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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 January 02 10:21UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 01.01.2025 at 23:00 UTC was 219 sfu.
The background X-Ray flux is at the class C3.8 level.
Four M-class flares were produced on January 01.
No obviously Earth directed CMEs were observed in available LASCO imagery on December 30-31.
---CME arrival forecast
A CME was observed on December 29 at 06:24 UT.The source is associated with the M2.0 solar flare from AR3939 (S17E30) starting on December 29 at 04:40 UT. This CME was expected to reach Earth on December 31 between at 09:46 UT and at 21:48 UT.

**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 552 Km/s on January 02 at 09:00 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 -23 nT on January 01 at 15:05 UT during the last 24 hours.
The geomagnetic field was at unsettled to severe storm (G4) 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 January 02 and at quiet to unsettled levels on January 03-04.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 02.01.2025 | 18 | Quiet to Active |
| 03.01.2025 | 08 | Quiet to Unsettled |
| 04.01.2025 | 06 | Quiet to Unsettled |

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