

[Study: Earth Is At Its Warmest In 120,000 Years \(washingtonpost.com\) 55](#)

Posted by [BeauHD](#) on Monday September 26, 2016 @09:30PM from the it's-getting-hot-in-here dept.

An anonymous reader quotes a report from Washington Post: *As part of her doctoral dissertation at Stanford University, Carolyn Snyder, now a climate policy official at the U.S. Environmental Protection Agency, created a continuous 2 million year temperature record, much longer than a previous 22,000 year record. Snyder's temperature reconstruction, [published Monday in the journal Nature](#), doesn't estimate temperature for a single year, but averages 5,000-year time periods going back a couple million years. Snyder based her reconstruction on 61 different sea surface temperature proxies from across the globe, such as ratios between magnesium and calcium, species makeup and acidity. But the further the study goes back in time, especially after half a million years, the fewer of those proxies are available, making the estimates less certain, she said. These are rough estimates with large margins of errors, she said. But she also found that the temperature changes correlated well to carbon dioxide levels. Temperatures averaged out over the most recent 5,000 years -- which includes the last 125 years or so of industrial emissions of heat-trapping gases -- are generally [warmer than they have been since about 120,000 years ago](#) or so, Snyder found. And two interglacial time periods, the one 120,000 years ago and another just about 2 million years ago, were the warmest Snyder tracked. They were about 3.6 degrees (2 degrees Celsius) warmer than the current 5,000-year average. Snyder said if climate factors are the same as in the past -- and that's a big if -- Earth is already committed to another 7 degrees or so (about 4 degrees Celsius) of warming over the next few thousand years. "This is based on what happened in the past, Snyder noted. "In the past it wasn't humans messing with the atmosphere."*