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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 October 25 10:06UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 24.10.2024 at 23:00 UTC was 197 sfu.
The background X-Ray flux is at the class C2.0 level.
One X3.3-class and one M1.2-class solar flares were produced on October 24.
AR3872 erupted on October 24 at 03:57 UT peak time producing a X3.3-class solar flare and a radio blackout of category R3.
No obviously Earth directed CMEs were observed in available LASCO imagery on October 21-22.
An equatorial coronal hole (CH1249) rotated across the central meridian on October 22.
A coronal hole (CH1250) at southern hemisphere will become Earth facing on October 24-25.
A partial halo CME was observed on October 24 at 03:48 UT. The source is an X3.3-class solar flare from AR3869. This CME is expected to reach Earth between on October 25 at 11:20 UT and on October 26 at 09:48 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 450 Km/s on October 24 at 14:00 UT during the last 24 hours.
The solar wind speed from STEREO A was detected 300 Km/s during the last 24 hours.
The vertical component of IMF Bz reached the max value -4 nT on October 24 at 18:40 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=1.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on October 25, at quiet to minor storm (G1) levels on October 26 and at quiet to unsettled levels on October 27.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 25.10.2024 | 12 | Quiet to Active |
| 26.10.2024 | 20 | Quiet to Minor storm (G1) |
| 27.10.2024 | 10 | Quiet to Unsettled |

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