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Product: Daily Forecast of Geomagnetic Activity
Issued: 2025 January 20 05:05UTC
Prepared by the Athens Space Weather Forecasting Center
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**I. Solar activity**
*--Current Status*
Solar Flux (10.7cm) measured on 19.01.2025 at 23:00 UTC was 234 sfu.
The background X-Ray flux is at the class C2.0 level.
AR3964 erupted on January 19 at 03:32 UT peak time producing a M2.4-Class solar flare and a radio blackout of category R1.
No obviously Earth directed CMEs were observed in available LASCO imagery on January 17-19.
A coronal hole (CH1267) at southern hemisphere rotated across the central meridian on January 14-16.

**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 546 Km/s on January 20 at 04:00 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 -7 nT on January 19 at 20:25 UT during the last 24 hours.
The geomagnetic field was at quiet to active 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 January 20 due to the continuous effect of the coronal hole high speed stream and at quiet to unsettled levels on January 21-22.

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| **Date** | **Ap index forecast** | **Geomagnetic Activity level** |
| 20.01.2025 | 12 | Quiet to Active |
| 21.01.2025 | 08 | Quiet to Unsettled |
| 22.01.2025 | 08 | 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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