

Newsletter Cosmic Rays / July 2014

July has been a quiet month in terms of solar activity. 134 coronal mass ejections have been spotted, 13 coronal mass ejections (CMEs) with angular width 90° < da < 180° and 1 HALO CME recorded in this month, resulting into distinct modulation of the galactic cosmic rays (GCRs) (source: http://sidc.oma.be/cactus/catalog.php).

The Sun has not been really productive in the sense of solar flares (SFs) either. 144 C and M class solar flares spotted with 139 C and only 4 M class solar flares. The most energetic one being a M6.5 on 08.07.2014 at 16:20 U.T. from AR 2113, N09E56 (Figure 1):

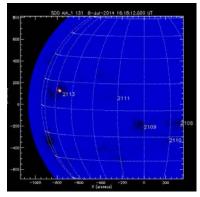


Figure 1: The M6.5 solar flare of 08.07.2014 (from solarmonitor.org)

From Figure 2 it is clear that the GCRs at Athens neutron monitor (NM) was possible modulated by a HALO CME. A Forbush decrease was recorded by the Athens NM which started on July 13 with a slow recovery after almost 10 days (Figure 2) as a result of a HALO CME which occurred on 08:12 of July 10th.

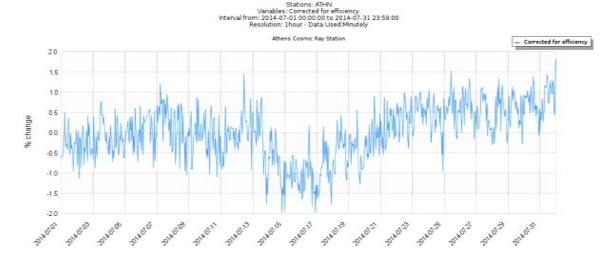


Figure 2: The corrected for efficiency counting rate of the Athens Neutron Monitor Station from 01-31.07.2014 (from multi station service of Athens).

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