

January 2015 has been less active than December 2014 in terms of solar activity. A number of 87 coronal mass ejections (CMEs) have been spotted, with only 1 CME with angular width $90^\circ < \alpha < 180^\circ$ recorded in this month, resulting into distinct modulation of the galactic cosmic rays (GCRs) (source: <http://sidc.oma.be/cactus/catalog.php>).

January was at the same levels as December 2014 in the sense of solar flares (SFs). A number of 260 C- and M-class solar flares spotted with 246 C-class and 14 M-class ones, the most energetic one being an M5.6 on 13/01/2015 at 04:13 UT from AR 2257, N06W70 (Fig. 1).

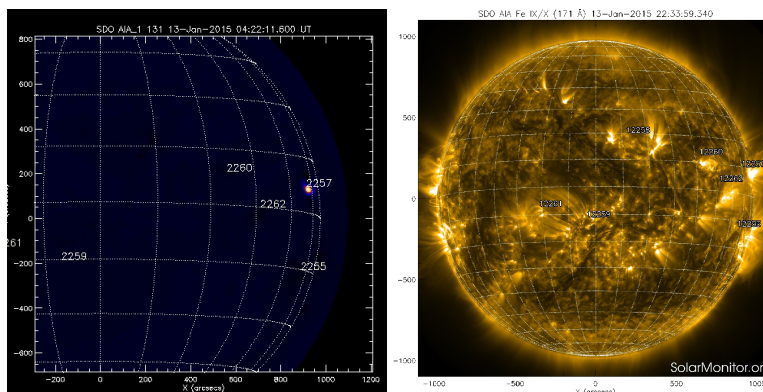


Figure 1: The M5.6 solar flare of 13/01/2015 at 04:24 peak time (from solarmonitor.org)

At the first half of this month the recovery phase of the previous month Forbush decrease is spotted. In the second half of this month a Forbush decrease started at 24/01/2015. The 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. Moreover a geomagnetic effect of cosmic ray intensity with $Dst = -105nT$ was recorded in Athens at 7/1/2015 12:00 U.T.

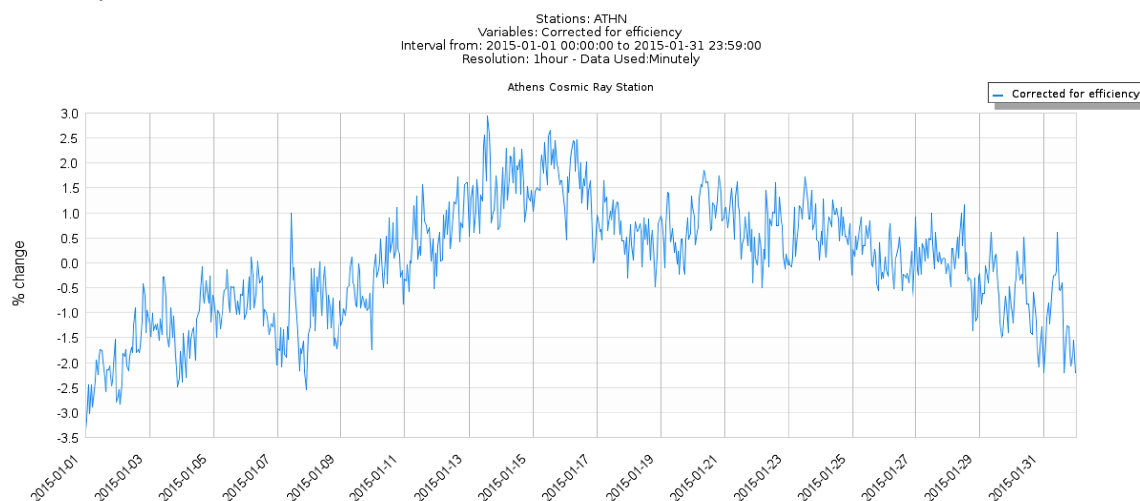


Figure 2: The corrected for efficiency counting rate of the Athens Neutron Monitor Station from 01-31/01/2015 (From multi station service of Athens Station)

Contact:

Prof. H. Mavromichalaki
 email: emavromi@phys.uoa.gr
<http://cosray.phys.uoa.gr>