

NASA looks at rainfall in Texas and Oklahoma flooding

June 2 2016, by Hal Pierce



NASA's IMERG estimated rainfall totals from May 27 to June 2, 2016. Rainfall totals can be seen off the coast of the Carolinas from Tropical Depression Bonnie. Totals in parts of southeastern Texas were estimated by IMERG to be over 431 mm (17 inches). Credit: NASA/JAXA/SSAI, Hal Pierce

NASA's Integrated Multi-satellitE Retrievals for GPM (IMERG) calculated rainfall that occurred over a week and caused major flooding in Texas and Oklahoma, as well as soaking rains in South Carolina from



Tropical Depression Bonnie.

IMERG uses data from NASA and the Japan Aerospace Agency's Global Precipitation Measurement mission (GPM) satellite and other satellites.

Continuing heavy rain has resulted in dangerous flooding conditions from Oklahoma through eastern Texas. The Brazos, Trinity and Colorado Rivers in Southeastern Texas are at or above flood stage. Flooding resulted in the deaths of at least 6 people in Texas during the past week. Governor Greg Abbott declared a state of disaster in 31 Texas counties. Over 20 inches of <u>rainfall</u> were reported in some areas since May 30, 2016.

Parts of Georgia and the Carolinas were also flooded by a very slow moving <u>tropical depression</u> Bonnie.

This estimate of rainfall totals from May 27, 2016 to June 2, 2016 was made using data from NASA's Integrated Multi-satellitE Retrievals for GPM (IMERG). During this period rainfall totals in parts of southeastern Texas were estimated by IMERG to be over 431 mm (17 inches).

Global precipitation estimates are provided by IMERG through the use of data from satellites in the GPM Constellation and is calibrated with measurements from the GPM Core Observatory as well as rain gauge networks around the world.

NOAA's National Weather Prediction Center in College Park, Maryland said today in the forecast discussion: A slow-moving frontal boundary will continue to move across the southern plains and lower Mississippi valley today, with scattered to numerous showers and thunderstorms expected today and tonight. Heavy rainfall amounts of 1 to 3 inches are



possible across portions of the southern plains and western Gulf Coast, and flash flooding is possible. On Friday the front will become stationary across Texas, keeping numerous showers and thunderstorms in place from the eastern half of Texas to eastward to the lower Mississippi valley through Saturday morning.

While along the U.S. Southeast, Tropical Depression Bonnie is expected to start moving away from North Carolina's Outer Banks later in the day on June 2 and June 3.

Provided by NASA's Goddard Space Flight Center

Citation: NASA looks at rainfall in Texas and Oklahoma flooding (2016, June 2) retrieved 16 June 2024 from https://phys.org/news/2016-06-nasa-rainfall-texas-oklahoma.html

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