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Product: Daily Forecast of Geomagnetic Activity  
Issued: 2024 October 27 05:59UTC  
Prepared by the Athens Space Weather Forecasting Center  
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**I. Solar activity**  
*--Current Status*  
Solar Flux (10.7cm) measured on 26.10.2024 at 23:00 UTC was 238 sfu.  
The background X-Ray flux is at the class C5.7 level.  
A X1.9 flare and 4 M-class flare were produced on October 26.  
AR3873 erupted on October 26 at 07:19 UT peak time producing a X1.9-class solar flare and a radio blackout of category R3.  
No obviously Earth directed CMEs were observed in available LASCO imagery on October 25.  
An equatorial coronal hole (CH1249) rotated across the central meridian on October 22.  
A coronal hole (CH1250) at southern hemisphere will become Earth facing on October 24-25.  
A partial halo CME was observed on October 24 at 03:48 UT. The source is an X3.3-class solar flare from AR3869. This CME was expected to reach Earth between on October 25 at 11:20 UT and on October 26 at 09:48 UT.  
Another CME was observed on October 26 at 06:48 UT, associated with the X1.9-class solar flare. This CME could 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 S1 was also observed.  
  
**III. Interplanetary and Geomagnetic conditions**  
The solar wind speed measured by ACE satellite reached the max value 496 Km/s on October 26 at 17:35 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 -11 nT on October 26 at 21:50 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 27 and 29 due to the effects of CMEs and at quiet to minor storm (G1) levels on October 28.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 27.10.2024 | 12 | Quiet to Active |
| 28.10.2024 | 25 | Quiet to Minor storm (G1) |
| 29.10.2024 | 12 | Quiet to Active |

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