

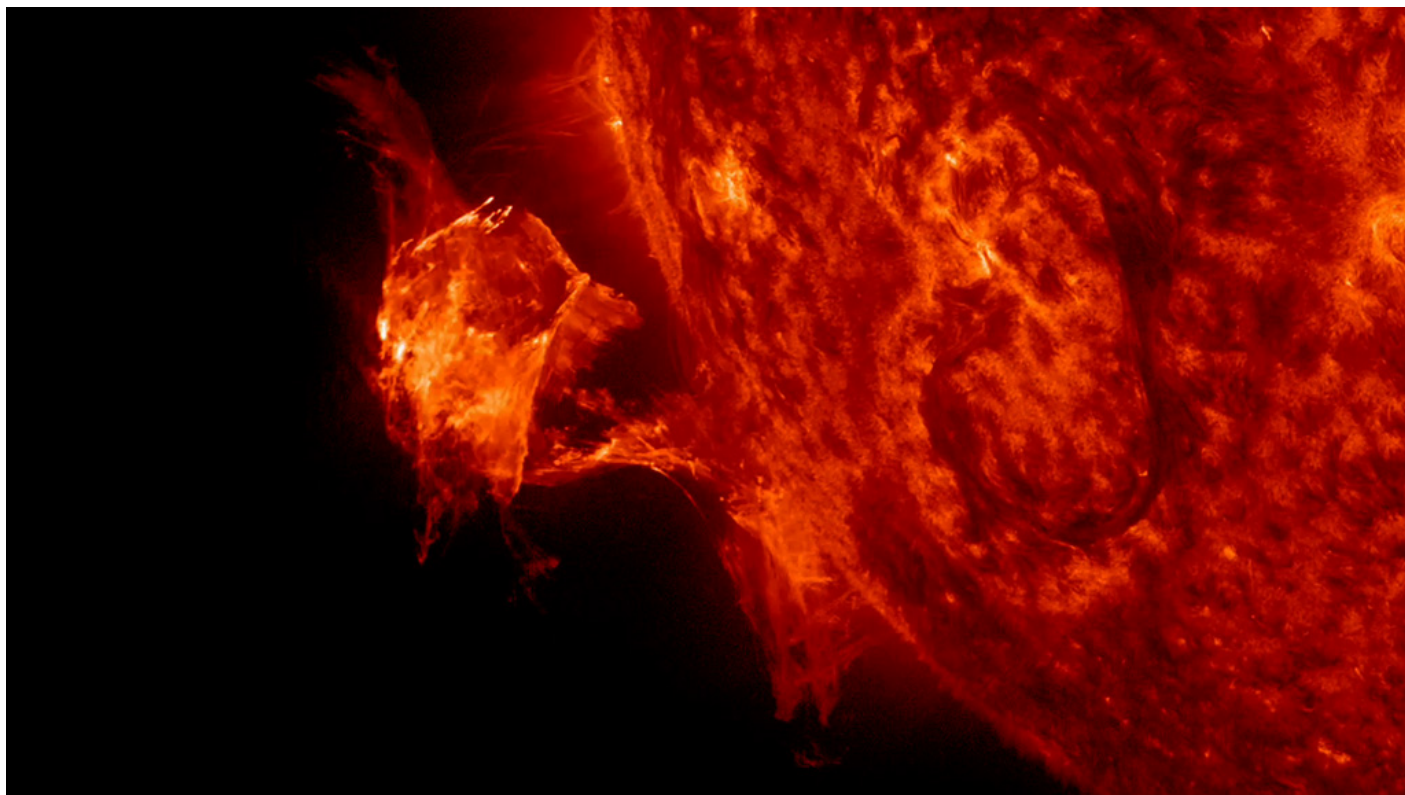
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ID: 11696

Twisted Solar Blob

Story by Leigh Cooper (/cgi-bin/search.cgi?person=1728) Released on December 25, 2014

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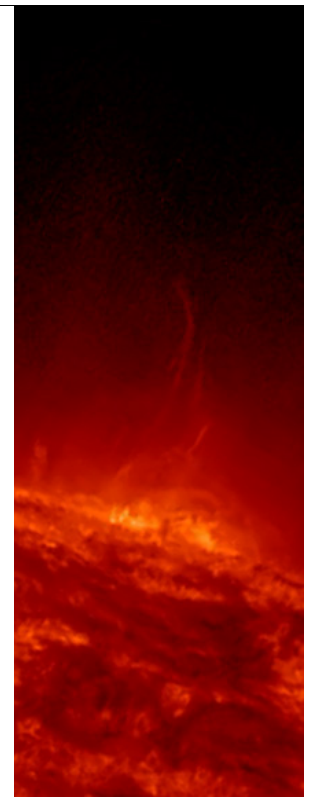


Plasma escapes the sun's web of magnetic fields in a fiery, blobby eruption.

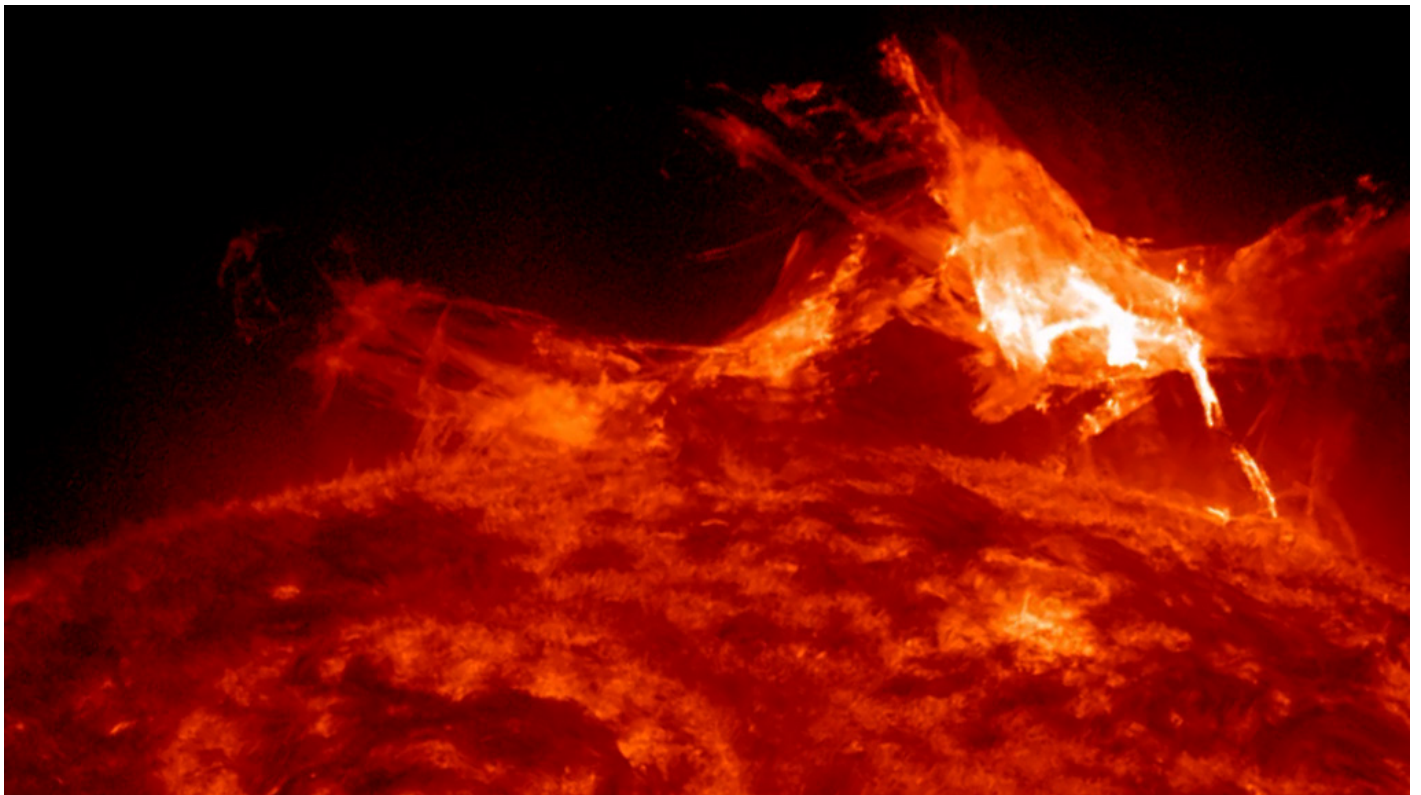
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NASA's Solar Dynamics Observatory (SDO) monitors the sun 24/7, recording its outbursts in high-definition. On September 26, 2014, the spacecraft captured a twisted blob of plasma erupting in a dramatic liftoff. The plasma, which is ionized helium cooked to over 100,000 degrees Fahrenheit, corkscrewed outward along the path of the sun's complex magnetic field. Like densely looped carpeting, magnetic field lines crisscross through the sun's surface and outer layers. This weave usually prevents plasma from escaping. But if the magnetic field lines become unsteady or suddenly align into new patterns, a filament can whip into space. Watch the video to see the event unfold.

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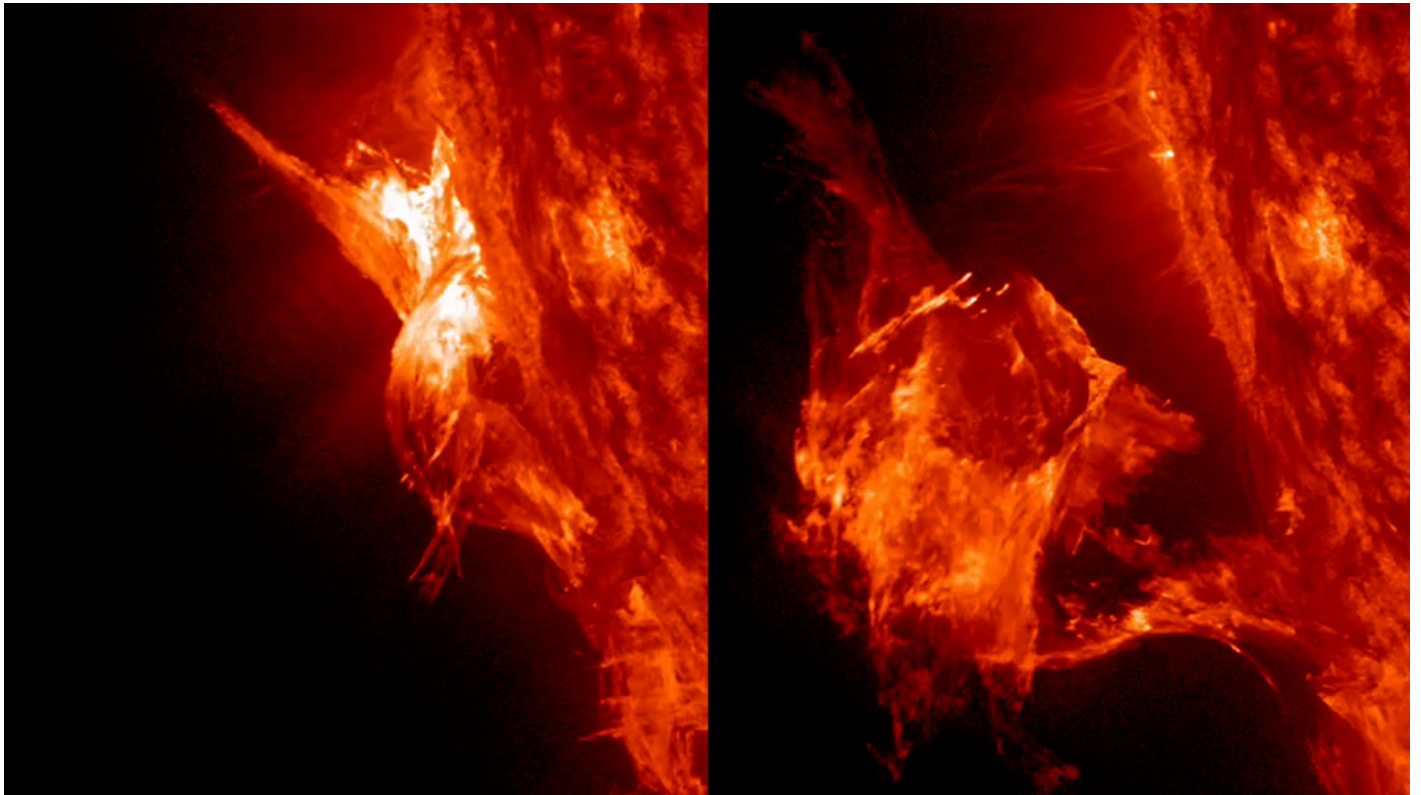


This time-lapse video shows views of the eruption taken over a two-hour period by NASA's SDO spacecraft.

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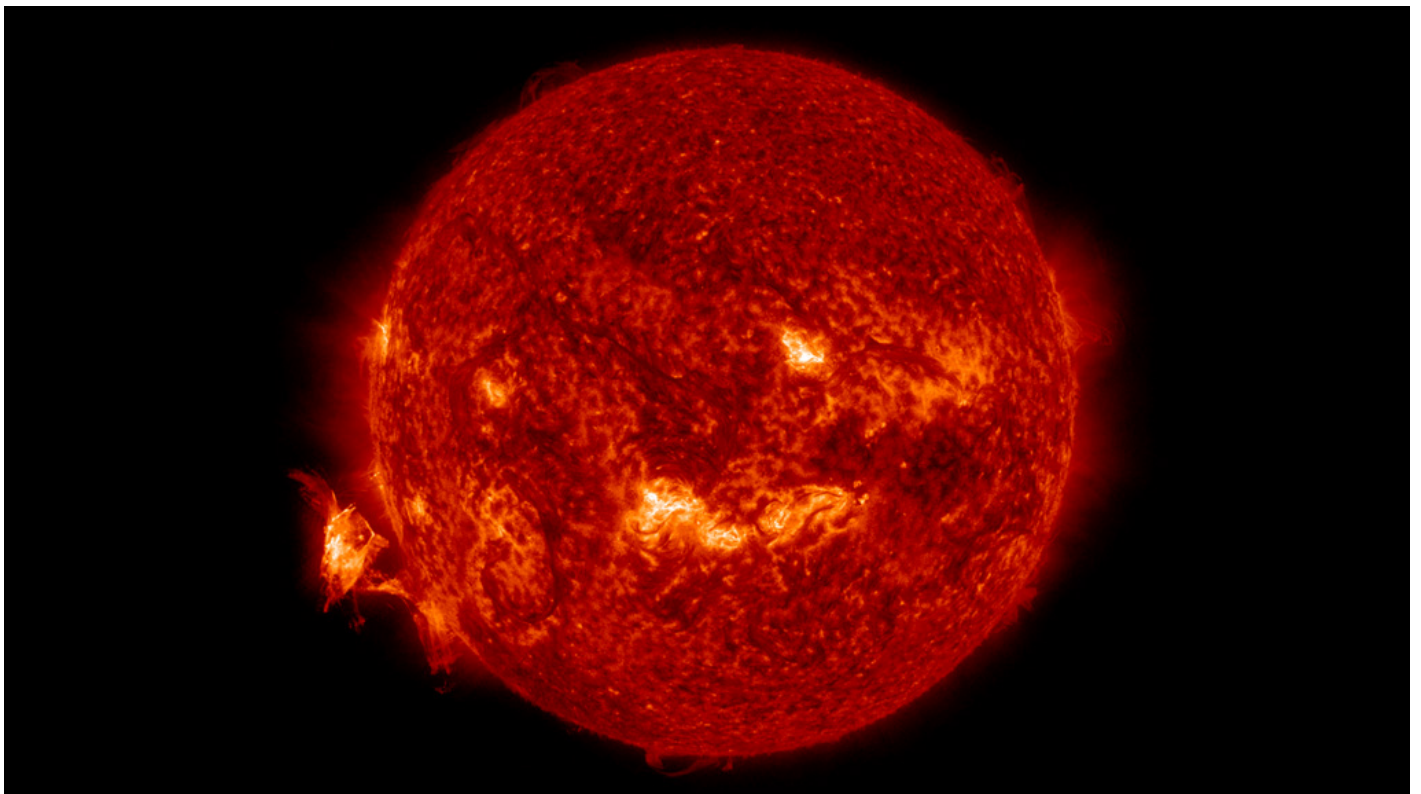
The arching plume of plasma took off like a buoyant hot balloon traveling at speeds of more than 1 million mph.

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As the plasma separated from the sun, the blob was wide enough to span 10 Earths.

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More than 1 billion tons of plasma jetted off the sun's lower left limb.

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Story Credits

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