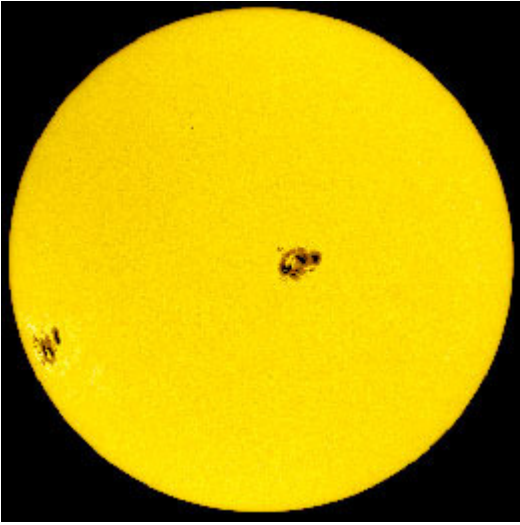


Do Sunspots Forecast the Rain?

As an editor at *Sky & Telescope*, it's my job to read every paper and press release with a fair dose of skepticism. Just because it was published in a scientific journal doesn't mean it is correct. So when we got wind of the paper published this week in the *Journal of Geophysical Research* entitled "Sunspots, El Niño, and the levels of Lake Victoria, East Africa," I was a little dubious.



Could the Sun's sunspot cycle predict weather on Earth?

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As the [press release](#) details, the paper correlates sunspot records with water levels in Africa's Lake Victoria. More rain means more water and therefore a correlation means that the solar cycle can be used to forecast rain trends. The lead scientist on the study, J. Curt Stager (Paul Smith's College), says in the release, "With the help of these findings, we can now say when especially rainy seasons are likely to occur, several years in advance."

Maybe.

We know sunspots and weather have something to do with each other. After all, from the mid 1600s to the early 1700s, Earth endured a period famously known as the Maunder Minimum. During that time the Sun had an extreme dearth of sunspots. Many experts also associate this period with the Little Ice Age, a time of bitterly cold winters. The connection between sunspots and weather is a major bone of contention in the battle over the cause for global warming too. Many people blame the Sun for global warming instead of human activity.

But back to this paper. Are sunspot patterns predicting rainy seasons in East Africa?

The answer, it appears, is testable. The team predicts wet weather about a year or so before the next solar maximum in 2011–12. Moreover the paper concludes by highlighting the economic impact that rain has on the region. The authors strongly urge other scientists to look deeper into the possible connection between Sun cycles and weather patterns.