

How climate chaos shaped human evolution

Researchers have produced what they say is one of the first-ever continuous climate records from a proven habitat of ancient *Homo sapiens*.

The new 620,000-year history of hydroclimate at Chew Bahir, a playa lake in southern Ethiopia, showed that the local climate swung dramatically between wet and dry extremes. Shifts in the intensity and frequency of those swings seem to have occurred alongside, and perhaps even driven, major events in hominin evolution. The results were [published in *Nature Geoscience*](#).

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Chew Bahir's climate 620,000 years ago was wet and mostly stable, punctuated by a handful of dry periods that each lasted about a thousand years. The team thought this pattern would have fractured early human habitats and isolated small groups, which could have driven the increase in [anatomical diversity](#) of hominins seen during this time.

Then, starting about 275,000 years ago, the swings between wet and dry conditions grew more frequent and intense. This chaotic climate would have changed too swiftly for biological evolution to keep pace—but cultural innovation could have. This period roughly corresponds to the emergence of better tools, long-distance transport, and symbolic use of pigment among local *Homo sapiens* populations.

[**This is an excerpt. Read the full article here**](#)