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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 December 21 08:11UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 20.12.2024 at 23:00 UTC was 175 sfu.
The background X-Ray flux is at the class C2.7 level.
No obviously Earth directed CMEs were observed in available LASCO imagery on December 18.
A coronal hole (CH1263) at southern hemisphere rotated across the central meridian on December 19-20.

**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 541 Km/s on December 20 at 12:05 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 -8 nT on December 20 at 15:15 UT during the last 24 hours.
The geomagnetic field was at quiet to unsettled 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 unsettled levels on December 21-23.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 21.12.2024 | 08 | Quiet to Unsettled |
| 22.12.2024 | 08 | Quiet to Unsettled |
| 23.12.2024 | 10 | Quiet to Unsettled |

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