Subject: PRESTO ALERT
From: Solar Influences Data analysis Center <sidc@oma.be>
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To: davetyp@typnet.net

:Issued: 2026 Jan 20 0659 UTC
:Product: documentation at http://www.sidc.be/products/presto
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FAST WARNING 'PRESTO' MESSAGE from the SIDC (RWC-Belgium)
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DSCOVR (Deep Space Climate Observatory) measurements near L1 show that an interplanetary shock arrived on 2026 Jan 19 at 21:15 UTC, with the solar wind speed jumping from about 300 km/s to about 1178 km/s and the interplanetary magnetic field, IMF, strengthening abruptly, with the total field Bt peaking near 91 nT. In the hours preceding the impact, the north-south IMF component Bz turned strongly southward, reaching about -58 nT, and then turned northward to about +80 nT at the shock; this southward phase favored efficient coupling with Earth's magnetosphere and explains the rapid escalation of geomagnetic activity. The local Belgian K index (K_Bel) increased from around 19:00 UTC and reached 8 at 21:00 UTC and 9 at 22:00 UTC, while the global NOAA Kp index reached 8 for 18:00 to 21:00 UTC and 9- for 21:00 to 24:00 UTC, indicating a severe storm with near-extreme levels.

This shock marks the arrival of the full-halo coronal mass ejection (SIDC CME 624) first seen in SOHO/LASCO C2 on 2026 Jan 18 at 18:12 UTC and associated with the X1.9 flare (SIDC Flare 6678) peaking at 18:09 UTC from SIDC Sunspot Group 740 (NOAA AR 4341), with an estimated plane-of-sky speed around 1400 km/s. The accompanying solar energetic particle (SEP) event persists: the greater than 10 MeV GOES proton flux has remained above the 10 pfu threshold since 2026 Jan 18 at 22:50 UTC and peaked near 3.7 10^4 pfu, while the greater than 100 MeV channel shows only a modest enhancement and the greater than 500 MeV channel remains near background.

Solar wind and geomagnetic conditions are expected to remain disturbed as the CME passage continues, with speeds still around 800 to 1000 km/s and Bt currently decaying toward about 30 nT, and further M-class flaring remains possible from SIDC Sunspot Group 740 with a small chance of additional X-class activity.
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