

NASA sees post Tropical Cyclone Nate's wide rainfall reach

October 10 2017





On Oct. 9 at 2:54 a.m. EDT (0654 UTC), NASA-NOAA's Suomi NPP satellite



captured this thermal image of cloud top temperatures from the remnants of Nate's cloud tops as it moved into the Mid-Atlantic and New England. Credit: NOAA/NASA Goddard Rapid Response Team

NASA-NOAA's Suomi NPP satellite analyzed the temperatures in Posttropical cyclone Nate's cloud tops as the storm moved over the Ohio Valley. Satellite imagery showed the storm was bringing rainfall from the northeastern U.S., to the Mid-Atlantic and south through the Appalachian Mountains.

Infrared light provides valuable temperature data to forecasters and cloud top temperatures give clues about highest, coldest, strongest storms within a hurricane. NASA-NOAA's Suomi NPP satellite provided that data and showed the location of the strongest storms in Post-tropical cyclone Nate.

On Oct. 9 at 2:54 a.m. EDT (0654 UTC) the VIIRS instrument aboard NASA-NOAA's Suomi NPP satellite captured a thermal image of cloud top temperatures from the remnants of Nate's <u>cloud tops</u> as it brought rain to the Mid-Atlantic and New England. Coldest cloud top temperatures were seen in storms over the Mid-Atlantic States down the chain of the Appalachian Mountains and back toward the Florida panhandle.

At 5 a.m. EDT (0900 UTC) on Monday, Oct, 9 the center of posttropical cyclone Nate was located near 40.7 degrees north latitude and 81.7 degrees west longitude. That puts the center of circulation about 20 miles (35 km) southwest of Akron, Ohio.

NOAA's Weather Prediction Center (WPC) has taken over forecasting for the <u>storm</u> since Nate has become a post-tropical cyclone. WPC said



"Doppler radar and <u>satellite imagery</u> indicated that the precipitation shield associated with Nate is on the northern and eastern side of the circulation. Moderate to <u>heavy rainfall</u> is occurring in the central Appalachians and Mid-Atlantic, with rain showers farther south into the Carolinas.



On Oct. 8 at 7:15 a.m. EDT (1115) NOAA's GOES East satellite provided an infrared look at the remnants of Nate stretching from the Mid-Atlantic to New England. Credit: NOAA/UWM-CIMSS



Farther north, tropical moisture is interacting with a frontal boundary stretching from the Ohio Valley through the northern Mid-Atlantic and northeast, leading to moderate to heavy rainfall for those areas and the lower Great Lakes. Nate is expected to continue tracking northeastward, moving through the Ohio Valley and into the Lower Great Lakes during the day on Monday."

Flood warnings and advisories are in effect across parts of the southern and central Appalachians. Wind advisories are in effect across parts of the central Appalachians.

For more information visit the Weather Prediction Center page: <u>http://www.wpc.ncep.noaa.gov/tropical/tropstorms.shtml</u>.

Provided by NASA's Goddard Space Flight Center

Citation: NASA sees post Tropical Cyclone Nate's wide rainfall reach (2017, October 10) retrieved 23 June 2024 from <u>https://phys.org/news/2017-10-nasa-tropical-cyclone-nate-wide.html</u>

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