NASA Planetary Data System (PDS) Roadmap Activity

Community Discussion

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Overview

- **NASA data preservation programs in PSD**
- **Strategic planning efforts now underway**
- **Organization of a Roadmap Study Team**
- **Schedule**
- **Community input**

Response to U.S. Policy on Data Access

- **President's Office of Science and Technology Policy (OSTP)**
  - Memo of 22 February 2013: "Increasing Access to the Results of Federally Funded Scientific Research"

- **NASA Plan**
  - Response released 21 November 2014: "NASA Plan: Increasing Access to the Results of Scientific Research"

Context Within Planetary Science Division (PSD)

- **Four PSD NASA-funded elements**
  - Planetary Data System (Distributed)
  - U.S.G.S. Astrogeology Planetary Spatial Infrastructure research program (Flagstaff, AZ)
  - NASA JSC Astromaterials Acquisition and Curation Office (Houston, TX)
  - Minor Planets Center (Cambridge, MA)
- **Looking 10 years into the future**
  - **PDS Roadmap Activity**
- **PDS Roadmap includes forecasting impact of rapidly growing data volumes, changing IT environment, and increasing community expectations on planetary data archiving**
  - Long-term NASA management objective to make the interfaces between these elements seamless and transparent to the planetary science community

Strategic Planning Exercise

- **NASA requests community input on the PDS Roadmap**
  - Request for Information (RFI) released Dec 2015, responses were due Jan 2015
  - **24** responses received

- **RFI Topics**
  - Future tools, resources, workflows, tutorials, and interfaces
  - Making the archiving process seamless, less costly, more efficient
  - Role of PDS in providing the public access to NASA-generated data
  - Integration of PDS data products and services with other facilities
  - Role of PDS in encouraging the development of higher-order data products
  - Improvements to current search capabilities of the PDS

PDS Roadmap

- **Web Site Established for PDS Roadmap Activities**
  - "Dear Colleague" invitation to join this effort as part of the Roadmap Study Team
  - Responses requested by 28 March 2016 (**next Monday**)
  - Guiding materials
    - Terms of Reference
    - PSD Planetary Data Environment: Vision for 2026
    - PDS Roadmap (2006)
    - PDS Level 1, 2, 3 Requirements (2014)

  - https://pds.nasa.gov/roadmap/index.shtml

PDS Roadmap Study Team

- **Complete a community-based PDS Roadmap**
- **Incorporate RFI responses, input from PDS, add community team members**
- **Assess current state of PDS and other NASA data services**
  - Understanding and improving the archiving process
  - Improving data submission and peer review process
  - Broad scheduling issues, drivers and roadblocks from provider perspective
  - Usefulness and transparency of archive preparation documents
  - Cross-node issues for data providers working with several PDS nodes
- **Plan from 2017 to 2026, with these timeframes in mind**
  - 20 years for missions
  - 10 years for flight technologies
  - 5 years for Information Technology (IT) infrastructure
    - Ensure consistency with Federal Best Practices (https://playbook.cio.gov/)

Roadmap Study Team

- **Chaired by PDS Chief Scientist: Dr. Ralph McNutt**
- **Membership**
  - 10 to 20 self-nominated members actively involved in *archiving or using* planetary data in the PDS; IT, EPO professionals, etc.
  - Group is independent of PDS Management Council
- **Chair sets agenda, schedule, prepares written report of deliberations**
  - Reports regularly to PDS Program Scientist and Program Executive
  - Three meetings in 2016 and early 2017 (one in Washington, DC)
  - Possible town hall meetings or community surveys
  - In April 2017, Chair reports results and presents report to PSD Director **Dr. Jim Green**
- **Ground rules set by a Terms of Reference document**
  - **https://pds.nasa.gov/roadmap/Term%20of%20Reference%20.pdf**

Community Discussion

- **We NEED to hear from you!**
- See https://pds.nasa.gov/pdsroadmapteam.shtml

- **Recall RFI topics:**
  - Future tools, resources, workflows, tutorials, and interfaces
  - Making the archiving process seamless, less costly, more efficient
  - Role of PDS in providing the public access to NASA-generated data
  - Integration of PDS data products and services with other facilities
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- **Other topics:**
  - Cloud data storage
  - Software archives
  - Sample data

Poster Tonight

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POSTER LOCATION #542

Renewing the Planetary Data System — Roadmapping the Needs of the Community 2017 – 2026 [#1907]

We have initiated a PDS Roadmap for 2017–2026. This activity began with the release of an RFI. We report results to date, and outline next steps.

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