Tropical Storm Debby Briefing

6 AM EDT
Tuesday, Aug 6, 2024

Catastrophic flooding likely this week

Disclaimer: The information contained within is time-sensitive. Do not use after:  11 AM EDT
Situation Overview

Tropical Storm Debby

- Potentially historic rainfall totals will likely produce areas of catastrophic flooding through at least Friday morning.

- Impacts will continue through mid-to-late week. Tropical storm force winds, storm surge, and some tornadoes also possible for portions of the area.

- Longer term River Flooding will likely inhibit recovery efforts into next week and beyond.
Tropical Storm Debby continues to move slowly northeast.

Slow movement northeast and then east with the storm moving off of the GA coast this afternoon.

The movement of Debby will then slowly turn north late Wednesday with a second landfall along the SC coast forecast Thursday.

Intensity and track forecast still somewhat uncertain Thursday and Friday.

**NOTE:** Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.
Threat Levels - Max Values for Debby

Hurricane Debby

- **Tuesday**
- **Wednesday**
- **Thursday**
- **Friday**

**Rain**

- Tuesday: Moderate Impact
- Wednesday: Moderate Impact
- Thursday: High Impact
- Friday: Little to No Impact

**Surge**

- Tuesday: Moderate Impact
- Wednesday: Moderate Impact
- Thursday: High Impact
- Friday: Little to No Impact

**Wind**

- Tuesday: Moderate Impact
- Wednesday: Moderate Impact
- Thursday: High Impact
- Friday: Little to No Impact

**Tornado**

- Tuesday: Moderate Impact
- Wednesday: Moderate Impact
- Thursday: High Impact
- Friday: Extreme Impact

**Marine**

- Tuesday: High Impact
- Wednesday: High Impact
- Thursday: High Impact
- Friday: Moderate Impact

**Effects and Impacts Legend**

- Little to No Impact
- Minor Impact
- Moderate Impact
- High Impact
- Extreme Impact

Last updated: 8/6/2024 4:43 AM EDT

National Weather Service - Charleston, SC
<table>
<thead>
<tr>
<th>Hazard</th>
<th>Impacts</th>
<th>Location</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding Rain</td>
<td>Potentially historic rainfall totals will likely produce areas of catastrophic flooding</td>
<td>Entire area, with highest amounts likely across coastal SC</td>
<td>Heavy rainfall now through Thursday</td>
</tr>
<tr>
<td>Storm Surge &amp; Inundation</td>
<td>Surge impacts exacerbated by heavy rainfall. Prepare for 2-4 feet AGL</td>
<td>Entire coast, but area will change as storm moves northward</td>
<td>Greatest threat Tuesday through Thursday, especially SC</td>
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<tr>
<td>Wind</td>
<td>Significant wind impacts, including scattered power/comms outages, possible</td>
<td>Within the Tropical Storm Warning area, especially southeast SC</td>
<td>Tonight through Thursday</td>
</tr>
<tr>
<td>Tornado</td>
<td>Isolated tornadoes could produce locally enhanced damage</td>
<td>Highest chances coastal SC</td>
<td>Through Wednesday</td>
</tr>
<tr>
<td>Marine</td>
<td>Winds and Seas dangerous to all mariners</td>
<td>All Atlantic waters</td>
<td>Through Wednesday (GA) and through Thursday (SC)</td>
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</tbody>
</table>
- **Tropical Storm Wind Warning**: Coastal SC, portions of southeast GA, ALL Atlantic waters

- **Flood Watch**: Entire area

- **Storm Surge Warning**: Entire coast

- **Tornado Watch**: Entire area

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Storm Total Rainfall Amounts: 10-20 inches, with locally higher amounts approaching 25 inches

Additional Rainfall: 10-20” for SC and 5 - 10” for GA.

NOTE: Successive rainfall forecasts now appear lower due to rainfall already having fallen. Really “additional” event rainfall.
There is a potential for:

- Potentially **Historic Rainfall** likely to bring areas of **catastrophic flooding**.

- **Timing**: GA: through at least Wednesday. SC through at least Thursday

- **Impacts**:
  - Numerous homes & structures flooded, damage to roadways (washouts)
  - Unprecedented small stream/creek flooding
  - Longer term major river flooding
There is a potential for:

- Storm Surge Warning for entire coastline
- Potential for 2-4 Feet of Storm Surge Inundation over normally dry tidal/near tidal region
- Timing: Greatest threat Tuesday through Thursday, especially SC
- Impacts:
  - Flooding of coastal/near coastal streets and roadways, especially low lying ones
  - Some coastal structures may be flooded
  - Minor to moderate beach erosion
Most Likely Time of Arrival

Tropical Storm Debby

● Most Likely Time of Arrival for Tropical Storm Force Winds:
  - **GA** - Tonight through early Wednesday
  - **SC** - Tuesday/Tuesday afternoon

● Best chances for Tropical Storm Wind/Wind gusts will be our southeast GA counties, all coastal areas, and/or within strong rainbands any location

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There is a potential for:

- Tropical Storm winds/wind gusts possible, especially coastal areas and/or within rainbands

- Timing: GA: through at least tonight. SC: through Wed/Wed night

- Impacts:
  - Isolated to scattered power and communications outages
  - Downed trees and/or large tree limbs, could block roads
  - Stronger winds over bridges
There is a potential for:

- Isolated to scattered tornadoes possible, with greatest threat near the coast
  - Especially within rainbands
  - Generally short-lived, with potential for short warning lead time(s)

- Timing: SC: Tues and Wed/Wed night

- Impacts: Locally enhanced damage possible
Key Take-Aways

Tropical Storm Debby

- Highest impact remains to be potential for historic rainfall, with areas of catastrophic flooding through mid-to-late week

- Expect a prolonged event with wind, surge, and tornado impacts also possible, but secondary to the flooding rainfall threat.

Forecast Confidence

Overall Confidence in Event - MODERATE

Confidence for Individual Impacts - LOW to MODERATE
Next Briefing:
Tuesday 1130 AM
Method: Webinar

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Local Resources
Tropical Storm Debby