

A new [study](#) in the journal *Science* shows just how extraordinary our current weather is. Here are the key findings:

- In one century, we have reversed a five thousand year cooling trend. Global temperatures have gone from nearly the coldest to the warmest in the past five thousand years. To give some perspective, five thousand years ago was about when the first Pharaoh unified ancient Egypt, about five hundred years before the first pyramids. In other words, we're talking about the whole time since the very earliest days of civilization.
- Under every emission scenario, by 2100 the world will be warmer than it has been for the past ten thousand years. To give you a benchmark, that was about the time that saber-tooth tigers became extinct. In other words, we will have compressed ten thousand years of temperature change into two centuries.
- Let me repeat that this is true of *every* emission scenario — in other words, it's completely baked in. The only question is whether we're going to escalate emissions and leap past that ten-thousand year record with even greater warming.

Now that I've unpacked everything, let me repack it: by the end of this century — within the life spans of many of my reader's children — the planet will be hotter than it has been since the days of sabertooth tigers. And that's the *best* case scenario. The worst case is that it will a *lot* warmer.

Are you starting to get worried yet?