

Lee's remnants continue to drench the Eastern US

September 8 2011



GOES-13 captured the clouds associated with tropical Storm Lee's remnants, and a warm front along the U.S. East coast on Sept. 7 at 9:02 a.m. EDT. The combination of the two are bringing heavy rainfall from New England to the Appalachian Mountains. Hurricane Katia is seen to the right in the western Atlantic Ocean and approaching the US. Credit: NASA/NOAA GOES Project

Landfalling tropical cyclones can bring a lot of rain, but after Lee made landfall and merged with a stalled frontal system over the eastern U.S. the rain keeps coming. Lee's clouds, however, continue to remain painfully out of reach of Texas, that needs the rain to battle several wildfires. One NASA satellite image showed how close but how far that needed rain was from the Lone Star State, while another showed the extent of Lee's cloud cover merged with a front.



As of today, Sept. 7, 2011, there has been one change with Lee's remnants. According to NOAA's Hydrometeorological Prediction Center (HPC), "the <u>surface circulation</u> of Lee has been absorbed by a large scale extratropical low to the north and that means heavy rains and flooding expected from the central Appalachians into parts of New England."

When NASA's Aqua satellite flew over the central U.S. on Sept. 6, 2011 at 3:23 p.m. EDT it captured a visible image from the Atmospheric Infrared Sounder (AIRS) instrument onboard. The image showed several plumes of smoke from the fires raging in Texas and a rounded mass of clouds just out of reach to the east, from the remnants of Tropical Storm Lee, which delivered only gusty winds to Texas and fanned the flames. Lee's rainfall remained to the east of the Texas fires.



This visible image was captured by the Atmospheric Infrared Sounder (AIRS) instrument that flies aboard NASA's Aqua satellite. It was taken on Sept. 6, 2011, at 3:23 p.m. EDT. Several plumes of smoke from the fires raging in Texas as visible in the lower center and left. The rounded mass of clouds on the right side are the remnants of Tropical Storm Lee, which delivered only gusty winds to Texas and fanned the flames. Lee's rainfall remained to the east. Credit: NASA JPL, Ed Olsen



Today, NOAA's <u>Geostationary Operational Environmental Satellite</u> called GOES-13 captured a <u>visible image</u> of the clouds associated with tropical Storm Lee's remnants, and a warm front along the U.S. East coast. The image also shows Hurricane Katia threatening the eastern U.S. in the Atlantic. The two systems seem to be acting against each other. Lee's remnants are keeping Katia away from a mainland landfall, while Katia is preventing Lee's remnants from moving east and offshore.

Finding Lee's surface circulation today, Sept. 7 is not possible because Lee's circulation was absorbed by a large scale extratropical low pressure area near the Tennessee/Virginia border. One other factor coming into play and keeping the U.S. east coast wet is a warm front draped across the Mid-Atlantic states bringing in warm, moist air from the Atlantic Ocean. It's causing heavy rainfall from southern New England to the central Appalachian mountains, and it is expected to stick around for the next couple of days. The HPC expects it to dissipate slowly by the week's end. Additional rainfall can range between 4 to 8 inches with isolated totals up to 10 inches until then.

Provided by NASA's Goddard Space Flight Center

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