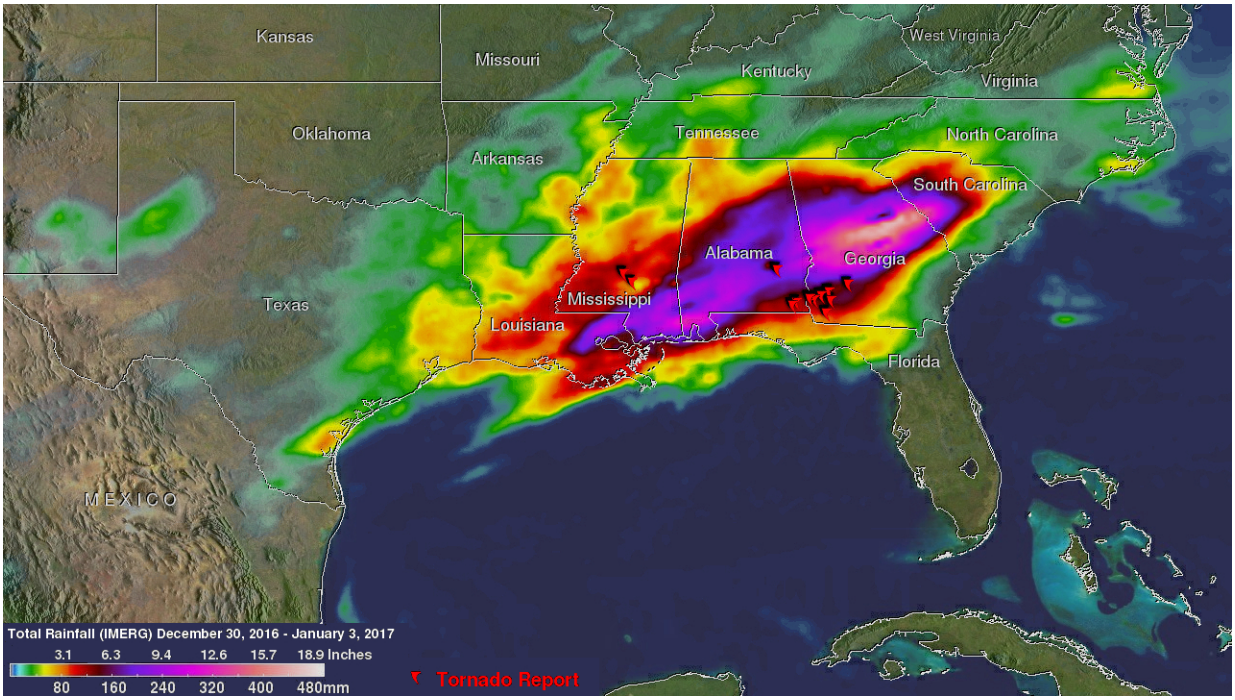
NASA adds up heavy rainfall from southeastern US severe weather

January 4 2017



NASA's IMERG estimated total rainfall from Dec. 30, 2016, through early Jan. 3, 2017, at more than 12 inches (305 mm) over the southeastern United States. Red symbols show the locations where some of the numerous tornadoes were reported. Credit: NASA/JAXA, Hal Pierce

Severe thunderstorms spawned tornadoes and generated flooding rainfall over the Southeast on Monday evening, Jan. 2, 2017. Using satellite data, NASA analyzed the rainfall from the outbreak and found up to a foot of

rain had fallen over a five-day period.

At least 12 tornadoes were reported with twisters spotted in Mississippi, Alabama and Georgia. Four deaths in Alabama and one in Florida have been blamed on this violent weather.

The Global Precipitation Measurement mission, or GPM, core satellite measures rainfall from space. It is also part of a constellation of satellites that provides data for NASA's IMERG or Integrated Multi-satellite Retrievals for GPM (IMERG) program which creates a merged precipitation product from the GPM constellation of satellites. GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency (JAXA).

IMERG estimated total rainfall from Dec. 30, 2016, through early Jan. 3, 2017. This analysis of rainfall over the Southeast indicates that more than 12 inches (305 mm) of rain fell over the southeastern United States during this stormy period.

The IMERG data are produced using data from satellites in the GPM Constellation and then calibrated with measurements from the GPM Core Observatory as well as rain gauge networks around the world. The calculations were done at NASA's Goddard Space Flight Center in Greenbelt, Maryland.

Provided by NASA's Goddard Space Flight Center