph and a path length of 9 miles and width of 400 yards. There was minor wind damage to trees across counties within the tropical storm warning. Debby brought minimal impacts from storm surge to eastern North Carolina.

NOTE: It is unlikely that the point-based observations provided in this report sampled the peak values for the event.

Highest 10 Land Winds (kts)*

Station	State	Type	Sustained	Gust
Piney Island - BT11 Bombing Range	NC	ASOS	29	43
Fort Macon	NC	Mesonet	29	42
Oregon Inlet CG	NC	Mesonet	28	36
New River Air Station	NC	ASOS	27	47
Billy Mitchell Field	NC	ASOS	26	45
Frisco Woods	NC	Mesonet	26	37
Beaufort Airport	NC	ASOS	25	42
Manteo Airport	NC	AWOS-3	25	34
Cherry Point Air Station	NC	ASOS	25	48
Albert J Ellis Airport	NC	AWOS-3PT	25	38

* Anemometer heights < 20 m

Highest 10 Marine Winds (kts)*

<i>Station</i>	<i>Type</i>	<i>Sustained</i>	<i>Gust</i>
Cape Lookout	NDBC	35	42
Ocracoke Sound	Mesonet	34	42
Alligator River Bridge	Mesonet	33	48
Pamlico Sound	Mesonet	31	39
Duck	NOS	30	37
Avon-Ocean	Mesonet	30	43
Onslow Bay Outer	CORMP	29	45
Beaufort	NOS	29	43
Diamond Shoals	NDBC	29	41
Real Slick	Mesonet	28	36

* Anemometer heights < 20 m

Highest 10 Rainfall Totals

<i>Station</i>	<i>State</i>	<i>Type</i>	<i>Inches</i>
Jacksonville 5.4 WSW	NC	CoCoRaHS	11.37
Mount Olive 6.0 SE	NC	CoCoRaHS	10.60
Beaufort 5.3 N	NC	CoCoRaHS	10.12
Jacksonville 6.8 NW	NC	CoCoRaHS	9.97
Emerald Isle 0.4 SW	NC	CoCoRaHS	9.25
Pink Hill 2.5 NE	NC	CoCoRaHS	9.21
Holly Ridge 5.0 E	NC	CoCoRaHS	9.08
Holly Ridge 3.7 E	NC	CoCoRaHS	9.04
Jacksonville 4.5 NW	NC	CoCoRaHS	9.03
Havelock 1.9 SSE	NC	CoCoRaHS	8.99

Highest NOAA Tide Gage Observations

<i>Station</i>	<i>State</i>	<i>Datum</i>	<i>Water Level (ft)</i>
#N/A			

Lowest 10 Pressures

<i>Station</i>	<i>State</i>	<i>Type</i>	<i>Millibars</i>
Onslow Bay Outer		CORMP	1002.2
Duplin County Airport	NC	AWOS-3	1002.6
New River Air Station	NC	ASOS	1003.4
Albert J Ellis Airport	NC	AWOS-3PT	1003.6
Fort Macon	NC	Mesonet	1004.1
Kinston Regional Airport	NC	AWOS-3	1004.3
Pitt-Greenville Airport	NC	AWOS-3	1004.7
Beaufort		NOS	1004.9
Cherry Point Air Station	NC	ASOS	1005.4
Coastal Carolina Airport	NC	ASOS	1005.6

Report Last Updated on 08/13/2024:

The following files have been updated: Wind and Pressure, Rainfall, Water Level, Tornadoes