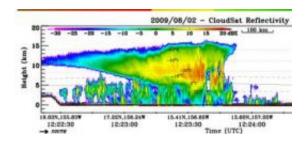


CloudSat captures a sideways look at fading Lana

August 3 2009



This sideways image of Tropical Storm Lana came from NASA's CloudSat satellite on Aug. 2 when its high clouds were almost 9 miles high and colder than -76F! Credit: NASA/JPL/Colo. State Univ/NRL-Monterey

NASA satellites do some really cool things, like take a sideways look at a slice of a tropical depression. That's what CloudSat did with Lana in the Central Pacific.

As Lana passed south of the <u>Hawaiian Islands</u> this past weekend, its maximum sustained winds peaked around 65 knots (74 mph), making it a Category One hurricane for a brief period before it ran into adverse <u>atmospheric conditions</u> that weakened the <u>storm</u> quickly.

By Monday, August 3, 2009 at 5 a.m. EDT, Lana's sustained winds were down to 30 knots and her minimum central pressure had gone up to 1010 millibars. Weakening winds and rising air pressure are signs of a weakening storm. Lana was located near 14.5 degrees north latitude and



162.0 west longitude and headed west near 13 knots (15 mph).

When NASA's CloudSat satellite's Cloud Profiling Radar captured a sideways look across Lana the day before, Sunday, August 2, it was still a tropical storm with high clouds higher than 14 kilometers (8.7 miles) high. CloudSat measured the highest, coldest cloud temperatures near minus 60 degrees Celsius (minus 76 degrees Fahrenheit)! Those high clouds indicated that there were some strong thunderstorms still occurring on Sunday, August 2. At the time when CloudSat swept over Lana, its maximum sustained winds were near 45 knots (52 mph) and pressure was 1008 millibars.

Less than 24 hours later, satellite data showed that Lana lacked "deep convection" - that is, rapid rising air that helps to build the powerful thunderstorms that fuel the tropical storm. Thus, Lana was re-classified as a weaker <u>tropical depression</u>. Forecasters believe that by August 4, Lana will start dissipating, and by August 5, she'll be a remnant low pressure area in the Central Pacific.

Source: NASA/Goddard Space Flight Center

Citation: CloudSat captures a sideways look at fading Lana (2009, August 3) retrieved 25 April 2024 from https://phys.org/news/2009-08-cloudsat-captures-sideways-lana.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.