

IMERG adds up heavy rainfall from Tropical Storm Damrey

November 8 2017



NASA's IMERG calculated rainfall from Typhoon Damrey from October 31 to Nov. 6, 2017 and estimated that more than 500 mm (19.7 inches) of rain fell in parts of south central Vietnam. Rainfall totals decreased as Damrey moved westward and dissipated over Cambodia. Credit: NASA/JAXA, Hal Pierce

Using a fleet of satellites, NASA calculated the heavy rainfall in Vietnam left by Typhoon Damrey at the beginning of November.



Typhoon Damrey originated as a tropical depression over the Philippines on October 31, 2017. Damrey intensified while moving westward over the South China Sea and became a typhoon on November 3, 2017. Typhoon Damrey hit Vietnam's south central coast the next day with sustained winds of about 75 knots (~86 mph).

Torrential <u>rainfall</u> led to deadly flooding. As much as 580 mm (22.8 inches) of rain was reported near the coast well north of where typhoon Damrey came ashore.

The Vietnamese government reported that Damrey was responsible for 89 deaths.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, a rainfall accumulation analysis was created using NASA's Integrated Multi-satellitE Retrievals data (IMERG). IMERG data are used to calculate estimates of precipitation from a combination of space-borne passive microwave sensors, including the GMI microwave sensor onboard the Global Precipitation Measurement mission or GPM satellite, and geostationary satellite infrared data. GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency, JAXA.

That data was used to create an image of IMERG rainfall estimates over southeast Asia during the period from October 31 to November 6, 2017. The IMERG rainfall analysis indicates Damrey's onshore flow caused the heaviest rainfall north of where the <u>typhoon</u> came ashore. IMERG estimated that more than 500 mm (19.7 inches) of rain was common in that area of south central Vietnam. Rainfall totals decreased as Damrey moved westward and dissipated over Cambodia.

Provided by NASA's Goddard Space Flight Center



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