

PUBLIC PARTICIPATION IN EARTH SCIENCE FROM THE ISS

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The Gateway to Astronaut Photography of Earth (GAPE) is an online database (<http://eol.jsc.nasa.gov>) of terrestrial astronaut photography that enables the public to experience the astronaut's view from orbit. This database of imagery includes all NASA human-directed missions from the Mercury program of the early 1960's to the current International Space Station (ISS). To date, the total number of images taken by astronauts is 1,025,333. Of the total, 621,316 images have been "cataloged" (image geographic center points determined and descriptive metadata added). The remaining imagery provides an opportunity for the citizen-scientist to become directly involved with NASA through cataloging of astronaut photography, while simultaneously experiencing the wonder and majesty of our home planet as seen by astronauts on board the ISS every day.

We are currently developing a public cataloging interface for the GAPE website. When complete, the citizen-scientist will be able to access a selected subset of astronaut imagery. Each candidate will be required to pass a training tutorial in order to receive certification as a cataloger. The cataloger can then choose from a selection of images with basic metadata that is sorted by difficulty levels. Some guidance will be provided (template/pull down menus) for generation of geographic metadata required from the cataloger for each photograph. Each cataloger will also be able to view other contributions and further edit that metadata if they so choose. After the public inputs their metadata the images will be posted to an internal screening site. Images with similar geographic metadata and centerpoint coordinates from multiple catalogers will be reviewed by NASA JSC Crew Earth Observations (CEO) staff. Once reviewed and verified, the metadata will be entered into the GAPE database with the contributors identified by their chosen usernames as having cataloged the frame.