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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 December 28 08:22UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 27.12.2024 at 23:00 UTC was 259 sfu.
The background X-Ray flux is at the class C3.6 level.
Two M-class solar flares were produced on December 27 and the largest was the M3.3.
AR3938 erupted on December 27 at 20:35 UT peak time producing a M3.3-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.

**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 346 Km/s on December 27 at 10:15 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 -4 nT on December 27 at 15:15 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 unsettled levels on December 28-30.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 28.12.2024 | 08 | Quiet to Unsettled |
| 29.12.2024 | 08 | Quiet to Unsettled |
| 30.12.2024 | 08 | Quiet to Unsettled |

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