Geosciences Node Report

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PDS MANAGEMENT COUNCIL FACE-TO-FACE

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Data Deliveries Behind Schedule

Mars Reconnaissance Orbiter SHARAD (15m Free Space Shallow Radar)

- Regular EDR and RDR deliveries from ASI stopped in 2012. Team does not respond to emails.
- Meanwhile, U.S. SHARAD team members have begun delivering radargrams, as a supplemental RDR. Deliveries of that product are now caught up with MRO schedule from the beginning of the mission.
- We have engaged the MRO Project to discuss archiving the EDRs for this supplemental product. The MRO project is interested and will bring this up in the face-to-face MRO PSG meeting in Rome on June 13-14. Following that meeting the MRO Project will inform MEP and PDS as to status and prospects of restarting generation and archival of regular EDR and RDR deliveries from ASI at its Matera facility.

Mars Express MARSIS (60 – 300m Free Space Subsurface and Ionospheric Sounder)

- Same ASI team members as SHARAD.
- No delivery of EDRs since May 2006. No delivery of derived subsurface radar data since November 2005. Regular deliveries of derived ionospheric data continue from U.S. investigators.

Data Deliveries Behind Schedule

Mars Exploration Rover APXS oxide abundance data

- This summary derived data set is delivered infrequently.
- Last delivery was December 2012, which completed the data set for Spirit, but there has been no update since then for the Opportunity data set (sol 2669).

Mars Exploration Rover Mössbauer Fe oxidation state and mineralogy data

- The only delivery was in November 2010 for both rovers (Spirit sol 1411, Opportunity sol 557).

Data Management Plans

We have received a few questions from proposers about DMPs.

- Refer them to our Help for Proposers page, which lists who does what (http://pds-geosciences.wustl.edu/dataserv/proposerhelp.html).
- Questions regarding definitions of PDS4 processing levels are referred to PDS policy page (https://pds.nasa.gov/policy/PolicyOnProcessingLevels03112013.pdf).
- Question about PDS4 rules or recommendations for archiving cartography products: received answers from Cartography and Imaging Sciences Node.

PDART and Other Proposers

The Geosciences Node has 15 selected PDART proposers in line to deliver data in the next couple of years. Two have started deliveries.

So far in FY16 we have had requests for letters of acknowledgement from 16 proposers to PDART, SSW, MDAP, LDAP, and DDAP.

The amount of effort required to support archiving of these data sets is significant, given the wide range of data types and levels of experience. Many may push the boundaries of the current PDS4 design.

Current PDART Data Providers

PDART 2014

Josh Cahill (APL) – Galileo NIMS reprocessing

Sander Goossens (Maryland/GSFC) – GRAIL high resolution gravity maps

Noam Izenberg (APL) – MESSENGER advanced products

Seiichi Nagihara (Texas Tech) / Dave Williams – ALSEP archive

Steve Ruff (ASU) – Mini-TES corrected spectra

David Williams (ASU) – Digitized RPIF archives

Sandra Wiseman (Brown) – Atmospherically corrected CRISM images

PDART 2015

David Blewett (APL) – Optical constants of ilmenite

Tom Duxbury (George Mason Univ.) – Mariner 69 image and SPICE restoration

Cindy Evans (JSC) – 3D images and X-ray CT scans of astromaterials

Perry Gerakines (GSFC) – Infrared spectra and optical constants of frozen volatiles

Ralph Milliken (Brown) – RELAB spectral library

Mario Parente (Univ. Massachusetts) – CRISM denoised data and spectra

Renee Weber (MSFC) – Apollo seismic event catalog

Yuki Yamashita (PSI) – Kaguya GRS data calibrated and corrected

Requested Distribution of Effort

Task	FTE
DDWG	0.15
CCB	0.10
Tools (Analyst's Notebook, Orbital Data Explorer)	1.50
Mission Archiving	3.50
Non-Mission Archiving	0.80
Total	**6.05**

Top Three Concerns

1. PDS4 lacks tools for archive preparation and validation and for reading data products.
2. PDS4 lacks good documentation for data providers and users (e.g., the Data Providers' Handbook).
3. Increasing numbers of individual data providers may strain node resources.

Geosciences Node Funding Status

FY16 funding received: 99.99% (all but about $200).

FY16 funding not yet costed: 67.98%.

- Bulk of money was only recently received and thus could not yet be costed, e.g. equipment purchases.
- Our definition of “costed” is to have money encumbered and thus not available for other uses.