

Great magnetic storms revisited

Show affiliations

Dal Lago, A.; Gonzalez, W. D.; Echer, E.; Vieira, L. E. A.; Guarnieri, F. L.; Clua de Gonzalez, A. L.; da Silva, M. R.; de Lucas, A.; Schuch, N. J.

In this work we revisit a very important topic of space weather the great magnetic storms Our inspiration comes from the work done by Tsurutani et al GRL 1992 in which 5 Dst -250nT geomagnetic storms were studied in terms mainly of their interplanetary origin Since 1996 the post-SOHO era we have identified a number of 18 Dst -200nT events this time with a much more complete set of observations of the sun and of the near-earth space We use data from the Large Angle and Spectrometric Coronagraph and the Extreme Ultraviolet Imaging Telescope both aboard the Solar and Heliospheric Observatory to identify the solar origin of these events Solar wind and interplanetary magnetic field from the Advanced Composition Explorer are used to study these events in terms of their interplanetary structure We also address the high energy cosmic ray modulation caused by these events using ground-based muon observations from telescope installed at the Southern Space Observatory Brazil

Publication:


36th COSPAR Scientific Assembly. Held 16 - 23 July 2006, in Beijing, China. Meeting abstract from the CDROM, #1153

Pub Date:

2006

Bibcode:

2006cosp...36.1153D

 [Feedback/Corrections? \(/feedback/correctabstract?bibcode=2006cosp...36.1153D\)](/feedback/correctabstract?bibcode=2006cosp...36.1153D)