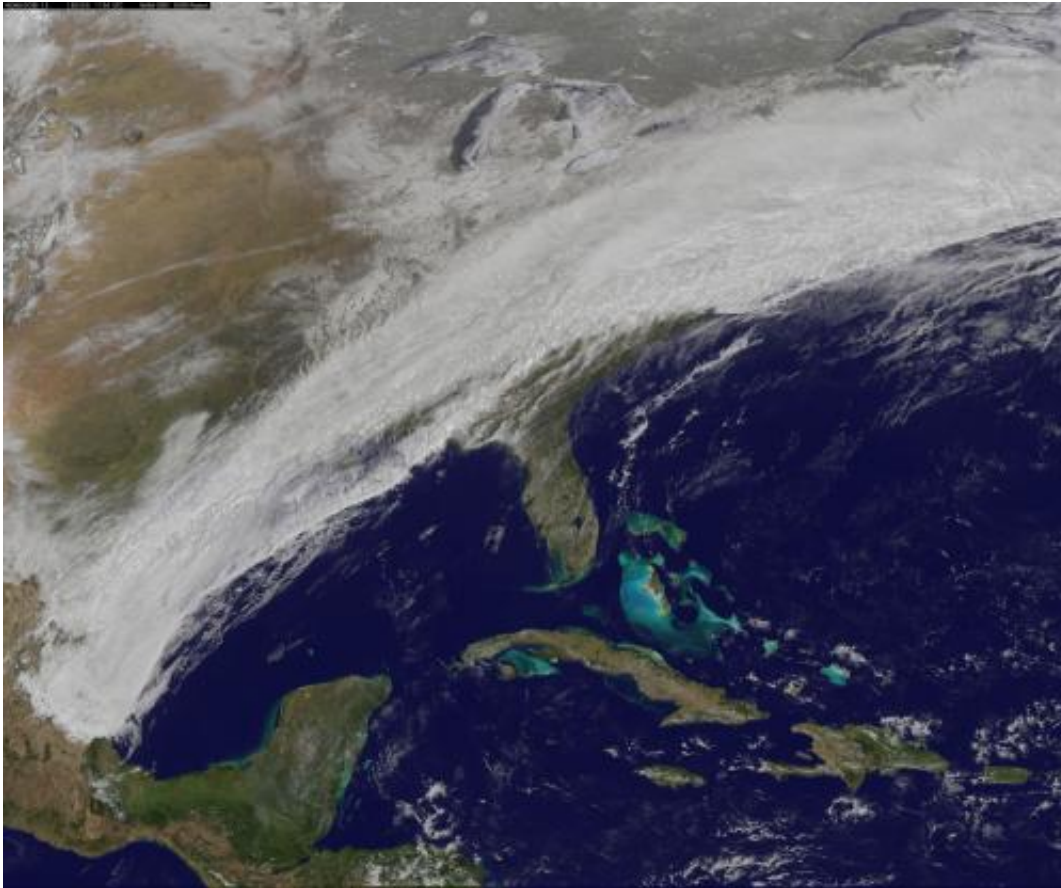


## Satellite movie shows winter storm sweep over US East coast

March 12 2015

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This GOES-East image from March 5 at 17:30 UTC (12:30 p.m. EST) shows clouds associated with a cold front push east and south that brought winter weather to the U.S. East Coast. Credit: NASA/NOAA GOES Project

A winter storm was bringing snow, sleet and freezing rain from lower

Mississippi Valley to Northeastern U.S. on Thursday, March 5, 2015. A new NASA animation of NOAA's GOES-East satellite imagery showed the progression of the clouds associated with the storm system that triggered winter storm warnings and winter weather advisories from the southern Plains eastward through the Mid-Atlantic and southern New England coast. The system also triggered flood warnings along and to the west of the central Appalachians.

An animation of GOES satellite visible and infrared imagery from March 3 through March 5 showed clouds associated with a cold front push over U.S. East coast. Behind the front, Arctic air is expected to drop low temperatures into the single numbers from Washington, D.C. to Minnesota overnight. Temperatures in the Carolinas and Tennessee are expected to drop to the low 20s.

NOAA's National Weather Service Weather Prediction Center (NWS NPC) in College Park, Maryland noted "a strong cold front moving across the eastern U.S. will bring heavy snow from parts of the Ohio Valley to the Northeast today (March 5) with rain, freezing rain and sleet possible from parts of the lower Mississippi Valley across the Southeast to the southern Mid-Atlantic. Snowfall totals of 5 to 10 inches are possible for some areas. Winter Storm Warnings remain in effect from Texas to Nantucket."

The animation ends at 17:45 UTC (12:45 p.m. EST). Before the end of the animation, the low pressure center along an arctic frontal boundary was nearly stationary over western North Carolina at 9 a.m. EST on March 5, according to the NWS NPC. NWS radar and surface observations indicated an extended swath of precipitation from near the Texas Gulf Coast through the interior eastern U.S. into southern New England. NPC's storm summary noted at that time "rain was changing to sleet/[freezing rain](#) and to all snow along a band within this swath as colder air continues to filter in from the north. Some areas in Tennessee,

the northern mid-Atlantic and southern New England were reporting moderate to [heavy snow](#)."

To create the video and imagery, 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.

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.

Provided by NASA

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