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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 May 20 04:08UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 19.05.2025 at 23:00 UTC was 117 sfu.
The background X-Ray flux is at the class B6.1 level.
A M3.2-class solar flare was erupted on May 19 at 08:21 UT peak time.
No obviously Earth directed CMEs were observed in available LASCO imagery on May 16-18.
A coronal hole (CH1294) at southern hemisphere will likely become Earth facing on May 15-23.
A coronal hole (CH1295) at northern hemisphere will likely become Earth facing on May 21-22.

**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 593 Km/s on May 19 at 06:45 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 -6 nT on May 20 at 03:20 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 at 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 20-21 due to the continuous effect of the coronal hole (CH1294) high speed stream and at quiet to unsettled levels on May 22.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 20.05.2025 | 12 | Quiet to Active |
| 21.05.2025 | 12 | Quiet to Active |
| 22.05.2025 | 10 | Quiet to Unsettled |

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