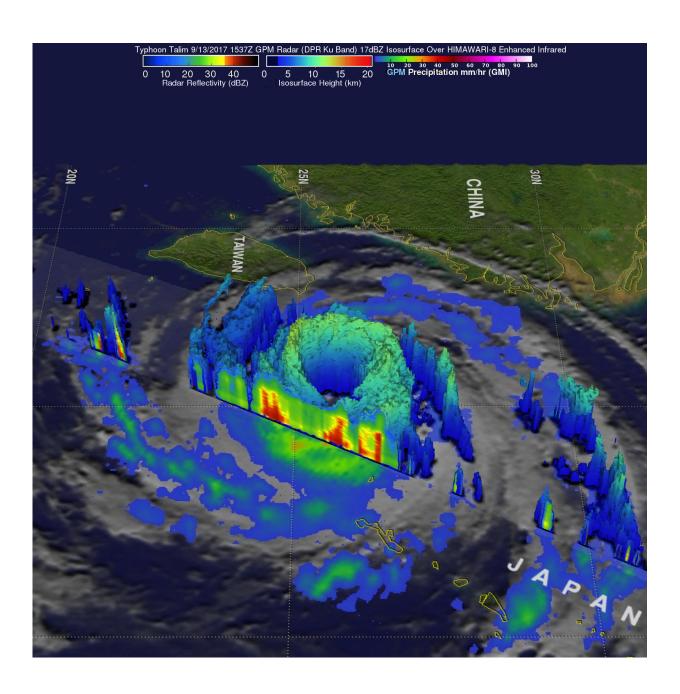


NASA gets a dramatic 3-D view of Typhoon Talim's large eye

September 15 2017





This a dramatic 3-D view of Talim's eye was taken from the GPM core satellite on Sept. 13, 2017 at 11:37 a.m. EDT Many of the storm tops in the western side of Talim's eyewall are shown extending to heights above 12km (7.4 miles) where rain was falling at a rate of over 232 mm (9.13 inches) per hour. Cloud tops were lower on the eastern side of the typhoon. Credit: NASA/JAXA, Hal Pierce

NASA created a dramatic 3-D image of powerful Typhoon Talim using data from the Global Precipitation Measurement mission or GPM core satellite. Talim's large eye really made the storm stand out as it moved toward landfall.

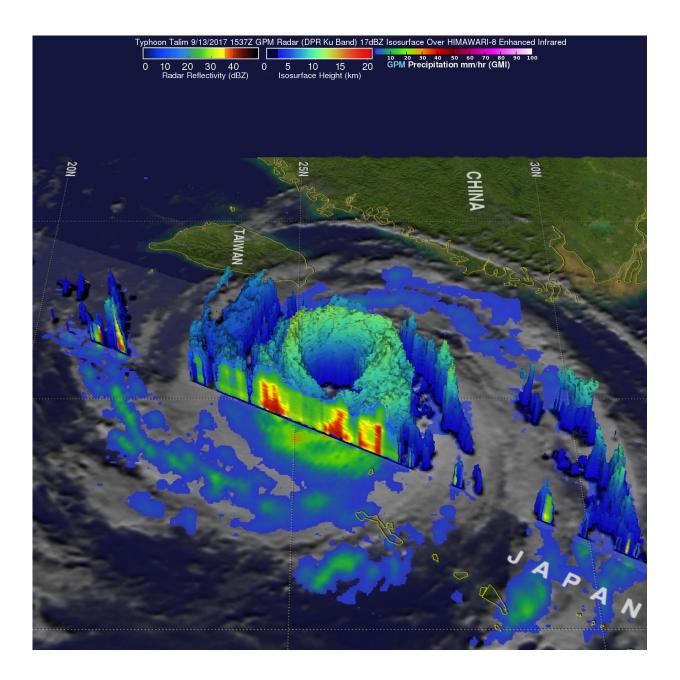
The GPM core observatory had an amazing view of Typhoon Talim in the western Pacific Ocean on September 13, 2017 at 11:37 a.m. EDT (1537 UTC). A large eye was Talim's most distinctive feature. GPM's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) showed the location of intense rainfall within Talim's distinct eye wall. DPR revealed that rain was falling at a rate of over 232 mm (9.13 inches) per hour in convective storms in the western side of the typhoon 's eye wall. GPM also showed that rainfall was far weaker to the east of Talim's center.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, the 3-D view of Talim's eye was produced using data collected by the GPM satellite's radar (DPR Ku Band). Many of the storm tops in the western side of Talim's eye wall were seen extending to heights above 12km (7.4 miles) while they were lower on the eastern side of the typhoon. GPM is a joint mission between NASA and the Japanese space agency JAXA.

On Sept. 15 at 5 a.m. EDT (0900 UTC), Typhoon Talim's maximum sustained winds had dropped to 80 knots (92 mph/148 kph). It was centered about 170 nautical miles west-northwest of Kadena Air Base,



Okinawa Island, Japan, near 28.0 degrees north latitude and 125.1 degrees east longitude. Talim was moving to the east-northeast at 6 knots (7 mph/11 kph).



The GPM core satellite measured rainfall in Typhoon Talim on Sept. 13, 2017 at 11:37 a.m. EDT. On the western side of Talim's eyewall rain was falling at a rate of over 232 mm (9.13 inches) per hour (in red and purple). Credit:



NASA/JAXA, Hal Pierce

Wind shear has started affecting Talim and has pushed the upper-level part of the eye about 30 nautical miles to the northwest of the lower-level eye. The eye is basically leaning from the surface to the top in a northwesterly direction as a result of southeasterly vertical wind shear. That wind shear has also pushed the strongest storms to the western side of the storm.

The Japan Meteorological Agency has issued advisories for the <u>storm</u> at: http://www.jma.go.jp/en/warn/.

The Joint Typhoon Warning Center (JTWC) predicts that typhoon Talim will maintain current intensity while moving toward the Japanese island of Kyushu. Talim is make landfall southeast of Sasebo, Japan on Sept. 17 and move in a northeasterly direction.

Provided by NASA's Goddard Space Flight Center

Citation: NASA gets a dramatic 3-D view of Typhoon Talim's large eye (2017, September 15) retrieved 23 May 2024 from https://phys.org/news/2017-09-nasa-d-view-typhoon-talim.html

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.