Planetary Data System

(PDS)

New Frontiers 4

William Knopf

January 20, 2017

What is PDS?

The Planetary Data System (PDS) is an accumulating archive holding the data from NASA's planetary missions. PDS is a distributed system with major nodes associated with scientific expertise with respect to their holdings. The PDS currently holds 1.3 PB of data.

PDS has as its goal obtaining a complete record of every planetary mission and using formats that can be maintained permanently.

PDS personnel are experienced with all phases of the archive process. PDS is currently archiving, or preparing to archive, data from all active planetary missions.

PDS personnel can help you with the development of your archive plans (Requirement 9) as called out the NF-4 AO.

PDS Mission and Vision

Mission Statement

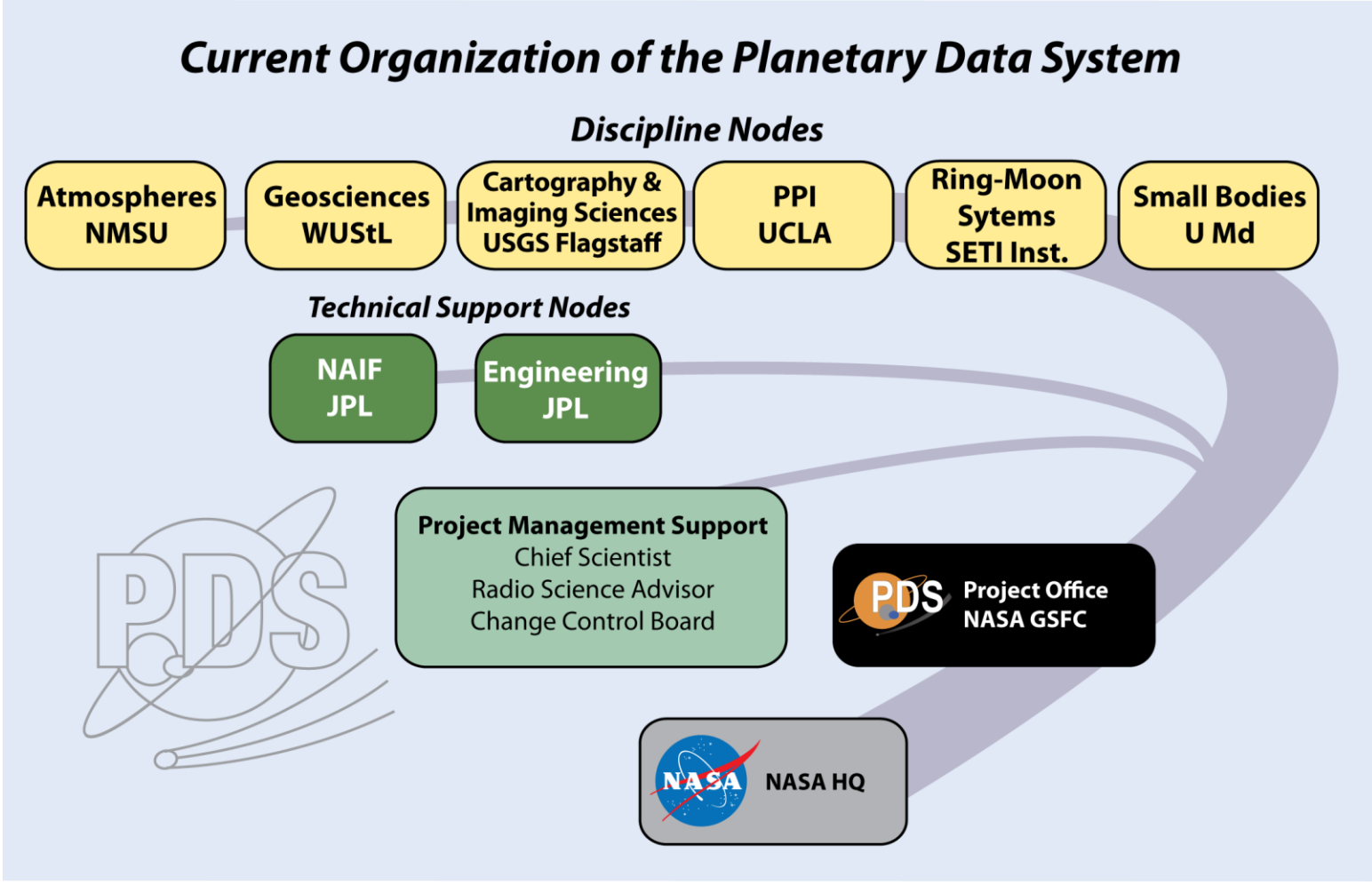
The mission of the Planetary Data System (PDS) is to facilitate achievement of NASA's planetary science goals by efficiently collecting, archiving, and making accessible digital data and documentation produced by or relevant to NASA's planetary missions, research programs, and data analysis programs.

Our vision

- To gather and preserve the data obtained from exploration of the Solar System.
- To facilitate new and exciting discoveries by providing access to and ensuring usability of those data to the worldwide community.
- To inspire the public through availability and distribution of the body of knowledge reflected in the PDS data collection.

PDS is a *federation* of distributed discipline and service nodes (shown on next page).

PDS Organization



Contacting PDS

The AO indicates there are several possible NASA-approved archives to which the data may be submitted. For most New Frontiers proposals the PDS is likely to be the appropriate archive. PDS archives are compliant with the current International Archiving Standard for Planetary Data, PDS4.

PDS on the WEB
Main Page: https://pds.nasa.gov
NF AO4 Direct link (also available through main page):
https://pds.nasa.gov/pds4/nf/nf.shtml

Specific PDS Node Points of Contact for New Frontiers
PDS personnel listed by node in the next 2 slides can provide technical advice on validation and documentation, on peer review, and on adequate resource levels to process the data and complete submission to the PDS.

The individuals listed below will treat your questions confidentially.

Contacts

Geosciences Node
Susan Slavney, slavney@wunder.wustl.edu 314-935-9295
Ed Guinness, guinness@wunder.wustl.edu, 314-935-5493

Cartography & Imaging Sciences Node
Lisa Gaddis, lgaddis@usgs.gov, 314-935-5609
Sue LaVoie, slavoie@jpl.nasa.gov, 818-354-5677

Navigation and Ancillary Information Facility (NAIF)
Chuck Acton, charles.acton@jpl.nasa.gov, 818-354-3869

Atmospheres Node
Reta Beebe, rbeebe@nmsu.edu, 575-646-1938
Nancy Chanover, nchanove@nmsu.edu, 575-646-2567
Lyle Huber, lhuber@nmsu.edu, 575-646-1862
Lynn Neakrase, lneakras@nmsu.edu, 575-646-2566

Contacts (continued)

Planetary Plasma Interactions Node
Todd King tking@igpp.ucla.edu 310-206-7201
Steve Joy, sjoy@igpp.ucla.edu, 310-622-3462

Ring-Moon Systems Node
Mitch Gordon, mgordon@seti.org, 276-393-8822

Small Bodies Node
Ludmilla Kolokolova, ludmilla@astro.umd.edu, 301-405-1539
Anne Raugh, raugh@astro.umd.edu 301-405-6855
Carol Neese, neese@psi.edu 520-382-0591

PDS Project Manager
Tom Morgan, thomas.h.morgan@nasa.gov, 301-286-1743

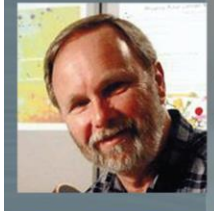
Please contact us if you have questions.

PDS Organization (continued)

Discipline Nodes

Atmospheres Node:
New Mexico State University,
Las Cruces, New Mexico
(Nancy Chanover, Manager)

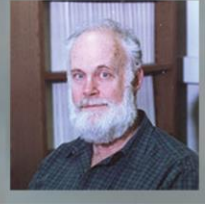
Planetary Plasma Interactions Node:
University of California,
Los Angeles, California
(Raymond Walker, Manager)



Geosciences Node:
Washington University in
St. Louis, Missouri
(Ray Arvidson, Manager)

Ring-Moon Systems Node:
SETI Institute,
Mountain View, California
(Mark Showalter, Manager)

Cartography & Imaging Sciences Node:
US Geological Survey,
Flagstaff, Arizona
(Lisa Gaddis, Manager)



Small Bodies Node:
University of Maryland,
College Park, Maryland
(Michael A'Hearn, Manager)

Support Nodes

Engineering Node:
Jet Propulsion Lab, Pasadena, California
(Dan Crichton , Mgr.)

Navigation and Ancillary Information Facility:
Jet Propulsion Lab, Pasadena, California
(Chuck Acton, Mgr.)

Management

William Knopf
Program Executive, NASA Headquarters

Micheal New
Program Scientist, NASA Headquarters

Ralph McNutt
PDS Chief Scientist, JHU Applied Physics Lab

Tom Morgan
Project Manager, NASA GSFC

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(PDS) Backup Slides

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Requirement 9

The Archiving requirement is captured most directly in Requirement 9.

Requirement 9. Proposals shall include an archive plan to calibrate (both preflight and inflight), analyze, publish, and archive the data returned, and shall demonstrate, analytically or otherwise, that sufficient resources have been allocated to carry out that plan within the proposed mission cost. The archive plan shall discuss and justify any data latency period (see Appendix B, Section E, for additional detail). The archive plan shall contain a section covering the data management plan, and both shall be in compliance with terms and conditions stated in the *NASA Plan: Increasing Access to the Results of Scientific Research.*

Preparing such an archive plan requires time, and the results will influence other portions of your proposal. Consider at least outlining your archive plan early in the process of writing your proposal.