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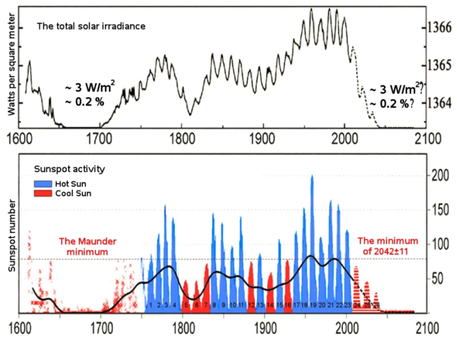
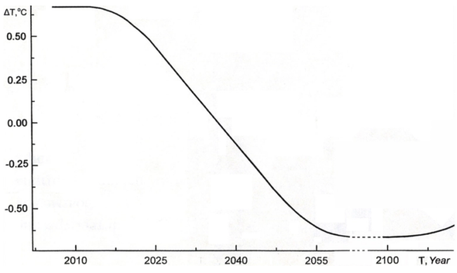
Abdussamatov: The Sun defines the Climate

A paper from Dr. Habibullo Abdussamatov, head of the Space Research Laboratory of the Pulkovo Observatory, makes some splashes in the blogosphere. The author predicts a coming cooling, based on a 200-year solar cycle he says having discovered, and which is caused by a slow cyclic change in the solar radius. This cycle has reached its peak during the "warm" 1990's and is now on its decreasing phase (see **REF1**). Using the PMOD TSI reconstruction he detects a loss of 0.19 W/m2 of solar power during the 23rd cycle. He also stresses that the increase in solar irradiance observed during the 20th century surpassed everything observed (he probably means "reconstructed") during the past 700 years.

Here is the forecast of solar activity, based on an assumed declining solar activity for the ongoing 24th and future 25th and 26th solar cycles :



This would give the following global temperature anomalies for the coming 50 years:



If A. is correct, this would render obsolete the whole craze about global warming (and render superfluous the political hysteria for a Copenhagen treaty) !

Look here for a more complete description of the Astrometria project to measure the variable solar radius, including the text of the paper.
Read here on the Wattsupwiththat website some heavy (and critical) discussions on the paper; the critics mostly center on the use of the PMOD TSI satellite data, which are thought to be incorrect (or less correct), compared to the ACRIM series, preferred by many solar scientists like N. Scafetta.

I am a bit uneasy on the lack of solid foundations in the paper to document the alleged bi-centennial (de Vries?) cycle. A slightly more complete justification can be found in an older (2006) paper here.

I also found one very bad error, which is more of a cosmetic type: A. calculates that the loss of 0.19W/m2 in TSI equals to the output of 21 million nuclear plants! This can not be true. A loss of 0.19 W/m2 equals for the whole earth to 0.19*pi*R2 = 24 million MW (R2 is the square of the radius of the globe). Assuming a standard plant of 2000 MW capacity this would amount to the output of approx. 12000 plants; still an impressive number!

Ref1: A paper by I.R.G. Wilson on solar cycles (de Vries, Gleisberg, Hale) and another paper by Rospopov

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