

Copernicus Sentinel-3 captures Cyclone Mocha

July 7 2023



contains modified Copernicus Sentinel data (2023), processed by ESA, [CC BY-SA 3.0 IGO](#)

The Copernicus Sentinel-3 mission captured this image of the powerful Cyclone Mocha on 13 May 2023 as it made its way across the Bay of

Bengal heading northeast towards Bangladesh and Myanmar.

Cyclone Mocha originated in the Indian Ocean, and it gradually intensified while moving towards the Bay of Bengal. Winds topped 280 km per hour, making it one the strongest storms on record in the North Indian Ocean, similar to Cyclone Fani, which hit the same area in May 2019.

Although the storm weakened slightly as it approached Myanmar and Bangladesh, it caused widespread destruction as it made landfall on 14 May.

With thousands of people losing their houses, infrastructure seriously damaged and croplands inundated, both the International Charter Space and Major Disasters and the Copernicus Emergency Mapping Service were triggered to supply maps based on [satellite data](#) to help civil protection authorities and the international humanitarian community with their emergency response efforts.

Satellites orbiting Earth can provide indispensable up-to-date information to observe such events, as shown here from Copernicus Sentinel-3. The mission is designed to measure, monitor and understand large-scale global dynamics and provides essential information in near-real time for ocean and weather forecasting.

Acquired with the Ocean and Land Color Instrument, this wide view covers an area of over 2000 km from north to south. The storm is estimated to be more than 1000 km across.

In the cloud-free portion on top of the image we can see parts of India, Nepal, Bangladesh and Myanmar and the entire country of Bhutan. The white snow-capped mountains of the eastern part of the Himalayas, including Mount Everest, the highest mountain on the planet, are clearly

visible. The Tibetan Plateau—part of China—appear in brownish colors owing to the absence of vegetation.

Provided by European Space Agency

Citation: Copernicus Sentinel-3 captures Cyclone Mocha (2023, July 7) retrieved 12 May 2024 from <https://phys.org/news/2023-07-copernicus-sentinel-captures-cyclone-mocha.html>

<p>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.</p>
--