\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Product: Daily Forecast of Geomagnetic Activity  
Issued: 2024 August 12 07:39UTC  
Prepared by the Athens Space Weather Forecasting Center  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
**I. Solar activity**  
*--Current Status*  
Solar Flux (10.7cm) measured on 11.08.2024 at 23:00 UTC was 282 sfu.  
The background X-Ray flux is at the class C3.8 level.  
Four M-class were produced on August 11 and the largest event was M1.7 flare.No obviously Earth directed CMEs were observed in available LASCO imagery on August 11.  
---CME arrival forecast  
A halo CME was observed on August 08 at 20:00 UT. The source of this CME is an X1.3 class flare from AR 3777 (S05W25) that peaked on August 08 at 19:36 UT. This CME is expected to reach on Earth between on August 11 at 22:18 UT and on August 12 at 08:34 UT according to EAM predictions.  
A partial halo CME was observed on August 09 at 21:48 UT. The source is an M4.5 flare peaking on August 09 at 21:23 UT from AR 3774. This CME is expected to reach on Earth on August 12 between 20:09 UT and 20:18 UT.  
  
**II. Solar Energetic Particle Events**  
Protons and electrons fluxes are quiet.  
  
**III. Interplanetary and Geomagnetic conditions**  
The solar wind speed measured by ACE satellite reached the max value 519 Km/s on August 12 at 03:40 UT during the last 24 hours.  
The solar wind speed from STEREO A was detected 400 Km/s during the last 24 hours.  
The vertical component of IMF Bz reached the max value -19 nT on August 11 at 23:25 UT during the last 24 hours.  
The geomagnetic field was at quiet to strong (G3) levels during the last 24 hours.br>The Kp index now is at strong (G3) levels with Kp=7.  
  
**IV. 3-day Geomagnetic Activity Forecast**  
The geomagnetic field is expected to be at quiet to moderate storm (G2) levels on August 12 due to CMEs observed on August 08-09, at quiet to active levels on August 13 and at quiet to unsettled levels on August 14.

|  |  |  |
| --- | --- | --- |
| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 12.08.2024 | 35 | Quiet to Moderate Storm (G2) |
| 13.08.2024 | 15 | Quiet to Active |
| 14.08.2024 | 08 | Quiet to Unsettled |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Athens Space Weather Forecasting Center  
Physics Department, National & Kapodistrian University of Athens  
Athens Neutron Monitor Station A.NE.MO.S  
Tel.: +30 210 727 6901  
email: spaceweather@phys.uoa.gr  
URL: http://spaceweather.phys.uoa.gr  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*