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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 May 15 04:04UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 14.05.2024 at 23:00 UTC was 220 sfu.
The background X-Ray flux is at the class C3.5 level.
Several M-class and 3 X-class solar flares were produced on May 14 and the biggest was the X8.7 class flare produced by AR3664.
A X3.9 class solar flare associated with a CME which was observed on May 10 at 07:12 UT. This CME was expected to reach Earth on May 12 between at 08:50 UT and at 22:46 UT according to EAM predictions.
Another bright partial halo CME was observed on May 11 at 01:36 UT and was associated with the X5.8 classs solar flare. This CME was expected to reach Earth between on May 13 at 18:00 UT and on May 13 at 13:15 UT according to EAM predictions.

**II. Solar Energetic Particle Events**
GOES Proton Flux for particles with energies above 10 MeV exceed the SWPC 10 MeV warning threshold on May 13 at 14:00 UT. A solar radiation storm reached the level of S2.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 591 Km/s on May 14 at 15:25 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 -3 nT on May 14 at 10:15 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=2.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on May 15 due to effects of CMEs and at quiet to unsettled levels on May 16-17.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 15.05.2024 | 12 | Quiet to Active |
| 16.05.2024 | 10 | Quiet to Unsettled |
| 17.05.2024 | 08 | Quiet to Unsettled |

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