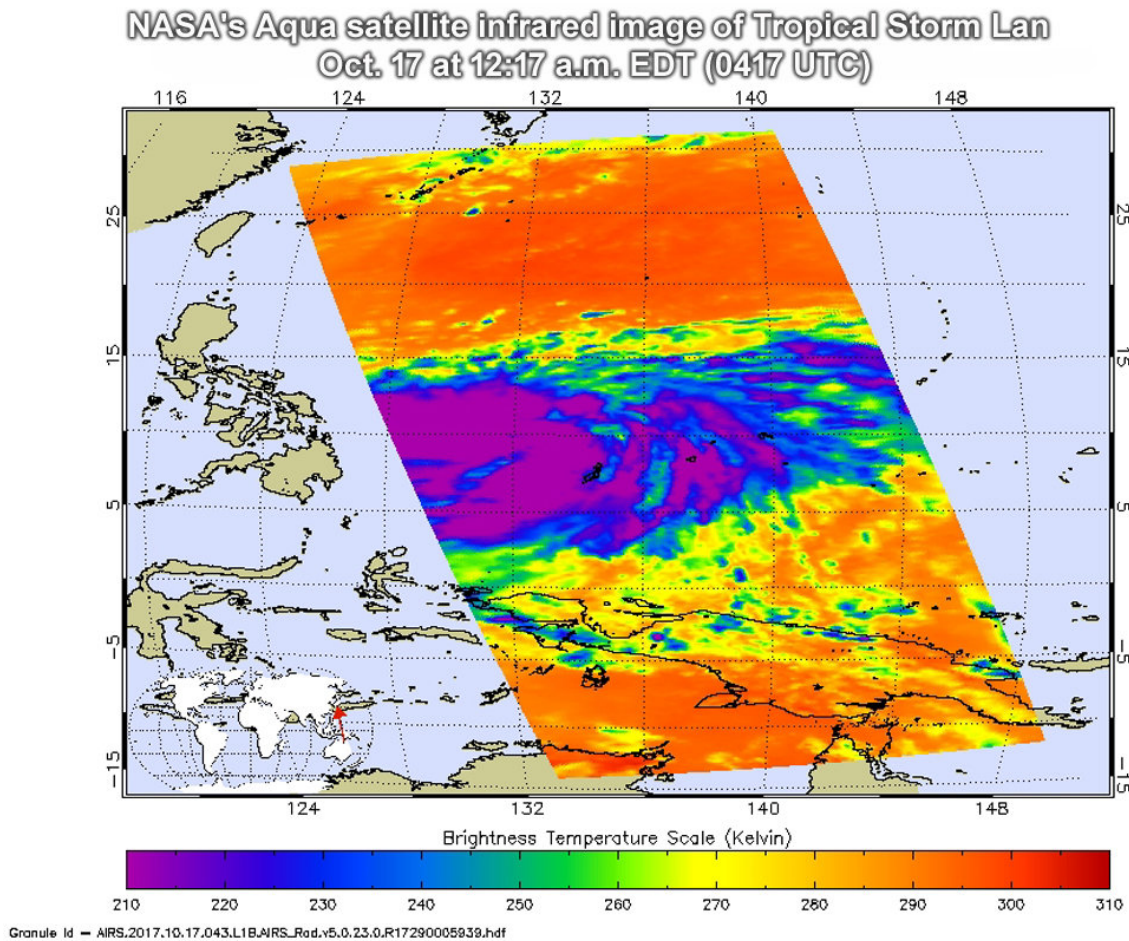


NASA finds Tropical Storm Lan strengthening

October 17 2017



NASA's Aqua satellite passed over Tropical Storm Lan on Oct. 17 at 12:17 a.m. EDT (0417 UTC) and saw coldest cloud top temperatures (purple) around the storm's center. Credit: NASA JPL/Ed Olsen

Infrared imagery from NASA's Aqua satellite revealed that Tropical Storm Lan was getting stronger as it moved through the Northwestern Pacific Ocean.

NASA's Aqua satellite passed over Maria on Oct. 17 at 12:17 a.m. EDT (0417 UTC) and analyzed the [storm](#) in [infrared light](#). Infrared light provides [temperature](#) data and that's important when trying to understand how strong storms can be. The higher the cloud tops, the colder and the stronger they are.

AIRS data showed coldest cloud top temperatures in thunderstorms around Lan's center. Those cooler temperatures were as cold as minus 63 degrees Fahrenheit (minus 53 degrees Celsius). Storms with cloud top temperatures that cold have the capability to produce heavy rainfall. The AIRS data showed broad banding of thunderstorms with deep flaring central convection and developing thunderstorms.

On Oct. 17 at 11 a.m. EDT (1500 UTC) Lan's maximum sustained winds strengthened to 55 knots (63 mph/102 kph). The center of the tropical storm was located near 10.6 degrees north latitude and 132.4 degrees east longitude, that's about 186 nautical miles northwest of Kayangel. Kayangel is the northernmost state of Palau, about 24 kilometers north of Koror. Lan has tracked northeastward at 3 knots (3.4 mph/5.5 kph).

The Joint Typhoon Warning Center forecast calls for Lan to intensify and move north to north-northwest. "The slow to moderate track motion over extremely high oceanic heat content will fuel a rapid intensification phase, reaching super typhoon strength by 72 hours (Oct. 20)."

Provided by NASA's Goddard Space Flight Center

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