

Global warming 'pause' theory is dead but still twitching

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People stand next to the Rhone Glacier on July 14, 2015 which was wrapped with blankets as a protection from the sun near Gletsch

A study released Thursday is the second this year seeking to debunk a 1998-2013 "pause" in global warming, but other climate scientists insist the slowdown was real, even if not a game-changer.

When evidence of the apparent hiatus first emerged, it was seized upon

by sceptics as evidence that [climate change](#) was driven more by natural cycles than humans pumping carbon dioxide into the atmosphere.

"Our results clearly show that ... there never was a hiatus, a pause or a slowdown," Noah Diffenbaugh, the study's main architect and a professor at Stanford University, said in a statement.

The thermal time-out, his team found, resulted from "faulty statistical methods".

In June, experts from the US National Oceanic and Atmospheric Administration (NOAA) came to the same conclusion, chalking up the alleged slowdown to a discrepancy in measurements involving ocean buoys used to log temperatures.

Their results were published in the peer-reviewed journal *Science*.

Beyond a strident public debate fuelled as much by ideology and facts, the "pause" issue has serious real-world implications.

Scientifically, a discrepancy between climate projections and observations could suggest that science has overstated Earth's sensitivity to the radiative force of the Sun.

Politically, it could weaken the sense of urgency underlying troubled UN negotiations, tasked with crafting a global pact in December to beat back climate change.

At first, scientists sounding an alarm about the threat of greenhouse gases were stumped by the data, unable to explain the drop-off in the pace of warming.

Even the UN's Intergovernmental Panel on Climate Change

(IPCC)—whose most recent 1,000-plus page report is the scientific benchmark for the UN talks—made note of "the hiatus".

Searching for explanations, the IPCC speculated on possible causes: minor volcano eruptions throwing radiation-blocking dust in the atmosphere, a decrease in solar activity, aerosols, regional weather patterns in the Pacific and Atlantic Oceans.

To the general relief of the climate science community, the Stanford findings—a detailed review of statistical methodology—would appear to be the final word on the subject.

Nail in the coffin

Previous calculations were flawed, they said, because they assumed there was a random distribution in tens of thousands of temperature data points. But once they were adjusted to take into account the relationship between the data points, the hiatus disappeared.

"This study puts the last nail in the coffin of the 'pause' idea circulated by the propagators or climate confusion," IPCC Vice President Jean-Pascal van Ypersele told AFP.

Perhaps—but if so, the corpse of the climate hiatus is still twitching in its grave.

In a 20-page report earlier this week called "Big changes underway in the climate system?", Britain's weather agency confirmed the existence of the notorious 'pause'—if only to say that it was probably over.

The historical record, the Met Office said, shows periods when temperatures rise rapidly and "periods with little warming or even cooling ... the most recent period starting around 2000."

The likelihood that 2015 and 2016 will deliver record average temperatures suggests that this interlude is likely over, the report said.

But despite having referenced the June NOAA study debunking the 'hiatus', the Met Office report did not call it into question.

Doug Smith, the Met Office's predictability research manager, told AFP that data for the world's average surface temperature showed "a clear reduction recently".

He added: "We prefer to call it a slowdown rather than a pause."

Rowan Sutton, Director of Research at Britain's National Centre for Atmospheric Science, went even further.

"We can't say that the 'pause' in the rise of global average surface temperature has ended because many factors affect short-term trends," he said.

At the same time, all these scientists agree that the [slowdown](#) debate is a footnote to the larger story of [climate](#) change, which threatens to make Earth inhospitable for humans well before the end of this century.

"Climate change never stopped and the Earth had continued to accumulate energy," Sutton said by email.

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