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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 September 23 09:19UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 22.09.2024 at 23:00 UTC was 163 sfu.
The background X-Ray flux is at the class C1.3 level.
AR3835 erupted on September 22 at 21:39 UT peak time producing a M3.8 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 428 Km/s on September 22 at 13:30 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 -3 nT on September 22 at 22:45 UT during the last 24 hours.
The geomagnetic field was at quiet levels during the last 24 hours.
The Kp index now is at quiet levels with Kp=2.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet levels on September 23-24 and at quiet to active levels on September 25.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 23.09.2024 | 05 | Quiet |
| 24.09.2024 | 05 | Quiet |
| 25.09.2024 | 12 | Quiet to Active |

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