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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 September 18 05:48UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 17.09.2024 at 23:00 UTC was 165 sfu.
The background X-Ray flux is at the class A0.0 level.
No obviously Earth directed CMEs were observed in available LASCO imagery on September 15-17.
---CME arrival forecast
A CME was observed on September 13 at 10:12 UT. This CME was expected to reach Earth on September 16 between at 01:37 UT and 06:15 UT according to EAM predictions.
Another CME was observed on September 14 at 15:36 UT, associated with a powerful X4.5-class solar flare. This CME was expected to reach Earth on September 16 at 15:50 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 September 17 at 07:30 UT and ended at 16:15 UT. A solar radiation storm of level S1 was also observed.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 602 Km/s on September 17 at 07:15 UT during the last 24 hours.
The solar wind speed from STEREO A was detected 500 Km/s during the last 24 hours.
The vertical component of IMF Bz reached the max value -13 nT on September 17 at 07:35 UT during the last 24 hours.
The geomagnetic field was at active to severe storm (G4) levels during the last 24 hours.
The Kp index now is at active levels with Kp=4.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to active levels on September 18, at quiet to unsettled levels on September 19 and at quiet levels on September 20.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 18.09.2024 | 15 | Quiet to Active |
| 19.09.2024 | 08 | Quiet to Unsettled |
| 20.09.2024 | 05 | Quiet |

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