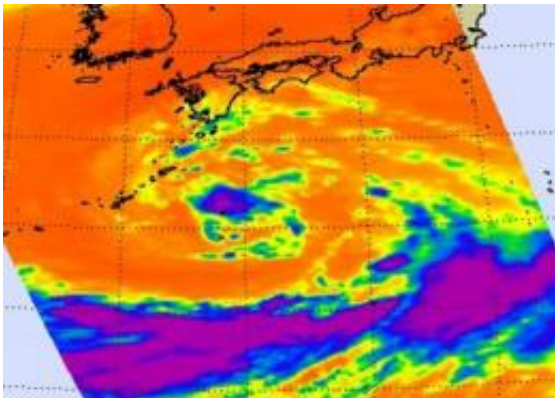


Tropical Storm Roke closing in on Kadena Air Base: Infrared NASA satellite imagery

September 15 2011



This infrared image of Tropical Storm Roke was captured on Sept. 14 at 10:41 p.m. EDT. The purple area around the center of circulation indicates the coldest, highest cloud heights, where the heaviest rain was occurring. The orange indicates warm sea surface temperatures over 80F that are allowing Roke to intensify. Credit: NASA/JPL, Ed Olsen

Tropical Storm Roke is showing some signs of intensification on NASA infrared satellite imagery, as areas of strong convection and very cold cloud tops were spotted. Kadena Air Base in Okinawa is now in Roke's sights and should be making preparations.

NASA's Aqua satellite flew over Roke yesterday and the Atmospheric Infrared Sounder (AIRS) instrument showed powerful convection building around the storm's center and over the northern edge. Meanwhile, dry air is wrapping into the low-level center from the

southwest, and limiting cloud development.

[Infrared imagery](#) provides forecasters with an inside look into the cloud temperatures and heights, and the colder and higher the clouds go, the stronger they become. Meteorologists at the Joint [Typhoon Warning Center](#) use [infrared imagery](#) to help create their forecasts. AIRS data also showed [sea surface temperatures](#) around Roke to be near 27 degrees Celsius (81 Fahrenheit).

On Sept. 15 at 11 a.m. EDT, Tropical Storm Roke was located approximately 175 nautical miles east of Kadena Air Base, Japan, and is moving west at 6 knots (7 mph). Roke is a minimal tropical storm with maximum sustained winds near 35 mph, but expected to strengthen as it closes in on Kadena Air Base. Warm water temperatures (over 80F/26.6C) and low wind shear are allowing Roke to intensify. Tropical storm conditions are expected at the base from Friday, Sept. 16 through Sunday, Sept. 18 as Roke continues on its westward track.

Provided by NASA's Goddard Space Flight Center

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