

Standards Change Request

Increase length of SOURCE_PRODUCT_ID keyword

SCR3-1083.v2

Provenance:

Date: 2006-08-18

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Problem:

CRISM labels include a list of SPICE kernel file names in the SOURCE_PRODUCT_ID field. Current limit on SOURCE_PRODUCT_ID is 40 characters, but MRO SPICE kernels can have names as long as 45 characters. NAIF (Boris) says this is not unusual -- there have been SPICE file names with 53 characters. (NAIF converts them to 27.3 for archiving.) I propose to increase the maximum length of SOURCE_PRODUCT_ID to 100 characters.

There are a number of keywords that are used in conjunction with or instead of SOURCE_PRODUCT_ID. These keywords need to have a length equal to that of SOURCE_PRODUCT_ID.

The following is the list of all keywords where the maximum length should be increased to 100 characters:

1. FIRST_PRODUCT_ID (char 40) - The first_product_id data element indicates the product_id that appears in the label of the first data product on an archive medium.
2. LAST_PRODUCT_ID (char 40) - The last_product_id data element indicates the product_id that appears in the label of the last data product on an archive medium.
3. ORIGINAL_PRODUCT_ID (char 40) - The original_product_id element provides the temporary product identifier that was assigned to a product during active flight operations which was eventually replaced by a permanent id (see product_id).
4. PRODUCT_ID (char 40) - The product_id data element represents a permanent, unique identifier assigned to a data product by its producer. See also: source_product_id.

Note: In the PDS, the value assigned to product_id must be unique within its data set.

Additional note: The product_id can describe the lowest-level data object that has a PDS label.

5. SOURCE_PRODUCT_ID (char 40) - The source_product_id data element identifies a product used as input to create a new product. The source_product_id may be based on a file name. See also: product_id.
Note: For Mars Pathfinder, this refers to the filenames of the SPICE kernels used to produce the product and its ancillary data.
6. STANDARD_DATA_PRODUCT_ID (char 20) - The STANDARD_DATA_PRODUCT_ID element is used to link a data product (file) to a standard data product (collection of similar files) described within software interface specification document for a particular data set.
7. USER_PRODUCT_ID (char 30) - The user_product_id element provides an alternate logical file name constructed according to a producer-defined naming convention.

Current Urgency:

Priority is high. This change is needed for the next set of MRO CRISM end-to-end tests. (It was medium priority when this SCR was first submitted, but now that the time is shorter, it has been raised to high.)

Proposed Solution:

Increase the maximum length of all keywords related to the SOURCE_PRODUCT_ID keyword to 100 characters.

Impact Assessment:

The impact should be low. The Data Dictionary will need to be modified to change the maximum length in the definitions of the above seven keywords.

Additional Information:

N/A

Requested Changes:

An updated element definition for each of the above seven keywords has been submitted.