

# Seneca Professor and astronomer discovers new asteroid

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Nebula vdb 152, as photographed by Paul Mortfield.

Astronomer and Seneca Polytechnic Professor Paul Mortfield has discovered a fourth asteroid, as confirmed by the International Astronomy Union's Minor Planet Center at the Harvard & Smithsonian Center for Astrophysics.

Mr. Mortfield's initial discovery of Asteroid ID: 588802 was made on Oct. 18, 2008, while he was imaging the night sky from the Sierra Nevada Mountains in California, using his remote-controlled telescope.

After tracking the asteroid for three nights, Mr. Mortfield noticed that the initial orbit showed something odd, insinuating that the asteroid could be much further than the asteroid belt, which is where his previous asteroids were discovered.

Over the next 14 years, he continued to regularly check if any observatories had flagged the asteroid. Recently, several larger telescopes in Hawaii, Chile, Arizona and New Mexico detected the object, and now with enough data, point back to his initial observations.

The confirmed asteroid lies near the planet Jupiter and measures approximately 7.5 kilometres in size at a current distance of approximately 900 million kilometres.

"This discovery is really unique for me," Mr. Mortfield says. "While my other asteroid discoveries all orbit in the asteroid belt, this one is much farther out near Jupiter. It is part of a class of Trojan asteroids that move just ahead of Jupiter in its orbit around the Sun with an almost 12-year orbit at an average distance of 800 million kilometres from Earth."

To receive confirmation, other observatories around the world must record the asteroid during their observations and submit the data to the Minor Planet Center. As per protocol, the discoverer of the asteroid is permitted to name it.

Mr. Mortfield, who named his first asteroid after his wife, Karen, is working on a few possibilities to present to the International Astronomy Union's asteroid naming committee.

Currently, Professor Mortfield is working on and creating global citizen science projects that can be used for science education and scientific discoveries.

Asteroid information and data tracking is funded by NASA and operated by the International Astronomy Union's Minor Planet Center at the Harvard & Smithsonian Center for Astrophysics. To view Professor Mortfield's latest asteroid discovery, click [here](#).





Mr. Mortfield and Seneca students listening in on a passing satellite.

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