The media is calling July 2023 the “hottest month on record” and even the “hottest month in the history of civilization.” Keeping in mind that July is typically the warmest month of every year, NASA satellite data indicate that July 2023 was the warmest July in the satellite record. But that record only dates back to 1979 and there certainly were Julys before 1979.

In terms of monthly temperature anomalies (temperature differences relative to a common baseline used to evaluate the notion of emissions-driven “global warming”), February 2016 had a greater anomaly than July 2023. March 2016 had the same anomaly and April 1998 was only an unmeasurable 0.02°C lower (see graph, below, and data). So February-March 2016 and April 1998 are not really endorsements of the hypothesis that every emission warms the planet.

Recalling that average global temperature is on the order of 58°F, use of the term “hottest” is obviously quite an exaggeration. Finally, the notion of “average global temperature” is not really meaningful in the first place. It has no physical reality, and its component satellite and surface station temperature measurements lack precision to a significant degree.

Notwithstanding the above, was July 2023 the “hottest month in the history of civilization”? We will address that after you check out the 10 climate fact checks for July 2023 presented below.
Fact Check. The ‘hottest day in 125,000 years’ is based on average global temperatures for July 3-4, estimated by the Climate Reanalyzer to be around 62.6°F. The Climate Reanalyzer relies on satellite temperature data estimates modified by computer modelling and presented as temperature anomalies (i.e., from an arbitrary baseline of 1979-2000 estimated temperatures). First, the 62.6°F is not the average of actually measured temperatures. It is guesswork. Next, the satellite era of temperature taking began in 1979, which is not close to 125,000 years ago. The significance of that is underscored by an Antarctic “heat wave” on July 3-4 that raised temperatures in part of Antarctica from around -70°F to around -30°F. That heat wave significantly skewed upward the Climate Reanalyzer’s “average global temperature.” Without satellites, that heat wave would never have been detected, as evidenced by Temperature.global’s average of global surface stations measurements remaining constant at about 57.5°F. The “hottest day” claim so lacks a factual basis that even the National Oceanic and Atmospheric Administration was compelled to run away from it.

Fact Check. Putting aside that the notion of “average global temperature” is a dubious proposition, whether you believe the high-end of “average global temperature” for July (i.e., the Climate Reanalyzer’s 62.6°F) or the low-end (i.e., Temperature.global’s 57.5°F), neither temperature is close to boiling (212°F).

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The National Oceanic and Atmospheric Administration on Thursday issued a note of caution about the Maine tool’s findings, saying it could not confirm data that results in part from computer modeling, saying it wasn’t a good substitute for observations.
**ATLANTIC CURRENT TO COLLAPSE BY 2025?**

*The New York Times* reported in "[Warming Could Push the Atlantic Past a ‘Tipping Point’ This Century](https://www.nytimes.com/2023/07/30/science/atlantic-ocean-counter-current-warming-climate.html)"; "The system of ocean currents that regulates the climate for a swath of the planet could collapse sooner than expected, a new analysis found... it could potentially occur as soon as 2025."

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**RECORD FOR CONSECUTIVE HOT DAYS IN PHOENIX?**

The Associated Press reported in "[July keeps sizzling as Phoenix hits another 110-degree day and wildfires spread in California](https://apnews.com/article/17352102f2649e407f978a9196d250d0)"; "Phoenix sizzled through its 31st consecutive day of at least 110°F, which supposedly blew past the previous record of 18 straight days over 110°F in 1974."

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**Fact Check.** The UK national weather service, the Met Office, ran away from the periodically recycled alarmist claim with a week.

A paper published in the journal Nature suggested the Atlantic Meridional Overturning Circulation was likely to collapse by 2057, and possibly as early as 2025. **‘Don’t despair’**

But scientists said the paper was “far too simplistic”, with Richard Betts, the head of the Climate Impacts at the Met Office Hadley Centre, saying: “There’s still not evidence that we’ve kind of past the point of no return in terms of devastating impacts. **‘On the basis of one paper, don’t despair’**

In addition, other recent research based on current measurements has suggested that the Atlantic ocean conveyor current is actually accelerating not getting weaker.

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**Fact Check.** If Phoenix’s 2023 weather-related temperatures are to be compared with those of Phoenix from 1974, some adjustments are in order to ensure an apples-to-apples comparison. Since 1974, Phoenix temperatures warmed 5°F due to the urban heat island effect (i.e., urban area warming due to concrete, asphalt, waste heat, population etc.) If you subtract Phoenix’s urban heat island effect from its [July 2023 maximum temperatures](https://www.cnn.com/cnnindiamap/cnnindianews/2023/07/29/news/phoenix-record-heat/index.html), the 1974 record of 18 consecutive days over 110°F is not close to be broken. The longest streak is six days, which occurred twice (July 17-22 and July 24-29). It was certainly hot in Phoenix during July 2023, but the weather-caused heat was far hotter in 1974.
HOTTTEST DAY IN DEATH VALLEY?
The Washington Post reported in "Death Valley soars to 130 degrees, matching Earth's highest temperature in at least 90 years": "As the third massive heat wave in three weeks kicked off in the West on Friday, Death Valley, Calif., soared to a searing 130 degrees. If confirmed, it would match the highest known temperature on the planet since at least 1931, which occurred less than a year ago."

Fact Check. Death Valley hit 134°F on July 10, 1913.

EMISSIONS CAUSING 'HOT OCEANS'
The Washington Post reported in "Ocean temperatures are off the charts. Here's where they’re highest": Baffled scientists are unsure what exactly has caused the rapid spike in ocean temperatures first detected in March. They believe it could be some combination of numerous factors: the massive heat domes that have July on track to be the planet's hottest month record and could make this the hottest year on record; reduced air pollution from ships; weaker winds carrying less Saharan dust over the Atlantic Ocean; and the influence of human-caused climate change and El Niño, which itself is an abnormal warming of the waters in the tropical Pacific Ocean that alters weather patterns worldwide."

Fact Check. No one knows why various parts of the oceans were so much warmer this year, but one factor can be ruled out – emissions. Not only does it remain unproven that emissions measurably warm the atmosphere, even if they could, the atmosphere can only warm the top one or two millimeters of the ocean, per meteorologist Joe Bastardi.

The WAPO shoots down their own man made climate change right here. THERE IS NO WAY BACK RADIATION OF CO2, WHICH PENETRATES ONLY THE TOP MM OR 2 OF THE OCEAN, can cause this. It has to be large scale natural forcing via geothermal or solar. Do they even stop and think of that.

A current carrying warm water from the poles has become slower and less resilient, a study found.

A collapse within the next few decades of weather changes on both sides of the equator agree on the timeline.

News: Waters off the South Florida coast.
HOTTEST SEAWATER EVER?
The Associated Press reported in "South Florida waters hit hot tub level and may have set world record for warmest seawater": “The water temperature around the tip of Florida has hit triple digits — hot tub levels — two days in a row. Meteorologists say it could be the hottest seawater ever measured, although some questions about the reading remain.”

USA Today columnist Richard Keller wrote in “Extreme heat is killing more people – and the worst is yet to come”: “A recent analysis in The Lancet Planetary Health indicates that every year since 2000, an average of 20,000 people have died from extreme heat in European cities.”

Fact Check. No, the water temperature was not unprecedented and calling it “seawater” is somewhat misleading as pointed out by the Fort Myers News-Press.

Fact Check. It is well established that cold weather kills many more people than hot weather. But the misrepresentation of data in the study cited by Keller may explain why he was misled. The image, below, shows the table from the Lancet Planetary Health (left) vs. a re-drawing of the same graph (right) in which the “Excess death rates” scale for cold deaths and heat deaths are the same. Note how the Lancet Planetary Health chart misleads viewers; it bars out cold deaths in units of 50 vs. only 10 for heat deaths, falsely making heat deaths look similar in magnitude to cold deaths for many countries. A fair representation of cold deaths vs. heat deaths indicates that cold deaths are much greater in magnitude than heat deaths.
The Lancet has published multiple large scale studies in recent years and they all come to the same conclusions: colder temperatures kill far more people each year than heat; and as the Earth has modestly warmed, the number of lives lost to sub-optimal temperatures has declined because fewer people each year are dying of cold.

**Fact Check.** While more CO2 and warming are generally good for plant life, algal growth is fueled by a combination of nutrients (especially agricultural run-off), ample sunlight and water conditions. Meteorologist Joe Bastardi points out that there has been a reduction in cloudiness and increase in sunlight in areas where the phytoplankton have increased.

"The Washington Post reported in “Climate change is changing the ocean’s color — and fast, scientists say” that emissions and warming (aka “climate change”) are causing the growth of phytoplankton that green the color of oceans."

**The Washington Post**
**HOTTEST EVER IN TURKEY?**

“The Washington Post reported in “The heat index reached 152 degrees in the Middle East — nearly at the limit for human survival!”: “in the Middle East, the heat index reached 152°F, nearing — or surpassing — levels thought to be the most intense the human body can withstand.”

**Fact Check.** While the heat index (what the temperature feels like) hit 152°F in July 2023 in Turkey, on July 10, 1977, the actual temperature (vs. just what it feels like) reportedly hit 152°F in Turkey.

So was July 2023 the “hottest month in the history of civilization”? Consider the following.

July’s warm temperature was skewed by the strong, short-term spike in Antarctic temperatures highlighted below. Such a short-term pike in temperatures is not indicative of a long-term climate trend, but rather anomalous, localized factors.
That heat wave was only detected and factored into average global temperature because of satellite coverage of the globe. But satellite coverage didn’t begin until 1979. So similar heat waves that may have occurred before 1979 would be unknown and not factored into average global temperature calculations. So it is not possible to claim that July 2023 was the “hottest month in the history of civilization” because such data does not exist.

Finally, it is important to recall that the basis of climate alarm is that emissions of greenhouse gases drive global warming. We believe recent warming has been driven by the series of El Nino events since 1980, not emissions. July’s warm temperatures do not alter this view as, in fact, a new El Nino seems to have started.

Until next month...