

The solar cycle 24 *The End of Cycle 23 and the beginning of 24*

Two years ago, on these pages, I tried a forecast about the solar cycle 24. At the time, from available data and from the extrapolation of these, I obtained a trend for the future course of providing very low values of sunspots, even positioning as a cycle of lower activity in the last 100 years. With latest data, it is possible to attempt a prediction that substantially more current limelight as previously stated. The new round could be from 30% to 50% stronger than previous and above all should start about a year later than expected. (The estimates suggested a start for the first months of 2007). The solar physicist David Hathaway, Marshall space flight center cycle 24 should be even more intense in the last 400 years. Researchers at NASA think they have understood what drives the 11 years cycle and using a new mathematical model that develops on previous 8 cycles comparing data of solar geomagnetic storms, they think they can predict in advance and with good precision periods maximum solar activity. In brief: Hathaway and Wilson have analyzed the geomagnetic activity from 150 years to date, noting something very significant: "The geomagnetic activities recorded over the years tells us clearly how will the next solar cycle with an advance of 6 - 8 years." During the peak occurring magnetic storms more frequent and more intense, can deteriorate communications. The peak of the cycle, called solar maximum, generates magnetic storms more frequent with expulsions of high-energy particles can aggravate the orbits of satellites and thus interfere with the overall navigation (GPS). May occur interruptions in communications and damage to power stations. The latest updates urge us to consider beginning of a new cycle for the end of 2007 or early 2008. A year later then compared to the usual chronology of 11 years. The new peak should occur in 2012. Recent progress statistical-mathematic allow even to try a prediction that goes until round 25, which should begin in 2020. This is a significant innovation, which is made possible by the convective motions that happens in the sun.

