NASA catches last image of Rafael as a hurricane, now merged with front

October 18 2012

This visible image of Hurricane Rafael in the North Atlantic was taken from the MODIS instrument aboard NASA's Terra satellite on Oct. 17 at 1440 UTC (10:40 a.m. EDT). Rafael's northwestern fringe clouds were brushing Nova Scotia, Canada (top left). Credit: NASA Goddard MODIS Rapid Response Team

Hurricane Rafael is no longer a tropical cyclone. The storm merged with a cold front on Oct. 18, but not before NASA's Terra satellite captured an image of the storm when it was in its last day as a hurricane.

The Moderate Resolution Imaging Spectrometer (MODIS) instrument aboard NASA's Terra captured a visible image of Hurricane Rafael in the North Atlantic on Oct. 17 at 1440 UTC (10:40 a.m. EDT). Although Rafael was far from land, its northwestern fringe clouds were brushing Nova Scotia, Canada.

By 5 p.m. EDT on Oct. 17, Rafael had become extra-tropical, meaning that its core changed from a warm system to a cold system, just like a typical mid-latitude low pressure system. At that time, Rafael had maximum sustained winds near 75 mph (120 kph). It was centered near 40.2 North latitude and 56.5 West longitude, about 475 miles (750 km) southeast of Halifax, Nova Scotia, Canada. Rafael was moving to the northeast at 35 mph (56 kph). Turn toward the east-northeast with some increase in forward speed later today, Oct 18.

The National Hurricane Center noted that ocean swells generated by the cyclone are expected to affect the coast of eastern Canada during today and tomorrow. These swells are likely to cause life-threatening surf and rip currents.

By 5 p.m. EDT on Oct. 18, the cold front was found to be merged with the tropical cyclone, making it extra-tropical. Rafael is expected to complete a cyclonic loop around a deep-layer low over the north-central Atlantic day or two and ride into hurricane history.

Provided by NASA's Goddard Space Flight Center

Citation: NASA catches last image of Rafael as a hurricane, now merged with front (2012,

October 18) retrieved 26 April 2024 from https://phys.org/news/2012-10-nasa-image-rafael-hurricane-merged.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.