ICRC2015

ICRC
The Astroparticle Physics Conference
34th International Cosmic Ray Conference
July 30 - August 6, 2015
The Hague, The Netherlands

Contribution ID: **9** Type: **Poster contribution**

Study of the Forbush Decrease Event of October-November 2003 observed with High Cutoff Rigidity Muon Detector at Riydah, Saudi Arabia

Tuesday 4 August 2015 16:00 (1 hour)

Forbush decreases are one of the most important cosmic ray time variations observed by ground level monitors and on board space detectors. They mainly occur during the active phases of the solar cycle, and associated with geomagnetic storms caused by solar flares or coronal mass ejections. Experimental studies of Forbush decreases have shown distinct properties. These properties are important and playing a significant role in our understanding of the interplanetary medium and heleospheric structures.
On October 28, 2003 an Earthward-directed coronal mass ejection (CME) was observed in conjunction with an X17 solar flare. Data from KACST, a one square meter single channel scintilator detector which detects secondary muons, are presented during the time of this Forbush decrease. The presented data are compared to that of other cosmic ray monitors. Interplanetary data were used to characterize the solar and interplanetary conditions causing this event.

Collaboration

– not specified –

Registration number following ”ICRC2015-I/”

16

Author: MAGHRABI, Abdullrahman (King Abdulaziz City For Science and Technology)

Presenter: MAGHRABI, Abdullrahman (King Abdulaziz City For Science and Technology)

Session Classification: Poster 3 SH

Track Classification: SH-EX