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Product: Daily Forecast of Geomagnetic Activity
Issued: 2024 February 10 07:43UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 09.02.2024 at 23:00 UTC was 183 sfu.
The background X-Ray flux is at the class C7.5 level.
AR3575 erupted on February 09 at 13:14 UT peak time producing a X3.4 class solar flare and a radioblackout of category R3.
No obviously Earth directed CMEs were observed in available LASCO imagery on February 07-08.

**II. Solar Energetic Particle Events**
GOES Proton Flux for particles with energies above 10 MeV exceed the SWPC 10 MeV warning threshold on February 09 at 15:30 due to the X3.4 solar flare. A solar radiation storm of level S2 was also observed.

**III. Interplanetary and Geomagnetic conditions**
The solar wind speed measured by ACE satellite reached the max value 496 Km/s on February 09 at 22:10 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 February 09 at 09:25 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 quiet levels with Kp=1.

**IV. 3-day Geomagnetic Activity Forecast**
The geomagnetic field is expected to be at quiet to unsettled levels on February 10-12.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 10.02.2024 | 08 | Quiet to Unsettled |
| 11.02.2024 | 06 | Quiet to Unsettled |
| 12.02.2024 | 08 | Quiet to Unsettled |

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