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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 January 01 09:07UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 31.12.2023 at 23:00 UTC was 146 sfu.
The background X-Ray flux is at the class C4.3 level.
AR3536 erupted on December 31 at 21:55 UT peak time producing a X5.0 class solar flare and a radioblackout of category R3.
No obviously Earth directed CMEs were observed in available LASCO imagery on December 28-30.
An equatorial coronal hole (CH1195) will become Earth facing on December 29-30.

**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 460 Km/s on January 01 at 01:00 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 -5 nT on December 31 at 20:15 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.
The Dst index reached the value 10 nT on December 31 at 13:00 UT during the last 24 hours.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on January 01-02 due to effects from CH1195 and at at quiet to unsettled levels on January 03.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 01.01.2024 | 15 | Quiet to Active |
| 02.01.2024 | 12 | Quiet to Active |
| 03.01.2024 | 08 | Quiet to Unsettled |

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