

NASA sees tropical cyclone 18p form near American Samoa

February 21 2020, by Rob Gutro



On Feb. 21, 2020, the MODIS instrument that flies aboard NASA's Terra satellite provided a visible image of newly developed Tropical Depression 18P in the Southern Pacific Ocean. Credit: NASA Worldview



The low-pressure area that has been lingering west-northwest of American Samoa for several days has organized into a tropical depression. NASA's Terra satellite passed over the Southern Pacific Ocean and provided forecasters with a visible image of Tropical Depression 18P.

On Feb.21, the Moderate Resolution Imaging Spectroradiometer or MODIS instrument that flies aboard NASA's Terra satellite provided a visible image of 18P that showed an improved cyclonic circulation along the southern end of a line of deep convection and thunderstorms that extends north-to-south.

At 10 a.m. EST (1500 UTC) on Feb. 21, the Joint Typhoon Warning Center said Tropical Cyclone 18P had maximum sustained winds near 30 knots (34.5 mph/55.5 kph). It was located near latitude 12.9 degrees south and longitude 174.8 degrees west, about 280 nautical miles west-northwest of Pago Pago, American Samoa. 18P is moving to the east-southeast.

The tropical cyclone is forecast to intensify to a tropical storm reaching maximum sustained winds to 45 knots as it passes near American Samoa on Feb. 22. In three days, vertical wind shear is expected to kick in which will cause the storm to dissipate quickly.

In addition to Tropical Cyclone 18P, Tropical Storm Vicky has developed to the southeast of American Samoa. Together, these systems have generated several warnings and watches. On Feb. 21, the National Weather Service (NWS) in Pago Pago has continued the Flash Flood Watch for all of American Samoa through Saturday, Feb. 22. The NWS forecast page stated, "The active monsoon trough remains across the area with several hybrid lows developing northwest and moving swiftly across the islands through the week. A flash flood watch means that conditions may develop that lead to flash flooding. Flash flooding is a very



dangerous situation."

NASA's Terra satellite is one in a fleet of NASA satellites that provide data for hurricane research.

Tropical cyclones/hurricanes are the most powerful weather events on Earth. NASA's expertise in space and <u>scientific exploration</u> contributes to essential services provided to the American people by other federal agencies, such as hurricane weather forecasting.

More information: For updated forecasts from NWS, Pago Pago, visit: www.weather.gov/ppg/?lang=english

Provided by NASA's Goddard Space Flight Center

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