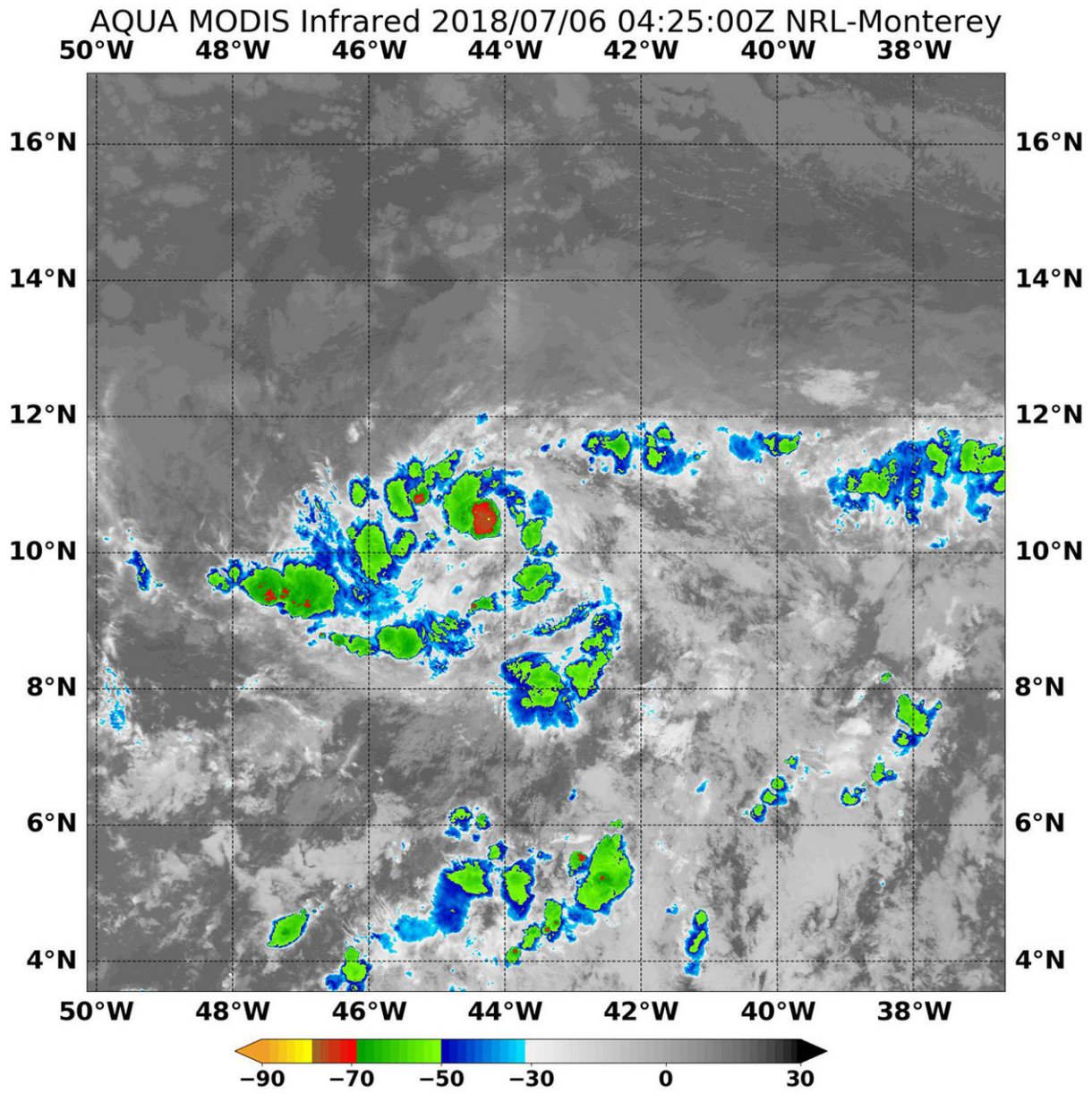


NASA's Aqua satellite spots the tiny, mighty Beryl

July 6 2018



NASA's Aqua satellite passed over Hurricane Beryl on July 6 at 12:25 a.m. EDT (0425 UTC), the MODIS instrument found coldest cloud top temperatures near minus 70 degrees Fahrenheit (red) around the center, and as cold as minus 50F(yellow) in fragmented bands of thunderstorms wrapping into the center.
Credit: NASA/NRL

Tropical Depression 2 strengthened into a compact hurricane on July 6 as NASA's Aqua satellite gathered temperature data on the storm.

At 2:30 p.m. EDT on July 5, the depression strengthened into Tropical Storm Beryl. At 5 a.m. EDT on Friday, July 6, Beryl became the first hurricane of the 2018 Atlantic hurricane season.

When NASA's Aqua satellite passed over the newly strengthened Hurricane Beryl on July 6 at 12:25 a.m. EDT (0425 UTC), the MODIS instrument or Moderate Resolution Imaging Spectroradiometer, analyzed the storm in infrared light. The infrared light provided temperature data that revealed how cold cloud tops were in the storm. The higher the cloud top, the colder, and the stronger the uplift in the storm. MODIS found coldest cloud top temperatures near minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius) around the center, and as cold as minus 50 degrees Fahrenheit (minus 45.5 degrees Celsius) in fragmented bands of thunderstorms wrapping into the center.

Beryl is a compact hurricane. Hurricane-force winds extend outward up to 10 miles (20 km) from the center, and tropical-[storm](#)-force winds extend outward up to 35 miles (55 km).

The National Hurricane Center (NHC) noted at 11 a.m. EDT (1500 UTC), the eye of Hurricane Beryl was located near latitude 10.7 degrees

north and longitude 46.5 degrees west.

Beryl was moving toward the west near 15 mph (24 kph). A faster westward to west-northwestward motion is expected to begin over the weekend and continue through early next week. On the forecast track, the center of Beryl will approach the Lesser Antilles over the weekend and cross the island chain late Sunday, July 8 or Monday, July 9. The estimated minimum central pressure is 994 millibars. Maximum sustained winds have increased to near 80 mph (130 kph) with higher gusts.

NHC cautioned that interests in the Lesser Antilles should monitor the progress of Beryl, as hurricane watches could be needed for some of the islands by tonight, July 6.

NHC said, "Additional strengthening is forecast during the next couple of days, and Beryl is expected to still be a [hurricane](#) when it reaches the Lesser Antilles late Sunday or Monday. Weakening is expected once Beryl reaches the eastern Caribbean Sea on Monday, but the system may not degenerate into an open trough until it reaches the vicinity of Hispaniola and the central Caribbean Sea."

Provided by NASA's Goddard Space Flight Center

Citation: NASA's Aqua satellite spots the tiny, mighty Beryl (2018, July 6) retrieved 28 June 2024 from <https://phys.org/news/2018-07-nasa-aqua-satellite-tiny-mighty.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.