

Newborn Tropical Storm Polo gives a NASA satellite a 'cold reception'

September 16 2014, by Rob Gutro



This infrared image of newborn Tropical Strom Polo was taken by the AIRS instrument aboard NASA's Aqua satellite on Sept. 16 at 4:11 a.m. EDT and shows cold, strong thunderstorms around the center (purple). Credit: NASA JPL/Ed Olsen

The AIRS instrument aboard NASA's Aqua satellite uses infrared light to read cloud top temperatures in tropical cyclones. When Aqua passed over newborn Tropical Storm Polo off of Mexico's southwestern coast it got a "cold reception" when infrared data saw some very cold cloud top



temperatures and strong storms within that hint at intensification.

Polo formed close enough to land to trigger a Tropical Storm Watch for the southwestern coast of Mexico. The watch was issued by the government of Mexico on September 16 and extends from Zihuatanejo to Cabo Corrientes, Mexico. A tropical storm watch means that <u>tropical</u> <u>storm</u> conditions are possible within the watch area, in this case within 24 hours.

The Atmospheric Infrared Sounder or AIRS instrument aboard NASA's Aqua satellite captured <u>infrared data</u> just after Tropical Storm Polo was named by the National Hurricane Center on September 16. The AIRS data showed cold cloud tops of strong thunderstorms circled around the center of the storm's circulation. Those storms had cloud top temperatures near -63F/-53C indicating they were high into the troposphere and had the potential to generate heavy rain.

At 8:00 a.m. PDT (11 a.m. EDT) the center of Tropical Storm Polo was located near latitude 12.8 north and longitude 99.4 west. That's about 285 miles (460 km) south of Acapulco, Mexico. Maximum sustained winds are near 40 mph (65 kph) and the National Hurricane Center noted that strengthening is possible during the next 24 hours and Polo could become a hurricane by Thursday, September 18.

Polo is moving toward the northwest near 12 mph (19 kph) and is expected to continue over the next two days, paralleling the coast of southwestern Mexico.

Provided by NASA's Goddard Space Flight Center

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