

NASA keeping an 'eye' on Hurricane Michael

September 7 2012



This stunning visible image of Hurricane Michael was taken by the MODIS instrument aboard NASA's Aqua satellite on Sept. 6 at 12:20 pm EDT. Michael's eye is so clear that the ocean surface is visible through it. Credit: NASA Goddard/MODIS Rapid Response Team

Hurricane Michael's eye was so clear on new satellite imagery from NASA that the surface of the Atlantic Ocean could be seen through it.

NASA satellites have provided visible, infrared and [microwave imagery](#) of Hurricane Michael as it tracks north in the eastern Atlantic. A stunning visible image of Hurricane Michael was taken by the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument that flies aboard NASA's Aqua satellite on Sept. 6 at 12:20 p.m. EDT. In the

image, Michael's eye was so clear that the ocean surface is visible through it. Since that time [infrared imagery](#) from the Atmospheric Infrared Sounder (AIRS) instrument that also flies aboard Aqua, provided cloud top temperature data. On Sept. 7, cloud top temperatures had cooled around the eye since Sept. 6. The National Hurricane Center noted that the "overall [cloud pattern](#) [of the storm] is a little more symmetric than it was 6 hours ago." A recent microwave image taken from the Advanced Microwave Sounding Unit (AMSU) which is also aboard the Aqua satellite showed that the eyewall had widened over the 24 hours from Sept. 6.

At 8 a.m. EDT on Sept. 7, Michael's center was about 920 miles (1,485 km) west-southwest of the Azores islands, near latitude 31.0 north and longitude 40.8 west. Michael's [maximum sustained winds](#) were near 105 mph (165 kmh) making it a Category 2 hurricane on the Saffir-Simpson scale. The National Hurricane Center expects Michael to gradually weaken over the next couple of days. Michael was moving toward the north near 3 mph (6 kmh) and the estimated minimum central pressure was 970 millibars.

As Michael has aged, the storm has grown in size. Hurricane force winds extend outward up to 25 miles (35 km) from the center and [tropical storm force winds](#) extend outward up to 80 miles (130 km).

The National Hurricane Center (NHC) forecasters analyze the atmosphere to see what will influence the movement of [tropical cyclones](#). In the NHC discussion of Michael on Sept. 7, NHC forecasters noted that the steering flow affecting Michael is weak, which accounts for the storm's slow movement. There are two cut off low pressure areas southwest and southeast of Michael. Over the weekend of Sept. 8 and 9 a ridge (elongated area) of high pressure is expected to strengthen to the north and east of Michael, and a trough (elongated area) of low pressure forming over the western Atlantic are expected to cause Michael to

speed up and move to the north-northwest then to the north.

Provided by NASA's Goddard Space Flight Center

Citation: NASA keeping an 'eye' on Hurricane Michael (2012, September 7) retrieved 4 May 2024 from <https://phys.org/news/2012-09-nasa-eye-hurricane-michael.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.