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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 January 29 05:11UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 28.01.2025 at 23:00 UTC was 171 sfu.
The background X-Ray flux is at the class C4.6 level.
AR3977 erupted on January 28 at 19:45 UT peak time producing a M1.7-Class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on January 24-25.
An equatorial coronal hole (CH1268) will be Earth facing position on January 28 -February 02.

**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 458 Km/s on January 28 at 10:30 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 January 28 at 14:45 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 unsettled levels with Kp=2.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to unsettled levels on January 29-30 and at quiet to minor storm (G1) levels on January 31 due to the effect of the recurrent coronal hole high speed stream.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 29.01.2025 | 08 | Quiet to Unsettled |
| 30.01.2025 | 10 | Quiet to Unsettled |
| 31.01.2025 | 25 | Quiet to Minor Storm (G1) |

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