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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 April 18 10:46UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 17.04.2024 at 23:00 UTC was 217 sfu.
The background X-Ray flux is at the class C4.4 level.
AR3645 erupted on April 17 at 22:08 UT peak time producing a M1.6 class solar flare and a radioblackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on April 15-17.
A coronal hole (CH1214) at southern hemisphere rotated across the central meridian on April 17.
---CME arrival forecast
A faint halo CME was observed on April 15 at 06:48 UT. This CME is expected to reach Earth on April 18 between at 05:23 UT and at 07:05 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 464 Km/s on April 17 at 09:10 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 -7 nT on April 17 at 17:35 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=0.33.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to minor storm (G1) levels on April 18 due to CME effects and at quiet to unsettled levels on April 19-20.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 18.04.2024 | 20 | Quiet to Minor storm\_(G1) |
| 19.04.2024 | 10 | Quiet to Unsettled |
| 20.04.2024 | 08 | Quiet to Unsettled |

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