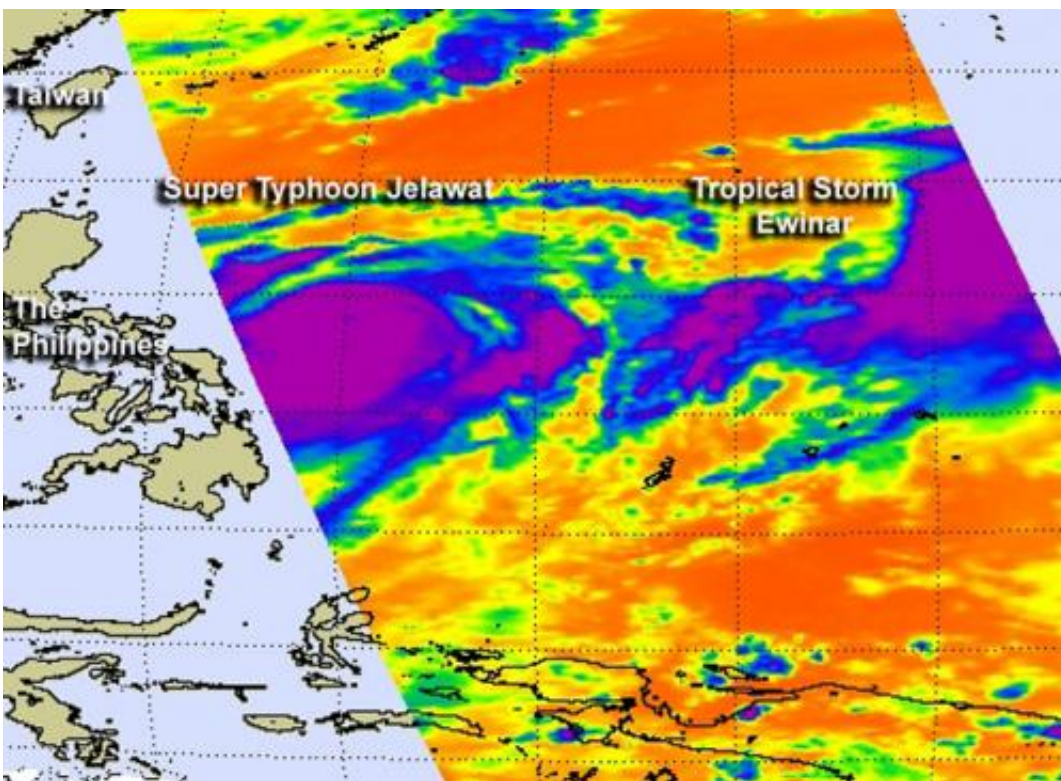


Frigid cloudtop temperatures indicate strength in Super Typhoon Jelawat and Tropical Storm Ewinar

September 24 2012



The above infrared image of Tropical Storm Jelawat and Tropical Storm Ewinar were captured by the AIRS instrument aboard NASA's Aqua satellite. The images were taken on Sept. 24 and revealed that Typhoon Jelawat and Tropical Storm Ewinar had large areas of strong thunderstorms (purple) and heavy rainfall around the center of circulation. Credit: NASA JPL, Ed Olsen

Tropical Storm Jelawat had been moving toward the Philippines since the week of Sept. 17 and on Sept. 24 it became a super typhoon east of the country. Meanwhile, the nineteenth tropical depression formed just east of Jelawat in the western North Pacific Ocean and quickly strengthened into a tropical storm. Both storms were captured on one infrared image from NASA's Aqua satellite.

The Atmospheric Infrared Sounder (AIRS) instrument aboard NASA's Aqua satellite revealed a large area of powerful thunderstorms around the center of Typhoon Jelawat and a band of thunderstorms west of the center on Sept. 23. Those thunderstorms continued to strengthen on Sept. 24 and cloud top temperatures exceeded -63 Fahrenheit (-52 Celsius). Cloud top temperatures are an indication of uplift in a storm. Uplift is the push of air upward that allows formation of towering clouds and thunderstorms that make up a tropical cyclone.

Jelawat's center continues to stay east of the Philippines, but is causing rough surf (with wave heights up to 37 feet/11.2 meters) along the eastern coasts of the country and its large extent is bringing rains and gusty winds as well.

Jelawat is a powerful [Super Typhoon](#) with a clear 23 nautical mile-wide eye and maximum sustained winds near 130 knots (149.6 mph/240.8 kmh). Jelawat is a Category 4 typhoon on the Saffir-Simpson scale. It is located near 15.0 North latitude and 127.9 East longitude, approximately 410 nautical miles (472 miles/759 km) east of Manila, Philippines. Jelawat's minimum central pressure is near 926 millibars. Jelawat is forecast to track to the northwest through the [Philippine Sea](#) and move toward Taiwan.

Tropical Storm Ewinar had [maximum sustained winds](#) near 35 knots (40 mph/64.8 kmh) on Sept 24 at 1500 UTC (11:00 a.m. EDT). It was centered near 20.9 North and 138.9 East, a 300 nautical miles (345

miles/555.6 km) south-southwest of Iwo To. AIRS data showed that the low-level center is slowly consolidating (organizing) and becoming less elongated. The strongest convection and thunderstorms were seen in a band of thunderstorms east of the center of circulation. Ewinar is getting organized slowly because of westerly wind shear caused by nearby Typhoon Jelawat.

The Joint Typhoon Warning Center expects Ewinar to track to the north-northeast and affect Iwo Two tomorrow, Sept. 25 as it continues in a northeasterly direction.

Provided by NASA's Goddard Space Flight Center

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