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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 July 28 08:40UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 27.07.2024 at 23:00 UTC was 204 sfu.
The background X-Ray flux is at the class C5.8 level.
Five M-class solar flares were produced on July 27 and the biggest was the M4.2.
AR3766 erupted on July 27 at 02:37 UT peak time producing a M4.2 class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on July 26.
---CME arrival forecast
A CME was observed on July 27 at 06:36 UT. The source is an M3.1 flare from AR3762. This CME was expected to reach Earth between on July 29 at 20:36 UT and on July 30 at 02:31 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 453 Km/s on July 27 at 12:45 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 -6 nT on July 27 at 12:45 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 quiet levels with Kp=1.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to unsettled levels on July 28 and at quiet to minor storm (G1) level on July 29-30 due to the effect of CME from July 27.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 28.07.2024 | 08 | Quiet to Unsettled |
| 29.07.2024 | 15 | Quiet to Minor storm (G1) |
| 30.07.2024 | 20 | Quiet to Minor storm (G1) |

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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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