Rising winter temperatures as important as summer’s in coral disease

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An increase in the frequency and destructiveness of coral disease has been identified as one of the threats posed to coral reefs by increased thermal stress from rising temperatures. For the first time, scientists have also linked mild water temperatures during the preceding winter period with outbreaks of coral diseases, known as white syndromes, on Australia's Great Barrier Reef.

An international team of scientists used satellite-derived temperature measurements to examine the magnitude of stress on corals from unusually warm temperatures.

‘Previous studies examined the relationship between warm conditions throughout the year and the likelihood of disease,’ says Dr Scott Heron, physical scientist with the US National Oceanic and Atmospheric Administration (NOAA).

‘We considered the influence of summer and winter separately, taking into account both cold and warm stress, to find that winter temperatures are just as important as summer stress in determining the susceptibility of corals to disease outbreaks.’

The project was a collaboration between the NOAA, the Australian Research Council Centre of Excellence for Coral Reef Studies, James Cook University and the Australian Institute of Marine Science.

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