



More Evidence There Is No 'Pause' in Global Warming

Despite what skeptics claim, the earth is on track for even hotter days ahead.

By John Metcalfe

July 22, 2014

Here's an argument that gets thrown around a lot by climate-change skeptics: Since 1998, the average rate of global warming slowed to 0.09 degrees per decade, compared with 0.22 degrees during the decades up to then after 1951. This slowed heating, which was not predicted by many computer models, is proof that we don't know what the future will be like and should all stop stressing over climate change.

The Cato Institute's Patrick Michaels and Paul "Chip" Knappenberger were among the most recent skeptics to push this talking point. Here was their takeaway on the yet-unknown "mechanism" behind the reduced warming:

Until we understand what this sizeable mechanism is and how it works, our ability to reliably look into the future and foresee what climate lies ahead is a mirage. Yet, somehow, the Obama Administration is progressing full speed ahead with regulations about the kinds of cars and trucks we can drive, the appliances we use, and the types of energy available, etc., all in the name of mitigating future climate change.

As we repeatedly point out, not only will the Obama Administration's actions have no meaningful impact on the amount of future climate change, but it is far from clear that the rate of future change will even be enough to mitigate—or even to worry about.

With researchers these days ignoring climate change because there is no scientific consensus on it, it would seem this logic is impossible to refute. Ha, just kidding: In fact, a peer-reviewed study last week in *Geophysical Research Letters* throws horse manure over it (a copy is available here). Shaun Lovejoy is a physics professor at Montreal's McGill University who ran a statistical analysis of global temperatures from 1998 to 2013. He believes that what skeptics deride as a "pause" in warming was caused by natural temperature fluctuations, and that these fluctuations helped muddle the ongoing and very real progression of climate change.

His findings:

Lovejoy's new study concludes that there has been a natural cooling fluctuation of about 0.28 to 0.37 degrees Celsius since 1998—a pattern that is in line with variations that occur historically

every 20 to 50 years, according to the analysis. "We find many examples of these variations in pre-industrial temperature reconstructions" based on proxies such as tree rings, ice cores, and lake sediment, Lovejoy says. "Being based on climate records, this approach avoids any biases that might affect the sophisticated computer models that are commonly used for understanding global warming."

What's more, the cooling effect observed between 1998 and 2013 "exactly follows a slightly larger pre-pause warming event, from 1992 to 1998," so that the natural cooling during the "pause" is no more than a return to the longer term natural variability, Lovejoy concludes. "The pause thus has a convincing statistical explanation."

Lovejoy's study adds another possibility for what caused the reduced rate of heating; scientists have also considered abnormal patterns in the trade winds, recent volcanic eruptions that spewed aerosols into the air, and the ocean sucking up heat like a sponge, as seen in this chart based on NOAA data:

In other news, global temperatures made this past month the hottest June on record. As that follows the hottest May known to humankind, some are speculating that "2014 could become the warmest year on record," says the Capital Weather Gang.