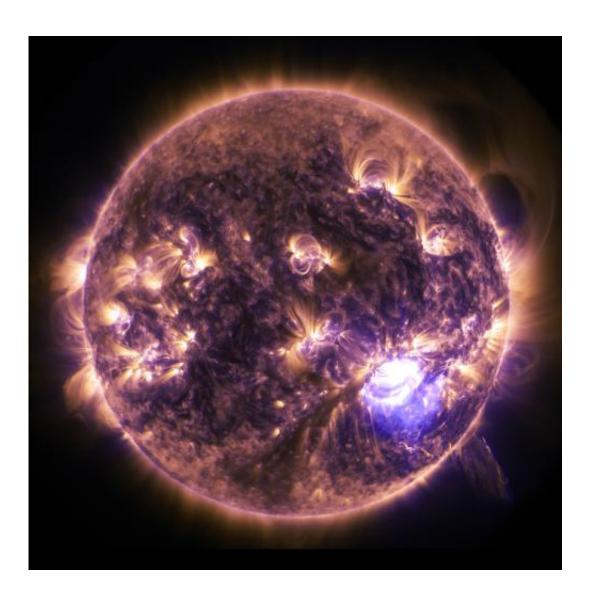


## Holiday lights on the Sun: SDO imagery of a significant solar flare

**December 22 2014** 



NASA's Solar Dynamics Observatory captured this image of a significant solar flare -- as seen in the bright flash on the right -- on Dec. 19, 2014. The image shows a subset of extreme ultraviolet light that highlights the extremely hot material in flares. Credit: NASA/SDO



The sun emitted a significant solar flare, peaking at 7:28 p.m. EST on Dec. 19, 2014.

NASA's Solar Dynamics Observatory, which watches the sun constantly, captured an image of the event. 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 affect Earth, please visit NOAA's Space Weather Prediction Center at <a href="http://spaceweather.gov">http://spaceweather.gov</a>, the U.S. government's official source for space weather forecasts, alerts, watches and warnings.

This flare is classified as an X1.8-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.

## Provided by NASA's Goddard Space Flight Center

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