

December 2016 has been a less active month in the sense of geomagnetic activity. A number of 38 CMEs has been spotted, with only 1 CME with angular width $90^\circ < \alpha < 180^\circ$ resulting into distinct modulation of the galactic cosmic rays (source: <http://sidc.oma.be/cactus/catalog.php>). December was a very quiet month in the production rate of solar flares (SFs). A number of only 5 SFs were spotted, the most energetic one being a C4.0 SF on 10/12/2016 at 16:48 UT (start time) from the site with coordinates S07W89 (Fig. 1).

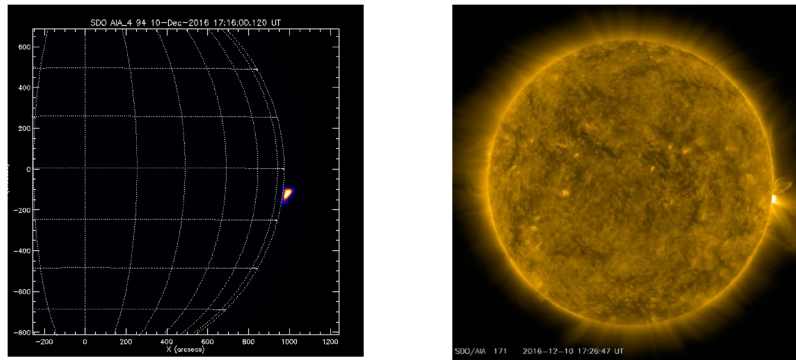
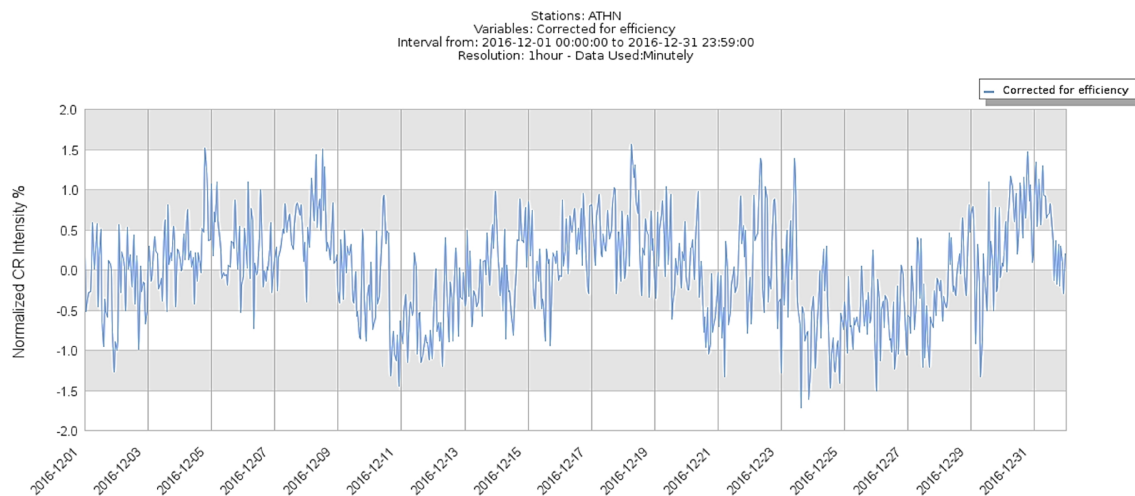


Figure 1: The C4.0 SF of 10/12/2016 at 17:15 UT peak time (from <http://www.lmsal.com/solarsoft> and <http://sdo.gsfc.nasa.gov/data/aiahmi/>)

The interaction of high speed streams of solar wind from large coronal holes with Earth's magnetosphere on December 8-9 and 21-23 was triggered a series of geomagnetic storms of G1 and G2 level, respectively. The results of these events, as well as the disturbances on Dec. 10-11 and 25-26, were spotted on the cosmic ray intensity as a series of Forbush decreases during this month, recorded at Athens Neutron Monitor Station (cut-off rigidity 8.53 GV) with amplitudes varied from 2% up to almost 3% (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 01-31/12/2016 (From the multi station data service of Athens NM Station).