



PHOTO: ESA & NASA/SOLAR ORBITER/EUI TEAM

DOUBLE TAKE

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On September 30, 2024, there was a violent eruption on the surface of the sun. It discharged a huge amount of magnetic energy and hurled solar plasma – charged particles – in a wide arc out into space. This arc was recorded by the Solar Orbiter space probe, which was developed by the European Space Agency (Esa) and Nasa (left). When large masses like this are ejected towards Earth, the charged particles usually only take a few days to reach the Earth's magnetic field. The solar particles are then guided along this magnetic field towards the poles, but depending on the force of the impact, they can also reach Europe. On their way, the particles cause the oxygen in the atmosphere to glow, among other things, and the resulting red, violet, and green colors that appear in the sky – as photographed on January 19, 2026, at Heidelberg's Königstuhl (right) – are a beautiful spectacle. Geomagnetic storms also disrupt GPS satellites and power grids and have already caused Starlink satellites to crash.

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