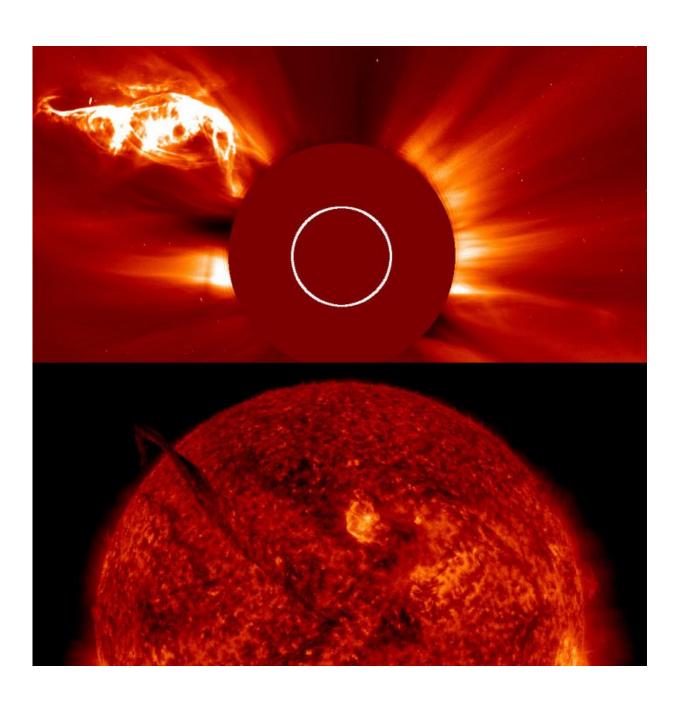


Video: An enormous "plasma snake" erupts from the Sun

May 1 2015, by Jason Major





SOHO LASCO C2 (top) and SDO AIA 304 (bottom) image of a solar filament detaching on April 28-29, 2015

Over the course of April 28–29 a gigantic filament, briefly suspended above the surface of the sun, broke off and created an enormous snakelike eruption of plasma that extended millions of miles out into space. The event was both powerful and beautiful, another demonstration of the incredible energy and activity of our home star... and it was all captured on camera by two of our finest sun-watching spacecraft.

Made from data acquired by both NASA's Solar Dynamics Observatory (SDO) and the joint ESA/NASA SOHO spacecraft, the video was compiled by astronomer and sungrazing comet specialist Karl Battams. It shows views of the huge filament before and after detaching from the sun, and gives a sense of the enormous scale of the event.

At one point the plasma eruption spanned a distance over 33 times farther than the moon is from Earth!

Filaments are long channels of solar material contained by magnetic fields that have risen up from within the sun. They are relatively cooler than the visible face of the sun behind them so they appear dark when silhouetted against it; when seen rising from the sun's limb they look bright and are called prominences.

When the <u>magnetic field lines</u> break apart, much of the material contained within the filaments gets flung out into space (a.k.a. a CME) while some gets pulled back down into the sun. These events are fairly common but that doesn't make them any less spectacular!



Source: <u>Universe Today</u>

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