

EFFECT OF SOLAR CYCLE ON GEOMAGNETIC STORMS

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Geomagnetic activities have been studied for the solar years of 1991 to 2007. It was found that the solar activity controls the intensity of geomagnetic storms. The intensities of these storms are found to be more severe in solar maximum years than in solar minimum years. The solar wind effect is dependent on the cycle, and invariably both are well correlated with geomagnetic storm intensity. The effects of disturbance ring current and large changes of interplanetary magnetic field Bz, both are responsible for the equatorial magnetic storm effects.

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