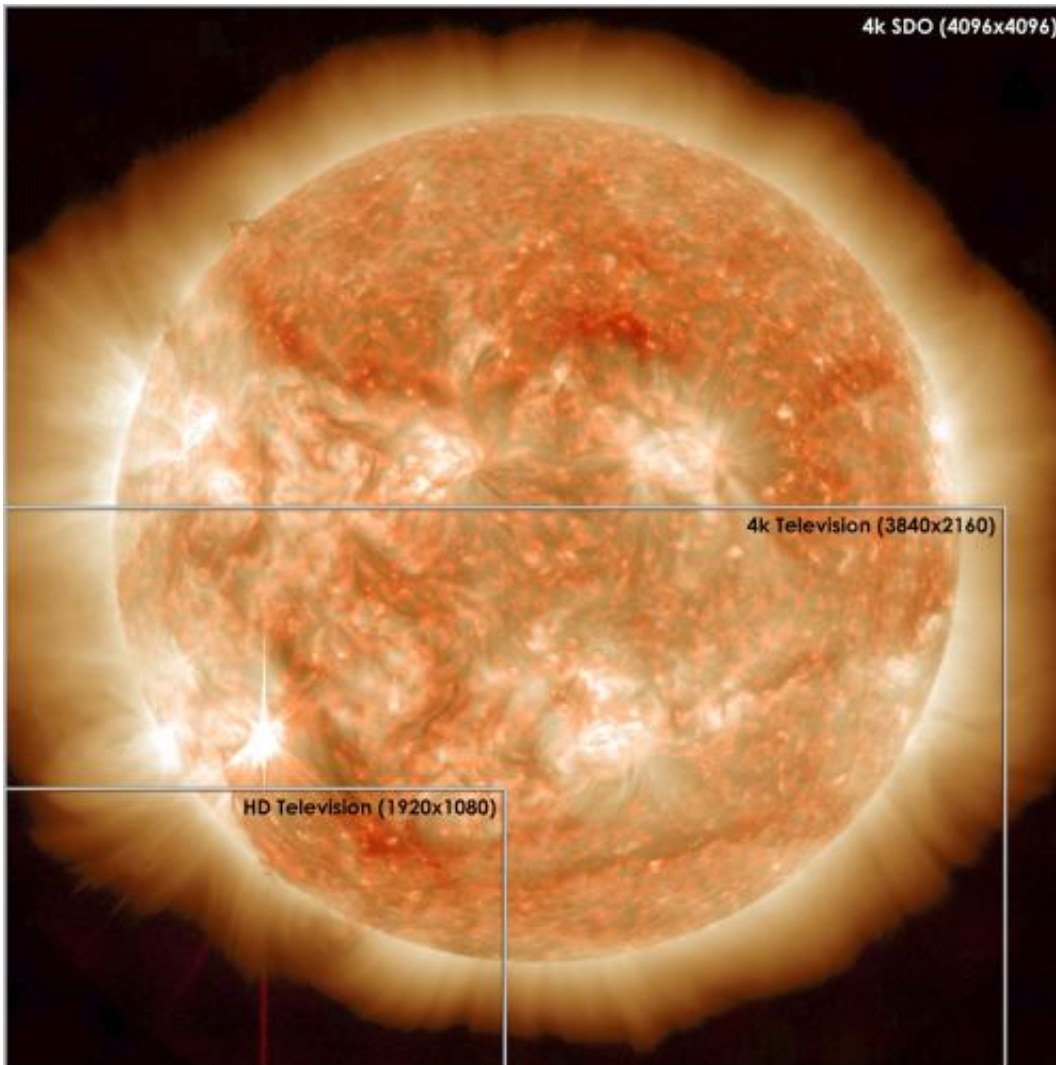


NASA's SDO has plenty of content for ultra HD TVs

January 14 2013, by Karen C. Fox



Ultra high-definition TVs – sold for the first time in late 2012 and early 2013 – have four times the pixels of a current high-definition TV, but still have fewer pixels than the images from NASA's Solar Dynamics Observatory (SDO). This image from SDO was captured on Nov.13, 2012, and shows star-shaped solar

flare in the lower left-hand corner. Credit: NASA/SDO

A new kind of television made headlines at the 2013 annual Consumer Electronics Show in early January, 2013 – Ultra High Definition TV. With four times as many pixels as a current high definition (HD) TV, viewers at the show reported being impressed with how crisp and vibrant the pictures appear.

This comes as no surprise to scientists who study the sun using NASA's Solar Dynamics [Observatory](#) (SDO). Its Atmospheric Imaging Assembly (AIA) and Helioseismic Magnetic Imager (HMI) instruments together capture an image almost once a second that is twice again as large as what the ultra high-def screens can display. Such detailed pictures show features on the sun that are as small as 200 miles across, helping researchers observe such things as what causes giant eruptions on the sun known as coronal [mass ejections](#) (CME) that can travel toward Earth and interfere with our satellites.

One concern about the new TVs? There's not yet enough content to make use of the opulent amount of pixels available. SDO can help with that. As of December, 2012, the telescope had captured 100 million images, which—if watched at a standard video rate of 30 frames per second—would mean a viewer could watch eight hours of sun movies a day for almost four months.

More information: For HD imagery from NASA's SDO mission, visit: www.nasa.gov/sdo

Provided by NASA

Citation: NASA's SDO has plenty of content for ultra HD TVs (2013, January 14) retrieved 23 June 2024 from <https://phys.org/news/2013-01-nasa-sdo-plenty-content-ultra.html>

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