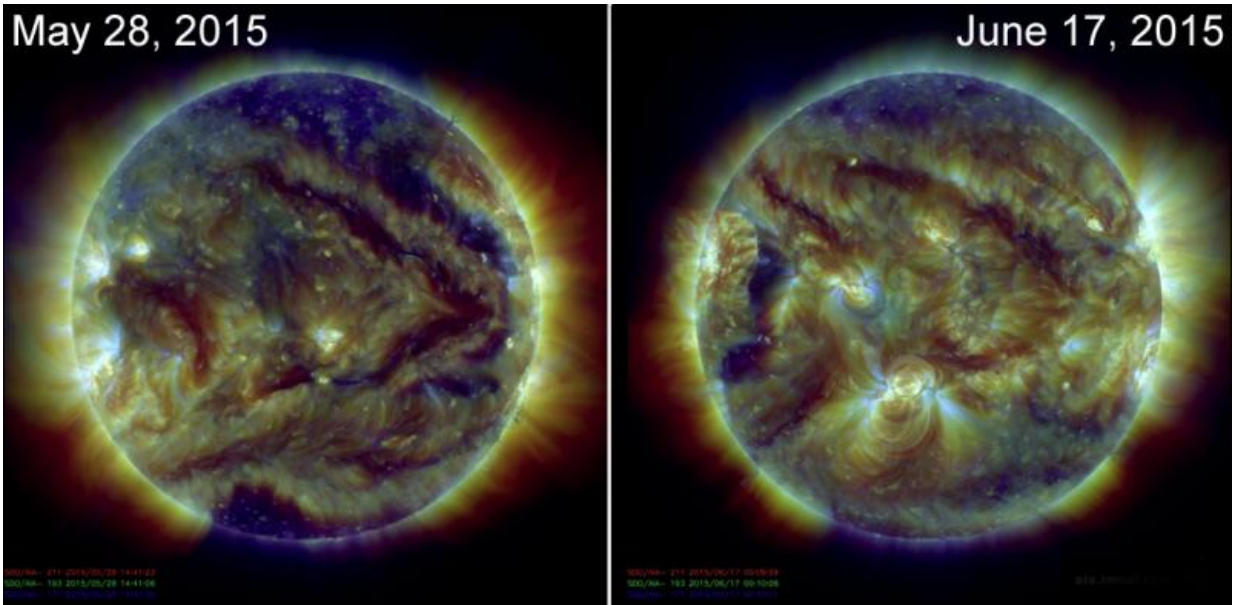


# Still a filament arrow?

June 22 2015, by Holly Zell



Comparison of solar filaments that appeared to form an arrow (left), as seen on May 28, 2015, by NASA's Solar Dynamics Observatory. On the right is what's left of the filaments, after transitioning around the sun. SDO captured the image on the right on June 17, 2015. Credit: NASA/SDO

On May 28, 2015 (above left), the sun, as seen by NASA's Solar Dynamics Observatory, showed a pair of filaments in the form of an arrow. The filaments appeared to remain stable as they rotated around to the far side of the sun. It takes approximately 25 days for the equator of the sun to complete a full revolution, though, because of its composition of plasma and gases, different areas of the sun rotate at different speeds.

At its poles the sun rotates once every 36 days.

We decided to check on the filaments when they rotated back to the face of the [sun](#). Viewed on June 17, 2015 (above, right), the arrow is still apparent, but in a less defined manner. Another filament has also appeared in the upper left of the image on the right.

Filaments are the dark features suspended above the sun's surface by its [magnetic field](#). When these occur on the limbs of the sun, they are called a prominence, and appear as bright features suspended within the sun's atmosphere, or corona.

A filament can form over timescales of about a day, and stable filament may persist in the corona for several months, looping hundreds of thousands of miles into space. Scientists are still researching how and why they form.

Will what's left of the [filament](#) arrow make it around the sun again? Check back in 3 weeks to find out.

Provided by NASA

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