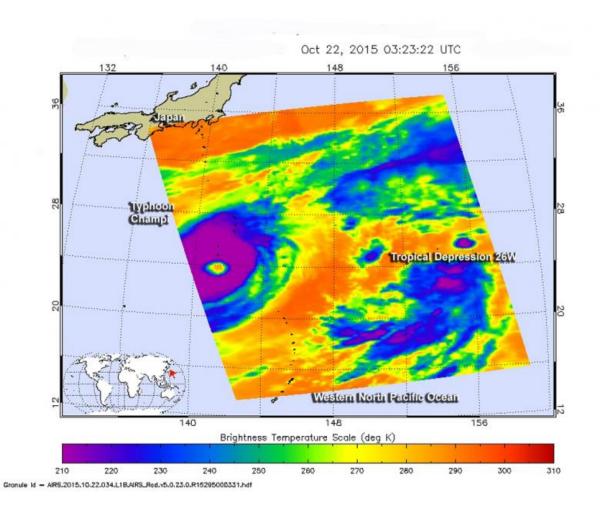


NASA gets clear look into Typhoon Champi's 36-nautical-mile-wide eye

October 22 2015, by Rob Gutro



This image on Oct. 22 at 03:23 UTC from the MODIS instrument aboard NASA's Aqua satellite shows a large eye in Typhoon Champi. Credit: NASA JPL, Ed Olsen



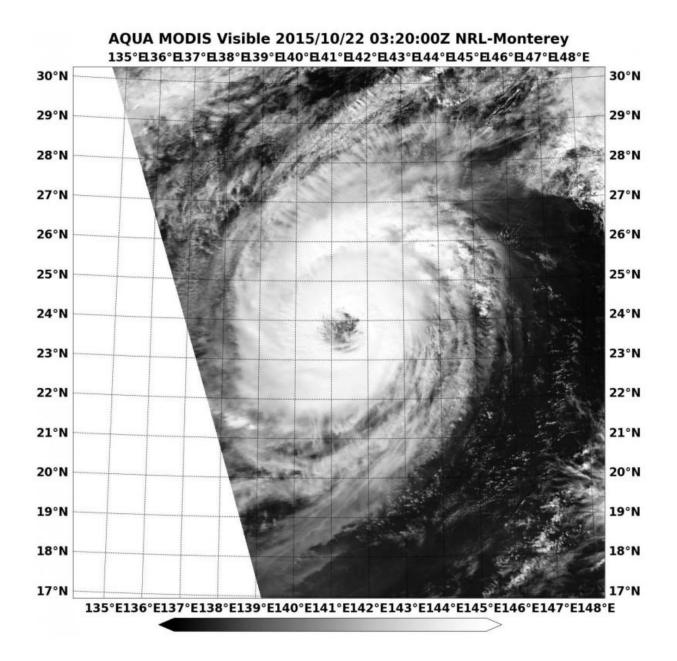
When the eye of a tropical cyclone is 36 nautical miles (41.4 mile/ 66.7 km) wide, it's pretty easy to spot from NASA's Aqua satellite in orbit. On October 22, 2015, two instruments aboard Aqua saw the large eye surrounded by powerful thunderstorms. Champi's eye was very close to the island of Iwo To, Japan.

At 03:23 UTC on October 22 ((11:23 p.m. EDT, Oct. 21) the Moderate Resolution Imaginge Spectroradiometer or MODIS instrument aboard NASA's Aqua satellite saw the large eye in Typhoon Champi, At the same time, the infrared instrument called the Atmospheric Infrared Sounder or AIRS instrument that also flies aboard Aqua looked at the storm. In a wider view, AIRS also saw newborn Tropical Depression 26W to the east of Champi in the western North Pacific Ocean. The image also clearly showed the large eye in Champi, where cloud top temperatures exceeded minus 63 Fahrenheit / minus 53 Celsius. Temperatures that cold indicate storms high in the troposphere with strong uplift and the ability to generate heavy rainfall. Forecasters at the Joint Typhoon Warning Center noted "The system continues to be elongated to the northeast as it interacts with the mid-latitude westerly flow."

At 1500 UTC (11 a.m. EDT) on October 22, 2015, Champi's maximum sustained winds were near 100 knots (115 mph/185 kph). It was centered just 53 nautical miles (60.9 miles/98.1 km) south-southeast of Iwo To, Island, Japan, near 24.0 degrees north latitude and 141.7 degrees east longitude. With a 36 nautical mile (41.4 mile/ 66.7 km)-wide eye, that puts Iwo To very close to the eye.

Champi was moving to the northeast at 5 knots (5.7 mph/9.2 kph) and generating rough seas with wave heights to 34 feet (10.3 meters). Champi is moving slowly east. The storm is expected to maintain current strength over the next day or two before becoming an extra-tropical system in the North Pacific Ocean.





This infrared image on Oct. 22 at 03:23 UTC shows a large eye in Typhoon Champi (right) and newborn Tropical Depression 26W to the east (right). Strong storms with cold cloud top temperatures appear in purple. Credit: NASA JPL, Ed Olsen



Provided by NASA's Goddard Space Flight Center

Citation: NASA gets clear look into Typhoon Champi's 36-nautical-mile-wide eye (2015, October 22) retrieved 2 May 2024 from <u>https://phys.org/news/2015-10-nasa-typhoon-champi-nautical-mile-wide-eye.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.