

# Study predicts faster Indian Ocean warming with fatal results

**T**he Indian Ocean is expected to experience surface warming of 1.4°C to 3°C between 2020 and 2100, which will push it into a near-permanent heatwave state, intensify cyclones, affect the monsoon, and lead to a rise in sea levels, according to a new study.

The study, led by Roxy Mathew Koll, a climate scientist at the Pune-based Indian Institute of Tropical Meteorology, showed that marine heatwaves (periods of abnormally high ocean temperatures) are projected to increase from 20 days per year (during 1970-2000) to 220-250 days per year, pushing the tropical Indian Ocean into a basin-wide near-permanent heatwave state by the end of the 21st century. Marine heatwaves cause habitat destruction due to coral bleaching, seagrass destruction, and loss of kelp forests, affecting the fisheries sector adversely. They also lead to the rapid intensification of cyclones. The maximum warming will occur in the northwestern Indian Ocean, including the Arabian Sea, while there will be reduced warming off the Sumatra and Java coasts.



Faster warming of the Indian Ocean will push it into a near-permanent heatwave state, intensify cyclones and lead to a rise in sea levels. REUTERS

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