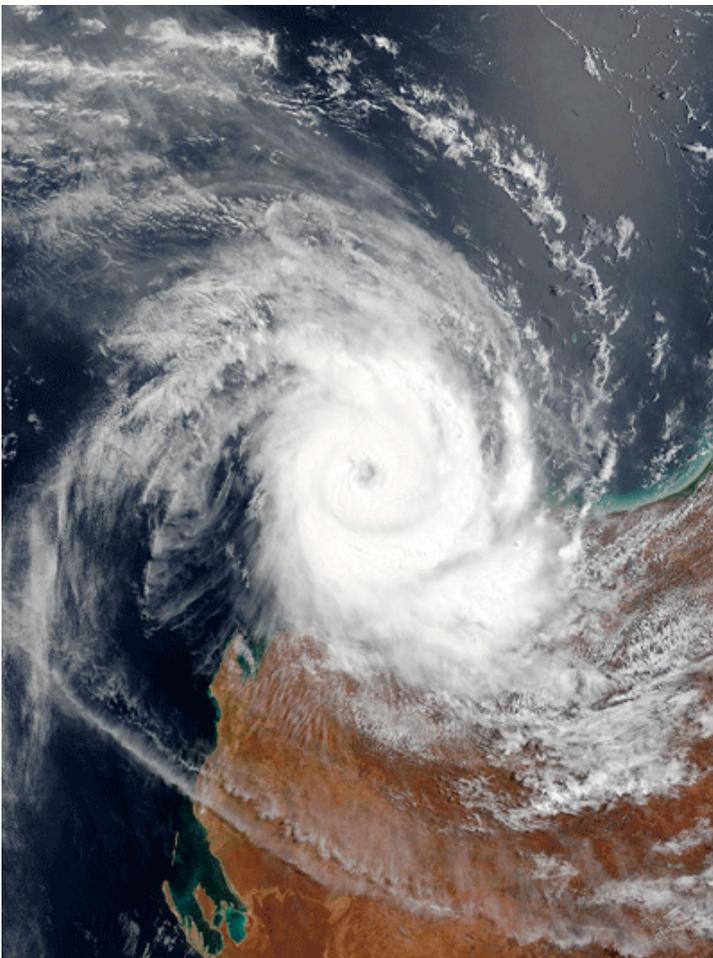




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Future to bring fewer but fiercer cyclones for WA

In the future fewer tropical cyclones may form off Western Australia but they may become more intense, shows new research from a Western Australian climate research collaboration.



Fewer tropical cyclones may form off Western Australia, but those that do are likely to be as intense as 2004's Category 4 Tropical Cyclone Monty.

Credit: NASA

CSIRO climate scientist Deborah Abbs says there could be a 50 per cent reduction in the number of storms from 2051–2090 compared to the period 1971–2000.

However, the climate model developed by Dr Abbs' team indicates a distinct shift towards more destructive storms.

'Despite a decrease in the number of tropical cyclones, there is a greater risk that a tropical cyclone that forms will be more severe in future,' Dr Abbs said.

'Even a small increase in cyclone intensity is concerning because of the threat to life, property, industry and agriculture.'

Dr Abbs is presenting her research at an annual meeting of scientists and policy makers of the Indian Ocean Climate Initiative (IOCI), a strategic research partnership between the WA Government, CSIRO and the Bureau of Meteorology.

Tropical cyclones already threaten a significant proportion of the WA coastline and offshore enterprises. Dr Abbs' research shows that both the formation and decay regions of tropical cyclones in Western Australia will move 100 km southward later this century. This means areas not currently affected will face the risk of tropical cyclones in the future.

The incidence and behaviour of tropical cyclones is complex. Wind speed alone does not fully explain a cyclone's potential to cause damage, particularly via wave or storm surge.

Researchers use an additional measure called integrated kinetic energy that accounts for both wind speed and the overall area covered by a cyclone's strong winds. Importantly, Dr Abbs' research shows this measure also indicates a distinct shift toward more destructive cyclones.

Source: CSIRO

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