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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 May 17 05:40UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 16.05.2025 at 23:00 UTC was 117 sfu.
The background X-Ray flux is at the class B4.7 level.
No obviously Earth directed CMEs were observed in available LASCO imagery on May 13-15.
A coronal hole (CH1293) at southern hemisphere rotated across the central meridian on May 11-12.
A coronal hole (CH1294) at southern hemisphere will likely become Earth facing on May 15-20.
---CME arrival forecast
A CME was observed on May 12 at 23:48 UT. This CME was expected to reach Earth on May 16 between on 03:32 UT and on 17:41 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 517 Km/s on May 17 at 01:25 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 -17 nT on May 17 at 03:20 UT during the last 24 hours.
The geomagnetic field was at quiet to moderate storm (G2) 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 May 17 due to the CME effects observed on May 12 and at quiet to minor storm (G1) levels on May 18-19 due to the effect of coronal hole (CH1294) high speed stream.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 17.05.2025 | 25 | Unsettled to Moderate Storm (G2) |
| 18.05.2025 | 20 | Quiet to Minor Storm (G1) |
| 19.05.2025 | 18 | Quiet to Minor Storm (G1) |

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