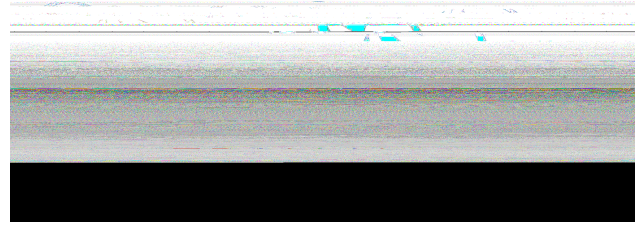


Press Release



Cool deep-water protects coral reefs against heat stress **Internal waves mitigate the increase in water temperatures in the Andaman Sea**

January 06, 2015, Kiel/Bremerhaven. Cool currents from the deep ocean could save tropical corals from lethal heat stress. Researchers from Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, GEOMAR Helmholtz Centre for Ocean Research Kiel and Phuket Marine Biological Center observed internal waves preserving corals in the Andaman Sea. Because satellites do not detect these small-scale phenomena, local measurements are crucial for the establishment and monitoring of protected areas, the scientists point out in the January issue of the "Proceedings of the Royal Society B".



As part of their investigation, the biologists revealed differences between the data of the satellite monitoring of the US-American National Oceanic and Atmospheric Administration (NOAA) and in-situ work: Only on-site measurements reflected the potential of internal waves. "Accurate knowledge of local conditions is therefore important for the establishment and monitoring of protected areas for corals," says Dr. Wall.

Original publication:

Wall M., Putschin L., Schmidt G.M., Jantzen C., Khokiattiwong S., Richter C. (2015), Large-amplitude internal waves benefit corals during thermal stress. Proc. R. Soc. B 282, doi: 10.1098/rspb.2014.0650

Links:

www.geomar.de GEOMAR Helmholtz Centre for Ocean Research Kiel
www.awi.de Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI)
www.bioacid.de BIOACID (Biological Impacts of Ocean Acidification)
www.calmaro.eu CALMARO (Calcification by Marine Organisms)

Images:

Images are available for download at www.geomar.de/n2236-e

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