

OCTOBER 2024

Flooding from Hurricane Helene



ICEYE

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Flood briefing series powered by multisource data analysis leveraging ICEYE satellite imagery



Hillsborough county, Florida

ANALYSIS RELEASE 9 | OCTOBER 8

Hurricane Helene brought significant storm surge flooding to much of the Gulf Coast of Florida.

Since 25 September, the US Southeast region has experienced heavy rainfall, with widespread totals of over 5 inches. The highest totals were recorded in the Appalachians, where more than 20 inches of rain led to catastrophic river flooding in some parts of western North Carolina.

The hurricane made landfall on September 26 in the Big Bend region of the Florida panhandle. With winds reaching 140mph, it was a category 4 storm that ranked among the most powerful to strike the United States.

ICEYE has been monitoring the storm since its formation, acquiring 150+ SAR satellite images of the impacted areas through thick storm clouds and even at night. According to our final analysis release, we identified more than 160,000 buildings that could be impacted by the flooding in the region.

TOTAL FLOOD EXTENT

3,645 sq mi (9,440 km²)

MOST AFFECTED STATES

Florida Tennessee Georgia Virginia South Carolina West Virginia North Carolina

MOST AFFECTED CITIES

FLORIDA: Tampa St.Petersburg Fort Myers

NORTH CAROLINA: Asheville

AVERAGE INUNDATION AT BUILDING LEVEL

1.72 ft (0.53 m)

IMPACTED BUILDING COUNT

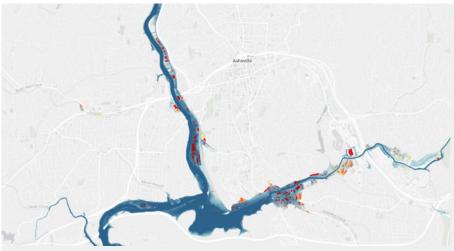
165,330

Total number of buldings affected by flood water depth category



Disclaimer

The current data is based on ICEYE's analysis with information collected until October 8, 2024. The analysis is focused on data specific to the regions most affected by the floods. Some areas which have been impacted by the flooding may not be represented in the data.

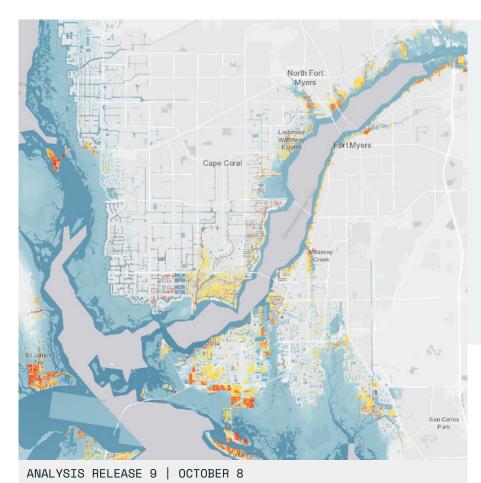


Asheville, North Carolina

IMPACTED BUILDING COUNT 349

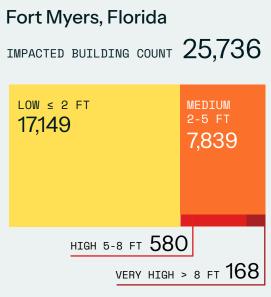


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Get the full analysis via

iceye.com/contact



ICEYE analysis timeline

- Start of monitoring SEPTEMBER 23
- First SAR image acquisition SEPTEMBER 23
- Event activated SEPTEMBER 27
- First analysis release SEPTEMBER 27
- Final analysis release OCTOBER 8