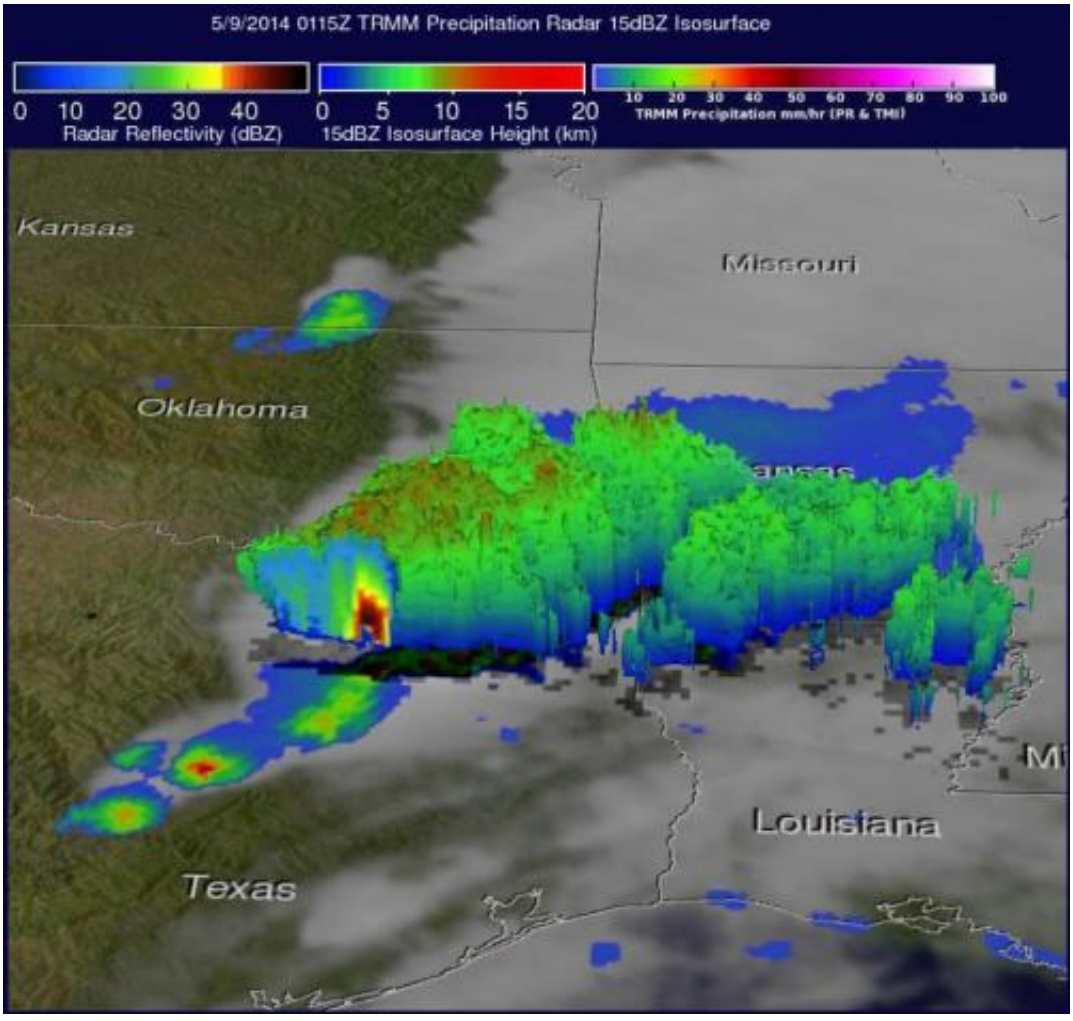
TRMM satellite see spring storms hit the US Great Plains

May 9 2014



The TRMM satellite flew above tornado spawning thunderstorms in the southern United States on May 9, 2014 at 0115 UTC. Credit: SSAI/NASA, Hal Pierce

The Tropical Rainfall Measuring Mission or TRMM satellite captured rainfall and cloud height information about the powerful thunderstorms and severe weather that affected the Great Plains over May 8 and 9.

Severe weather extended from Minnesota to southern Texas on Thursday afternoon, May 8 and Friday morning, May 9. During that time there were three tornadoes reported in Minnesota, two in Colorado and two in Missouri.

The TRMM satellite flew above tornado spawning thunderstorms in the southern United States on May 9, 2014 at 0115 UTC (May 8, 2014 at 8:15 PM CTD). A rainfall analysis from TRMM's Precipitation Radar (PR) and Microwave Imager (TMI) was created at NASA's Goddard Space Flight Center in Greenbelt, Md.

The TRMM data was overlaid on an infrared image from NOAA's GOES-East satellite that showed the extent of the clouds at the same time. TRMM's PR instrument found rain falling at a rate of over almost 163 mm (about 6.4 inches) per hour in an intense line of storms extending from Arkansas into Texas.

TRMM noticed that some of the highest thunderstorms topped out at around 11 km (6.8 miles) high. Some of these powerful storms were returning reflectivity values of over 55dBZ to the satellite.

Provided by NASA's Goddard Space Flight Center

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