

# Release Notes

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## PD4 Information Model Version 1.F.0.0

### Build 11.0 Release

December 23, 2020

These notes detail the changes made to the PDS4 Information Model and contained in Release 1.F.0.0. These changes include those approved by the CCB since Version 1.E.0.0 and bug fixes since Version 1.E.0.0. The released documents include:

1. index\_1F00.html – Information Model Specification
2. PDS4\_PDS\_1F00.xsd – Common Schema
3. PDS4\_PDS\_1F00.sch – Common Schematron
4. PDS4\_PDS\_1F00.xml – Label for Common Schema and Schematron files
5. PDS4\_PDS\_DD\_1F00.html – Data Dictionary (html)
6. PDS4\_PDS\_DD\_1F00.pdf – Data Dictionary (pdf)
7. PDS4\_PDS\_JSON\_1F00.JSON – Information Model (JSON)

### CCB approved changes made since the release of the prior version of the Information Model

1. CCB-284 - Streamlined process for adding or removing enumerated values
2. CCB-285 - GeoTIFF format as observational PDS4 image
3. CCB-289 - Define new class Encoded\_Audio to describe supplementary audio data products.
4. CCB-290 - Add value 'Field Campaign' to Investigation\_Area type enumerated value list.
5. CCB-292 - New enumerated values for reference\_type.
6. CCB-294 - Add enumerated value to Units\_of\_Pixel\_Resolution\_Angular
7. CCB-296 - Duplicated value in enumerated value list of Product\_Context /Internal\_Reference /reference\_type.
8. CCB-297 - Inappropriate values in permissible values list for Product\_Observational /Observation\_Area /Target\_Identification/ Internal\_Reference /reference\_type
9. CCB-308 - "Add enumerated value to `Units\_of\_Frequency` - `Hz` - The abbreviated unit for `Units\_of\_Frequency` (Hertz)
10. CCB-317 - Add FITS 4.0 to parsing\_standard\_id enumerated values for Header object

## **Bug Fixes and other LDDTool Changes**

1. 85, 86, 87, 176, 178 - Clean up log messages, debug, info, warning, and error.
2. 167 - LDDTool: Use sch:value-of to display a variable in Schematron validation.
3. 188 - LDDTool requires one class with (element\_flag=true) even when no classes are defined
4. 192 - Two choice blocks defined in the ingest file gets merged into one block in the schema using version 10.1.0 of lddtool
5. 194 - LDDTool - The MSN namespace declaration is missing from the generated schematron file.
6. 197 - LDDTool: Deprecation Rule for Unit\_Of\_Wavenumber is being propagated to Spectral LDD with an error in the assert statement.
7. 222 - Clean up option for IM Version option on command line
8. 225 – Removed useless warning messages from IMTool and LDDTool run
9. 227 - LDDTool: erroneously replaces TBD values with null in JSON output
10. 230 - LDDTool: update LDD attribute checking to only check for "type" and "\_type"