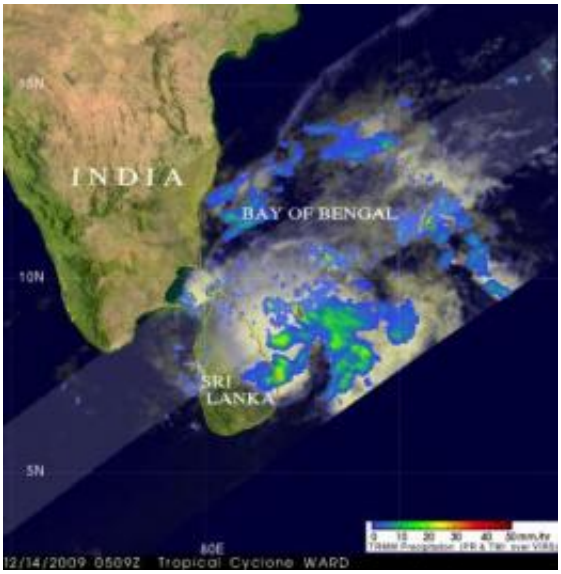
# TRMM sees 05B winding down off the Sri Lanka coast

December 14 2009




Cyclone 05B was producing heavy rainfall over areas of the southwestern Bay of Bengal and eastern Sri Lanka when the TRMM satellite passed over on Dec. 14, 2009 at 0509 UTC. Credit: NASA/SSAI, Hal Pierce

Tropical Depression 05B is dissipating on the east coast of Sri Lanka today and over the next couple of days, but not before bringing some moderate and heavy rain over the next couple of days to some areas in Sri Lanka and the southeast coast of India, from Chennai, southward.

The Joint Typhoon Warning Center issued its final advisory on Tropical Depression 05B, also known as Tropical Storm Ward, on Sunday,

December 13 at 2100 UTC (4 p.m. ET). At that time, 05B's maximum sustained winds were near 34 mph. At that time, its center of circulation was located about 140 miles northeast of Colombo, Sri Lanka near 8.8 North latitude and 81.3 North longitude. It was crawling to the west-southwest near 4 mph.

The Tropical Rainfall Measuring Mission (TRMM) satellite is a joint mission between NASA and the Japan Aerospace Exploration Agency (JAXA) designed to monitor and study tropical rainfall, and it captured 05B's rainfall on December 11.

The TRMM satellite monitors the global tropics as it circles the earth every 92.5 minutes at a height of 403 km (~250.4 miles). The TRMM satellite passed over 05B when it was newly formed in the Bay of Bengal on December 11, 2009 at 1610 UTC. TRMM's Microwave Imager (TMI) and Precipitation Radar (PR) instruments were used in the rainfall analysis. That data is used to create visual images at NASA's Goddard Space Flight Center, located in Greenbelt, Md. The TRMM data showed a large area of rainfall near the center of the storm with some areas of intense rainfall greater than 50 mm/hr (~2 inches). The analysis was overlaid on an infrared image from TRMM's Visible and Infrared Scanner (VIRS). Tropical cyclone 05B was above tropical storm strength with winds over 35 knots (~40.3 mph) at that time.

The Precipitation Radar (PR) instrument has the unique capability of seeing through clouds to show tropical cyclones such as 05B in 3-D. An intense thunderstorm near the center of 05B was found by TRMM's PR to extend to heights above 13 km (~8 miles). Since that time, 05B has weakened into a tropical depression and its cloud heights have dropped.

Tropical cyclone 05B (Ward) that had been predicted to impact the southeastern coast of India, weakened to a tropical depression while moving over northeastern Sri Lanka. 05B was producing heavy rainfall

over areas of the southwestern Bay Of Bengal and eastern Sri Lanka when the TRMM satellite passed over on December 14, 2009 at 0509 UTC. The rainfall analysis was derived from TRMM's Microwave Imager (TMI) and Precipitation Radar (PR) instruments and was overlaid on a combination infrared and visible image from TRMM's Visible and Infrared Scanner (VIRS).

Chennai and southeastern India will see scattered thunderstorms over the next several days as the system winds down. The areas in the southeast will experience scattered thunderstorms with light winds. Some downpours could be heavy at times. The current forecast calls for thunderstorms to diminish over southeastern India by Thursday, December 17.

In Sri Lanka, the Meteorology Department issued a cyclone warning on Sunday, December 13, and noted that the effects from the storm would peak by mid-day on Monday, December 14. Fishermen were cautioned against going out to sea because of rough seas and gusty winds. Scattered showers are expected today in the Northern, Eastern, Uva and North-Central Provinces of the country.

Source: NASA's Goddard Space Flight Center (news : web)