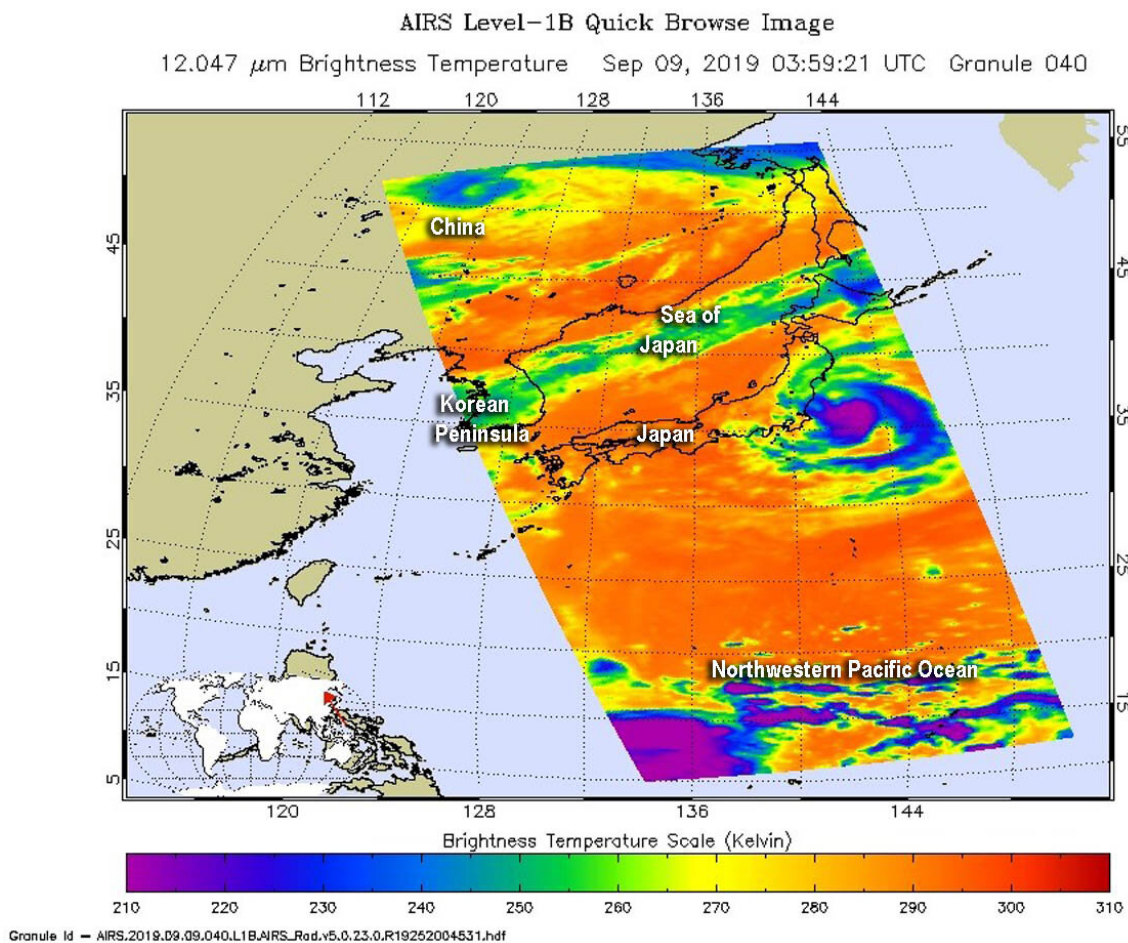


# NASA finds Tropical Storm Faxai's heavy rainmaking storms off-shore from Japan

September 9 2019



On Sept. 8 at 11.59 p.m. EDT (Sept. 9 at 0359 UTC) the AIRS instrument aboard NASA's Aqua satellite analyzed cloud top temperatures of Tropical Storm Faxai in infrared light. AIRS found coldest cloud top temperatures (purple) of strongest thunderstorms were as cold as or colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) around the center and in a large

band east of center. Credit: NASA JPL/Heidar Thrastarson

The big island of Japan received Tropical Storm Faxai and NASA's Aqua satellite provided forecasters at the Joint Typhoon Warning Center infrared data and cloud top temperature information that revealed the most powerful storms just off-shore when the satellite flew overhead.

NASA researches [tropical cyclones](#) and one of the ways NASA does that is with [infrared data](#) that provides [temperature](#) information. Cloud top temperatures provide information to forecasters about where the strongest storms are located within a tropical cyclone. Tropical cyclones do not always have uniform strength, and some sides have stronger sides than others. The stronger the storms, the higher they extend into the troposphere, and they have the colder cloud temperatures.

NASA's Aqua satellite analyzed the [storm](#) on Sept. 8 at 11:59 p.m. EDT (Sept. 9 at 0359 UTC) using the Atmospheric Infrared Sounder or AIRS instrument. AIRS found coldest cloud top temperatures as cold as or colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) around Faxai's center and in a large band east of center. NASA research has shown that cloud top temperatures that cold indicate strong storms that have the capability to create heavy rain.

Satellite imagery has revealed that Faxai continues to decay as it moves east of Honshu, Japan over the cooler waters of the Pacific Ocean.

Typhoon Faxai made landfall just east of Tokyo on Sept. 8. Japan's Kyodo News Service reported that 3 people were killed and 700,000 people were left without power.

On Sept. 8 at 11:59 p.m. EDT (Sept. 9 at 0359 UTC) the center of Faxai

was located near latitude 38.2 degrees north and longitude 144.5 degrees west. That places the center 289 nautical miles northeast of Yokosuka, Japan. Faxai is moving toward the east-northeast. Maximum sustained winds are near 55 knots.

Faxai is moving northeast and forecasters at the Joint Tropical Storm Warning Center expect Faxai will become extra-tropical.

**More information:** For updated forecasts from the Japan Meteorological Agency, visit: <https://www.jma.go.jp/en/typh/>

Provided by NASA's Goddard Space Flight Center

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