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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 May 04 08:32UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 03.05.2024 at 23:00 UTC was 156 sfu.
The background X-Ray flux is at the class C6.9 level.
Four M-class and 1 X-class solar flares were produced on May 03 and the biggest was the X1.7.
AR3663 erupted on May 03 at 02:22 UT peak time producing a X1.7 class solar flare and a radioblackout of category R3.
No obviously Earth directed CMEs were observed in available LASCO imagery on April 29-30.
A coronal hole (CH1219) at northern hemisphere was Earth facing on May 01-02. An equatorial coronal hole (CH1220 rotated across the central meridian on May 03.

---CME arrival forecast

A CME was observed on the Sun on May 01 at 06:36 UT. This CME could reach Earth on May 04 between 07:13 UT and 14:28 UT according to EAM predictions.

Another CME was observed on the Sun on May 03 at 02:48 UT after the X1.7 class solar flare. This CME could reach Earth on May 05 between 10:22 UT and 20:26 UT according to EAM predictions.

**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 467 Km/s on May 03 at 07:05 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 -2 nT on May 03 at 18:05 UT during the last 24 hours.
The geomagnetic field was at quiet to unsettled levels during the last 24 hours due to the effects of CME.
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 minor storm (G1) levels on May 04-06 due to the effects of CMEs and the coronal hole high speed stream.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 04.05.2024 | 15 | Quiet to Minor storm (G1) |
| 05.05.2024 | 20 | Quiet to Minor storm (G1) |
| 06.05.2024 | 20 | Quiet to Minor storm (G1) |

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