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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 June 21 05:46UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 20.06.2025 at 23:00 UTC was 130 sfu.
The background X-Ray flux is at the class B4.9 level.
Two M-class solar flares were produced on June 20 and the biggest was the M1.1.
AR4114 erupted on June 20 at 00:04 UT peak time producing a M4.6-class solar flare and a radio blackout of category R2.
No obviously Earth directed CMEs were observed in available LASCO imagery on June 17-19.
A coronal hole (CH1301) at southern hemisphere was Earth facing on June 11-19.

**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 648 Km/s on June 20 at 06:55 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 -7 nT on June 20 at 06:55 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 unsettled levels on June 21-23.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 21.06.2025 | 10 | Quiet to Unsettled |
| 22.06.2025 | 08 | Quiet to Unsettled |
| 23.06.2025 | 08 | Quiet to Unsettled |

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