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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 February 03 07:47UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 02.02.2025 at 23:00 UTC was 216 sfu.
The background X-Ray flux is at the class C3.8 level.
Six M-class solar flares were produced on February 02 and the largest was the M5.2.
AR3977 erupted on February 02 at 13:19 UT peak time producing a M5.2-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 637 Km/s on February 02 at 10:05 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 February 02 at 14:30 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=1.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on February 03 due to the effect of the recurrent coronal hole high speed stream and at quiet to unsettled levels on February 04-05.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 03.02.2025 | 12 | Quiet to Active |
| 04.02.2025 | 10 | Quiet to Unsettled |
| 05.02.2025 | 08 | Quiet to Unsettled |

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