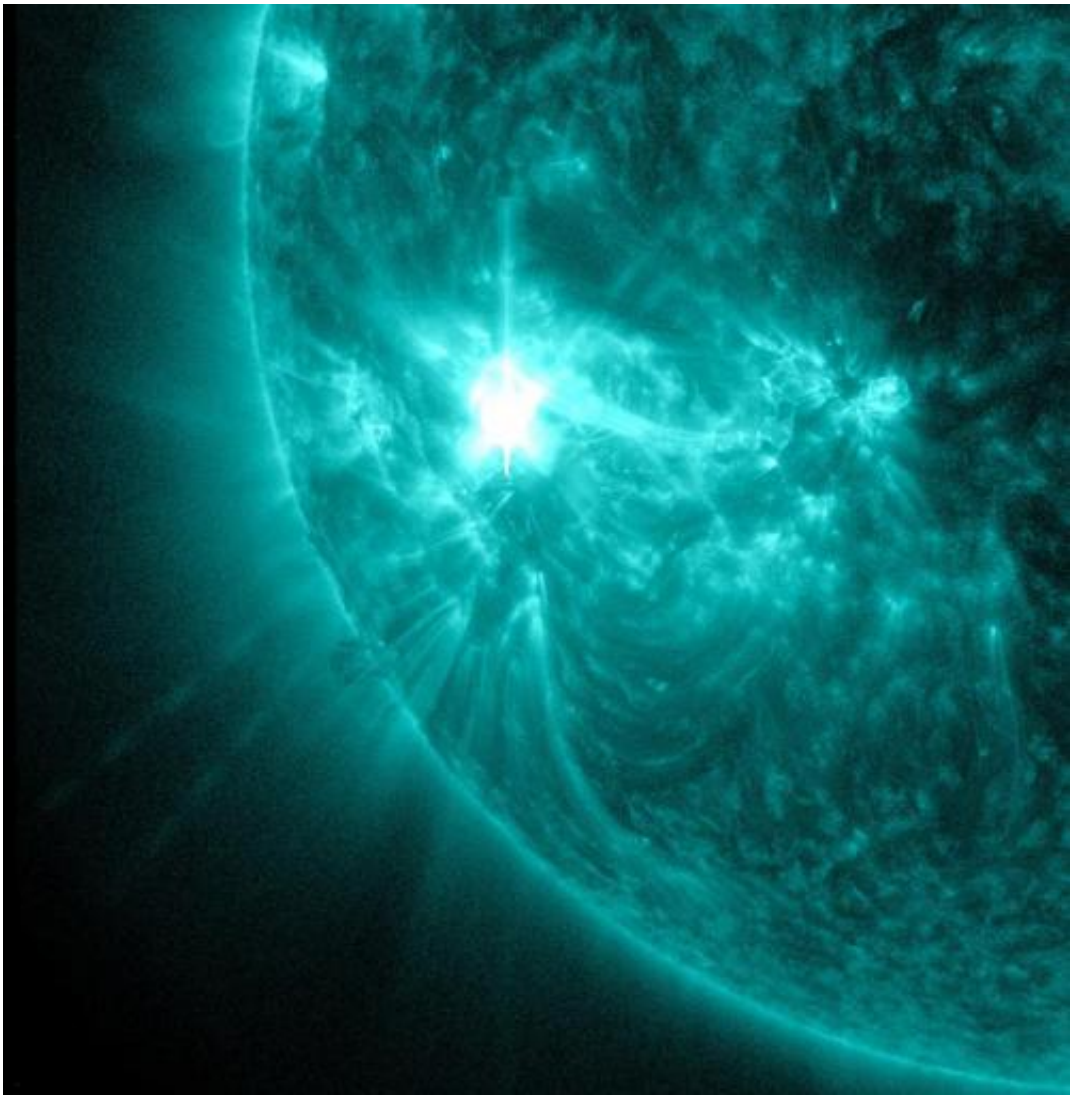
SDO sees returning sunspot produce mid-level flare

November 17 2014



NASA's Solar Dynamics Observatory captured this image of a mid-level solar flare, an M5.7 on Nov. 16, 2014. The image shows a subset of extreme ultraviolet light that highlights the very hot material in flares and which is

typically colorized in teal. Credit: NASA/SDO

The sun emitted a mid-level solar flare, peaking at 12:48 p.m. EST on Nov. 16, 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 http://spaceweather.gov, the U.S. government's official source for space weather forecasts, alerts, watches and warnings.

This flare emerged from an active region that rotated over the left side of the sun on Nov. 13, 2014. This active region previously rotated across the front of the sun during the last two weeks on October, when it was the largest sunspot in 24 years. This time around it is one third of its previous size.

This flare is classified as an M5.7-class flare. M-class flares are a tenth the size of the most intense flares, the X-class flares. The number provides more information about its strength. An M2 is twice as intense as an M1, an M3 is three times as intense, etc.

Provided by NASA's Goddard Space Flight Center