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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 October 16 08:41UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 15.10.2024 at 23:00 UTC was 172 sfu.
The background X-Ray flux is at the class C1.5 level.
Five M-class flares were produced on October 15.
No obviously Earth directed CMEs were observed in available LASCO imagery on October 14-16.
A small northern hemisphere coronal hole (CH1246) was in an Earth facing position on October 12-13.
Another coronal hole (CH1247) at northern hemisphere could rotate across the central meridian on October 14-16.

**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 431 Km/s on October 15 at 23:25 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 15 at 15:15 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 unsettled levels on October 16-18.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 16.10.2024 | 12 | Quiet to Unsettled |
| 17.10.2024 | 08 | Quiet to Unsettled |
| 18.10.2024 | 06 | Quiet to Unsettled |

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