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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 February 25 04:56UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 24.02.2025 at 23:00 UTC was 203 sfu.
The background X-Ray flux is at the class C4.5 level.
Four M-class solar flares were produced on February 24 and the biggest was the M3.9.
AR3990 erupted on February 24 at 23:06 UT peak time producing a M3.9-class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on February 21-23.
An equatorial coronal hole (CH1271) will likely become Earth facing on February 24-26.
A coronal hole (CH1272) at southern hemisphere will likely rotate across the central meridian on February 22-25.
A coronal hole (CH1273) at northern hemisphere rotated across the central meridian on February 21.

**II. Solar Energetic Particle Events**
GOES Proton Flux for particles with energies above 10 MeV exceed the SWPC 10 MeV warning threshold on February 25 at 00:20 UT. A solar radiation storm of level S1 was also observed.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 442 Km/s on February 24 at 19:10 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 -13 nT on February 24 at 17:35 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 February 25-27.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 25.02.2025 | 08 | Quiet to Unsettled |
| 26.02.2025 | 08 | Quiet to Unsettled |
| 27.02.2025 | 12 | Quiet to Unsettled |

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