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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 February 03 08:21UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 02.02.2024 at 23:00 UTC was 143 sfu.
The background X-Ray flux is at the class C3.4 level.
AR3571 erupted on February 02 at 03:01 UT peak time producing a M1.2 class solar flare and a short 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 460 Km/s on February 03 at 00:00 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 -3 nT on February 02 at 08:30 UT during the last 24 hours.
The geomagnetic field was at quiet 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 unsettled levels on February 03 and at quiet to active levels with a chance of minor storm (G1) levels on February 04-05 due to effects of the CME observed on February 01.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 03.02.2024 | 07 | Quiet to Unsettled |
| 04.02.2024 | 15 | Quiet to Minor storm (G1) |
| 05.02.2024 | 10 | Quiet to Active |

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