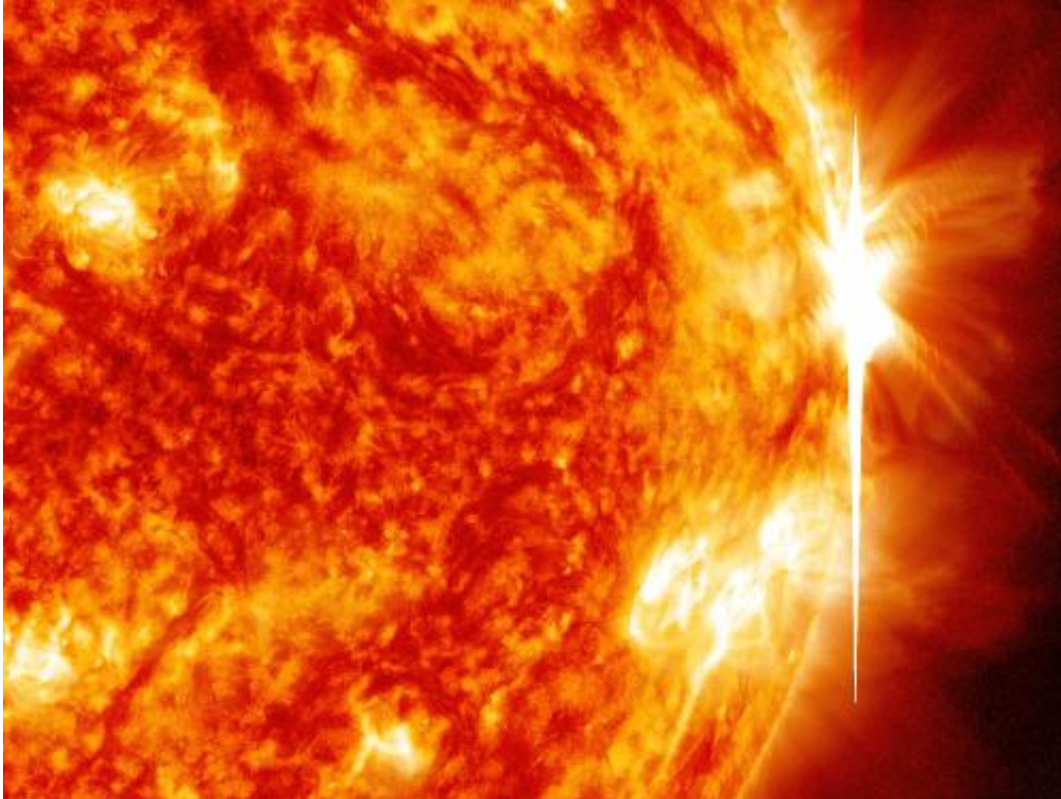


# Sun emits fourth X-class flare in a week

October 30 2013, by Karen C. Fox

---



The sun emitted a significant solar flare -- its fourth X-class flare since Oct. 23, 2013 -- peaking at 5:54 p.m. on Oct. 29, 2013. NASA's Solar Dynamics Observatory captured the flare in this image, which shows light in wavelengths of both 304 and 193 Angstroms. Credit: NASA/SDO

The sun emitted a significant solar flare—its fourth X-class flare since Oct. 23, 2013—peaking at 5:54 p.m. on Oct. 29, 2013. 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 disrupts the radio signals for as long as the flare is ongoing, anywhere from minutes to hours.

To see how this event may impact 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.

This flare is classified as an X2.3 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.

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's Goddard Space Flight Center

Citation: Sun emits fourth X-class flare in a week (2013, October 30) retrieved 25 April 2024 from <https://phys.org/news/2013-10-sun-emits-fourth-x-class-flare.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.