

April 2016 has been more active month than March in the sense of solar activity. A number of 78 CMEs have been spotted, with 6 CMEs with angular width $90^\circ < da < 180^\circ$ and 1 CME with angular width $180^\circ < da < 270^\circ$ resulting into distinct modulation of the galactic cosmic rays (source: <http://sidc.oma.be/cactus/catalog.php>). April was also more active month in the production rate of solar flares (SFs). A number of 42 C-class solar flares and only 1 M-class solar flare was spotted, the most energetic one being an M6.7 one on 18/04/2016 at 00:14 UT (start time) from the AR 12529, N11W60 (Fig. 1).

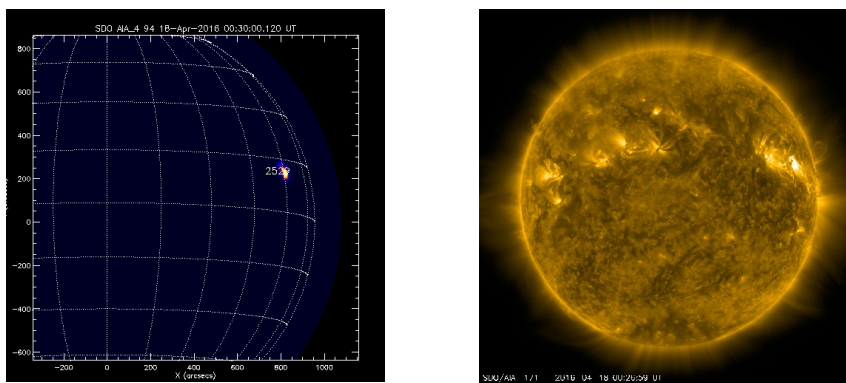


Figure 1: The M6.7 solar flare of 18/04/2016 at 00:29 peak time (from <http://www.lmsal.com/solarsoft> and <http://sdo.gsfc.nasa.gov/data/aiahmi/>)

The interaction of high speed solar wind streams with Earth's magnetosphere had as a result five geomagnetic storms on April 2-3, 7, 12-13, 17 and 23 (G2 and four G1, respectively). The arrival of a CME on April 14 at around 07:00 UT triggered also a G1 geomagnetic storm. The results of these events 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% to 4% (Fig. 2).

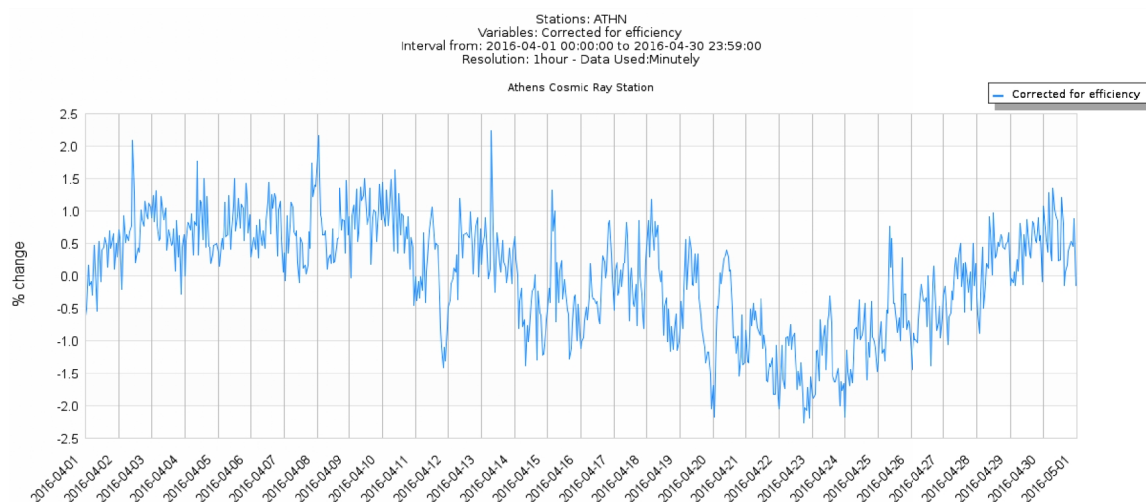


Figure 2: Hourly corrected for pressure and efficiency values of the cosmic ray intensity recorded at Athens Neutron Monitor Station from 01-30/04/2016 (From the multi station data service of Athens NM Station).