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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 February 02 08:03UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 01.02.2025 at 23:00 UTC was 188 sfu.
The background X-Ray flux is at the class C2.7 level.
AR3977 erupted on February 01 at 13:19 UT peak time producing a M2.5-Class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on January 27-29.
An equatorial coronal hole (CH1268) was Earth facing position on January 28-February 01.

**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 783 Km/s on February 02 at 05:25 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 -11 nT on February 01 at 13:30 UT during the last 24 hours.
The geomagnetic field was at unsettled to active levels during the last 24 hours.
The Kp index now is at active levels with Kp=4.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels with a chance of minor storm (G1) levels on February 02 due to the effect of the recurrent coronal hole high speed stream and at quiet levels on February 03-04.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 02.02.2025 | 12 | Quiet to Active |
| 03.02.2025 | 08 | Quiet |
| 04.02.2025 | 08 | Quiet |

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