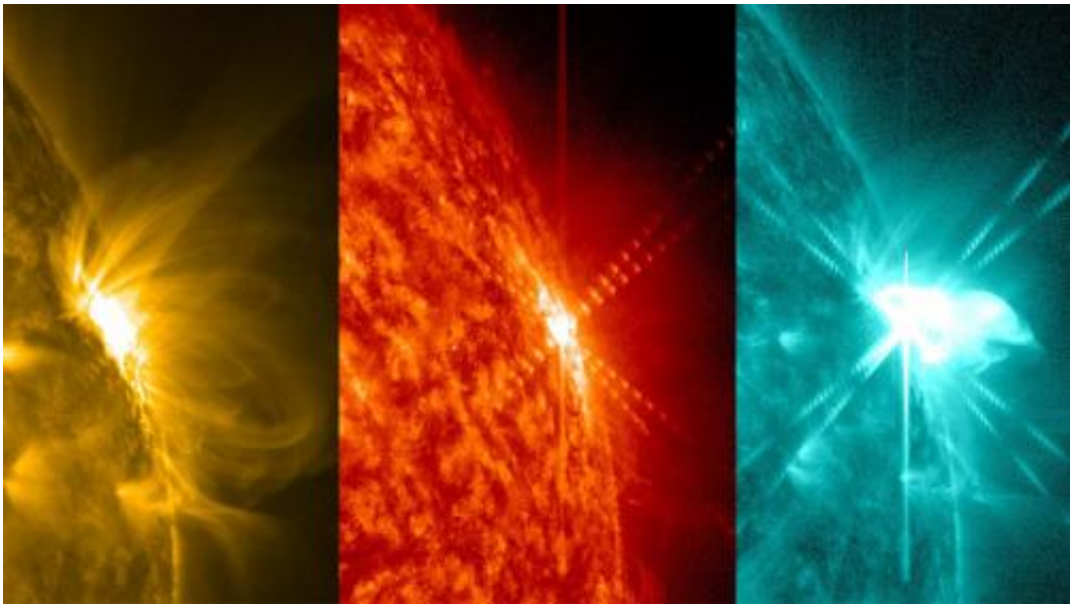
Mid-level solar flare seen by NASA's SDO

March 13 2014



NASA's Solar Dynamics Observatory captures images of the sun in many wavelengths of light at the same time, each of which is typically colorized in a different color. Each wavelength shows different aspects of the same event, as seen in these three images of a solar flare on March 12, 2014. Credit: NASA/SDO/Goddard Space Flight Center

The sun emitted a mid-level solar flare, peaking at 6:34 p.m. EDT on March 12, 2014, and NASA's Solar Dynamics Observatory, or SDO, captured an image of it. 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 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 M9.3 flare, just slightly weaker than the most intense flares, which are labeled X-class. The letters denote broad categories of strength, while the numbers provide more information. An M2 is twice as intense as an M1, an M3 is three times as intense, etc.

This M9.3 flare was emitted by an active region—a magnetically strong and complex region on the sun's surface—labeled AR 11996.

Updates will be provided as they are available on the flare and whether there was an associated coronal mass ejection, or CME, another solar phenomenon that can send solar particles into space and affect electronic systems in satellites and on Earth.

Provided by NASA's Goddard Space Flight Center

Citation: Mid-level solar flare seen by NASA's SDO (2014, March 13) retrieved 2 May 2024 from https://phys.org/news/2014-03-mid-level-solar-flare-nasa-sdo.html