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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 February 12 05:08UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 11.02.2024 at 23:00 UTC was 180 sfu.
The background X-Ray flux is at the class C3.5 level.
No obviously Earth directed CMEs were observed in available LASCO imagery on February 07-08.
---CME arrival forecast
A CME was observed on February 10 at 07:00 UT from AR3576. This CME could reach Earth on February 12 between 11:20 UT and 22:51 UT according to EAM predictions.
Another partial halo was observed on February 10 at 23:36 UT from AR3576 after the M9.0 class solar flare. This CME could reach Earth on February 13 between 01:00 UT and 14:22 UT according to EAM predictions.

**II. Solar Energetic Particle Events**
GOES Proton Flux for particles with energies above 10 MeV exceed the SWPC 10 MeV warning threshold on February 09 at 15:30 due to the X3.4 solar flare. A solar radiation storm of level S2 was also observed.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 612 Km/s on February 11 at 14:00 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 11 at 04:35 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 minor storm (G1) levels on February 12 and 14 and at unsettled to minor storm (G1) levels on February 13 due to effects of CMEs observed on February 10.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 12.02.2024 | 15 | Quiet to Minor storm (G1) |
| 13.02.2024 | 30 | Unsettled to Minor storm (G1) |
| 14.02.2024 | 15 | Quiet to Minor storm (G1) |

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