

Public invited to test new tool to study earth using photos taken by International Space Station astronauts

September 29 2017, by Susan Murph

CosmoQuest's Image Detective, a NASA-funded citizen science project, invites the public to identify Earth features in photographs taken by astronauts from the International Space Station (ISS).

Citizen scientists are asked to help identify geographic features (natural or human-made) in astronaut photographs and then determine the location on Earth where the photo is centered. CosmoQuest is led by principal investigator Dr. Pamela L. Gay from the Astronomical Society of the Pacific (ASP).

You can become part of Image Detective by visiting <http://cosmoquest.org/ImageDetective>.

"The [astronauts'](#) photos of Earth are visually stunning, but more than that, they can be used to study our changing Earth," says Dr. Gay, the Director of Technology and Citizen Science at the ASP. "From erupting volcanoes, to seasonal flooding, these images document the gradual changes that happen to our landscape. The trick is, we need to make these images searchable, and that means taking the time to sort through, analyze, and label (add metadata) the unidentified images within the database of 1.5 million plus photos."

Originally developed by NASA Johnson Space Center (JSC) [science](#) experts within the JSC Astromaterials Research and Exploration Science

(ARES) Division, Image Detective's upgrade provides new and improved options for [citizen](#) scientists to help enhance NASA's growing online database of astronaut imagery, also referred to as Crew Earth Observations (CEO) imagery.

Image Detective lets anyone with an Internet connection advance the usefulness of NASA's vast catalogue of astronaut imagery. Since construction began in 2000, more than 200 people from 18 nations have visited the International Space Station (ISS). Orbiting just 250 miles above the Earth, this platform provides astronaut photographers an amazing platform for imaging our planet. As part of their day-to-day work on the ISS, astronauts are asked by the ESRS team at Johnson Space Center to take numerous photos of our planet Earth's land surface, oceans, and atmosphere, including impressive auroral displays. Crews also take images of other solar system bodies, such as the Moon, planets, and stars. These images now need carefully labeled.

Image Detective spreads the significant work necessary to label all of the images out to citizen scientists across the world. "This is a unique, powerful, and beautiful image data set that has already yielded excellent research science. But the data set needs the many eyes and minds of citizen scientists to reach its full potential as a publicly available, searchable catalog," said Dr. Jennifer Grier, a Senior Scientist and Senior Education and Communication Specialist at Planetary Science Institute (PSI) and CosmoQuest's lead support scientist. "With the additions that [citizen scientists](#) as detectives can make, professional research scientists will be able to conduct more research into our changing world, and do so much more effectively."

Your efforts can enhance NASA's database of images taken by International Space Station Astronauts!

Provided by Astronomical Society of the Pacific

Citation: Public invited to test new tool to study earth using photos taken by International Space Station astronauts (2017, September 29) retrieved 26 April 2024 from

<https://phys.org/news/2017-09-tool-earth-photos-international-space.html>

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