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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 May 16 04:02UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 15.05.2025 at 23:00 UTC was 119 sfu.
The background X-Ray flux is at the class B8.2 level.
AR4087 erupted on May 15 at 17:21 UT peak time producing a M2.1-class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on May 13-14.
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 15-18.

**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 471 Km/s on May 15 at 05:10 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 -6 nT on May 15 at 18:40 UT during the last 24 hours.
The geomagnetic field was at quiet to active 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 levels on May 16-17 and at quiet to minor storm (G1) levels on May 18 due to the effect of coronal hole (CH1294) high speed stream.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 16.05.2025 | 08 | Quiet to Unsettled |
| 17.05.2025 | 12 | Quiet to Unsettled |
| 18.05.2025 | 25 | Quiet to Minor Storm (G1) |

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