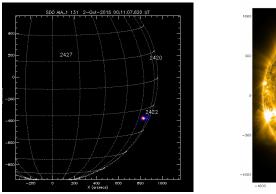


Newsletter Cosmic Rays / October 2015

October 2015 has been an active month in the sense of solar activity. A number of 101 CMEs have been spotted, with 3 CMEs with angular width 90° < da < 180° resulting into distinct modulation of the galactic cosmic rays (source: http://sidc.oma.be/cactus/catalog.php). October was a very active month in the production rate of solar flares (SFs). A number of 210 solar flares were spotted with 200 C- and 10 M-class SFs, the most energetic one being a M5.5 one on 02/10/2015 at 00:06 UT from the AR 12422, S20W67 which also produced the most energetic solar flare of previous month (Fig. 1).



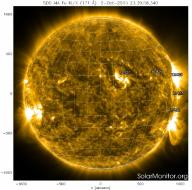


Figure 1: The M5.5 solar flare of 02/10/2015 at 00:13 peak time (from solarmonitor.org)

The interaction of high speed solar wind streams with Earth's magnetosphere on October 7-8, 2015 had resulted to a strong (G3) geomagnetic storm. The influence of this event was spotted on the cosmic ray intensity as a Forbush decrease starting from first hours of October 7, 2015 with amplitude of 2% recorded at Lomnicky stit Neutron Monitor Station with cut-off rigidity 3.84 GV (Fig. 2). Recently on October 29th at 02:55 UT a GLE event noticed from stations SOPO and SOPB with an increase of about 2%.

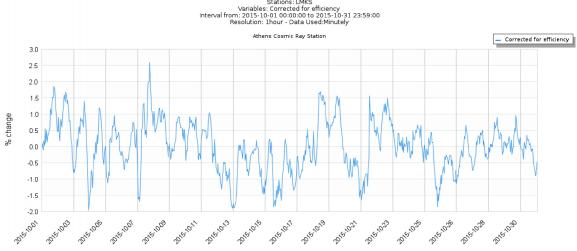


Figure 2: Hourly corrected for pressure and efficiency values of the Lomnicky stit (Slovakia) Neutron Monitor Station from 01-31/10/2015 (From multi station service of ANeMoS).

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