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Global-Warming Slowdown Due to Pacific Winds, Study Shows



Photographer: Paul J. Richards/AFP via Getty Images

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Stronger Pacific Ocean winds may help explain the slowdown in the rate of global warming since the turn of the century, scientists said.

More powerful winds in the past 20 years may be forcing warmer seas deeper and bringing cooler water to the surface, 10 researchers from the U.S. and Australia said yesterday in the journal [Nature](#). That has cooled the average global temperature by as much as 0.2 degree Celsius (0.36 Fahrenheit) since 2001.

Scientists have been trying to find out why the rate of global warming has eased in the past 20 years while greenhouse-gas emissions have surged to a record. Yesterday's paper elaborates on a theory that deep seas are absorbing more warmth by explaining how that heat could be getting there.

"The net effect of these anomalous winds is a cooling in the 2012 global average surface air temperature of 0.1–0.2 degree Celsius, which can account for much of the hiatus in surface warming observed since 2001," the researchers wrote. They're led by Matthew England, a professor of oceanography at the University of New South Wales in [Australia](#).



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The United Nations Intergovernmental Panel on Climate Change said in September that the average temperature since 1998 has increased at less than half the rate since 1951. The world has warmed by an average 0.05 degree per decade since 1998, compared with the 1951-2012 average of 0.12 degree a decade, the UNIPCC said.

Hiatus Persisting

“This hiatus could persist for much of the present decade if the tradewind trends continue; however rapid warming is expected to resume once the anomalous wind trends abate,” the authors of yesterday’s study said. “Volcanoes and changes in solar radiation can also drive cooler decades against the backdrop of ongoing warming,” they said.

The scientists used computer models and weather data to determine the effect of the stronger winds on ocean circulation. Other institutions involved in the research include the National Center for Atmospheric Research in Boulder, **Colorado**, the University of **Hawaii**, the U.S. National Oceanic and Atmospheric Administration and Australia’s Commonwealth Scientific & Industrial Research Organization.

A paper in the journal Geophysical Research Letters in May found that ocean waters below 700 meters (2,300 feet) have **absorbed more heat** since 1999. A separate study in Nature in August linked the hiatus to a cooling of surface waters in the eastern Pacific, and yesterday’s research builds on that.

<http://www.bloomberg.com/news/2014-02-10/global-warming-slowdown-due-to-pacific-winds-study-shows.html>