

October 2018 has been a very quiet month in the sense of solar activity. A number of only 3 CMEs has been spotted (source <http://sidc.oma.be/cactus/catalog.php>) with angular width $w < 90^\circ$. These CMEs together with the high-speed streams of solar wind for this month resulted to a distinct modulation of the galactic cosmic rays. October was also a very quiet month in the sense of proton flux levels of solar flares (SFs). No solar flare with magnitude $> C1.0$ was recorded during this period.

October was also less active month in the sense of geomagnetic activity. The interaction of a high-speed solar wind stream from coronal holes on October 7-10 and 13 triggered a minor geomagnetic storm of G1 level (Fig. 1). Active conditions noticed also on October 15 as a result of the interaction of a high-speed solar wind streams from coronal holes with Earth's magnetosphere.

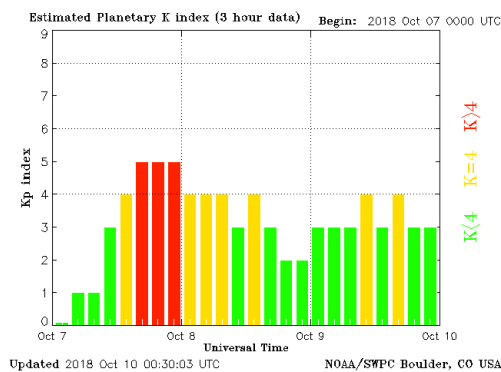
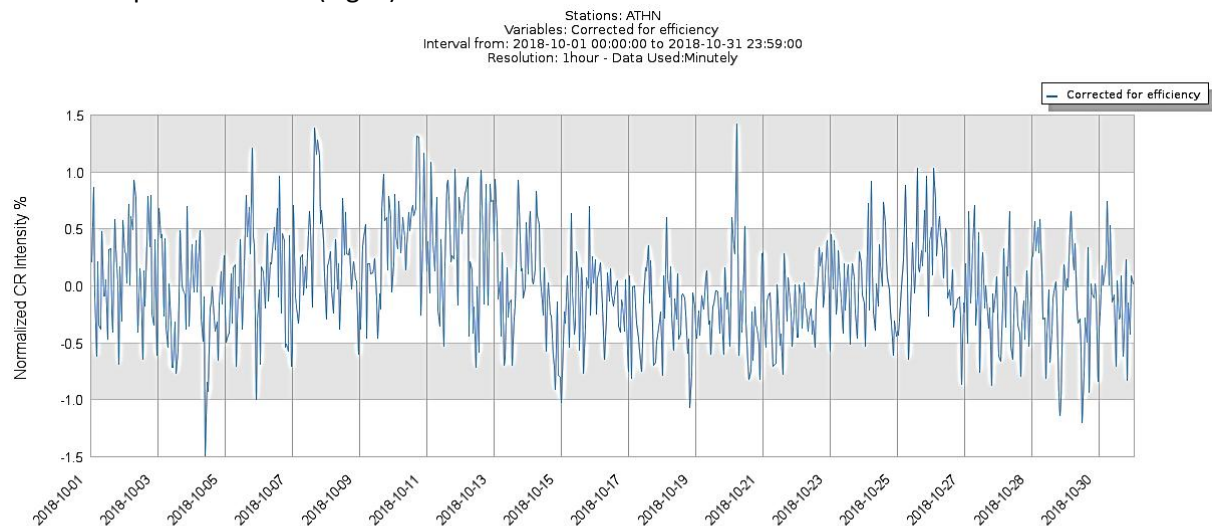


Figure 1: The Kp index values during the minor G1 geomagnetic storm of October 7-10. (from ftp://ftp.swpc.noaa.gov/pub/warehouse/2018/2018_plots/kp/)

The results of these events during this month were spotted on the cosmic ray intensity as Forbush effects, recorded at Athens Neutron Monitor Station (cut-off rigidity 8.53 GV) with amplitudes varied from 1% up to almost 2% (Fig. 2).



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Figure 2: Hourly corrected for pressure and efficiency values of the cosmic ray intensity recorded by Athens Neutron Monitor Station from 01-31/10/2018 (From the multi station data service of Athens NM Station)