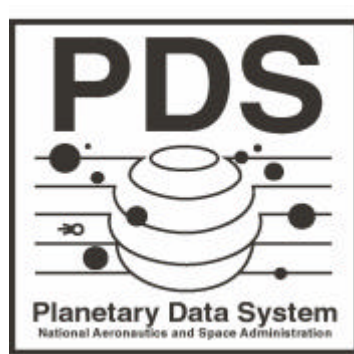


# **PDS Data Set Status Page Background and Requirements**

**August 24, 2005**

**Version 0.050824**



Jet Propulsion Laboratory  
Pasadena, California

JPL D-xxxxx

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## CHANGE LOG

Revision	Date	Description	Author
Start Document	2005-02-08	Initial document	S. Hughes
Update	2005-04-16	Requirements Refined	S. Hughes
Update	2005-08-24	Update for Software Testing	S. Hughes

## OPEN ISSUES

Date	Description	Host Doc
8/24/05	Superseded Data Sets are currently omitted. The SBN has requested that their superseded data sets be eliminated from the Data Set View Summary Results page. Since the results page is used as the link from the Status Page data set id column, a change to allow parameter passing and control of the data sets listed is required.	PDS

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# **1 INTRODUCTION**

## **1.1 Purpose**

The Data Set Status Page displays the data sets in the PDS Catalog database and their archive status.

## **1.2 Scope**

This document specifies the background and requirements for the Data Set Status Page.

## **1.3 Governing Documents / Standards / Specifications**

1. Planetary Science Data Dictionary,  
[http://pds.nasa.gov/tools/data\\_dictionary\\_lookup.cfm](http://pds.nasa.gov/tools/data_dictionary_lookup.cfm).

## 2 BACKGROUND

The Planetary Data System (PDS) Program Executive (PE) at NASA Headquarters levied the development of the PDS Data Set Status Page as a JPL Award Fee Criteria task for FY2005. The original task description stated, "Include a tracking status display for all datasets by May 16, 2005. (This includes whether dataset has been delivered by PI to the PDS, if data has gone through peer review, lien status, etc. Goal is to provide as much information to user community as quickly and accurately as possible.)"

Analysis of the task statement by PDS system engineering staff resulted in the following interpretation of the task.

"Dataset Tracking - Data tracking begins when an assigned data set id is submitted to CN catalog for ingestion. Will assess completeness of current data set status field descriptors and display data set id and archive status keywords in a data set status page with two columns and each column sortable."

The PDS system engineering team has assessed the current data set status field descriptors as being complete. The descriptors are listed in appendix A.

The PDS development staff had previously developed a prototype data set status page for the use of Data Engineering staff prior to the levying of the task. The requirements of the two status pages were compared and found to be overlapping with the existing prototype providing additional functionality. The systems engineering team decided that the prototype would be completed as the deliverable for the award fee task. The prototype was made available for outside review and a message was sent to the PE on 2/8/05 asking for a review of the prototype data set status page.

The primary users of the Data Set Status Page are expected to be PDS Engineering Node staff, PDS Discipline Node staff, PDS Project Management, and NASA Headquarters officials. Data providers could also be advised of the page by PDS Discipline Node staff for their use.

### **3 REQUIREMENTS**

The PDS Data Set Status Page herein referred to as the "Status Page", will adhere to the following Functional and Non-Functional requirements.

The Status Page shall display the list of data sets in the PDS Catalog and their archive status.

#### **3.1 Functional Requirements**

- 3.1.1** The Status Page shall list all data sets in the PDS catalog, regardless of their status. (See Open Issues table – 8/24/05)
- 3.1.2** The Status Page shall use the operational PDS catalog database.
- 3.1.3** The Status Page shall use the PDS catalog database data set information (dsinfo) table as the source of the data set list.
- 3.1.4** The Status Page shall display the data set id and archive status attributes of each data set by default.
- 3.1.5** The Status Page shall display the associated mission names and instrument names attributes by request.
- 3.1.6** The Status Page shall list the attributes in parallel vertical columns.
- 3.1.7** The Status Page shall allow a sort on any one or all of the attributes.
- 3.1.8** The Status Page shall always list the data set id attribute .
- 3.1.9** The Status Page shall provide a valid link from the data set id attribute to the Data Set View summary page for that data set.
- 3.1.10** The Status Page shall have a HTTP protocol URL for use by Web applications.
- 3.1.11** A link to the Status Page shall be included in the PDS websites for easy access by the expected audience.

## **3.2 Non-Functional Requirements**

The Status Page shall have an associated help page.



## **APPENDIX A ARCHIVE\_STATUS - Standard Values List**

IN QUEUE - Received at the curation node but no action has been taken by the curation node. Use with caution.

PRE PEER REVIEW - Being prepared for peer review under the direction of the curation node. Use with caution

IN PEER REVIEW - Under peer review at the curation node but evaluation is not complete. Use with caution

IN LIEN RESOLUTION - Peer review completed. Liens are in the process of being resolved.

LOCALLY ARCHIVED - Passed peer reviewed with all liens resolved. Considered archived by the curation node but awaiting completion of the standard archiving process. Possible TBD items include the arrival of the archive volume at NSSDC and ingestion of catalog information into the Data Set Catalog.

ARCHIVED - Passed peer review with all liens resolved. Available through the Data Set Catalog and at NSSDC.

SUPERSEDED - Superseded by a new version of the data set. This implies that the data set is not to be used unless the requester has specific reasons. When a data set has been superseded the CN will notify NSSDC that their databases need to be updated to advise users of the new status and the location of the replacement data set.

SAFED - Received by the PDS with no evaluation. Data will not be formally archived.

ACCUMULATING - Portions, but not all, of a data set are in one or more phases of completion (e.g., portions of a data set have been archived while portions remain in lien resolution).

## **APPENDIX B Acronyms**

The table below lists acronyms and abbreviations used in this document.

<b>ACRONYM</b>	<b>DEFINITION</b>
CN	Central Node
DE	Data Engineer
EN	Engineering Node
HTTP	A protocol used to request and transmit files over the Internet or other computer network
ODL	Object Definition Language
PDS	Planetary Data System
PSDD	Planetary Science Data Dictionary

**Table A-1. Acronyms and abbreviations**