

Standards Change Request

Expand the optional keyword list for the IMAGE object

SCR3-1102.v1

Provenance:

Date: 2007-04-023

Author(s): A.Raugh

Revised:

Working Group:

Problem:

External agencies, most notably the Planetary Science Archives of ESA, are writing validation tools of their own and are running into problems with the OPTIONAL_ELEMENT_SET of the IMAGE object. The current pdsdd.full definition of the IMAGE object does not contain at least two keywords whose use is strongly recommended to avoid display ambiguity. Consequently, SBN is requesting that LINE_DISPLAY_DIRECTION and SAMPLE_DISPLAY_DIRECTION be explicitly added to the OPTIONAL_ELEMENT_SET of the IMAGE object.

Priority:

The original submitter has requested this be given a High priority because a) it affects the external interface between PDS and PSA, and b) it should be quick to implement with minimal system impact.

Proposed Solution:

Add LINE_DISPLAY_DIRECTION and SAMPLE_DISPLAY_DIRECTION to the OPTIONAL_ELEMENT_LIST for the IMAGE entries in the pdsdd.full file, the associated database, and the SR Appendix A description of the IMAGE object.

Impact Assessment:

Documentation changes

- PDS Standards Reference, Appendix A, Section A.20.2: Add LINE_DISPLAY_DIRECTION and SAMPLE_DISPLAY_DIRECTION to this list.

Public Interface changes

- The PSDD database will require an update to the IMAGE entry to add the

LINE_DISPLAY_DIRECTION and SAMPLE_DISPLAY_DIRECTION to the OPTIONAL_ELEMENT_SET.

- The pdsdd.full file and index will require an update

Software changes

- None specifically related to this change, although we note that the current version of NASAView appears to ignore these keywords when they are present. This should have been coded into NASAView at the time these keywords were first incorporated into the data dictionary. The development status for NASAView with respect to these keywords is not currently known.

External Agencies

- We should notify the ESA developers of the pvv tool of the change, in case this affects when they next freeze their standard input files.

Recommended Actions:

1. Schedule the database and documentation updates.
2. Notify the PDS developers when the change to pdsdd.full has been implemented.