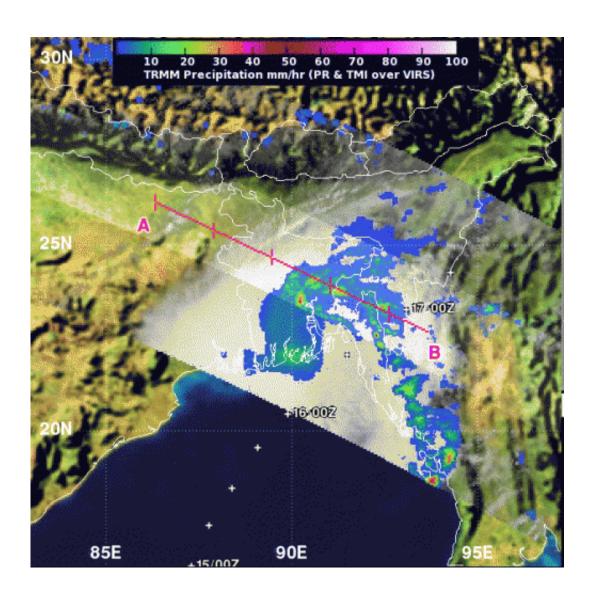


NASA sees heavy rainfall as Cyclone Mahasen made landfall

May 16 2013



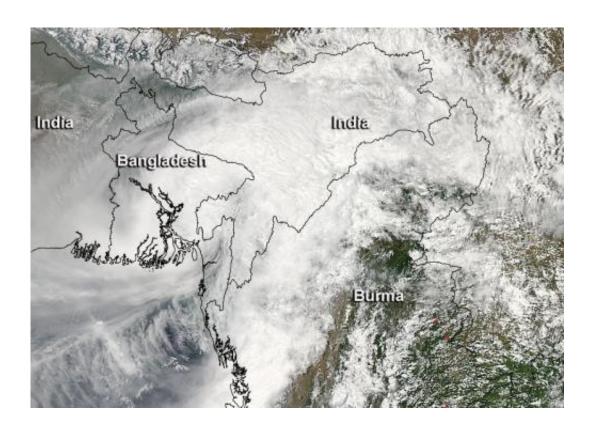
When NASA's TRMM satellite passed over Cyclone Mahasen on May 16 at 04:06 UTC (12:04 a.m. EDT), the TRMM Microwave imager showed the heaviest rainfall was occurring in a band of thunderstorms north of the center of circulation. That band of thunderstorms was already over southern Bangladesh



and dropping as much as 2 inches/50 mm of rain per hour along the coast. Credit: NASA/SSAI, Hal Pierce

NASA's TRMM satellite identified areas of heavy rainfall as Cyclone Mahasen made landfall today, May 16, in southern Bangladesh. NASA's Aqua satellite also captured an image of the storm and showed the extent of Cyclone Mahasen's clouds over three countries.

When NASA's <u>Tropical Rainfall</u> Measuring Mission (TRMM) satellite passed over Cyclone Mahasen on May 16 at 0406 UTC (12:04 a.m. EDT), the <u>TRMM Microwave imager</u> showed the heaviest rainfall was occurring in a band of thunderstorms north of the center of circulation. That band of thunderstorms was already over southern Bangladesh and dropping as much as 2 inches/50 mm of rain per hour along the coast. TRMM measured the highest <u>cloud tops</u> near 7.4 miles / 12 km high.





The MODIS instrument aboard NASA's Aqua satellite captured this visible image of Cyclone Mahasen on May 16 at 6:50 UTC (2:50 a.m. EDT) when its clouds extended over India, Bangladesh, and Burma. Credit: Credit: NASA Goddard/MODIS Rapid Response Team

Mahasen made landfall northwest of Chittagong around 0600 UTC (2 a.m. EDT) on May 16, as a tropical storm with maximum sustained winds near 45 knots (51.7 mph/83.3 kph). Mahasen is moving further inland in a north-northeasterly direction at 22 knots (25.3 mph/45.7 kph). At 0900 UTC (5 a.m. EDT), Mahasen was located near 23.7 north and 91.7 east, about 53 nautical miles (61 miles/98.1 km)southeast of Dhaka, Bangladesh. Just 50 minutes after TRMM captured the rainfall rates within Mahasen, the MODIS instrument aboard NASA's Aqua satellite captured a visible image of Cyclone Mahasen that showed the extent of its clouds over India, Bangladesh, and Burma.

As of 12:38 UTC (8:38 a.m. EDT), the Bangladesh Meteorological Department (BMD) maintained a Signal Number 3 warning for maritime ports of Chittagong, Cox's Bazar and Mongla. For a look at Bangladesh radar, visit the BMD web page: http://tinyurl.com/c5vbs35.

The interaction with the land is causing Mahasen to fall apart rapidly, according to forecasters at the Joint <u>Typhoon Warning Center</u>. The system became disorganized just hours after it made landfall.

Mahasen is forecast to track across northeastern India while weakening, especially as it tracks over rugged terrain. Mahasen is also expected to encounter strong wind shear which will help speed the weakening and drop it below tropical storm status later in the day.



Provided by NASA's Goddard Space Flight Center

Citation: NASA sees heavy rainfall as Cyclone Mahasen made landfall (2013, May 16) retrieved 23 May 2024 from https://phys.org/news/2013-05-nasa-heavy-rainfall-cyclone-mahasen.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.