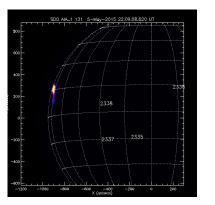


Newsletter Cosmic Rays / May 2015

May 2015 has been an unsettled month in the sense of solar activity. Especially in the sense of coronal mass ejections (CMEs) May 2015 was an active month as the previous one. A number of 150 CMEs have been spotted, with 14 CMEs with angular width $90^{\circ} < da < 180^{\circ}$, 1 CME with angular width $180^{\circ} < da < 270^{\circ}$ and 1 HALO CME resulting into distinct modulation of the galactic cosmic rays (source: http://sidc.oma.be/cactus/catalog.php). May was also active in the sense of solar flares (SFs). A number of 176 C, M and X-class SFs spotted with 169 C, 6 M and 1 X-class SFs, the most energetic one being a X2.7 on 05/05/2015 at 22:11 UT from the AR 2339, N15E79 (Fig. 1).



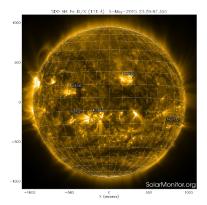


Figure 1: The X2.7 solar flare of 05/05/2015 at 22:11 peak time (from solarmonitor.org)

A Forbush decrease is spotted in 6-7 April 2015 as a result of the partial HALO CME which spotted on May 2nd, with a typical recovery phase of about 8 days. A high speed stream of solar wind produced a G2 geomagnetic storm on May 13th without any impact on cosmic ray intensity. Hourly values of the cosmic ray intensity recorded at the Athens neutron monitor station (cut-off rigidity 8.53 GV) are illustrated in Fig. 2.

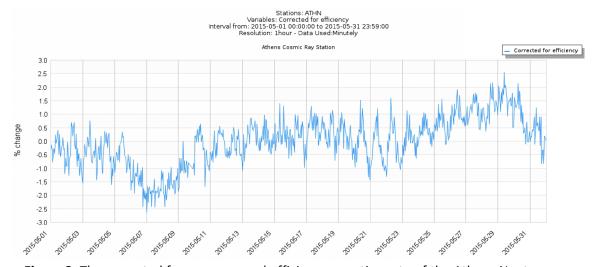


Figure 2: The corrected for pressure and efficiency counting rate of the Athens Neutron Monitor Station from 01-31/05/2015 (From multi station service of Athens CR Station).

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