



Linking CMEs-ICMEs-Geomagnetic Storms during 1996 - 2012

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During the period 1996 - 2012 there were 401 coronal mass ejections (CMEs) which arrived at the Earth (see the on-line catalogue of Richardson and Cane). The solar counterpart of these interplanetary CMEs (ICMEs) was found for 379 events and for 22 the identification was not possible because of the data gaps.

Out of the identified events, the CMEs with sources towards solar west are more numerous compared with the ones having sources at east. Also, there are more CMEs, correlated with ICMEs, that are coming from the northern hemisphere, compared with the ones coming from the southern hemisphere. It was found that majority of the ICMEs produced minor or no geomagnetic storms.

The intense geomagnetic storms are associated with CMEs coming from regions closer to the central meridian as seen from the Earth.

A study of these events separated on different phases of the solar cycle is also done.