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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 September 24 08:18UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 23.09.2024 at 23:00 UTC was 167 sfu.
The background X-Ray flux is at the class C1.5 level.
AR3836 erupted on September 23 at 14:56 UT peak time producing a M1.4 class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on September 20-21.
An equatorial coronal hole (CH1243) rotated into an Earth facing position on September 22.
---CME arrival forecast
A CME was observed on September 22 at 21:36 UT. This CME was expecting to reach Earth on September 25 between 03:43 UT and 14:35 UT according to EAM predictions.

**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 482 Km/s on September 24 at 01:35 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 -10 nT on September 23 at 11:55 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 September 24, at quiet to minor storm (G1) levels on September 25 due to the effects of the recurrent coronal hole high speed streams and CME and at quiet to unsettled levels on September 26.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 24.09.2024 | 12 | Quiet to Active |
| 25.09.2024 | 18 | Quiet to Minor Storm (G1) |
| 26.09.2024 | 10 | Quiet to Unsettled |

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