
Solar Activity as a Driver of Space Weather: I. Introduction

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It is well known that solar activity such as coronal mass ejections(CMEs) and flares is a direct driver of space weather. In this talk, we introduce its main physical characteristics and physical connections among CMEs(or flares) - Interplanetary(IP) shocks - interplanetary CMEs (or magnetic clouds) - geomagnetic storms. Specifically, solar activity is discussed in terms of space weather scales (R: Radio Blackout, S: Solar Radiation Storms, G: Geomagnetic Storms). We summarize our recent works on (1) the relationship between CMEs and flares and (2) how to select geoeffective CMEs. Finally, we introduce further research plans to investigate geoeffective solar activities. For this, we are making a set of halo CMEs-IP shocks-IP CMEs-geomagnetic storms data from 1996 to 2002.