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Product: Daily Forecast of Geomagnetic Activity  
Issued: 2024 September 17 07:36UTC  
Prepared by the Athens Space Weather Forecasting Center  
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**I. Solar activity**  
*--Current Status*  
Solar Flux (10.7cm) measured on 16.09.2024 at 23:00 UTC was 170 sfu.  
The background X-Ray flux is at the class C1.8 level.  
No obviously Earth directed CMEs were observed in available LASCO imagery on September 15-16.  
A coronal hole (CH1242) at northern hemisphere was in an Earth facing position on September 14.  
---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**  
Protons and electrons fluxes are quiet.  
  
**III. Interplanetary and Geomagnetic conditions**  
The solar wind speed measured by ACE satellite reached the max value 574 Km/s on September 17 at 04:45 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 -17 nT on September 17 at 01:55 UT during the last 24 hours.  
The geomagnetic field was at quiet to severe storm (G4) levels during the last 24 hours.  
The Kp index now is at strong storm (G3) levels with Kp=7.  
  
**IV. 3-day Geomagnetic Activity Forecast**  
The geomagnetic field is expected to be at quiet to severe storm (G4) levels on September 17 due to the effects of CMEs from September 13 and 14, at quiet to minor storm (G1) levels on September 18 and at quiet to unsettled levels on September 19.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 17.09.2024 | 65 | Quiet to Severe storm (G4) |
| 18.09.2024 | 28 | Quiet to minor storm (G1) |
| 19.09.2024 | 12 | Quiet to Unsettled |

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Athens Space Weather Forecasting Center  
Physics Department, National & Kapodistrian University of Athens  
Athens Neutron Monitor Station A.NE.MO.S  
Tel.: +30 210 727 6901  
email: spaceweather@phys.uoa.gr  
URL: http://spaceweather.phys.uoa.gr  
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