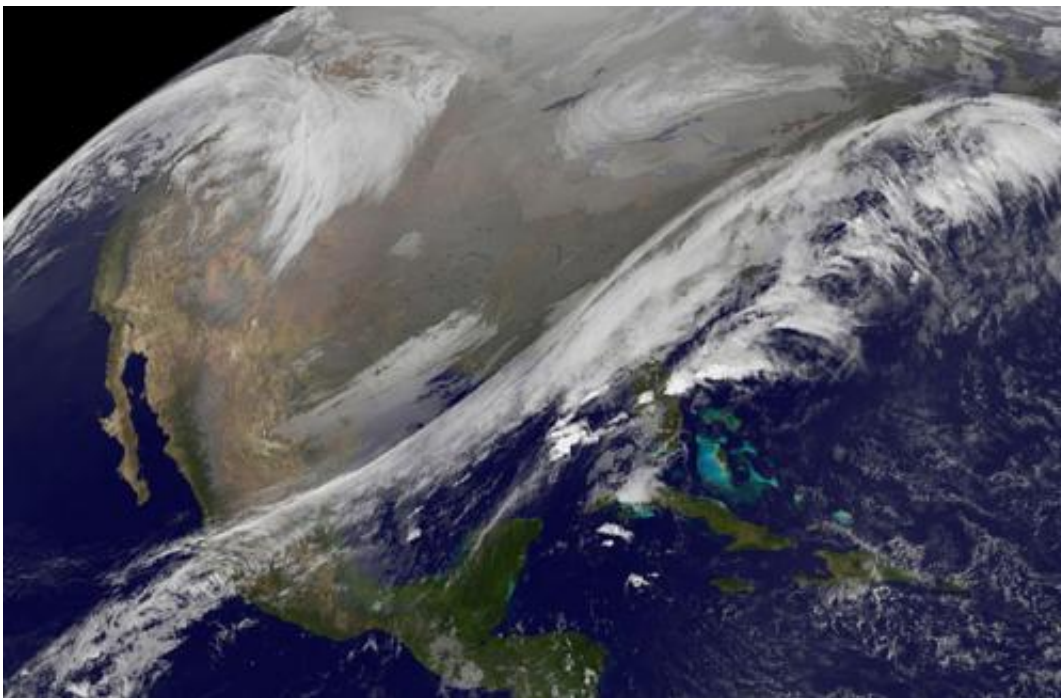


Satellite views early Thanksgiving travel trouble areas in US

November 25 2014, by Rob Gutro



This NOAA's GOES satellite infrared image taken on Nov. 25 at 11:45 UTC (6:45 a.m. EST) shows two main weather systems over the US. Credit: NASA/NOAA GOES Project

As the U.S. Thanksgiving holiday approaches this Thursday, November 27, NOAA's GOES-East and GOES-West satellites are keeping a weather eye out for storms that may affect early travelers. In an image from Nov. 25, the satellites show an active weather pattern is in place for travelers across the central and eastern U.S.

NOAA's GOES-East satellite provides visible and infrared images over the eastern U.S. and the Atlantic Ocean, while NOAA's GOES-West satellite covers the western U.S. and Pacific Ocean from its fixed orbit in space. Data from both satellites were combined at NASA's GOES Project to create a full view of the U.S. on Nov. 25 at 11:45 UTC (6:45 a.m. EST). The image shows clouds associated with cold front stretching from the Gulf of Mexico over northern Florida and along the U.S. East coast to eastern Canada. Clouds associated with another area of low pressure are in the northern Rockies and northwestern U.S.

To create the image, NASA/NOAA's GOES Project takes the cloud data from NOAA's GOES-East satellite and overlays it on a true-color image of land and ocean created by data from the Moderate Resolution Imaging Spectroradiometer, or MODIS, instrument that flies aboard NASA's Aqua and Terra satellites. Together, those data created the entire picture of the storm and show its movement. After the storm system passes, the snow on the ground becomes visible.

NOAA's National Weather Service Weather Prediction Center said "a storm system will develop off the coast of the Carolinas early Wednesday (Nov. 25) and strengthen as it moves rapidly up the East Coast Wednesday into early Thursday (Nov. 26). Heavy snow is likely to begin in the central Appalachians early Wednesday morning, spreading northeast through the interior Mid-Atlantic into New England by Wednesday night. Winter Storm Watches are in effect for these areas."

For travelers in the western U.S., the Northern Rocky Mountains are expected to receive more snow from the north side of a stationary frontal boundary. South of the boundary rain showers will affect the lower valley. The National Weather Service calls for cold weather to continue in the northern Plains and Upper Midwest as a Canadian surface high pressure rules the weather. The U.S. Southwest will experience nice weather for mid-week.

In the Pacific Northwest, the National Weather Service noted that a warm front will bring rain, heavy at times, to the Cascades today and tonight. There will be a break in the heavier rains on Wednesday, then another period of heavy rain for the Cascades Wednesday night through Friday morning as a cold front slowly drags through the area.

NOAA's GOES satellites provide the kind of continuous monitoring necessary for intensive data analysis. Geostationary describes an orbit in which a satellite is always in the same position with respect to the rotating Earth. This allows GOES to hover continuously over one position on Earth's surface, appearing stationary. As a result, GOES provide a constant vigil for the atmospheric triggers for severe [weather](#) conditions such as tornadoes, flash floods, hail storms and hurricanes.

Provided by NASA's Goddard Space Flight Center

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