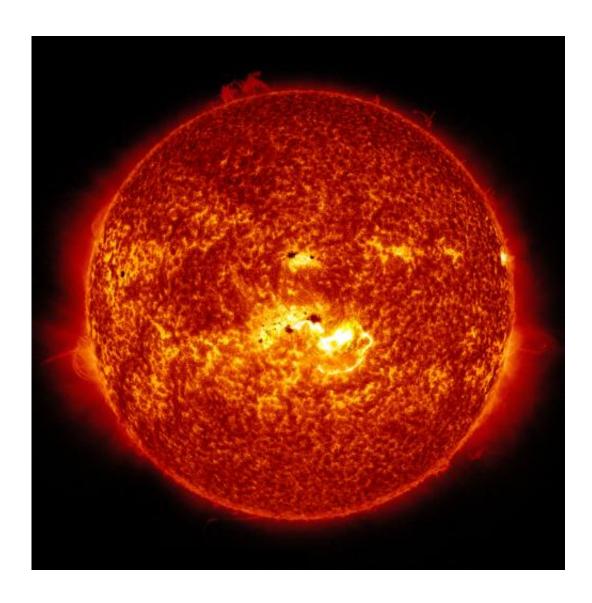


Sun unleashes first X-class flare of 2014

January 7 2014



This closeup of the sun taken by NASA's Solar Dynamics Observatory shows large sunspot AR1944 and the source area of the X1.2 class solar flare, which appears to be from adjacent, smaller sunspot AR1943. Credit: NASA/SDO



The sun emitted a significant solar flare peaking at 1:32 p.m. EST on Jan.7, 2014. This is the first significant flare of 2014, and follows on the heels of mid-level flare earlier in the day. Each flare was centered over a different area of a large sunspot group currently situated at the center of the sun, about half way through its 14-day journey across the front of the disk along with the rotation of the sun.

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 X1.2-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.

Provided by NASA's Goddard Space Flight Center

Citation: Sun unleashes first X-class flare of 2014 (2014, January 7) retrieved 25 April 2024 from https://phys.org/news/2014-01-sun-unleashes-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.