

August 2016 has been a very quiet month in the sense of solar activity. A number of only 13 CMEs has been spotted, all of them with angular width $\alpha < 90^\circ$ resulting into distinct modulation of the galactic cosmic rays (source: <http://sidc.oma.be/cactus/catalog.php>). August was also a very quiet month in the production rate of solar flares (SFs). A number of 19 SFs were spotted, the most energetic one being a M1.3 one on 07/08/2016 at 14:37 UT (start time) from the site with coordinates: S12W70 (Fig. 1).

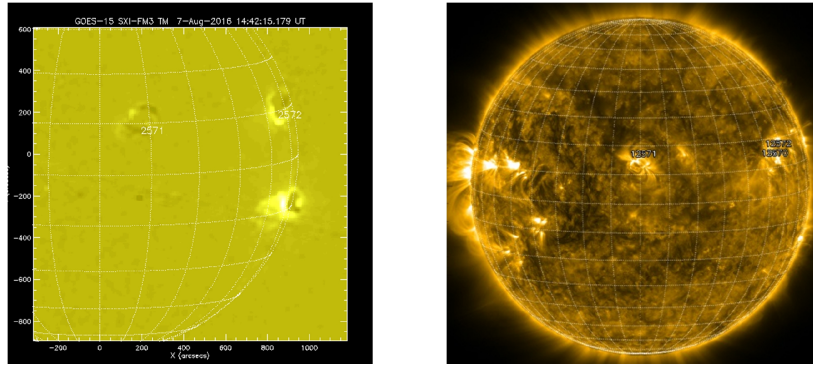
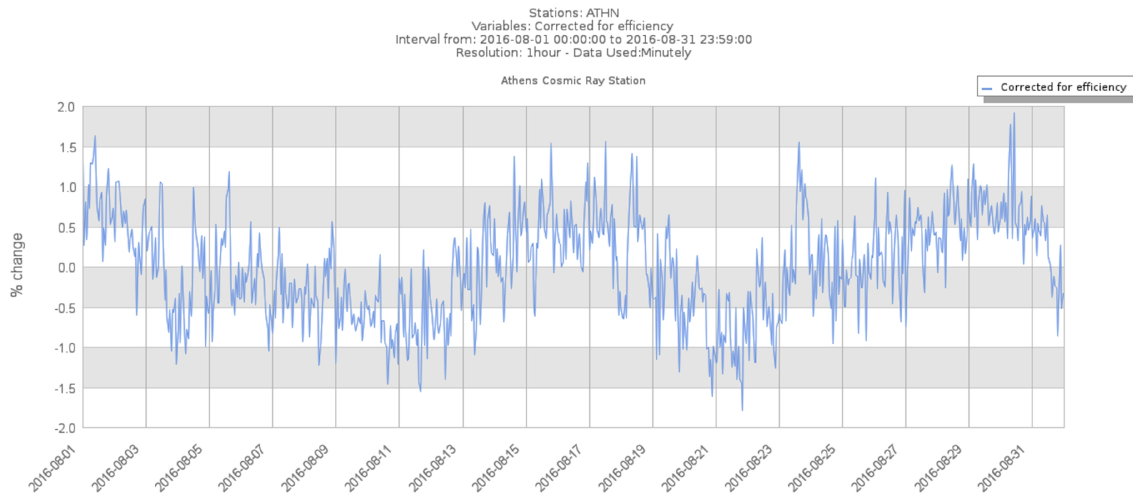


Figure 1: The M1.3 SF of 07/08/2016 at 14:44 UT peak time (from <http://www.lmsal.com/solarsoft> and <http://sdo.gsfc.nasa.gov/data/aiahmi/>)

The interaction of a CME and a high speed solar wind stream with Earth's magnetosphere had as a result the geomagnetic storm (G1) of August 2-5. High speed solar wind streams were also responsible for the geomagnetic storms of August 9-10 and 23-24 (both G1). The results of these events, as well as disturbances on August 17 and 30-31 without storm effects, 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 3% to 3.5% (Fig. 2).



Data retrieved via NMDB are the property of the individual data providers. These data are free for non commercial use to within the restrictions imposed by the providers. If you use such data for your research or applications, please acknowledge the origin by a sentence like 'We acknowledge the NMDB database (www.nmdb.eu) founded under the European Union's FP7 programme (contract no. 213007), and the PIs of individual neutron monitors for providing data.'

Figure 2: Hourly corrected for pressure and efficiency values of the cosmic ray intensity recorded at Athens Neutron Monitor Station from 01-31/08/2016 (From the multi station data service of Athens NM Station).