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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 February 05 05:02UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 04.02.2024 at 23:00 UTC was 170 sfu.
The background X-Ray flux is at the class M1.3 level.
Six M class solar flares were produced on February 04 and the biggest was the M2.7. AR3576 erupted on February 04 at 22:37 UT peak time producing a M2.7 class solar flare and a radioblackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on January 29-31.
A coronal hole (CH1201) at southern hemisphere was Earth facing on February 01-02.
---CME arrival forecast
A partial halo CME was recorded on February 01 at 08:00 UT, associated with a C3.0 class solar flare. This CME could reach Earth between on February 03 at 20:55 UT and on February 04 at 02:43 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 430 Km/s on February 04 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 -6 nT on February 04 at 18:50 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 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 05 due to effects of the recurrent coronal hole high speed stream and CME observed on February 01, at quiet to unsettled levels on February 06 and at quiet levels on February 07.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 05.02.2024 | 12 | Quiet to Active |
| 06.02.2024 | 08 | Quiet to Unsettled |
| 07.02.2024 | 05 | Quiet |

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