

# Corals may fare better in turbid waters, research finds

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Turbid waters can have the same effect as shading during a thermal stress event. In the Philippines, the *Seriatopora* colony on the bottom right, under the bleached colony, has retained pigment, whereas the adjacent colony of the same species of *Seriatopora*, on the left, in full sunlight is bleached and will die. Credit: Robert van Woesik/Florida Institute of Technology

New research from Florida Institute of Technology scientists Chris

Cacciapaglia and Rob van Woesik shows that corals may survive better in warm oceans where the water is clouded by floating particles.

Coral reefs, the most diverse marine ecosystems on the planet, are under increasing stress and are dying in many parts of the world as the oceans continue to warm. When high levels of sunlight combine with unnaturally warm temperatures, the corals don't have much of a chance.

Cacciapaglia and van Woesik's study, appearing in the December issue of *Global Change Biology*, shows that moderate levels of turbidity - cloudy water - could lower stress by shading the corals from extremely high light.

"We've identified refuges from climate change, where naturally turbid environments will reduce the temperature stress predicted for 2100," Cacciapaglia said.

The study highlights locations where turbidity will help corals survive. "Naturally turbid environments may be among the few places where [coral](#) species survive in a warmer climate" said van Woesik.

**More information:** Chris Cacciapaglia et al. Climate-change refugia: shading reef corals by turbidity, *Global Change Biology* (2015). [DOI: 10.1111/gcb.13166](#)

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