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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 February 25 08:00UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 24.02.2024 at 23:00 UTC was 179 sfu.
The background X-Ray flux is at the class C2.5 level.
Three M class solar flares were produced on February 24 and the biggest was the M4.5. AR3590 erupted on February 24 at 06:34 UT peak time producing a M4.5 class solar flare and a radioblackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on February 18-20.
A coronal hole (CH1202) at southern hemisphere was Earth facing position on February 21-24.
---CME arrival forecast
A partial halo CME was observed on February 21 at 18:36 UT. This CME was expected to reach Earth on February 24 between at 17:50 UT and 22:29 UT according to EAM predictions.

**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 453 Km/s on February 25 at 04:00 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 -7 nT on February 25 at 01:25 UT during the last 24 hours.
The geomagnetic field was at quiet to unsettled 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 active levels on February 25 due to effects of coronal hole (CH1202) high speed stream and CME observed on February 21 and at quiet to unsettled levels on February 26-27.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 25.02.2024 | 12 | Quiet to Active |
| 26.02.2024 | 06 | Quiet to Unsettled |
| 27.02.2024 | 06 | Quiet to Unsettled |

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