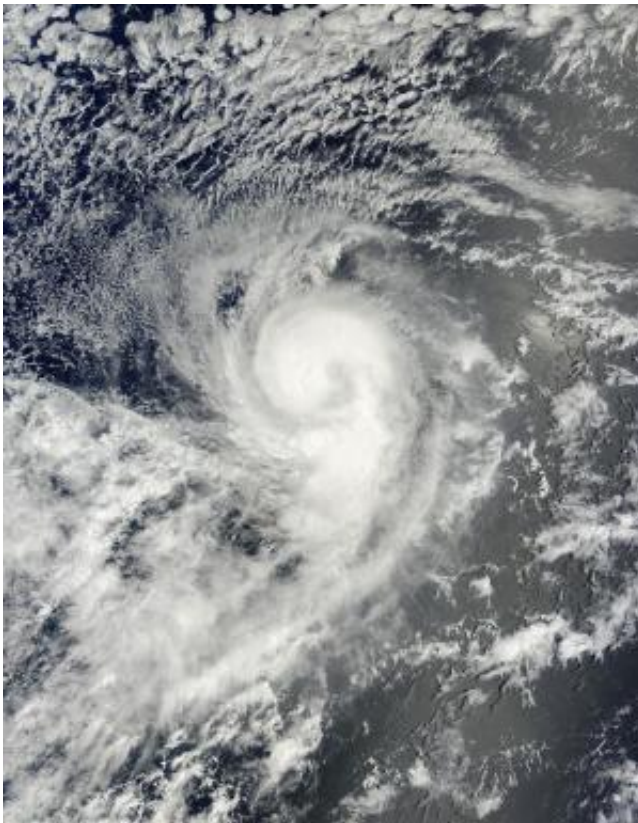


Tropical Storm Karina looks like a giant 'number 9' from space

August 21 2014, by Rob Gutro



When NASA's Terra satellite passed over Tropical Storm Karina on Aug. 20, it looked like a giant number "9" as a thick band of thunderstorms wrapped into its center. Credit: NASA Goddard MODIS Rapid Response Team

Despite being the eleventh tropical cyclone of the Eastern Pacific Ocean Hurricane Season, Karina looked like a giant number nine from NASA's

Aqua satellite.

Tropical Storm Karina was weakening on August 20 when NASA's Terra satellite passed overhead. The Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard Terra snapped a visible image of Tropical Storm Karina on August 20 at 19:40 UTC (3:40 p.m. EDT). The MODIS image showed that a thick band of strong thunderstorms spiraled into Karina's center from the southeast. The band of thunderstorms wrapped around Karina's eastern and northern quadrants, spiraling into the center from the west, making the tropical cyclone look like the number nine.

On August 21 at 0900 UTC (5 a.m. EDT), Tropical Storm Karina's maximum sustained winds had decreased to near 50 mph (85 kph). Karina was centered near latitude 15.6 north and longitude 136.2 west, about 1,275 miles (2,050 km east of Hilo, Hawaii). Karina is now drifting to the east-southeast near 2 mph (4 kph) and is expected to continue in that direction with a turn to the northeast late on August 22 as it nears Tropical Storm Lowell.

The National Hurricane Center noted that Karina is now being affected by moderate-to-strong vertical [wind shear](#). Wind shear acts like a battering ram in the atmosphere and can tear a storm apart.

A tropical cyclone is stacked like a tire that sits sideways on the ground and stretches through the middle and upper troposphere. In addition to wind shear, [dry air](#) is moving into Karina in the middle and upper levels of the atmosphere and sapping the moisture from the storm, inhibiting development of thunderstorms that make up a tropical cyclone. The NHC noted that the dry air will continue to affect Karina over the next day or two which will continue weakening the storm.

Karina is close to 140 degrees longitude, which is the where the Central

Pacific Ocean begins. However, because Karina is forecast to move to the northeast, it appears that it will stay in the Eastern Pacific for the rest of its lifetime.

Provided by NASA's Goddard Space Flight Center

Citation: Tropical Storm Karina looks like a giant 'number 9' from space (2014, August 21) retrieved 17 August 2024 from <https://phys.org/news/2014-08-tropical-storm-karina-giant-space.html>

<p>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.</p>
--