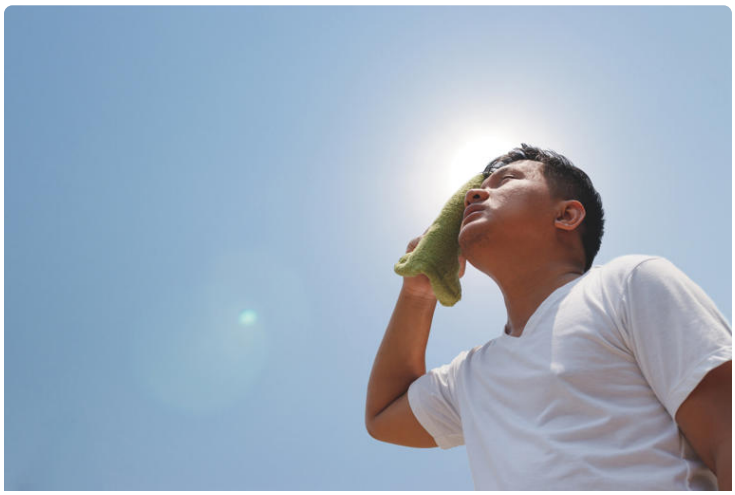
Newsweek

Texans Warned That Felt Heat Rises Far Faster Than Real Temperature

Story by Robyn White • 3h • 2 min read



A stock photo shows a man suffering in the heat. In Texas, the index is rising faster than the actual temperature.
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The heat index in Texas has risen much faster than the actual measured temperature, a new study has found.

As climate change worsens, temperatures across the world are becoming more extreme. Texas is no stranger to hot temperatures, but a study published in the journal *Environmental Research Letters* by David Romps, a professor of earth and planetary science at the University of California, Berkeley, found that the heat index is increasing quicker than the measured temperature in the state.

The heat index measures how temperature feels to the human body. It combines humidity with air temperature to do this. The measured temperature does not accurately depict how the heat feels to the human body.

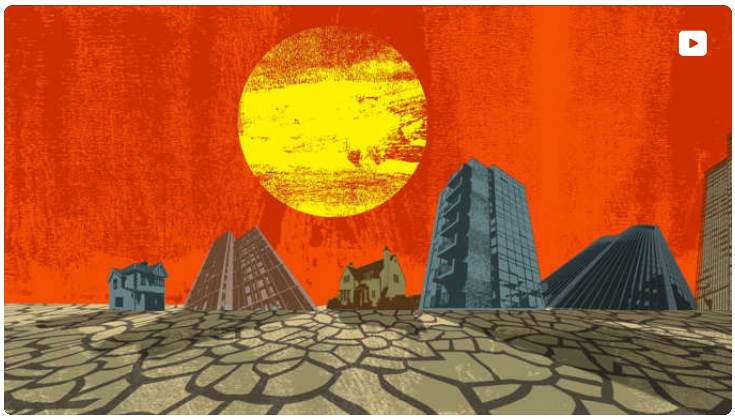
The research found that the heat index increased three times faster than the actual measured temperature. This meant that conditions felt much hotter than the recorded temperature.

To reach these findings, the study compiled data from June, July, and August of 2023.

One particular example stood out at Houston's Ellington Airport. On July 23 last year, Romps calculated the heat index there at 75 degrees Celsius or 167 degrees Fahrenheit. He then found that climate change accounted for 12 F (6 C) of that heat index.

"I mean, the obvious thing to do is to cease additional warming, because this is not going to get better unless we stop burning fossil fuels," Romps said of the findings. "That's message No. 1, without doubt. We have only one direction we can really be taking the planet's average temperature, and that's up. And that's through additional burning of fossil fuels. So that's gotta stop and stop fast."

Related video: Study: Temperatures Rising, But Heat Index Is Rising Faster (The Weather Channel)



As climate change worsens, scientists have set 1.5 C as the maximum temperature rise before adverse effects start taking hold. But this recent study notes that even this small rise makes the Texas heat index hotter.

It feels so much hotter than it is due to climate change affecting "the interplay between humidity and temperature," Romps said.

Before climate change became as extreme, increases in temperature often meant the relative humidity dropped. This allows the body, in turn, to sweat and feel more comfortable despite the high temperature.

But now, the humidity remains constant when the measured temperature rises. This causes discomfort and heat stress to the body. Romps warns that people need to adapt to this rising heat index.

"You can coat yourself in water. Get a wet rag, run it under the faucet, get your skin wet and get in front of a fan. As long as you are drinking enough water and you can keep that skin wetted in front of the fan, you're doing a good thing for yourself," Romps said.