PDSMC F2F Summary:
Lunar Mapping Project Discussion

in

Houston, TX

August 6 & 7, 2007

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PDS Imaging Node

- **Lunar Mapping Project (LMP)**
  - Sponsored by Exploration Systems Mission Directorate, Constellation Program Office, and Lunar Precursor Robotic Program
  - ESMD: Mike Wargo at NASA HQ
  - Constellation: Wendell Mendell at JSC
  - LPRP: Tony Lavoie at MSFC
- LMP Goals
  - Create a 'lunar data system' that can be used to support mission operations for a landed lunar mission
- This Meeting
  - Share information about what data and products are available…
    - PDS archive contents, formats, standards, tools
    - Distribution, services, viewing and analysis tools
      - Reps from JPL, GSFC, Ames, JSC, MSFC
    - Lunar data archives
  - …and what data and products will likely be required by users
    - In situ lunar station architecture planning
    - Pre-mission modeling of lighting conditions at landing sites
    - Mission operations
    - Science and engineering analyses and visualization

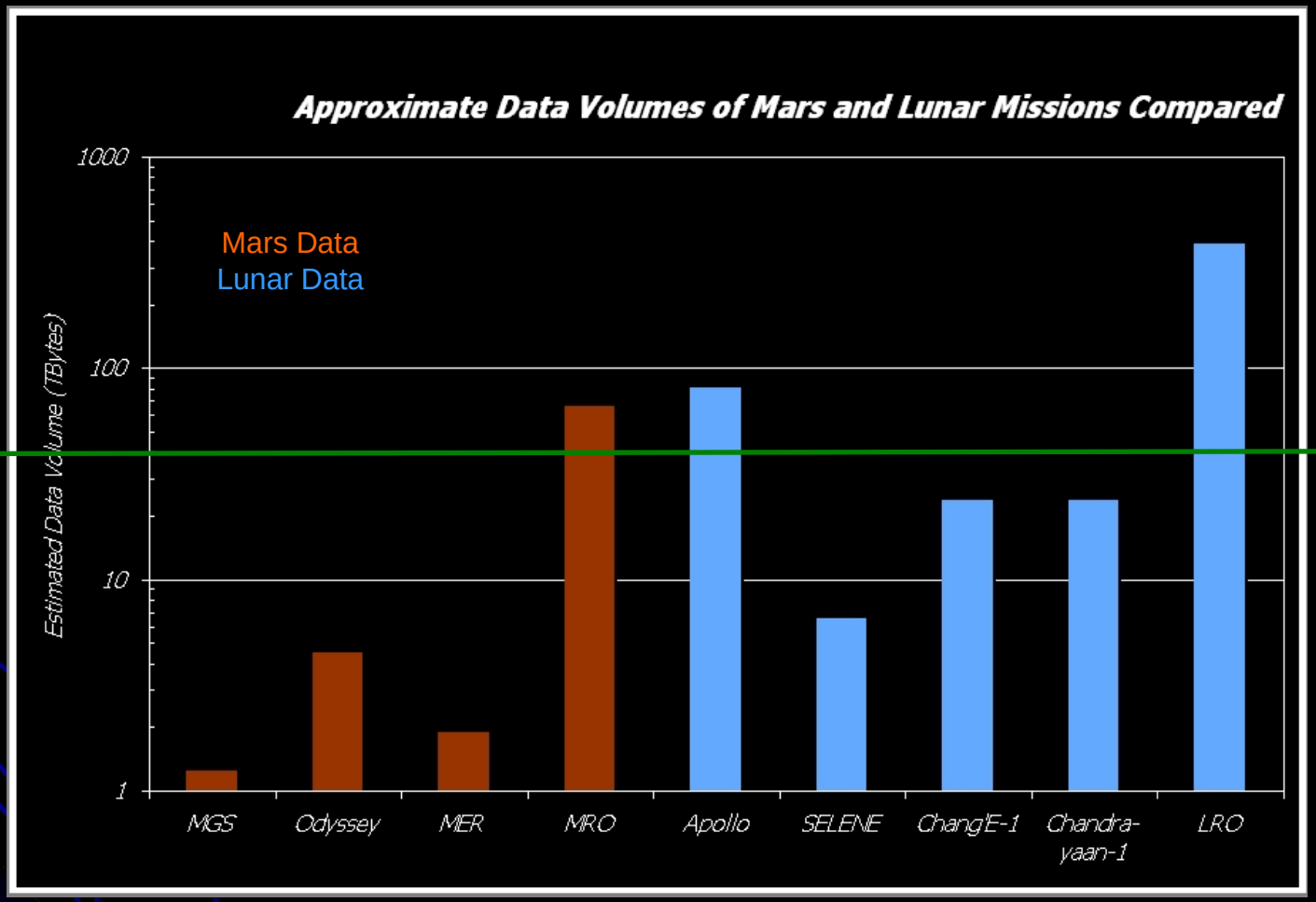
- **Described PDS organization and operations**
  - Discipline and support nodes
  - Expert assistance and guidance on archive development
  - Data archives, search capabilities, and tools
    - ODE, Image Atlas, Unified Coord DB, Map-a-Planet and new data search tools, etc.

- **Summarized *lunar* data in PDS**
  - Historic and more recent data
  - LRO plans and assignments
  - *Mentioned* IPDA and int'l mission plans

- **Provided updated digital copy of 'Lunar Data Tour'**
  - Includes data and tools within and outside of PDS
  - Added links to:
    - Apollo image data (ASU)
    - onMoon (JPL) lunar data server
    - New Lunar GIS (USGS)

- **Challenges**
  - Lunar data volumes (esp for LROC) are BIG!
    - But data storage, access solutions will build on MRO
  - Not all LRO data will be in ‘usable’ form
    - Data providers likely to request add’l funding
  - No plan to process or otherwise incorporate data from international missions
    - Improved geodetic control required for landing
  - Lunar science community is struggling to resurrect and distribute h/c lunar data, information, maps from 1960’s
    - Google
    - Lunar wiki
  - Lunar exploration community is unfamiliar with tools developed for operations on Mars etc.
    - Human spaceflight emphasis
    - Catching up on s/w and interfaces used for MER, etc.
  - Now ~one year before LRO PSP!!!

- **Meeting Summary**
  - Attendees (NASA ‘customers’) want:
    - Topography data (NOW!)
    - Simple data interface and display tools
      - GIS or other COTS software?
      - Rapid, easy exchange of data and documents
    - Data integration tools to support operations
      - Map-projected, coregistered data products
    - Simple data search and identification tools
      - Full PDS archive and beyond
      - Geographic
      - Feature-based
  - Users want data that are easily found, retrieved, viewed, correlated, processed, etc.
    - Derived products are desired
    - Want to think about engineering and science, *not* data formats, etc.



Current PDS Data Holdings ~40 TB

Note Log Scale!