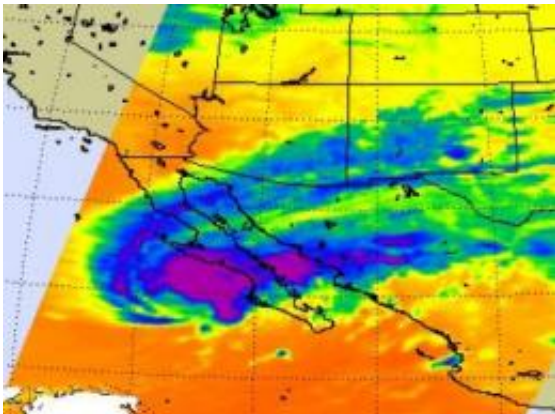


NASA satellite sees Olaf stretch out and fizzle over northwestern mainland Mexico

October 5 2009



The Aqua satellite flew over Olaf on Oct. 3 at 5:05 a.m. EDT captured infrared imagery of his clouds streaming into northwestern Mexico. The images showed some high, cold, thunderstorm cloud tops (purple) as cold as -63F near Olaf's center indicating some moderate rainfall. Credit: NASA JPL, Ed Olsen

Tropical Storm Olaf wasn't given much of a chance when he was born, and he never did make it to hurricane strength before fizzling out late Saturday night. NASA's Aqua satellite captured infrared imagery that clearly showed Olaf's clouds stretched eastward out over mainland Mexico, away from its center of circulation near Baja California.

At 11 p.m. EDT on Saturday, October 3, the National [Hurricane](#) Center issued its last advisory on Olaf. By that time, he was just classified as a remnant low pressure area.

Olaf was basically reduced to a tight swirl of low clouds approaching the west coast of southern Baja California. When precipitation and clouds separate from the center of the [wind](#) circulation and that's a tell-tale sign of a storm's demise. That's what happened with Olaf late Saturday. Olaf's clouds and rains moved northeast of his center and were located over mainland Mexico. Northwestern Mexico received Olaf's rains and gusty winds as he faded away.

NASA's Quick Scatterometer satellite (QuikScat) passed over Olaf when he was a [tropical storm](#) on Olaf captured Oct 2, at 01:42 UTC (9:42 p.m. ET on October 1) and confirmed tropical storm force winds. QuikScat uses microwaves to peer into a storm's clouds and determine the speed of the rotating winds at the surface. At that time, maximum sustained winds were 45 mph, but adverse environmental conditions such as upper level winds and cooler sea surface temperatures weakened Olaf quickly afterward.

NASA's Aqua satellite got a great image of Olaf's clouds stretching away from his center of circulation on October 3. The Atmospheric Infrared Sounder (AIRS) instrument that is used to measure cloud top temperature and [atmospheric pressure](#) among other environmental factors clearly showed Olaf's center west of Baja California, but his [clouds](#) stretching over the Baja and into northwestern mainland [Mexico](#). Those cloud top temperatures were around -63F indicating that there were still some strong thunderstorms in the storm as it was breaking apart, so Olaf was leaving behind some moderate rainfall and gusty winds as he began to dissipate. As of Monday, October 5, Olaf has dissipated.

Source: JPL/NASA ([news](#) : [web](#))

Citation: NASA satellite sees Olaf stretch out and fizzle over northwestern mainland Mexico (2009, October 5) retrieved 30 April 2024 from <https://phys.org/news/2009-10-nasa-satellite-olaf-fizzle-northwestern.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.