## Study: Sun's Changes to Blame for Part of Global Warming

By Robert Roy Britt LiveScience Managing Editor posted: 30 September 2005

Increased output from the Sun might be to blame for 10 to 30 percent of global warming that has been measured in the past 20 years, according to a new report.

Increased emissions of carbon dioxide and other heat-trapping gases still play a role, the scientists say.

But climate models of global warming should be corrected to better account for changes in solar activity, according to Nicola Scafetta and Bruce West of Duke University.

The findings were published online this week by the journal *Geophysical Research Letters*. Scientists agree the planet is warming. Effects are evident in melting glaciers and reductions in the amount of frozen ground around the planet.

The new study is based in part on Columbia University research from 2003 in which scientists found errors in how data on solar brightness is interpreted. A gap in data, owing to satellites not being deployed after the Space Shuttle Columbia disaster, were filled by less accurate data from other satellites, Scafetta says.

The Duke analyses examined solar changes over 22 years versus 11 years used in previous studies. The cooling effect of volcanoes and cyclical shifts in ocean currents can have a greater negative impact on the accuracy of shorter data periods.

"The Sun may have minimally contributed about 10 to 30 percent of the 1980-2002 global surface warming," the researchers said in a statement today.

Many questions remain, however. For example, scientists do not have a good grasp of how much Earth absorbs or reflects sunlight.

"We don't know what the Sun will do in the future," Scafetta says. "For now, if our analysis is correct, I think it is important to correct the climate models so that they include reliable sensitivity to solar activity. Once that is done, then it will be possible to better understand what has happened during the past hundred years."

http://www.livescience.com/environment/050930 sun effect.html

## What Interested Me:

- The article listed under it on the website, entitled "Scientists Clueless over Sun's Effect on Earth." (very ironic)
- The general amount of uncertainty regarding this topic
- Blaming global warming too much on minor contributors?
- This article might be leaving out some key information that is known