



## **On the solar cycle distribution of geomagnetic storms**

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We present a study on the solar cycle distribution of geomagnetic storms. We have determined the number of storms per year within several Dst ranges, from 1957 to 2002. Moderate storms have showed a peak near solar cycle maxima. As the storm intensity rises, however, a dual peak distribution starts to appear. The strongest storm distributions have peaks just before solar maximum and around the descending solar cycle phase. There seems to be a trend for weaker cycles to have a lower number of storms, of any intensity. Very intense magnetic storms can occur more frequently around solar maximum and declining phases. The variation of the southward component of the interplanetary magnetic field with solar cycle epoch is also investigated in this work.