## NASA sees areas of strength in Tropical Storm Trami

September 212018


At 8:45 a.m. EDT (1245 UTC) on Sept. 21, 2018, the MODIS instrument aboard NASA's Terra satellite looked at Tropical Storm Trami (28W) in infrared light. MODIS found coldest cloud top temperatures in two large areas, as cold as or colder than minus 80 degrees (yellow) Fahrenheit (minus 112 degrees Celsius). Surrounding them were powerful storms with cloud tops as cold as or colder than minus 70 degrees (red) Fahrenheit (minus 56.6 degrees Celsius). Credit: NASA/NRL

NASA's Terra satellite provided an infrared look at Tropical Storm Trami, located just over 100 miles from Guam on Sept. 21. Infrared data provides temperature information that showed two areas of the highest, coldest cloud tops and most powerful storms within the tropical storm.

NOAA's National Weather Service (NWS) in Tiyan, Guam said that a flash flood watch is in effect for all of Guam and the northern Marianas. A small craft advisory remains in effect until 6 a.m. CHST local time on Sunday, Sept. 23.

However, the Tropical Storm Watch for Rota, Tinian and Saipan has been canceled. Because Tropical Storm Trami (28W) continues to move away from the Marianas the threat of damaging winds has ended.

At 2:20 a.m. EDT (0230 UTC) on Sept. 13, Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Aqua satellite analyzed Hurricane Florence in infrared light. MODIS found coldest cloud top temperatures in two large areas. One was around the center of circulation and the other was in a thick band of thunderstorms wrapping into the low-level center. Those temperatures were as cold as or colder than minus 80 degrees Fahrenheit (minus 112 degrees Celsius). Surrounding them were powerful storms with cloud tops as cold as or colder than minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius).

NASA research has found that cloud top temperatures as cold as or colder than the $70 \mathrm{~F} / 56.6 \mathrm{C}$ threshold have the capability to generate heavy rainfall.

On Sept. 21, Trami was located near latitude 15.3 degrees north and longitude 142.9 degrees east. That's about 175 miles west-northwest of Rota and about 180 miles northwest of Guam. Trami is moving northwest at 12 mph . It is expected to make a slight turn toward the westnorthwest with little change in forward speed over the next 24 hours. Maximum sustained winds have increased to 40 mph .28 W is forecast to intensify through Saturday. Tropical storm force winds extend outward from the center up to 120 miles.

NWS issued a special weather statement for Micronesia that said areas of heavy showers and thunderstorms can be found near Trami and in the monsoon flow southwest of the storm. The westerly monsoonal flow across Yap State and the Republic of Palau will increase during the next few days. Showery weather and locally gusty winds are likely for Yap and Koror through this weekend. Sea and surf conditions may become hazardous at times.

## Provided by NASA's Goddard Space Flight Center

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