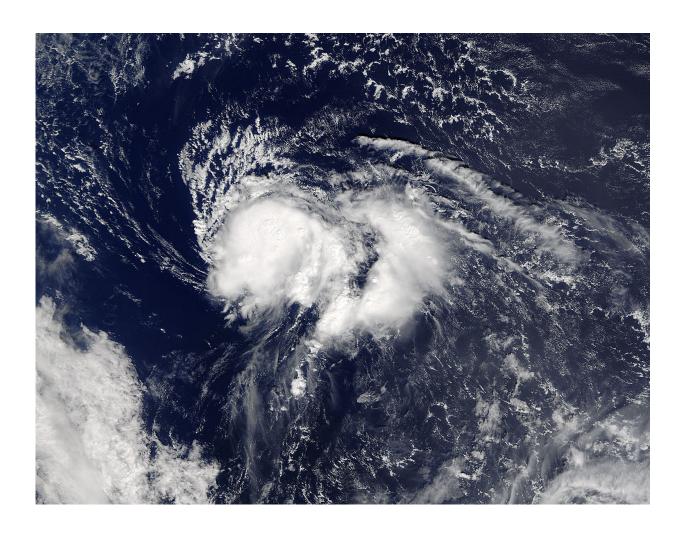


NASA sees Nicole dwarfed by Hurricane Matthew

October 6 2016



On Oct. 5 at 10:35 a.m. EDT, NASA's Terra satellite captured this visible image of Tropical Storm Nicole in the western Atlantic, about 400 miles south of Bermuda. Credit: NASA Goddard MODIS Rapid Response



Satellite imagery shows that Tropical Storm Nicole is less than half the size of powerful Hurricane Matthew. Matthew is moving through the Bahamas, while Nicole, positioned east of Matthew, is holding steady just below hurricane strength as it crawls toward Bermuda.

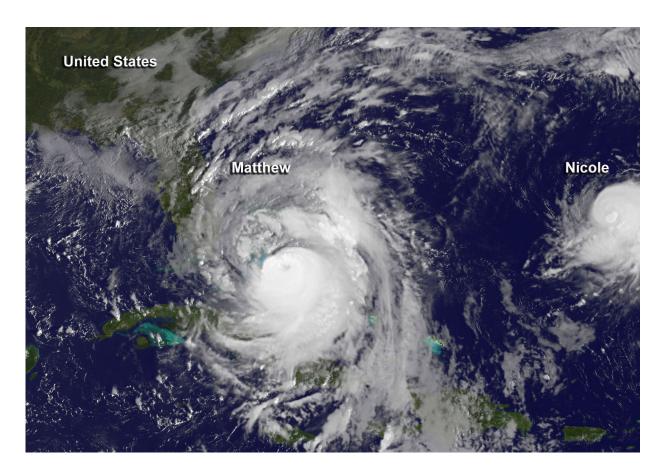
On Oct. 5 at 10:35 a.m. EDT, the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Terra satellite captured a visible image of Tropical Storm Nicole in the western Atlantic Ocean. Strong thunderstorms around the storm's center bubbled higher than the surrounding storms.

A <u>visible image</u> showing Matthew and Nicole on Oct. 6 at 7:45 a.m. EDT was captured by NOAA's GOES-East satellite. The image shows large Hurricane Matthew stretching from eastern Cuba and Hispaniola, over the Bahamas and extending to Florida. Matthew is west of the much smaller Tropical Storm Nicole. Nicole was about 400 miles south of Bermuda and although approaching hurricane strength, no eye was yet visible.

NOAA's National Hurricane Center forecaster Cangialosi noted on the Oct. 6 Nicole discussion at 5 a.m. EDT, "The cloud pattern has generally changed little since the previous advisory, and it consists of a central dense overcast feature with some curved bands to the east of the center. Earlier microwave data did show a mid-level eye, but this feature is not apparent in geostationary satellite images."

At 5 a.m. EDT (0900 UTC), the center of Tropical Storm Nicole was located near 26.5 degrees north latitude and 64.7 degrees west longitude. That's about 400 miles (645 km) south of Bermuda, and 565 miles (910 km) north of San Juan, Puerto Rico.





This visible image on Oct. 6 at 7:45 a.m. EDT from NOAA's GOES-East satellite shows Hurricane Matthew to the west of a much smaller Tropical Storm Nicole. Nicole is about 400 miles south of Bermuda. Credit: NASA/NOAA GOES Project

Nicole was moving toward the northwest near 9 mph (15 kph). A turn toward the north-northwest is expected later today. A slow and meandering motion is forecast tonight and Friday.

Maximum sustained winds remain near 70 mph (110 kph) with higher gusts. Little change in strength is forecast today, with some weakening anticipated by late Friday.



Tropical-storm-force winds extend outward up to 70 miles (110 km) from the center. The estimated minimum central pressure is 995 millibars.

At the same time, Matthew's maximum sustained winds were near 125 mph (205 kph). In Matthew, hurricane-force winds extend outward up to 40 miles (65 km) from the center and tropical-storm-force winds extend outward up to 160 miles (260 km), so Matthew is more than twice the size of Nicole and of course much stronger.

Nicole is expected to drift erratically as a trough currently off the coast of New England is expected to move southeastward and erode the ridge. "This pattern change will likely leave Nicole in weak steering currents beginning in about 24 hours (Oct. 7)," Cangialosi said.

Provided by NASA's Goddard Space Flight Center

Citation: NASA sees Nicole dwarfed by Hurricane Matthew (2016, October 6) retrieved 25 April 2024 from https://phys.org/news/2016-10-nasa-nicole-dwarfed-hurricane-matthew.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.