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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 December 26 08:05UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 25.12.2024 at 23:00 UTC was 253 sfu.
The background X-Ray flux is at the class C2.7 level.
Two M-class solar flares were produced on December 25 and the largest was the M5.0.
AR3932 erupted on December 25 at 04:49 UT peak time producing a M5.0-Class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on December 20-22.
---CME arrival forecast
A CME was observed on December 23 at 11:36 UT.The source is associated with the M8.9 solar flare This CME is expected to reach Earth between on December 25 at 21:42 UT and on December 26 at 05:21 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 514 Km/s on December 25 at 08:50 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 -2 nT on December 25 at 12:05 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 minor storm (G1) levels on December 26 and at quiet to unsettled levels on December 27-28.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 26.12.2024 | 20 | Quiet to Minor storm (G1) |
| 27.12.2024 | 10 | Quiet to Unsettled |
| 28.12.2024 | 08 | Quiet to Unsettled |

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