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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 July 25 08:25UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 24.07.2024 at 23:00 UTC was 175 sfu.
The background X-Ray flux is at the class C1.3 level.
Two M-class solar flares were produced on July 24 and the biggest was the M3.6.
AR3751 erupted on July 24 at 07:42 UT peak time producing a M3.6 class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on July 22-23.
---CME arrival forecast
A CME was observed on July 23 at 14:48 UT. The source is an M2.4 flare. This CME is expected to reach Earth between on July 25 at 20:16 UT and on July 26 at 07:57 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 364 Km/s on July 24 at 14:00 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 July 25 at 01:55 UT during the last 24 hours.
The geomagnetic field was at quiet levels during the last 24 hours.
The Kp index now is at quiet levels with Kp=2.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to unsettled level on July 25 and 27 and at quiet to active or minor storm (G1) levels on July 26 due to the CME observed on July 23.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 25.07.2024 | 10 | Quiet to Unsettled |
| 26.07.2024 | 16 | Quiet to Minor Storm (G1) |
| 27.07.2024 | 10 | Quie tto Unsettled |

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