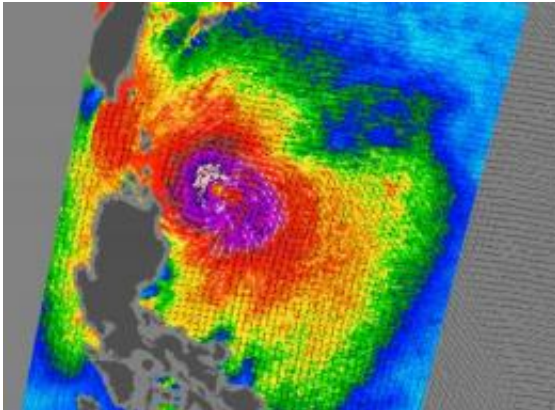


Philippines breathing easier as Typhoon Lupit turns north

October 24 2009



NASA's QuikScat measured Typhoon Lupit's rotating winds on October 22 at 0947 UTC (5:47 p.m. Local time Manila) by using microwaves to peer into the clouds. White barbs show direction of wind and point to areas of heavy rain. The highest wind speeds are normally shown in purple, which indicate winds over 46 mph. QuikScat noticed that Lupit's tropical storm-force winds extended as far as 135 miles from center of the storm. Credit: NASA JPL

Typhoon Lupit is giving residents of Luzon a break from facing the storm head on. The Luzon region of the Philippines still experienced rain and gusty winds, but the storm didn't and won't make landfall there.

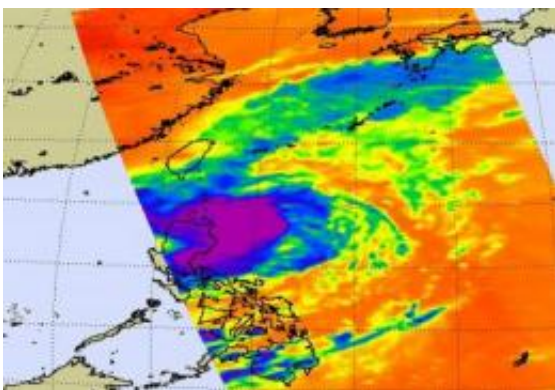
Lupit, called "Ramil" in the [Philippines](#), turned north on Friday, October 23, and is forecast to move northeast, while staying at sea and tracking to the east of Taiwan over the weekend. While on its northern track, cooler

waters and wind shear will continue weakening the storm.

At 11 a.m. EDT or 11 p.m. local Asia/Manila Time, October 23, Lupit had [maximum sustained winds](#) near 55 knots (63 mph). It was located 345 miles north-northeast of Manila, near 19.8 North and 123.6 East. It was crawling north-northeast near 4 mph, but still generating 31-foot-high waves.

Despite the storm's turn to the north, warnings still abound in the Philippines for October 23. Public [Storm Warning](#) Signal 3 is in force in the following areas of Luzon: Babuyan, Calayan Islands and Batanes Group. Public Storm Warning Signal 2 is in force in the following areas of Luzon: Northern Cagayan, Ilocos Norte and Apayao. Public Storm Warning Signal 1 is in force in the following areas of Luzon: Ilocos Sur, Abra, Kalinga.

NASA's Quick Scatterometer satellite (QuikScat) observed Lupit's winds by using microwaves to peer into the clouds. QuikScat can determine the speed of the rotating winds within the storm at the surface of the ocean.



The AIRS instrument on NASA's Aqua satellite captured an infrared image of Typhoon Lupit at 12:47 p.m. local time October 23. Infrared imagery revealed that the deep convection located over the low-level center of circulation has become fragmented and disorganized. The coldest cloud tops are cold as or

colder than 220K (Kelvin) or minus 63F. The blue areas are around 240K, or minus 27F. Credit: NASA JPL, Ed Olsen

NASA's QuikScat measured Typhoon Lupit's winds on October 22 at 0947 UTC (5:47 p.m. Local time Manila) by using microwaves to peer into the clouds. QuikScat can determine the speed of the rotating winds. White barbs show direction of wind and point to areas of heavy rain. The highest wind speeds are normally shown in purple, which indicate winds over 40 knots (46 mph). QuikScat noticed that Lupit's tropical storm-force winds extended as far as 135 miles from center of the storm.

Data from the Atmospheric Infrared Sounder (AIRS), an instrument that flies aboard NASA's Aqua satellite captured an infrared image of Typhoon Lupit at 12:47 p.m. local Manila time October 23. Infrared imagery revealed that the deep convection located over the low-level center of circulation has become fragmented and disorganized.

Because AIRS infrared images show the temperature of the cloud tops, scientists can tell how strong the thunderstorms are that make up the tropical cyclone. The highest clouds have the coldest temperatures. In fact, they can be as cold or colder than 220 degrees Kelvin (K) or minus 63 degrees Fahrenheit (F). Lower clouds are as cold as 27F (240K). There are still some very high, strong thunderstorms around Lupit's center of circulation. The data from AIRS is also used to create an accurate 3-D map of atmospheric temperature, water vapor and clouds, all of which are also helpful to forecasters.

Forecasters at the U.S. Navy's Joint Typhoon Warning Center also looked at water vapor imagery, and noticed that an upper level mid-latitude jet stream has been affecting the northwestern quadrant of [Typhoon](#) Lupit in a way that's detrimental to the storm. The jet stream is

bringing in dry air to the mid-and-upper levels of the storm, which is weakening it as it moves north.

Although Lupit is turning north, it's expected to continue crawling at a slow pace, which means a longer duration of rain over northern Luzon this weekend. Eventually it will pull far enough away so that the fringes of the [storm](#) let Luzon start drying out.

Source: JPL/NASA ([news](#) : [web](#))

Citation: Philippines breathing easier as Typhoon Lupit turns north (2009, October 24) retrieved 24 April 2024 from <https://phys.org/news/2009-10-philippines-easier-typhoon-lupit-north.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.