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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 April 22 17:04UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 21.04.2024 at 23:00 UTC was 217 sfu.
The background X-Ray flux is at the class C8.0 level.
Three M-class solar flares were produced on April 21 and the biggest was the M3.4.
AR3638 erupted on April 21 at 21:52 UT peak time producing a M3.4 class solar flare and a radioblackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on April 19-20.
A coronal hole (CH1214) at southern hemisphere rotated across the central meridian on April 17. A equatorial coronal hole (CH1215) will become Earth facing on April 22-23.

**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 473 Km/s on April 22 at 04:00 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 April 22 at 05:10 UT during the last 24 hours.
The geomagnetic field was at quiet to active levels during the last 24 hours due to the effects of the CME.
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 April 22-24.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 22.04.2024 | 12 | Quiet to Unsettled |
| 23.04.2024 | 12 | Quiet to Unsettled |
| 24.04.2024 | 10 | Quiet to Unsettled |

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