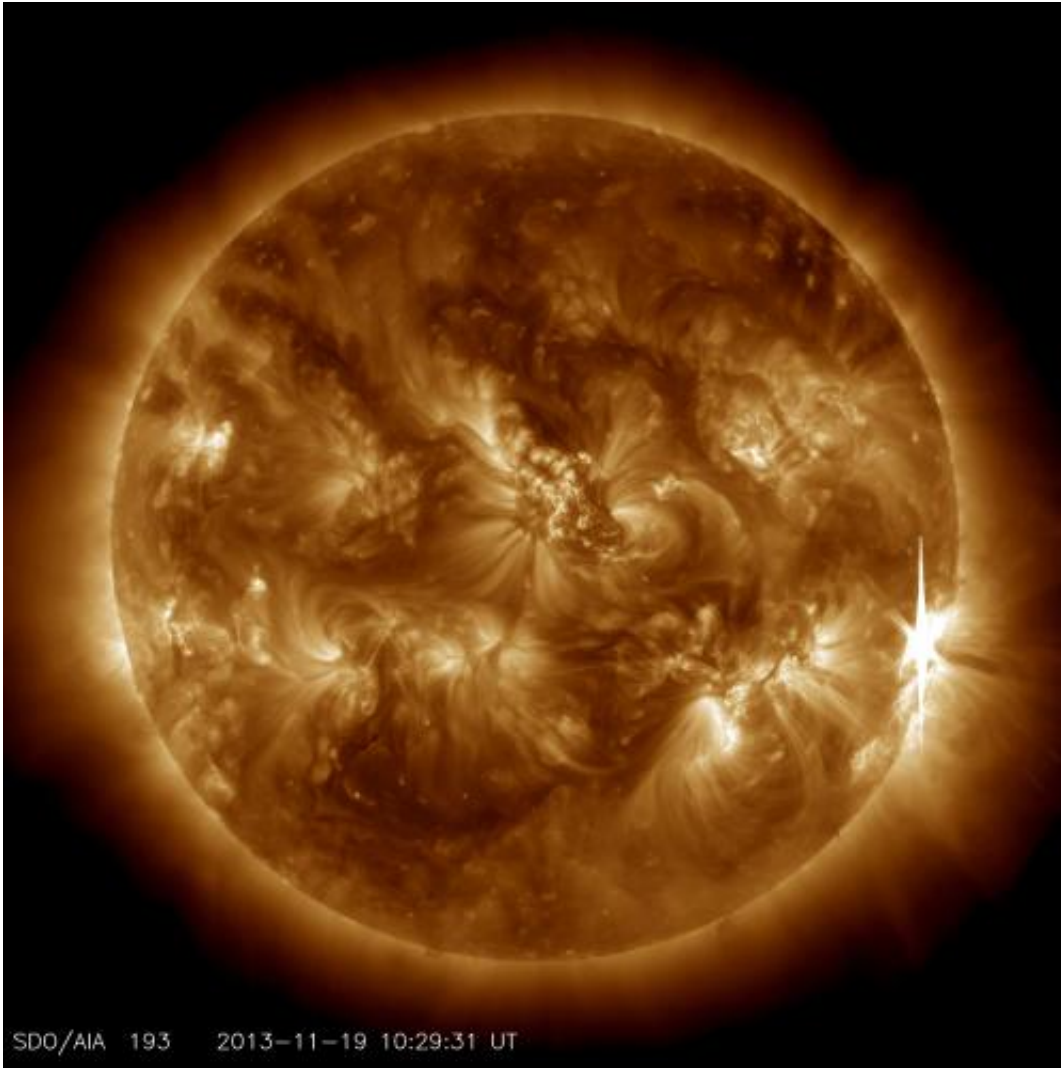


X-Class solar flare: Nov. 19

November 20 2013, by Karen C. Fox



An X1-class flare erupts from the right side of the sun in this image captured by NASA's Solar Dynamics Observatory on Nov. 19, 2013. The flare erupted from a region that produced many flares in its two-week journey across the face of the sun, and is shown here just before rotating out of view. Credit: NASA/SDO

Adding on to a series of solar flares throughout October and November, the sun emitted another significant solar flare on Nov. 19, 2013, peaking at 5:26 a.m. EST. Solar flares are powerful bursts of radiation. Harmful radiation from a flare cannot pass through Earth's atmosphere to physically affect humans on the ground, however—when intense enough—they can disturb the atmosphere in the layer where GPS and communications signals travel.

To see how this event may impact Earth, please visit [NOAA's Space Weather Prediction Center](#), the U.S. government's official source for space weather forecasts, alerts, watches and warnings.

This flare is classified as an X1.0 class flare. "X-class" denotes the most intense flares, while the number provides more information about its strength. An X2 is twice as intense as an X1, an X3 is three times as intense, etc.

This flare came from an [active region](#) numbered AR 1893 that is just rotating out of sight over the sun's right side. Increased numbers of flares are quite common at the moment, since the sun's normal 11-year activity cycle is ramping up toward solar maximum conditions. Humans have tracked this solar cycle continuously since it was discovered in 1843, and it is normal for there to be many flares a day during the sun's peak activity.

Provided by NASA

Citation: X-Class solar flare: Nov. 19 (2013, November 20) retrieved 10 April 2024 from <https://phys.org/news/2013-11-x-class-solar-flare-nov.html>

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