



Barbara A.

MIKULSKI ARCHIVE OF SPACE TELESCOPES

# Citizen Engagement and the Archive

Karen Levay

Past and current activities and plans for the future

# The Hubble Legacy Archive

- Hidden Treasures
- Lab Exercises
- Pictures of the day

# MAST / EPO

- OPO staff determine and provide metadata for Hubble Press Release images. MAST provides Virtual Observatory Compliant web services.
- Subset completed.
- Available via VAO Discovery Portal and MAST Discovery Portal

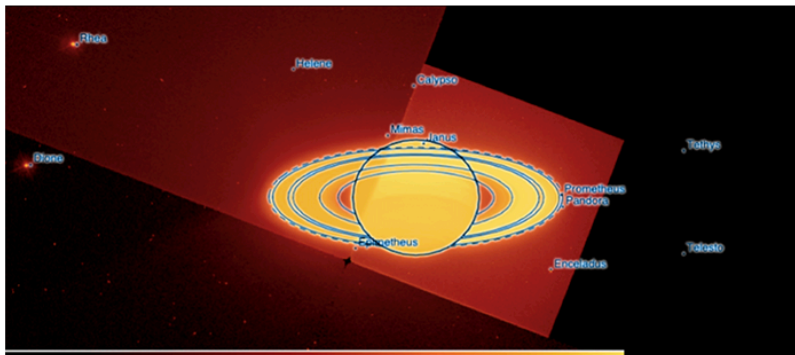
# Hubble Archive Updating Infrastructure

- MAST Discovery Portal
  - Infrastructure more easily adapted to public browsing and to citizen-science requirements
- Working toward and on-line cache rather than On-The-Fly-Reprocessing
- Exploring new storage solutions
- While improving standard archive activities, the new infrastructure will facilitate data handling for citizen science projects.

# The archive can provide infrastructure for your Citizen Science Projects

## The Planet Pipeline: enabling data mining and citizen science with Hubble images of the Solar System

Max Mutchler, Michael H. Wong, Justin Higgins, Alberto Conti, Susana Deustua, Pamela L. Gay, Daniel Golombek, John Grunsfeld, Sean McKenna



In 15 years of service, the Wide Field Planetary Camera 2 (WFPC2) onboard the Hubble Space Telescope (HST) obtained over 10,000 frames of Solar System data. Since standard data reduction pipelines are typically not optimized for moving-target data, our "planet pipeline" will uniformly reprocess and catalog this WFPC2 image collection to make it more immediately science-ready. Some of our processing steps will utilize citizen scientists to perform visual inspections. Our corresponding database will enable robust queries which are more specific to planetary science, helping archival researchers quickly find and utilize the prepared images within our collection for a wide range of scientific analyses. We welcome suggestions (especially from veteran WFPC2 users) on the optimal treatment and organization of this data collection, and also to identify a broad range of analyses that might only be possible with

- Storage
- Archiving final products and results