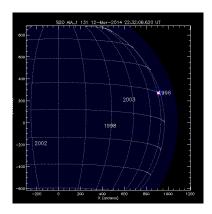


## **Newsletter Cosmic Rays / March 2014**

March has been a relatively quiet month in terms of solar activity. 17 coronal mass ejections (CMEs) with a da  $> 90^{\circ}$  and 3 with da  $> 180^{\circ}$  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. 23 < M.20 class flares have been recorded with the most energetic one being an M9.5 on 13.03.2014 from AR11996, N14W90 (see Figure 1):



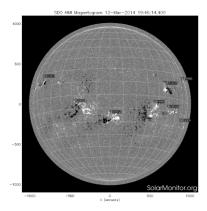
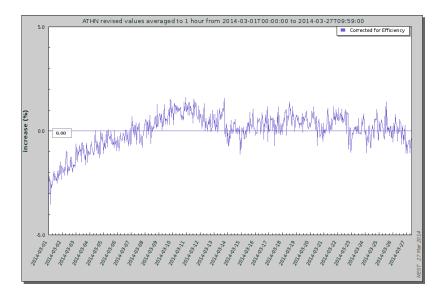


Figure 1: The M9.5 solar flare of 13.03.2014 (from solarmonitor.org)

From Figure 2 it is clear that the intensity of the GCRs at Athens was at a recovery from the extended Forbush decrease (FD) that was marked at the end of the previous month (February 2014), resulting from the partial Halo CME of 25.02.2014. GCRs reached their background level (0%) almost after the first week of March and the sporadic CMEs modulated the GCRs intensity from that point until the 27.03.2014.



**Figure 2:** The corrected for efficiency counting rate of the Athens Neutron Monitor Station from 01-27.03.2014 (from nmdb.eu)

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