

SIGNIFICANT DECREASES OF GEOMAGNETIC INDICES IN THE ASCENDING PHASE OF SOLAR CYCLE 24

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Solar activity has been kept quite low since the start of Solar Cycle 24, from January 2008 to February 2009. The number of days in which sunspots were absent in 2008 is the forth-largest number for a year since 1842.

Geomagnetic index K at Kakioka and several observatories from 2008 to beginning of 2009 has recorded the smallest in the history of observation. Kp-index, which is to characterize the global planetary geomagnetic activity, also decreases extremely.

Taking into account the correlation between Kp-index in minimum phase of solar cycle and sunspot numbers of the next maximum in solar cycle, it is suggested that the peak of solar activity in cycle 24 will become quite low.

Sunspot number is an useful parameter for monitoring long-term variation of solar activity. However, it is likely that sunspot number could not reveal the inactive solar in beginning phase of cycle 24 because it marked the lower limit “Zero” more than two third days of 2008. While geomagnetic data covers longest time next to sunspot number and the value has never arrived at the limit. Geomagnetic data is a key mean to monitor calm solar-terrestrial activity.

Kp-index, solar activity, cycle 24

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