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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 May 21 07:03UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 20.05.2024 at 23:00 UTC was 200 sfu.
The background X-Ray flux is at the class C2.0 level.
A coronal hole (CH1222) at northern hemisphere will rotate into an Earth facing position on May 21-22.
---CME arrival forecast
A CME was observed on May 17 at 21:05 UT and associated with a M7.2 solar flare of AR3685. This CME was expected to reach Earth between on May 19 at 21:24 UT and on May 20 at 12:12 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 404 Km/s on May 20 at 14:10 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 -5 nT on May 20 at 21:15 UT during the last 24 hours.
The geomagnetic field was at quiet to unsettled levels during the last 24 hours.
The Kp index now is quiet levels with Kp=2.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on May 21 due to the effect of CME observed on May 17, at quiet to unsettled levels on May 22 and at quiet levels on May 23.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 21.05.2024 | 15 | Quiet to Active |
| 22.05.2024 | 07 | Quiet to Unsettled |
| 23.05.2024 | 05 | Quiet |

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