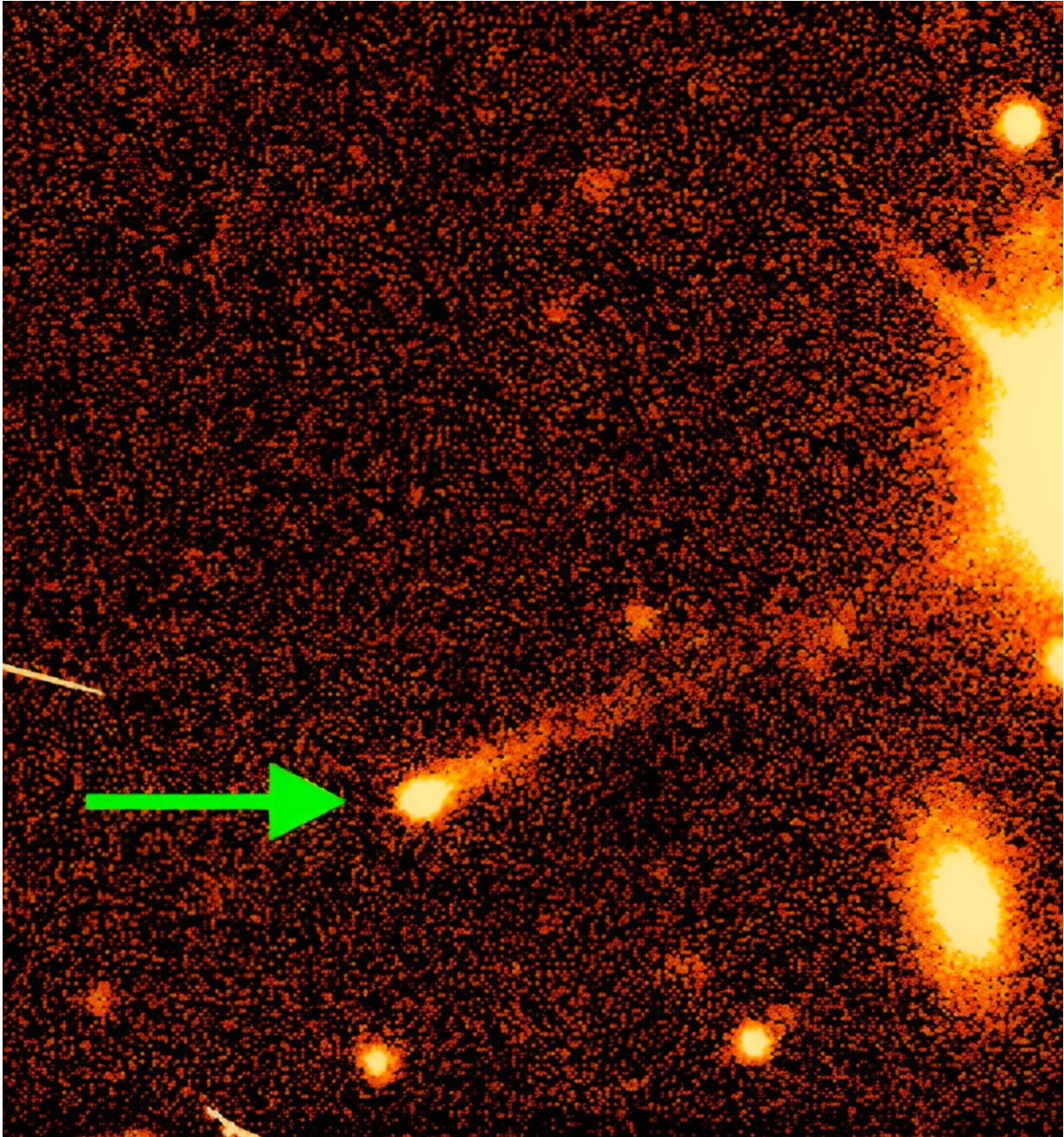


NASA volunteers find 15 rare 'active asteroids'

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Volunteers from the NASA's "Active Asteroids" Citizen Science project identified a comet tail coming from Asteroid 2015 VA108, one of the active asteroids spotted by volunteers from NASA's "Active Asteroids" Citizen Science project. The object, indicated by the green arrow, orbits entirely within the main asteroid belt (located between Mars and Jupiter), but sports a tail like a comet. Credit: Colin Orion Chandler/University of Washington

Some extraordinary asteroids have "activity"—comet-like tails or envelopes of gas and dust. NASA's [Active Asteroids project](#) announced the discovery of activity on 15 asteroids, challenging conventional wisdom about the solar system.

To find these 15 rare objects, more than 8,000 volunteers combed through 430,000 images from the Dark Energy Camera (DECam) on the Victor M. Blanco telescope in Chile. A [paper](#) presenting the results, now published in *The Astronomical Journal*, includes nine [volunteers](#) among the co-authors.

"For an amateur astronomer like me it's a dream come true," said volunteer Virgilio Gonano from Udine, Italy. "Congratulations to all the staff and the friends that also check the images."

Studying these rare active asteroids teaches scientists about the formation and evolution of the solar system, including the origins of water here on Earth. These objects may also aid future space exploration because the same ices that cause comet-like tails can power rockets or provide breathable air.

"I have been a member of the Active Asteroids team since its first batch of data," said volunteer Tiffany Shaw-Diaz from Dayton, Ohio. "And to say that this project has become a significant part of my life is an understatement. I look forward to classifying subjects each day, as long as time or health permits, and I am beyond honored to work with such esteemed scientists on a regular basis."

More information: Colin Orion Chandler et al, The Active Asteroids

Citizen Science Program: Overview and First Results, *The Astronomical Journal* (2024). [DOI: 10.3847/1538-3881/ad1de2](https://doi.org/10.3847/1538-3881/ad1de2)

Provided by NASA

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