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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 August 12 07:39UTC
Prepared by the Athens Space Weather Forecasting Center
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**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.

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| **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 |

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