Getting a Handle on PDS4 Labels
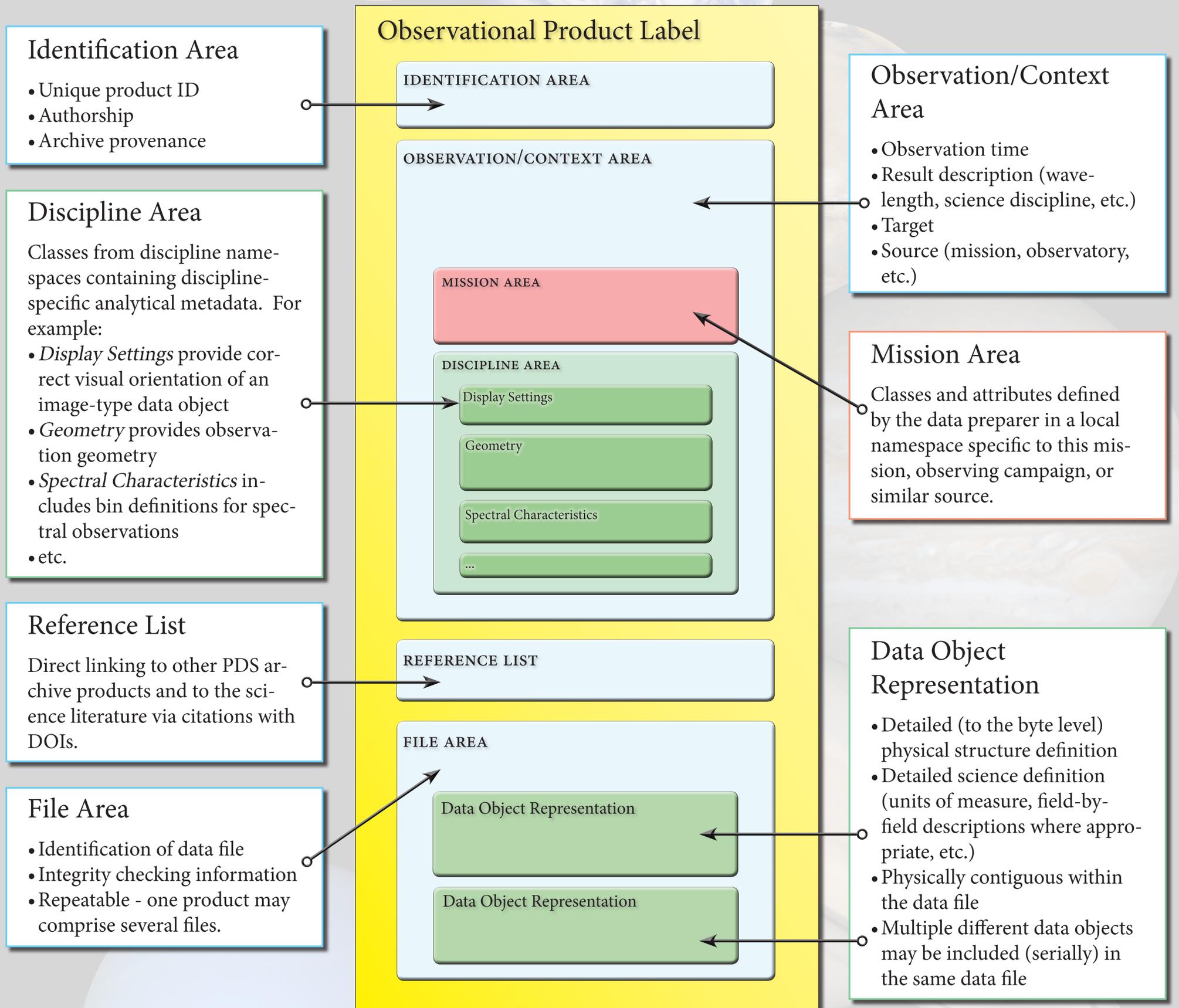
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The Anatomy of a Data Product Label

Identification Area

- Unique product ID
- Authorship
- Archive provenance

Discipline Area

Classes from discipline name-spaces containing discipline-specific analytical metadata. For example:

- *Display Settings* provide correct visual orientation of an image-type data object
- *Geometry* provides observation geometry
- *Spectral Characteristics* includes bin definitions for spectral observations
- etc.

Reference List

Direct linking to other PDS archive products and to the science literature via citations with DOIs.

File Area

- Identification of data file
- Integrity checking information
- Repeatable - one product may comprise several files.

Observational Product Label

IDENTIFICATION AREA

OBSERVATION/CONTEXT AREA

MISSION AREA

DISCIPLINE AREA

Display Settings

Geometry

Spectral Characteristics

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REFERENCE LIST

FILE AREA

Data Object Representation

Data Object Representation

Observation/Context Area

- Observation time
- Result description (wavelength, science discipline, etc.)
- Target
- Source (mission, observatory, etc.)

Mission Area

Classes and attributes defined by the data preparer in a local namespace specific to this mission, observing campaign, or similar source.

Data Object Representation

- Detailed (to the byte level) physical structure definition
- Detailed science definition (units of measure, field-by-field descriptions where appropriate, etc.)
- Physically contiguous within the data file
- Multiple different data objects may be included (serially) in the same data file

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The sequence of attributes, classes, and label sections is defined and validated by the PDS schemas, resulting in uniform structure, sequence, and naming across labels from all sources.