

Newsletter Cosmic Rays / August 2014

August has been a quiet month in terms of solar activity. 130 coronal mass ejections have been spotted, 10 coronal mass ejections (CMEs) with angular width $90^{\circ} < da < 180^{\circ}$, 1 CME with angular width $180^{\circ} < da < 270^{\circ}$ and 1 HALO CME recorded in this month, resulting into distinct modulation of the galactic cosmic rays (GCRs) (source: http://sidc.oma.be/cactus/catalog.php).

The Sun has not been really productive in the sense of solar flares (SFs) either. 148 C and M class solar flares spotted with 141 C and only 7 M class solar flares. The most energetic one being a M5.9 on 24.08.2014 at 12:15 U.T. from AR 2151, S09E76 (Figure 1):

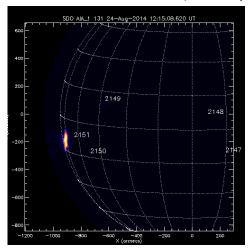


Figure 1: The M5.9 solar flare of 24.08.2014 (from solarmonitor.org)

During this month a series of Forbush decreases were recorded by the neutron monitors starting from the beginning of the month after the M-class solar flares of August 1st and also the sporadic partial HALO CMEs which mentioned above. The hourly values of the cosmic ray intensity recorded at the Athens neutron monitor station (cut-off rigidity 8.53 GV) are illustrated in Figure 2.

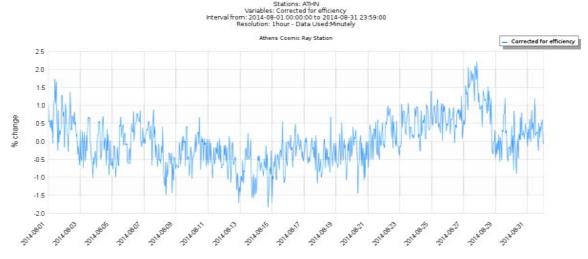


Figure 2: The corrected for efficiency counting rate of the Athens Neutron Monitor Station from 01-31.08.2014. (From multi station service of Athens)

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