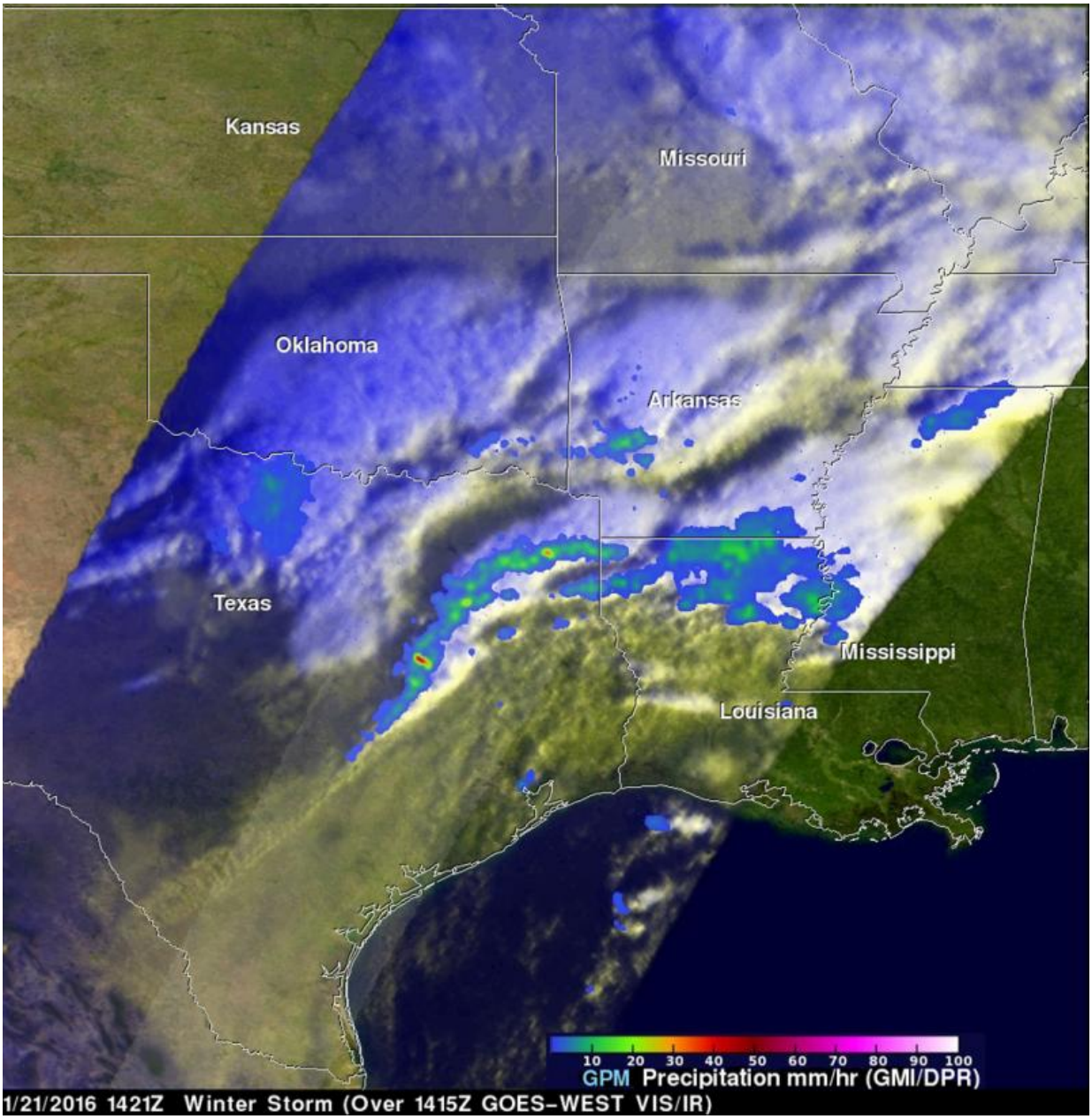
NASA sees gulf coast severe weather from developing winter storm

January 22 2016



The GPM core satellite on Jan. 21, 2016 at 1421 UTC (8:21 a.m. CST) observed rain falling at a rate of over 100 mm (3.9 inches) per hour in one line of storms moving over eastern Texas. Credit: SSAI/NASA/JAXA, Hal Pierce

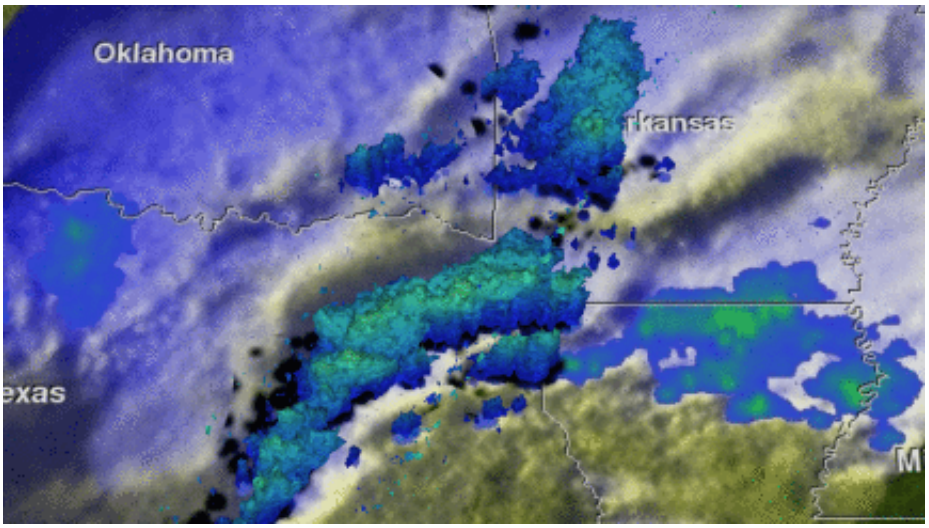
An intensifying winter storm that is forecast to cause an historic blizzard in the Washington, D.C. area has also spawned severe weather in states from Texas to Florida along the Gulf Coast. NASA's Global Precipitation Measurement or GPM mission core satellite observed the extreme rainfall this system was generating in the Gulf coast.

There were numerous reports of hail near this system from Thursday morning, Jan. 21, 2016 through early Friday morning, Jan. 22, 2016. At least one tornado was reported with this severe weather. The GPM core observatory satellite flew over the Gulf Coast on Jan. 21, 2016 at 1421 UTC (8:21 a.m. CST) and had a good view of extreme rainfall occurring within this developing winter storm.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, data from GPM's Microwave Imager (GMI) and Dual-frequency Precipitation Radar (DPR) were used to measure the rainfall that was occurring when GPM traveled overhead from space. GPM's DPR observed rain falling at a rate of over 100 mm (3.9 inches) per hour in one line of storms moving over eastern Texas. GPM's 3-D radar data (Ku Band) were used to create a 3-D flyby of precipitation. GPM is a mission managed by both NASA and the Japan Aerospace Exploration Agency.

Behind the weather system, on Jan. 22, 2016 a tight pressure gradient will result in strong and gusty winds of 15 to 20 mph with gusts to 25 to 30 mph across south central and southwestern Arkansas, north central

Louisiana, southeastern Oklahoma and northeastern Texas, according to the National Weather Service in Shreveport, Louisiana.



The GPM core satellite on Jan. 21, 2016 at 1421 UTC (8:21 a.m. CST) observed rain falling at a rate of over 100 mm (3.9 inches) per hour in one line of storms moving over eastern Texas. Credit: The GPM core satellite on Jan. 21, 2016 at 1421 UTC (8:21 a.m. CST) observed rain falling at a rate of over 100 mm (3.9 inches) per hour in one line of storms moving over eastern Texas. Credit: SSAI/NASA/JAXA, Hal Pierce

As the storm moves, east, places like eastern Arkansas are under winter storm warnings for ice accumulation. The National Weather Service in Little Rock Arkansas noted that much of central, southern and eastern Arkansas are facing additional ice accumulations of up to a tenth of an inch will be possible...with localized heavier amounts and additional snow and sleet. In addition, severe weather is also possible across eastern Gulf coasts and Florida.

On Jan. 22, 2016 the National Weather Service Weather Prediction Center in College Park, Maryland said "A potentially crippling winter

storm is anticipated for portions of the mid-Atlantic Friday into early Saturday. Farther south, significant icing is likely for portions of Kentucky and North Carolina." For updates on the storm, visit: http://www.weather.gov.

Provided by NASA's Goddard Space Flight Center