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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 May 05 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 04.05.2024 at 23:00 UTC was 167 sfu.

The background X-Ray flux is at the class X1.3 level.

Six M-class solar flares were produced on May 04 and the biggest was the M9.0.

AR3663 erupted on May 04 at 23:48 UT peak time producing a M9.0 class solar flare and a radioblackout of category R2.

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 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 375 Km/s on May 04 at 06:35 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 -3 nT on May 05 at 01:45 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 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 05-06 due to the effects of CMEs and the coronal hole high speed stream and at quiet to unsettled levels on May 07.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 05.05.2024 | 25 | Quiet to Minor storm (G1) |
| 06.05.2024 | 20 | Quiet to Minor storm (G1) |
| 07.05.2024 | 10 | Quiet to Unsettled |

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Athens Space Weather Forecasting Center
Physics Department, National & Kapodistrian University of Athens
Athens Neutron Monitor Station A.NE.MO.S
Tel.: +30 210 727 6901
email: spaceweather@phys.uoa.gr
URL: http://spaceweather.phys.uoa.gr
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