Headline: This summer was a global record breaker for the highest heat ever measured,

meteorologists say

Byline: Associated Press

Published Date: 07:24 AM September 07, 2023

Section: newsinfo Word Count: 6262

Content:

FILE PHOTO: A cyclist tops a hill on a hot day at sunset, August 20, 2023, in San Antonio. UN weather agency says Earth sweltered through the hottest summer ever as record heat in August capped a brutal, deadly three months in the northern hemisphere. (AP Photo/Eric Gay, File)

FILE PHOTO: A cyclist tops a hill on a hot day at sunset, August 20, 2023, in San Antonio. UN weather agency says Earth sweltered through the hottest summer ever as record heat in August capped a brutal, deadly three months in the northern hemisphere. (AP Photo/Eric Gay, File)

GENEVA — Earth has sweltered through its hottest Northern Hemisphere summer ever measured, with a record-warm August capping a season of brutal and deadly temperatures, according to the World Meteorological Organization (WMO).

Last month was not only the hottest August scientists ever recorded by far with modern equipment, it was also the second hottest month measured, behind only July 2023, WMO and the European climate service Copernicus announced Wednesday.

August was about 1.5 degrees Celsius (2.7 degrees Fahrenheit) warmer than pre-industrial averages. That is the threshold that the world is trying not to pass, though scientists are more concerned about rises in temperatures over decades, not merely a blip over a month's time.

READ: Climate change made July hotter for 4 of 5 humans on Earth, scientists find

The world's oceans — more than 70% of the Earth's surface — were the hottest ever recorded, nearly 21 ■ (69.8 ■), and have set high-temperature marks for three consecutive months, the WMO and Copernicus said.

"The dog days of summer are not just barking, they are biting," United Nations Secretary-General Antonio Guterres said in a statement. "Climate breakdown has begun."

So far, 2023 is the second hottest year on record, behind 2016, according to Copernicus.

Scientists blame ever warming human-caused climate change from the burning of coal, oil and natural gas with an extra push from a natural El Niño, which is a temporary warming of parts of the Pacific Ocean that changes weather worldwide. Usually an El Niño, which started earlier this year, adds extra heat to global temperatures but more so in its second year.

READ: World could face record temperatures in 2023 as El Niño returns

Climatologist Andrew Weaver said the numbers announced by WMO and Copernicus come as no surprise, bemoaning how governments have not appeared to take the issue of global warming seriously enough. He expressed concern that the public will just forget the issue when temperatures fall again.

"It's time for global leaders to start telling the truth," said Weaver, a professor at the School of Earth and Ocean Sciences at the University of Victoria in Canada. "We will not limit warming to 1.5■; we will not limit warming to 2.0■. It's all hands on deck now to prevent 3.0■ global warming — a level of warming that will wreak havoc worldwide."

Copernicus, a division of the European Union's space program, has records going back to 1940, but in the United Kingdom and the United States, global records go back to the mid 1800s and those weather and science agencies are expected to soon report that the summer was a record-breaker.

"What we are observing, not only new extremes but the persistence of these record-breaking conditions, and the impacts these have on both people and planet, are a clear consequence of the warming of the climate system," Copernicus Climate Change Service Director Carlo Buontempo said.

READ: Sick of hearing about record heat? Scientists say those numbers paint the story of a warming world

FILE PHOTO: A World Youth Day volunteer uses a small fan to cool off from the intense heat, as he waits ahead of Pope Francis' arrival at Passeio Marítimo in Algés, just outside Lisbon, August 6, 2023. UN weather agency says Earth sweltered through the hottest summer ever as record heat in August capped a brutal, deadly three months in the northern hemisphere. (AP Photo/Armando Franca, File)

Scientists have used tree rings, ice cores and other proxies to estimate that temperatures are now warmer than they have been in about 120,000 years. The world has been warmer before, but that was prior to human civilization, seas were much higher and the poles were not icy.

So far, daily September temperatures are higher than what has been recorded before for this time of year, according to the University of Maine's Climate Reanalyzer.

While the world's air and oceans were setting records for heat, Antarctica continued to set records for low amounts of sea ice, the WMO said.

"Antarctic sea ice extent was literally off the charts, and the global sea surface temperature was once again at a new record," WMO's secretary-general, Petteri Taalas, said in a statement released to the media. "It is worth noting that this is happening BEFORE we see the full warming impact of the El Nino event, which typically plays out in the second year after it develops."

READ: Recent events that indicate Earth's climate has entered uncharted territory

A strong El Niño coincided with the all-time high temperatures in 2016. The United Nations weather agency earlier this year rolled out predictions that suggest Earth would within the next five years have a year that averages 1.5■ warmer than in the mid 19th century. Each year at or near 1.5■ matters.

It also predicted 98% chance of breaking the 2016 record between now and 2027.

The new readings on high global temperatures came as WMO released Wednesday its latest bulletin on air quality and climate, noting that extreme heat, compounded by wildfires and desert dust, has had a measurable impact on air quality, human health and the environment.

WMO scientific adviser Lorenzo Labrador lamented the deteriorating air quality around the globe and cited "record-breaking wildfire season" in many parts of the world, including western Canada

and Europe.

"If heat waves increase as a result of El Niño, we may probably expect a further degradation in air quality as a whole," he said.

Subscribe to our daily newsletter

By providing an email address. I agree to the Terms of Use and acknowledge that I have read the Privacy Policy.

READ: A heat wave named Cerberus has southern Europe in its jaws, and it's only going to get worse