

Newsletter Cosmic Rays / December 2017

December 2017 has been a less active month in the sense of cosmic ray and geomagnetic activity. A number of 23 CMEs has been spotted (source http://sidc.oma.be/cactus/catalog.php) and together with the high speed streams of solar wind for this period, resulted to a distinct modulation of the galactic cosmic rays. This month was the quietest month up to now in the sense of proton flux levels of solar flares (SFs). No important solar flare with magnitude > C1.0, was recorded during this period.

The interaction of the high-speed solar wind streams obtained from coronal holes on December 5-6 and 17-18 as well as of the disturbed solar wind on December 11-12 and 24-26, was triggered geomagnetic storms of G1 levels. 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. 1).

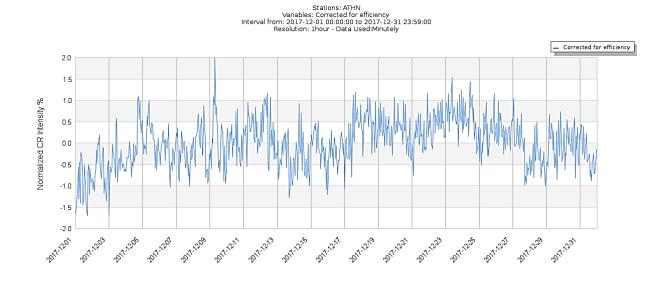


Figure 1: Hourly corrected for pressure and efficiency values of the cosmic ray intensity recorded by Athens Neutron Monitor Station from 01-31/12/2017 (From the multi station data service of Athens NM Station)

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