Notes Regarding Chandrayaan-1 Mini-RF PDS3 to PDS4 Migration

PDS Geosciences Node

July 7, 2020

Notes

These notes apply to Chandrayaan-1 Mini-RF archives at the PDS Geosciences Node. These data sets were originally archived under the PDS3 standard. The PDS Geosciences Node has migrated the data to the PDS4 standard.

The data products in the PDS3 Chandrayaan-1 Mini-RF archives at the Geosciences Node are already PDS4-compliant, so there was no need to alter the data files. The PDS3 archive volume remains intact; no files have been removed. The only change is the addition of PDS4 labels and documentation files. In the data directories, the metadata in PDS3 labels has been copied to PDS4 labels, so that each data product now has both a PDS3 and a PDS4 label.

Instead of the data sets and archive volumes in PDS3, products in PDS4 are organized into collections and bundles. A collection is a set of related products, which may be data products, document products, browse products, miscellaneous products, etc. A bundle is a set of related collections.

For these archives a single PDS4 bundle has been defined. The bundle contains four data collections, a document collection, and a miscellaneous collection. The table below shows the correspondence between PDS3 data sets and PDS4 collections. All these data sets are on the PDS volume **ch1mrf_0xxx**.

Chandrayaan-1 Mini-RF PDS4 Collections and Corresponding PDS3 Data Sets

Contents	PDS4 Collection	PDS3 Data Set ID
Housekeeping data	urn:nasa:pds:chand1-orb_mini_rf:data_hk	CH1-ORB-L-MRFFR-1-PDR-V1.0*
Level 1 data	urn:nasa:pds:chand1-orb_mini_rf:data_level1	CH1-ORB-L-MRFFR-4-CDR-V1.0
Level 2 data	urn:nasa:pds:chand1-orb_mini_rf:data_level2	CH1-ORB-L-MRFFR-5-CDR-MAP-V1.0
Mosaics	urn:nasa:pds:chand1-orb_mini_rf:data_mosaic	CH1-ORB-L-MRFFR-5-CDR-MOSAIC-V1.0
Documents	urn:nasa:pds:chand1-orb_mini_rf:document	n/a
PDS3 Index Tables	urn:nasa:pds:chand1-orb_mini_rf:miscellaneous	n/a

*This collection contains housekeeping data only. The Packetized Data Records that are also associated with this PDS3 Data Set ID were not migrated to PDS4. They are telemetry data in a format that could not be converted to a PDS4-compliant format.

The bundle is identified by a file named **bundle_chand1_mini_rf.xml** in the root directory of the volume; it describes the bundle and lists the collections that belong to it. A collection is identified by a file named **collection_*.xml** in a subdirectory. The file **collection_*_inventory.csv** is a list of the products that belong to the collection.

Every product, collection, and bundle in PDS4 has a Logical Identifier (LID) which is guaranteed to be unique throughout PDS. The LID is defined in the PDS4 label using the tag **<logical_identifier>**. For data products, the LID is analogous to PRODUCT_ID in a PDS3 label.

Not every PDS3 directory has a PDS4 counterpart. The PDS3 data, document, and index directories have been made into collections, but the calib, catalog, extras, and geometry directories have been left unchanged. In order to preserve the information in the PDS3 catalog files, the text has been copied to *.txt files in the document directories and given PDS4 labels. The files aareadme.txt and errata.txt in the volume root directories have been left alone, except that a brief note has been added to the end of errata.txt. No PDS4 labels have been provided for aareadme.txt and errata.txt.