

Newsletter Cosmic Rays / February 2015

February 2015 has been slightly more active than January 2015 in terms of solar activity and especially in the sense of coronal mass ejections (CMEs). A number of 106 CMEs have been spotted, with 10 CMEs with angular width $90^{\circ} < da < 180^{\circ}$ recorded in this month and only one with angular width $180^{\circ} < da < 270^{\circ}$ resulting into distinct modulation of the galactic cosmic rays (source: http://sidc.oma.be/cactus/catalog.php).

February was less active in the sense of solar flares (SFs). A number of 122 C- and M-class SFs spotted with 120 C-class and 2 M-class ones, the most energetic one being an M2.4 on 09/02/2015 at 23:35 UT from AR 2282, N12E61 (Fig. 1).



Figure 1: The M2.4 solar flare of 09/02/2015 at 23:33 peak time (from solarmonitor.org)

At the first half of this month the long recovery phase of the Forbush decrease of 24/01/2015 is spotted. In the second half of this month a small symmetric Forbush decrease started at 21/02/2015 as a result of a fast stream of solar wind. 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 01-28/02/2015 (From multi station service of Athens Station)

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