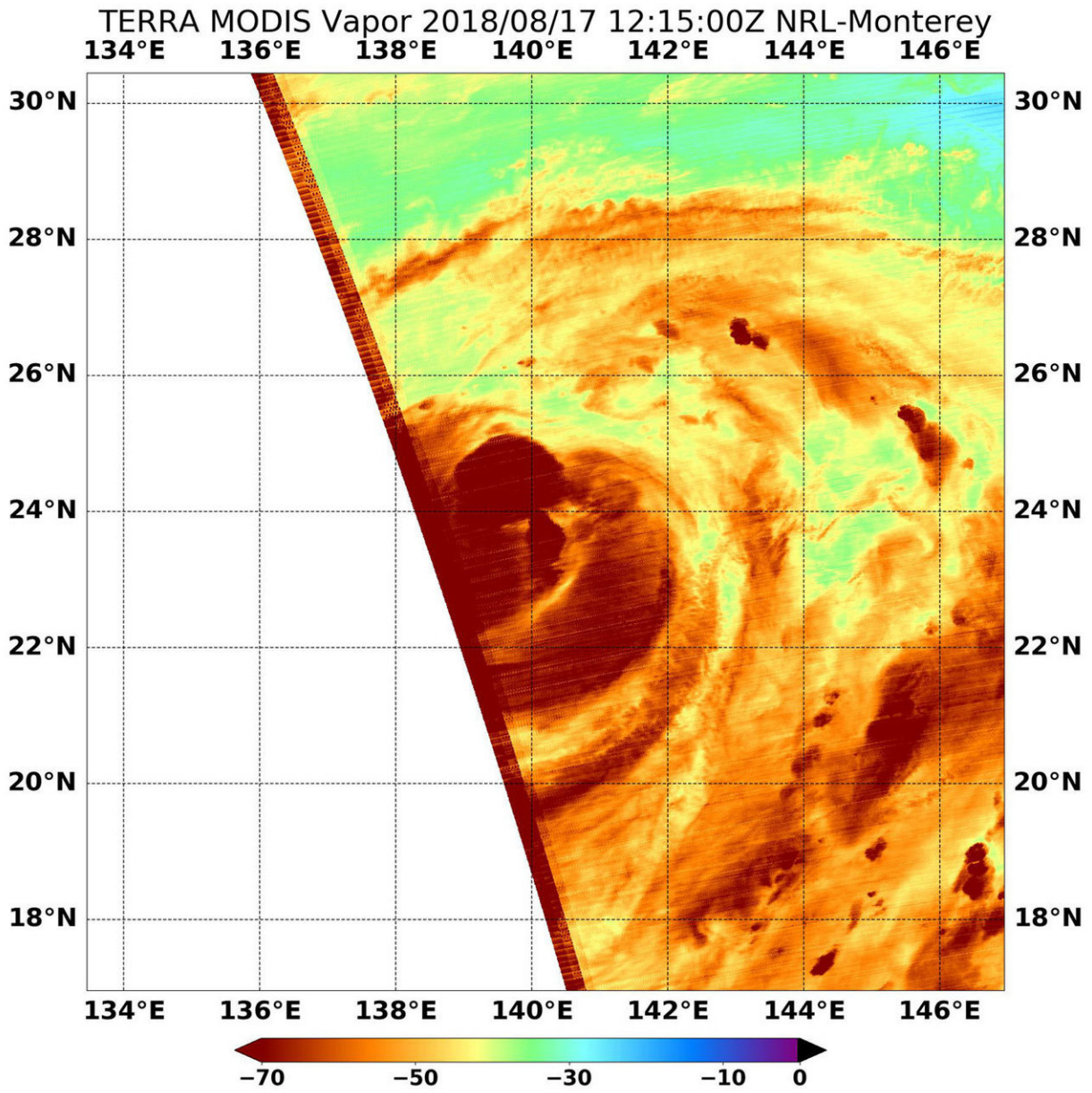


# NASA analyzes Typhoon Soulik's water vapor

August 17 2018



NASA's Terra satellite passed over Tropical Storm Soulik on Aug. 17 at 8:15 a.m. EDT (1215 UTC) and saw an abundance of water vapor and coldest cloud top temperatures around the center of circulation and in a thick bands of thunderstorms around the center. The left side (white) is out of the satellite path of observation. Credit: NASA/NRL

NASA's Terra satellite looked at water vapor and cloud top temperatures when it passed over the recently strengthened Typhoon Soulik in the Northwestern Pacific Ocean.

NASA's Terra satellite passed over Soulik on Aug. 17 at 8:15 a.m. EDT (1215 UTC) and the Moderate Resolution Imaging Spectroradiometer or MODIS instrument gathered [water vapor](#) content and temperature information.

Water vapor analysis of tropical cyclones tells forecasters how much potential a storm has to develop. Water vapor releases latent heat as it condenses into liquid. That liquid becomes clouds and thunderstorms that make up a tropical cyclone. Temperature is important when trying to understand how strong storms can be. The higher the [cloud tops](#), the colder and the stronger they are.

MODIS saw coldest cloud top temperatures around the center of circulation and in a thick feeder band north to northeast of the storm's center. Those cloud top temperatures were as cold as minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius). Storms with cloud top temperatures that cold have the capability to produce heavy rainfall.

The Joint Typhoon Warning Center or JTWC noted on Aug. 17 at 11 a.m. EDT (1500 UTC) that Soulik was centered near 23.7 degrees north

latitude and 140.1 degrees east longitude. That's about 93 nautical miles southwest of Iwo To Island, Japan. Soulik was moving to the north-northwest and had [maximum sustained winds](#) near 92 mph (80 knots /148 kph).

Soulik is turning to the northwest. The system will intensify over the next two days, but weaken on approach to and trek over Kyushu, southern Japan.

Provided by NASA's Goddard Space Flight Center

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