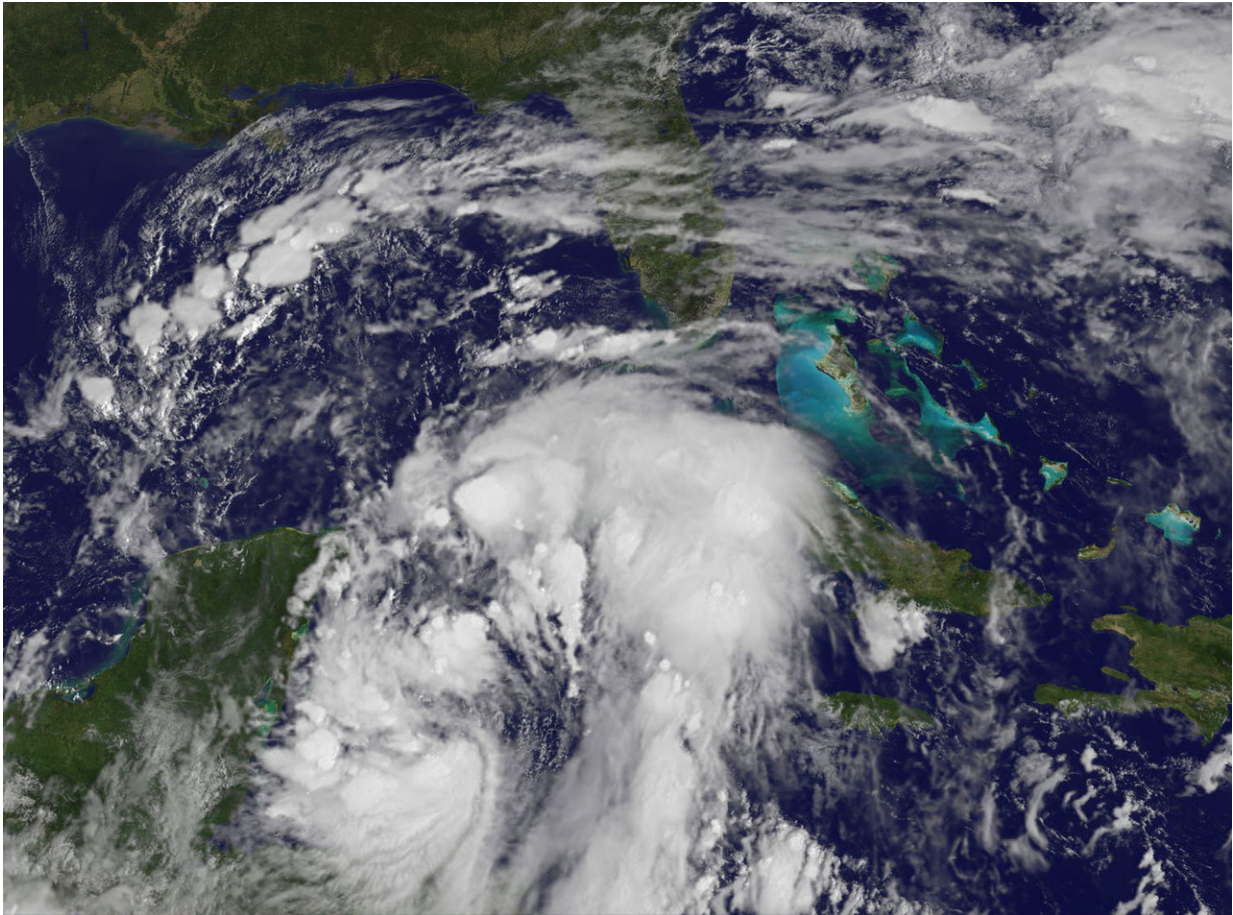


NASA analyzes Tropical Storm Nate

October 6 2017



On Oct. 6 at 10 a.m. EDT (1400 UTC) NOAA's GOES East satellite provided a visible image of Nate that showed the center back over water in the northwestern Caribbean Sea. Powerful thunderstorms circled the center and east of the center. Credit: NASA/NOAA GOES Project

NASA's Aqua satellite and NOAA's GOES East satellite provided imagery of Tropical Storm Nate affecting Nicaragua and extending into the Caribbean Sea.

The Atmospheric Infrared or AIRS instrument aboard NASA's Aqua satellite captured [infrared data](#) on Nate on Oct. 6 at 2:53 a.m. EDT (0653 UTC). At the time of the image Nate's center had exited Honduras and Nicaragua. Bands of thunderstorms east of center extended over the northwestern Caribbean Sea.

Nate's Rainfall Potential in Central America and the U.S.

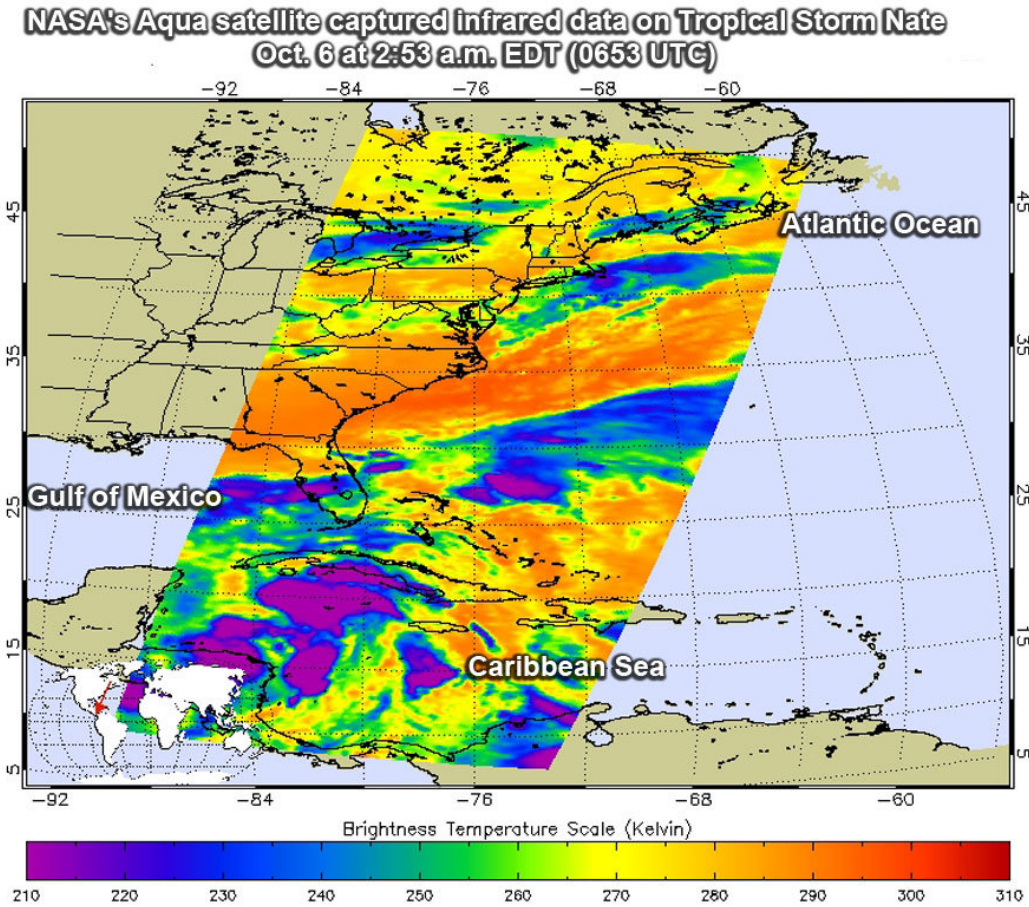
The [heavy rainfall](#) that was indicated in infrared data is expected to affect a large area. Heavy rainfall will occur over a wide area, including locations well away from the center along the Pacific coast of Central America. Rainfall across all of these areas may produce life-threatening flash floods and mudslides.

The National Hurricane Center noted that Nate is expected to produce the following rain accumulations through the weekend of Oct. 7 and 8: Southern Honduras and western Nicaragua can expect 6 to 10 inches, maximum 15 inches; eastern El Salvador and northern to central Honduras can expect between 3 to 5 inches, maximum 8 inches; eastern Yucatan and western Cuba can expect 2 to 4 inches, maximum 8 inches; eastern Belize and the Cayman Islands can expect between 1 to 3 inches. Along the U.S. Central Gulf Coast states: 3 to 6 inches, maximum 12 inches.

Watches and Warnings

On Oct. 6, The National Hurricane Center issued a Tropical Storm

Warning for Punta Castilla Honduras to the Honduras/Nicaragua border and Punta Herrero to Rio Lagartos, Mexico.



NASA's Aqua satellite AIRS instrument captured infrared data on Nate on Oct. 6 at 2:53 a.m. EDT (0653 UTC). Coldest cloud tops were colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) and appear in purple. Credit: NASA JPL/Ed Olsen

In the U.S., a Storm Surge Watch is in effect for Morgan City, Louisiana to the Alabama/Florida border and for the northern and western shores

of Lake Pontchartrain, Louisiana. A Hurricane Watch is in effect for Morgan City, Louisiana to the Mississippi/Alabama border, metropolitan New Orleans, Lake Pontchartrain and Lake Maurepas and in Mexico from Punta Herrero to Rio Lagartos.

A Tropical Storm Watch is in effect from the Mississippi/Alabama border to the Okaloosa/Walton County Line and west of Morgan City to Intracoastal City, Louisiana.

Status of Tropical Storm Nate

At 8 a.m. EDT/7 a.m. CDT (1200 UTC) on Oct. 6 the center of Tropical Storm Nate was located by Air Force Reserve and NOAA Hurricane Hunter aircraft near 17.8 degrees north latitude and 84.8 degrees west longitude. That's about 115 miles (185 km) northeast of Isla Guanaja, Honduras and about 230 miles (370 km) south-southeast of Cozumel, Mexico.

Nate was moving toward the north-northwest near 14 mph (22 kph), and this general track with a marked increase in forward speed is expected during the next day or two.

Maximum sustained winds are near 45 mph (75 kph) with higher gusts. Strengthening is forecast during the next couple of days, and Nate is expected to become a hurricane by the time it reaches the northern Gulf of Mexico. The minimum central pressure estimated from the Hurricane Hunter data is 996 millibars.

The National Hurricane Center said "On the forecast track, the center of Nate will move across the northwestern Caribbean Sea today, and reach the eastern coast of the Yucatan peninsula early this evening. Nate will then move into the southern Gulf of Mexico tonight and approach the northern Gulf coast Saturday evening."

For forecast updates on Nate, visit: <http://www.nhc.noaa.gov>.

Provided by NASA's Goddard Space Flight Center

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