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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 October 18 05:25UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 17.10.2024 at 23:00 UTC was 174 sfu.
The background X-Ray flux is at the class C1.3 level.
Two M-class flares were produced on October 17 and the largest was the M2.4.
AR3854 erupted on October 17 at 05:05 UT peak time producing a M2.4 class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on October 15-17.
A coronal hole (CH1247) rotated across the central meridian on October 14-16.
Another coronal hole (CH1248) at northern hemisphere will become Earth facing on October 18-19.

**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 427 Km/s on October 17 at 19:00 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 -7 nT on October 18 at 00:30 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 unsettled levels with Kp=3.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on October 18-20 due to effect of the coronal hole (CH1247) high speed stream.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 18.10.2024 | 15 | Quiet to Active |
| 19.10.2024 | 15 | Quiet to Active |
| 20.10.2024 | 12 | Quiet to Active |

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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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