Cosmic rays create clouds, as the interaction of a cosmic particle with a water molecule acts as a seed to create water droplets. Clouds reflect sunlight and cool the earth. Changes in cosmic rays over time (centuries and millennia) are correlated with cooling.

Nir Shaviv stated that cosmic rays have a period of 135 million years, as the solar system passes through the bright arms of the Milky Way. In 2002, Shaviv hypothesised that passages through the Milky Way's spiral arms appear to have been the cause behind the major ice-ages over the past billion years. Jan Veizer examined sea shells, and found a cooling-warming cycle of 135 million years.

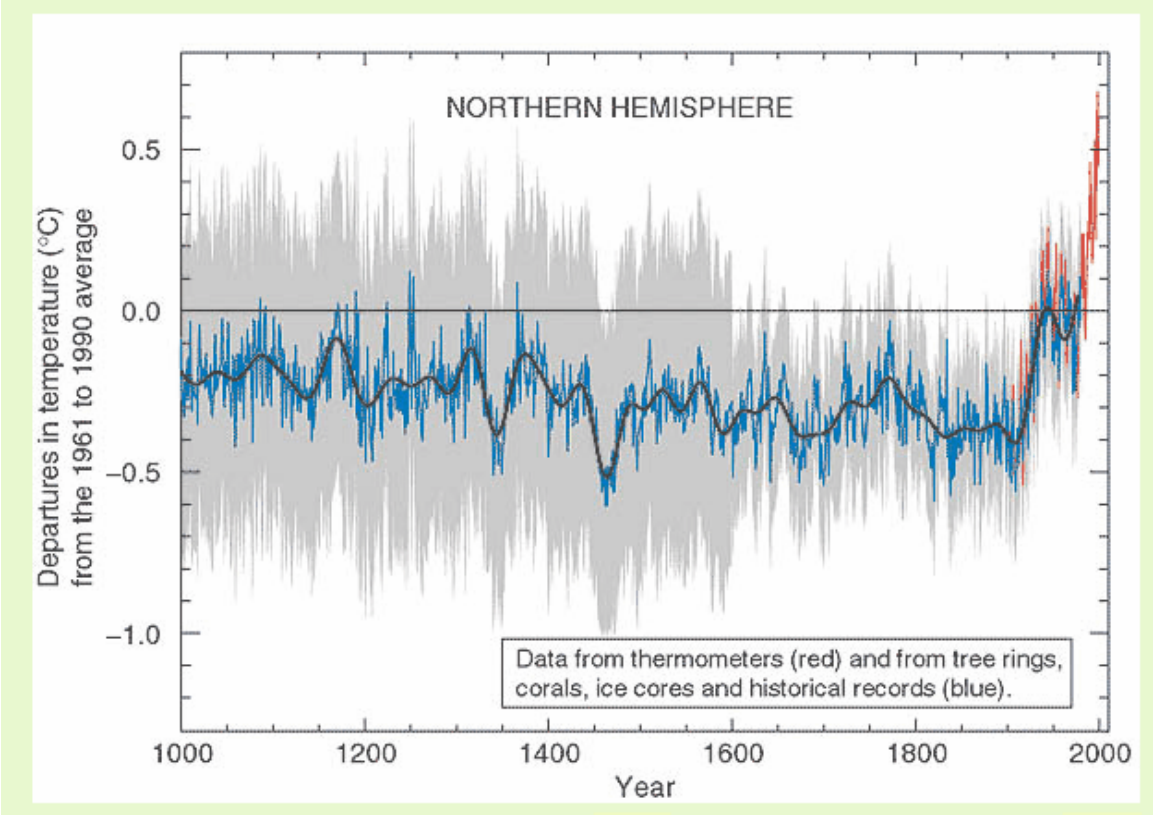
Solar wind is a current (flow of charged particles) that reflects some cosmic rays, which are also charged particles. Increased solar wind means less cosmic rays to create water droplets. That is, increased solar wind means less clouds, and a warmer earth.

Solar wind varies with sunspots, being greater when sunspots are larger. Few sunspots mean little wind, and a cloudy cool earth.

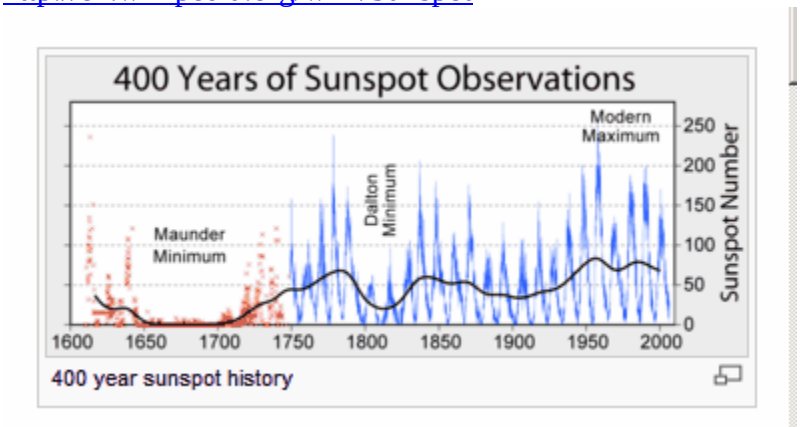
The attached charts show sunspot variation over the past centuries, and temperature variation. These charts demonstrate the relation between sunspots and temperature. The Maunder Minimum was a period spanning 1645 to 1715 when sunspots became exceedingly rare. The Dalton Minimum was a period of low solar activity lasting from about 1790 to 1830. Like the Maunder Minimum and Spörer Minimum, the Dalton Minimum coincided with a period of lower-than-average global temperatures.

This is a chart of temperature over the decades.

http://nicholas.duke.edu/thegreengrok/pulse-sunspots



This is a chart of sunspot activity.
http://en.wikipedia.org/wiki/Sunspot



Recent sunspot activity, as shown in the attached chart, is very low.
http://spaceweather.com/glossary/sunspotplotter.htm?PHPSESSID=a1ncc9sjq4d3n4k9r7bv58evn7