

GPM sees nor'easter dump snow on New England

January 28 2015, by Ellen Gray

At 5:05 p.m. EST Monday, Jan. 26, 2015, the Global Precipitation Measurement mission's Core Observatory flew over the Nor'easter that dumped snow on New England. This satellite image shows the rate of rainfall, with low amounts in green and high in red, and snowfall, in blue to purple. The center of the storm, shown in 3-D, was offshore with far reaching bands of snowfall. More intense snow rates are shown in darker blue, which can be seen on the northern edge of the storm. Visible in the 3-D image of the center of the storm are the snowy tops of the clouds in blue and underneath where it melts into rain, the most intense rainfall shown in red, over the ocean. Over land, snow reaches the ground.

Nor'easters form when warm moist air traveling north with the Gulf Stream up the coast collides with cold air travelling down from Canada. The combination of moisture and cold can develop into snowstorms. This week these air masses collided into a storm that brought blizzard conditions with, as of Tuesday morning, up to 30 inches of snow and 70 mile per hour winds across parts of Connecticut, Maine, Massachusetts, New Hampshire New York and Rhode Island. Lesser snow totals also hit New Jersey, Pennsylvania, Maryland, Virginia and West Virginia. Snow is expected to continue to fall into Wednesday as the storm moves northeast up the coast.

The GPM Core Observatory carries two instruments that show the location and intensity of rain and snow, which defines a crucial part of the [storm](#) structure and how it will behave. The GPM Microwave Imager sees through the tops of clouds to observe how much and where

precipitation occurs, and the Dual-frequency Precipitation Radar observes precise details of precipitation in 3-dimensions.

GPM data is part of the toolbox of satellite data used by forecasters and scientists to understand how storms behave. GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency.

Provided by NASA's Goddard Space Flight Center

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