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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 December 13 07:36UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 12.12.2024 at 23:00 UTC was 161 sfu.
The background X-Ray flux is at the class C1.4 level.
Two M-class flares were produced on December 12 and the largest was the M2.2.
AR3922 erupted on December 12 at 17:43 UT peak time producing a M2.2-Class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on December 08-09.
A coronal hole (CH1261) at northern hemisphere rotated across the central meridian on December 08-09.
A coronal hole (CH1262) at northern hemisphere was in an Earth facing position on December 11.

**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 372 Km/s on December 12 at 20:35 UT during the last 24 hours.
The solar wind speed from STEREO A was detected 500 Km/s during the last 24 hours.
The vertical component of IMF Bz reached the max value -4 nT on December 13 at 02:25 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 levels on December 13-14 and at quiet to unsettled levels on December 15.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 13.12.2024 | 05 | Quiet |
| 14.12.2024 | 05 | Quiet |
| 15.12.2024 | 08 | Quiet to Unsettled |

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