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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 August 13 07:51UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 12.08.2024 at 23:00 UTC was 272 sfu.
The background X-Ray flux is at the class C4.2 level.
Two M-class solar flares were produced on August 12.
---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 was 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 was 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 522 Km/s on August 12 at 08:20 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 -20 nT on August 12 at 10:15 UT during the last 24 hours.
The geomagnetic field was at unsettled to severe storm (G4) levels during the last 24 hours.
The Kp index now is at unsettled levels with Kp=3.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to minor storm (G1) levels on August 13 due to CMEs observed on August 08-09 and at quiet to unsettled levels on August 14-15.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 13.08.2024 | 30 | Quiet to Minor storm (G1) |
| 14.08.2024 | 12 | Quiet to Unsettled |
| 15.08.2024 | 08 | Quiet to Unsettled |

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