

October 2017 has been a less active month in the sense of geomagnetic activity. A number of 50 CMEs has been spotted, with 2 CMEs with angular width $90^\circ < w < 180^\circ$, resulting into distinct modulation of the galactic cosmic rays (source <http://sidc.oma.be/cactus/catalog.php>). October was one of the quietest months up to now in the sense of proton flux levels of solar flares (SFs). A number of only 2 SFs were spotted, the most energetic one being an M1.1 one on 20/10/2017 at 23:10 UT (start time) from AR2685 with coordinates S12E88 (Fig. 1).

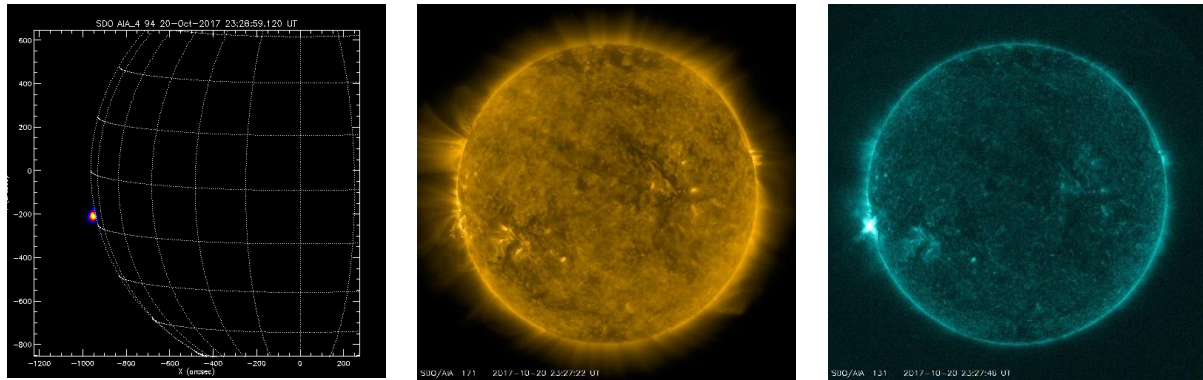
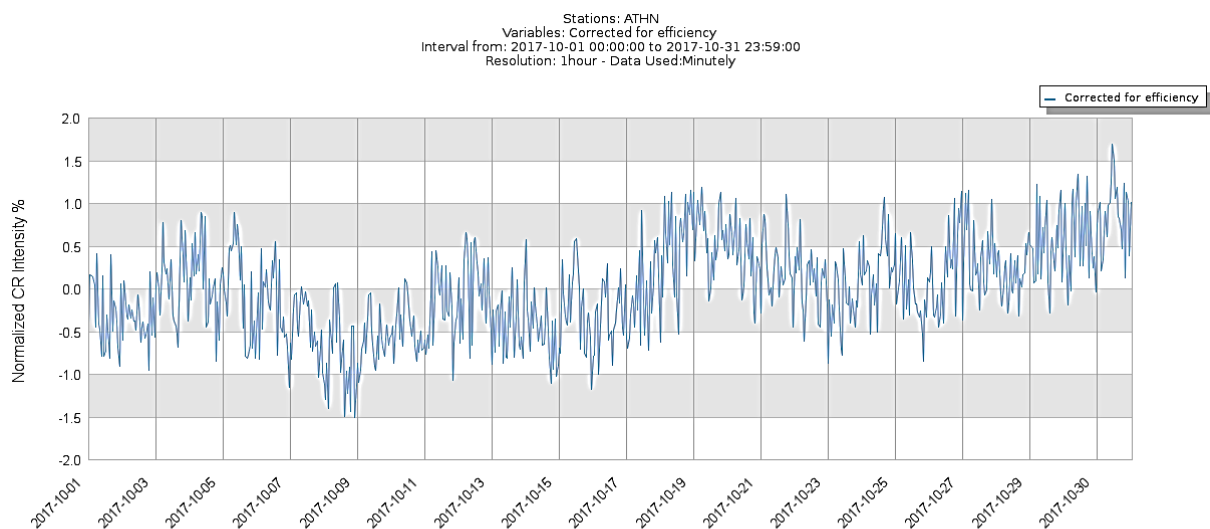


Figure 1: The M1.1 SF of 20/10/2017 at 23:28 UT peak time (from <http://www.lmsal.com/solarsoft> and <http://sdo.gsfc.nasa.gov/data/aiahmi/>)

The interaction of high-speed streams of solar wind from coronal holes on October 11-15 and 24-26 as well as disturbed solar wind on October 19, was triggered geomagnetic storms of G1-G2 and G1 levels, respectively. The results of these events were spotted on the cosmic ray intensity as Forbush decreases during this month, 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 01-31/10/2017 (From the multi station data service of Athens NM Station).