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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 October 30 07:44UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 29.10.2024 at 23:00 UTC was 266 sfu.
The background X-Ray flux is at the class C3.0 level.
AR3873 erupted on October 29 at 16:33 UT peak time producing a M1.1-Class solar flare and a radio blackout of category R1.
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.
A CME was observed on October 26 at 06:48 UT, associated with a X1.9-Class solar flare from AR3873. This CME was expected reach Earth between on October 27 at 14:55 UT and on October 28 at 13:11 UT.

**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 522 Km/s on October 30 at 02:35 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 -7 nT on October 29 at 18:25 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 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 30 and at quiet to unsettled levels on October 31-November 01.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 30.10.2024 | 10 | Quiet to Active |
| 31.10.2024 | 08 | Quiet to Unsettled |
| 01.11.2024 | 08 | Quiet to Unsettled |

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