\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Product: Daily Forecast of Geomagnetic Activity  
Issued: 2025 January 25 06:57UTC  
Prepared by the Athens Space Weather Forecasting Center  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
**I. Solar activity**  
*--Current Status*  
Solar Flux (10.7cm) measured on 24.01.2025 at 23:00 UTC was 205 sfu.  
The background X-Ray flux is at the class C2.2 level.  
AR3961 erupted on January 24 at 21:04 UT peak time producing a M2.7-Class solar flare and a radio blackout of category R1.  
No obviously Earth directed CMEs were observed in available LASCO imagery on January 23.  
A CME was observed on January 21 at 10:53 UT. The source is the M3.4 class solar flare. This CME was expecting to reach Earth on January 24 between at 08:20 UT and at 08:58 UT according to EAM predictions.  
Another CME was observed on January 22 at 11:36 UT. This CME could reach Earth on January 25 between at 09:29 UT and at 11:12 UT according to EAM predictions.  
  
**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 460 Km/s on January 24 at 22:10 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 -4 nT on January 24 at 20:45 UT during the last 24 hours.  
The geomagnetic field was at quiet to unsettled levels during the last 24 hours.  
The Kp index now is at quiet levels with Kp=1.  
  
**IV. 3-day Geomagnetic Activity Forecast**  
The geomagnetic field is expected to be at quiet to minor storm (G1) levels on January 25 due to the effects of CMEs observed on January 21-22, at quiet to active levels on January 26 and at quiet to unsettled levels on January 27.

|  |  |  |
| --- | --- | --- |
| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 25.01.2025 | 25 | Quiet to Minor Storm (G1) |
| 26.01.2025 | 15 | Quiet to Active |
| 27.01.2025 | 10 | 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  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*