

# A new sungrazing comet may brighten in the evening sky

February 25 2015, by Bob King

---

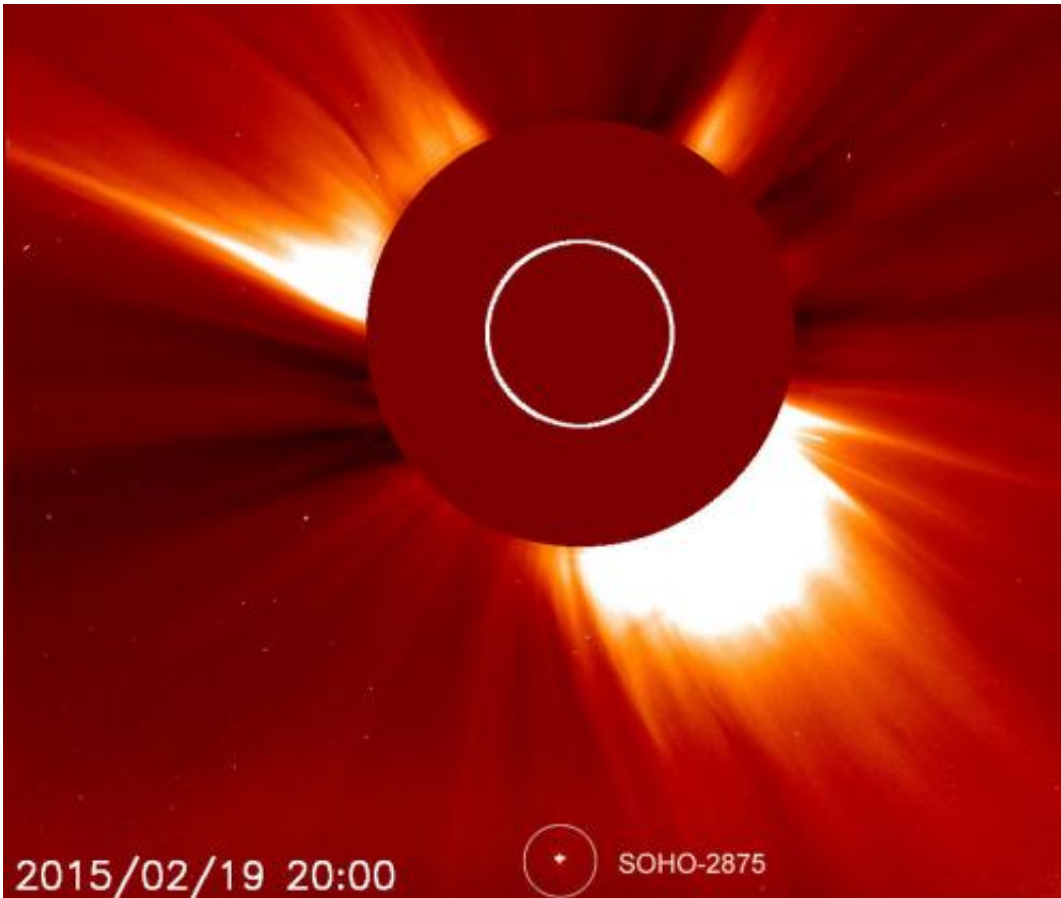


Photo taken at 20:00 UT (2 pm. CST) Feb. 19 with the SOHO C2 coronagraph, a device that blocks the Sun, allowing a view of the area close by. A faint tail can be seen just below the comet's bright head. Credit: NASA/ESA

A newly-discovered comet may soon become bright enough to see from

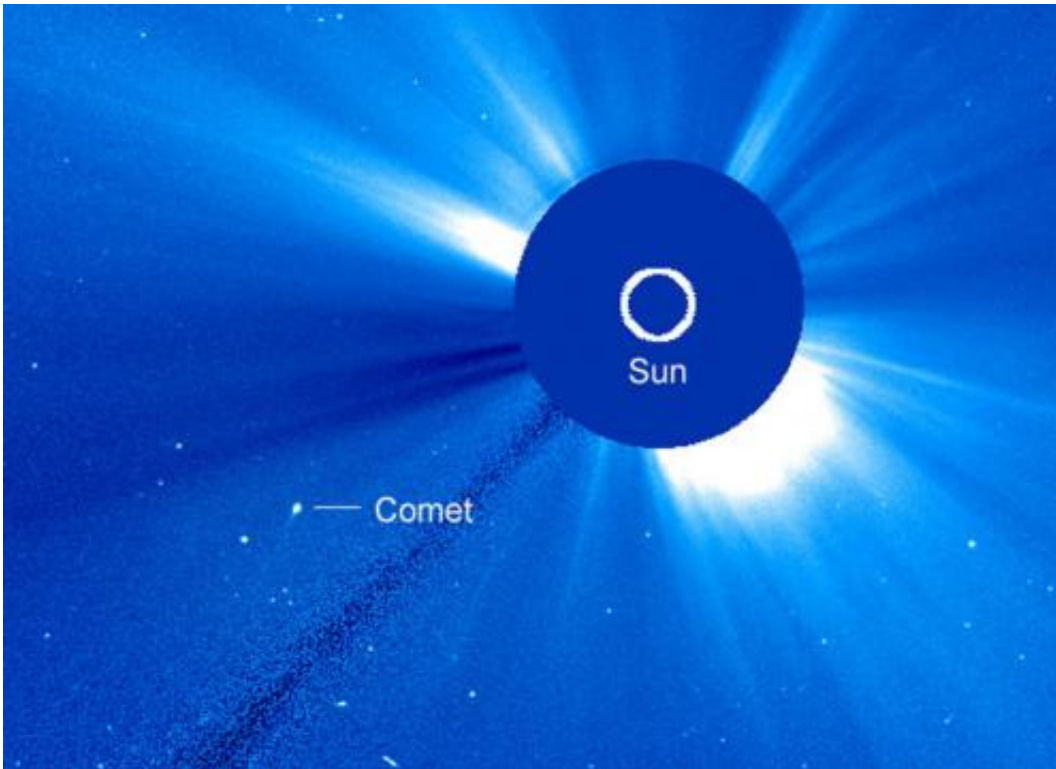
a sky near you. Originally dubbed SOHO-2875, it was spotted in photos taken by the Solar and Heliospheric Observatory (SOHO) earlier this week. Astronomer Karl Battams, who maintains the Sungrazer Project website, originally thought this little comet would dissipate after its close brush with the Sun. To his surprise, it outperformed expectations and may survive long enough to see in the evening sky.

Most sungrazing comets discovered by SOHO are members of the Kreutz family, a group of icy fragments left over from the breakup of a single much larger comet centuries ago. We know they're all family by their similar orbits. The newcomer, SOHO's 2,875th comet discovery, is a "non-group" comet or one that's unrelated to the Kreutz family or any other comet club for that matter. According to Battams these mavericks appear several times a year. As of today (Feb. 24) its official name is C/2015 D1 (SOHO).

What's unusual about #2,875 is how bright it is. At least for now, it appears to have survived the Sun's heat and gravitational tides and is turning around to the east headed for the evening sky. Before it left SOHO's field of view on Feb. 21, the comet was still around magnitude +4-4.5.

No one can say for sure whether it has what it takes to hang on, so don't get your hopes up just yet. Battams and others carefully calculated the comet's changing position in the SOHO images and sent the data off to the Minor Planet Center, which today published an orbit.

Based on this preliminary orbit, I've plotted SOHO-2875's path for the next couple weeks as it tracks up through Pisces and Pegasus during the early evening hours. Given that it's probably no brighter than magnitude +6 at the moment and very low in the west at dusk, it may still be swamped in twilight's glow.



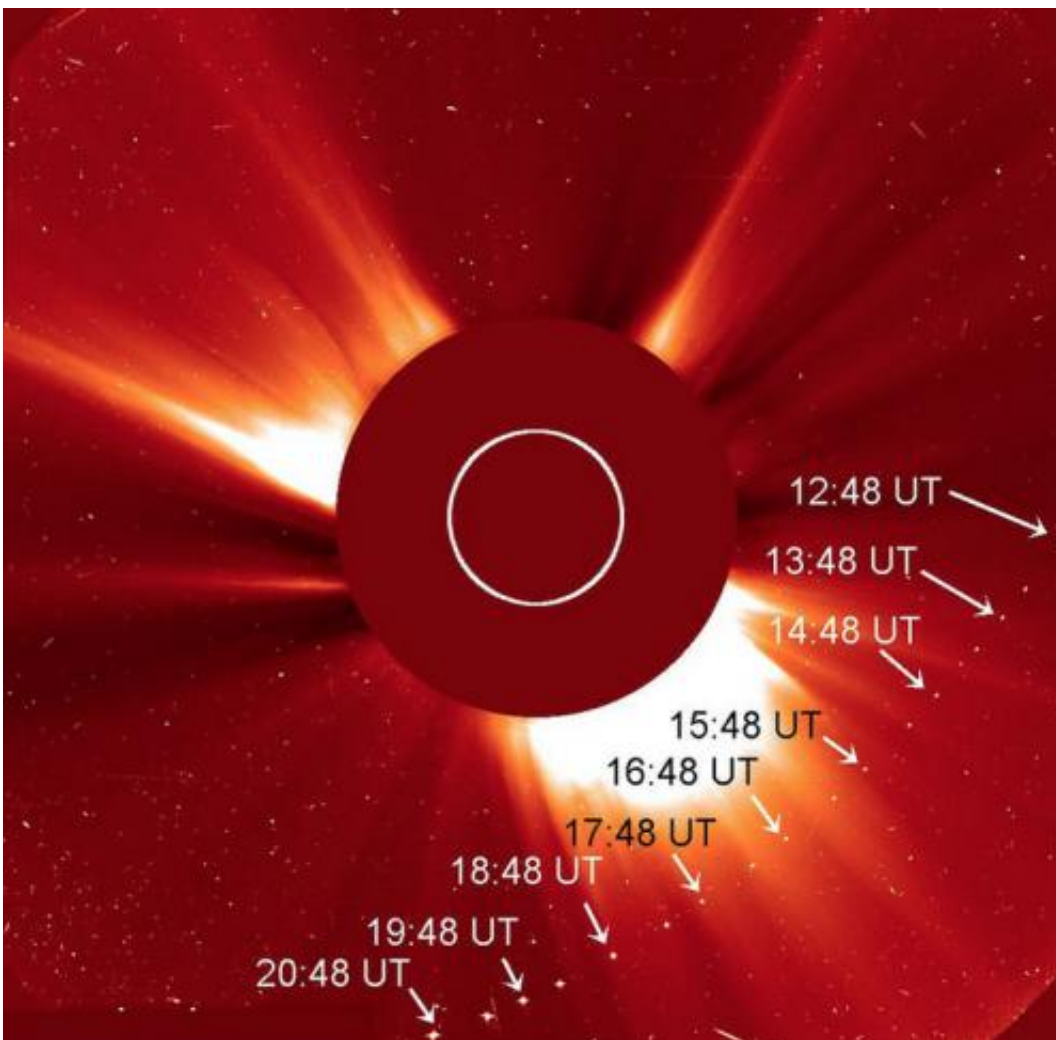
C/2015 D1 (SOHO) seen in a second, wide-field coronagraph called LASCO C3 at 2:42 a.m. Feb. 20. Since then it's well to the east of the Sun into the evening sky. Credit: NASA/ESA

Barring an unexpected outburst, there's no question that the comet will fade in the coming days as its distance from both the Earth and Sun increase. Right now it's 79 million miles from us and 28 million miles from the Sun. That puts it about 8 million miles closer to the Sun than the planet Mercury.

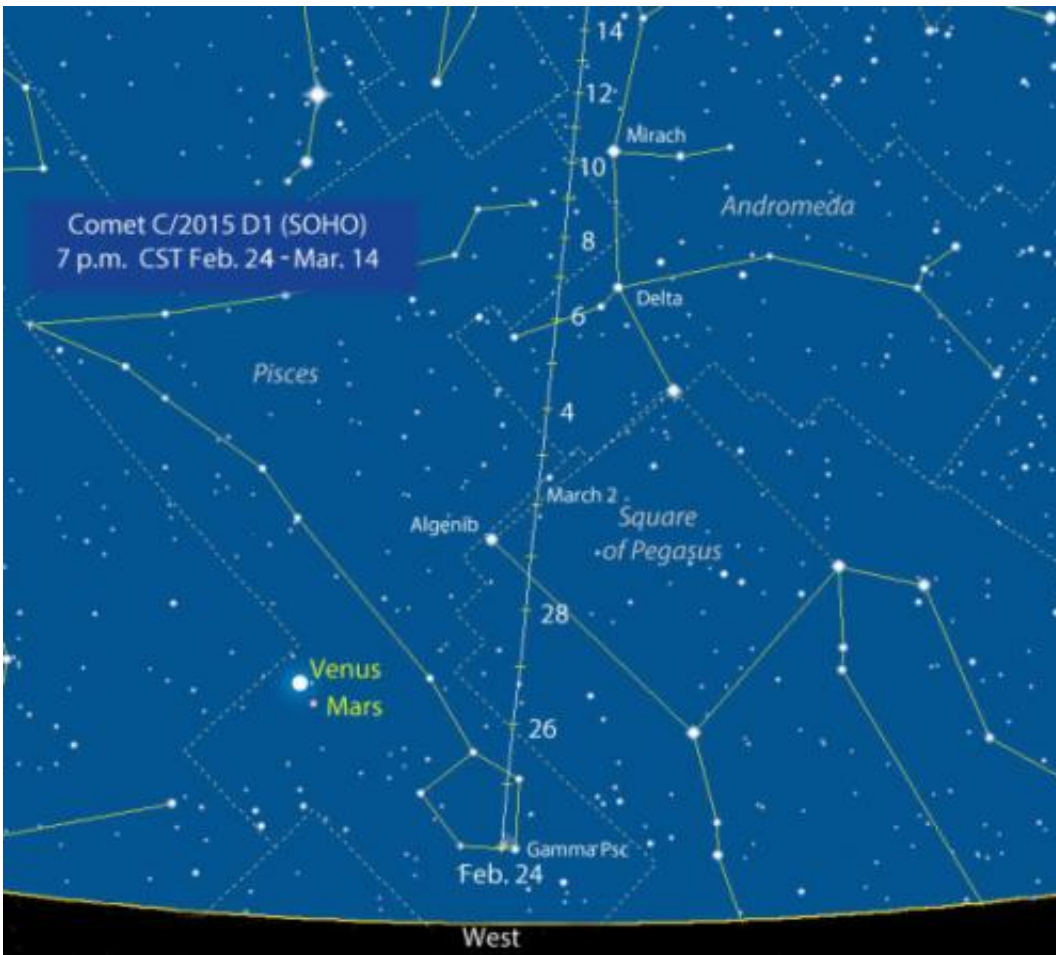
I drew up the chart for about 75 minutes after sunset in late twilight. Keep in mind that since the comet's positions were determined via spacecraft imagery, which isn't as precise as photographing it from ground observatories, its orbit is preliminary. That means it may not be on the precise path shown on the map. Be sure you search up-down and

right-left of the plotted locations.

It's also very possible the [comet](#) is in the process of disintegration after perihelion passage, so it may not be a dense, compact object but rather a diffuse cloud of glowing dust. Will it go the way of Comet ISON and fade away to nothing? Who knows? I sure don't but can't wait to find out what it's up to the next clear night.



Composite of Comet SOHO-2875 crossing the C2 coronagraph field Feb. 19.  
Credit: NASA/ESA/Barbara Thompson



Newly-named Comet C/2015 D1 (SOHO) will share the sky with Venus and Mars at dusk. For the next few nights it will be quite low and nearly impossible to see. Its situation improves over time as the comet moves rapidly northward into Pegasus and Andromeda. Tick marks show the comet's position each evening. Stars are shown to magnitude +6.5. Created with Chris Marriott's SkyMap software

Source: [Universe Today](#)

Citation: A new sungrazing comet may brighten in the evening sky (2015, February 25) retrieved 10 April 2024 from <https://phys.org/news/2015-02-sungrazing-comet-brighten-evening-sky.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.