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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 June 03 04:13UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 02.06.2025 at 23:00 UTC was 140 sfu.
The background X-Ray flux is at the class B9.6 level.
AR4100 erupted on June 01 at 11:18 UT peak time producing a M3.3-class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on June 01.
---CME arrival forecast
A CME was observed on May 31 at 00:15 UT. The source is an M8.1 flare from AR 14100 (N12E12). This CME was expected to reach Earth between on June 01 at 07:59 UT and on June 02 at 07:09 UT according to EAM predictions.

**II. Solar Energetic Particle Events**
Protons fluxes are quiet.
The greater than 2 MeV electron flux at geosynchronous orbit was at minor storm levels.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 811 Km/s on June 02 at 04:25 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 -14 nT on June 03 at 00:10 UT during the last 24 hours.
The geomagnetic field was at minor storm (G1) to strong storm (G3) levels during the last 24 hours.
The Kp index now is at moderate storm (G2) levels with Kp=6.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at unsettled to moderate storm (G2) levels on June 03 due to the continuous effects of halo CME observed on May 31 and at unsettled to active levels on June 04-05.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 03.06.2025 | 35 | Unsettled to Moderate storm (G2) |
| 04.06.2025 | 20 | Unsettled to Active |
| 05.06.2025 | 20 | Unsettled to Active |

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