



Contribution ID: 861

Type: **Poster contribution**

Analysis of the solar and interplanetary phenomena causing Forbush decreases in cosmic rays.

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We developed a catalog of Forbush decreases (Fd), in the period 2007-2013. To analyze the Fd's, we used data from three neutron monitors representing low, medium and high cut-off: Oulu (Finland), Moscow (Russia) and Mexico City. We selected the 9 most energetic events in the period to analyze them further. With the available data (interplanetary data from OMNI) we identified that 8 events are associated with Interplanetary Coronal Mass Ejections (ICME) and the last one is a complex event. We found that, instead of a single or many parameters from the ICME's, it's a mixture of the geometry of the impact, size and some parameters within the ICME. A general overview for the interplanetary (IP) causes, and the actual analysis for the events, is shown. Images of the catalog contains plots of the cosmic ray intensity in the three stations mentioned, solar wind data plots (magnetic field and plasma data), and behavior of Earth's magnetic field via the Dst index.

Collaboration

– not specified –

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Primary author: MUSALEM, Omar (UNAM)

Co-author: Dr VALDÉS-GALICIA, Jose Francisco (UNAM)

Presenter: MUSALEM, Omar (UNAM)

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