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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 October 31 08:45UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 30.10.2024 at 23:00 UTC was 270 sfu.
The background X-Ray flux is at the class C2.8 level.
AR3878 erupted on October 30 at 20:53 UT peak time producing a M7.2-Class solar flare and a radio blackout of category R2.
No obviously Earth directed CMEs were observed in available LASCO imagery on October 27-28.
A coronal hole (CH1250) at southern hemisphere was Earth facing on October 24-25.
A coronal hole (CH1251) at northern hemisphere could rotate across the central meridian on October 30-31.

**II. Solar Energetic Particle Events**
GOES Proton Flux for particles with energies above 10 MeV exceed the SWPC 10 MeV warning threshold on October 26 at 19:10. A solar radiation storm of level S2 was also observed.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 612 Km/s on October 30 at 22:30 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 30 at 15:05 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 levels on October 31 and at quiet to unsettled levels on November 01-02.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 31.10.2024 | 05 | Quiet |
| 01.11.2024 | 08 | Quiet to Unsettled |
| 02.11.2024 | 08 | Quiet to Unsettled |

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