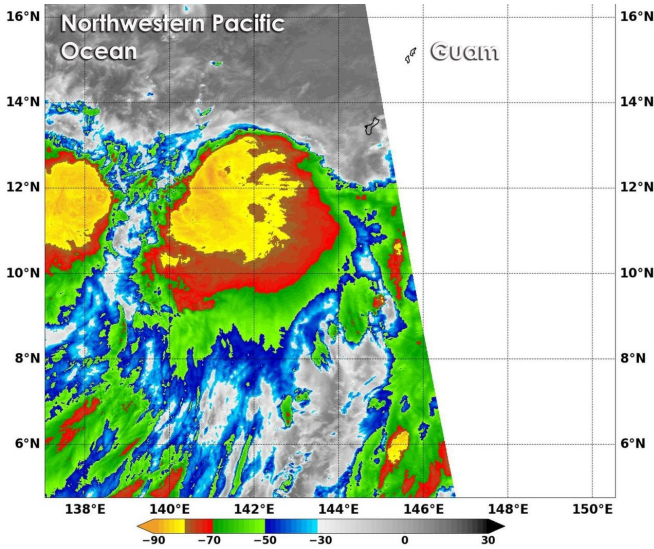


NASA sees Tropical Storm Saola near Guam

24 October 2017



On Oct. 24 at 12:45 a.m. EDT (0425 UTC) NASA's Aqua satellite found top temperatures of strongest thunderstorms (yellow) in Tropical Storm Saola. Temperatures were as cold as or colder than minus 80 degrees Fahrenheit (minus 62.2 Celsius). Credit: NRL/NASA

Infrared data from NASA satellites helped confirm that former Tropical Depression 27W has strengthened into a tropical storm near Guam. The storm has been renamed Tropical Storm Saola and NASA's Aqua satellite analyzed the system in infrared light to determine the location of its strongest storms.

The U.S. Territory of Guam has issued a Small Craft Advisory and High Surf Advisory for the island that extends from Oct. 24 to Oct. 25.

Infrared light provides valuable temperature data to forecasters and cloud top temperatures give clues about highest, coldest, strongest storms within a hurricane.

On Oct. 24 at 12:45 a.m. EDT (0425 UTC) the Moderate Resolution Imaging Spectroradiometer

or MODIS instrument aboard NASA's Aqua satellite analyzed Tropical Storm Saola's cloud top temperatures in [infrared light](#). MODIS found cloud top temperatures of strongest thunderstorms were as cold as or colder than minus 80 degrees Fahrenheit (minus 62.2 Celsius) in two areas, south and southwest of the center.

Cloud top temperatures that cold indicate strong storms that have the capability to create heavy rain.

The Joint Typhoon Warning Center noted at 5 a.m. EDT (0900 UTC) that animated multispectral satellite imagery showed the main convection has sheared southwestward of a partially exposed, broad, low level circulation center. That indicates that the storm was still being battered by vertical wind shear.

On Oct. 24 at 5 a.m. EDT (0900 UTC) the center of Tropical Storm Saola was located near 13.6 degrees north latitude and 141.1 degrees east longitude, about 159 nautical miles west of Navsta, Guam. The island of Guam is located approximately 3,300 miles West of Hawaii, and 1,500 miles east of the Philippines and south of Japan. Guam is a territory of the United States and its residents are U.S. citizens.

Saola had maximum sustained winds near 40 knots (46 mph/74 kph) and was moving to the northwest at 25 knots (28.7 mph/46.3 kph).

The National Weather Service in Guam issued a Small Craft Advisory until 6 p.m. CHST (local time) on Wednesday, Oct. 25. NWS Guam noted: "As Tropical Storm Saola moves away from the Marianas, combined seas of 10 to 13 feet will subside to 8 to 9 feet Wednesday night, Oct. 25. Fresh to strong winds will prevail through Wednesday decreasing Wednesday night."

There's also a High Surf Advisory in effect for Guam until Wednesday, Oct. 25 at 6 p.m. CHST, local time. The Advisory states "expect hazardous surf of 12 to 14 feet along east facing reefs and 8 to

10 feet along south facing reefs. Along west and north facing reefs...surf will be hazardous up to 9 feet. Surf will remain hazardous through Wednesday."

The Joint Typhoon Warning Center expects that Saola will continue strengthening and become a typhoon by Oct. 25 as it moves in a northwesterly direction. Extended forecasts call for the [storm](#) to curve to the northeast beginning on Oct. 27 when it is parallel to Kadena Air Base on Okinawa, in Okinawa Prefecture, Japan.

Provided by NASA's Goddard Space Flight Center

APA citation: NASA sees Tropical Storm Saola near Guam (2017, October 24) retrieved 22 September 2020 from <https://phys.org/news/2017-10-nasa-tropical-storm-saola-guam.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.