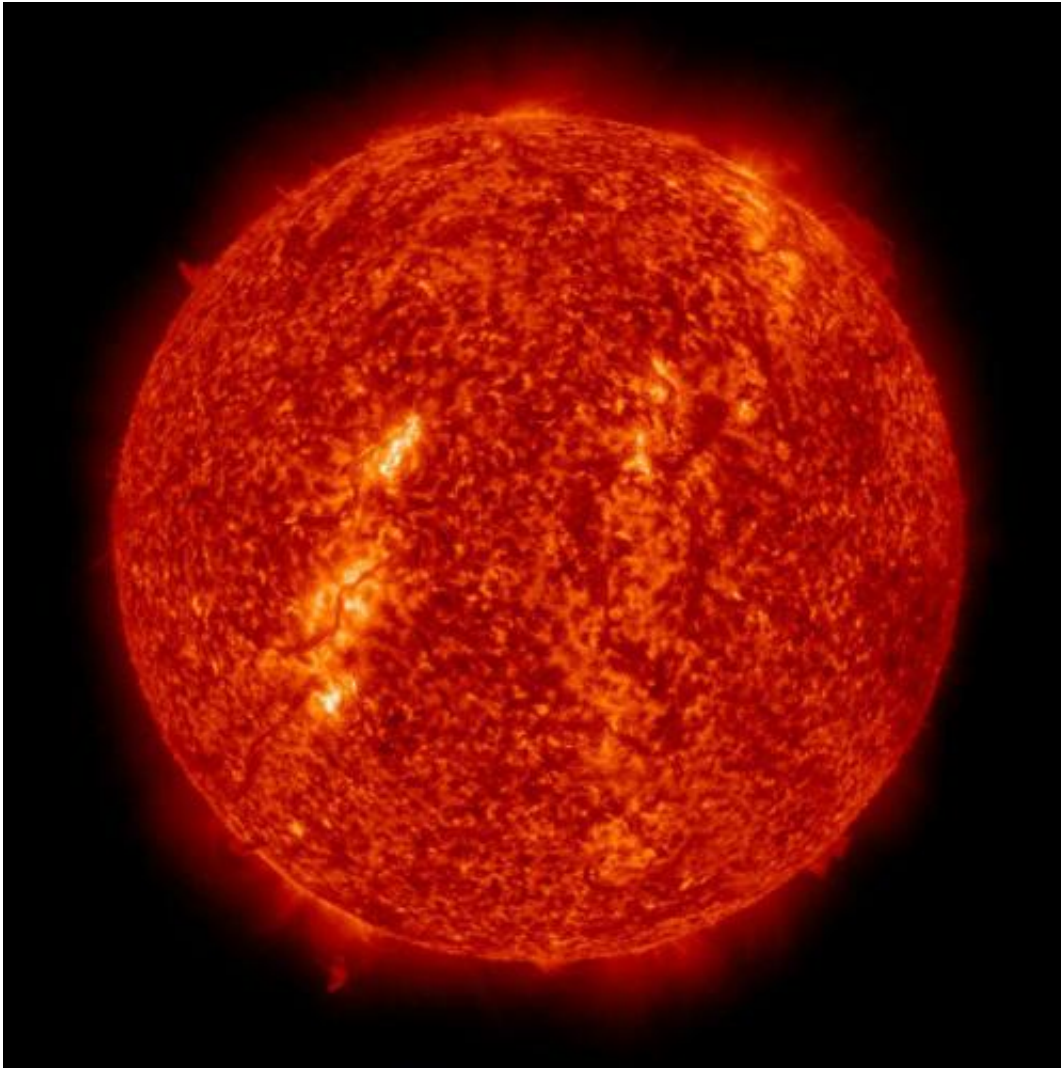


Solar Dynamics Observatory goes for a spin

April 9 2012, By Karen C. Fox



In this screen capture from the video, the sun appears to have rolled 90 degrees counter-clockwise (North is to the left). In actuality, it was the SDO spacecraft doing the rolling. Credit: NASA/SDO/AIA

(Phys.org) -- On April 4, 2012, NASA's Solar Dynamics Observatory (SDO) did a 360. It rolled completely around its axis – something it does twice a year. In this movie, the dizzying view looks as if the sun went for a spin, but, of course, it stayed perfect still while SDO did the turning.

This maneuver helps the Helioseismic and Magnetic Imager (HMI) instrument, one of three instruments onboard [SDO](#), take measurements of the solar limb to study the shape of the sun. The roll helps scientists remove optical distortions from the images and to precisely determine the boundaries of the sun's horizon, or "limb". Accumulated over time, such data shows whether the sun's sphere changes in concert with the 11-year solar cycle, during which the sun moves through periods of greater and lesser activity as evidenced by the changing frequency of giant solar eruptions.

This was SDO's sixth roll.

Provided by JPL/NASA

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