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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 March 19 05:04UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 18.03.2024 at 23:00 UTC was 177 sfu.
The background X-Ray flux is at the class A0.0 level.
Three M class solar flares were produced on March 18 and the biggest was the M6.7. AR3615 erupted on March 18 at 19:19 UT peak time producing a M6.7 class solar flare and a radioblackout of category R2.
No obviously Earth directed CMEs were observed in available LASCO imagery on March 15-16.
A coronal hole (CH1206) at northern hemisphere was in an Earth facing position on March 14.
---CME arrival forecast
A CME was observed on March 17 at 03:36 UT after a southern hemisphere filament eruption. This CME could reach Earth on March 20 between 05:49 UT and 17:26 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 375 Km/s on March 19 at 03:30 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 -11 nT on March 18 at 21:50 UT during the last 24 hours.
The geomagnetic field was at quiet to unsettled levels during the last 24 hours.
The Kp index now is at unsettled levels with Kp=3.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to unsettled levels on March 19 and at quiet to minor storm (G1) levels on March 20-21 due to the CME observed on March 17.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 19.03.2024 | 08 | Quiet to Unsettled |
| 20.03.2024 | 18 | Quiet to Minor storm (G1) |
| 21.03.2024 | 20 | Quiet to Minor storm (G1) |

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