Operations Report

PDS Management Council Meeting

Flagstaff, Arizona

August 2006
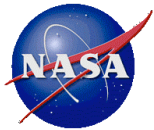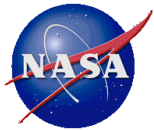
http://pds.nasa.gov
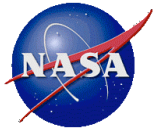
Topics

- **Catalog Cleanup**
  - Data Set Reconciliation Progress
  - Discrepancy Causes
  - April 2006 Summary
  - July 2006 Summary
  - Proposed changes
- **Process Improvement**
  - Ingest Process
  - Release Process
  - Keyword Approval Process
- **Performance Monitoring**
  - System Performance
  - Monthly Summary
 - Link Check

Catalog Cleanup - Reconciliation Progress

- **Catalog/DN data holding reconciliation**
  - Wrote program to extract data holding info from GEO, PPI and SBN, compared with Catalog, generated and reported discrepancies to GEO, PPI and SBN (Jan-Feb 2006)
  - Generated reports for other Nodes (Mar-Apr 2006)
  - Worked with Nodes to investigate initial discrepancies (Mar-Apr 2006)
  - Posted April reports and status for each Node on EN web page (Apr 2006)

    http://pds-engineering.jpl.nasa.gov/index.cfm?pid=3&cid=69
  - Updated program to query SBN & RINGS product server
  - Re-generated reports for all Nodes (Jul 2006)
  - Continued working with Nodes to resolve discrepancies
  - Posted July reports and cumulated status for each Node on EN web page (July 2006)

- **Main reasons causing the discrepancies**
  - Data Set to be ingested PDS Catalog
    - Catalog files yet to be given to EN
  - Data Set in peer review or lien resolution state
    - In PDS Catalog, but not archived at Nodes
  - Special product not to be included into PDS Catalog
  - Data Set stored off line at Nodes only
  - Erroneous data set ID
  - Archive status not up-to-date
  - Multiple data set IDs for the same data set
  - Superseded data set
  - NSSDC IDs not up-to-date
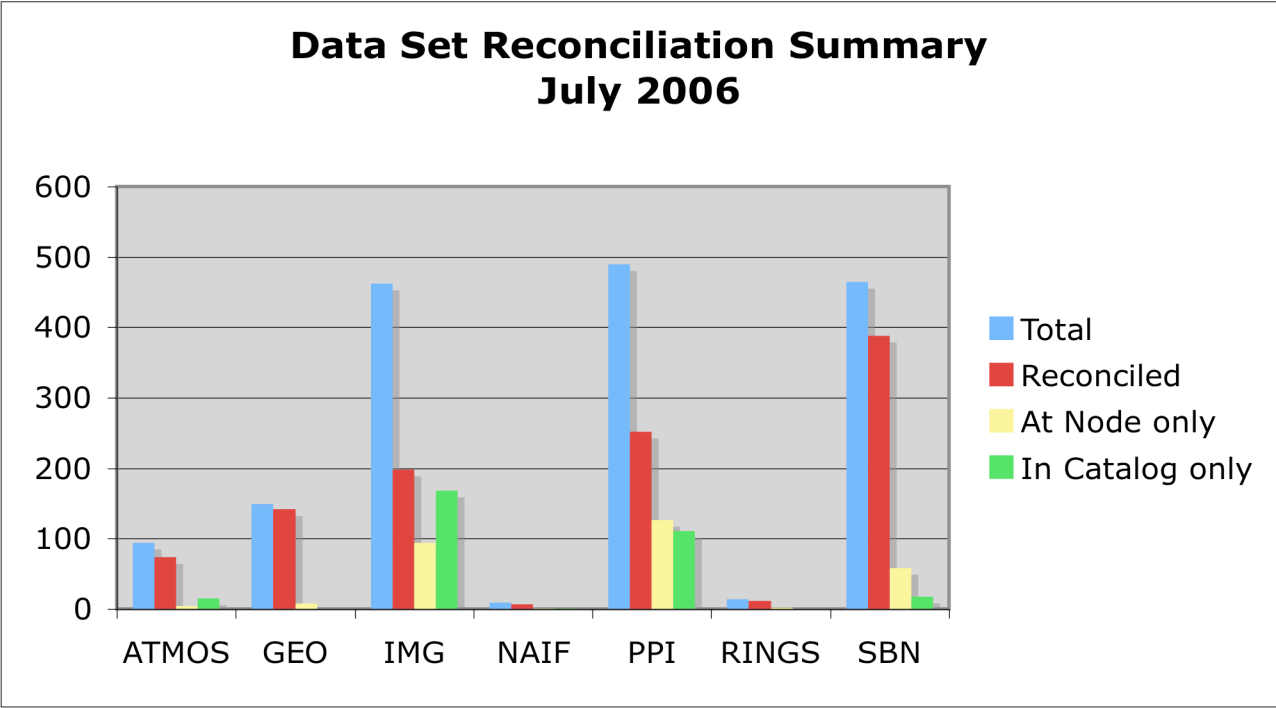 - Backup resource not up-to-date
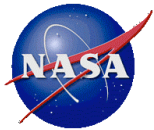
Catalog Cleanup - April 2006 Summary

Data Set Reconciliation Summary
April 2006
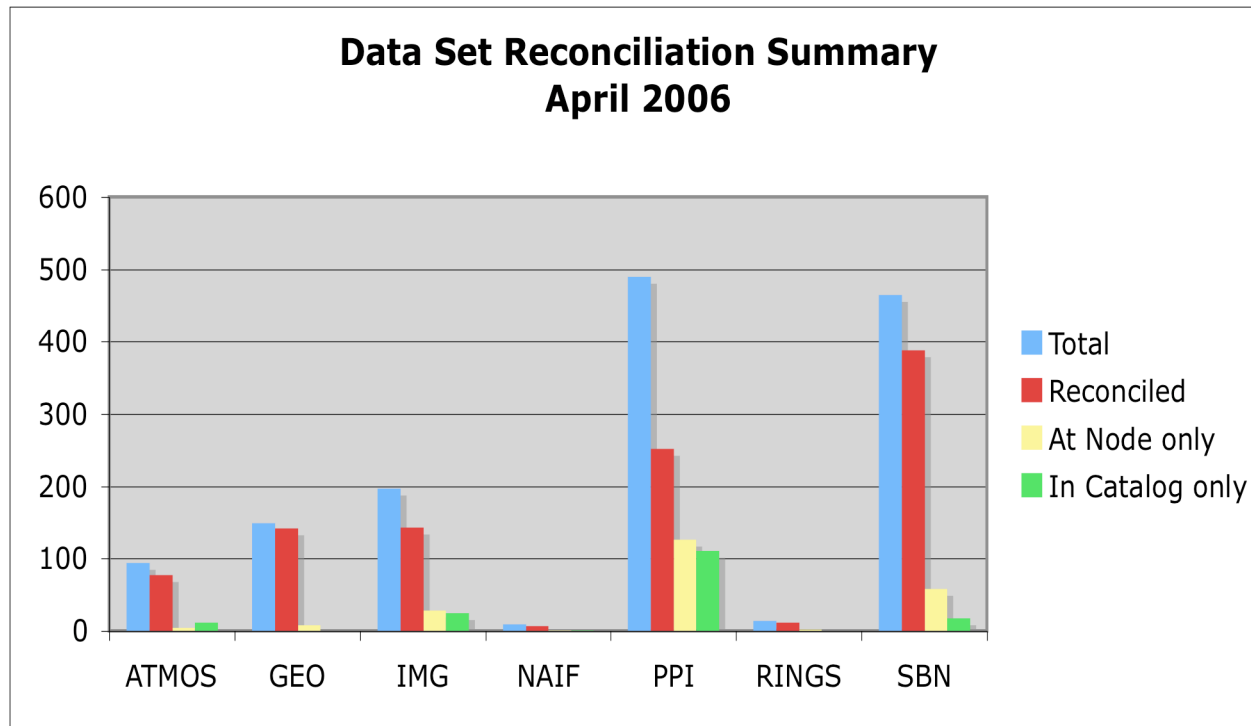
	ATMOS	GEO	IMG	NAIF	PPI	RINGS	SBN
Total	95	150	197	9	490	14	465
Reconciled	78	142	143	7	252	12	389
At Node only	5	8	29	1	127	2	58
In Catalog only	12	0	25	1	111	0	18
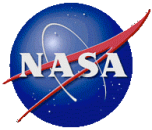
Catalog Cleanup - July 2006 Summary

Data Set Reconciliation Summary
July 2006

|	ATMOS	GEO	IMG	NAIF	PPI	RINGS	SBN
Total	95	150	196	9	490	14	465
Reconciled	74	142	145	7	252	12	389
At Node only	5	8	27	1	127	2	58
In Catalog only	16	0	24	1	111	0	18
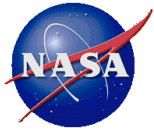
Catalog Cleanup - Proposed Changes

- ## Local Archive -> Archive
  - No policy stipulates when archive status changes from "Local Archive" to "Archive"
  - Proposed change
    - Change occurs when NSSDC ID (provided by Node) is ingested into PDS Catalog

- ## Superseded Data Sets
  - Superseded data sets are not searchable nor viewable
  - Proposed change
    - Update revision notes of the superseded data sets
    - Provide an option to search and view the data sets
    - Provide link to the data set that succeeds it
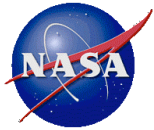
Process Improvement - Ingest Process

- **Ingest process**
  - Reviewed and documented current process (Feb-May 2006)
    - Focused on standardizing ingestion process across EN
    - Identified potential "work around" to difficult / sizeable effort tasks
      - Developed script to initialize / rebuild DE database
      - Modified ingestion tool to auto-create result report

  - Near term improvement
    - Build tool to compare catalog files to be ingested against cataloged data and report if differ or identical

  - Longer term improvement
   - Automate Ingest process, a development task to start in FY07 (currently in EN over-guide POP)
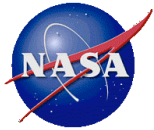
- Release process
  - Drafted current process (Jul 2006)
  - Next Step: Focus on identifying difficult / sizeable effort tasks and areas that can be streamlined (Aug 2006)

- Keyword approval process
  - Examine current process (Jul 2006)
  - Draft an enhanced process (Jul 2006)
  - Prototype a keyword tracking tool (Aug 2006)
 - Review by Nodes (Aug-Sept 2006)
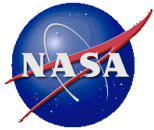
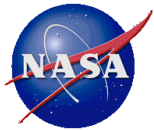- Automated System Monitoring
  - EN servers
  - EN applications
  - Mirror Site
  - Nodes product servers

- Monthly reports on EN site
  http://pds-engineering.jpl.nasa.gov/index.cfm?pid=6&cid=30

- Proven high availability (mostly 99.9x to 100% uptime)

- A few below 99.9% due to
  - Pasadena City power failure
  - JPL network failure
  - Mirror Site network failure
  - Transient server overload

Monthly System Performance Average Uptime and Downtime Percentage
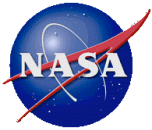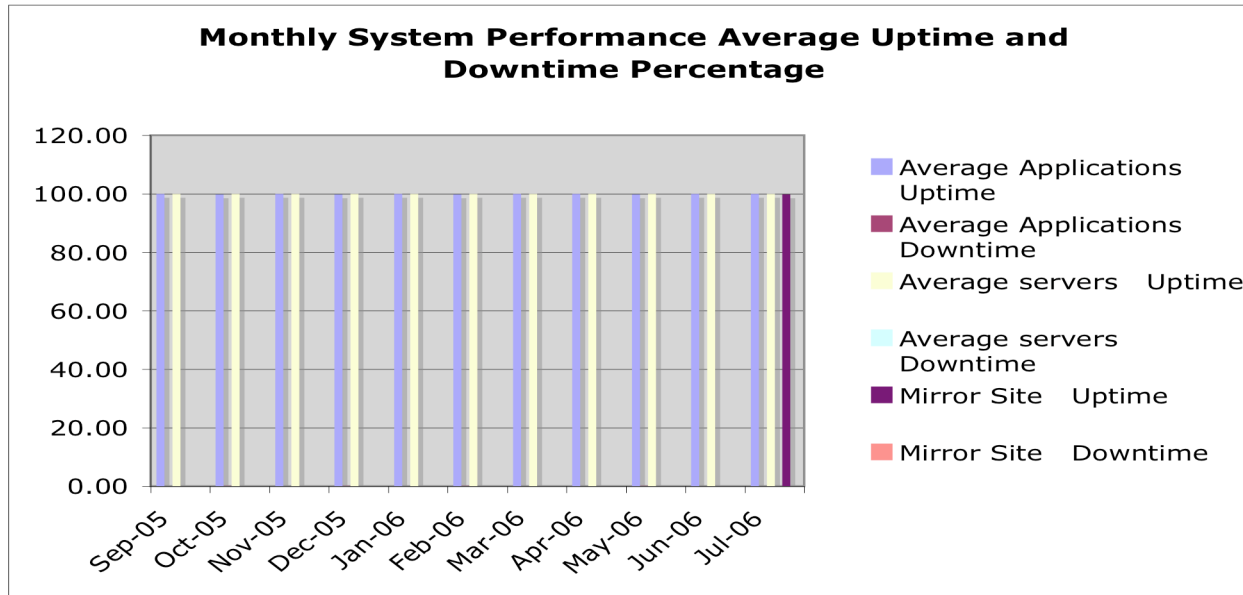
	Average Applications		Average servers		Mirror Site	
	Uptime	Downtime	Uptime	Downtime	Uptime	Downtime
Sep-05	99.97	0.03	100.00	0.00		
Oct-05	99.92	0.08	100.00	0.00		
Nov-05	99.96	0.04	100.00	0.00		
Dec-05	99.81	0.19	100.00	0.00		
Jan-06	99.97	0.03	100.00	0.00		
Feb-06	99.77	0.23	100.00	0.00		
Mar-06	99.98	0.02	100.00	0.00		
Apr-06	99.93	0.07	99.95	0.05		
May-06	99.83	0.18	99.98	0.02		
Jun-06	99.95	0.05	99.99	0.01		
Jul-06	99.98	0.02	99.94	0.02	99.833	0.067

Performance Monitoring - Link Check

- **Link Check completed in July 2006**
  - Performed verification using Web Link Validator by REL
    - PDS Home website
    - EN website
    - PDS Catalog resource links
    - ATMOS website
    - GEO website
    - IMG website
    - NAIF website
    - RINGS website
    - PPI website
    - SBN (Maryland and PSI) websites
  - Results reported to Nodes
  - Broken links were fixed
  - Reran verification
  - Reports posted on EN site
    http://pds-engineering.jpl.nasa.gov/index.cfm?pid=6&cid=43

- **Next Link Check schedule: February 2007**