

Mon Jan 18, 2016 11:24am EST

Related: ENVIRONMENT, GLOBAL ENERGY NEWS

Oceans heat fast, even with slower warming at Earth's surface

<http://www.reuters.com/article/us-climatechange-oceans-idUSKCN0UW1SJ>

OSLO | BY ALISTER DOYLE



An aerial view shows a sea wall on the beach that protects sand dunes from erosion along the Atlantic Ocean coast in Anglet, southwestern France, June 20, 2015.
REUTERS/REGIS DUVIGNAU

The amount of heat soaked up by the oceans has surged in the past two decades in a sign of worsening global warming despite a slowdown in temperature rises at the Earth's surface, a U.S. study showed on Monday.

The trend of warmer oceans, blamed on man-made emissions of greenhouse gases, is pushing fish stocks towards the poles, damaging coral reefs and nudging up world sea levels because water expands as it heats up.

The report, examining ocean temperatures to depths of more than 2,000 meters (6,500 ft), found that "half of the total global ocean heat uptake since 1865 has accumulated since 1997". The year 1865 is taken as the start of wide use of fossil fuels.

And more than a third of the surge in heat in the oceans since 1997 was at depths exceeding 700 meters - a part of the ocean rarely studied, the scientists wrote in the journal Nature Climate Change.

"We expect that the deep ocean will absorb an increasing amount of heat," lead author Peter Gleckler, of the U.S. Department of Energy's Lawrence Livermore National Laboratory (LLNL) in California, told Reuters in an email.

The increase in the oceans' uptake of heat has coincided with a puzzling slowdown in the pace of temperature rises at the Earth's surface since the late 1990s, even as man-made emissions of heat-trapping gases have kept rising.

That slowdown may now be over with record temperatures in 2015 and 2014.

Understanding ocean heat "is vital to improving projections of how much and how fast the Earth will warm and seas rise in the future," LLNL wrote in a statement. Most of the extra heat from man-made global warming ends up in the oceans.

The scientists said it was hard to judge the role of ocean heat in what the United Nations panel of climate scientists calls a "hiatus" in surface warming, which had heartened those who doubt big man-made impact on the climate.

"The 'hiatus' is a surface phenomenon. The Earth is still warming, and the oceans have been taking up the bulk of that heat," Matt Palmer, a climate scientist at the British Met Office Hadley Centre who was not involved in the study, wrote in a statement.

John Shepherd, of the University of Southampton, said it was unclear if the extra heat absorbed by the oceans would return to the atmosphere or stay in the depths. "It's certainly not a cure for climate change, nor any reason to be less concerned with it," he said in a statement on ocean warming.

Last month, almost 200 governments agreed a deal in Paris meant as a turning point from fossil fuels, blamed for causing more heat waves, downpours and rising sea levels.

(Editing by Jeremy Gaunt)



TRENDING ON REUTERS

- U.S. sailors captured by Iran were held at gunpoint: U.S. military

1
- Banks drag on Europe; oil falls after Iran sanctions lifted | VIDEO

2
- End of Europe? Berlin, Brussels' shock tactic on migrants

3
- The Eagles guitarist Glenn Frey dead at 67 | VIDEO

4
- Oil slumps below \$28 to 2003 low as Iran sanctions lifted | VIDEO

5

RECOMMENDED VIDEO



Mexico's Colima or "Fire" Volcano erupts



American murdered in Italy, gang rape in NY