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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 April 16 07:50UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 15.04.2025 at 23:00 UTC was 153 sfu.
The background X-Ray flux is at the class C1.7 level.
Two M-class solar flares were produced on April 15.
No obviously Earth directed CMEs were observed in available LASCO imagery on April 14-15.
A CME was observed on April 13 at 08:00 UT. This CME is expected to reach Earth between on April 15 at 22:59 UT and on April 16 at 03:50 UT according to EAM predictions.
An equatorial coronal hole (CH1285) was Earth facing on April 14.
A southern hemisphere coronal hole (CH1286) will likely rotate across the central meridian on April 17-20.

**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 630 Km/s on April 15 at 23:25 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 -18 nT on April 15 at 18:15 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 unsettled levels with Kp=3.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to moderate storm (G2) levels on April 16 due to effect of the CME observed on April 13 and at quiet to active levels on April 17-18.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 16.04.2025 | 35 | Quiet to Moderater Storm (G2) |
| 17.04.2025 | 25 | Quiet to Active |
| 18.04.2025 | 15 | Quiet to Active |

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