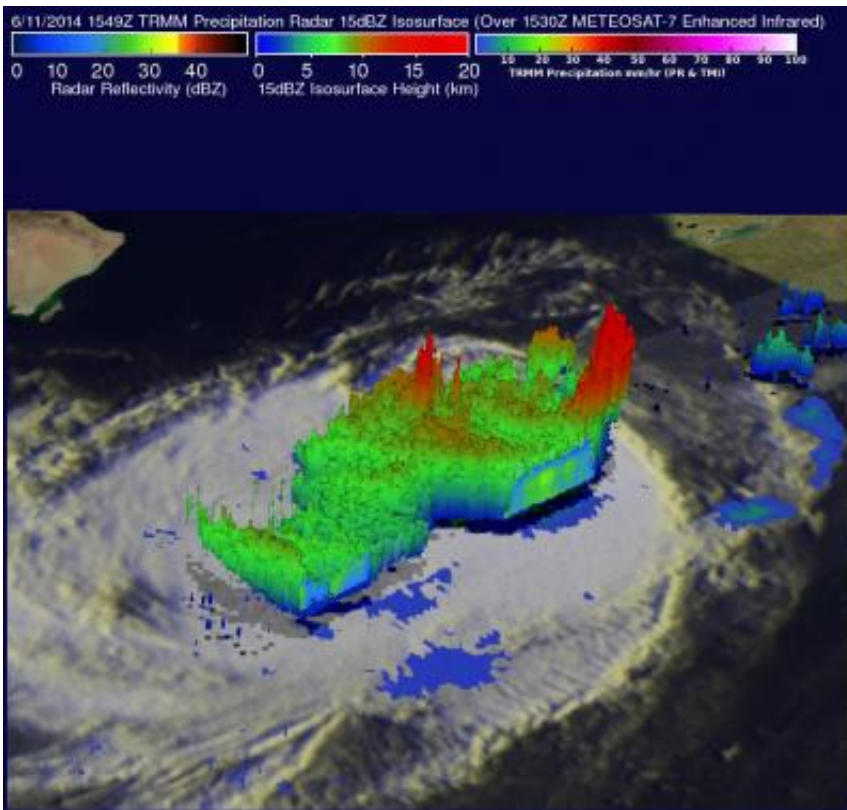


NASA sees Tropical Storm Nanauk's soaking swan song

June 13 2014



This TRMM satellite 3-D image shows that Tropical Storm Nanauk contained powerful towering thunderstorms that were reaching heights of up to 16.8 km (10.4 miles) on June 11, 2014. Credit: SSAI/NASA, Hal Pierce

Tropical Storm Nanauk was dissipating in the Arabian Sea on Friday, June 13 as it ran into increasing vertical wind shear, dry air moving into the tropical cyclone and cooler sea surface temperatures. NASA's

TRMM satellite observed the soaking rains the day before that marked Nanauk's "swan song."

Tropical storm Nanauk formed west of India on June 10, 2014 and since then has been moving toward the northwest over the open waters of the Arabian Sea. NASA and the Japan Aerospace Exploration Agency's Tropical Rainfall Measuring Mission's (TRMM) satellite found that Nanauk contained powerful storms dropping rain at a rate of over 247.3 mm/ 9.7 inches per hour when viewed on June 11, 2014 at 1549 UTC (11:49 a.m. EDT).

At NASA's Goddard Space Flight Center in Greenbelt, Maryland an analysis of rainfall from TRMM's Microwave Imager (TMI) and Precipitation Radar (PR) were overlaid on a 1530 UTC (11:30 a.m. EDT) enhanced infrared image from the European Space Agency's METEOSAT-7 satellite. TRMM PR data were used to create a 3-D view that showed that Nanauk contained powerful towering thunderstorms that were reaching heights of up to 16.8 km (10.4 miles).

Friday the thirteenth proved unlucky for Nanauk as environmental conditions worsened and tore the storm apart. By 09:00 UTC (5 a.m. EDT), the Joint Typhoon Warning Center (JTWC) issued their final warning on the tropical cyclone. At that time, maximum sustained winds were near 35 knots (40 mph/65 kph) and weakening quickly. The storm's last official position was at 21.3 north latitude and 64.3 east longitude, about 285 nautical miles (328 miles/528 km) southwest of Karachi, Pakistan. At that time the dissipating storm was moving to the north at 9 knots (10 mph/~17 kph).

JTWC is a joint U.S. Navy and U.S. Air Force office that includes Navy, Air Force and civilian meteorologists and satellite analysts. The center, located in Pearl Harbor, Hawaii, provides forecasts, advisories and warnings on [tropical cyclones](#) (the generic name for a typhoon, cyclone,

hurricane, tropical storm or tropical depression).

JTWC forecasters examined the upper level of the atmosphere and noted that Nanauk was analysis in an area of strong (40-50 knot/46-57 mph/74-92 kph) northeasterly [vertical wind shear](#) that was tearing the system apart.

Provided by NASA's Goddard Space Flight Center

Citation: NASA sees Tropical Storm Nanauk's soaking swan song (2014, June 13) retrieved 3 May 2024 from <https://phys.org/news/2014-06-nasa-tropical-storm-nanauk-swan.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.