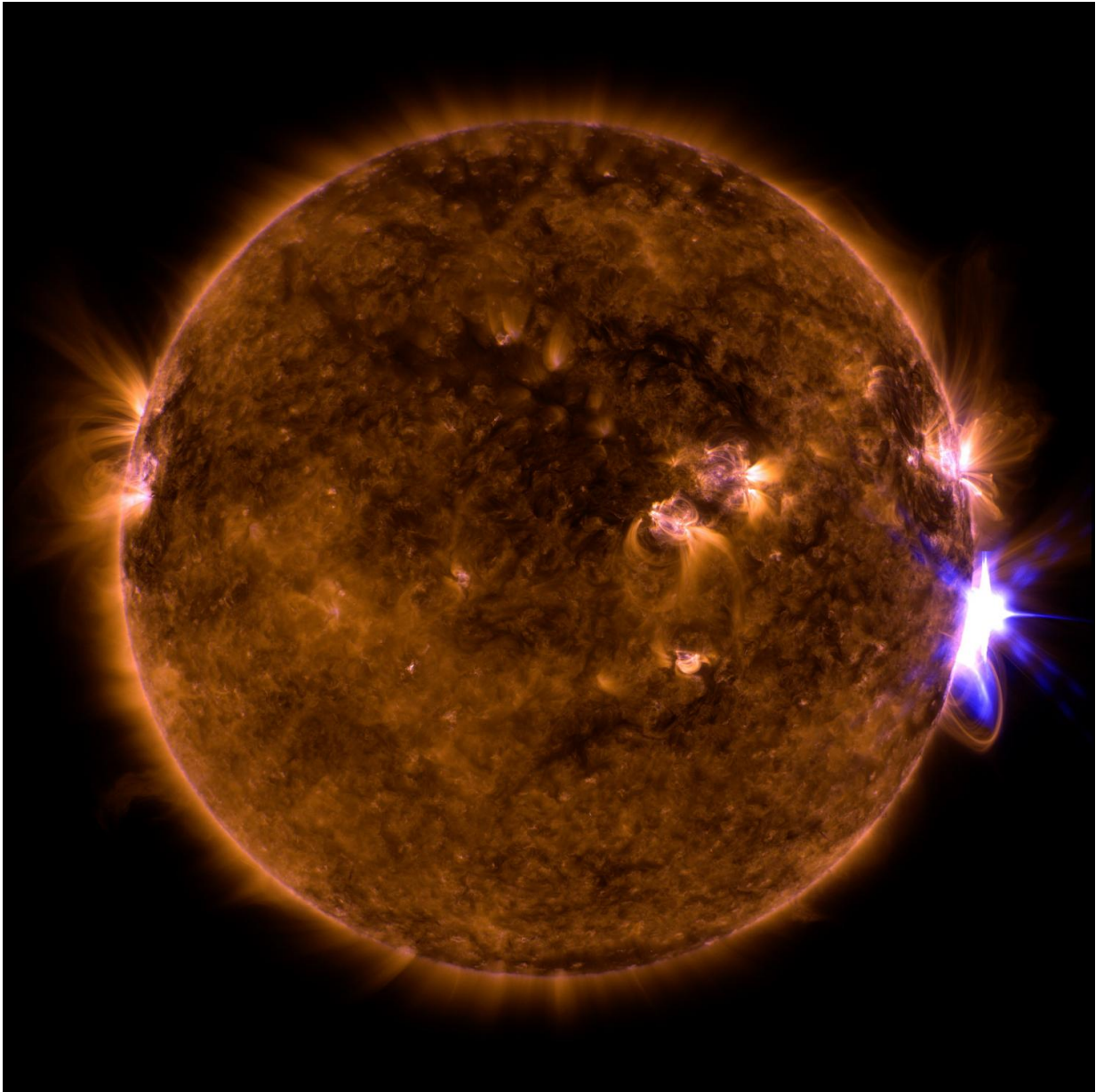


# Sun erupts with significant flare

September 11 2017, by Karen C. Fox

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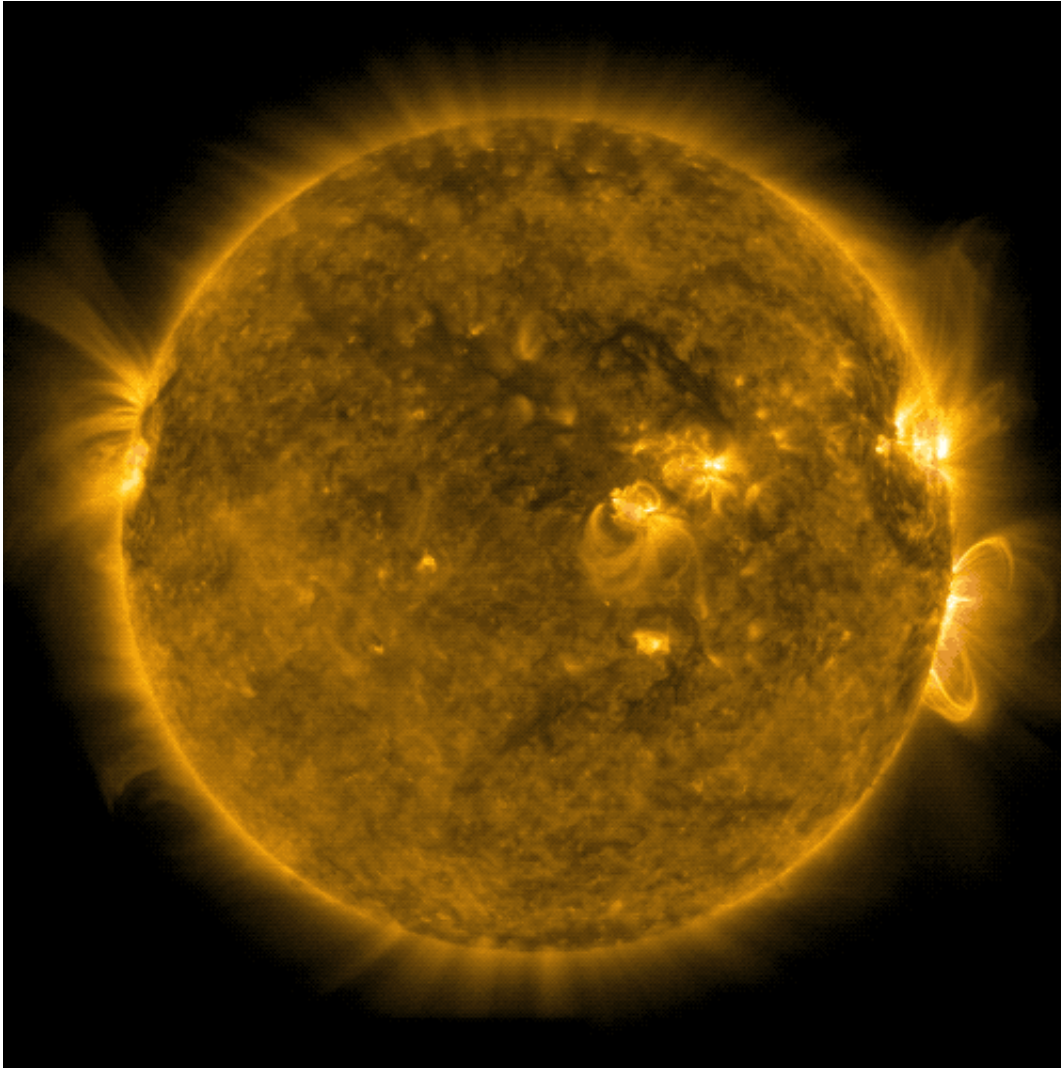
NASA's Solar Dynamics Observatory captured this image of a solar flare -- as

seen in the bright flash on the right side -- on Sept. 10, 2017. The image shows a combination of wavelengths of extreme ultraviolet light that highlights the extremely hot material in flares, which has then been colorized. Credit: NASA/SDO/Goddard

The sun emitted a significant solar flare, peaking at 12:06 p.m. EDT on Sept. 10, 2017. 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.

This flare is classified as an X8.2-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 is the capstone on a series of flares from Active Region 2673, which was identified on Aug. 29 and is currently rotating off the front of the sun as part of our star's normal rotation.



NASA's Solar Dynamics Observatory captured this image of a solar flare -- as seen in the bright flash on the right side -- on Sept. 10, 2017. Credit: NASA/SDO/Goddard

To see how this event may affect Earth, please visit NOAA's Space Weather Prediction Center at <http://spaceweather.gov>, the U.S. government's official source for space weather forecasts, alerts, watches and warnings.

Provided by NASA's Goddard Space Flight Center

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