

# Researchers find Americans set their thermostat to match African environmental temperatures

March 20 2019, by Bob Yirka

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A team of researchers at North Carolina State University has found that people living in the United States tend to set their thermostats to

temperatures that mimic natural environmental conditions in parts of Africa. In their paper published in the journal *Royal Society Open Science*, the group describes their study, which involved installing sensors in homes across the U.S., and what they found.

In their paper, the researchers note that they did not start out looking to match indoor air indoor environments with natural environmental conditions—that came later. Their original intent was to learn more about the creatures that exist in homes along with people—microbes, insects, rodents, etc. They wanted to know if their numbers varied depending on the indoor climate. To find out, they asked people living in 37 homes across the U.S. to set up a sensing device in their house. The devices took [temperature](#) and humidity readings every hour for a year—at the end of the year, the sensors were sent back to the researchers who analyzed the data they recorded.

The researchers found that the lowest average temperatures came to 8 degrees C (generally at night, when people turn down thermostats) and the highest mean maximum was 36 degrees C. The researchers then split up Earth into [cells](#) half a degree longitude and latitude in size, and plugged in actual average temperatures for each cell. They compared the averages for homes in the U.S. with their cell data and found that people in the U.S. set the environmental conditions inside their homes in a way that very nearly matches [environmental conditions](#) in western Kenya and other parts of eastern Africa. They noted that [conditions](#) in Kenya also tend to be quite dry, similar to the U.S. They further noted that Kenya and nearby areas are believed to be the places where [modern humans](#) first appeared on the planet. They conclude by suggesting that modern humans are setting their thermostats to give them roughly the same climate they were exposed to during the period when they had no control over the weather. It is apparently the climate in which we are still most comfortable.

**More information:** Michael G. Just et al. Human indoor climate preferences approximate specific geographies, *Royal Society Open Science* (2019). [DOI: 10.1098/rsos.180695](https://doi.org/10.1098/rsos.180695)

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Citation: Researchers find Americans set their thermostat to match African environmental temperatures (2019, March 20) retrieved 26 April 2024 from <https://phys.org/news/2019-03-americans-thermostat-african-environmental-temperatures.html>

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