

NASA captures Tropical Depression Kai-Tak's final bow

December 22 2017



NASA's Aqua satellite captured an infrared image of Tropical Depression Kai-Tak dissipating on Dec. 21 at 1:59 p.m. (18:59 UTC). Credit: NASA JPL/Ed Olsen



NASA's Aqua satellite passed over the Malay Peninsula and infrared imagery showed Tropical Depression Kai-Tak dissipating in the Gulf of Thailand under strong vertical wind shear.

The Atmospheric Infrared Sounder or AIRS instrument aboard NASA's Aqua satellite captured an <u>infrared image</u> of Tropical Depression Kai-Tak dissipating on Dec. 21 at 1:59 p.m. (18:59 UTC) in the Gulf of Thailand. Infrared data from AIRS provides cloud top temperatures and showed the coldest cloud tops and strongest storms were fragmented over the Gulf. Just a few cloud tops were colder than minus 63 degrees Fahrenheit (minus 53 degrees Celsius) and they were all over open water. NASA research has shown that storms with <u>cloud tops</u> that cold have the potential to generate heavy rainfall.

At 10 p.m. EST on Dec. 21, (0300 UTC on Dec. 22), the Joint Typhoon Warning Center issued their final bulletin on Tropical Depression Kai-Tak. At the time, Kai-Tak had maximum sustained winds near 25 knots (28.7 mph/46.3 kph). It was located near 5.2 degrees north latitude and 106.4 degrees east longitude, about 297 nautical miles north-northeast of Singapore. Kai-Tak was moving to the southwest.

The Joint Typhoon Warning Center noted that upper level analysis indicates the system has drifted into an area of strong (30 to 40 knot) easterly <u>vertical wind shear</u> and limited outflow. The low-level center is expected to further unravel and disperse as high vertical wind shear persists leading to dissipation on Dec. 22.

Provided by NASA's Goddard Space Flight Center

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