

# **THE UNPRECEDENTED SOLAR MAGNETIC FIELDS AND THEIR IMPLICATION**

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The onset of solar cycle 24 was once announced and then cancelled. The prolonged cycle 23 has delayed the onset of solar cycle 24 by two more years than the predicted. Solar magnetic fields and the Sun-Earth connection related parameters covariant with the solar cyclic change of sunspot number (SSN) revealed low activities during the maximum years of last solar cycle 23 and are currently showing unprecedented level of low activities at the solar minimum years of solar cycle 23 ending period. The strangeness of unprecedented activity levels of most parameters may not be sufficient to draw invincible conclusions with only three cycle data. However, the SSN has been recorded for four hundred years with modern telescopic observation. The historians and the artists recorded how severely cold during the Maunder and Dalton minimums, when the SSN at the solar cycle maximum years is very low. The solar cycle length has a good reverse correlation with the global surface temperature [Friis-Christensen and Lassen, 1991]. Thus, the reality of those relationships with global climate could be tested during the coming solar cycle 24. Then, the solar cycle 24 will be a stage for arguing between two scenarios of the anthropogenic global warming and the solar activity driven climate.

Solar Cycle, Solar Magnetic Field, Climate Change

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