Sunspots and Climate

• Image of sunspots and solar storms.
• When there are more sunspots, the sun itself is slightly hotter.

400 Years of Sunspot Observations

Sunspots and Climate

- Graph of Carbon-14 as evidence of sunspots (more sunspots = more C-14)

Historical Temps

You decide – is there a correlation between sunspot activity and temperature?
Sunspots and Climate

Data sources:
- (blue) Mauna Loa CO2 data: http://www.esrl.noaa.gov/gmd/ccgg/trends/co2_mm_mlo.dat
- (red) Temperature Data: http://www.cru.uea.ac.uk/cru/data/temperature/hadcrut3gl.txt
- (orange) Sunspot data: http://sidc.oma.be/DATA/yearssn.dat