Planetary Data Systems (PDS) NASA HQ Update

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HQ Priorities for PDS

Priority #1: Trusted Repository ("Archiving")
  • Peer Review of Input
  • Long-Term Stability
    • Simple Data Formats

Priority #2 (FY20): PDS3-4 Migration
  • HQ is eager to see the PDS3-4 migration completed as soon as feasible

Priority #3: Discoverability and Usability
  • Unified Search
  • Higher Level Data Products
  • Creation and Management of Tools

Main Strategy for PDS: LEAN FORWARD

PDS must evolve!!
PDS Senior Review

- PDS Cooperative Agreements expire in late 2020
- NASA HQ delayed Senior Review for renewal cooperative agreements
  - Until a larger scale review of the Planetary Data Ecosystem can be completed
    - more about this later in the talk
- PDS Nodes are able to request a 1-year funded extension to continue the current cooperative agreements through late 2021
Strategic Management and Computing for Groundbreaking Science 2019-2024

In December 2019, SMD published a report developed by a working group at NASA HQ

• Goals:
  1. Develop and Implement Capabilities to Enable Open Science
  2. Continuously Evolve Data and Computing Systems
  3. Harness the Scientific Community and Strategic Partnerships for Innovation

• PSD is looking at a variety of ways to embrace this strategy, including:
  • Making plans and exploring a move of PDS into the cloud environment
  • Completing a broad scale, overarching review of our entire PSD Data Ecosystem
Planetary Data Ecosystem Review

• PSD has recognized that its data, archiving, tool development, and data programs are disjointed and do not connect under a broad strategy
• PSD will be undertaking a large, broad Planetary Data Ecosystem review by an independent review board (IRB) in Fall 2020
• The IRB will provide findings and recommendations to PSD from at least four sub-panels based on the working group:
  • Sub-Panel 1: Open Data/Open Software/Open Tools
  • Sub-Panel 2: Advanced Computing Capabilities
  • Sub-Panel 3: Archives Modernization
  • Sub-Panel 4: Management and Mission Critical/Enabling Assets
Planetary Data Ecosystem Review

• Inputs to Review:
  • NAS studies of relevance
  • PDS roadmaps
  • PDS white paper (in development)
  • Additional project/program review materials
  • White papers solicited from the community

• Outcome of Review:
  • Report that includes findings and recommendations that can feed into PSD data ecosystem strategy document
## Planetary Data Ecosystem Review

### Sub-Panel 1: Open Data/Open Software/Open Tools
- PDS Tools
- Jmars/JAsteroid
- Treks
- PDART + DAPs
- NASA Github/NASA Planetary GitHub
- ISIS
- Ames Stereo Pipeline

### Sub-Panel 2: Advanced Computing Capabilities
- High-End Computing
- Cloud Computing Resources

### Sub-Panel 3: Archives Modernization
- PDS (incl. all sub-nodes)
  - NSSDCA
  - Planetary Photojournal
  - Astromaterials Acquisition and Curation Office
  - MoonDB
  - PetDB
  - Planetary Geologic Mapping Program/Planetary Cartography Program (incl. Astropedia)
  - RPIF
  - HiTRAN

### Sub-Panel 4: Management and Mission Critical/Enabling Assets
- Project Offices and Program Management
- AMMOS
- HORIZONS System
- SPICE

### Stakeholder Organizations
- MAPSIT
- IPDA

### Legend:
- Data Archive/Curated Data
- Community Tools/Processed Data
Survey

- PDS has developed a customer satisfaction survey
- Survey is live
- Plan is to do this annually to observe trends
- Likely will be small changes to the survey after initial year

https://feedback.app.cfigroup.com/I/r/NASAPDSSGen