# PDS4 Data Dictionary

## Abridged - Version 1.3.0.0

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# Chapter 1. Introduction

The Planetary Data System (PDS) PDS4 Data Dictionary defines the organization and components of PDS4 product labels. Components of a product label include classes and their attributes.

# Audience

The PDS4 Data Dictionary - Abridged - has been abstracted from the unabridged version with the needs of data providers and data end users in mind. It contains full definitions but not all the fine detail or repetition necessary to support the underlying Information Model.

# Acknowledgements

The PDS4 Data Dictionary and the PDS4 Information Model is a joint effort involving representatives from each of the PDS nodes functioning as the PDS4 Data Design Working Group.

# Scope

The PDS4 Data Dictionary defines the common and discipline level classes and attributes used to create PDS4 product labels. It also defines the meta-attributes (i.e. attributes about attributes) used to define attributes. This abridged version includes only one entry for each attribute where the unabridge version includes an entry for each use of an attribute in a class.

# Applicable Documents

### Controlling Documents

• PDS4 Information Model Specification - The PDS4 Information Model is used as the source for class, attribute, and data type definitions. The model is presented in document format as the PDS4 Information Model Specification.

• ISO/IEC 11179:3 Registry Metamodel and Basic Attributes Specification, 2003. - The ISO/IEC 11179 specification provides the schema for the PDS4 data dictionary.

### Reference Documents

• Planetary Science Data Dictionary - The online version of the PDS3 data dictionary was used as the source for a few data elements being carried over from the PDS3 data standards.

# Terminology

This document uses very specific engineering terminology to describe the various structures involved. It is particularly important that readers who have absorbed the PDS Standards Reference bear in mind that terms which are familiar in that context can have very different meanings in the present document.

Following are some definitions of essential terms used throughout this document.

• An *attribute* is a property or characteristic that provides a unit of information. For example, �color� and �length� are possible attributes.

• A *class* is a set of attributes (including a name) which defines a family. A class is generic � a template from which individual members of the family may be constructed.

- A *conceptual object* is an object which is intangible (and, because it is intangible, does not fit into a digital archive). Examples of �conceptual objects� include the Cassini mission and NASA�s strategic plan for solar system exploration. Note that a PDF describing the Cassini mission is a digital object, not a conceptual object (nor a component of a conceptual object).

- A *data element* is a unit of data for which the definition, identification, representation and *permissible values* are specified by means of a set of attributes. For example, the concept of a *calibration_lamp_state_flag* is used in the PDS archive to indicate whether the lamp used for onboard camera calibration was turned on or off during the capture of an image. The *data element* aspect of this concept is the named attribute (or data element) *calibration_lamp_state_flag*.

- A *data object* is a physical, conceptual, or digital object.

- A *digital object* is an object which is real data � for example, a binary image of a redwood tree or an ASCII table of atmospheric composition versus altitude.

- *Formal* as used in the definition of attributes that are names indicates that an established procedure was involved in creating the name.

- A *unique identifier* is a special type of identifier used to provide a reference number which is unique in a context.

- *Local* refers to the context within a single label.

- *Logical* as used in the definition of logical identifier indicates that the identifier logically groups a set of objects.

- A *physical object* is an object which is physical or tangible (and, therefore, does not itself fit into a digital archive). Examples of �physical objects� include the planet Saturn and the Venus Express magnetometer. Note that an ASCII file describing Saturn is a digital object, not a physical object (nor a component of a physical object).

- A *resource* is the target (referent) of any Uniform Resource Identifier; the thing to which a URI points.

# Chapter 2. Product Classes in the common (pds) namespace.

These classes define the PDS4 products.

## Ingest_LDD

| *Name:* **Ingest_LDD** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Ingest_LDD class provides a form for collecting class and attribute definitions. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Ingest_LDD | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | ldd_version_id | 1..1 | None |
| | full_name | 1..1 | None |
| | steward_id | 1..1 | None |
| | namespace_id | 1..1 | None |
| | comment | 0..1 | None |
| | last_modification_ date_time | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| | local_attribute | 1..Unbounded | DD_Attribute |
| | local_class | 0..Unbounded | DD_Class |
| | local_rule | 0..Unbounded | DD_Rule |
| *Referenced from:* None | | | |

## Product_AIP

| *Name:* **Product_AIP** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| *Description:*The Product AIP class defines a product for the Archival Information Package. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_AIP | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | has_Information_ Package_Component | 1..Unbounded | Information_Package_ Component |
| | product_data_object | 1..1 | Archival_Information_ Package |
| *Referenced from:* None | | | |

# Product_Attribute_Definition

| Name: Product_Attribute_Definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Attribute Definition provides an attribute definition in XML encoding. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Attribute_Definition | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | DD_Attribute_Full |
| Referenced from: None | | | |

# Product_Browse

| Name: Product_Browse | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Browse class defines a product consisting of one encoded byte stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Browse | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..Unbounded | File_Area_Browse |
| Referenced from: None | | | |

# Product_Bundle

| Name: Product_Bundle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:A Product_Bundle is an aggregate product and has a table of references to one or more collections. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Bundle | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | context_area | 0..1 | Context_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Bundle |
| | file_area | 0..1 | File_Area_Text |
| | member_entry | 1..Unbounded | Bundle_Member_Entry |
| Referenced from: None | | | |

# Product_Class_Definition

| Name: Product_Class_Definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Class Definition provides a class definition in XML encoding. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Class_Definition | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | DD_Class_Full |
| Referenced from: None | | | |

# Product_Collection

| Name: Product_Collection | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:A Product_Collection has a table of references to one or more basic products. The references are stored in a table called the inventory. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Collection | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | context_area | 0..1 | Context_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Collection |
| | file_area_inventory | 1..1 | File_Area_Inventory |
| Referenced from: None | | | |

# Product_Context

| Name: Product_Context | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Context class describes something that provides context and provenance for an observational product. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Context | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | has_discipline_area | 0..1 | Discipline_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Agency, Facility, Instrument, Instrument_Host, |

| Name: Product_Context | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Investigation, Node, Other, PDS_Affiliate, PDS_Guest, Resource, Target, Telescope |
| Referenced from: None | | | |

# Product_DIP

| Name: Product_DIP | | | Version Id: 1.n.0.0 |
|---|---|---|---|
| Description:The Product DIP class defines a product for the Dissemination Information Package. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_DIP | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | has_Information_ Package_Component | 1..Unbounded | Information_Package_ Component |
| | product_data_object | 1..1 | Dissemination_ Information_Package |
| Referenced from: None | | | |

# Product_DIP_Deep_Archive

| Name: Product_DIP_Deep_Archive | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Product DIP_Deep_Archive class defines a product for the Dissemination Information Package for the deep archive. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_DIP_Deep_Archive | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | has_Information_ Package_Component | 1..Unbounded | Information_Package_ Component |
| | product_data_object | 1..1 | DIP_Deep_Archive |
| Referenced from: None | | | |

# Product_Data_Set_PDS3

| Name: Product_Data_Set_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Data Set PDS3 product is used to create proxy labels for the data sets in the PDS3 Data Set catalog. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |

| *Name:* **Product_Data_Set_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Product :: Product_Data_Set_PDS3 | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Data_Set_PDS3 |
| *Referenced from:* None | | | |

# Product_Document

| *Name:* **Product_Document** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* A Product Document is a product consisting of a single logical document that may comprise one or more document editions. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Document | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | context_area | 0..1 | Context_Area |
| | reference_list | 0..1 | Reference_List |
| | has_document | 1..1 | Document |
| *Referenced from:* None | | | |

# Product_File_Repository

| *Name:* **Product_File_Repository** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Product File Repository class consists of a single text file. This product is used to register a file in a repository. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_File_Repository | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..1 | File_Area_Binary |
| *Referenced from:* None | | | |

# Product_File_Text

| *Name:* **Product_File_Text** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Product File Text consists of a single text file with ASCII character encoding. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |

| Name: Product_File_Text | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Class Hierarchy: Product :: Product_File_Text | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..1 | File_Area_Text |
| Referenced from: None | | | |

# Product_Instrument_Host_PDS3

| Name: Product_Instrument_Host_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:An Instrument Host product describes an instrument host. This product captures the PDS3 catalog instrument host information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Instrument_Host_PDS3 | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Instrument_Host_PDS3 |
| Referenced from: None | | | |

# Product_Instrument_PDS3

| Name: Product_Instrument_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:An Instrument product describes an instrument. This product captures the PDS3 catalog instrument information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Instrument_PDS3 | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Instrument_PDS3 |
| Referenced from: None | | | |

# Product_Mission_PDS3

| Name: Product_Mission_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:An Mission product describes a mission. This product captures the PDS3 catalog mission information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Mission_PDS3 | | | |

| *Name:* **Product_Mission_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Mission_PDS3 |
| *Referenced from:* None | | | |

# Product_Native

| *Name:* **Product_Native** | | | *Version Id:* **1.2.0.0** |
|---|---|---|---|
| *Description:* Product_Native is used to describe digital objects in the original format returned by the spacecraft or experimental system when that format cannot be described using one of the PDS4 formats specified for observational data (tables or arrays, excluding Array_1D). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Native | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | context_area | 0..1 | Context_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..Unbounded | File_Area_Native |
| *Referenced from:* None | | | |

# Product_Observational

| *Name:* **Product_Observational** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* A Product_Observational is a set of one or more information objects produced by an observing system. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Observational | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | observation_area | 1..1 | Observation_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..Unbounded | File_Area_ Observational |
| | file_area_supplemental | 0..Unbounded | File_Area_ Observational_ Supplemental |
| *Referenced from:* None | | | |

# Product_Proxy_PDS3

| Name: Product_Proxy_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Proxy PDS3 class defines a product with enough information to register a PDS3 data product. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Proxy_PDS3 | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..Unbounded | File_Area_Binary |
| Referenced from: None | | | |

# Product_SIP

| Name: Product_SIP | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Product SIP class defines a product for the Submission Information Package. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_SIP | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | has_Information_ Package_Component | 1..Unbounded | Information_Package_ Component |
| | product_data_object | 1..1 | Submission_ Information_Package |
| Referenced from: None | | | |

# Product_SIP_Deep_Archive

| Name: Product_SIP_Deep_Archive | | | Version Id: 1.n.0.0 |
|---|---|---|---|
| Description:The Product SIP Deep Archive class defines a Submission Information Package (SIP) for the NASA planetary science deep archive. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_SIP_Deep_Archive | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | has_Information_ Package_Component | 1..1 | Information_Package_ Component_Deep_ Archive |
| | product_data_object | 1..1 | SIP_Deep_Archive |

| *Name:* **Product_SIP_Deep_Archive** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| | reference_list | 0..1 | Reference_List |
| *Referenced from:* None | | | |

# Product_SPICE_Kernel

| *Name:* **Product_SPICE_Kernel** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Product SPICE Kernel class defines a SPICE kernel product. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_SPICE_Kernel | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | context_area | 1..1 | Context_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..1 | File_Area_SPICE_ Kernel |
| *Referenced from:* None | | | |

# Product_Service

| *Name:* **Product_Service** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Product Service class defines a product for registering services. Service descriptions from this product are used to register services as intrinsic registry objects. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Service | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 0..Unbounded | File_Area_Service_ Description |
| *Referenced from:* None | | | |

# Product_Software

| *Name:* **Product_Software** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*Product Software is a product consisting of a set of one or more software formats. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Software | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |

| Name: Product_Software | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | product_description | 1..1 | Software |
| | software_format_set | 0..Unbounded | Software_Binary, Software_Script, Software_Source |
| Referenced from: None | | | |

# Product_Subscription_PDS3

| Name: Product_Subscription_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product_Subscription_PDS3 class provides the list of subscriptions for a PDS3 subscriber. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Subscription_PDS3 | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | subscriber | 1..1 | Subscriber_PDS3 |
| Referenced from: None | | | |

# Product_Target_PDS3

| Name: Product_Target_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:A target product describes a target. This product captures a reduced set of the PDS3 catalog target information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Target_PDS3 | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Target_PDS3 |
| Referenced from: None | | | |

# Product_Thumbnail

| Name: Product_Thumbnail | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product Thumbnail class defines a product consisting of one encoded byte stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Thumbnail | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |

| *Name:* **Product_Thumbnail** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..1 | File_Area_Encoded_ Image |
| *Referenced from:* None | | | |

# Product_Update

| *Name:* **Product_Update** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Product Update class defines a product consisting of update information and optional references to other products. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Update | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Update |
| *Referenced from:* None | | | |

# Product_Volume_PDS3

| *Name:* **Product_Volume_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*A Product Volume PDS3 product captures the PDS3 volume information. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Volume_PDS3 | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | product_data_object | 1..1 | Volume_PDS3 |
| *Referenced from:* None | | | |

# Product_Volume_Set_PDS3

| *Name:* **Product_Volume_Set_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*A Product Volume Set PDS3 product captures the PDS3 volume set information. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product :: Product_Volume_Set_PDS3 | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |

| Name: Product_Volume_Set_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | product_data_object | 1..1 | Volume_Set_PDS3 |
| Referenced from: None | | | |

# Product_XML_Schema

| Name: Product_XML_Schema | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product_XML_Schema describes a resource used for the PDS4 implementation into XML. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_XML_Schema | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | reference_list | 0..1 | Reference_List |
| | file_area | 1..Unbounded | File_Area_XML_Schema |
| Referenced from: None | | | |

# Product_Zipped

| Name: Product_Zipped | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Product_Zipped is a product with references to other products. The referenced products and all associated products and files are packaged into a single ZIP file. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product :: Product_Zipped | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| | internal_reference | 1..Unbounded | Internal_Reference |
| | has_zip | 1..1 | Zip |
| | file | 1..1 | File |
| Referenced from: None | | | |

# Chapter 3. Support classes in the common (pds) namespace.

The classes in this section are used by the product classes.

## Agency

| Name: Agency | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Agency class provides a description of an entity that provides regional or national level governance over nodes within the federated Planetary Data System. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: Agency | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | European Space Agency, National Aeronautics and Space Administration |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Product_Context | | | |

## Alias

| Name: Alias | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Alias class provides a single alternate name and identification for this product in this or some other archive or data system. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Alias | | | |
| Attribute(s) | Name | Cardinality | Value |
| | alternate_id | 0..1 | None |
| | alternate_title | 0..1 | None |
| | comment | 0..1 | None |
| No Associations | | | |
| Referenced from: Alias_List | | | |

## Alias_List

| Name: Alias_List | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Alias_List class provides a list of paired alternate names and identifications for this product in this or some other archive or data system. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Alias_List | | | |

| Name: Alias_List | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | alias | 1..Unbounded | Alias |
| Referenced from: Identification_Area | | | |

# Archival_Information_Package

| Name: Archival_Information_Package | | | Version Id: 1.n.0.0 |
|---|---|---|---|
| Description:The Archival Information Package (AIP) class defines an Information Package consisting of the Content Information and the associated Preservation Description Information (PDI), which is preserved within an archive that conforms to the Open Archive Information System (OAIS) Reference Model. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package :: Archival_Information_Package | | | |
| Attribute(s) | Name | Cardinality | Value |
| | description | 1..1 | None |
| No Associations | | | |
| Referenced from: Product_AIP | | | |

# Array

| Name: Array | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Array class defines a homogeneous N-dimensional array of scalars. The Array class is the parent class for all n-dimensional arrays of scalars. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Array | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | None |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 0..Unbounded | Axis_Array |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_ reference | 0..Unbounded | Local_Internal_ Reference |
| Referenced from: None | | | |

# Array_1D

| Name: **Array_1D** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Array 1D class is the parent class for all one dimensional array based classes. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Array :: Array_1D | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 1 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 1..1 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_reference | 0..Unbounded | Local_Internal_Reference |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_Supplemental | | | |

# Array_2D

| Name: **Array_2D** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Array 2D class is the parent class for all two dimensional array based classes. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Array :: Array_2D | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 2 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 2..2 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |

| *Name:* **Array_2D** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_ reference | 0..Unbounded | Local_Internal_ Reference |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Array_2D_Image

| *Name:* **Array_2D_Image** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Array 2D Image class is an extension of the Array 2D class and defines a two dimensional image. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Array :: Array_2D :: Array_2D_Image | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 2 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 2..2 | Axis_Array |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_ reference | 0..Unbounded | Local_Internal_ Reference |
| | has_Display_2d_Image | 0..1 | Display_2D_Image *Deprecated* |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Array_2D_Map

| *Name:* **Array_2D_Map** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:*The Array 2D Map class is an extension of the Array 2D class and defines a two dimensional map. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Array :: Array_2D :: Array_2D_Map | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |

| Name: Array_2D_Map | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 2 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 2..2 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_reference | 0..Unbounded | Local_Internal_Reference |
| | has_Display_2d_Image | 0..1 | Display_2D_Image *Deprecated* |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_Supplemental | | | |

# Array_2D_Spectrum

| Name: Array_2D_Spectrum | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Array 2D Spectrum class is an extension of the Array 2D class and defines a two dimensional spectrum. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Array :: Array_2D :: Array_2D_Spectrum | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 2 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 2..2 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_reference | 0..Unbounded | Local_Internal_Reference |

| *Name:* **Array_2D_Spectrum** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| | has_Display_2d_Image | 0..1 | Display_2D_Image *Deprecated* |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Array_3D

| *Name:* **Array_3D** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Array 3D class is the parent class for all three dimensional array based classes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Array :: Array_3D | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 3 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 3..3 | Axis_Array |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_ reference | 0..Unbounded | Local_Internal_ Reference |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Array_3D_Image

| *Name:* **Array_3D_Image** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:* The Array 3D Image class is an extension of the Array 3D class and defines a three dimensional image. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Array :: Array_3D :: Array_3D_Image | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 3 |
| | axis_index_order | 1..1 | Last Index Fastest |

| Name: Array_3D_Image | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 3..3 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_reference | 0..Unbounded | Local_Internal_Reference |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_Supplemental | | | |

# Array_3D_Movie

| Name: Array_3D_Movie | | | Version Id: 1.n.0.0 |
|---|---|---|---|
| Description:The Array 3D Movie class is an extension of the Array 3D class and defines a movie as a set of two dimensional images in a time series. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Array :: Array_3D :: Array_3D_Movie | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 3 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 3..3 | Axis_Array |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_reference | 0..Unbounded | Local_Internal_Reference |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_Supplemental | | | |

# Array_3D_Spectrum

| Name: Array_3D_Spectrum | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Array 3D Spectrum class is an extension of the Array 3D class and defines a three dimensional spectrum. | | | |

| *Name:* **Array_3D_Spectrum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Array :: Array_3D :: Array_3D_ Spectrum | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | axes | 1..1 | 3 |
| | axis_index_order | 1..1 | Last Index Fastest |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Element_Array | 1..1 | Element_Array |
| | has_Axis_Array | 3..3 | Axis_Array |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Object_Statistics |
| | data_object | 1..1 | Digital_Object |
| | local_internal_ reference | 0..Unbounded | Local_Internal_ Reference |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Axis_Array

| *Name:* **Axis_Array** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Axis Array class is used as a component of the array class and defines an axis of the array. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Axis_Array | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | axis_name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | elements | 1..1 | None |
| | unit *Deprecated* | 0..1 | None |
| | sequence_number | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Band_Bin_Set | 0..1 | Band_Bin_Set *Deprecated* |
| *Referenced from:* Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_ Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum | | | |

# Band_Bin *Deprecated*

| Name: Band_Bin *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Band_Bin class specifies the characteristics of an individual spectral band in a spectral qube. | | | |
| Namespace Id: pds | Steward: img | Role: concrete | Status: Deprecated |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Band_Bin *Deprecated* | | | |
| Attribute(s) | Name | Cardinality | Value |
| | band_number | 1..1 | None |
| | band_width | 1..1 | None |
| | center_wavelength | 1..1 | None |
| | detector_number | 0..1 | None |
| | filter_number | 0..1 | None |
| | grating_position | 0..1 | None |
| | original_band | 0..1 | None |
| | standard_deviation | 0..1 | None |
| | scaling_factor | 0..1 | None |
| | value_offset | 0..1 | None |
| No Associations | | | |
| Referenced from: Band_Bin_Set *Deprecated* | | | |

# Band_Bin_Set *Deprecated*

| Name: Band_Bin_Set *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Band_Bin_Set class contains the spectral characteristics for all the spectral bands in a qube. | | | |
| Namespace Id: pds | Steward: img | Role: concrete | Status: Deprecated |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Band_Bin_Set *Deprecated* | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_band_bin | 1..Unbounded | Band_Bin *Deprecated* |
| Referenced from: Axis_Array | | | |

# Bundle

| Name: Bundle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Bundle class describes a collection of collections. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Bundle | | | |
| Attribute(s) | Name | Cardinality | Value |
| | bundle_type | 1..1 | Archive, Supplemental |
| | description | 0..1 | None |

| Name: Bundle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Product_Bundle | | | |

# Bundle_Member_Entry

| Name: Bundle_Member_Entry | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Bundle Member Entry class provides a member reference to a collection. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Bundle_Member_Entry | | | |
| Attribute(s) | Name | Cardinality | Value |
| | lid_reference | 0..1 | None |
| | lidvid_reference | 0..1 | None |
| | member_status | 1..1 | Primary, Secondary |
| | reference_type | 1..1 | bundle_has_browse_ collection, bundle_has_ calibration_collection, bundle_has_context_ collection, bundle_ has_data_collection, bundle_has_document_ collection, bundle_has_ geometry_collection, bundle_has_member_ collection, bundle_has_ schema_collection, bundle_has_spice_ kernel_collection |
| No Associations | | | |
| Referenced from: Product_Bundle | | | |

# Byte_Stream

| Name: Byte_Stream | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Byte Stream class defines a stream of bytes. | | | |
| Namespace Id: pds | Steward: pds | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Checksum_Manifest

| Name: **Checksum_Manifest** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Checksum_Manifest class defines a two column table for file references and checksums. The table structure is compatible with the output from an MD5 checksum utility. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Stream_Text :: Checksum_Manifest | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | MD5Deep 4.n |
| | description | 0..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Checksum_Manifest | | | |

# Citation_Information

| Name: **Citation_Information** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Citation_Information class provides specific fields often used in citing the product in journal articles, abstract services, and other reference contexts. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Citation_Information | | | |
| Attribute(s) | Name | Cardinality | Value |
| | author_list | 0..1 | None |
| | editor_list | 0..1 | None |
| | publication_year | 1..1 | None |
| | keyword | 0..Unbounded | None |
| | description | 1..1 | None |
| No Associations | | | |
| Referenced from: Identification_Area | | | |

# Collection

| Name: **Collection** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Collection class provides a description of a set of products. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Collection | | | |

| *Name:* **Collection** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | collection_type | 1..1 | Browse, Calibration, Context, Data, Document, Geometry, Miscellaneous, SPICE Kernel, XML Schema |
| | description | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_Collection | | | |

# Conceptual_Object

| *Name:* **Conceptual_Object** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Conceptual Object class defines a non-tangible object that is also not a digital object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Data_Object :: Conceptual_Object | | | |
| *No Attributes* | | | |
| *No Associations* | | | |
| *Referenced from:* Agency, Bundle, DD_Attribute, DD_Attribute_Full, DD_Class, DD_Class_Full, Data_Set_PDS3, Field_Statistics, Geometry, Ingest_LDD, Investigation, Mission_PDS3, Node, Object_Statistics, Observing_System, Other, Quaternion, Resource, Update, Vector, Volume_PDS3, Volume_Set_PDS3 | | | |

# Context_Area

| *Name:* **Context_Area** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Context Area provides context information for a product. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Context_Area | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | comment | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_time_coordinates | 0..1 | Time_Coordinates |
| | has_primary_result_description | 0..1 | Primary_Result_Summary |
| | has_investigation_area | 0..Unbounded | Investigation_Area |
| | has_observing_system | 0..Unbounded | Observing_System |
| | has_target_identification | 0..Unbounded | Target_Identification |
| | has_mission_area | 0..1 | Mission_Area |
| | has_discipline_area | 0..1 | Discipline_Area |
| *Referenced from:* Product_Bundle, Product_Collection, Product_Document, Product_Native, Product_SPICE_Kernel | | | |

# DD_Association

| Name: DD_Association | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Association class defines the association between two classes or a class and an attribute in a data dictionary. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Association | | | |
| Attribute(s) | Name | Cardinality | Value |
| | local_identifier | 1..Unbounded | None |
| | reference_type | 1..1 | attribute_of, component_of, extension_of, parent_of, restriction_of, subclass_of |
| | minimum_occurrences | 1..1 | None |
| | maximum_occurrences | 1..1 | None |
| | constant_value | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | dd_attribute_reference | 0..1 | DD_Attribute_Reference |
| | dd_class_reference | 0..1 | DD_Class_Reference |
| Referenced from: DD_Class, DD_Class_Full | | | |

# DD_Association_External *Deprecated*

| Name: DD_Association_External *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Association_External class defines the association between classes and attributes within the local data dictionary and those external to the local data dictionary. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Deprecated |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Association_External *Deprecated* | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | namespace_id | 1..1 | None |
| | reference_type | 1..1 | attribute_of, component_of, extension_of, parent_of, restriction_of, subclass_of |
| | minimum_occurrences | 1..1 | None |
| | maximum_occurrences | 1..1 | None |
| No Associations | | | |
| Referenced from: DD_Class | | | |

# DD_Attribute

| Name: DD_Attribute | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Attribute class defines an attribute for a data dictionary. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Attribute | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | version_id | 1..1 | None |
| | local_identifier | 1..1 | None |
| | nillable_flag | 1..1 | None |
| | submitter_name | 1..1 | None |
| | definition | 1..1 | None |
| | comment | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | internal_reference | 0..Unbounded | Internal_Reference |
| | data_object | 1..1 | Conceptual_Object |
| | terminological_entry | 0..Unbounded | Terminological_Entry |
| | value_domain_entry | 1..1 | DD_Value_Domain |
| Referenced from: Ingest_LDD | | | |

# DD_Attribute_Full

| Name: DD_Attribute_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Attribute_Full class provides a more complete definition of an attribute in the data dictionary. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Attribute_Full | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | version_id | 1..1 | None |
| | class_name | 1..1 | None |
| | local_identifier | 1..1 | None |
| | steward_id | 1..1 | atm, geo, img, naif, ops, pds, ppi, rings, rs, sbn |
| | type | 1..1 | PDS3, PDS4 |
| | namespace_id | 1..1 | None |
| | nillable_flag | 1..1 | None |
| | submitter_name | 1..1 | None |
| | definition | 1..1 | None |
| | comment | 0..1 | None |
| | registered_by | 1..1 | None |

| *Name:* **DD_Attribute_Full** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | registration_authority_id | 1..1 | 0001_NASA_PDS_1 |
| | attribute_concept | 1..1 | Address, Angle, Attribute, Bit, Checksum, Collection, Constant, Cosine, Count, DOI, Delimiter, Description, Deviation, Direction, Distance, Duration, Factor, Flag, Format, Group, Home, ID, Latitude, Length, List, Location, Logical, Longitude, Mask, Maximum, Mean, Median, Minimum, Name, Note, Number, Offset, Order, Parallel, Password, Path, Pattern, Pixel, Quaternion, Radius, Ratio, Reference, Resolution, Role, Rotation, Scale, Sequence, Set, Size, Status, Summary, Syntax, Temperature, Text, Title, Type, Unit, Unknown, Value, Vector |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| | terminological_entry | 1..Unbounded | Terminological_Entry |
| | value_domain_entry | 0..1 | DD_Value_Domain_Full |
| *Referenced from:* Product_Attribute_Definition | | | |

# DD_Attribute_Reference

| *Name:* **DD_Attribute_Reference** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The DD Attribute Reference class provides a reference to an attribute using a namespace identifier and the attribute name. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Child :: DD_Attribute_Reference | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | namespace_id | 1..1 | None |
| | name | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* DD_Association, DD_Rule | | | |

# DD_Class

| *Name:* **DD_Class** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The DD_Class class defines a class for a data dictionary. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Class | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | version_id | 1..1 | None |
| | local_identifier | 1..1 | None |
| | submitter_name | 1..1 | None |
| | definition | 1..1 | None |
| | abstract_flag | 0..1 | None |
| | element_flag | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | internal_reference | 0..Unbounded | Internal_Reference |
| | data_object | 1..1 | Conceptual_Object |
| | dd_association | 1..Unbounded | DD_Association, DD_Association_External *Deprecated* |
| | terminological_entry | 0..Unbounded | Terminological_Entry |
| *Referenced from:* Ingest_LDD | | | |

# DD_Class_Full

| *Name:* **DD_Class_Full** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The DD_Class_Full class provides a more complete definition of a class for a data dictionary. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Class_Full | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | version_id | 1..1 | None |
| | local_identifier | 1..1 | None |
| | steward_id | 1..1 | atm, geo, img, naif, ops, pds, ppi, rings, rs, sbn |
| | type | 1..1 | PDS3, PDS4 |
| | namespace_id | 1..1 | None |
| | submitter_name | 1..1 | None |
| | definition | 1..1 | None |
| | comment | 0..1 | None |
| | registered_by | 1..1 | None |

| Name: DD_Class_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | registration_authority_id | 1..1 | None |
| | abstract_flag | 0..1 | None |
| | element_flag | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| | dd_association | 0..Unbounded | DD_Association |
| | terminological_entry | 0..Unbounded | Terminological_Entry |
| Referenced from: Product_Class_Definition | | | |

# DD_Class_Reference

| Name: DD_Class_Reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD Class Reference class provides a reference to a class using a namespace identifier and the class name. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Class_Reference | | | |
| Attribute(s) | Name | Cardinality | Value |
| | namespace_id | 1..1 | None |
| | name | 1..1 | None |
| No Associations | | | |
| Referenced from: DD_Association, DD_Rule | | | |

# DD_Permissible_Value

| Name: DD_Permissible_Value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Permissible_Value class lists permissible values and their meanings. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Permissible_Value | | | |
| Attribute(s) | Name | Cardinality | Value |
| | value | 1..1 | None |
| | value_meaning | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | terminological_entry | 0..Unbounded | Terminological_Entry |
| Referenced from: DD_Value_Domain | | | |

# DD_Permissible_Value_Full

| Name: DD_Permissible_Value_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Permissible_Value_Full class lists permissible values, their meanings, and the dates when active. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Permissible_Value_Full | | | |

| Name: DD_Permissible_Value_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Attribute(s) | Name | Cardinality | Value |
| | value | 1..1 | None |
| | value_meaning | 0..1 | None |
| | value_begin_date | 1..1 | None |
| | value_end_date | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | terminological_entry | 0..Unbounded | Terminological_Entry |
| Referenced from: DD_Value_Domain_Full | | | |

# DD_Rule

| Name: DD_Rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Rule class defines a Schematron rule for a data dictionary. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Rule | | | |
| Attribute(s) | Name | Cardinality | Value |
| | local_identifier | 1..1 | None |
| | rule_context | 1..1 | None |
| | rule_assign | 0..Unbounded | None |
| Association(s) | Name | Cardinality | Class |
| | dd_attribute_reference | 1..1 | DD_Attribute_Reference |
| | dd_class_reference | 1..1 | DD_Class_Reference |
| | rule_statement | 1..Unbounded | DD_Rule_Statement |
| Referenced from: Ingest_LDD | | | |

# DD_Rule_Statement

| Name: DD_Rule_Statement | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The DD_Rule_Statement class defines a Schematron rule statement. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: DD_Rule_Statement | | | |
| Attribute(s) | Name | Cardinality | Value |
| | rule_type | 1..1 | Assert, Assert Every, Assert If, Report |
| | rule_test | 1..1 | None |
| | rule_message | 1..1 | None |
| | rule_description | 0..1 | None |
| | rule_value | 0..Unbounded | None |
| No Associations | | | |
| Referenced from: DD_Rule | | | |

# DD_Value_Domain

| Name: DD_Value_Domain | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description:The DD_Value_Domain class defines an attribute's permissible values and their constraints. | | | | |
| Namespace Id: pds | Steward: ops | | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: DD_Value_Domain | | | | |
| Attribute(s) | Name | Cardinality | | Value |
| | enumeration_flag | 1..1 | | None |
| | value_data_type | 1..1 | | ASCII_AnyURI, ASCII_Boolean, ASCII_DOI, ASCII_Date_DOY, ASCII_Date_Time, ASCII_Date_Time_DOY, ASCII_Date_Time_UTC, ASCII_Date_Time_YMD, ASCII_Date_YMD, ASCII_Directory_Path_Name, ASCII_File_Name, ASCII_File_Specification_Name, ASCII_Integer, ASCII_LID, ASCII_LIDVID, ASCII_LIDVID_LID, ASCII_MD5_Checksum, ASCII_NonNegative_Integer, ASCII_Numeric_Base16, ASCII_Numeric_Base2, ASCII_Numeric_Base8, ASCII_Real, ASCII_Short_String_Collapsed, ASCII_Short_String_Preserved, ASCII_Text_Collapsed, ASCII_Text_Preserved, ASCII_Time, ASCII_VID, UTF8_Short_String_Collapsed, UTF8_Short_String_Preserved, UTF8_Text_Preserved, Vector_Cartesian_3, Vector_Cartesian_3_Acceleration, Vector_Cartesian_3_Pointing, Vector_Cartesian_3_Position, Vector_Cartesian_3_Velocity |
| | formation_rule | 0..1 | | None |

| *Name:* **DD_Value_Domain** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | minimum_characters | 0..1 | None |
| | maximum_characters | 0..1 | None |
| | minimum_value | 0..1 | None |
| | maximum_value | 0..1 | None |
| | pattern | 0..1 | None |
| | unit_of_measure_type | 0..1 | Units_of_Acceleration, Units_of_Amount_ Of_Substance, Units_ of_Angle, Units_of_ Angular_Velocity, Units_of_Area, Units_ of_Frame_Rate, Units_ of_Frequency, Units_ of_Length, Units_of_ Map_Scale, Units_ of_Mass, Units_of_ Misc, Units_of_None, Units_of_Optical_ Path_Length, Units_ of_Pressure, Units_ of_Radiance, Units_ of_Rates, Units_of_ Solid_Angle, Units_ of_Spectral_Irradiance, Units_of_Spectral_ Radiance, Units_of_ Storage, Units_of_ Temperature, Units_ of_Time, Units_of_ Velocity, Units_of_ Voltage, Units_of_ Volume, Units_of_ Wavenumber |
| | specified_unit_id | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | permissible_value | 0..Unbounded | DD_Permissible_Value |
| *Referenced from:* DD_Attribute | | | |

# DD_Value_Domain_Full

| *Name:* **DD_Value_Domain_Full** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The DD_Value_Domain_Full class provides a more complete definition of a attribute's value domain. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Child :: DD_Value_Domain_Full | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | enumeration_flag | 1..1 | None |
| | value_data_type | 1..1 | ASCII_AnyURI, ASCII_Boolean, ASCII_DOI, ASCII_ |

| Name: DD_Value_Domain_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Date_DOY, ASCII_Date_Time, ASCII_Date_Time_DOY, ASCII_Date_Time_UTC, ASCII_Date_Time_YMD, ASCII_Date_YMD, ASCII_Directory_Path_Name, ASCII_File_Name, ASCII_File_Specification_Name, ASCII_Integer, ASCII_LID, ASCII_LIDVID, ASCII_LIDVID_LID, ASCII_MD5_Checksum, ASCII_NonNegative_Integer, ASCII_Numeric_Base16, ASCII_Numeric_Base2, ASCII_Numeric_Base8, ASCII_Real, ASCII_Short_String_Collapsed, ASCII_Short_String_Preserved, ASCII_Text_Collapsed, ASCII_Text_Preserved, ASCII_Time, ASCII_VID, UTF8_Short_String_Collapsed, UTF8_Short_String_Preserved, UTF8_Text_Preserved |
| | formation_rule | 0..1 | None |
| | minimum_characters | 0..1 | None |
| | maximum_characters | 0..1 | None |
| | minimum_value | 0..1 | None |
| | maximum_value | 0..1 | None |
| | pattern | 0..1 | None |
| | unit_of_measure_type | 0..1 | Units_of_Amount_Of_Substance, Units_of_Angle, Units_of_Angular_Velocity, Units_of_Area, Units_of_Frame_Rate, Units_of_Frequency, Units_of_Length, Units_of_Map_Scale, Units_of_Mass, Units_of_Misc, Units_of_None, Units_of_Optical_Path_Length, Units_of_Pressure, Units_ |

| Name: DD_Value_Domain_Full | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | of_Radiance, Units_ of_Rates, Units_of_ Solid_Angle, Units_ of_Spectral_Irradiance, Units_of_Spectral_ Radiance, Units_of_ Storage, Units_of_ Temperature, Units_ of_Time, Units_of_ Velocity, Units_of_ Voltage, Units_of_ Volume, Units_of_ Wavenumber |
| | conceptual_domain | 1..1 | Boolean, Integer, Name, Numeric, Real, Short_String, Text, Time, Type, Unknown |
| | specified_unit_id | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | permissible_value | 0..Unbounded | DD_Permissible_ Value_Full |
| *Referenced from:* DD_Attribute_Full | | | |

# DIP_Deep_Archive

| Name: DIP_Deep_Archive | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| *Description:*The Dissemination Information Package Deep Archive class is an Information Package derived from one or more AIPs and is received by the National Space Science Data Center (NSSDC). | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package :: DIP_Deep_Archive | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | description | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_DIP_Deep_Archive | | | |

# Data_Object

| Name: Data_Object | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| *Description:*The Data_Object class defines a thing about which almost nothing is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* abstract | *Status:* Active |
| *Class Hierarchy:* Data_Object | | | |
| *No Attributes* | | | |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Digital_Object

| *Name:* **Digital_Object** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Digital Object class defines a sequence of digital bits. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Data_Object :: Digital_Object | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | bit_string | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_ Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum, Checksum_ Manifest, Document, Document_File, Encoded_Binary, Encoded_Byte_Stream, Encoded_ Header, Encoded_Image, Encoded_Native, File, Header, Inventory, Manifest_SIP_Deep_ Archive, Parsable_Byte_Stream, SPICE_Kernel, Service_Description, Software, Software_Binary, Software_Script, Software_Source, Stream_Text, Table_Base, Table_Binary, Table_Character, Table_Delimited, Transfer_Manifest, XML_Schema | | | |

# Discipline_Area

| *Name:* **Discipline_Area** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Discipline area allows the insertion of discipline specific metadata. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Discipline_Area | | | |
| *No Attributes* | | | |
| *No Associations* | | | |
| *Referenced from:* Context_Area, Observation_Area, Product_Context | | | |

# Discipline_Facets

| *Name:* **Discipline_Facets** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:* The Discipline_Facets class contains the discipline-related search facets. It is required and may not be repeated. Note that Science_Facets was modeled with Discipline_Facets as a component and Discipline_Facets was modeled with Group_Facet1 and Group_Facet2 as components. This dependency hierarchy was flattened and only Science_Facets exists in the schema. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Discipline_Facets | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | discipline_name | 1..1 | Atmospheres, Fields, Flux Measurements, Imaging, Particles, Ring-Moon Systems, Small Bodies, Spectroscopy |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Group_Facet1 | 0..Unbounded | Group_Facet1 |
| | has_Group_Facet2 | 0..Unbounded | Group_Facet2 |

| Name: Discipline_Facets | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Referenced from: Science_Facets | | | |

# Display_2D_Image *Deprecated*

| Name: Display_2D_Image *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Display_2D_Image class provides attributes to enable the display of a 2 dimensional image. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Deprecated |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Display_2D_Image *Deprecated* | | | |
| Attribute(s) | Name | Cardinality | Value |
| | line_display_direction | 1..1 | Down, Up |
| | sample_display_ direction | 1..1 | Right |
| No Associations | | | |
| Referenced from: Array_2D_Image, Array_2D_Map, Array_2D_Spectrum | | | |

# Dissemination_Information_Package

| Name: Dissemination_Information_Package | | | Version Id: 1.n.0.0 |
|---|---|---|---|
| Description:The Dissemination Information Package (DIP) class defines an Information Package, derived from one or more AIPs, that is received by a consumer. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package :: Dissemination_Information_Package | | | |
| Attribute(s) | Name | Cardinality | Value |
| | description | 1..1 | None |
| No Associations | | | |
| Referenced from: Product_DIP | | | |

# Document

| Name: Document | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Document class describes a document. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Document | | | |
| Attribute(s) | Name | Cardinality | Value |
| | revision_id | 0..1 | None |
| | document_name | 0..1 | None |
| | doi | 0..1 | None |
| | author_list | 0..1 | None |
| | editor_list | 0..1 | None |
| | acknowledgement_text | 0..1 | None |
| | copyright | 0..1 | None |

| Name: Document | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | publication_date | 1..1 | None |
| | document_editions | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_document_edition | 0..Unbounded | Document_Edition |
| | data_object | 1..1 | Digital_Object |
| Referenced from: Product_Document | | | |

# Document_Edition

| Name: Document_Edition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:A Document Edition is one complete version of the document in a set of files that is distinguished by language, a unique assemblage of file formats, or some other criteria. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: Document_Edition | | | |
| Attribute(s) | Name | Cardinality | Value |
| | edition_name | 1..1 | None |
| | starting_point_ identifier | 0..1 | None |
| | language | 1..1 | None |
| | files | 1..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_document_file | 1..Unbounded | Document_File |
| Referenced from: Document | | | |

# Document_File

| Name: Document_File | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Document File class describes a file which is a part of a document. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: File :: Document_File | | | |
| Attribute(s) | Name | Cardinality | Value |
| | file_name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | creation_date_time | 0..1 | None |
| | file_size | 0..1 | None |
| | records | 0..1 | None |
| | md5_checksum | 0..1 | None |
| | comment | 0..1 | None |
| | directory_path_name | 0..1 | None |
| | document_standard_id | 1..1 | 7-Bit ASCII Text, Encapsulated |

| *Name:* **Document_File** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | | | Postscript, GIF, HTML 2.0, HTML 3.2, HTML 4.0, HTML 4.01, JPEG, LaTEX, Microsoft Excel, Microsoft Word, PDF, PDF/A, PNG, Postscript, Rich Text, TIFF, UTF-8 Text |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* Document_Edition | | | |

# Element_Array

| *Name:* **Element_Array** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Element Array class is used as a component of the array class and defines an element of the array. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Element_Array | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | data_type | 1..1 | ComplexLSB16, ComplexLSB8, ComplexMSB16, ComplexMSB8, IEEE754LSBDouble, IEEE754LSBSingle, IEEE754MSBDouble, IEEE754MSBSingle, SignedBitString, SignedByte, SignedLSB2, SignedLSB4, SignedLSB8, SignedMSB2, SignedMSB4, SignedMSB8, UnsignedBitString, UnsignedByte, UnsignedLSB2, UnsignedLSB4, UnsignedLSB8, UnsignedMSB2, UnsignedMSB4, UnsignedMSB8 |
| | unit | 0..1 | None |
| | scaling_factor | 0..1 | None |
| | value_offset | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_ Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum | | | |

# Encoded_Binary

| Name: Encoded_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Encoded Binary class describes a binary encoded byte stream. This class is used to describe files in the repository that are being registered using Product_File_Repository. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Encoded_Byte_Stream :: Encoded_ Binary | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | encoding_standard_id | 1..1 | CCSDS Space Communications Protocols |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Binary, File_Area_Observational_Supplemental | | | |

# Encoded_Byte_Stream

| Name: Encoded_Byte_Stream | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Encoded Byte Stream class defines byte streams that must be decoded by software before use. These byte streams must only use standard encodings. The Encoded Byte Stream class is the parent class for all encoded byte streams. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Encoded_Byte_Stream | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | encoding_standard_id | 1..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Observational_Supplemental | | | |

# Encoded_Header

| Name: Encoded_Header | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Encoded Header class describes a header that has been encoded using an encoding scheme that is compliant to an external standard. | | | |

| *Name:* **Encoded_Header** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Encoded_Byte_Stream :: Encoded_ Header | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | encoding_standard_id | 1..1 | TIFF |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Encoded_Image

| *Name:* **Encoded_Image** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Encoded Image class is used for ancillary images in standard formats, such as JPEG. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Encoded_Byte_Stream :: Encoded_ Image | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | encoding_standard_id | 1..1 | GIF, J2C, JPEG, PDF, PDF/A, PNG, TIFF |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* File_Area_Browse, File_Area_Encoded_Image, File_Area_Observational_ Supplemental | | | |

# Encoded_Native

| *Name:* **Encoded_Native** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Encoded Native class describes a binary encoded byte stream. This class is used to describe data objects for Product_Native. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Encoded_Byte_Stream :: Encoded_ Native | | | |

| *Name:* **Encoded_Native** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | encoding_standard_id | 1..1 | SEED 2.4 |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* File_Area_Native | | | |

# External_Reference

| *Name:* **External_Reference** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The External_Reference class is used to reference a source outside the PDS registry system. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: External_Reference | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | doi | 0..1 | None |
| | reference_text | 1..1 | None |
| | description | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Observing_System_Component, Reference_List | | | |

# External_Reference_Extended

| *Name:* **External_Reference_Extended** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The External_Reference_Extended class is used to reference a source outside the PDS registry system. This extension is used in the local data dictionary. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: External_Reference :: External_Reference_Extended | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | doi | 0..1 | None |
| | reference_text | 1..1 | None |
| | description | 0..1 | None |
| | name | 0..1 | None |
| | url | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Terminological_Entry | | | |

# Facility

| Name: Facility | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Facility class provides a name and address for a terrestrial observatory or laboratory. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: Facility | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | type | 0..1 | Laboratory, Observatory |
| | address | 0..1 | None |
| | country | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Context | | | |

# Field

| Name: Field | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Field class defines a field of a record and is the parent class of all specific field classes.The Field class defines a field of a record or a field of a group and is the parent class of all specific field classes. | | | |
| Namespace Id: pds | Steward: pds | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Field | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | field_number | 0..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Field_Binary

| Name: Field_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Field_Binary class defines a field of a binary record or a field of a binary group. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Field :: Field_Binary | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | field_number | 0..1 | None |
| | field_location | 1..1 | None |
| | data_type | 1..1 | ASCII_AnyURI, ASCII_Boolean, ASCII_DOI, ASCII_ |

| Name: Field_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Date, ASCII_Date_DOY, ASCII_Date_Time, ASCII_Date_Time_DOY, ASCII_Date_Time_UTC, ASCII_Date_Time_YMD, ASCII_Date_YMD, ASCII_Directory_Path_Name, ASCII_File_Name, ASCII_File_Specification_Name, ASCII_Integer, ASCII_LID, ASCII_LIDVID, ASCII_LIDVID_LID, ASCII_MD5_Checksum, ASCII_NonNegative_Integer, ASCII_Numeric_Base16, ASCII_Numeric_Base2, ASCII_Numeric_Base8, ASCII_Real, ASCII_String, ASCII_Time, ASCII_VID, ComplexLSB16, ComplexLSB8, ComplexMSB16, ComplexMSB8, IEEE754LSBDouble, IEEE754LSBSingle, IEEE754MSBDouble, IEEE754MSBSingle, SignedBitString, SignedByte, SignedLSB2, SignedLSB4, SignedLSB8, SignedMSB2, SignedMSB4, SignedMSB8, UTF8_String, UnsignedBitString, UnsignedByte, UnsignedLSB2, UnsignedLSB4, UnsignedLSB8, UnsignedMSB2, UnsignedMSB4, UnsignedMSB8 |
| | field_length | 1..1 | None |
| | field_format | 0..1 | None |
| | unit | 0..1 | None |
| | scaling_factor | 0..1 | None |

| Name: Field_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | value_offset | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Field_Statistics |
| | has_Packed_Data_ Fields | 0..1 | Packed_Data_Fields |
| Referenced from: Group_Field_Binary, Record_Binary | | | |

# Field_Bit

| Name: Field_Bit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Field_Bit class provides parameters for extracting one field out of a string of bytes which contains packed data (that is, data values either smaller than a single byte, or crossing byte boundaries, or both. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Field :: Field_Bit | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | field_number | 0..1 | None |
| | start_bit | 1..1 | None |
| | stop_bit | 1..1 | None |
| | data_type | 1..1 | SignedBitString, UnsignedBitString |
| | field_format | 0..1 | None |
| | unit | 0..1 | None |
| | scaling_factor | 0..1 | None |
| | value_offset | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | associated_Special_ Constants | 0..1 | Special_Constants |
| Referenced from: Packed_Data_Fields | | | |

# Field_Character

| Name: Field_Character | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Field_Character class defines a field of a character record or a field of a character group. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Field :: Field_Character | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |

| *Name:* **Field_Character** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | field_number | 0..1 | None |
| | field_location | 1..1 | None |
| | data_type | 1..1 | ASCII_AnyURI, ASCII_Boolean, ASCII_DOI, ASCII_Date, ASCII_Date_DOY, ASCII_Date_Time, ASCII_Date_Time_DOY, ASCII_Date_Time_UTC, ASCII_Date_Time_YMD, ASCII_Date_YMD, ASCII_Directory_Path_Name, ASCII_File_Name, ASCII_File_Specification_Name, ASCII_Integer, ASCII_LID, ASCII_LIDVID, ASCII_LIDVID_LID, ASCII_MD5_Checksum, ASCII_NonNegative_Integer, ASCII_Numeric_Base16, ASCII_Numeric_Base2, ASCII_Numeric_Base8, ASCII_Real, ASCII_String, ASCII_Time, ASCII_VID, UTF8_String |
| | field_length | 1..1 | None |
| | field_format | 0..1 | None |
| | unit | 0..1 | None |
| | scaling_factor | 0..1 | None |
| | value_offset | 0..1 | None |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Field_Statistics |
| *Referenced from:* Group_Field_Character, Record_Character | | | |

# Field_Delimited

| *Name:* **Field_Delimited** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Field_Delimited class defines a field of a delimited record or a field of a delimited group. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |

| Name: Field_Delimited | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Class Hierarchy: Tagged_Digital_Child :: Field :: Field_Delimited | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | field_number | 0..1 | None |
| | data_type | 1..1 | ASCII_AnyURI, ASCII_Boolean, ASCII_DOI, ASCII_Date, ASCII_Date_DOY, ASCII_Date_Time, ASCII_Date_Time_DOY, ASCII_Date_Time_UTC, ASCII_Date_Time_YMD, ASCII_Date_YMD, ASCII_Directory_Path_Name, ASCII_File_Name, ASCII_File_Specification_Name, ASCII_Integer, ASCII_LID, ASCII_LIDVID, ASCII_LIDVID_LID, ASCII_MD5_Checksum, ASCII_NonNegative_Integer, ASCII_Numeric_Base16, ASCII_Numeric_Base2, ASCII_Numeric_Base8, ASCII_Real, ASCII_String, ASCII_Time, ASCII_VID, UTF8_String |
| | maximum_field_length | 0..1 | None |
| | field_format | 0..1 | None |
| | unit | 0..1 | None |
| | scaling_factor | 0..1 | None |
| | value_offset | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | associated_Special_Constants | 0..1 | Special_Constants |
| | associated_Statistics | 0..1 | Field_Statistics |
| Referenced from: Group_Field_Delimited, Record_Delimited | | | |

# Field_Statistics

| Name: Field_Statistics | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Field Statistics class provides a set of metrics for a column formed by a field in a repeating record. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Field_Statistics | | | |
| Attribute(s) | Name | Cardinality | Value |
| | local_identifier | 0..1 | None |
| | maximum | 0..1 | None |
| | minimum | 0..1 | None |
| | mean | 0..1 | None |
| | standard_deviation | 0..1 | None |
| | median | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Field_Binary, Field_Character, Field_Delimited | | | |

# File

| Name: File | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File class consists of attributes that describe a file in a data store. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: File | | | |
| Attribute(s) | Name | Cardinality | Value |
| | file_name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | creation_date_time | 0..1 | None |
| | file_size | 0..1 | None |
| | records | 0..1 | None |
| | md5_checksum | 0..1 | None |
| | comment | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Binary, File_Area_Browse, File_Area_Checksum_Manifest, File_Area_Encoded_Image, File_Area_Inventory, File_Area_Native, File_Area_Observational, File_Area_Observational_Supplemental, File_Area_SIP_Deep_Archive, File_Area_SPICE_Kernel, File_Area_Service_Description, File_Area_Text, File_Area_Transfer_Manifest, File_Area_XML_Schema, Product_Zipped | | | |

# File_Area

| Name: File_Area | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File_Area class defines a File and its component data objects. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# File_Area_Binary

| Name: File_Area_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Binary class describes a file that contains an encoded byte stream. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_Binary | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 0..Unbounded | Encoded_Binary |
| Referenced from: Product_File_Repository, Product_Proxy_PDS3 | | | |

# File_Area_Browse

| Name: File_Area_Browse | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Browse class describes a file and one or more tagged_data_objects contained within the file. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_Browse | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..Unbounded | Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum, Encoded_Header, Encoded_Image, Header, Stream_Text, Table_Binary, Table_Character, Table_Delimited |
| Referenced from: Product_Browse | | | |

# File_Area_Checksum_Manifest

| Name: File_Area_Checksum_Manifest | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Checksum Manifest class describes a file that contains a two column table for file references and checksums. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_Checksum_Manifest | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Checksum_Manifest |
| Referenced from: Information_Package_Component | | | |

# File_Area_Encoded_Image

| Name: File_Area_Encoded_Image | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Encoded Image class describes a file that contains an Encoded Image object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_Encoded_Image | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Encoded_Image |
| Referenced from: Product_Thumbnail | | | |

# File_Area_Inventory

| Name: File_Area_Inventory | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Inventory class describes a file and an inventory consisting of references to members. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_Inventory | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Inventory |
| Referenced from: Product_Collection | | | |

# File_Area_Native

| Name: File_Area_Native | | | Version Id: 1.2.0.0 |
|---|---|---|---|
| Description:The File Area Native describes tagged_data_objects collected from an instrument. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |

| *Name:* **File_Area_Native** | | | *Version Id:* **1.2.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Native | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..Unbounded | Encoded_Native |
| *Referenced from:* Product_Native | | | |

# File_Area_Observational

| *Name:* **File_Area_Observational** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The File Area Observational class describes, for an observational product, a file and one or more tagged_data_objects contained within the file. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Observational | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..Unbounded | Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum, Encoded_Header, Header, Stream_Text, Table_Binary, Table_Character, Table_Delimited |
| *Referenced from:* Product_Observational | | | |

# File_Area_Observational_Supplemental

| *Name:* **File_Area_Observational_Supplemental** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The File Area Observational Supplemental class describes, for an observational product, additional files and tagged_data_objects contained within the file. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Observational_Supplemental | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..Unbounded | Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_Spectrum, Array_3D, |

| Name: File_Area_Observational_Supplemental | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum, Encoded_Binary, Encoded_Byte_Stream, Encoded_Header, Encoded_Image, Header, Parsable_ Byte_Stream, Stream_ Text, Table_Binary, Table_Character, Table_Delimited |
| Referenced from: Product_Observational | | | |

# File_Area_SIP_Deep_Archive

| Name: File_Area_SIP_Deep_Archive | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area SIP Deep Archive class describes the File Area for the Submission Information Package (SIP) for the NASA planetary science deep archive. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_SIP_Deep_Archive | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Manifest_SIP_Deep_ Archive |
| Referenced from: Information_Package_Component_Deep_Archive | | | |

# File_Area_SPICE_Kernel

| Name: File_Area_SPICE_Kernel | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area SPICE Kernel class describes a file that contains a SPICE Kernel object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: File_Area :: File_Area_SPICE_Kernel | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | SPICE_Kernel |
| Referenced from: Product_SPICE_Kernel | | | |

# File_Area_Service_Description

| Name: File_Area_Service_Description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The File Area Service Description class describes a file that contains a service description. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |

| *Name:* **File_Area_Service_Description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Service_Description | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..Unbounded | Service_Description |
| *Referenced from:* Product_Service | | | |

# File_Area_Text

| *Name:* **File_Area_Text** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The File Area Text class describes a file that contains a text stream object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Text | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Stream_Text |
| *Referenced from:* Product_Bundle, Product_File_Text | | | |

# File_Area_Transfer_Manifest

| *Name:* **File_Area_Transfer_Manifest** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The File Area Transfer Manifest class describes a file that contains a two column table that maps the logical identifiers and version ids of products to their file specification names. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_Transfer_Manifest | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | Transfer_Manifest |
| *Referenced from:* Information_Package_Component | | | |

# File_Area_XML_Schema

| *Name:* **File_Area_XML_Schema** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The File Area XML Schema class describes a file that contains a resource used for the PDS4 implementation into XML. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: File_Area :: File_Area_XML_Schema | | | |
| *No Attributes* | | | |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_File | 1..1 | File |
| | has_tagged_data_object | 1..1 | XML_Schema |

| *Name:* **File_Area_XML_Schema** | *Version Id:* **1.0.0.0** |
|---|---|
| *Referenced from:* Product_XML_Schema | |

# Geometry

| *Name:* **Geometry** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| *Description:* The Geometry class groups geometry information. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Geometry | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | local_identifier | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| | vector | 0..Unbounded | Vector |
| *Referenced from:* None | | | |

# Group

| *Name:* **Group** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Group class defines a group of (repeating) fields and, possibly, (sub) groups; it is the parent class of all specific group classes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* abstract | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Group | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | group_number | 0..1 | None |
| | repetitions | 1..1 | None |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Group_Facet1

| *Name:* **Group_Facet1** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:* The Group_Facet1 class contains a single facet restricted according to the value of discipline_name. It also contains zero or more subfacets restricted according to the value of the facet. Note that Science_Facets was modeled with Discipline_Facets as a component and Discipline_Facets was modeled with Group_Facet1 and Group_Facet2 as components. This dependency hierarchy was flattened and only Science_Facets exists in the schema. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Group_Facet1 | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | facet1 | 0..1 | 2D, Color, Color Movie, Dust Study, Dynamical Properties, Electric, |

| *Name:* **Group_Facet1** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| | | | Electrons, Gas Study, Grayscale, Historical Reference, Ions, Lightcurve, Linear, Magnetic, Meteoritics, Meteorology, Movie, Neutrals, Photometry, Physical Properties, Polarimetry, Production Rates, Ring Compositional Map, Ring Occultation Profile, Ring Thermal Map, Satellite Astrometry, Shape Model, Spectral Cube, Spectral Image, Structure, Tabulated, Taxonomy |
| | subfacet1 | 0..Unbounded | None |
| *No Associations* | | | |
| *Referenced from:* Discipline_Facets | | | |

# Group_Facet2

| *Name:* **Group_Facet2** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:* The Group_Facet2 class contains a single facet restricted according to the value of discipline_name. It also contains zero or more subfacets restricted according to the value of the facet. Note that Science_Facets was modeled with Discipline_Facets as a component and Discipline_Facets was modeled with Group_Facet1 and Group_Facet2 as components. This dependency hierarchy was flattened and only Science_Facets exists in the schema. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Group_Facet2 | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | facet2 | 0..1 | Background, Cosmic Ray, Energetic, Plasma, Solar Energetic, Waves |
| | subfacet2 | 0..Unbounded | None |
| *No Associations* | | | |
| *Referenced from:* Discipline_Facets | | | |

# Group_Field_Binary

| *Name:* **Group_Field_Binary** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Group_Field_Binary class allows a group of table fields. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Group :: Group_Field_Binary | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | group_number | 0..1 | None |

| *Name:* **Group_Field_Binary** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | repetitions | 1..1 | None |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| | group_location | 1..1 | None |
| | group_length | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Group_Field_ Binary | 1..Unbounded | Field_Binary, Group_ Field_Binary |
| *Referenced from:* Group_Field_Binary, Record_Binary | | | |

# Group_Field_Character

| *Name:* **Group_Field_Character** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Group_Field_Character class allows a group of table fields. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Group :: Group_Field_Character | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | group_number | 0..1 | None |
| | repetitions | 1..1 | None |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| | group_location | 1..1 | None |
| | group_length | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Group_Field_ Character | 1..Unbounded | Field_Character, Group_Field_Character |
| *Referenced from:* Group_Field_Character, Record_Character | | | |

# Group_Field_Delimited

| *Name:* **Group_Field_Delimited** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Field_Group_Delimited class allows a group of delimited fields. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Group :: Group_Field_Delimited | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | group_number | 0..1 | None |
| | repetitions | 1..1 | None |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Delimited_Field_ Grouped | 1..Unbounded | Field_Delimited, Group_Field_Delimited |
| *Referenced from:* Group_Field_Delimited, Record_Delimited | | | |

# Header

| Name: Header | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Header class describes a data object header. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Header | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 1..1 | None |
| | parsing_standard_id | 1..1 | 7-Bit ASCII Text, CDF 3.4 ISTP/IACG, FITS 3.0, ISIS2, ISIS2 History Label, ISIS3, PDS DSV 1, PDS ODL 2, PDS3, Pre-PDS3, UTF-8 Text, VICAR1, VICAR2 |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Identification_Area

| Name: Identification_Area | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The identification area consists of attributes that identify and name an object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Identification_Area | | | |
| Attribute(s) | Name | Cardinality | Value |
| | logical_identifier | 1..1 | None |
| | version_id | 1..1 | None |
| | title | 1..1 | None |
| | information_model_ version | 1..1 | 1.3.0.0 |
| | product_class | 1..1 | Product_AIP, Product_ Attribute_Definition, Product_Browse, Product_Bundle, Product_Class_ Definition, Product_ Collection, Product_ Context, Product_ DIP, Product_DIP_ Deep_Archive, Product_Data_Set_ |

| Name: Identification_Area | | | | Version Id: 1.0.0.0 |
|---|---|---|---|---|
| | | | | PDS3, Product_ Document, Product_ File_Repository, Product_File_Text, Product_Instrument_ Host_PDS3, Product_ Instrument_PDS3, Product_Mission_ PDS3, Product_Native, Product_Observational, Product_Proxy_PDS3, Product_SIP, Product_ SIP_Deep_Archive, Product_SPICE_ Kernel, Product_ Service, Product_ Software, Product_ Subscription_PDS3, Product_Target_PDS3, Product_Thumbnail, Product_Update, Product_Volume_ PDS3, Product_ Volume_Set_PDS3, Product_XML_ Schema, Product_ Zipped |
| Association(s) | Name | Cardinality | | Class |
| | alias_list | 0..1 | | Alias_List |
| | citation_information | 0..1 | | Citation_Information |
| | modification_history | 0..1 | | Modification_History |
| Referenced from: Product, Product_AIP, Product_Attribute_Definition, Product_Browse, Product_ Bundle, Product_Class_Definition, Product_Collection, Product_Context, Product_DIP, Product_ DIP_Deep_Archive, Product_Data_Set_PDS3, Product_Document, Product_File_Repository, Product_File_Text, Product_Instrument_Host_PDS3, Product_Instrument_PDS3, Product_ Mission_PDS3, Product_Native, Product_Observational, Product_Proxy_PDS3, Product_SIP, Product_SIP_Deep_Archive, Product_SPICE_Kernel, Product_Service, Product_Software, Product_Subscription_PDS3, Product_Target_PDS3, Product_Thumbnail, Product_Update, Product_Volume_PDS3, Product_Volume_Set_PDS3, Product_XML_Schema, Product_Zipped | | | | |

# Information_Package

| Name: Information_Package | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Information Package class defines the Information Package as described in the OAIS Reference Model and is the parent class of all specific IP classes. | | | |
| Namespace Id: pds | Steward: ops | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package | | | |
| Attribute(s) | Name | Cardinality | Value |
| | description | 1..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Information_Package_Component

| Name: Information_Package_Component | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description: The Information_Package_Component class associates a Bundle, Collections or Basic Products with Checksum and Storage Manifests. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package_ Component | | | |
| Attribute(s) | Name | Cardinality | Value |
| | checksum_manifest_ checksum | 0..1 | None |
| | checksum_type | 0..1 | None |
| | transfer_manifest_ checksum | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | internal_reference | 1..Unbounded | Internal_Reference |
| | has_Checksum_ Manifest | 0..1 | File_Area_Checksum_ Manifest |
| | has_Transfer_Manifest | 0..1 | File_Area_Transfer_ Manifest |
| Referenced from: Product_AIP, Product_DIP, Product_DIP_Deep_Archive, Product_SIP | | | |

# Information_Package_Component_Deep_Archive

| Name: Information_Package_Component_Deep_Archive | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description: The Information Package Component Deep Archive class is an Information Package Component for the NASA planetary science deep archive. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package_ Component_Deep_Archive | | | |
| Attribute(s) | Name | Cardinality | Value |
| | manifest_checksum | 1..1 | None |
| | checksum_type | 1..1 | None |
| | manifest_url | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_manifest | 1..1 | File_Area_SIP_Deep_ Archive |
| | internal_reference | 1..1 | Internal_Reference |
| Referenced from: Product_SIP_Deep_Archive | | | |

# Instrument

| Name: Instrument | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Instrument class provides a description of a physical object that collects data. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |

| *Name:* **Instrument** | | | *Version Id:* **1.0.0.0** |
| --- | --- | --- | --- |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Instrument | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | type | 1..Unbounded | Accelerometer, Alpha Particle Detector, Alpha Particle X-Ray Spectrometer, Altimeter, Anemometer, Atomic Force Microscope, Barometer, Biology Experiments, Bolometer, Camera, Cosmic Ray Detector, Drilling Tool, Dust Detector, Electrical Probe, Energetic Particle Detector, Gamma Ray Detector, Gas Analyzer, Grinding Tool, Hygrometer, Imager, Imaging Spectrometer, Inertial Measurement Unit, Infrared Spectrometer, Laser Induced Breakdown Spectrometer, Magnetometer, Mass Spectrometer, Microwave Spectrometer, Moessbauer Spectrometer, Naked Eye, Neutral Particle Detector, Neutron Detector, Photometer, Plasma Analyzer, Plasma Detector, Plasma Wave Spectrometer, Polarimeter, RADAR, Radio Science, Radio Spectrometer, Radio Telescope, Radiometer, Reflectometer, Robotic Arm, Spectrograph Imager, Spectrometer, Thermal Imager, Thermal Probe, Thermometer, Ultraviolet Spectrometer, Wet Chemistry Laboratory, X-ray Detector, |

| *Name:* **Instrument** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | | | X-ray Diffraction Spectrometer, X-ray Fluorescence Spectrometer |
| | model_id | 0..1 | None |
| | naif_instrument_id | 0..1 | None |
| | serial_number | 0..1 | None |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Physical_Object |
| *Referenced from:* Product_Context | | | |

# Instrument_Host

| *Name:* **Instrument_Host** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Instrument Host class provides a description of the physical object upon which an instrument is mounted. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Instrument_Host | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | instrument_host_ version_id | 0..1 | None |
| | version_id *Deprecated* | 0..1 | None |
| | type | 1..1 | Earth Based, Earth-based, Lander, Rover, Spacecraft |
| | naif_host_id | 0..1 | None |
| | serial_number | 0..1 | None |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Physical_Object |
| *Referenced from:* Product_Context | | | |

# Internal_Reference

| *Name:* **Internal_Reference** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Internal_Reference class is used to cross-reference other products in the PDS registry system. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Internal_Reference | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | lid_reference | 0..1 | None |

| Name: Internal_Reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | lidvid_reference | 0..1 | None |
| | reference_type | 1..1 | None |
| | comment | 0..1 | None |
| No Associations | | | |
| Referenced from: DD_Attribute, DD_Class, Information_Package_Component, Information_ Package_Component_Deep_Archive, Investigation_Area, Observing_System_Component, Product_Zipped, Reference_List, Target_Identification, Update_Entry | | | |

# Inventory

| Name: Inventory | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Inventory class defines the inventory for members of a collection. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Table_ Delimited :: Inventory | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | PDS DSV 1 |
| | description | 0..1 | None |
| | records | 1..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| | field_delimiter | 1..1 | Comma, Horizontal Tab, Semicolon, Vertical Bar, comma, horizontal tab, semicolon, vertical bar |
| | reference_type | 1..1 | inventory_has_ member_product |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |
| | has_delimited_record | 1..1 | Record_Delimited |
| Referenced from: File_Area_Inventory | | | |

# Investigation

| Name: Investigation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Investigation class provides a description of activities involved in the collection of data. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |

| *Name:* **Investigation** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Investigation | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | type | 1..1 | Individual Investigation, Mission, Observing Campaign, Other Investigation |
| | start_date | 1..1 | None |
| | stop_date | 1..1 | None |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| *Referenced from:* Product_Context | | | |

# Investigation_Area

| *Name:* **Investigation_Area** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Investigation_Area class provides information about an investigation (mission, observing campaign or other coordinated, large-scale data collection effort). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Investigation_Area | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | type | 1..1 | Individual Investigation, Mission, Observing Campaign, Other Investigation |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | internal_reference | 1..Unbounded | Internal_Reference |
| *Referenced from:* Context_Area, Observation_Area | | | |

# Local_Internal_Reference

| *Name:* **Local_Internal_Reference** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Local Internal_Reference class is used to cross-reference other Description Objects in a PDS4 label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Local_Internal_Reference | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | comment | 0..1 | None |
| | local_identifier_ reference | 1..1 | None |
| | local_reference_type | 1..1 | None |
| *No Associations* | | | |

| Name: Local_Internal_Reference | Version Id: 1.0.0.0 |
|---|---|
| Referenced from: Display_Settings, Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_ Map, Array_2D_Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum | |

# Manifest_SIP_Deep_Archive

| Name: Manifest_SIP_Deep_Archive | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Manifest SIP Deep Archive class is a Table Delimited for the NASA planetary science deep archive's Submission Information Package (SIP). | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Table_ Delimited :: Manifest_SIP_Deep_Archive | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | PDS DSV 1 |
| | description | 0..1 | None |
| | records | 1..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| | field_delimiter | 1..1 | Comma, Horizontal Tab, Semicolon, Vertical Bar, comma, horizontal tab, semicolon, vertical bar |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |
| | has_delimited_record | 1..1 | Record_Delimited |
| Referenced from: File_Area_SIP_Deep_Archive | | | |

# Mission_Area

| Name: Mission_Area | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The mission area allows the insertion of mission specific metadata. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Mission_Area | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: Context_Area, Observation_Area | | | |

# Modification_Detail

| Name: Modification_Detail | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Modification_Detail class provides the details of one round of modification for the product. The first, required, instance of this class documents the date the product was first registered. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Modification_Detail | | | |
| Attribute(s) | Name | Cardinality | Value |
| | modification_date | 1..1 | None |
| | version_id | 1..1 | None |
| | description | 1..1 | None |
| No Associations | | | |
| Referenced from: Modification_History | | | |

# Modification_History

| Name: Modification_History | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Modification_History class tracks the history of changes made to the product once it enters the registry system. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Modification_History | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | modification_detail | 1..Unbounded | Modification_Detail |
| Referenced from: Identification_Area | | | |

# NSSDC

| Name: NSSDC | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The NSSDC Information class provides identification information for data submitted to the NSSDC. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: NSSDC | | | |
| Attribute(s) | Name | Cardinality | Value |
| | medium_type | 1..1 | None |
| | nssdc_collection_id | 1..1 | None |
| No Associations | | | |
| Referenced from: Data_Set_PDS3 | | | |

# Node

| Name: Node | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Node class provides a description of an entity that provides local governance within the federated Planetary Data System. | | | |

| Name: Node | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: Node | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | Engineering, Geosciences, Imaging, Management, Navigation and Ancillary Information Facility, Planetary Atmospheres, Planetary Plasma Interactions, Planetary Rings, Planetary Science Archive, Radio Science, Small Bodies |
| | institution_name | 1..1 | None |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Product_Context | | | |

# Object_Statistics

| Name: Object_Statistics | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Object Statistics class provides a set of values that provide metrics about the object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Object_Statistics | | | |
| Attribute(s) | Name | Cardinality | Value |
| | local_identifier | 0..1 | None |
| | maximum | 0..1 | None |
| | minimum | 0..1 | None |
| | mean | 0..1 | None |
| | standard_deviation | 0..1 | None |
| | bit_mask | 0..1 | None |
| | median | 0..1 | None |
| | md5_checksum | 0..1 | None |
| | maximum_scaled_ value | 0..1 | None |
| | minimum_scaled_value | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_ Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum | | | |

# Observation_Area

| Name: Observation_Area | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The observation area consists of attributes that provide information about the circumstances under which the data were collected. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Context_Area :: Observation_Area | | | |
| Attribute(s) | Name | Cardinality | Value |
| | comment | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_time_coordinates | 1..1 | Time_Coordinates |
| | has_primary_result_ description | 0..1 | Primary_Result_ Summary |
| | has_investigation_area | 1..Unbounded | Investigation_Area |
| | has_observing_system | 1..Unbounded | Observing_System |
| | has_target_ identification | 1..Unbounded | Target_Identification |
| | has_mission_area | 0..1 | Mission_Area |
| | has_discipline_area | 0..1 | Discipline_Area |
| Referenced from: Product_Observational | | | |

# Observing_System

| Name: Observing_System | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Observing System class describes the entire suite used to collect the data. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: Observing_System | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | observing_system_ component | 1..Unbounded | Observing_System_ Component |
| | data_object | 1..1 | Conceptual_Object, Physical_Object |
| Referenced from: Context_Area, Observation_Area | | | |

# Observing_System_Component

| Name: Observing_System_Component | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Observing System Component class references one or more subsystems used to collect data. A subsystem can be an instrument_host, instrument, or any other similar product. Each subsystem is categorized as either a sensor or a source. If the observing system includes both a sensor and a source, Observing System Component occurs twice (once for each type) otherwise it only occurs once. | | | |

| *Name:* **Observing_System_Component** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Child :: Observing_System_Component | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | type | 1..1 | Artificial Illumination, Instrument, Laboratory, Literature Search, Naked Eye, Observatory, Spacecraft, Telescope |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | internal_reference | 0..1 | Internal_Reference |
| | external_reference | 0..Unbounded | External_Reference |
| *Referenced from:* Observing_System | | | |

# Other

| *Name:* **Other** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Other class provides a description of activities involved in the collection of data which are not otherwise modeled. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Other | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| *Referenced from:* Product_Context | | | |

# PDS_Affiliate

| *Name:* **PDS_Affiliate** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The PDS Affiliate class provides a description of a person who has an association with the planetary science community and has access to PDS resources not normally allowed to the general public. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: PDS_Affiliate | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | registration_date | 1..1 | None |
| | electronic_mail_ address | 0..Unbounded | None |
| | sort_name | 1..1 | None |

| Name: PDS_Affiliate | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | affiliation_type | 1..1 | Affiliate, Data Provider, Manager, Technical Staff |
| | alternate_telephone_ number | 0..1 | None |
| | institution_name | 1..1 | None |
| | phone_book_flag | 1..1 | None |
| | postal_address_text | 1..1 | None |
| | team_name | 0..Unbounded | Engineering, Geosciences, Headquarters, Imaging, Management, National Space Science Data Center, Navigation and Ancillary Information Facility, Planetary Atmospheres, Planetary Plasma Interactions, Planetary Rings, Radio Science, Small Bodies |
| | telephone_number | 0..1 | None |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Context | | | |

# PDS_Guest

| Name: PDS_Guest | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The PDS_Guest class is the default description of a person who has an association with the planetary science community and who has the most limited access to PDS resources. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: PDS_Guest | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | registration_date | 1..1 | None |
| | electronic_mail_ address | 0..Unbounded | None |
| | sort_name | 1..1 | None |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Context | | | |

# Packed_Data_Fields

| Name: Packed_Data_Fields | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Packed_Data_Fields class contains field definitions for extracting packed data from the associated byte string field. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Packed_Data_Fields | | | |
| Attribute(s) | Name | Cardinality | Value |
| | bit_fields | 1..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Field_Bit | 1..Unbounded | Field_Bit |
| Referenced from: Field_Binary | | | |

# Parsable_Byte_Stream

| Name: Parsable_Byte_Stream | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Parsable Byte Stream class defines byte streams that have standard parsing rules. The Parsable Byte Stream class is the parent class for all parsable byte streams. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Observational_Supplemental | | | |

# Physical_Object

| Name: Physical_Object | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Physical Object class defines a tangible object. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Data_Object :: Physical_Object | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: Data_Set_PDS3, Facility, Instrument, Instrument_Host, Instrument_Host_PDS3, Instrument_PDS3, Observing_System, PDS_Affiliate, PDS_Guest, Target, Target_PDS3, Volume_PDS3, Volume_Set_PDS3 | | | |

# Primary_Result_Summary

| Name: Primary_Result_Summary | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Primary_Result_Summary class provides a high-level description of the types of products included in the collection or bundle | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Primary_Result_Summary | | | |
| Attribute(s) | Name | Cardinality | Value |
| | type *Deprecated* | 0..1 | Altimetry, Astrometry, Count, E/B-Field Vectors, Gravity Model, Image, Lightcurves, Map, Meteorology, Null Result, Occultation, Photometry, Physical Parameters, Polarimetry, Radiometry, Reference, Shape Model, Spectrum |
| | purpose | 1..1 | Calibration, Checkout, Engineering, Navigation, Science |
| | data_regime *Deprecated* | 0..Unbounded | Dust, Electric Field, Electrons, Far Infrared, Gamma Ray, Infrared, Ions, Magnetic Field, Microwave, Millimeter, Near Infrared, Particles, Pressure, Radio, Sub-Millimeter, Temperature, Ultraviolet, Visible, X-Ray |
| | processing_level | 1..1 | Calibrated, Derived, Partially Processed, Raw, Telemetry |
| | processing_level_id *Deprecated* | 0..1 | Calibrated, Derived, Partially Processed, Raw, Telemetry |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Science_Facet | 0..Unbounded | Science_Facets |
| Referenced from: Context_Area, Observation_Area | | | |

# Product

| Name: Product | Version Id: 1.0.0.0 |
|---|---|
| Description:A Product is a uniquely identified object that is managed by a registry/repository. It consists of one or more tagged data objects. | |

| Name: **Product** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | has_identification_area | 1..1 | Identification_Area |
| Referenced from: None | | | |

# Product_Components

| Name: **Product_Components** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Product Component class is an abstract class for the components of the Product class. | | | |
| Namespace Id: pds | Steward: pds | Role: abstract | Status: Active |
| Class Hierarchy: Product_Components | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# Quaternion

| Name: **Quaternion** | | | Version Id: **1.n.0.0** |
|---|---|---|---|
| Description:The Quaternion class models a mathematical construct that consists of four individual numeric components. Quaternions are a convenient mechanism for encapsulating orientation information since they require only four units of numeric storage, as opposed to the nine needed for a rotation matrix. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Quaternion | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | type | 1..1 | SPICE, Spacecraft Telemetry |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| | quaternion_component | 4..4 | Quaternion_ Component |
| Referenced from: None | | | |

# Quaternion_Component

| Name: **Quaternion_Component** | | | Version Id: **1.n.0.0** |
|---|---|---|---|
| Description:The Quaternion_Component class provides a component of a quaternion. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |

| *Name:* **Quaternion_Component** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Tagged_NonDigital_Child :: Quaternion_Component | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | data_type | 1..1 | ASCII_Real |
| | value | 1..1 | None |
| | sequence_number | 1..1 | None |
| | description | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Quaternion | | | |

# Record

| *Name:* **Record** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Record class defines a record of a file and is the parent class of all specific record classes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* abstract | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Record | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Record_Binary

| *Name:* **Record_Binary** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Record_Binary class is a component of the table class and defines a record of the table. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Child :: Record :: Record_Binary | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| | record_length | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | has_Table_Field | 1..Unbounded | Field_Binary, Group_Field_Binary |
| *Referenced from:* Table_Binary | | | |

# Record_Character

| Name: Record_Character | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Record_Character class is a component of the table class and defines a record of the table. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Record :: Record_Character | | | |
| Attribute(s) | Name | Cardinality | Value |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| | record_length | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Character_Field | 1..Unbounded | Field_Character, Group_Field_Character |
| Referenced from: Table_Character, Transfer_Manifest | | | |

# Record_Delimited

| Name: Record_Delimited | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Record_Delimited class is a component of the delimited table (spreadsheet) class and defines a record of the delimited table. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Record :: Record_Delimited | | | |
| Attribute(s) | Name | Cardinality | Value |
| | fields | 1..1 | None |
| | groups | 1..1 | None |
| | maximum_record_ length | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | has_Delimited_Field | 1..Unbounded | Field_Delimited, Group_Field_Delimited |
| Referenced from: Inventory, Manifest_SIP_Deep_Archive, Table_Delimited | | | |

# Reference_List

| Name: Reference_List | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Reference_List class provides lists general references and cross-references for the product. References cited elsewhere in the label need not be repeated here. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Reference_List | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | internal_reference | 0..Unbounded | Internal_Reference |
| | external_reference | 0..Unbounded | External_Reference |

| *Name:* **Reference_List** | *Version Id:* **1.0.0.0** |
|---|---|
| *Referenced from:* Product_AIP, Product_Attribute_Definition, Product_Browse, Product_Bundle, Product_Class_Definition, Product_Collection, Product_Context, Product_DIP, Product_DIP_ Deep_Archive, Product_Data_Set_PDS3, Product_Document, Product_File_Repository, Product_ File_Text, Product_Instrument_Host_PDS3, Product_Instrument_PDS3, Product_Mission_PDS3, Product_Native, Product_Observational, Product_Proxy_PDS3, Product_SIP, Product_SIP_Deep_ Archive, Product_SPICE_Kernel, Product_Service, Product_Software, Product_Subscription_ PDS3, Product_Target_PDS3, Product_Thumbnail, Product_Update, Product_Volume_PDS3, Product_Volume_Set_PDS3, Product_XML_Schema | |

# Resource

| *Name:* **Resource** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Resource class provides a description of a web resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Resource | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | type | 1..1 | Information.Agency, Information.Instrument, Information.Instrument_ Host, Information.Investigation, Information.Node, Information.Person, Information.Resource, Information.Science_ Portal, Information.Target, System.Browse, System.Directory_ Listing, System.Registry_ Query, System.Search, System.Transform, System.Transport |
| | url | 1..1 | None |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| *Referenced from:* Product_Context | | | |

# SIP_Deep_Archive

| *Name:* **SIP_Deep_Archive** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| *Description:* The SIP Deep Archive class is a Submission Information Package (SIP) for the NASA planetary science deep archive. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package :: SIP_Deep_Archive | | | |

| *Name:* **SIP_Deep_Archive** | | | *Version Id:* **1.n.0.0** |
|---|---|---|---|
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | description | 1..1 | None |
| | provider_site_id | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_SIP_Deep_Archive | | | |

# SPICE_Kernel

| *Name:* **SPICE_Kernel** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The SPICE Kernel class describes a SPICE object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: SPICE_ Kernel | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | SPICE |
| | description | 0..1 | None |
| | kernel_type | 1..1 | CK, DBK, DSK, EK, FK, IK, LSK, MK, PCK, SCLK, SPK |
| | encoding_type | 1..1 | Binary, Character |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* File_Area_SPICE_Kernel | | | |

# Science_Facets

| *Name:* **Science_Facets** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Description:*The Science_Facets class contains the science-related search facets. It is optional and may be repeated if an product has facets related to, for example, two different disciplines (as defined by the discipline_name facet). Note that Science_Facets was modeled with Discipline_Facets as a component and Discipline_Facets was modeled with Group_Facet1 and Group_Facet2 as components. This dependency hierarchy was flattened and only Science_Facets exists in the schema. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Science_Facets | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | wavelength_range | 0..Unbounded | Far Infrared, Gamma Ray, Infrared, Microwave, Millimeter, Near Infrared, Radio, Submillimeter, |

| Name: Science_Facets | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| | | | Ultraviolet, Visible, X-ray |
| | domain | 0..Unbounded | Atmosphere, Heliosphere, Interior, Interstellar, Ionosphere, Magnetosphere, Surface |
| Association(s) | Name | Cardinality | Class |
| | has_Discipline_Facets | 1..1 | Discipline_Facets |
| Referenced from: Primary_Result_Summary | | | |

# Service_Description

| Name: Service_Description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Service Description class defines a file that contains a standardized service specification. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Service_ Description | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | WADL, WSDL 2.n |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Service_Description | | | |

# Software

| Name: Software | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Software class describes a software product | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Software | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | software_version_id | 1..1 | None |
| | version_id *Deprecated* | 0..1 | None |
| | author_list | 0..1 | None |
| | programmers_manual_ id | 1..1 | None |

| Name: Software | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | software_id | 1..1 | None |
| | software_type | 1..1 | None |
| | users_manual_id | 1..1 | None |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: Product_Software | | | |

# Software_Binary

| Name: Software_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Software Script class provides a description of a software code that is stored as a compiled binary file. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Software_Binary | | | |
| Attribute(s) | Name | Cardinality | Value |
| | files | 1..1 | None |
| | os_version | 1..Unbounded | None |
| | program_notes_id | 1..1 | None |
| | software_format_type | 1..1 | None |
| | supported_ architecture_note | 1..Unbounded | None |
| | supported_operating_ system_note | 1..Unbounded | None |
| | system_requirements_ note | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: Product_Software | | | |

# Software_Script

| Name: Software_Script | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Software Script class provides a description of a software code that is stored as a script. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Software_Script | | | |
| Attribute(s) | Name | Cardinality | Value |
| | files | 1..1 | None |
| | install_note | 1..1 | None |
| | supported_ environment_note | 1..1 | None |
| | system_requirements_ note | 1..1 | None |

| Name: Software_Script | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: Product_Software | | | |

# Software_Source

| Name: Software_Source | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Software Script class provides a description of a software code that is stored as source code. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Software_Source | | | |
| Attribute(s) | Name | Cardinality | Value |
| | compile_note | 1..1 | None |
| | files | 1..1 | None |
| | os_version | 1..1 | None |
| | program_notes_id | 1..1 | None |
| | software_dialect | 1..1 | None |
| | software_format_type | 1..1 | None |
| | software_language | 1..1 | None |
| | supported_ architecture_note | 1..Unbounded | None |
| | supported_operating_ system_note | 1..Unbounded | None |
| | system_requirements_ note | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: Product_Software | | | |

# Special_Constants

| Name: Special_Constants | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Special Constants class provides a set of values used to indicate special cases that occur in the data. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Special_Constants | | | |
| Attribute(s) | Name | Cardinality | Value |
| | saturated_constant | 0..1 | None |
| | missing_constant | 0..1 | None |
| | error_constant | 0..1 | None |
| | invalid_constant | 0..1 | None |
| | unknown_constant | 0..1 | None |

| Name: Special_Constants | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | not_applicable_ constant | 0..1 | None |
| | valid_maximum | 0..1 | None |
| | high_instrument_ saturation | 0..1 | None |
| | high_representation_ saturation | 0..1 | None |
| | valid_minimum | 0..1 | None |
| | low_instrument_ saturation | 0..1 | None |
| | low_representation_ saturation | 0..1 | None |
| No Associations | | | |
| Referenced from: Array, Array_1D, Array_2D, Array_2D_Image, Array_2D_Map, Array_2D_ Spectrum, Array_3D, Array_3D_Image, Array_3D_Movie, Array_3D_Spectrum, Field_Binary, Field_Bit, Field_Character, Field_Delimited | | | |

# Stream_Text

| Name: Stream_Text | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Stream text class defines a text object. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Stream_Text | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | None |
| | description | 0..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental, File_Area_Text | | | |

# Submission_Information_Package

| Name: Submission_Information_Package | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:The Submission Information Package (SIP) class is an Information Package that is delivered by a Data Provider to an archive that conforms to the Open Archive Information System (OAIS) Reference Model for use in the construction of one or more AIPs. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |

| *Name:* **Submission_Information_Package** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Information_Package :: Submission_Information_Package | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | description | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_SIP | | | |

# Symbolic_Literals_PDS

| *Name:* **Symbolic_Literals_PDS** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Symbolic_Literals_PDS class is used to collect orphan attributes for the pds namespace. These attributes are members by default of the USER class but not members of any domain class. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Symbolic_Literals_PDS | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | nil_reason | 0..1 | anticipated, inapplicable, missing, unknown |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# TNDO_Context

| *Name:* **TNDO_Context** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Tagged NonDigital Object (TNDO) Context class is an abstract class for the context class hierarchy. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* abstract | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context | | | |
| *No Attributes* | | | |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# TNDO_Supplemental

| *Name:* **TNDO_Supplemental** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Tagged NonDigital Object (TNDO) Supplemental class is an abstract class for the supplemental class hierarchy. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* abstract | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental | | | |
| *No Attributes* | | | |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Table_Base

| Name: Table_Base | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Table Base class defines a heterogeneous repeating record of scalars. The Table Base class is the parent class for all heterogeneous repeating record of scalars. | | | |
| Namespace Id: pds | Steward: pds | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Table_Base | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | records | 1..1 | None |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| Referenced from: None | | | |

# Table_Binary

| Name: Table_Binary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Table Binary class is an extension of table base and defines a simple binary table. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Table_Base :: Table_Binary | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | records | 1..1 | None |
| | description | 0..1 | None |
| | record_delimiter | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |
| | has_Record | 1..1 | Record_Binary |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Table_Character

| Name: Table_Character | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Table Character class is an extension of table base and defines a simple character table. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |

| *Name:* **Table_Character** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Table_Base :: Table_Character | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | records | 1..1 | None |
| | description | 0..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |
| | has_Record | 1..1 | Record_Character |
| *Referenced from:* File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Table_Delimited

| *Name:* **Table_Delimited** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Table_Delimited class defines a simple table (spreadsheet) with delimited fields and records. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: Table_ Delimited | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | PDS DSV 1 |
| | description | 0..1 | None |
| | records | 1..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| | field_delimiter | 1..1 | Comma, Horizontal Tab, Semicolon, Vertical Bar, comma, horizontal tab, semicolon, vertical bar |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |

| Name: Table_Delimited | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | has_delimited_record | 1..1 | Record_Delimited |
| Referenced from: File_Area_Browse, File_Area_Observational, File_Area_Observational_ Supplemental | | | |

# Tagged_Digital_Child

| Name: Tagged_Digital_Child | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Tagged Digital Child class is an abstract class for the components of classes in the tagged digital object class hierarchy. | | | |
| Namespace Id: pds | Steward: ops | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_Digital_Child | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# Tagged_Digital_Object

| Name: Tagged_Digital_Object | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Tagged Digital Object class is an abstract class for the digital class hierarchy. A tagged object is an information object. | | | |
| Namespace Id: pds | Steward: ops | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_Digital_Object | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# Tagged_NonDigital_Child

| Name: Tagged_NonDigital_Child | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Tagged NonDigital Child class is an abstract class for the components of classes in the tagged nondigital object class hierarchy. | | | |
| Namespace Id: pds | Steward: ops | Role: abstract | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# Tagged_NonDigital_Object

| Name: Tagged_NonDigital_Object | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Tagged NonDigital Object class is an abstract class for the physical and conceptual class hierarchy. A tagged object is an information object. | | | |
| Namespace Id: pds | Steward: ops | Role: abstract | Status: Active |

| *Name:* **Tagged_NonDigital_Object** | *Version Id:* **1.0.0.0** |
|---|---|
| *Class Hierarchy:* Tagged_NonDigital_Object | |
| *No Attributes* | |
| *No Associations* | |
| *Referenced from:* None | |

# Target

| *Name:* **Target** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Target class provides a description of a physical object that is the object of data collection. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context :: Target | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 0..1 | None |
| | type | 0..Unbounded | Asteroid, Comet, Dust, Dwarf Planet, Galaxy, Globular Cluster, Meteorite, Meteoroid, Meteoroid Stream, Nebula, Open Cluster, Planet, Planetary Nebula, Planetary System, Plasma Cloud, Ring, Satellite, Star, Star Cluster, Sun, Terrestrial Sample, Trans-Neptunian Object |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Physical_Object |
| *Referenced from:* Product_Context | | | |

# Target_Identification

| *Name:* **Target_Identification** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Target_Identification class provides detailed target identification information. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Target_Identification | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | alternate_designation | 0..Unbounded | None |
| | type | 1..Unbounded | Asteroid, Calibration, Comet, Dust, Dwarf Planet, Galaxy, Globular Cluster, Meteorite, Meteoroid, |

| Name: Target_Identification | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Meteoroid Stream, Nebula, Open Cluster, Planet, Planetary Nebula, Planetary System, Plasma Cloud, Ring, Satellite, Star, Star Cluster, Sun, Terrestrial Sample, Trans-Neptunian Object |
| | description | 0..1 | None |
| Association(s) | Name | Cardinality | Class |
| | internal_reference | 0..1 | Internal_Reference |
| Referenced from: Context_Area, Observation_Area | | | |

# Telescope

| Name: Telescope | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Telescope class provides coordinates and parameters for terrestrial, ground-based telescopes. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context :: Telescope | | | |
| Attribute(s) | Name | Cardinality | Value |
| | aperture | 1..1 | None |
| | telescope_longitude | 0..1 | None |
| | telescope_latitude | 0..1 | None |
| | altitude | 1..1 | None |
| | coordinate_source | 1..1 | Aerial Survey - North American (1983) Datum, Astronomical, Doppler determined - WGS 72 Datum, Geodetic - Adindan Datum, Geodetic - Australian Datum, Geodetic - Campo Inchauspe (Argentina) Datum, Geodetic - Cape (South Africa) Datum, Geodetic - Corregio Alegre (Brazil) Datum, Geodetic - Datum Unknown, Geodetic - European 1979 Datum, Geodetic - European Datum, Geodetic - GRS 80 Datum, Geodetic - Hermannskogel Datum, Geodetic - Indian Datum, Geodetic - La |

| Name: Telescope | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | Canoa (Venezuela) Datum, Geodetic - New Zealand Datum, Geodetic - North American (1927) Datum, Geodetic - Old Hawaiian Datum, Geodetic - Ordnance Survey of Great Britain (1936) Datum, Geodetic - Ordnance Survey of Great Britain (SN) 1980 Datum, Geodetic - Potsdam Datum, Geodetic - Puerto Rican (1940) Datum, Geodetic - South American Datum, Geodetic - Tokyo Datum, Geodetic - WGS 84 Datum, Satellite Determined - Datum Unknown, Unknown |
| | description | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_Context | | | |

# Terminological_Entry

| Name: Terminological_Entry | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| *Description:* The terminological_entry class provides the name (designation) and definition of the attribute in a specified natural language. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Child :: Terminological_Entry | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | name | 1..1 | None |
| | definition | 1..1 | None |
| | language | 1..1 | English, Russian |
| | preferred_flag | 1..1 | None |
| | role | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | source | 0..Unbounded | External_Reference_ Extended |
| *Referenced from:* DD_Attribute, DD_Attribute_Full, DD_Class, DD_Class_Full, DD_Permissible_ Value, DD_Permissible_Value_Full | | | |

# Time_Coordinates

| Name: Time_Coordinates | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Time_Coordinates class provides a list of time coordinates. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Time_Coordinates | | | |
| Attribute(s) | Name | Cardinality | Value |
| | start_date_time | 1..1 | None |
| | stop_date_time | 1..1 | None |
| | local_mean_solar_time | 0..1 | None |
| | local_true_solar_time | 0..1 | None |
| | solar_longitude | 0..1 | None |
| No Associations | | | |
| Referenced from: Context_Area, Observation_Area | | | |

# Transfer_Manifest

| Name: Transfer_Manifest | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Transfer_Manifest class defines a table that maps product LIDVIDs to the file_specificaition_names of the products' XML label files. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Table_Base :: Table_Character :: Transfer_Manifest | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |
| | records | 1..1 | None |
| | description | 0..1 | None |
| | record_delimiter | 1..1 | Carriage-Return Line-Feed, carriage-return line-feed |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Digital_Object |
| | uniformly_sampled | 0..1 | Uniformly_Sampled |
| | has_Record | 1..1 | Record_Character |
| Referenced from: File_Area_Transfer_Manifest | | | |

# Uniformly_Sampled

| Name: Uniformly_Sampled | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Uniformly_Sampled class provides parameters for a uniformly sampled table. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Child :: Uniformly_Sampled | | | |

| *Name:* **Uniformly_Sampled** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | sampling_parameter_ name | 1..1 | None |
| | sampling_parameter_ interval | 1..1 | None |
| | sampling_parameter_ unit | 1..1 | None |
| | first_sampling_ parameter_value | 1..1 | None |
| | last_sampling_ parameter_value | 1..1 | None |
| | sampling_parameter_ scale | 0..1 | Exponential, Linear, Logarithmic |
| *No Associations* | | | |
| *Referenced from:* Inventory, Manifest_SIP_Deep_Archive, Table_Binary, Table_Character, Table_ Delimited, Transfer_Manifest | | | |

# Update

| *Name:* **Update** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Update class consists of update information. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Update | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | local_identifier | 0..1 | None |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object |
| | update_entry | 1..Unbounded | Update_Entry |
| *Referenced from:* Product_Update | | | |

# Update_Entry

| *Name:* **Update_Entry** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Update Entry class provides the date and description of an update. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Update_Entry | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | date_time | 1..1 | None |
| | full_name | 1..1 | None |
| | description | 1..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | internal_reference | 0..1 | Internal_Reference |
| *Referenced from:* Update | | | |

# Vector

| Name: Vector | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Vector class provides the components of either a velocity or position vector. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | type | 1..1 | Acceleration, Pointing, Position, Velocity |
| | data_type | 1..1 | ASCII_Real |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_ DE421 |
| | vector_components | 1..1 | None |
| | description | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| | vector_component | 1..Unbounded | Vector_Component |
| Referenced from: Geometry | | | |

# Vector_Cartesian_3

| Name: Vector_Cartesian_3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Vector_Cartesian_3_Base class is the parent class of 3 element Cartesian vectors. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector_Cartesian_3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_ DE421 |
| | x | 1..1 | None |
| | y | 1..1 | None |
| | z | 1..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Vector_Cartesian_3_Acceleration

| Name: Vector_Cartesian_3_Acceleration | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Vector_Cartesian_3_Acceleration class is a 3 element Cartesian vector for acceleration coordinates. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector_Cartesian_3 :: Vector_Cartesian_3_Acceleration | | | |

| *Name:* **Vector_Cartesian_3_Acceleration** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_DE421 |
| | x | 1..1 | None |
| | y | 1..1 | None |
| | z | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Vector_Cartesian_3_Pointing

| *Name:* **Vector_Cartesian_3_Pointing** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Vector_Cartesian_3_Pointing class is a 3 element normalized Cartesian vector for pointing. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector_Cartesian_3 :: Vector_Cartesian_3_Pointing | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_DE421 |
| | x | 1..1 | None |
| | y | 1..1 | None |
| | z | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Vector_Cartesian_3_Position

| *Name:* **Vector_Cartesian_3_Position** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Vector_Cartesian_3_Position class is a 3 element Cartesian vector for position coordinates. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector_Cartesian_3 :: Vector_Cartesian_3_Position | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_DE421 |
| | x | 1..1 | None |
| | y | 1..1 | None |
| | z | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Vector_Cartesian_3_Velocity

| Name: Vector_Cartesian_3_Velocity | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Vector_Cartesian_3_Velocity class is a 3 element Cartesian vector for velocity coordinates. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Supplemental :: Vector_Cartesian_3 :: Vector_Cartesian_3_Velocity | | | |
| Attribute(s) | Name | Cardinality | Value |
| | reference_frame_id | 1..1 | ICRF, MOON_ME_DE421 |
| | x | 1..1 | None |
| | y | 1..1 | None |
| | z | 1..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Vector_Component

| Name: Vector_Component | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Vector_Component class provides a component of a vector. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Child :: Vector_Component | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | unit | 0..1 | None |
| | value | 1..1 | None |
| | sequence_number | 1..1 | None |
| | description | 0..1 | None |
| No Associations | | | |
| Referenced from: Vector | | | |

# XML_Schema

| Name: XML_Schema | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The XML Schema class defines a resource used for the PDS4 implementation into XML. | | | |
| Namespace Id: pds | Steward: pds | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_Digital_Object :: Byte_Stream :: Parsable_Byte_Stream :: XML_Schema | | | |
| Attribute(s) | Name | Cardinality | Value |
| | name | 0..1 | None |
| | local_identifier | 0..1 | None |
| | offset | 1..1 | None |

| *Name:* XML_Schema | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| | object_length | 0..1 | None |
| | parsing_standard_id | 1..1 | Schematron ISO/IEC 19757-3:2006, XML Schema Version 1.1 |
| | description | 0..1 | None |
| | ldd_version_id | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Digital_Object |
| *Referenced from:* File_Area_XML_Schema | | | |

# Zip

| *Name:* **Zip** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The Zip class describes a zip file. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Supplemental :: Zip | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | container_type | 1..1 | GZIP, LZIP, TAR, ZIP |
| | description | 1..1 | None |
| *No Associations* | | | |
| *Referenced from:* Product_Zipped | | | |

# Chapter 4. PDS3 catalog classes in the common (pds) namespace.

These classes are used to archive PDS3 catalog information.

## Data_Set_PDS3

| Name: Data_Set_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Data Set PDS3 class is used to capture the data set information from the PDS3 Data Set Catalog. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Data_Set_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | data_set_id | 1..1 | None |
| | data_set_name | 1..1 | None |
| | data_set_release_date | 1..1 | None |
| | start_time | 0..1 | None |
| | start_date_time *Deprecated* | 0..1 | None |
| | stop_time | 0..1 | None |
| | stop_date_time *Deprecated* | 0..1 | None |
| | producer_full_name | 1..1 | None |
| | citation_text | 1..1 | None |
| | data_set_terse_desc | 1..1 | None |
| | abstract_desc | 1..1 | None |
| | data_set_desc | 1..1 | None |
| | confidence_level_note | 1..1 | None |
| | archive_status | 1..1 | ARCHIVED, ARCHIVED_ ACCUMULATING, IN_LIEN_ RESOLUTION, IN_ LIEN_RESOLUTION_ ACCUMULATING, IN_PEER_REVIEW, IN_PEER_REVIEW_ ACCUMULATING, IN_QUEUE, IN_QUEUE_ ACCUMULATING, LOCALLY_ ARCHIVED, LOCALLY_ ARCHIVED_ ACCUMULATING, PRE_PEER_ REVIEW, PRE_ |

| Name: Data_Set_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | | PEER_REVIEW_ ACCUMULATING, SAFED, SUPERSEDED |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object, Physical_Object |
| | nssdc | 0..Unbounded | NSSDC |
| Referenced from: Product_Data_Set_PDS3 | | | |

# Instrument_Host_PDS3

| Name: Instrument_Host_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Instrument Host class provides a description of the phyiscal object upon which an instrument is mounted. This class captures the PDS3 catalog Instrument Host information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Instrument_Host_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | instrument_host_name | 1..1 | None |
| | instrument_host_desc | 1..1 | None |
| | instrument_host_id | 1..1 | None |
| | instrument_host_type | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Instrument_Host_PDS3 | | | |

# Instrument_PDS3

| Name: Instrument_PDS3 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Instrument class provides a description of a phyiscal object that collects data. This class captures the PDS3 catalog Instrument information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Instrument_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | instrument_name | 1..1 | None |
| | instrument_desc | 1..1 | None |
| | instrument_id | 1..1 | None |
| | instrument_serial_ number | 1..1 | None |
| | instrument_type | 1..1 | None |
| | instrument_version_id | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Instrument_PDS3 | | | |

# Mission_PDS3

| Name: **Mission_PDS3** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Mission PDS3 class describes an activity involved in the collection of data. This class captures the PDS3 catalog Mission information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Mission_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | mission_name | 1..1 | None |
| | mission_desc | 1..1 | None |
| | mission_objectives_ summary | 1..1 | None |
| | mission_start_date | 1..1 | None |
| | mission_stop_date | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Conceptual_Object |
| Referenced from: Product_Mission_PDS3 | | | |

# Subscriber_PDS3

| Name: **Subscriber_PDS3** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Subscriber PDS3 class provides the name of the subscriber and their subscription list. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Subscriber_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | full_name | 1..1 | None |
| | local_identifier | 0..1 | None |
| | subscription_id | 1..Unbounded | None |
| No Associations | | | |
| Referenced from: Product_Subscription_PDS3 | | | |

# TNDO_Context_PDS3

| Name: **TNDO_Context_PDS3** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Tagged NonDigital Object (TNDO) Context PDS3 class is an abstract class for the PDS3 context class hierarchy. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 | | | |
| No Attributes | | | |
| No Associations | | | |
| Referenced from: None | | | |

# Target_PDS3

| Name: **Target_PDS3** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Target class provides a description of a phyiscal object that is the object of data collection. This class captures the PDS3 catalog Target information. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Target_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | target_name | 1..1 | None |
| | orbit_direction | 0..Unbounded | None |
| | primary_body_name | 1..1 | None |
| | rotation_direction | 0..1 | None |
| | target_desc | 1..1 | None |
| | target_type | 1..1 | None |
| Association(s) | Name | Cardinality | Class |
| | data_object | 1..1 | Physical_Object |
| Referenced from: Product_Target_PDS3 | | | |

# Volume_PDS3

| Name: **Volume_PDS3** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Volume_PDS3 class is used to capture the volume information from the PDS3 Data Set Catalog. | | | |
| Namespace Id: pds | Steward: ops | Role: concrete | Status: Active |
| Class Hierarchy: Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Volume_PDS3 | | | |
| Attribute(s) | Name | Cardinality | Value |
| | archive_status | 1..1 | ARCHIVED, ARCHIVED_ ACCUMULATING, IN_LIEN_ RESOLUTION, IN_ LIEN_RESOLUTION_ ACCUMULATING, IN_PEER_REVIEW, IN_PEER_REVIEW_ ACCUMULATING, IN_QUEUE, IN_QUEUE_ ACCUMULATING, LOCALLY_ ARCHIVED, LOCALLY_ ARCHIVED_ ACCUMULATING, PRE_PEER_ REVIEW, PRE_ PEER_REVIEW_ ACCUMULATING, |

| *Name:* **Volume_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | | | SAFED, SUPERSEDED |
| | archive_status_note | 1..1 | None |
| | curating_node_id | 0..Unbounded | None |
| | medium_type | 1..1 | None |
| | publication_date | 1..1 | None |
| | volume_de_fullname | 1..1 | None |
| | volume_format | 1..1 | None |
| | volume_id | 1..1 | None |
| | volume_name | 1..1 | None |
| | volume_set_id | 1..1 | None |
| | volume_size | 1..1 | None |
| | volume_version_id | 1..1 | None |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object, Physical_Object |
| *Referenced from:* Product_Volume_PDS3 | | | |

# Volume_Set_PDS3

| *Name:* **Volume_Set_PDS3** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Volume_Set_PDS3 class is used to capture the volume set information from the PDS3 Data Set Catalog. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Tagged_NonDigital_Object :: TNDO_Context_PDS3 :: Volume_Set_PDS3 | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | volume_series_name | 1..1 | None |
| | volume_set_id | 1..1 | None |
| | volume_set_name | 1..1 | None |
| | volumes | 1..1 | None |
| | description | 0..1 | None |
| *Association(s)* | *Name* | *Cardinality* | *Class* |
| | data_object | 1..1 | Conceptual_Object, Physical_Object |
| *Referenced from:* Product_Volume_Set_PDS3 | | | |

# Chapter 5. Classes in the Rings discipline namespace.

These classes have been defined for the Rings science discipline and can be used in the label's discipline area.

## Radio_Occultation

| Name: Radio_Occultation | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description: This class is required for all radio ring occultations | | | |
| Namespace Id: rings | Steward: rings | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Radio_Occultation | | | |
| Attribute(s) | Name | Cardinality | Value |
| | ring_observation_id | 1..1 | None |
| | orbit_number | 0..Unbounded | None |
| | SCLK_start_time | 0..1 | None |
| | SCLK_stop_time | 0..1 | None |
| | occultation_type | 1..1 | Radio, Solar, Stellar |
| | dsn_station_number | 1..1 | None |
| | source_pds3_id | 0..Unbounded | None |
| | frequency_band | 1..1 | C, D, E, F, G, H, K, Ka, Ku, Q, R, S, U, V, W, X, Y |
| | ring_occultation_ direction | 1..1 | Both, Egress, Ingress, Multiple |
| | ring_profile_direction | 1..1 | Egress, Ingress, Multiple |
| | planetary_occultation_ flag | 0..1 | N, Y |
| | wavelength | 0..1 | None |
| | minimum_wavelength | 0..1 | None |
| | reference_time_utc | 1..1 | None |
| | maximum_wavelength | 0..1 | None |
| | radial_resolution | 1..1 | None |
| | radial_sampling_ interval | 0..1 | None |
| | minimum_radial_ sampling_interval | 0..1 | None |
| | maximum_radial_ sampling_interval | 0..1 | None |
| | observed_event_start_ tdb | 0..1 | None |
| | observed_event_stop_ tdb | 0..1 | None |

| *Name:* **Radio_Occultation** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| | spacecraft_event_start_ time_utc | 1..1 | None |
| | spacecraft_event_stop_ time_utc | 1..1 | None |
| | ring_event_start_time_ utc | 0..1 | None |
| | ring_event_stop_time_ utc | 0..1 | None |
| | ring_event_start_tdb | 0..1 | None |
| | ring_event_stop_tdb | 0..1 | None |
| | earth_received_start_ time_utc | 0..1 | None |
| | earth_received_stop_ time_utc | 0..1 | None |
| | minimum_ring_radius | 1..1 | None |
| | maximum_ring_radius | 1..1 | None |
| | minimum_ring_ longitude | 1..1 | None |
| | maximum_ring_ longitude | 1..1 | None |
| | minimum_observed_ ring_azimuth | 1..1 | None |
| | maximum_observed_ ring_azimuth | 1..1 | None |
| | observed_ring_ elevation | 0..1 | None |
| | minimum_observed_ ring_elevation | 0..1 | None |
| | maximum_observed_ ring_elevation | 0..1 | None |
| | light_source_ incidence_angle | 0..1 | None |
| | minimum_light_ source_incidence_angle | 0..1 | None |
| | maximum_light_ source_incidence_angle | 0..1 | None |
| | lowest_detectable_ opacity | 0..1 | None |
| | highest_detectable_ opacity | 0..1 | None |
| | along_track_timing_ offset | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Radio_Occultation_Support

| Name: Radio_Occultation_Support | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:This class is required for all radio ring occultation calibration and geometry supplemental files. | | | |
| Namespace Id: rings | Steward: rings | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Radio_Occultation_Support | | | |
| Attribute(s) | Name | Cardinality | Value |
| | ring_observation_id | 1..1 | None |
| | orbit_number | 0..Unbounded | None |
| | spice_filename | 0..Unbounded | None |
| | occultation_type | 1..1 | Radio, Solar, Stellar |
| | dsn_station_number | 1..1 | None |
| | frequency_band | 1..1 | C, D, E, F, G, H, K, Ka, Ku, Q, R, S, U, V, W, X, Y |
| | ring_occultation_ direction | 1..1 | Both, Egress, Ingress, Multiple |
| | ring_profile_direction | 1..1 | Egress, Ingress, Multiple |
| | planetary_occultation_ flag | 0..1 | N, Y |
| | sampling_parameter_ name | 1..1 | None |
| | sampling_parameter_ unit | 1..1 | None |
| | sampling_parameter_ interval | 1..1 | None |
| | reference_time_utc | 1..1 | None |
| | minimum_observed_ event_time | 1..1 | None |
| | maximum_observed_ event_time | 1..1 | None |
| No Associations | | | |
| Referenced from: None | | | |

# Rings_Supplement

| Name: Rings_Supplement | | | Version Id: 1.1.0.0 |
|---|---|---|---|
| Description:This class is required for all Rings Node currated data products | | | |
| Namespace Id: rings | Steward: rings | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Rings_Supplement | | | |
| Attribute(s) | Name | Cardinality | Value |
| | ring_observation_id | 1..1 | None |
| | source_pds3_id | 0..Unbounded | None |

| Name: Rings_Supplement | | Version Id: 1.1.0.0 |
|---|---|---|
| No Associations | | |
| Referenced from: None | | |

# Stellar_Occultation

| Name: Stellar_Occultation | | Version Id: 1.1.0.0 | |
|---|---|---|---|
| Description:This class is required for all stellar ring occultations | | | |
| Namespace Id: rings | Steward: rings | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Stellar_Occultation | | | |
| Attribute(s) | Name | Cardinality | Value |
| | ring_observation_id | 1..1 | None |
| | orbit_number | 0..Unbounded | None |
| | SCLK_start_time | 0..1 | None |
| | SCLK_stop_time | 0..1 | None |
| | occultation_type | 1..1 | Radio, Solar, Stellar |
| | source_pds3_id | 0..Unbounded | None |
| | ring_occultation_ direction | 1..1 | Both, Egress, Ingress, Multiple |
| | star_name | 1..1 | None |
| | ring_profile_direction | 1..1 | Egress, Ingress, Multiple |
| | planetary_occultation_ flag | 0..1 | N, Y |
| | wavelength | 0..1 | None |
| | minimum_wavelength | 0..1 | None |
| | maximum_wavelength | 0..1 | None |
| | radial_resolution | 1..1 | None |
| | radial_sampling_ interval | 0..1 | None |
| | minimum_radial_ sampling_interval | 0..1 | None |
| | maximum_radial_ sampling_interval | 0..1 | None |
| | observed_event_start_ tdb | 0..1 | None |
| | observed_event_stop_ tdb | 0..1 | None |
| | ring_event_start_time_ utc | 0..1 | None |
| | ring_event_stop_time_ utc | 0..1 | None |
| | ring_event_start_tdb | 0..1 | None |
| | ring_event_stop_tdb | 0..1 | None |
| | minimum_ring_radius | 1..1 | None |

| *Name:* **Stellar_Occultation** | | | *Version Id:* **1.1.0.0** |
|---|---|---|---|
| | maximum_ring_radius | 1..1 | None |
| | sub_stellar_ring_ azimuth | 0..1 | None |
| | minimum_ring_ longitude | 1..1 | None |
| | sub_stellar_clock_ angle | 0..1 | None |
| | maximum_ring_ longitude | 1..1 | None |
| | minimum_observed_ ring_azimuth | 1..1 | None |
| | maximum_observed_ ring_azimuth | 1..1 | None |
| | observed_ring_ elevation | 0..1 | None |
| | minimum_observed_ ring_elevation | 0..1 | None |
| | maximum_observed_ ring_elevation | 0..1 | None |
| | light_source_ incidence_angle | 0..1 | None |
| | lowest_detectable_ opacity | 0..1 | None |
| | highest_detectable_ opacity | 0..1 | None |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Chapter 6. Classes in the Imaging discipline namespace.

These classes have been defined for the Imaging science discipline and can be used in the label's discipline area.

## Telemetry_Parameters

| *Name:* **Telemetry_Parameters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:*The Telemetry_Parameters class contains downlink-related attributes used primarily during mission operations. | | | |
| *Namespace Id:* img | *Steward:* img | *Role:* concrete | *Status:* Active |
| *Class Hierarchy:* Product_Components :: Telemetry_Parameters | | | |
| *Attribute(s)* | *Name* | *Cardinality* | *Value* |
| | application_process_id | 0..1 | None |
| | application_process_name | 0..1 | None |
| | earth_received_start_date_time | 0..1 | None |
| | earth_received_stop_date_time | 0..1 | None |
| | expected_packets | 0..1 | None |
| | packet_map_mask | 0..1 | None |
| | received_packets | 0..1 | None |
| | spice_file_name | 0..1 | None |
| | telemetry_format_id | 0..1 | None |
| | telemetry_provider_id | 0..1 | None |
| | telemetry_source_name | 0..1 | None |
| | telemetry_source_type | 0..1 | DATA_PRODUCT, SFDU |
| *No Associations* | | | |
| *Referenced from:* None | | | |

# Chapter 7. Classes in the Display namespace.

This dictionary describes how to display Array data on a display device.

## Color_Display_Settings

| Name: **Color_Display_Settings** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Color_Display_Settings class provides guidance to data users on how to display a multi-banded Array object on a color-capable display device. | | | |
| Namespace Id: disp | Steward: img | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Color_Display_Settings | | | |
| Attribute(s) | Name | Cardinality | Value |
| | color_display_axis | 1..1 | None |
| | comment | 0..1 | None |
| | red_channel_band | 1..1 | None |
| | green_channel_band | 1..1 | None |
| | blue_channel_band | 1..1 | None |
| No Associations | | | |
| Referenced from: Display_Settings | | | |

## Display_Direction

| Name: **Display_Direction** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description:The Display_Direction class specifies how two of the dimensions of an Array object should be displayed in the vertical (line) and horizontal (sample) dimensions of a display device. | | | |
| Namespace Id: disp | Steward: img | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Display_Direction | | | |
| Attribute(s) | Name | Cardinality | Value |
| | comment | 0..1 | None |
| | horizontal_display_axis | 1..1 | None |
| | horizontal_display_ direction | 1..1 | Left to Right, Right to Left |
| | vertical_display_axis | 1..1 | None |
| | vertical_display_ direction | 1..1 | Bottom to Top, Top to Bottom |
| No Associations | | | |
| Referenced from: Display_Settings | | | |

## Display_Settings

| Name: **Display_Settings** | Version Id: **1.0.0.0** |
|---|---|
| Description:The Display_Settings class contains one or more classes describing how data should be displayed on a display device. | |

| Name: Display_Settings | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: disp | Steward: img | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Display_Settings | | | |
| No Attributes | | | |
| Association(s) | Name | Cardinality | Class |
| | local_internal_ reference | 1..1 | Local_Internal_ Reference |
| | has_display_direction | 1..1 | Display_Direction |
| | has_color_display_ settings | 0..1 | Color_Display_Settings |
| | has_movie_display_ settings | 0..1 | Movie_Display_ Settings |
| Referenced from: None | | | |

# Movie_Display_Settings

| Name: Movie_Display_Settings | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description:The Movie_Display_Settings class provides default values for the display of a multi-banded Array using a software application capable of displaying video content. | | | |
| Namespace Id: disp | Steward: img | Role: concrete | Status: Active |
| Class Hierarchy: Product_Components :: Movie_Display_Settings | | | |
| Attribute(s) | Name | Cardinality | Value |
| | time_display_axis | 1..1 | None |
| | comment | 0..1 | None |
| | frame_rate | 0..1 | None |
| | loop_flag | 0..1 | false, true |
| | loop_count | 0..1 | None |
| | loop_delay | 0..1 | None |
| | loop_back_and_forth_ flag | 0..1 | false, true |
| No Associations | | | |
| Referenced from: Display_Settings | | | |

# Chapter 8. Attributes in the common (pds) namespace.

These attributes are used by the classes in the common (pds) namespace.

## abstract_desc in Data_Set_PDS3

| Name: abstract_desc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The abstract desc attribute provides a summary of a text, scientific article, or document. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_PDS3 | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

## abstract_flag in DD_Class

| Name: abstract_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The abstract flag attribute indicates whether or not the class can be instantiated. Abstract flag is only included if a value of 'true' is desired and indicates that the class is abstract and cannot be used in a label. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

## abstract_flag in DD_Class_Full

| Name: abstract_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The abstract flag attribute indicates whether or not the class can be instantiated. Abstract flag is only included if a value of 'true' is desired and indicates that the class is abstract and cannot be used in a label. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **abstract_flag** | *Version Id:* **1.0.0.0** |
|---|---|
| *Permissible Value(s)* | *No Values* | |

# acknowledgement_text in Document

| *Name:* **acknowledgement_text** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The acknowledgement_text attribute is a character string which recognizes another's contribution, authority, or right. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Document | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Text | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# address in Facility

| *Name:* **address** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The address attribute provides a mailing address. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Facility | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Address | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# affiliation_type in PDS_Affiliate

| *Name:* **affiliation_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The affiliation type data attribute describes the type of relationship an individual has with the PDS. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_ Affiliate | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Affiliate | The PDS_Affiliate has affiliation type Affiliate | |
| | Data Provider | The PDS_Affiliate has affiliation type Data Provider | |

| Name: affiliation_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | Manager | The PDS_Affiliate has affiliation type Manager |
| | Technical Staff | The PDS_Affiliate has affiliation type Technical Staff |

# alternate_designation in Target_Identification

| Name: alternate_designation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The alternate_designation attribute provides aliases. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Target_ Identification | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# alternate_id in Alias

| Name: alternate_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The alternate_id attribute provides an additional identifier supplied by the data provider. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Alias | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# alternate_telephone_number in PDS_Affiliate

| Name: alternate_telephone_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The telephone_number attribute provides a telephone number in international notation in compliance with the E.164 telephone number format recommendation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_ Affiliate | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# alternate_title in Alias

| *Name:* **alternate_title** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The alternate _title attribute provides an alternate title for the product. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Alias | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Title | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# altitude in Telescope

| *Name:* **altitude** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The altitude attribute provides the height of anything above a given reference plane. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Telescope | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* m | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# aperture in Telescope

| *Name:* **aperture** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The aperture attribute provides the diameter of an opening, usually circular, that limits the quantity of light that can enter an optical instrument. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Telescope | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* m | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# archive_status in Data_Set_PDS3

| *Name:* **archive_status** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The ARCHIVE_STATUS attribute indicates the stage to which a data set has progressed in the archiving process, from IN QUEUE through ARCHIVED. It can also take on the values SUPERSEDED or SAFED, which indicate that the data set is not part of the active archive. ACCUMULATING can be appended to some values to indicate that the data set is incomplete and/or that not all components have reached the stage given by the root value; ACCUMULATING | |

| Name: archive_status | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| would be used, for example, when the archive is being delivered incrementally, as from a mission that lasts many months or years. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Status | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ARCHIVED | Archive status of the PDS3 data set is ARCHIVED (passed peer review with all liens resolved. Available through the Data Set Catalog and at NSSDC). | |
| | ARCHIVED_ ACCUMULATING | Archive status of the PDS3 data set is ARCHIVED_ACCUMULATING (some parts of the data set are ARCHIVED, but other parts are in earlier stages of the archiving process and/ or have not yet been delivered to PDS; use with caution). | |
| | IN_LIEN_ RESOLUTION | Archive status of the PDS3 data set is IN_LIEN_RESOLUTION (peer review completed; liens are in the process of being resolved; use with caution). | |
| | IN_LIEN_ RESOLUTION_ ACCUMULATING | Archive status of the PDS3 data set is IN_LIEN_RESOLUTION_ACCUMULATING (some parts of the data set are IN LIEN RESOLUTION, but other parts are in earlier stages of the archiving process and/or have not yet been delivered to PDS; use with caution). | |
| | IN_PEER_REVIEW | Archive status of the PDS3 data set is IN_PEER_REVIEW (under peer review at the curation node but evaluation is not complete; use with caution). | |
| | IN_PEER_REVIEW_ ACCUMULATING | Archive status of the PDS3 data set is IN_PEER_REVIEW_ACCUMULATING (some parts of the data set are IN PEER REVIEW, but other parts are in earlier stages of the archiving process and/or have not yet been delivered to PDS; use with caution). | |
| | IN_QUEUE | Archive status of the PDS3 data set is IN_QUEUE (received at the curation node but no action has been taken by the curation node; use with caution). | |
| | IN_QUEUE_ ACCUMULATING | Archive status of the PDS3 data set is IN_QUEUE_ACCUMULATING (some parts of the data set are IN QUEUE, but other parts have not yet been delivered to PDS; use with caution). | |
| | LOCALLY_ ARCHIVED | Archive status of the PDS3 data set is LOCALLY_ARCHIVED (passed peer review with all liens resolved; considered archived by | |

| Name: archive_status | | Version Id: 1.0.0.0 |
|---|---|---|
| | | the curation node but awaiting completion of the standard archiving process; possible TBD items include the arrival of the archive volume at NSSDC and ingestion of catalog information into the Data Set Catalog). |
| | LOCALLY_ ARCHIVED_ ACCUMULATING | Archive status of the PDS3 data set is LOCALLY_ARCHIVED_ACCUMULATING (some parts of the data set are LOCALLY ARCHIVED, but other parts are in earlier stages of the archiving process and/or have not yet been delivered to PDS; use with caution). |
| | PRE_PEER_REVIEW | Archive status of the PDS3 data set is PRE_PEER_REVIEW (being prepared for peer review under the direction of the curation node; use with caution).' |
| | PRE_PEER_ REVIEW_ ACCUMULATING | Archive status of the PDS3 data set is PRE_PEER_REVIEW_ACCUMULATING (some parts of the data set are in PRE PEER REVIEW, but other parts are IN QUEUE and/ or have not yet been delivered to PDS; use with caution). |
| | SAFED | Archive status of the PDS3 data set is SAFED (the data set has been received by the PDS with no evaluation; data will not be formally archived). |
| | SUPERSEDED | Archive status of the PDS3 data set is SUPERSEDED (this data set has been replaced by a newer version, implying that the data set is not to be used unless the requester has specific reasons; when a data set has been superseded the Engineering Node, will notify NSSDC that their databases need to be updated to advise users of the new status and the location of the replacement data set). |

# archive_status in Volume_PDS3

| Name: archive_status | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ARCHIVE_STATUS attribute indicates the stage to which a data set has progressed in the archiving process, from IN QUEUE through ARCHIVED. It can also take on the values SUPERSEDED or SAFED, which indicate that the data set is not part of the active archive. ACCUMULATING can be appended to some values to indicate that the data set is incomplete and/ or that not all components have reached the stage given by the root value; ACCUMULATING would be used, for example, when the archive is being delivered incrementally, as from a mission that lasts many months or years. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_ PDS3 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Status | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: archive_status | | Version Id: 1.0.0.0 |
|---|---|---|
| Permissible Value(s) | Value | Value Meaning |
| | ARCHIVED | Archive status of the PDS3 volume is ARCHIVED (passed peer review with all liens resolved. Available through the Data Set Catalog and at NSSDC). |
| | ARCHIVED_ ACCUMULATING | Archive status of the PDS3 volume is ARCHIVED_ACCUMULATING (some parts of the volume are ARCHIVED, but other parts are in earlier stages of the archiving process and/ or have not yet been delivered to PDS; use with caution). |
| | IN_LIEN_ RESOLUTION | Archive status of the PDS3 volume is IN_LIEN_RESOLUTION (peer review completed; liens are in the process of being resolved; use with caution). |
| | IN_LIEN_ RESOLUTION_ ACCUMULATING | Archive status of the PDS3 volume is IN_LIEN_RESOLUTION_ACCUMULATING (some parts of the volume are IN LIEN RESOLUTION, but other parts are in earlier stages of the archiving process and/or have not yet been delivered to PDS; use with caution). |
| | IN_PEER_REVIEW | Archive status of the PDS3 volume is IN_PEER_REVIEW (under peer review at the curation node but evaluation is not complete; use with caution). |
| | IN_PEER_REVIEW_ ACCUMULATING | Archive status of the PDS3 volume is IN_PEER_REVIEW_ACCUMULATING (some parts of the volume are IN PEER REVIEW, but other parts are in earlier stages of the archiving process and/or have not yet been delivered to PDS; use with caution). |
| | IN_QUEUE | Archive status of the PDS3 volume is IN_QUEUE (received at the curation node but no action has been taken by the curation node; use with caution). |
| | IN_QUEUE_ ACCUMULATING | Archive status of the PDS3 volume is IN_QUEUE_ACCUMULATING (some parts of the volume are IN QUEUE, but other parts have not yet been delivered to PDS; use with caution). |
| | LOCALLY_ ARCHIVED | Archive status of the PDS3 volume is LOCALLY_ARCHIVED (passed peer review with all liens resolved; considered archived by the curation node but awaiting completion of the standard archiving process; possible TBD items include the arrival of the archive volume at NSSDC and ingestion of catalog information into the Data Set Catalog). |
| | LOCALLY_ ARCHIVED_ ACCUMULATING | Archive status of the PDS3 volume is LOCALLY_ARCHIVED_ACCUMULATING (some parts of the volume are LOCALLY ARCHIVED, but other parts are in earlier stages |

| Name: archive_status | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | of the archiving process and/or have not yet been delivered to PDS; use with caution). | |
| | PRE_PEER_REVIEW | Archive status of the PDS3 volume is PRE_PEER_REVIEW (being prepared for peer review under the direction of the curation node; use with caution). | |
| | PRE_PEER_ REVIEW_ ACCUMULATING | Archive status of the PDS3 volume is PRE_PEER_REVIEW_ACCUMULATING (some parts of the volume are in PRE PEER REVIEW, but other parts are IN QUEUE and/ or have not yet been delivered to PDS; use with caution). | |
| | SAFED | Archive status of the PDS3 volume is SAFED (the volume has been received by the PDS with no evaluation; data will not be formally archived). | |
| | SUPERSEDED | Archive status of the PDS3 volume is SUPERSEDED (this volume has been replaced by a newer version, implying that the volume is not to be used unless the requester has specific reasons; when a volume has been superseded the Engineering Node, will notify NSSDC that their databases need to be updated to advise users of the new status and the location of the replacement volume). | |

# archive_status_note in Volume_PDS3

| Name: archive_status_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The archive status note attribute provides a comment about the archive status. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_ PDS3 | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# attribute_concept in DD_Attribute_Full

| Name: attribute_concept | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The attribute_concept attribute provides the type of information (classification) conveyed by the attribute -- e.g., stop_date_time has attribute_concept = date_time. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute_Full | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| Name: attribute_concept | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Address | The attribute has been classified as being an Address | |
| | Angle | The attribute has been classified as being an Angle | |
| | Attribute | The attribute has been classified as being an Attribute | |
| | Bit | The attribute has been classified as being a Bit | |
| | Checksum | The attribute has been classified as being a Checksum | |
| | Collection | The attribute has been classified as being a Collection | |
| | Constant | The attribute has been classified as being a Constant | |
| | Cosine | The attribute has been classified as being a Cosine | |
| | Count | The attribute has been classified as being a Count | |
| | DOI | The attribute has been classified as being a DOI | |
| | Delimiter | The attribute has been classified as being a Delimiter | |
| | Description | The attribute has been classified as being a Description | |
| | Deviation | The attribute has been classified as being a Deviation | |
| | Direction | The attribute has been classified as being a Direction | |
| | Distance | The attribute has been classified as being a Distance | |
| | Duration | The attribute has been classified as being a Duration | |
| | Factor | The attribute has been classified as being a Factor | |
| | Flag | The attribute has been classified as being a Flag | |
| | Format | The attribute has been classified as being a Format | |
| | Group | The attribute has been classified as being a Group | |
| | Home | The attribute has been classified as being a Home | |
| | ID | The attribute has been classified as being an Identifier | |
| | Latitude | The attribute has been classified as being a Latitude | |

| Name: attribute_concept | | Version Id: 1.0.0.0 |
|---|---|---|
| | Length | The attribute has been classified as being a Length |
| | List | The attribute has been classified as being a List |
| | Location | The attribute has been classified as being a Location |
| | Logical | The attribute has been classified as being a Logical |
| | Longitude | The attribute has been classified as being a Longitude |
| | Mask | The attribute has been classified as being a Mask |
| | Maximum | The attribute has been classified as being a Maximum |
| | Mean | The attribute has been classified as being a Mean |
| | Median | The attribute has been classified as being a Median |
| | Minimum | The attribute has been classified as being a Minimum |
| | Name | The attribute has been classified as being a Name |
| | Note | The attribute has been classified as being a Note |
| | Number | The attribute has been classified as being a Number |
| | Offset | The attribute has been classified as being an Offset |
| | Order | The attribute has been classified as being an Order |
| | Parallel | The attribute has been classified as being a Parallel |
| | Password | The attribute has been classified as being a Password |
| | Path | The attribute has been classified as being a Path |
| | Pattern | The attribute has been classified as being a Pattern |
| | Pixel | The attribute has been classified as being a Pixel |
| | Quaternion | The attribute has been classified as being a Quaternion |
| | Radius | The attribute has been classified as being a Radius |
| | Ratio | The attribute has been classified as being a Ratio |
| | Reference | The attribute has been classified as being a Reference |
| | Resolution | The attribute has been classified as being a Resolution |
| | Role | The attribute has been classified as being a Role |
| | Rotation | The attribute has been classified as being a Rotation |

| Name: attribute_concept | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | Scale | The attribute has been classified as being a Scale | |
| | Sequence | The attribute has been classified as being a Sequence | |
| | Set | The attribute has been classified as being a Set | |
| | Size | The attribute has been classified as being a Size | |
| | Status | The attribute has been classified as being a Status | |
| | Summary | The attribute has been classified as being a Summary | |
| | Syntax | The attribute has been classified as being a Syntax | |
| | Temperature | The attribute has been classified as being a Temperature | |
| | Text | The attribute has been classified as being a Text | |
| | Title | The attribute has been classified as being a Title | |
| | Type | The attribute has been classified as being a Type | |
| | Unit | The attribute has been classified as being a Unit | |
| | Unknown | The attribute has an Unknown classification | |
| | Value | The attribute has been classified as being a Value | |
| | Vector | The attribute has been classified as being a Vector | |

# author_list in Citation_Information

| Name: author_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The author_list attribute provides a list of people to be cited as the authors of the asssociated product. Lists are constructed with last names first and first and middle names and/ or initials following. Initials are terminated by periods and delimited by single spaces. Suffixes (if applicable) follow everything else, after a final comma. Hyphenated names may be reduced to initials as "J.-P." Each person's full name is separated from the next by a semi-colon. There is no "and" before the last name. If there is no author list, editor_list must be present and non-null. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Citation_Information | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: List | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# author_list in Document

| Name: author_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The author_list attribute provides a list of people to be cited as the authors of the asssociated product. Lists are constructed with last names first and first and middle names and/ or initials following. Initials are terminated by periods and delimited by single spaces. Suffixes | | | |

| Name: author_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| (if applicable) follow everything else, after a final comma. Hyphenated names may be reduced to initials as "J.-P." Each person's full name is separated from the next by a semi-colon. There is no "and" before the last name. If there is no author list, editor_list must be present and non-null. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: List | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# author_list in Software

| Name: author_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The author_list attribute provides a list of people to be cited as the authors of the asssociated product. Lists are constructed with last names first and first and middle names and/ or initials following. Initials are terminated by periods and delimited by single spaces. Suffixes (if applicable) follow everything else, after a final comma. Hyphenated names may be reduced to initials as "J.-P." Each person's full name is separated from the next by a semi-colon. There is no "and" before the last name. If there is no author list, editor_list must be present and non-null. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: List | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# axes in Array

| Name: axes | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The axes attribute provides a count of the axes. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Array | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: 16 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# axes in Array_1D

| Name: axes | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The axes attribute provides a count of the axes. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Array_1D | Type: ASCII_Integer |

| *Name:* **axes** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* 1 | *Maximum Value:* 16 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Array_1D has 1 axis | |

# axes in Array_2D

| *Name:* **axes** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The axes attribute provides a count of the axes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Array_2D | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* 16 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 2 | Array_2D has 2 axes | |

# axes in Array_3D

| *Name:* **axes** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The axes attribute provides a count of the axes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Array_3D | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* 16 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 3 | Array_2D has 3 axes | |

# axis_index_order in Array

| *Name:* **axis_index_order** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The axis_index_order attribute provides the axis index that varies fastest with respect to storage order. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Array | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Order | *Conceptual Domain:* Short_String |

| *Name:* **axis_index_order** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None |
| *Permissible Value(s)* | *Value* | *Value Meaning* |
| | Last Index Fastest | The values of a multi-dimensional array are stored in an order such that the last index changes fastest and the first index slowest. |

# axis_name in Axis_Array

| *Name:* **axis_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The axis_name attribute provides a word or combination of words by which the axis is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Axis_ Array | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# band_number in Band_Bin *Deprecated*

| *Name:* **band_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The band_number attribute provides a number corresponding to the band in the spectral qube. The band number is equivalent to the instrument band number. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* 512 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# band_width in Band_Bin *Deprecated*

| *Name:* **band_width** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The band_width attributes provides the width, at half height, of the band. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# bit_fields in Packed_Data_Fields

| Name: **bit_fields** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The bit_fields attribute provides the number of defined bit fields (Field_Bit definitions) within the Packed_Data_Field. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Packed_ Data_Fields | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# bit_mask in Object_Statistics

| Name: **bit_mask** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The bit_mask attribute is a series of binary digits identifying the active bits in a value; it has exactly the same number of the bits as the array element to which it is applied. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Object_ Statistics | Type: ASCII_Numeric_ Base2 |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Mask | Conceptual Domain: Numeric |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# bit_string in Digital_Object

| Name: **bit_string** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The bit string attribute is a sequence of digital bits. It is the content of a digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Digital_ Object | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# bundle_type in Bundle

| Name: **bundle_type** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The bundle_type attribute provides a classification for the bundle. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Bundle | Type: ASCII_Short_ String_Collapsed |

| *Name:* **bundle_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Archive | The Bundle contains at least one data collection | |
| | Supplemental | The Bundle does not contain a data collection | |

# center_wavelength in Band_Bin *Deprecated*

| *Name:* **center_wavelength** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The center_wavelength attribute provides the wavelength or frequency describing the center of a bin along the band axis of a spectral qube. When describing data from a spectrometer, the value corresponds to the peak of the response function for a particular detector and/or grating position. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# character_constraint in ASCII_AnyURI

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_AnyURI | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_AnyURI must be limited to the ASCII encoding character set. | |

# character_constraint in ASCII_DOI

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_DOI | *Type:* ASCII_Short_String_Collapsed |

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_DOI must be ASCII | |

# character_constraint in ASCII_Date

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Date must be ASCII | |

# character_constraint in ASCII_Date_DOY

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_DOY | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Date_DOY must be ASCII | |

# character_constraint in ASCII_Date_Time

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_Time | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Date_Time must be ASCII | |

# character_constraint in ASCII_Date_Time_ DOY

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Date_Time_DOY | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Date_Time_DOY must be ASCII | |

# character_constraint in ASCII_Date_Time_ UTC

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Date_Time_UTC | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Date_Time_UTC must be ASCII | |

# character_constraint in ASCII_Date_Time_ YMD

| *Name:* **character_constraint** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | |

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Date_Time_YMD must be ASCII | |

# character_constraint in ASCII_Date_YMD

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Date_YMD must be ASCII | |

# character_constraint in ASCII_Directory_ Path_Name

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Directory_Path_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Directory_Path_Name must be ASCII | |

# character_constraint in ASCII_File_Name

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_File_Name must be ASCII | |

# character_constraint in ASCII_File_Specification_Name

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Specification_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_File_Specification_Name must be ASCII | |

# character_constraint in ASCII_Integer

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Integer | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in ASCII_LID

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_LID must be ASCII | |

# character_constraint in ASCII_LIDVID

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LIDVID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_LIDVID must be ASCII | |

# character_constraint in ASCII_LIDVID_LID

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LIDVID_LID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_LIDVID_LID must be ASCII | |

# character_constraint in ASCII_MD5_ Checksum

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ MD5_Checksum | Type: ASCII_Short_ String_Collapsed |

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_MD5_Checksum must be ASCII | |

# character_constraint in ASCII_NonNegative_ Integer

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ NonNegative_Integer | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in ASCII_Numeric_ Base16

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Numeric_Base16 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in ASCII_Numeric_ Base2

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Numeric_Base2 | Type: ASCII_Short_ String_Collapsed |

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Numeric_Base2 must be ASCII | |

# character_constraint in ASCII_Numeric_ Base8

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base8 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII | Values of ASCII_Numeric_Base8 must be ASCII | |

# character_constraint in ASCII_Real

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Real | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# character_constraint in ASCII_Short_String_ Collapsed

| *Name:* **character_constraint** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The character_constraint attribute limits the characters allowed. | | | |

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Short_String_Collapsed | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Short_String_Collapsed must be ASCII | |

# character_constraint in ASCII_Short_String_ Preserved

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Short_String_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Short_String_Preserved must be ASCII | |

# character_constraint in ASCII_String

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ String | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_String must be ASCII | |

# character_constraint in ASCII_Text_ Collapsed

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Text_Collapsed | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Text_Collapsed must be ASCII | |

# character_constraint in ASCII_Text_ Preserved

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Text_Preserved must be ASCII | |

# character_constraint in ASCII_Time

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Time | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_Time must be ASCII | |

# character_constraint in ASCII_VID

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_VID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII | Values of ASCII_VID must be ASCII | |

# character_constraint in Character_Data_Type

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in UTF8_Short_String_ Collapsed

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_Short_String_Collapsed | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in UTF8_Short_String_ Preserved

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Short_String_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_constraint in UTF8_Text_ Preserved

| Name: character_constraint | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_constraint attribute limits the characters allowed. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# character_encoding in ASCII_AnyURI

| Name: character_encoding | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_encoding attribute identifies the standard that maps a set of allowed characters to their machine readable code. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ AnyURI | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | UTF-8 | Values of ASCII_AnyURI have UTF-8 character encoding. | |

# character_encoding in Character_Data_Type

| Name: character_encoding | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The character_encoding attribute identifies the standard that maps a set of allowed characters to their machine readable code. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | UTF-8 | Values of Character_Data_Type have UTF-8 character encoding | |

# checksum_manifest_checksum in Information_Package_Component

| Name: checksum_manifest_checksum | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The checksum manifest checksum provides the checksum for the checksum manifest file. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Information_Package_Component | Type: ASCII_MD5_Checksum |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Checksum | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# checksum_type in Information_Package_ Component

| Name: checksum_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The checksum type attribute provides the name of the checksum algorithm used to calculate the checksum value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Information_Package_Component | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **checksum_type** | *Version Id:* **1.0.0.0** |
|---|---|
| *Permissible Value(s)* | *No Values* | |

# checksum_type in Information_Package_ Component_Deep_Archive

| *Name:* **checksum_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The checksum type attribute provides the name of the checksum algorithm used to calculate the checksum value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Information_Package_ Component_Deep_ Archive | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# citation_text in Data_Set_PDS3

| *Name:* **citation_text** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The citation_text attribute provides a character string containing a literature or other citation in sufficient detail that the material could be located in PDS or elsewhere. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Data_Set_ PDS3 | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Text | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# class_name in DD_Attribute_Full

| *Name:* **class_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The class_name attribute provides the common name by which the class is identified, as well as the class within which the attribute is used. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# collection_type in Collection

| Name: collection_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The collection_type attribute provides a classification for the collection. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Collection | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Browse | This is a BROWSE collection | |
| | Calibration | This is a CALIBRATION collection | |
| | Context | This is a CONTEXT collection | |
| | Data | This is a DATA collection | |
| | Document | This is a DOCUMENT collection | |
| | Geometry | This is a GEOMETRY collection | |
| | Miscellaneous | This is a MISCELLANEOUS collection | |
| | SPICE Kernel | This is a SPICE Kernel collection | |
| | XML Schema | This is an XML SCHEMA collection | |

# comment in Alias

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Alias | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# comment in Color_Display_Settings

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| Namespace Id: pds | Steward: img | Class Name: Color_Display_Settings | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* comment | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in Context_Area

| *Name:* comment | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Context_Area | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in DD_Attribute

| *Name:* comment | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Attribute | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in DD_Attribute_Full

| *Name:* comment | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Attribute_Full | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in DD_Class_Full

| *Name:* **comment** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Full | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in Display_Direction

| *Name:* **comment** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Display_Direction | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in File

| *Name:* **comment** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* File | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# comment in Ingest_LDD

| *Name:* **comment** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | |

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: ops | Class Name: Ingest_ LDD | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# comment in Internal_Reference

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The comment attribute provides one or more remarks or thoughts relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Internal_ Reference | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# comment in Local_Internal_Reference

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Local_ Internal_Reference | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# comment in Movie_Display_Settings

| Name: comment | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The comment attribute is a character string expressing one or more remarks or thoughts relevant to the object. | | | |
| Namespace Id: pds | Steward: img | Class Name: Movie_ Display_Settings | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **comment** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# compile_note in Software_Source

| *Name:* **compile_note** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The compile note attribute provides a brief statement giving particulars about the compilation of the software source. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_ Source | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Note | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# conceptual_domain in DD_Value_Domain_ Full

| *Name:* **conceptual_domain** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The conceptual_domain attribute provides the domain to which the value has been assigned. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Value_Domain_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Boolean | The value is classified as Boolean | |
| | Integer | The value is classified as Integer | |
| | Name | The value is classified as Name | |
| | Numeric | The value is classified as Numeric | |
| | Real | The value is classified as Real | |
| | Short_String | The value is classified as Short_String | |
| | Text | The value is classified as Text | |
| | Time | The value is classified as Time | |
| | Type | The value is classified as Type | |
| | Unknown | The value has an Unknown classification | |

# confidence_level_note in Data_Set_PDS3

| *Name:* **confidence_level_note** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The confidence_level_note attribute is a text field which characterizes the reliability of data within a data set or the reliability of a particular programming algorithm or software component. Essentially, this note discusses the level of confidence in the accuracy of the data or in the ability of the software to produce accurate results. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Data_Set_ PDS3 | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Note | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# constant_value in DD_Association

| *Name:* **constant_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The constant value attribute provides the value to be used if an attribute is static. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Association | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# container_type in Zip

| *Name:* **container_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The container type attribute indicates the method used to package the components. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Zip | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | GZIP | Product_Zipped is in container type GZIP | |
| | LZIP | Product_Zipped is in container type LZIP | |
| | TAR | Product_Zipped is in container type TAR | |
| | ZIP | Product_Zipped is in container type ZIP | |

# coordinate_source in Telescope

| Name: coordinate_source | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The coordinate_source provides the name of the source of a set of coordinates. | | | | |
| Namespace Id: pds | Steward: pds | Class Name: Telescope | Type: ASCII_Short_ String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | Value | Value Meaning | | |
| | Aerial Survey - North American (1983) Datum | The coordinate source is Aerial survey - North American (1983) Datum | | |
| | Astronomical | The coordinate source is Astronomical | | |
| | Doppler determined - WGS 72 Datum | The coordinate source is Doppler determined - WGS 72 Datum | | |
| | Geodetic - Adindan Datum | The coordinate source is Geodetic - Adindan Datum | | |
| | Geodetic - Australian Datum | The coordinate source is Geodetic - Australian Datum | | |
| | Geodetic - Campo Inchauspe (Argentina) Datum | The coordinate source is Geodetic - Campo Inchauspe (Argentina) Datum | | |
| | Geodetic - Cape (South Africa) Datum | The coordinate source is Geodetic - Cape (South Africa) Datum | | |
| | Geodetic - Corregio Alegre (Brazil) Datum | The coordinate source is Geodetic - Corregio Alegre (Brazil) Datum | | |
| | Geodetic - Datum Unknown | The coordinate source is Geodetic - Datum Unknown | | |
| | Geodetic - European 1979 Datum | The coordinate source is Geodetic - European 1979 Datum | | |
| | Geodetic - European Datum | The coordinate source is Geodetic - European Datum | | |
| | Geodetic - GRS 80 Datum | The coordinate source is Geodetic - GRS 80 Datum | | |
| | Geodetic - Hermannskogel Datum | The coordinate source is Geodetic - Hermannskogel Datum | | |
| | Geodetic - Indian Datum | The coordinate source is Geodetic - Indian Datum | | |
| | Geodetic - La Canoa (Venezuela) Datum | The coordinate source is Geodetic - La Canoa (Venezuela) Datum | | |
| | Geodetic - New Zealand Datum | The coordinate source is Geodetic - New Zealand Datum | | |
| | Geodetic - North American (1927) Datum | The coordinate source is Geodetic - North American (1927) Datum | | |

| Name: coordinate_source | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | Geodetic - Old Hawaiian Datum | The coordinate source is Geodetic - Old Hawaiian Datum | |
| | Geodetic - Ordnance Survey of Great Britain (1936) Datum | The coordinate source is Geodetic - Ordnance Survey of Great Britain (1936) Datum | |
| | Geodetic - Ordnance Survey of Great Britain (SN) 1980 Datum | The coordinate source is Geodetic - Ordnance Survey of Great Britain (SN) 1980 Datum | |
| | Geodetic - Potsdam Datum | The coordinate source is Geodetic - Potsdam Datum | |
| | Geodetic - Puerto Rican (1940) Datum | The coordinate source is Geodetic - Puerto Rican (1940) Datum | |
| | Geodetic - South American Datum | The coordinate source is Geodetic - South American Datum | |
| | Geodetic - Tokyo Datum | The coordinate source is Geodetic - Tokyo Datum | |
| | Geodetic - WGS 84 Datum | The coordinate source is Geodetic - WGS 84 Datum | |
| | Satellite Determined - Datum Unknown | The coordinate source is Satellite determined - Datum Unknown | |
| | Unknown | The coordinate source is Unknown | |

# copyright in Document

| Name: copyright | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The copyright attribute is a character string giving information about the exclusive right to make copies, license, and otherwise exploit an object, whether physical or digital. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# country in Facility

| Name: country | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: country | | | |
| Namespace Id: pds | Steward: pds | Class Name: Facility | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: **country** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| *Permissible Value(s)* | *No Values* | | |

# creation_date_time in File

| Name: **creation_date_time** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| *Description:* The creation_date_time attribute provides a date and time when the object was created. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* File | *Type:* ASCII_Date_Time |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# curating_node_id in Volume_PDS3

| Name: **curating_node_id** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| *Description:* The curating_node_id attribute provides the id of the node currently maintaining the data set or volume and is responsible for maintaining catalog information. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# data_regime in Primary_Result_Summary *Deprecated*

| Name: **data_regime *Deprecated*** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| *Description:* The data_regime attribute provides the wavelength (or an analogous concept for things like particle detectors) of the observations, stated as a category. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Primary_Result_Summary | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Deprecated | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |

| Name: data_regime *Deprecated* | | Version Id: 1.0.0.0 |
|---|---|---|
| | Dust | Particles ranging in size from a few molecules to approximately 0.1 micrometer in diameter. |
| | Electric Field | A vector force field controlled primarily by the presence of electrons and/or ions |
| | Electrons | Subatomic particles with negative elementary charge. |
| | Far Infrared | Electromagnetic radiation in the approximate range: 1 THz - 10 THz (frequency), 30 micrometers - 300 micrometers (wavelength), or 4 meV - 40 meV (photon energy) |
| | Gamma Ray | Electromagnetic radiation in the approximate range: greater than 10 EHz (frequency), less than 0.01 nm (wavelength), or more than 100 keV (photon energy) |
| | Infrared | Electromagnetic radiation in the approximate range: 300 GHz - 405 THz (frequency), 750 nm - 1 mm (wavelength), or 1.24 meV - 1.7 eV (photon energy) |
| | Ions | Atoms or molecules in which the number of electrons and protons is unequal, giving them a net negative or positive electric charge. |
| | Magnetic Field | A vector force field produced by moving electric charges (currents) and/or the intrinsic magnetic properties of materials |
| | Microwave | Electromagnetic radiation in the approximate range: 300 MHz - 300 GHz (frequency), 1 mm - 1 m (wavelength), or 12 micro eV - 1.2 meV (photon energy) |
| | Millimeter | Electromagnetic radiation in the approximate range: 30 GHz - 300 GHz (frequency), 1 mm - 10 mm (wavelength), or 120 micro eV - 1.2 meV (photon energy) |
| | Near Infrared | Electromagnetic radiation in the approximate range: 300 THz - 1.5 PHz (frequency), 1 micrometer - 5 micrometer (wavelength), or 1 eV - 6 eV (photon energy) |
| | Particles | Discrete (but small) objects that can be characterized by a few simple physical properties such as volume and mass. |
| | Pressure | Measurement of ambient atmospheric pressure. |
| | Radio | Electromagnetic radiation in the approximate range: 3 Hz - 300 GHz (frequency), 1 mm - 100,000 km (wavelength), or 12 feV - 1.2 meV (photon energy) |
| | Sub-Millimeter | Electromagnetic radiation in the approximate range: 0.3 THz - 3 THz (frequency), 0.1 mm - 1 mm (wavelength), or 1.2 meV - 12 meV (photon energy) |
| | Temperature | Measurement of ambient temperature. |

| Name: data_regime *Deprecated* | | Version Id: 1.0.0.0 |
|---|---|---|
| | Ultraviolet | Electromagnetic radiation in the approximate range: 790 THz - 30 PHz (frequency), 10 nm - 390 nm (wavelength), or 3 eV - 120 eV (photon energy) |
| | Visible | Electromagnetic radiation in the approximate range: 405 THz - 790 THz (frequency), 390 nm - 750 nm (wavelength), or 1.7 eV - 3.3 eV (photon energy) |
| | X-Ray | Electromagnetic radiation in the approximate range: 30 PHz - 30 EHz (frequency), 0.01 nm - 10 nm (wavelength), or 120 eV - 120 keV (photon energy)) |

# data_set_desc in Data_Set_PDS3

| Name: data_set_desc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_set_desc attribute describes the content and type of a data set and provides information required to use the data (such as binning information). | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_PDS3 | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# data_set_id in Data_Set_PDS3

| Name: data_set_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data set id provides a formal name used to refer to a data set. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# data_set_name in Data_Set_PDS3

| Name: data_set_name | Version Id: 1.0.0.0 |
|---|---|
| Description: The data_set_name attribute provides the full name given to a data set or a data product. The data_set_name typically identifies the instrument that acquired the data of that instrument Example value data_set_id. Note This attribute is defined in the AMMOS Magellan catalog as an alias for file_name to provide backward compatibility | |

| *Name:* **data_set_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Data_Set_ PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# data_set_release_date in Data_Set_PDS3

| *Name:* **data_set_release_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The data_set_release_date attribute provides the date when a data set is released by the data producer for archive or publication. In many systems this represents the end of a proprietary or validation period. Formation rule In AMMOS identify the date at which a product may be released to the general public from proprietary access. AMMOS-related systems should apply this attribute only to proprietary data. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Data_Set_ PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# data_set_terse_desc in Data_Set_PDS3

| *Name:* **data_set_terse_desc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* A one line description of the data set | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Data_Set_ PDS3 | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# data_type in Element_Array

| *Name:* **data_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The data_type attribute provides the hardware representation used to store a value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Element_ Array | *Type:* ASCII_Short_ String_Collapsed |

| *Name:* **data_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ComplexLSB16 | Values of Array_Element are stored as two 64-bit floating point numbers with the least significant byte first | |
| | ComplexLSB8 | Values of Array_Element are stored as two 32-bit floating point numbers with the least significant byte first | |
| | ComplexMSB16 | Values of Array_Element are stored as two 64-bit floating point numbers with the more significant byte first | |
| | ComplexMSB8 | Values of Array_Element are stored as two 32-bit floating point numbers with the more significant byte first | |
| | IEEE754LSBDouble | Values of Array_Element are stored as 64-bit IEEE binary floating point numbers with the least significant byte first | |
| | IEEE754LSBSingle | Values of Array_Element are stored as 32-bit IEEE binary floating point numbers with the least significant byte first | |
| | IEEE754MSBDouble | Values of Array_Element are stored as 64-bit IEEE binary floating point numbers with the most significant byte first | |
| | IEEE754MSBSingle | Values of Array_Element are stored as 32-bit IEEE binary floating point numbers with the most significant byte first | |
| | SignedBitString | Values of Array_Element are stored as signed bit strings | |
| | SignedByte | Values of Array_Element are stored as 8-bit signed binary integers | |
| | SignedLSB2 | Values of Array_Element are stored as 16-bit signed binary integers with the less significant byte first | |
| | SignedLSB4 | Values of Array_Element are stored as 32-bit signed binary integers with the less significant byte first | |
| | SignedLSB8 | Values of Array_Element are stored as 64-bit signed binary integers with the less significant byte first | |
| | SignedMSB2 | Values of Array_Element are stored as 16-bit signed binary integers with the more significant byte first | |
| | SignedMSB4 | Values of Array_Element are stored as twos-complement 32-bit binary integers with the most significant byte first | |

| Name: data_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | SignedMSB8 | Values of Array_Element are stored as twos-complement 64-bit binary integers with the most significant byte first |
| | UnsignedBitString | Values of Array_Element are stored as unsigned bit strings |
| | UnsignedByte | Values of Array_Element are stored as 8-bit unsigned binary integers |
| | UnsignedLSB2 | Values of Array_Element are stored as 16-bit unsigned binary integers with the less significant byte first |
| | UnsignedLSB4 | Values of Array_Element are stored as 32-bit unsigned binary integers with the least significant byte first |
| | UnsignedLSB8 | Values of Array_Element are stored as 64-bit unsigned binary integers with the least significant byte first |
| | UnsignedMSB2 | Values of Array_Element are stored as 16-bit unsigned binary integers with the more significant byte first |
| | UnsignedMSB4 | Values of Array_Element are stored as 32-bit unsigned binary integers with the most significant byte first |
| | UnsignedMSB8 | Values of Array_Element are stored as 64-bit unsigned binary integers with the most significant byte first |

# data_type in Field_Binary

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Binary | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_AnyURI | Values in Field_Binary have data type ASCII_AnyURI | |
| | ASCII_Boolean | Values in Field_Binary have data type ASCII_Boolean | |
| | ASCII_DOI | Values in Field_Binary have data type ASCII_DOI | |
| | ASCII_Date | Values in Field_Binary have data type ASCII_Date | |
| | ASCII_Date_DOY | Values in Field_Binary have data type ASCII_Date_DOY | |

| Name: data_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | ASCII_Date_Time | Values in Field_Binary have data type ASCII_Date_Time |
| | ASCII_Date_Time_ DOY | Values in Field_Binary have data type ASCII_Date_Time_DOY |
| | ASCII_Date_Time_ UTC | Values in Field_Binary have data type ASCII_Date_Time_UTC |
| | ASCII_Date_Time_ YMD | Values in Field_Binary have data type ASCII_Date_Time_YMD |
| | ASCII_Date_YMD | Values in Field_Binary have data type ASCII_Date_YMD |
| | ASCII_Directory_ Path_Name | Values in Field_Binary have data type ASCII_Directory_Path_Name |
| | ASCII_File_Name | Values in Field_Binary have data type ASCII_File_Name |
| | ASCII_File_ Specification_Name | Values in Field_Binary have data type ASCII_File_Specification_Name |
| | ASCII_Integer | Values in Table_Binary_Field have data type ASCII_Integer |
| | ASCII_LID | Values in Field_Binary have data type ASCII_LID |
| | ASCII_LIDVID | Values in Field_Binary have data type ASCII_LIDVID |
| | ASCII_LIDVID_LID | Values in Field_Binary have data type ASCII_LIDVID_LID |
| | ASCII_MD5_ Checksum | Values in Field_Binary have data type ASCII_MD5_Checksum |
| | ASCII_NonNegative_ Integer | Values in Field_Binary have data type ASCII_NonNegative_Integer |
| | ASCII_Numeric_ Base16 | Values in Field_Binary have data type ASCII_Numeric_Base16 |
| | ASCII_Numeric_Base2 | Values in Field_Binary have data type ASCII_Numeric_Base2 |
| | ASCII_Numeric_Base8 | Values in Field_Binary have data type ASCII_Numeric_Base8 |
| | ASCII_Real | Values in Field_Binary have data type ASCII_Real |
| | ASCII_String | Values in Field_Binary have data type ASCII_String |
| | ASCII_Time | Values in Field_Binary have data type ASCII_Time |
| | ASCII_VID | Values in Field_Binary have data type ASCII_VID |
| | ComplexLSB16 | Values in Field_Binary have data type ComplexLSB16 |
| | ComplexLSB8 | Values in Field_Binary have data type ComplexLSB8 |

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | ComplexMSB16 | Values in Field_Binary have data type ComplexMSB16 | |
| | ComplexMSB8 | Values in Field_Binary have data type ComplexMSB8 | |
| | IEEE754LSBDouble | Values in Field_Binary have data type IEEE754LSBDouble | |
| | IEEE754LSBSingle | Values in Field_Binary have data type IEEE754LSBSingle | |
| | IEEE754MSBDouble | Values in Field_Binary have data type IEEE754MSBDouble | |
| | IEEE754MSBSingle | Values in Field_Binary have data type IEEE754MSBSingle | |
| | SignedBitString | Values in Field_Binary have data type SignedBitString | |
| | SignedByte | Values in Field_Binary have data type SignedByte | |
| | SignedLSB2 | Values in Field_Binary have data type SignedLSB2 | |
| | SignedLSB4 | Values in Field_Binary have data type SignedLSB4 | |
| | SignedLSB8 | Values in Field_Binary have data type SignedLSB8 | |
| | SignedMSB2 | Values in Field_Binary have data type SignedMSB2 | |
| | SignedMSB4 | Values in Field_Binary have data type SignedMSB4 | |
| | SignedMSB8 | Values in Field_Binary have data type SignedMSB8 | |
| | UTF8_String | Values in Field_Binary have data type UTF8_String | |
| | UnsignedBitString | Values in Field_Binary have data type UnsignedBitString | |
| | UnsignedByte | Values in Field_Binary have data type UnsignedByte | |
| | UnsignedLSB2 | Values in Field_Binary have data type UnsignedLSB2 | |
| | UnsignedLSB4 | Values in Field_Binary have data type UnsignedLSB4 | |
| | UnsignedLSB8 | Values in Field_Binary have data type UnsignedLSB8 | |
| | UnsignedMSB2 | Values in Field_Binary have data type UnsignedMSB2 | |
| | UnsignedMSB4 | Values in Field_Binary have data type UnsignedMSB4 | |
| | UnsignedMSB8 | Values in Field_Binary have data type UnsignedMSB8 | |

# data_type in Field_Bit

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Bit | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | SignedBitString | Values of Array_Element are stored as signed bit strings | |
| | UnsignedBitString | Values of Array_Element are stored as unsigned bit strings | |

# data_type in Field_Character

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Character | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_AnyURI | Values in Field_Character have data type ASCII_AnyURI | |
| | ASCII_Boolean | Values in Field_Character have data type ASCII_Boolean | |
| | ASCII_DOI | Values in Field_Character have data type ASCII_DOI | |
| | ASCII_Date | Values in Field_Character have data type ASCII_Date | |
| | ASCII_Date_DOY | Values in Field_Character have data type ASCII_Date_DOY | |
| | ASCII_Date_Time | Values in Field_Character have data type ASCII_Date_Time | |
| | ASCII_Date_Time_ DOY | Values in Field_Character have data type ASCII_Date_Time_DOY | |
| | ASCII_Date_Time_ UTC | Values in Field_Character have data type ASCII_Date_Time_UTC | |
| | ASCII_Date_Time_ YMD | Values in Field_Character have data type ASCII_Date_Time_YMD | |

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | ASCII_Date_YMD | Values in Field_Character have data type ASCII_Date_YMD | |
| | ASCII_Directory_ Path_Name | Values in Field_Character have data type ASCII_Directory_Path_Name | |
| | ASCII_File_Name | Values in Field_Character have data type ASCII_File_Name | |
| | ASCII_File_ Specification_Name | Values in Field_Character have data type ASCII_File_Specification_Name | |
| | ASCII_Integer | Values in Field_Character have data type ASCII_Integer | |
| | ASCII_LID | Values in Field_Character have data type ASCII_LID | |
| | ASCII_LIDVID | Values in Field_Character have data type ASCII_LIDVID | |
| | ASCII_LIDVID_LID | Values in Field_Character have data type ASCII_LIDVID_LID | |
| | ASCII_MD5_ Checksum | Values in Field_Character have data type ASCII_MD5_Checksum | |
| | ASCII_NonNegative_ Integer | Values in Field_Character have data type ASCII_NonNegative_Integer | |
| | ASCII_Numeric_ Base16 | Values in Field_Character have data type ASCII_Numeric_Base16 | |
| | ASCII_Numeric_Base2 | Values in Field_Character have data type ASCII_Numeric_Base2 | |
| | ASCII_Numeric_Base8 | Values in Field_Character have data type ASCII_Numeric_Base8 | |
| | ASCII_Real | Values in Field_Character have data type ASCII_Real | |
| | ASCII_String | Values in Field_Character have data type ASCII_String | |
| | ASCII_Time | Values in Field_Character have data type ASCII_Time | |
| | ASCII_VID | Values in Field_Character have data type ASCII_VID | |
| | UTF8_String | Values in Field_Character have data type UTF8_String | |

# data_type in Field_Delimited

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |

| Name: **data_type** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_AnyURI | The delimited field has data type ASCII_AnyURI | |
| | ASCII_Boolean | Values in Field_Delimited have data type ASCII_Boolean | |
| | ASCII_DOI | The delimited field has data type ASCII_DOI | |
| | ASCII_Date | Values in Field_Delimited have data type ASCII_Date | |
| | ASCII_Date_DOY | The delimited field has data type ASCII_Date_DOY | |
| | ASCII_Date_Time | Values in Field_Delimited have data type ASCII_Date_Time | |
| | ASCII_Date_Time_ DOY | The delimited field has data type ASCII_Date_Time_DOY | |
| | ASCII_Date_Time_ UTC | The delimited field has data type ASCII_Date_Time_UTC | |
| | ASCII_Date_Time_ YMD | The delimited field has data type ASCII_Date_Time_YMD | |
| | ASCII_Date_YMD | The delimited field has data type ASCII_Date_YMD | |
| | ASCII_Directory_ Path_Name | Values in Field_Delimited have data type ASCII_Directory_Path_Name | |
| | ASCII_File_Name | The delimited field has data type ASCII_File_Name | |
| | ASCII_File_ Specification_Name | The delimited field has data type ASCII_File_Specification_Name | |
| | ASCII_Integer | The delimited field has data type ASCII_Integer | |
| | ASCII_LID | The delimited field has data type ASCII_LID | |
| | ASCII_LIDVID | The delimited field has data type ASCII_LIDVID | |
| | ASCII_LIDVID_LID | Values in Field_Delimited have data type ASCII_LIDVID_LID | |
| | ASCII_MD5_ Checksum | The delimited field has data type ASCII_MD5_Checksum | |
| | ASCII_NonNegative_ Integer | The delimited field has data type ASCII_NonNegative_Integer | |
| | ASCII_Numeric_ Base16 | The delimited field has data type ASCII_Numeric_Base16 | |
| | ASCII_Numeric_Base2 | The delimited field has data type ASCII_Numeric_Base2 | |
| | ASCII_Numeric_Base8 | Values in Field_Delimited have data type ASCII_Numeric_Base8 | |
| | ASCII_Real | The delimited field has data type ASCII_Real | |
| | ASCII_String | Values in Field_Delimited have data type ASCII_String | |

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | ASCII_Time | The delimited field has data type ASCII_Time | |
| | ASCII_VID | The delimited field has data type ASCII_VID | |
| | UTF8_String | Values in Field_Delimited have data type UTF8_String | |

# data_type in Quaternion_Component

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Quaternion_ Component | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_Real | The value is expressed using the data type ASCII_Real | |

# data_type in Vector

| Name: data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The data_type attribute provides the hardware representation used to store a value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_Real | The value is expressed using the data type ASCII_Real | |

# date_time in Update_Entry

| Name: date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The date_time attribute provides the date and time of an event. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Update_ Entry | Type: ASCII_Date_ Time |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |

| Name: date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# definition in DD_Attribute

| Name: definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The definition attribute provides a statement, picture in words, or account that defines the term. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# definition in DD_Attribute_Full

| Name: definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The definition attribute provides a statement, picture in words, or account that defines the term. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute_Full | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# definition in DD_Class

| Name: definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The definition attribute provides a statement, picture in words, or account that defines the term. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# definition in DD_Class_Full

| Name: definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The definition attribute provides a statement, picture in words, or account that defines the term. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# definition in Terminological_Entry

| Name: definition | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The definition attribute provides a statement, picture in words, or account that defines the term. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Terminological_Entry | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Agency

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Agency | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Array

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Array | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Bundle

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Bundle | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Citation_Information

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a short (5KB or less) description of the product as a whole. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Citation_Information | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Collection

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Collection | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Document

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Document_Edition

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes the edition, including how it is distinguished from other editions (if any). | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_Edition | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Encoded_Byte_Stream

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Encoded_ Byte_Stream | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in External_Reference

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: External_ Reference | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Facility

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Facility | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Field_Binary

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Binary | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Field_Bit

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_Bit | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Field_Character

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Character | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Field_Delimited

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Delimited | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Field_Statistics

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Statistics | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Information_Package

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Information_Package | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Instrument

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Instrument_Host

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument_Host | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Investigation

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Investigation | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Modification_Detail

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Modification_Detail | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Node

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Node | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Object_Statistics

| *Name:* description | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Object_ Statistics | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Observing_System

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Observing_System | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Observing_System_ Component

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Observing_System_ Component | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Other

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Other | Type: UTF8_Text_ Preserved |

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in PDS_Affiliate

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_ Affiliate | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in PDS_Guest

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_ Guest | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Packed_Data_Fields

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Packed_ Data_Fields | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Parsable_Byte_Stream

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Parsable_ Byte_Stream | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Primary_Result_Summary

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Primary_ Result_Summary | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Quaternion

| Name: description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Quaternion | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# description in Quaternion_Component

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Quaternion_ Component | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Resource

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Resource | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Software

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Table_Base

| *Name:* description | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Table_ Base | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Target

| *Name:* description | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Target | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Target_Identification

| *Name:* description | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides additional information or clarification, as needed. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Target_ Identification | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Telescope

| *Name:* description | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Telescope | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Update

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Update | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Update_Entry

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Update_ Entry | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Vector

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Vector_Component

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector_ Component | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Volume_PDS3

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_ PDS3 | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# description in Volume_Set_PDS3

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_ Set_PDS3 | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| *Name:* **description** | *Version Id:* **1.0.0.0** |
|---|---|
| *Permissible Value(s)* | *No Values* | |

# description in Zip

| *Name:* **description** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The description attribute provides a statement, picture in words, or account that describes or is otherwise relevant to the object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Zip | *Type:* UTF8_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# detector_number in Band_Bin *Deprecated*

| *Name:* **detector_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The detector_number attribute provides the spectrometer detector number corresponding to a band of a spectral qube. Detector numbers are usually assigned consecutively from 1, in order of increasing wavelength. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# directory_path_name in Document_File

| *Name:* **directory_path_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The directory_path_name attribute provides a sequence of names that locates a directory in a hierarchy of directories. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Document_File | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# discipline_name in Discipline_Facets

| Name: discipline_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The discipline_name attribute describes the observing discipline (as opposed to a PDS Discipline Node Name, though the concepts and values are similar). Some of these values are, with respect to the PDS Nodes, inter-disciplinary and should be used when they are applicable in perference to the more restrictive values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Discipline_Facets | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Atmospheres | atmospheric observations | |
| | Fields | electric and magnetic field data | |
| | Flux Measurements | photometry/polarimetry not resulting in images or spectra | |
| | Imaging | any non-spectroscopic image, of any dimensionality (color, movies, etc.) | |
| | Particles | ions, electrons, and anything not classified as 'dust' | |
| | Ring-Moon Systems | other ring or ring-moon system data | |
| | Small Bodies | other small body observations, including dust, shape models, etc. | |
| | Spectroscopy | light wavelength/wave number spectra of any and all dimensionalities | |

# document_editions in Document

| Name: document_editions | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The document_editions attribute provides a count of the total number of complete, distinct editions of the document. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# document_name in Document

| Name: document_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The document_title attribute provides the full name of the published document. This optional attribute is used only if the title in the identification area of the document product is not sufficient. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: UTF8_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# document_standard_id in Document_File

| Name: document_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The document_standard_id attribute provides the formal name of a standard used for the structure of a document file. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_File | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 7-Bit ASCII Text | The Document_File contains simple text using only the 7-Bit ASCII character set. ANSI X3.4-1986. | |
| | Encapsulated Postscript | The Document_File is governed by the external standard Encapsulated Postscript (EPS). | |
| | GIF | The Document_File is governed by the standard Graphics Interchange Format (GIF). | |
| | HTML 2.0 | The Document_File is governed by the standard HyperText Markup Language (HTML), IETF RFC 2070. | |
| | HTML 3.2 | The Document_File is governed by the standard HyperText Markup Language (HTML), W3C Recommendation 14-Jan-1997. | |
| | HTML 4.0 | The Document_File is governed by the standard HyperText Markup Language (HTML), ISO 8879:1986. | |
| | HTML 4.01 | The Document_File is governed by the standard HyperText Markup Language (HTML), ISO/IEC 15445:2000. | |

| *Name:* **document_standard_id** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | JPEG | The Document_File is governed by the standard Joint Photographic Experts Group (JPEG), ISO/IEC 10918-1. |
| | LaTEX | The Document_File is governed by the standard LaTEX, Version LaTeX2e. |
| | Microsoft Excel | The Document_File is governed by a Microsoft Excel standard (xls, xlsx), Microsoft Corporation. |
| | Microsoft Word | The Document_File is governed by a Microsoft Word standard, Microsoft Corporation. |
| | PDF | The Document_File is governed by the standard Portable Document Format (PDF), ISO 32000-1:2008. |
| | PDF/A | The Document_File is governed by the standard Portable Document Format / Archive (PDF/A), ISO 19005-1:2005. |
| | PNG | The Document_File is governed by the standard Portable Network Graphics (PNG), ISO/IEC 15948:2004. |
| | Postscript | The Document_File is governed by the standard Postscript (PS) |
| | Rich Text | The Document_File is governed by the standard Rich Text Format (RTF), Microsoft Corporation. |
| | TIFF | The Document_File is governed by the standard Tagged Image File Format (TIFF), Version 6.n, 1992. |
| | UTF-8 Text | The Document_File contains simple text using UTF-8 Unicode character encodings. RFC 3629. |

# doi in Document

| *Name:* **doi** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The doi attribute provides the Digital Object Identifier for an object, assigned by the appropriate DOI System Registration Agency. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Document | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* DOI | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# doi in External_Reference

| *Name:* **doi** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The doi attribute provides the Digital Object Identifier for an object, assigned by the appropriate DOI System Registration Agency. | |

| Name: doi | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: External_ Reference | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: DOI | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# domain in Science_Facets

| Name: domain | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The radial "zone" or "shell" of the target for which the observations were collected or which are represented in the product(s). The value may depend on wavelength_range and size of the target. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Science_ Facets | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Atmosphere | an envelope of uncharged gases and particles surrounding the target and bound to it primarily by gravitational forces | |
| | Heliosphere | the solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause, which separates primarily solar plasma from the interstellar medium. | |
| | Interior | the solid and/or liquid portion of a target enclosed by its surface. | |
| | Interstellar | the region between stars, which is outside of any star's heliopause. | |
| | Ionosphere | an envelope of plasma and charged particles surrounding the target and bound to it primarily by gravitational forces. | |
| | Magnetosphere | an envelope of charged particles, bounded on the upper side by the magnetopause and which is primarily under the control of the target body's magnetic field. | |
| | Surface | the boundary between the solid/liquid portion of a target and its atmosphere, ionosphere, or magnetosphere (or space). | |

# edition_name in Document_Edition

| Name: edition_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The edition name attribute provides a name by which the edition is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_Edition | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# editor_list in Citation_Information

| Name: editor_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The editor_list attribute provides a list of people to be cited as the editors of the associated product. Lists are constructed with last names first and first and middle names and/or initials following. Initials are terminated by periods and delimited by single spaces. Suffixes (if applicable) follow everything else, after a final comma. Hyphenated names may be reduced to initials as "J.-P." Each person's full name is separated from the next by a semi-colon. There is no "and" before the last name. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Citation_Information | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: List | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# editor_list in Document

| Name: editor_list | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The editor_list attribute provides a list of people to be cited as the editors of the associated product. Lists are constructed with last names first and first and middle names and/or initials following. Initials are terminated by periods and delimited by single spaces. Suffixes (if applicable) follow everything else, after a final comma. Hyphenated names may be reduced to initials as "J.-P." Each person's full name is separated from the next by a semi-colon. There is no "and" before the last name. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document | Type: UTF8_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: List | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# electronic_mail_address in PDS_Affiliate

| *Name:* **electronic_mail_address** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The electronic mail address attribute provides a multi-part email address: the first part (the user name), which identifies a unique user, is separated by an "at sign" from the host name, which uniquely identifies the mail server. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_ Affiliate | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Address | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# electronic_mail_address in PDS_Guest

| *Name:* **electronic_mail_address** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The electronic mail address attribute provides a multi-part email address: the first part (the user name), which identifies a unique user, is separated by an "at sign" from the host name, which uniquely identifies the mail server. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_ Guest | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Address | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# element_flag in DD_Class

| *Name:* **element_flag** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The element flag attribute indicates whether or not the class is defined as a xs:element in XML Schema. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class | *Type:* ASCII_Boolean |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Boolean |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# element_flag in DD_Class_Full

| *Name:* **element_flag** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The element flag attribute indicates whether or not the class is defined as a xs:element in XML Schema. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Class_Full | *Type:* ASCII_Boolean |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Boolean |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# elements in Axis_Array

| *Name:* **elements** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The elements attribute provides the count of the number of elements along an array axis. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Axis_ Array | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# encoding_standard_id in Encoded_Binary

| *Name:* **encoding_standard_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The encoding_standard_id attribute provides the formal name of a standard used for the structure of an Encoded Byte Stream digital object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Encoded_ Binary | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | CCSDS Space Communications Protocols | The digital object is governed by the Consultative Committee for Space Data Systems (CCSDS) recommended standards on telecommand, telemetry and space datalink protocols. | |

# encoding_standard_id in Encoded_Byte_ Stream

| Name: encoding_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The encoding_standard_id attribute provides the formal name of a standard used for the structure of an Encoded Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Encoded_ Byte_Stream | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# encoding_standard_id in Encoded_Header

| Name: encoding_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The encoding_standard_id attribute provides the formal name of a standard used for the structure of an Encoded Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Encoded_ Header | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | TIFF | The Header is governed by the standard Tagged Image File Format (TIFF), Version 6.n, 1992. | |

# encoding_standard_id in Encoded_Image

| Name: encoding_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The encoding_standard_id attribute provides the formal name of a standard used for the structure of an Encoded Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Encoded_ Image | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | GIF | The Encoded_Image is governed by the standard Graphics Interchange Format (GIF). | |

| *Name:* **encoding_standard_id** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | J2C | The Encoded_Image is governed by the standard JPEG2000 compressed image codestream. |
| | JPEG | The Encoded_Image is governed by the standard Joint Photographic Experts Group (JPEG), ISO/IEC 10918-1. |
| | PDF | The Encoded_Image is governed by the standard Portable Document Format (PDF), ISO 32000-1:2008. |
| | PDF/A | The Encoded_Image is governed by the standard Portable Document Format / Archive (PDF/A), ISO 19005-1:2005. |
| | PNG | The Encoded_Image is governed by the standard Portable Network Graphics (PNG), ISO/IEC 15948:2004. |
| | TIFF | The Encoded_Image is governed by the standard Tagged Image File Format (TIFF), Version 6.n, 1992. |

# encoding_standard_id in Encoded_Native

| *Name:* **encoding_standard_id** | | *Version Id:* **1.0.0.0** | |
|---|---|---|---|
| *Description:* The encoding_standard_id attribute provides the formal name of a standard used for the structure of an Encoded Byte Stream digital object. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Encoded_Native | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | SEED 2.4 | SEED (Standard for the Exchange of Earthquake Data) is an international standard format for archiving seismic data. The standard is maintained by the International Federation of Digital Seismograph Networks (FDSN). The details of the format are documented in the SEED Reference Manual, version 2.4 (published: 2009-01). | |

# encoding_type in SPICE_Kernel

| *Name:* **encoding_type** | | *Version Id:* **1.0.0.0** | |
|---|---|---|---|
| *Description:* The encoding_type attribute provides the storage format (binary or character). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* SPICE_Kernel | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: encoding_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Binary | The data object contains binary and possibly some character encoded data. | |
| | Character | The data object contains only character encoded data, for example ASCII or UTF-8 encoded characters. | |

# enumeration_flag in DD_Value_Domain

| Name: enumeration_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The enumeration_flag attribute indicates whether there is an enumerated set of permissible values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# enumeration_flag in DD_Value_Domain_Full

| Name: enumeration_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The enumeration_flag attribute indicates whether there is an enumerated set of permissible values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# error_constant in Special_Constants

| Name: error_constant | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The error_constant attribute provides a value that indicates the original value was in error. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_Constants | Type: ASCII_Short_String_Collapsed |

| Name: error_constant | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Constant | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# facet1 in Group_Facet1

| Name: facet1 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The facet1 attribute provides a sub-categorization under the discipline_name. The values are restricted according to the value of discipline_name. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Group_ Facet1 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 2D (Spectroscopy) | A 2D array in which each pixel value directly represents the spectral measurement at that point. The physical axes of the array align with the axes of the spectral data. | |
| | Color (Imaging) | 3D data, typically with two spatial axes, where the third axis contains display color levels (RGB, CMYK, false color, etc.) | |
| | Color Movie (Imaging) | 4D data, typically with two spatial, one color, and one temporal axis | |
| | Dust Study (Small Bodies) | Dust measurements of all kinds and all targets | |
| | Dynamical Properties (Small Bodies) | Orbital parameters, proper elements, etc. | |
| | Electric (Fields) | Electrical field measurements | |
| | Electrons (Particles) | Electron measurements | |
| | Gas Study (Small Bodies) | Gas measurements of all kinds and targets | |
| | Grayscale (Imaging) | 2D data, typically with two spatial axes | |
| | Historical Reference (Small Bodies) | Discovery circumstances, reference collections | |
| | Ions (Particles) | Ion measurements | |
| | Lightcurve (Small Bodies) | Light intensity variation with time, including rotational, secular, and occultation light curves | |
| | Linear (Spectroscopy) | A table representing a single spectrum | |
| | Magnetic (Fields) | Magnetic field measurements | |

| Name: **facet1** | | Version Id: **1.0.0.0** |
|---|---|---|
| | Meteoritics (Small Bodies) | Meteoroid streams, meteorite studies |
| | Meteorology (Atmospheres) | Meteorological observations |
| | Movie (Imaging) | 3D data, typically with two spatial and one temporal axis |
| | Neutrals (Particles) | Neutral particle measurements |
| | Photometry (Flux Measurements) | Photon measurements resulting in magnitudes, colors, etc. |
| | Physical Properties (Small Bodies) | Mass, density, albedo, etc. |
| | Polarimetry (Flux Measurements) | Linear and circular polarization studies |
| | Production Rates (Small Bodies) | Quantification of mass loss from, e.g., the nucleus of a comet: molecular production rates, Af?, etc. |
| | Ring Compositional Map (Ring-Moon Systems) | 3D data, typically with two spatial axes, where the third axis uses either color or intensity to depict chemical or particle size variations within the rings. |
| | Ring Occultation Profile (Ring-Moon Systems) | Derived ring occultation data uniformly sampled along the radial axis. The occulted signal may be either, radio, solar, or stellar in origin. |
| | Ring Thermal Map (Ring-Moon Systems) | 3D data, typically with two spatial axes, where the third axis uses either color or intensity to depict temperature variations within the rings. |
| | Satellite Astrometry (Ring-Moon Systems) | Astrometry of natural satellite in ring systems |
| | Shape Model (Small Bodies) | Shape models, slope models, terrain models, elevation models, etc. |
| | Spectral Cube (Spectroscopy) | Any 3D structure containing spectral data |
| | Spectral Image (Spectroscopy) | A 2D image of a spectrum, as projected on a focal plane. There may be multiple orders present, and the axes of the spectrum/spectra typically do not align with the edges of the image. |
| | Structure (Atmospheres) | Atmospheric structure observations |
| | Tabulated (Spectroscopy) | A table with one spectrum per record, possibly for a different target in each record |
| | Taxonomy (Small Bodies) | Physical and dynamical taxonomies of small bodies |

# facet2 in Group_Facet2

| *Name:* **facet2** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The facet2 attribute provides a sub-categorization under the discipline_name. The values are restricted according to the value of discipline_name. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group_ Facet2 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Background (Fields) | slowly varying background field (typically at less than 100 Hz) | |
| | Cosmic Ray (Particles) | > 10 MeV | |
| | Energetic (Particles) | > 30keV | |
| | Plasma (Particles) | < 30keV | |
| | Solar Energetic (Particles) | 0.1-10MeV | |
| | Waves (Fields) | higher frequency field variations and/or oscillations (typically at greater than 100 Hz). | |

# field_delimiter in Table_Delimited

| *Name:* **field_delimiter** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The field_delimiter attribute provides the character or characters that indicate the end of a character string. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Table_ Delimited | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Delimiter | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Comma | Fields in the delimited table are delimited by ASCII commas (0x2C) | |
| | Horizontal Tab | Fields in the delimited table are delimited by horizontal tab characters (0x09) | |
| | Semicolon | Fields in the delimited table are delimited by ASCII semicolons (0x3B) | |
| | Vertical Bar | Fields in the delimited table are delimited by ASCII vertical bar characters ('|' - 0x7C) | |
| | comma - *Deprecated* | Fields in the delimited table are delimited by ASCII commas (0x2C) | |

| Name: field_delimiter | | Version Id: 1.0.0.0 |
|---|---|---|
| | horizontal tab - *Deprecated* | Fields in the delimited table are delimited by horizontal tab characters (0x09) |
| | semicolon - *Deprecated* | Fields in the delimited table are delimited by ASCII semicolons (0x3B) |
| | vertical bar - *Deprecated* | Fields in the delimited table are delimited by ASCII vertical bar characters ('|' - 0x7C) |

# field_format in Field_Binary

| Name: field_format | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_format attribute gives the magnitude and precision of the data value. The standard POSIX string formats are used. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Binary | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Format | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# field_format in Field_Bit

| Name: field_format | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_format attribute gives the magnitude and precision of the data value. The standard POSIX string formats are used. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Bit | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Format | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# field_format in Field_Character

| Name: field_format | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_format attribute gives the magnitude and precision of the data value. The standard POSIX string formats are used. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Character | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Format | Conceptual Domain: Short_String |

| *Name:* **field_format** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# field_format in Field_Delimited

| *Name:* **field_format** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The field_format attribute gives the magnitude and precision of the data value. The standard POSIX string formats are used. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Delimited | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Format | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# field_length in Field_Binary

| *Name:* **field_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The field_length attribute provides the number of bytes in the field. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Binary | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# field_length in Field_Character

| *Name:* **field_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The field_length attribute provides the number of bytes in the field. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Character | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# field_location in Field_Binary

| Name: field_location | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_location attribute provides the starting byte for a field within a record or group, counting from '1'. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Binary | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Location | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# field_location in Field_Character

| Name: field_location | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_location attribute provides the starting byte for a field within a record or group, counting from '1'. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Character | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Location | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# field_number in Field

| Name: field_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The field_number attribute provides the position of a field, within a series of fields, counting from 1. If two fields within a record are physically separated by one or more groups, they have consecutive field numbers; the fields within the intervening group(s) are numbered separately. Fields within a group separated by one or more (sub)groups, will also have consecutive field numbers. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# fields in Group

| Name: fields | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The fields attribute provides a count of the total number of scalar fields directly associated with a group. Fields within (sub) groups of the group are not included in this count. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Group | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# fields in Record

| Name: fields | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The fields attribute provides a count of the total number of scalar fields directly associated with a table record. Fields within groups within the record are not included in this count. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Record | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# file_name in File

| Name: file_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The file_name attribute provides the name of a file. | | | |
| Namespace Id: pds | Steward: pds | Class Name: File | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# file_size in File

| Name: file_size | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The file_size attribute provides the size of the file. | | | |
| Namespace Id: pds | Steward: pds | Class Name: File | Type: ASCII_ NonNegative_Integer |

| Name: file_size | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Size | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# files in Document_Edition

| Name: files | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The files attribute provides the number of files in the edition. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_Edition | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# files in Software_Binary

| Name: files | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The files attribute provides the number of files. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_Binary | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# files in Software_Script

| Name: files | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The files attribute provides the number of files. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_Script | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# files in Software_Source

| *Name:* **files** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The files attribute provides the number of files. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_ Source | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# filter_number in Band_Bin *Deprecated*

| *Name:* **filter_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The filter_number attribute of a spectral qube describes the physical location of a band (identified by the band_number) in a detector array. Filter 1 is on the leading edge of the array. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# first_sampling_parameter_value in Uniformly_Sampled

| *Name:* **first_sampling_parameter_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The first_sampling_parameter_value element provides the first value in an ascending series and is therefore the minimum value at which a given data item was sampled. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Uniformly_Sampled | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# formation_rule in ASCII_DOI

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_DOI | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | nn.nnnn/nnn | Values of ASCII_DOI are constructed using the template nn.nnnn/nnn where nn identifies the DOI registry, nnnn identifies the DOI registrant, and nnn uniquely idenfies the document or other work. | |

# formation_rule in ASCII_Date

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | YYYY-MM-DD/ YYYY-DOY | Values of ASCII_Date are constructed as either YYYY-MM-DD or as YYYY-DDD where YYYY is the year, MM is the month (01-12), DD is the day-of-month (01-31), and DDD is the day-of-year (001-366) | |

# formation_rule in ASCII_Date_DOY

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | YYYY-DOY | Values of ASCII_Date_DOY are constructed as YYYY-DDD where YYYY is the 4-digit year and DDD is the day-of-year (001-366) | |

# formation_rule in ASCII_Date_Time

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | YYYY-MM-DDTHH:MM:SS.SSS(Z)/ YYYY-DOYTHH:MM:SS.SSS(Z) | TBD_value_meaning | |

# formation_rule in ASCII_Date_Time_DOY

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | YYYY-DOYTHH:MM:SS.SSS(Z) | TBD_value_meaning | |

# formation_rule in ASCII_Date_Time_UTC

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_UTC | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | YYYY-MM-DDTHH:MM:SS.SSSZ/ YYYY-DOYTHH:MM:SS.SSSZ | TBD_value_meaning | |

# formation_rule in ASCII_Date_Time_YMD

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_Time_YMD | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | YYYY-MM-DDTHH:MM:SS.SSS(Z) | TBD_value_meaning | |

# formation_rule in ASCII_Date_YMD

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_YMD | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | YYYY-MM-DD | Values of ASCII_Date_YMD are constructed as YYYY-MM-DD where YYYY is the year, MM is the month (01-12), and DD is the day-of-month (01-31) | |

# formation_rule in ASCII_Directory_Path_ Name

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Directory_Path_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | dir1/dir2/ | Values of ASCII_Directory_Path_Name are constructed of directory names (strings) separated by forward slashes | |

# formation_rule in ASCII_File_Name

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ File_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | file_name.file_ extension | Values of ASCII_File_Name comprise a base file name, a period ('.'), and an extension | |

# formation_rule in ASCII_File_Specification_ Name

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ File_Specification_ Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | dir1/dir2/file_ name.file_extension | Values of ASCII_File_Specification_Name comprise a series of directory names (separated by forward slashes), a file base name, a period (''), and an extension | |

# formation_rule in ASCII_LID

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_LID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | urn:nasa:pds:xxxx | Values of ASCII_LID have the form urn:nasa:pds:xxxx where xxxx is a character string | |

# formation_rule in ASCII_LIDVID

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_LIDVID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | urn:nasa:pds:xxxx::M.n | Values of ASCII_LIDVID have the form urn:nasa:pds:xxxx::M.n where xxxx is a character string and M and n are non-negative integers | |

# formation_rule in ASCII_LIDVID_LID

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_LIDVID_LID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | urn:nasa:pds:xxxx | TBD_value_meaning | |

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | urn:nasa:pds:xxxx::M.n | Values of ASCII_LIDVID_LID have the form urn:nasa:pds:xxxx::M.n where xxxx is a character string and M and n are non-negative integers | |

# formation_rule in ASCII_MD5_Checksum

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_MD5_Checksum | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 0123456789abcdef | Values of ASCII_MD5_Checksum are constructed from the characters 0,1,2,3,4,5,6,7,8,9,a,b,c,d,e, and/or f | |

# formation_rule in ASCII_Time

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Time | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | HH:MM:SS.SSS | TBD_value_meaning | |

# formation_rule in ASCII_VID

| *Name:* **formation_rule** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_VID | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | M.m | Values of ASCII_VID have the form M.N where M and n are non-negative integers | |

# formation_rule in Character_Data_Type

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# formation_rule in DD_Value_Domain

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: ASCII_Text_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# formation_rule in DD_Value_Domain_Full

| Name: formation_rule | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The formation_rule attribute provides a 'user friendly' instruction for forming values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Text_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# full_name in Ingest_LDD

| *Name:* **full_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The full_name attribute provides the complete name for a person and includes titles and suffixes. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Ingest_ LDD | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# full_name in Subscriber_PDS3

| *Name:* **full_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The full_name attribute provides the complete name for a person and includes titles and suffixes. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Subscriber_PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# full_name in Update_Entry

| *Name:* **full_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The full_name attribute provides the complete name for a person and includes titles and suffixes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Update_ Entry | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# grating_position in Band_Bin *Deprecated*

| *Name:* **grating_position** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The grating_position attribute of a spectral qube describes the grating position which corresponds to the band. Grating positions are usually assigned consecutively from 0, and increasing position causes increasing wavelength for each detector. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Integer |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# group_length in Group_Field_Binary

| *Name:* **group_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The group_length attribute provides the total length, in bytes, of a repeating field and/or group structure. It is the number of bytes in the repeating fields/groups plus any embedded unused bytes that are also repeated multiplied by the number of repetitions. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group_Field_Binary | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# group_length in Group_Field_Character

| *Name:* **group_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The group_length attribute provides the total length, in bytes, of a repeating field and/or group structure. It is the number of bytes in the repeating fields/groups plus any embedded unused bytes that are also repeated multiplied by the number of repetitions. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group_Field_Character | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# group_location in Group_Field_Binary

| *Name:* **group_location** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The group_location attribute provides the starting position for a Group_Field_Binary within the containing Record_Binary or Group_Field_Binary class, in bytes. Location "1" denotes the first byte of the containing class. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group_ Field_Binary | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Location | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# group_location in Group_Field_Character

| *Name:* **group_location** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The group_location attribute provides the starting position for a Group_Field_Character within the containing Record_Character or Group_Field_Character class, in bytes. Location "1" denotes the first byte of the containing class. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group_ Field_Character | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Location | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# group_number in Group

| *Name:* **group_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The group_number attribute provides the position of a group, within a series of groups, counting from 1. If two groups within a record are physically separated by one or more fields, they have consecutive group numbers; the intervening fields are numbered separately. Groups within a parent group, but separated by one or more fields, will also have consecutive group numbers. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group | *Type:* ASCII_Integer |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# groups in Group

| Name: groups | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The groups attribute provides a count of the number of (sub)groups within the repeating structure of a group. (Subsub)groups within (sub)groups within the group are not included in this count. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Group | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# groups in Record

| Name: groups | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The groups attribute provides a count of the total number of groups directly associated with a table record. Groups within groups within the record are not included in this count. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Record | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# high_instrument_saturation in Special_ Constants

| Name: high_instrument_saturation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The high_instrument_saturation attribute specifies a special value whose presence indicates the measuring instrument was saturated at the high end. The value must be less than the value of the valid_minimum attribute or more than the value of the valid_maximum attribute. Values of this attribute should be represented in the same data_type as the elements in the object with which the Special_Constants class is associated. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# high_representation_saturation in Special_ Constants

| Name: high_representation_saturation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The high_representative_saturation attribute specifies a special value whose presence indicates the true value cannot be represented in the chosen data type and length -- in this case being above the allowable range -- which may happen during conversion from another data type. The value must be less than the value of the valid_minimum attribute or more than the value of the valid_maximum attribute. Values of this attribute should be represented in the same data_type as the elements in the object with which the Special_Constants class is associated. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# information_model_version in Identification_ Area

| Name: information_model_version | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The information_model_version attribute provides the version identification of the PDS Information Model on which the label and schema are based. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Identification_Area | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1.3.0.0 | This version of the information model is an operational release. | |

# install_note in Software_Script

| Name: install_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The install note attribute provides a brief statement giving particulars about the installation of the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Script | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **install_note** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Note | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# institution_name in Node

| *Name:* **institution_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The institution_name attribute provides the name of the associated institution. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Node | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* [a-zA-Z]{1}([-/, ._a-zA-Z0-9]*) | |
| *Permissible Value(s)* | *No Values* | | |

# institution_name in PDS_Affiliate

| *Name:* **institution_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The institution_name attribute provides the name of the associated institution. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_Affiliate | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* [a-zA-Z]{1}([-/, ._a-zA-Z0-9]*) | |
| *Permissible Value(s)* | *No Values* | | |

# instrument_desc in Instrument_PDS3

| *Name:* **instrument_desc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The instrument_desc attribute describes a given instrument. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Instrument_PDS3 | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Description | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# instrument_host_desc in Instrument_Host_PDS3

| Name: instrument_host_desc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument_host_desc provides a description of an instrument host | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_Host_PDS3 | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_host_id in Instrument_Host_PDS3

| Name: instrument_host_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument_host_id attribute provides a unique identifier for the host on which an instrument is located. This host can be either a spacecraft or an earth base (e.g. earth). | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_Host_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_host_name in Instrument_Host_PDS3

| Name: instrument_host_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument_host_name attribute provides the full name of the platform or facility upon which an instrument or other device is mounted. For example, the host can be a spacecraft, a ground-based telescope, or a laboratory. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_Host_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_host_type in Instrument_Host_ PDS3

| Name: instrument_host_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument_host_type attribute provides the type of host on which an instrument is based. For example instrument is located on a spacecraft instrument_host_type attribute would have the value SPACECRAFT. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_Host_PDS3 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_host_version_id in Instrument_ Host

| Name: instrument_host_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument_host_version_id attribute provides the version of the instrument host. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Instrument_Host | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_id in Instrument_PDS3

| Name: instrument_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The instrument id provides a formal name used to refer to an instrument. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_PDS3 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# instrument_name in Instrument_PDS3

| *Name:* **instrument_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The instrument_name attribute provides a unique name for an instrument. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Instrument_PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# instrument_serial_number in Instrument_ PDS3

| *Name:* **instrument_serial_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The instrument serial number element provides the manufacturer's serial number assigned to an instrument. This number may be used to uniquely identify a particular instrument for tracing its components or determining its calibration history, for example. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Instrument_PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# instrument_type in Instrument_PDS3

| *Name:* **instrument_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The instrument_type attribute identifies the type of an instrument. Example values: POLARIMETER SPECTROMETER | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Instrument_PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# instrument_version_id in Instrument_PDS3

| Name: instrument_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The Instrument_Version_Id element identifies the specific model of an instrument used to obtain data. For example, this keyword could be used to distinguish between an engineering model of a camera used to acquire test data, and a flight model of a camera used to acquire science data during a mission. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Instrument_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# invalid_constant in Special_Constants

| Name: invalid_constant | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The invalid_constant attribute provides a value that indicates the original value was outside the valid range for the parameter. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_Constants | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Constant | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# kernel_type in SPICE_Kernel

| Name: kernel_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The kernel_type attribute identifies the type of SPICE kernel. | | | |
| Namespace Id: pds | Steward: pds | Class Name: SPICE_Kernel | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | CK | SPICE_Kernel is type CK (orientation kernel) | |
| | DBK | SPICE_Kernel is type DBK (database kernel) | |
| | DSK | SPICE_Kernel is type DSK (digital shape kernel) | |
| | EK | SPICE_Kernel is type EK (events kernel) | |

| Name: kernel_type | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| | FK | SPICE_Kernel is type FK (frames kernel) |
| | IK | SPICE_Kernel is type IK (instrument kernel) |
| | LSK | SPICE_Kernel is type LSK (leap seconds kernel) |
| | MK | SPICE_Kernel is type MK (meta kernel names SPICE kernels to be used together) |
| | PCK | SPICE_Kernel is type PCL (planetary constants kernel) |
| | SCLK | SPICE_Kernel is type SCLK (spacecraft clock kernel) |
| | SPK | SPICE_Kernel is type SPK (ephemeris kernel) |

# keyword in Citation_Information

| Name: keyword | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The keyword attribute provides one or more words to be used for keyword search. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Citation_ Information | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# language in Document_Edition

| Name: language | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The language attribute provides the language used for definition and designation of the term. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_Edition | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# language in Terminological_Entry

| Name: language | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The language attribute provides the language used for definition and designation of the term. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Terminological_Entry | Type: ASCII_Short_ String_Collapsed |

| Name: language | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | English | Values in Terminological_Entry are in English | |
| | Russian | Values in Terminological_Entry are in Russian | |

# last_modification_date_time in Ingest_LDD

| Name: last_modification_date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The last_modification_date_time attribute gives the most recent date and time that a change was made. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Ingest_LDD | Type: ASCII_Date_Time_YMD |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# last_sampling_parameter_value in Uniformly_Sampled

| Name: last_sampling_parameter_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The last_sampling_parameter_value element provides the last value in an ascending series and is therefore the maximum value at which a given data item was sampled. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Uniformly_Sampled | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ldd_version_id in Ingest_LDD

| Name: ldd_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ldd_version_id attribute provides the version of the Local Data Dictionary. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Ingest_LDD | Type: ASCII_Short_String_Collapsed |

| Name: ldd_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ldd_version_id in XML_Schema

| Name: ldd_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ldd_version_id attribute provides the version of the Local Data Dictionary. | | | |
| Namespace Id: pds | Steward: pds | Class Name: XML_Schema | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lid_reference in Bundle_Member_Entry

| Name: lid_reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The lid_reference attribute provides the logical_identifier for a product. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Bundle_Member_Entry | Type: ASCII_LID |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Reference | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lid_reference in Internal_Reference

| Name: lid_reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The lid_reference attribute provides the logical_identifier for a product. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Internal_Reference | Type: ASCII_LID |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Reference | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lidvid_reference in Bundle_Member_Entry

| Name: lidvid_reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The lidvid_reference attribute provides the logical_identifier plus version_id, which uniquely identifies a product. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Bundle_Member_Entry | Type: ASCII_LIDVID |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Reference | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lidvid_reference in Internal_Reference

| Name: lidvid_reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The lidvid_reference attribute provides the logical_identifier plus version_id, which uniquely identifies a product. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Internal_Reference | Type: ASCII_LIDVID |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Reference | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# line_display_direction in Display_2D_Image *Deprecated*

| Name: line_display_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The line_display_direction element is the preferred orientation of lines within an image for viewing on a display device. Note that if this keyword is present in a label, the sample_display_direction keyword must also be present and must contain a value orthogonal to the value selected for this keyword. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Display_2D_Image *Deprecated* | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Direction | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Down | The preferred orientation of lines within an image for viewing on a display device is Down | |

| *Name:* **line_display_direction** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | Up | The preferred orientation of lines within an image for viewing on a display device is Up |

# local_identifier in Axis_Array

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Axis_ Array | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Byte_Stream

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Byte_ Stream | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in DD_Association

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Association | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in DD_Attribute

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in DD_Attribute_Full

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in DD_Class

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in DD_Class_Full

| *Name:* **local_identifier** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | |

| Name: local_identifier | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_identifier in DD_Rule

| Name: local_identifier | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_identifier in Field_Statistics

| Name: local_identifier | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Statistics | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_identifier in File

| Name: local_identifier | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| Namespace Id: pds | Steward: pds | Class Name: File | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Geometry

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Geometry | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Object_Statistics

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Quaternion

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Quaternion | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Subscriber_PDS3

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Subscriber_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Update

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Update | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier in Vector

| *Name:* **local_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_identifier attribute provides a character string which uniquely identifies the containing object within the label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# local_identifier_reference in Local_Internal_ Reference

| Name: local_identifier_reference | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_identifier_reference attribute provides the value of the local_identifier of the entity described by the referencing class. Note that a local_identifier attribute, with the same value as this local_identifier_reference, must be present within the label. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Local_ Internal_Reference | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_mean_solar_time in Time_Coordinates

| Name: local_mean_solar_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_mean_solar_time attribute provides the hour angle of the fictitious mean Sun at a fixed point on a rotating solar system body. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Time_ Coordinates | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 8 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_reference_type in Local_Internal_ Reference

| Name: local_reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The local_reference_type attribute provides the name of an association between an entity identified by a local_identifier_reference and another corresponding entity identified by a local_identifier. The values for the local_reference_type are expected to be enumerated for appropriate contexts in the Schematron files of local (i.e., discipline and mission) data dictionaries. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Local_ Internal_Reference | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# local_true_solar_time in Time_Coordinates

| *Name:* **local_true_solar_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The local_true_solar_time (LTST) attribute provides the local time on a rotating solar system body where LTST is 12 h at the sub-solar point (SSP) and increases 1 h for each 15 degree increase in east longitude away from the SSP for prograde rotation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Time_ Coordinates | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 8 | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# logical_identifier in Identification_Area

| *Name:* **logical_identifier** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* A logical identifier identifies the set of all versions of an object. It is an object identifier without a version. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Identification_Area | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# low_instrument_saturation in Special_ Constants

| *Name:* **low_instrument_saturation** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The low_instrument_saturation attribute specifies a special value whose presence indicates the measuring instrument was saturated at the low end. The value must be less than the value of the valid_minimum attribute. Values of this attribute should be represented in the same data_type as the elements in the object with which the Special_Constants class is associated. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Special_ Constants | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# low_representation_saturation in Special_ Constants

| Name: low_representation_saturation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The low_representative_saturation attribute specifies a special value whose presence indicates the true value cannot be represented in the chosen data type and length -- in this case being below the allowable range -- which may happen during conversion from another data type. The value must be less than the value of the valid_minimum attribute. Values of this attribute should be represented in the same data_type as the elements in the object with which the Special_Constants class is associated. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# manifest_checksum in Information_Package_ Component_Deep_Archive

| Name: manifest_checksum | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The manifest checksum provides the checksum for the manifest file. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Information_Package_ Component_Deep_ Archive | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# manifest_url in Information_Package_ Component_Deep_Archive

| Name: manifest_url | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The manifest url provides the URL to the manifest file. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Information_Package_ Component_Deep_ Archive | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **manifest_url** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum in Field_Statistics

| *Name:* **maximum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum attribute provides the largest stored value which appears in the field over all records (empty fields and Special_Constants values are excluded). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum in Object_Statistics

| *Name:* **maximum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum attribute provides the largest value which appears in the stored array after application of any bit mask (Special_Constants values are excluded). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_AnyURI

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ AnyURI | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_DOI

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_DOI | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Date

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Date_DOY

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Date_Time

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Date_Time | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_Date_Time_ DOY

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Date_Time_DOY | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_Date_Time_ UTC

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Date_Time_UTC | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_Date_Time_ YMD

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Date_YMD

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Directory_ Path_Name

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Directory_Path_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 255 | Values of ASCII_Directory_Path_Name may have no more than 255 characters | |

# maximum_characters in ASCII_File_Name

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 255 | Values of ASCII_File_Name may have no more than 255 characters | |

# maximum_characters in ASCII_File_Specification_Name

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Specification_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 255 | Values of ASCII_File_Specification_Name may have no more than 255 characters | |

# maximum_characters in ASCII_Integer

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Integer | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **maximum_characters** | *Version Id:* **1.0.0.0** |
|---|---|
| *Permissible Value(s)* | *No Values* | |

# maximum_characters in ASCII_LID

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_LID | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_LID may have no more than 255 characters | |

# maximum_characters in ASCII_LIDVID

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_LIDVID | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_LIDVID may have no more than 255 characters | |

# maximum_characters in ASCII_LIDVID_LID

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_LIDVID_LID | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| *Name:* **maximum_characters** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Permissible Value(s)* | *Value* | *Value Meaning* |
| | 255 | Values of ASCII_LIDVID_LID may have no more than 255 characters |

# maximum_characters in ASCII_MD5_ Checksum

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ MD5_Checksum | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 32 | Values of ASCII_MD5_Checksum may have no more than 32 characters | |

# maximum_characters in ASCII_NonNegative_ Integer

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ NonNegative_Integer | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_Numeric_ Base16

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base16 | *Type:* ASCII_Short_ String_Collapsed |

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_Numeric_Base16 may have no more than 255 characters | |

# maximum_characters in ASCII_Numeric_ Base2

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base2 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_Numeric_Base2 may have no more than 255 characters | |

# maximum_characters in ASCII_Numeric_ Base8

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base8 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_Numeric_Base8 may have no more than 255 characters | |

# maximum_characters in ASCII_Real

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Real | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_Short_String_ Collapsed

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Short_String_Collapsed | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | Values of ASCII_Short_String_Collapsed may have no more than 255 characters | |

# maximum_characters in ASCII_Short_String_ Preserved

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Short_String_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |

| Name: maximum_characters | | Version Id: 1.0.0.0 |
|---|---|---|
| | 255 | Values of ASCII_Short_String_Preserved may have no more than 255 characters |

# maximum_characters in ASCII_Text_ Collapsed

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Text_Collapsed | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Text_ Preserved

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_characters in ASCII_Time

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Time | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in ASCII_VID

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_VID | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 100 | Values of ASCII_VID may have no more than 100 characters | |

# maximum_characters in Character_Data_Type

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Character_Data_Type | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in DD_Value_Domain

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Value_Domain | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| *Name:* **maximum_characters** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Permissible Value(s)* | *No Values* | |

# maximum_characters in DD_Value_Domain_ Full

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Value_Domain_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_characters in UTF8_Short_String_ Collapsed

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* UTF8_ Short_String_Collapsed | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 255 | UTF8_Short_String_Collapsed may have no more than 255 characters | |

# maximum_characters in UTF8_Short_String_ Preserved

| *Name:* **maximum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* UTF8_ Short_String_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 255 | UTF8_Short_String_Preserved may have no more than 255 characters | |

# maximum_characters in UTF8_Text_ Preserved

| Name: maximum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_characters attribute provides the upper, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_field_length in Field_Delimited

| Name: maximum_field_length | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_field_length attribute sets an upper, inclusive bound on the number of bytes in the field. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Length | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_occurrences in DD_Association

| Name: maximum_occurrences | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum occurrences attribute indicates the number of times something may occur. It is also called the maximum cardinality. The asterisk character is used as a value to indicate that no upper bound exists. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Association | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **maximum_occurrences** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_occurrences in DD_Association_ External *Deprecated*

| *Name:* **maximum_occurrences** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum occurrences attribute indicates the number of times something may occur. It is also called the maximum cardinality. The asterisk character is used as a value to indicate that no upper bound exists. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Association_External *Deprecated* | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_record_length in Record_ Delimited

| *Name:* **maximum_record_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_record_length attribute provides the maximum length of a record, including the record delimiter. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Record_ Delimited | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_scaled_value in Object_Statistics

| *Name:* **maximum_scaled_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_scaled_value attribute provides the maximum value after application of scaling_factor and value_offset (see their definitions; maximum_scaled_value is the maximum of Ov). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Real |

| *Name:* **maximum_scaled_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_value in ASCII_Date_Time

| *Name:* **maximum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_Time | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_value in ASCII_Date_Time_DOY

| *Name:* **maximum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_Time_DOY | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_value in ASCII_Date_Time_UTC

| *Name:* **maximum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Date_Time_UTC | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_value in ASCII_Date_Time_YMD

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_YMD | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Integer

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Integer | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_LID

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_LID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_NonNegative_Integer

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_NonNegative_Integer | Type: ASCII_Short_String_Collapsed |

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Numeric_Base16

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base16 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Numeric_Base2

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base2 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Real

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Real | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Short_String_ Collapsed

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Short_String_Collapsed | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Short_String_ Preserved

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Short_String_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Text_Preserved

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_Time

| Name: maximum_value | Version Id: 1.0.0.0 |
|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | |

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Time | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in ASCII_VID

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ VID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in Character_Data_Type

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in DD_Value_Domain

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Value_Domain | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in DD_Value_Domain_Full

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in UTF8_Short_String_ Collapsed

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_Short_String_Collapsed | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in UTF8_Short_String_ Preserved

| Name: maximum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_Short_String_Preserved | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_value in UTF8_Text_Preserved

| *Name:* **maximum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The maximum_value attribute provides the upper, inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* UTF8_ Text_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# md5_checksum in File

| *Name:* **md5_checksum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The md5_checksum attribute is the 32-character hexadecimal number computed for a file using the MD5 algorithm. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* File | *Type:* ASCII_MD5_ Checksum |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 32 | *Maximum Characters:* 32 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Checksum | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* ([a-f0-9]{32}) | |
| *Permissible Value(s)* | *No Values* | | |

# md5_checksum in Object_Statistics

| *Name:* **md5_checksum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The md5_checksum attribute is the 32-character hexadecimal number computed for a file using the MD5 algorithm. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_MD5_ Checksum |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 32 | *Maximum Characters:* 32 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Checksum | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* ([a-f0-9]{32}) | |
| *Permissible Value(s)* | *No Values* | | |

# mean in Field_Statistics

| *Name:* **mean** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The mean attribute provides the sum of the stored field values divided by the number of values in all records (empty fields and Special_Constants values are excluded from both the sum and the count). | |

| *Name:* **mean** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# mean in Object_Statistics

| *Name:* **mean** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The mean attribute provides the sum of the stored array element values (after application of any bit mask) divided by the number of elements (Special_Constants values are excluded from both the sum and the count). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# median in Field_Statistics

| *Name:* **median** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The median attribute provides the number separating the larger half of stored field values from the algebraically smaller half over all records (empty fields and Special_Constants values are excluded from the sort). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# median in Object_Statistics

| *Name:* **median** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The median attribute provides the number separating the larger half of stored array element values from the algebraically smaller half after application of any bit mask (Special_Constants values are excluded from the sort). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Real |

| *Name:* **median** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# medium_type in NSSDC

| *Name:* **medium_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The medium_type attribute identifies the physical storage medium for a data volume. Examples: CD-ROM, CARTRIDGE TAPE. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* NSSDC | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# medium_type in Volume_PDS3

| *Name:* **medium_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The medium_type attribute identifies the physical storage medium for a data volume. Examples: CD-ROM, CARTRIDGE TAPE. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_ PDS3 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# member_status in Bundle_Member_Entry

| *Name:* **member_status** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The member_status attribute indicates whether the collection is primary and whether the file_specification_name has been provided for the product_collection label. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Bundle_ Member_Entry | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |

| *Name:* **member_status** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Primary | The collection is a primary member of the bundle | |
| | Secondary | The collection is a secondary member of the bundle | |

# minimum in Field_Statistics

| *Name:* **minimum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum attribute provides the algebraically smallest stored value which appears in the field over all records (empty fields and Special_Constants values are excluded). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum in Object_Statistics

| *Name:* **minimum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum attribute provides the algebraically smallest value which appears in the stored array after application of any bit mask (Special_Constants values are excluded). | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Object_ Statistics | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_characters in ASCII_AnyURI

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ AnyURI | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_DOI

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ DOI | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date_DOY

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_DOY | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date_Time

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date_Time_DOY

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date_Time_UTC

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_UTC | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Date_Time_ YMD

| Name: minimum_characters | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_YMD | Type: ASCII_Short_ String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | No Values | | | |

# minimum_characters in ASCII_Date_YMD

| Name: minimum_characters | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_YMD | Type: ASCII_Short_ String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | No Values | | | |

# minimum_characters in ASCII_Directory_ Path_Name

| Name: minimum_characters | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Directory_Path_Name | Type: ASCII_Short_ String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | Value | Value Meaning | | |
| | 1 | Values of ASCII_Directory_Path_Name must have at least 1 character | | |

# minimum_characters in ASCII_File_Name

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | Values of ASCII_File_Name must have at least one character | |

# minimum_characters in ASCII_File_Specification_Name

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_File_Specification_Name | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | Values of ASCII_File_Specification_Name must have at least 1 character | |

# minimum_characters in ASCII_Integer

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Integer | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **minimum_characters** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Permissible Value(s)* | *No Values* | |

# minimum_characters in ASCII_LID

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ LID | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 14 | Values of ASCII_LID must have at least 14 characters | |

# minimum_characters in ASCII_LIDVID

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ LIDVID | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 19 | Values of ASCII_LIDVID must have at least 19 characters | |

# minimum_characters in ASCII_LIDVID_LID

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ LIDVID_LID | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | 14 | Values of ASCII_LIDVID_LID must have at least 14 characters | |

# minimum_characters in ASCII_MD5_ Checksum

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ MD5_Checksum | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 32 | Values of ASCII_MD5_Checksum must have at least 32 characters | |

# minimum_characters in ASCII_NonNegative_ Integer

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ NonNegative_Integer | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Numeric_ Base16

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Numeric_Base16 | Type: ASCII_Short_ String_Collapsed |

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Values of ASCII_Numeric_Base16 must have at least 1 character | |

# minimum_characters in ASCII_Numeric_ Base2

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base2 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Values of ASCII_Numeric_Base2 must have at least 1 character | |

# minimum_characters in ASCII_Numeric_ Base8

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Numeric_Base8 | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Values of ASCII_Numeric_Base8 must have at least 1 character | |

# minimum_characters in ASCII_Real

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Real | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_Short_String_Collapsed

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Short_String_Collapsed | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | Values of ASCII_Short_String_Collapsed must have at least 1 character | |

# minimum_characters in ASCII_Short_String_Preserved

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Short_String_Preserved | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |

| *Name:* **minimum_characters** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | 1 | Values of ASCII_Short_String_Preserved must have at least 1 character |

# minimum_characters in ASCII_String

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_String | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Values of ASCII_String must have at least 1 character | |

# minimum_characters in ASCII_Text_ Collapsed

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Text_Collapsed | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 1 | Values of ASCII_Text_Collapsed must have at least 1 character | |

# minimum_characters in ASCII_Text_ Preserved

| *Name:* **minimum_characters** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Text_Preserved | *Type:* ASCII_Short_String_Collapsed |

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | Values of ASCII_Text_Preserved must have at least 1 character | |

# minimum_characters in ASCII_Time

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in ASCII_VID

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_VID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 3 | Values of ASCII_VID must have at least 3 characters | |

# minimum_characters in Character_Data_Type

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in DD_Value_Domain

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in DD_Value_Domain_ Full

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_characters in UTF8_Short_String_ Collapsed

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Short_String_Collapsed | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | UTF8_Short_String_Collapsed must have at least 1 character | |

# minimum_characters in UTF8_Short_String_ Preserved

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Short_String_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | UTF8_Short_String_Preserved must have at least 1 character | |

# minimum_characters in UTF8_String

| Name: minimum_characters | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ String | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | UTF8_String must have at least 1 character | |

# minimum_characters in UTF8_Text_ Preserved

| Name: **minimum_characters** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The minimum_characters attribute provides the lower, inclusive bound on the number of characters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1 | UTF8_Text_Preserved must have at least 1 character | |

# minimum_occurrences in DD_Association

| Name: **minimum_occurrences** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The minimum occurrences attribute indicates the number of times something may occur. It is also called the minimum cardinality. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Association | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_occurrences in DD_Association_ External *Deprecated*

| Name: **minimum_occurrences** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The minimum occurrences attribute indicates the number of times something may occur. It is also called the minimum cardinality. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Association_External *Deprecated* | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_scaled_value in Object_Statistics

| Name: minimum_scaled_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_scaled_value attribute provides the minimum value after application of scaling_factor and value_offset (see their definitions; minimum_scaled_value is the minimum of Ov). | | | |
| Namespace Id: pds | Steward: pds | Class Name: Object_ Statistics | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Date_Time

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Date_Time_DOY

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_DOY | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Date_Time_UTC

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_UTC | Type: ASCII_Short_ String_Collapsed |

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Date_Time_YMD

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Integer

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Integer | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_LID

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_NonNegative_ Integer

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ NonNegative_Integer | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 0 | The minimum value for ASCII_NonNegative_Integer is zero | |

# minimum_value in ASCII_Numeric_Base16

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Numeric_Base16 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Numeric_Base2

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Numeric_Base2 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Real

| Name: minimum_value | Version Id: 1.0.0.0 |
|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | |

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Real | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_value in ASCII_Short_String_ Collapsed

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Short_String_Collapsed | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_value in ASCII_Short_String_ Preserved

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Short_String_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_value in ASCII_Text_Preserved

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Text_Preserved | *Type:* ASCII_Short_ String_Collapsed |

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_Time

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in ASCII_VID

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_VID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in Character_Data_Type

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in DD_Value_Domain

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in DD_Value_Domain_Full

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in UTF8_Short_String_Collapsed

| Name: minimum_value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_Short_String_Collapsed | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_value in UTF8_Short_String_Preserved

| Name: minimum_value | Version Id: 1.0.0.0 |
|---|---|
| Description: The minimum_value attribute provides the lower inclusive bound on the value. | |

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* UTF8_ Short_String_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_value in UTF8_Text_Preserved

| *Name:* **minimum_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The minimum_value attribute provides the lower inclusive bound on the value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* UTF8_ Text_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# missing_constant in Special_Constants

| *Name:* **missing_constant** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The missing_constant attribute provides a value that indicates the original value was missing, such as due to a gap in coverage. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Special_ Constants | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Constant | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# mission_desc in Mission_PDS3

| *Name:* **mission_desc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The mission_desc attribute summarizes major aspects of a planetary mission or project, including the number and type of spacecraft, the target body or bodies and major accomplishments. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Mission_ PDS3 | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |

| Name: mission_desc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# mission_name in Mission_PDS3

| Name: mission_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The mission_name attribute identifies a major planetary mission or project. A given planetary mission may be associated with one or more spacecraft. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Mission_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# mission_objectives_summary in Mission_PDS3

| Name: mission_objectives_summary | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The mission_objectives_summary attribute describes the major scientific objectives of a planetary mission or project. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Mission_PDS3 | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Summary | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# mission_start_date in Mission_PDS3

| Name: mission_start_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The mission_start_date attribute provides the date of the beginning of a mission in UTC system format. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Mission_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Short_String |

| Name: mission_start_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# mission_stop_date in Mission_PDS3

| Name: mission_stop_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The mission_stop_date attribute provides the date of the end of a mission in UTC system format. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Mission_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# model_id in Instrument

| Name: model_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The model_id attribute helps discriminate instrument hardware. For example "flight", "engineering", or "proto" have been used. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Instrument | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# modification_date in Modification_Detail

| Name: modification_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The modification_date attribute provides date the modifications were completed | | | |
| Namespace Id: pds | Steward: pds | Class Name: Modification_Detail | Type: ASCII_Date_YMD |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# naif_host_id in Instrument_Host

| Name: naif_host_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The naif_instrument_id element provides the numeric ID used within the SPICE system to identify the spacecraft, spacecraft structure or science instrument. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Instrument_Host | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# naif_instrument_id in Instrument

| Name: naif_instrument_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The naif_instrument_id element provides the numeric ID used within the SPICE system to identify the spacecraft, spacecraft structure or science instrument. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Instrument | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Agency

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Agency | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | European Space Agency | The Agency has name European Space Agency | |
| | National Aeronautics and Space Administration | The Agency has name National Aeronautics and Space Administration | |

# name in Byte_Stream

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Byte_ Stream | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in DD_Association_External *Deprecated*

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Association_External *Deprecated* | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in DD_Attribute

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in DD_Attribute_Full

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Full | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in DD_Attribute_Reference

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Reference | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in DD_Class

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in DD_Class_Full

| Name: name | Version Id: 1.0.0.0 |
|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Full | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in DD_Class_Reference

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Reference | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in External_Reference_Extended

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* External_Reference_Extended | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Facility

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Facility | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Field

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Field_Binary

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Binary | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Field_Bit

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Bit | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Field_Character

| Name: **name** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Character | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Field_Delimited

| Name: **name** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Ingest_LDD

| Name: **name** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Ingest_ LDD | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Instrument

| Name: **name** | Version Id: **1.0.0.0** |
|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Instrument_Host

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument_Host | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Investigation

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Investigation | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Investigation_Area

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Investigation_Area | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Observation_Area/ pds:Investigation_Area* | *Value* | *Value Meaning* | |
| | $name | The value for name is to be provided by software during template processing. | |

# name in Node

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Node | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Engineering | The Node has name Engineering | |
| | Geosciences | The Node has name Geosciences | |
| | Imaging | The Node has name Imaging | |
| | Management | The Node has name Management | |
| | Navigation and Ancillary Information Facility | The Node has name Navigation and Ancillary Information Facility | |
| | Planetary Atmospheres | The Node has name Planetary Atmospheres | |
| | Planetary Plasma Interactions | The Node has name Planetary Plasma Interactions | |
| | Planetary Rings | The Node has name Planetary Rings | |
| | Planetary Science Archive | The Node has name Planetary Science Archive | |
| | Radio Science | The Node has name Radio Science | |
| | Small Bodies | The Node has name Small Bodies | |

# name in Observing_System

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Observing_System | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Observation_Area/ pds:Observing_System* | *Value* | *Value Meaning* | |
| | $name | The value for name is to be provided by software during template processing. | |

# name in Observing_System_Component

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Observing_System_ Component | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Observation_ Area/pds:Observing_ System/pds:Observing_ System_Component* | *Value* | *Value Meaning* | |
| | $name | The value for name is to be provided by software during template processing. | |

# name in PDS_Affiliate

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_ Affiliate | *Type:* UTF8_Short_ String_Collapsed |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in PDS_Guest

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_ Guest | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Quaternion

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Quaternion | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Quaternion_Component

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Quaternion_ Component | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Resource

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Resource | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Software

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Target

| *Name:* **name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name attribute provides a word or combination of words by which the object is known. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Target | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# name in Target_Identification

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a human-readable primary name/identification in the standard format for the target type. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Target_ Identification | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |
| Extended Value(s) for: pds:Product_ Observational/ pds:Observation_ Area/pds:Target_ Identification | Value | Value Meaning | |
| | $name | The value for name is to be provided by software during template processing. | |

# name in Terminological_Entry

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Terminological_Entry | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# name in Vector

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: name | Version Id: 1.0.0.0 |
|---|---|
| Permissible Value(s) | No Values | |

# name in Vector_Component

| Name: name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The name attribute provides a word or combination of words by which the object is known. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector_Component | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in DD_Association_External *Deprecated*

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Association_External *Deprecated* | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in DD_Attribute_Full

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in DD_Attribute_Reference

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Reference | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in DD_Class_Full

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in DD_Class_Reference

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Reference | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# namespace_id in Ingest_LDD

| Name: namespace_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The namespace_id attribute provides the abbreviation of the XML schema namespace container for this logical grouping of classes and attributes. It is assigned by the steward. | | | |

| *Name:* **namespace_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Ingest_ LDD | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# nil_reason in Symbolic_Literals_PDS

| *Name:* **nil_reason** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The nil_reason attribute provides the permissible values allowed as reasons when an attribute assigned a nil value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Symbolic_Literals_ PDS | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | anticipated | The value is temporarily not available. | |
| | inapplicable | There is no value. | |
| | missing | The correct value is not readily available to the sender of this data. However, a correct value probably exists. | |
| | unknown | The correct value is not readily available to the sender of this data. Furthermore, a correct value may not exist. | |

# nillable_flag in DD_Attribute

| *Name:* **nillable_flag** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The nillable_flag attribute indicates whether an attribute is allowed to take on nil as a value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute | *Type:* ASCII_Boolean |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Flag | *Conceptual Domain:* Boolean |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# nillable_flag in DD_Attribute_Full

| Name: **nillable_flag** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The nillable_flag attribute indicates whether an attribute is allowed to take on nil as a value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute_Full | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# not_applicable_constant in Special_ Constants

| Name: **not_applicable_constant** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The not_applicable_constant attribute provides a value that indicates the parameter is not applicable. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Constant | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# nssdc_collection_id in NSSDC

| Name: **nssdc_collection_id** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: An NSSDC Collection ID is an NSSDC assigned identifier for a collection of PDS datasets. | | | |
| Namespace Id: pds | Steward: ops | Class Name: NSSDC | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# object_length in Encoded_Byte_Stream

| *Name:* **object_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The object_length attribute provides the length of the digital object in bytes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Encoded_ Byte_Stream | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# object_length in Header

| *Name:* **object_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The object_length attribute provides the length of the digital object in bytes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Header | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# object_length in Parsable_Byte_Stream

| *Name:* **object_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The object_length attribute provides the length of the digital object in bytes. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Parsable_ Byte_Stream | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# offset in Array

| *Name:* **offset** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The offset attribute provides the displacement of the object starting position from the beginning of the parent structure (file, record, etc.). If there is no displacement, offset=0. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Array | *Type:* ASCII_Integer |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Offset | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# offset in Encoded_Byte_Stream

| Name: offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The offset attribute provides the displacement of the object starting position from the beginning of the parent structure (file, record, etc.). If there is no displacement, offset=0. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Encoded_Byte_Stream | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Offset | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# offset in Parsable_Byte_Stream

| Name: offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The offset attribute provides the displacement of the object starting position from the beginning of the parent structure (file, record, etc.). If there is no displacement, offset=0. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Parsable_Byte_Stream | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Offset | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# offset in Table_Base

| Name: offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The offset attribute provides the displacement of the object starting position from the beginning of the parent structure (file, record, etc.). If there is no displacement, offset=0. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Table_Base | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Offset | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |

| Name: offset | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Permissible Value(s) | No Values | | |

# orbit_direction in Target_PDS3

| Name: orbit_direction | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The orbit_direction element provides the direction of movement along the orbit about the primary as seen from the north pole of the 'invariable plane of the solar system', which is the plane passing through the center of mass of the solar system and perpendicular to the angular momentum vector of the solar system orbit motion. PROGRADE for positive rotation according to the right-hand rule, RETROGRADE for negative rotation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Direction | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# original_band in Band_Bin *Deprecated*

| Name: original_band | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The original_band attribute of a spectral qube provides the sequence of band numbers in the qube relative to some original qube. In the original qube, the values are just consecutive integers beginning with 1. In a qube which contains a subset of the bands in the original qube, the values are the original sequence numbers from that qube. | | | |
| Namespace Id: pds | Steward: img | Class Name: Band_Bin *Deprecated* | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: 512 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# os_version in Software_Binary

| Name: os_version | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The OS version attribute indicates the version of an operating system. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_Binary | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: os_version | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| Permissible Value(s) | No Values | |

# os_version in Software_Source

| Name: os_version | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The OS version attribute indicates the version of an operating system. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Source | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# parsing_standard_id in Checksum_Manifest

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Checksum_Manifest | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | MD5Deep 4.n | The checksum manifest is governed by the Message-Digest Algorithm (MD5) output of the MD5 Deep Package Version 4.n. | |

# parsing_standard_id in Header

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
| --- | --- | --- | --- |
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Header | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |

| Name: parsing_standard_id | | Version Id: 1.0.0.0 |
|---|---|---|
| | 7-Bit ASCII Text | The Header contains simple text using only the 7-Bit ASCII character set. ANSI X3.4-1986. |
| | CDF 3.4 ISTP/IACG | The Header is governed by Version 3.4 of the CDF format specification, the ISTP/IACG guidelines and PDS constraints. |
| | FITS 3.0 | The Header is governed by the standard Flexible Image Transport System (FITS), Version 3.0. |
| | ISIS2 | The Header is governed by the standard Integrated Software for Imagers and Spectrometers (ISIS), USGS Astrogeology Isis Cube, Version 2. |
| | ISIS2 History Label | An ISIS history label contains text information that records the sequence of processing operations that created an ISIS file. A description of the format of the label is available in section 5.2 of the ISIS2 Overview documentation. |
| | ISIS3 | The Header is governed by the standard Integrated Software for Imagers and Spectrometers (ISIS), USGS Astrogeology ISIS Cube, Version 3. |
| | PDS DSV 1 | The format is delimiter separated value (DSV); see Standards Reference section 4C.1. |
| | PDS ODL 2 | The Header is governed by the standard Planetary Data System (PDS) Object Description Language (ODL), Version 2.n. |
| | PDS3 | The Header is governed by the Planetary Data System (PDS) Data Standards Version 3.n. |
| | Pre-PDS3 | The Header is governed by Planetary Data System (PDS) Data Standards prior to Version 3.0. |
| | UTF-8 Text | The Header contains simple text using UTF-8 Unicode character encodings. RFC 3629. |
| | VICAR1 | The Header is governed by the standard Video Image Communication And Retrieval (VICAR). |
| | VICAR2 | The Header is governed by the standard Video Image Communication And Retrieval (VICAR). |

# parsing_standard_id in Parsable_Byte_ Stream

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Parsable_ Byte_Stream | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# parsing_standard_id in SPICE_Kernel

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: SPICE_ Kernel | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | SPICE | The SPICE_Kernel is governed by the standard Spacecraft Planet Instrument C-matrix Events (SPICE). | |

# parsing_standard_id in Service_Description

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Service_ Description | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | WADL | The service is governed by the standard Web Application Description Language (WADL). | |
| | WSDL 2.n | The service is governed by the standard Web Services Description Language (WSDL) Version 2.n. | |

# parsing_standard_id in Table_Delimited

| Name: parsing_standard_id | Version Id: 1.0.0.0 |
|---|---|
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | |

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Table_ Delimited | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | PDS DSV 1 | The format is delimiter separated value (DSV); see Standards Reference section 4C.1. | |

# parsing_standard_id in XML_Schema

| Name: parsing_standard_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The parsing_standard_id attribute provides the formal name of a standard used for the structure of a Parsable Byte Stream digital object. | | | |
| Namespace Id: pds | Steward: pds | Class Name: XML_ Schema | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Schematron ISO/IEC 19757-3:2006 | Schematron is governed by the standard for Schematron | |
| | XML Schema Version 1.1 | XML_Schema is governed by the standard for XML_Schema | |

# pattern in ASCII_DOI

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ DOI | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 10\.\S+/\S+ | The Digital Object Identifier (DOI) is expressed as the decimal number "10." followed by a character string followed by a forward slash "/" followed by another character string. The format and its use are specified by the International DOI Federation (see http://www.doi.org). | |

# pattern in ASCII_Date

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((00[1-9])\| (0[1-9][0-9])\|([1-2] [0-9][0-9])\|(3(([0-5] [0-9])\|(6[0-6])))) | | |
| | (-)?[0-9]{4}-((0[1-9])\| (1[0-2])) | | |
| | (-)?[0-9]{4}-((0[1-9])\| (1[0-2]))-((0[1-9])\| ([1-2][0-9])\|(3[0-1])) | | |

# pattern in ASCII_Date_DOY

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_DOY | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((00[1-9])\| (0[1-9][0-9])\|([1-2] [0-9][0-9])\|(3(([0-5] [0-9])\|(6[0-6])))) | | |

# pattern in ASCII_Date_Time

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_Time | Type: ASCII_Short_ String_Collapsed |

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-4]))(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)24:00((:00((\.0+)?))?)(Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]: | | |

| Name: pattern | Version Id: 1.0.0.0 |
|---|---|
| (((0-5][0-9])\|60)(\.<br>([0-9]{1,4}))?(Z)? | |
| (-)?[0-9]{4}-((0[1-9])\|<br>(1[0-2]))-((0[1-9])\|<br>([1-2][0-9])\|(3[0-1]))<br>(T)(((0-1][0-9])\|<br>(2[0-4]))(Z)? | |
| (-)?[0-9]{4}-((0[1-9])\|<br>(1[0-2]))-((0[1-9])\|<br>([1-2][0-9])\|(3[0-1]))<br>(T)24:00((:00((\.0+)?))?)<br>(Z)? | |

# pattern in ASCII_Date_Time_DOY

| Name: pattern | | Version Id: 1.0.0.0 | |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_<br>Date_Time_DOY | Type: ASCII_Short_<br>String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters:<br>1 | Maximum Characters:<br>255 |
| Unit of Measure Type:<br>None | Default Unit Id: None | Attribute Concept:<br>Pattern | Conceptual Domain:<br>Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4}-((00[1-9])\|<br>(0[1-9][0-9])\|([1-2]<br>[0-9][0-9])\|(3(([0-5]<br>[0-9])\|(6[0-6]))))(T)<br>(((0-1][0-9])\|(2[0-3])):<br>[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|<br>(0[1-9][0-9])\|([1-2]<br>[0-9][0-9])\|(3(([0-5]<br>[0-9])\|(6[0-6]))))(T)<br>(((0-1][0-9])\|(2[0-3])):<br>[0-5][0-9]:(([0-5][0-9])\|<br>60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|<br>(0[1-9][0-9])\|([1-2]<br>[0-9][0-9])\|(3(([0-5]<br>[0-9])\|(6[0-6]))))(T)<br>(((0-1][0-9])\|(2[0-4]))<br>(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|<br>(0[1-9][0-9])\|([1-2]<br>[0-9][0-9])\|(3(([0-5]<br>[0-9])\|(6[0-6]))))<br>(T)24:00((:00((\.0+)?))?)<br>(Z)? | | |

# pattern in ASCII_Date_Time_UTC

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_UTC | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | | | |
| | (-)?[0-9]{4}(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))))(T)((([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))))(T)((([0-1][0-9])\|(2[0-3])):[0-5][0-9]:((([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))))(T)((([0-1][0-9])\|(2[0-4]))(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)24:00((:00((\.0+)?))?)(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))))(Z) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))(Z) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)((([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z) | | |

| Name: pattern | | Version Id: 1.0.0.0 |
|---|---|---|
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z) | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-4]))(Z) | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)24:00((:00((\.0+)?))?)(Z) | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(Z) | |

# pattern in ASCII_Date_Time_YMD

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date_Time_YMD | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-4]))(Z)? | | |

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)24:00((:00((\.0+)?))?)(Z)? | | |

# pattern in ASCII_Date_YMD

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ Date_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1])) | | |

# pattern in ASCII_LID

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# pattern in ASCII_MD5_Checksum

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ MD5_Checksum | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | [0-9a-fA-F]{32} | | |

# pattern in ASCII_Numeric_Base16

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base16 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# pattern in ASCII_Numeric_Base2

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base2 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | [0-1]{1,255} | Values of ASCII_Numeric_Base2 are constructed from 1-255 characters, each of which is either 0 or 1 | |

# pattern in ASCII_Numeric_Base8

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base8 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | [0-7]{1,255} | Values of ASCII_Numeric_Base8 are constructed from 1-255 characters, each of which is a digit in the range 0-7 | |

# pattern in ASCII_Time

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | (([0-1][0-9])\|(2[0-3])): [0-5][0-9](Z\|) | The time is expressed in the form hh:mmZ where hh is the 2-digit hour (00 to 23), mm is the 2-digit minute (00 to 59), and "Z" is an optional suffix denoting UTC. | |
| | (([0-1][0-9])\|(2[0-3])): [0-5][0-9]:(([0-5][0-9])\| 60)((\.[0-9]+)\|)(Z\|) | The time is expressed in the form hh:mm:ss.sssZ where hh is the 2-digit hour (00 to 23), mm is the 2-digit minute (00 to 59), ss.sss is optional whole (00-60) and fractional seconds to arbitrary precision, and "Z" is an optional suffix denoting UTC. | |
| | (([0-1][0-9])\|(2[0-4])) (Z\|) | The time is expressed in the form hhZ where hh is the 2-digit hour (00 to 24) and "Z" is an optional suffix denoting UTC. | |
| | 24:00((:00((\.0+)\|))\|) (Z\|) | The time is represented in the form 24:00:00.000 where "00:000" is optional whole and fractional seconds to arbitrary precision and "Z" is an optional suffix denoting UTC. | |

# pattern in ASCII_VID

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_VID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |

| Name: pattern | | Version Id: 1.0.0.0 |
|---|---|---|
| | 0\.([1-9]|([0-9][0-9]+)) | |
| | [1-9][0-9]* | |
| | [1-9][0-9]*\.[0-9]+ | |

# pattern in Character_Data_Type

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Character_Data_Type | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# pattern in DD_Value_Domain

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# pattern in DD_Value_Domain_Full

| Name: pattern | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The pattern attribute provides a symbolic instruction for forming values. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Pattern | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# phone_book_flag in PDS_Affiliate

| Name: phone_book_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The phone_book_flag attribute indicates whether or not this person should be included in the phone book. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Affiliate | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# postal_address_text in PDS_Affiliate

| Name: postal_address_text | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The postal address text attribute provides a mailing address. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Affiliate | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# preferred_flag in Terminological_Entry

| Name: preferred_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The preferred_flag indicates whether this entry is preferred over all other entries. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Terminological_Entry | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Flag | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# primary_body_name in Target_PDS3

| Name: primary_body_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The primary_body_name attribute identifies the primary body with which a given target body is associated as a secondary body. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Short_String_Collapsed |

| *Name:* **primary_body_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# processing_level in Primary_Result_ Summary

| *Name:* **processing_level** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The processing_level attribute provides a broad indication of data processing level. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Primary_ Result_Summary | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Calibrated | Data converted to physical units, which makes values independent of the instrument. | |
| | Derived | Results that have been distilled from one or more calibrated data products (for example, maps, gravity or magnetic fields, or ring particle size distributions). Supplementary data, such as calibration tables or tables of viewing geometry, used to interpret observational data should also be classified as 'derived' data if not easily matched to one of the other three categories. | |
| | Partially Processed | Data that have been processed beyond the raw stage but which have not yet reached calibrated status. | |
| | Raw | Original data from an instrument. If compression, reformatting, packetization, or other translation has been applied to facilitate data transmission or storage, those processes will be reversed so that the archived data are in a PDS approved archive format. | |
| | Telemetry | An encoded byte stream used to transfer data from one or more instruments to temporary storage where the raw instrument data will be extracted. | |

# processing_level_id in Primary_Result_ Summary *Deprecated*

| Name: processing_level_id *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The processing_level_id attribute provides a broad indication of data processing level. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Primary_ Result_Summary | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Deprecated | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Calibrated | Data converted to physical units, which makes values independent of the instrument. | |
| | Derived | Results that have been distilled from one or more calibrated data products (for example, maps, gravity or magnetic fields, or ring particle size distributions). Supplementary data, such as calibration tables or tables of viewing geometry, used to interpret observational data should also be classified as 'derived' data if not easily matched to one of the other three categories. | |
| | Partially Processed | Data that have been processed beyond the raw stage but which have not yet reached calibrated status. | |
| | Raw | Original data from an instrument. If compression, reformatting, packetization, or other translation has been applied to facilitate data transmission or storage, those processes will be reversed so that the archived data are in a PDS approved archive format. | |
| | Telemetry | An encoded byte stream used to transfer data from one or more instruments to temporary storage where the raw instrument data will be extracted. | |

# producer_full_name in Data_Set_PDS3

| Name: producer_full_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The producer_full_name attribute provides the full_name of the individual mainly responsible for the production of the data set. This individual does not have to be registered with the PDS. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |

| Name: producer_full_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# product_class in Identification_Area

| Name: product_class | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The product_class attribute provides the name of the product class. For example the value of the attribute product_class must be Product_Document for any Product_Document. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Identification_Area | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Product_AIP | This is a product of type Product_AIP | |
| | Product_Attribute_ Definition | This is a product of type Product_Attribute_Definition | |
| | Product_Browse | This is a product of type Product_Browse | |
| | Product_Bundle | This is a product of type Product_Bundle | |
| | Product_Class_ Definition | This is a product of type Product_Class_Definition | |
| | Product_Collection | This is a product of type Product_Collection | |
| | Product_Context | This is a product of type Product_Context | |
| | Product_DIP | This is a product of type Product_DIP | |
| | Product_DIP_Deep_ Archive | This is a product of type Product_DIP_Deep_Archive | |
| | Product_Data_Set_ PDS3 | This is a product of type Product_Data_Set_PDS3 | |
| | Product_Document | This is a product of type Product_Document | |
| | Product_File_ Repository | This is a product of type Product_File_Repository | |
| | Product_File_Text | This is a product of type Product_File_Text | |
| | Product_Instrument_ Host_PDS3 | This is a product of type Product_Instrument_Host_PDS3 | |
| | Product_Instrument_ PDS3 | This is a product of type Product_Instrument_PDS3 | |
| | Product_Mission_ PDS3 | This is a product of type Product_Mission_PDS3 | |
| | Product_Native | This is a product of type Product_Native | |
| | Product_Observational | This is a product of type Product_Observational | |
| | Product_Proxy_PDS3 | This is a product of type Product_Proxy_PDS3 | |
| | Product_SIP | This is a product of type Product_SIP | |

| Name: product_class | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | Product_SIP_Deep_ Archive | This is a product of type Product_SIP_Deep_Archive | |
| | Product_SPICE_Kernel | This is a product of type Product_SPICE_Kernel | |
| | Product_Service | This is a product of type Product_Service | |
| | Product_Software | This is a product of type Product_Software | |
| | Product_Subscription_ PDS3 | This is a product of type Product_Subscription_PDS3 | |
| | Product_Target_PDS3 | This is a product of type Product_Target_PDS3 | |
| | Product_Thumbnail | This is a product of type Product_Thumbnail | |
| | Product_Update | This is a product of type Product_Update | |
| | Product_Volume_ PDS3 | This is a product of type Product_Volume_PDS3 | |
| | Product_Volume_Set_ PDS3 | This is a product of type Product_Volume_Set_PDS3 | |
| | Product_XML_Schema | This is a product of type Product_XML_Schema | |
| | Product_Zipped | This is a product of type Product_Zipped | |

# program_notes_id in Software_Binary

| Name: program_notes_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The program notes id attribute provides an identifier to a brief statement giving particulars about a software program. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Binary | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# program_notes_id in Software_Source

| Name: program_notes_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The program notes id attribute provides an identifier to a brief statement giving particulars about a software program. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Source | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# programmers_manual_id in Software

| *Name:* **programmers_manual_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The programmers manual id attribute provides an identifier to a document giving instruction about the programming of the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# provider_site_id in SIP_Deep_Archive

| *Name:* **provider_site_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The provider site id attribute provides an identifier for the provider. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* SIP_Deep_Archive | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# publication_date in Document

| *Name:* **publication_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The publication_date attribute provides the date on which an item was published. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Document | *Type:* ASCII_Date_YMD |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# publication_date in Volume_PDS3

| *Name:* **publication_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The publication_date attribute provides the date on which an item was published. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_PDS3 | *Type:* ASCII_Date_YMD |

| Name: publication_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# publication_year in Citation_Information

| Name: publication_year | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The publication_year attribute provides the year in which the product should be considered as published. Generally, this will be the year the data were declared "Certified" or "Archived". | | | |
| Namespace Id: pds | Steward: pds | Class Name: Citation_ Information | Type: ASCII_Date |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# purpose in Primary_Result_Summary

| Name: purpose | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The purpose attribute provides an indication of the primary purpose of the observations included. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Primary_ Result_Summary | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Calibration | Data collected to determine the relationship between measurement values and physical units. | |
| | Checkout | Data collected during operational tests | |
| | Engineering | Data collected about support systems and structures, which are ancillary to the primary measurements. | |
| | Navigation | Data collected to support navigation | |
| | Science | Data collected primarily to answer questions about the targets of the investigation. | |

# record_delimiter in Stream_Text

| Name: record_delimiter | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The record_delimiter attribute provides the character or characters used to indicate the end of a record. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Stream_Text | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Delimiter | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Carriage-Return Line-Feed | Records in the stream text are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) | |
| | carriage-return line-feed - *Deprecated* | Records in the stream text are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) | |

# record_delimiter in Table_Binary

| Name: record_delimiter | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The record_delimiter attribute provides the character or characters used to indicate the end of a record. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Table_Binary | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Delimiter | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# record_delimiter in Table_Character

| Name: record_delimiter | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The record_delimiter attribute provides the character or characters used to indicate the end of a record. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Table_Character | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Delimiter | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |

| Name: record_delimiter | | Version Id: 1.0.0.0 |
|---|---|---|
| | Carriage-Return Line-Feed | Records in the character table are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) |
| | carriage-return line-feed - *Deprecated* | Records in the character table are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) |

# record_delimiter in Table_Delimited

| Name: record_delimiter | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The record_delimiter attribute provides the character or characters used to indicate the end of a record. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Table_Delimited | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Delimiter | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Carriage-Return Line-Feed | Records in the delimited table are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) | |
| | carriage-return line-feed - *Deprecated* | Records in the delimited table are delimited by ASCII carriage-return line-feed pairs (0x0D0x0A) | |

# record_length in Record_Binary

| Name: record_length | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The record_length attribute provides the length of a record, including a record delimiter, if present. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Record_Binary | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Storage | Default Unit Id: byte | Attribute Concept: Length | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# record_length in Record_Character

| Name: record_length | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: The record_length attribute provides the length of a record, including the record delimiter. | | |

| *Name:* **record_length** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Record_ Character | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Storage | *Default Unit Id:* byte | *Attribute Concept:* Length | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# records in File

| *Name:* **records** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The records attribute provides a count of records. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* File | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# records in Table_Base

| *Name:* **records** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The records attribute provides a count of records. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Table_ Base | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# records in Table_Delimited

| *Name:* **records** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The records attribute provides a count of records. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Table_ Delimited | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: records | | Version Id: 1.0.0.0 |
|---|---|---|
| Permissible Value(s) | No Values | |

# reference_frame_id in Vector

| Name: reference_frame_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference frame id attribute identifies a reference frame, an origin and set of axes, the physical realization of a reference system, i.e., the reference frame orientation and axes are established by the reported coordinates of datum points in the reference system. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ICRF | International celestial reference frame | |
| | MOON_ME_DE421 | Moon mean Earth based on JPL DE421 | |

# reference_frame_id in Vector_Cartesian_3

| Name: reference_frame_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference frame id attribute identifies a reference frame, an origin and set of axes, the physical realization of a reference system, i.e., the reference frame orientation and axes are established by the reported coordinates of datum points in the reference system. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector_Cartesian_3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ICRF | International celestial reference frame | |
| | MOON_ME_DE421 | Moon mean Earth based on JPL DE421 | |

# reference_text in External_Reference

| Name: reference_text | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference_text attribute provides a complete bibliographic citation for a published work. | | | |
| Namespace Id: pds | Steward: pds | Class Name: External_Reference | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| Name: reference_text | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# reference_type in Bundle_Member_Entry

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference_type attribute provides the name of the association. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Bundle_ Member_Entry | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | bundle_has_browse_ collection | The bundle has a browse collection member | |
| | bundle_has_ calibration_collection | The bundle has a calibration collection member | |
| | bundle_has_context_ collection | The bundle has a context collection member | |
| | bundle_has_data_ collection | The bundle has a data collection member | |
| | bundle_has_document_ collection | The bundle has a document collection member | |
| | bundle_has_geometry_ collection | The bundle has a geometry collection member | |
| | bundle_has_member_ collection | The bundle has a member collection member | |
| | bundle_has_schema_ collection | The bundle has a schema collection member | |
| | bundle_has_spice_ kernel_collection | The bundle has a spice kernel collection member | |

# reference_type in DD_Association

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference_type attribute provides the name of the association. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Association | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | attribute_of | The referenced attribute is a member of this class | |
| | component_of | The referenced class is a component of this class | |
| | extension_of - *Deprecated* | The referenced class is an extension of this class | |
| | parent_of | This class is a parent of the referenced class | |
| | restriction_of - *Deprecated* | The referenced class is a restriction of this class | |
| | subclass_of - *Deprecated* | The referenced class is a subclass of this class | |

# reference_type in DD_Association_External *Deprecated*

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference_type attribute provides the name of the association. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Association_External *Deprecated* | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | attribute_of | The referenced attribute is a member of this class | |
| | component_of | The referenced class is a component of this class | |
| | extension_of | The referenced class is an extension of this class | |
| | parent_of | This class is a parent of the referenced class | |
| | restriction_of | The referenced class is a restriction of this class | |
| | subclass_of | The referenced class is a subclass of this class | |

# reference_type in Internal_Reference

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The reference_type attribute provides the name of the association. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Internal_Reference | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | No Values | | |
| Extended Value(s) for: pds:Observing_ System_Component/ pds:Internal_Reference | Value | Value Meaning | |
| | is_instrument | The referenced class is a context product describing the instrument. | |
| | is_instrument_host | The referenced class is a context product describing the instrument_host | |
| | is_other | The referenced class is a context product describing something not classified | |
| | is_facility | The referenced class is a context product describing the facility | |
| | is_telescope | The referenced class is a context product describing the telescope | |
| Extended Value(s) for: pds:Product_ AIP/pds:Information_ Package_Component/ pds:Internal_Reference | Value | Value Meaning | |
| | package_has_collection | The Archival Information Package contains a Collection. | |
| | package_has_bundle | The Archival Information Package contains a Bundle. | |
| | package_has_product | The Archival Information Package contains a basic Product. | |
| | package_compiled_ from_package | The Archival Information Package is compiled from a Submission Information Package. | |
| Extended Value(s) for: pds:Product_Browse/ pds:Reference_List/ pds:Internal_Reference | Value | Value Meaning | |
| | browse_to_data | The browse product is associated to a data product | |
| | browse_to_thumbnail | The browse product is associated to a thumbnail | |
| Extended Value(s) for: pds:Product_Bundle/ pds:Context_Area/ pds:Investigation_ Area/pds:Internal_ Reference | Value | Value Meaning | |
| | bundle_to_ investigation | The bundle is associated to an investigation | |
| Extended Value(s) for: pds:Product_Bundle/ pds:Reference_List/ pds:Internal_Reference | Value | Value Meaning | |
| | bundle_to_errata | The bundle is associated to an errata document | |
| | bundle_to_document | The bundle is associated to a document | |

| Name: reference_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | bundle_to_ investigation | The bundle is associated to an investigation |
| | bundle_to_instrument | The bundle is associated to an instrument |
| | bundle_to_instrument_ host | The bundle is associated to an instrument host |
| | bundle_to_target | The bundle is associated to a target |
| | bundle_to_associate | The bundle is associated to a product |
| *Extended Value(s) for: pds:Product_ Collection/ pds:Context_Area/ pds:Investigation_ Area/pds:Internal_ Reference* | *Value* | *Value Meaning* |
| | collection_to_ investigation | The collection is associated to an investigation |
| *Extended Value(s) for: pds:Product_ Collection/ pds:Reference_List/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | collection_to_resource | The collection is associated to a resource |
| | collection_to_associate | The collection is associated to a product |
| | collection_to_ calibration | The collection is associated to calibration data |
| | collection_to_geometry | The collection is associated to geometry |
| | collection_to_spice_ kernel | The collection is associated to spice kernels |
| | collection_curated_by_ node | The collection is curated by the referenced node |
| | collection_to_ document | The collection is associated to a document |
| | collection_to_browse | The collection is associated to a browse product |
| | collection_to_context | The collection is associated to a context product |
| | collection_to_data | The collection is associated to a data product |
| | collection_to_schema | The collection is associated to a schema document |
| | collection_to_errata | The collection is associated to an errata document |
| | collection_to_bundle | The collection is associated to a bundle |
| | collection_to_personnel | The collection is associated to personnel |
| | collection_to_ investigation | The collection is associated to an investigation |
| | collection_to_ instrument | The collection is associated to an instrument |
| | collection_to_ instrument_host | The collection is associated to an instrument host |

| Name: reference_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | collection_to_target | The collection is associated to a target |
| *Extended Value(s) for: pds:Product_Context/ pds:Reference_List/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | context_to_associate | The context product is associated to a product |
| | instrument_to_ document | The instrument is associated to a document |
| | instrument_to_ instrument_host | The instrument is associated to an instrument host |
| | instrument_host_to_ document | The instrument host is associated to a document |
| | instrument_host_to_ instrument | The instrument_host is associated to an instrument |
| | instrument_host_to_ investigation | The instrument host is associated to an investigation |
| | instrument_host_to_ target | The instrument host is associated to a target |
| | investigation_to_ document | The investigation is associated to a document |
| | investigation_to_ instrument | The investigation is associated to an instrument |
| | investigation_to_ instrument_host | The investigation is associated to an instrument_host |
| | investigation_to_target | The investigation is associated to a target |
| | node_to_personnel | The node is associated to a person |
| | node_to_agency | The node is associated to an agency |
| | node_to_manager | The node is associated to a manager |
| | node_to_operator | The node is associated to an operator |
| | node_to_data_archivist | The node is associated to a data archivist |
| | resource_to_instrument | The resource is associated to an instrument |
| | resource_to_ instrument_host | The resource is associated to an instrument host |
| | resource_to_ investigation | The resource is associated to an investigation |
| | resource_to_target | The resource is associated to a target |
| | target_to_document | The target is associated to a document |
| | target_to_instrument | The target is associated to an instrument |
| | target_to_instrument_ host | The target is associated to an instrument_host |
| | target_to_investigation | The target is associated to an investigation |
| *Extended Value(s) for: pds:Product_ DIP/pds:Information_ Package_Component/ pds:Internal_Reference* | *Value* | *Value Meaning* |

| Name: reference_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | package_has_collection | The Dissemination Information Package contains a Collection. |
| | package_has_bundle | The Dissemination Information Package contains a Bundle. |
| | package_has_product | The Dissemination Information Package contains a basic Product. |
| | package_compiled_ from_package | The Dissemination Information Package is compiled from an Archival Information Package. |
| *Extended Value(s) for: pds:Product_ DIP_Deep_Archive/ pds:Information_ Package_Component/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | package_has_collection | The Dissemination Information Package contains a Collection. |
| | package_has_bundle | The Dissemination Information Package contains a Bundle. |
| | package_has_product | The Dissemination Information Package contains a basic Product. |
| | package_compiled_ from_package | The Dissemination Information Package is compiled from an Archival Information Package. |
| *Extended Value(s) for: pds:Product_ Document/ pds:Context_Area/ pds:Investigation_ Area/pds:Internal_ Reference* | *Value* | *Value Meaning* |
| | document_to_ investigation | The document is associated to an investigation |
| *Extended Value(s) for: pds:Product_ Document/ pds:Context_ Area/pds:Target_ Identification/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | document_to_target | The document is associated to a target |
| *Extended Value(s) for: pds:Product_ Document/ pds:Reference_List/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | document_to_associate | The document is associated to a product |
| | document_to_ investigation | The document is associated to an investigation |
| | document_to_ instrument_host | The document is associated to an instrument_host |

| Name: **reference_type** | | Version Id: 1.0.0.0 |
|---|---|---|
| | document_to_ instrument | The document is associated to an instrument |
| | document_to_target | The document is associated to a target |
| *Extended Value(s) for: pds:Product_Native/ pds:Reference_List/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | described_by_ document | The format of the digital object must be described one or more referenced documents |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Observation_Area/ pds:Investigation_ Area/pds:Internal_ Reference* | *Value* | *Value Meaning* |
| | data_to_investigation | The data product is associated to an investigation |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Observation_ Area/pds:Target_ Identification/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | data_to_target | The data product is associated to a target |
| | collection_to_target | The collection is associated to a target |
| | bundle_to_target | The bundle is associated to a target |
| | document_to_target | The document is associated to a target |
| *Extended Value(s) for: pds:Product_ Observational/ pds:Reference_List/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | data_to_associate | The data product is associated to a product |
| | data_to_resource | The data product is associated to a resource |
| | data_to_calibration_ document | The data product is associated to a calibration document |
| | data_to_calibration_ product | The data product is associated to a calibration product |
| | data_to_raw_product | The data product is associated to a raw product |
| | data_to_calibrated_ product | The data product is associated to a calibrated product |
| | data_to_derived_ product | The data product is associated to a derived product |
| | data_to_geometry | The data product is associated to geometry |
| | data_to_spice_kernel | The data product is associated to spice kernel(s) |
| | data_to_thumbnail | The data product is associated to a thumbnail |
| | data_to_document | The data product is associated to a document |

| *Name:* **reference_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | data_curated_by_node | The data product is curated by the referenced node |
| | data_to_browse | The data product is associated to a browse product |
| | data_to_ancillary_data | The referencing data product requires the referenced data product to provide specific support for its own use. For example, a table with footnotes can be archived as two products: a data table file with a field giving a footnote code number; and a footnotes file sorted by those code numbers. The label of the data table would then reference the footnotes file with an association type of "data_to_ancillary_data". |
| *Extended Value(s) for: pds:Product_ SIP/pds:Information_ Package_Component/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | package_has_collection | The Submission Information Package contains a Collection. |
| | package_has_bundle | The Submission Information Package contains a Bundle. |
| | package_has_product | The Submission Information Package is contains a basic Product. |
| *Extended Value(s) for: pds:Product_ SIP_Deep_Archive/ pds:Information_ Package_Component_ Deep_Archive/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | package_has_bundle | The Submission Information Package Deep Archive contains a Bundle. |
| *Extended Value(s) for: pds:Product_Zipped/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | zip_to_package | The zip file contains a copy of the package |
| *Extended Value(s) for: pds:Update_Entry/ pds:Internal_Reference* | *Value* | *Value Meaning* |
| | data_to_update | The data product is associated to an update product |
| | collection_to_update | The collection is associated to an update product |
| | bundle_to_update | The bundle is associated to an update product |

# reference_type in Inventory

| *Name:* **reference_type** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The reference_type attribute provides the name of the association. | |

| Name: reference_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Inventory | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | inventory_has_member_product | The collection inventory has member products identified by either LIDVID or LID references | |

# registered_by in DD_Attribute_Full

| Name: registered_by | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The registered_by attribute provides the name of the person or organization that registered the object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# registered_by in DD_Class_Full

| Name: registered_by | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The registered_by attribute provides the name of the person or organization that registered the object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# registration_authority_id in DD_Attribute_Full

| Name: registration_authority_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The registration_authority_id attribute provides the name of the organization that registered the object. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Full | Type: ASCII_Short_String_Collapsed |

| *Name:* **registration_authority_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | 0001_NASA_PDS_1 | The Attribute Registration_Authority is 0001_NASA_PDS_1 | |

# registration_authority_id in DD_Class_Full

| *Name:* **registration_authority_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The registration_authority_id attribute provides the name of the organization that registered the object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Full | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# registration_date in PDS_Affiliate

| *Name:* **registration_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The registration_date attribute provides the date of registration within the PDS system. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_Affiliate | *Type:* ASCII_Date_YMD |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# registration_date in PDS_Guest

| *Name:* **registration_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The registration_date attribute provides the date of registration within the PDS system. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* PDS_Guest | *Type:* ASCII_Date_YMD |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **registration_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# repetitions in Group

| *Name:* **repetitions** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The repetitions attribute provides the number of times a set of repeating fields and, possibly, (sub)groups is replicated within a group. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Group | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# revision_id in Document

| *Name:* **revision_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The revision_id attribute provides the revision level of a document, which may be set outside PDS and may be different from its version_id. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Document | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# role in Terminological_Entry

| *Name:* **role** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The role attribute provides the role performed by this object. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Terminological_Entry | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# rotation_direction in Target_PDS3

| Name: rotation_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rotation_direction element provides the direction of rotation as viewed from the north pole of the 'invariable plane of the solar system', which is the plane passing through the center of mass of the solar system and perpendicular to the angular momentum vector of the solar system. The value for this element is PROGRADE for counter -clockwise rotation, RETROGRADE for clockwise rotation and SYNCHRONOUS for satellites which are tidally locked with the primary. Sidereal_rotation_period and rotation_direction_type are unknown for a number of satellites, and are not applicable (N/A) for satellites which are tumbling. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Direction | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_assign in DD_Rule

| Name: rule_assign | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rule_assign attribute provides an assignment statement for a schematron rule. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_context in DD_Rule

| Name: rule_context | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rule_context attribute provides the xpath for the rule. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_description in DD_Rule_Statement

| Name: rule_description | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rule_description attribute provides a description of the rule statement suitable for user documentation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule_Statement | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_message in DD_Rule_Statement

| Name: rule_message | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rule_message attribute provides a message to be displayed by the schematron processor when the test condition is met. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule_Statement | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_test in DD_Rule_Statement

| Name: rule_test | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The rule_test attribute provides the body of the statement to be executed by the schematron processor. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Rule_Statement | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# rule_type in DD_Rule_Statement

| Name: rule_type | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: The rule_type attribute indicates the type of statement to be executed. | | |

| *Name:* **rule_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Rule_Statement | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Assert | The rule statement type is generic Assert. | |
| | Assert Every | The rule statement type is Assert Every. | |
| | Assert If | The rule statement type is Assert If. | |
| | Report | The rule statement type is Report. | |

# rule_value in DD_Rule_Statement

| *Name:* **rule_value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The rule_value attribute provides values to be used to complete certain schematon statements. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Rule_Statement | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sample_display_direction in Display_2D_Image *Deprecated*

| *Name:* **sample_display_direction** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The sample_display_direction attribute provides the preferred orientation of samples within a line for viewing on a display device. The attribute sample_display_direction must be used with line_display_direction. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Display_2D_Image *Deprecated* | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Direction | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Right | The preferred orientation of samples within an line for viewing on a display device is Right | |

# sampling_parameter_interval in Uniformly_ Sampled

| *Name:* **sampling_parameter_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The sampling_parameter_interval element identifies the spacing of points at which data are sampled and at which a value for an instrument or dataset parameter is available. This sampling interval can be either the original (raw) sampling or the result of some resampling process. For example, in 48-second magnetometer data the sampling interval is 48. The sampling parameter (time, in the example) is identified by the sampling_parameter_name element. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Uniformly_Sampled | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sampling_parameter_name in Uniformly_ Sampled

| *Name:* **sampling_parameter_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The sampling_parameter_name element provides the name of the parameter which determines the sampling interval of a particular instrument or dataset parameter. For example, magnetic field intensity is sampled in time increments, and a spectrum is sampled in wavelength or frequency. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Uniformly_Sampled | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sampling_parameter_scale in Uniformly_ Sampled

| *Name:* **sampling_parameter_scale** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The sampling_parameter_scale element specifies whether the sampling interval is linear or something other such as logarithmic. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Uniformly_Sampled | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |

| Name: sampling_parameter_scale | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Scale | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Exponential | Values of Uniformly_Sampled are given at uniform spacings of the exponential of an independent variable [e.g., log(1), log(2), log(3), log(4), ...] | |
| | Linear | Values of Uniformly_Sampled are given at uniform (linear) spacings of an independent variable [e.g., 1, 2, 3, 4, ...] | |
| | Logarithmic | Values of Uniformly_Sampled are given at uniform spacings of the logarithm of an independent variable [e.g., 1, 10, 100, 1000, ...] | |

# sampling_parameter_unit in Uniformly_ Sampled

| Name: sampling_parameter_unit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sampling_parameter_unit element specifies the unit of measure of associated data sampling parameters. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Uniformly_Sampled | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Unit | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# saturated_constant in Special_Constants

| Name: saturated_constant | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The saturated_constant attribute provides a value that indicates the original value was invalid because of sensor saturation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Constant | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# scaling_factor in Band_Bin *Deprecated*

| *Name:* **scaling_factor** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| *Namespace Id:* pds | *Steward:* img | *Class Name:* Band_Bin *Deprecated* | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# scaling_factor in Element_Array

| *Name:* **scaling_factor** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Element_ Array | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Factor | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# scaling_factor in Field_Binary

| *Name:* **scaling_factor** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Binary | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Factor | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# scaling_factor in Field_Bit

| Name: scaling_factor | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Bit | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Factor | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# scaling_factor in Field_Character

| Name: scaling_factor | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Character | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Factor | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# scaling_factor in Field_Delimited

| Name: scaling_factor | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The scaling_factor attribute is the scaling factor to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 1. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Factor | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sequence_number in Axis_Array

| Name: sequence_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sequence_number attribute provides a number that is used to order axes in an array. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Axis_ Array | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: 16 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sequence_number in Quaternion_Component

| Name: sequence_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sequence_number attribute provides a number that is used to order axes in an array. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Quaternion_ Component | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: 16 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sequence_number in Vector_Component

| Name: sequence_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sequence_number attribute provides a number that is used to order axes in an array. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector_ Component | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: 16 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# serial_number in Instrument

| Name: serial_number | Version Id: 1.0.0.0 |
|---|---|
| Description: The serial number element provides the assigned manufacturer's serial number. | |

| *Name:* **serial_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# serial_number in Instrument_Host

| *Name:* **serial_number** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The serial number attribute provides the manufacturer's serial number assigned to an instrument host. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument_Host | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# software_dialect in Software_Source

| *Name:* **software_dialect** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The software dialect attribute indicates the variety of a language used to write the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_Source | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Text | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# software_format_type in Software_Binary

| *Name:* **software_format_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The software format type attribute classifies the format of the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_Binary | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: software_format_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# software_format_type in Software_Source

| Name: software_format_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The software format type attribute classifies the format of the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_Source | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# software_id in Software

| Name: software_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The software id attribute provides a formal name used to refer to the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# software_language in Software_Source

| Name: software_language | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The software language attribute identifies the language used to write the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_Source | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# software_type in Software

| Name: software_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The software type attribute identifies the class of which the software is a member. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# software_version_id in Software

| Name: software_version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The software_version_id attribute provides the version of the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# solar_longitude in Time_Coordinates

| Name: solar_longitude | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The solar_longitude attribute provides the angle between the body-Sun line at the time of interest and the body-Sun line at its vernal equinox. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Time_Coordinates | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: deg | Attribute Concept: Longitude | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sort_name in PDS_Affiliate

| Name: sort_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sort name attribute provides a string to be used in ordering. For people, the last name (surname) is typically first, followed by a comma and then other names. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Affiliate | Type: ASCII_Short_String_Collapsed |

| Name: sort_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sort_name in PDS_Guest

| Name: sort_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The sort name attribute provides a string to be used in ordering. For people, the last name (surname) is typically first, followed by a comma and then other names. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Guest | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# specified_unit_id in DD_Value_Domain

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# specified_unit_id in DD_Value_Domain_Full

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Value_Domain_Full | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# specified_unit_id in Unit_Of_Measure

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Unit_Of_ Measure | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# specified_unit_id in Units_of_Acceleration

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Acceleration | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | m/s**2 | Units_of_Acceleration maximum, minimum, and permissible values are given in the unit m/ s**2 | |

# specified_unit_id in Units_of_Amount_Of_ Substance

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Amount_Of_Substance | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | mol | Units_of_Amount_Of_Substance maximum, minimum, and permissible values are given in the unit mol | |

# specified_unit_id in Units_of_Angle

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_Angle | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | deg | Units_of_Angle maximum, minimum, and permissible values are given in the unit deg | |

# specified_unit_id in Units_of_Angular_ Velocity

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_Angular_Velocity | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | deg/s | Units_of_Angular_Velocity maximum, minimum, and permissible values are given in the unit deg/s | |

# specified_unit_id in Units_of_Area

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Area | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | m**2 | Units_of_Area maximum, minimum, and permissible values are given in the unit m**2 | |

# specified_unit_id in Units_of_Current

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Current | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | A | Units_of_Current maximum, minimum, and permissible values are given in the unit A | |

# specified_unit_id in Units_of_Frame_Rate

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Frame_Rate | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | frames/s | Units_of_Frame_Rate maximum, minimum, and permissible values are given in the unit frames/s | |

# specified_unit_id in Units_of_Frequency

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Frequency | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Hz | Units_of_Frequency maximum, minimum, and permissible values are given in the unit Hz | |

# specified_unit_id in Units_of_Length

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Length | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | m | Units_of_Length maximum, minimum, and permnissible values are given in the unit m | |

# specified_unit_id in Units_of_Map_Scale

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Map_Scale | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | pixel/deg | Units_of_Map_Scale maximum, minimum, and permissible values are given in the unit pixel/deg | |

# specified_unit_id in Units_of_Mass

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Mass | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | kg | Units_of_Mass maximum, minimum, and permissible values are given in the unit kg | |

# specified_unit_id in Units_of_Misc

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Misc | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | DN | Units_of_Misc maximum, minimum, and permissible values are given in the unit DN | |

# specified_unit_id in Units_of_None

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ None | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | none | Units_of_None maximum, minimum, and permissible values are given in the unit none | |

# specified_unit_id in Units_of_Optical_Path_ Length

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Optical_Path_Length | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | airmass | Units_of_Optical_Path_Length maximum, minimum, and permissible values are given in the unit airmass | |

# specified_unit_id in Units_of_Pressure

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Pressure | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | bar | Units_of_Pressure maximum, minimum, and permissble values are given in the unit bar | |

# specified_unit_id in Units_of_Radiance

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Radiance | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | W*m**-2*sr**-1 | Units_of_Radiance maximum, minimum, and permissible values are given in the unit W*m**-2*sr**-1 | |

# specified_unit_id in Units_of_Rates

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Rates | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | counts/bin | Units_of_Rates maximum, minimum, and permissible values are given in the unit counts/ bin | |

# specified_unit_id in Units_of_Solid_Angle

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Solid_Angle | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | sr | Units_of_Solid_Angle maximum, minimum, and permissible values are given in the unit sr | |

# specified_unit_id in Units_of_Spectral_ Irradiance

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Spectral_Irradiance | Type: UTF8_Short_ String_Collapsed |

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | W/m**3 | Units_of_Spectral_Irradiance maximum, minimum, and permissible values are given in the unit W/m**3 | |

# specified_unit_id in Units_of_Spectral_ Radiance

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Spectral_Radiance | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | W/m**3/sr | Units_of_Spectral_Radiance maximum, minimum, and permissible values are given in the unit W/m**3/sr | |

# specified_unit_id in Units_of_Storage

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Storage | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | byte | Units_of_Storage maximum, minimum, and permissible values are given in the unit byte | |

# specified_unit_id in Units_of_Temperature

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Temperature | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | degC | Units_of_Temperature maximum, minimum, and permissible values are given in the unit degC | |

# specified_unit_id in Units_of_Time

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Time | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | s | Units_of_Time maximum, minimum, and permissible values are given in the unit s | |

# specified_unit_id in Units_of_Velocity

| *Name:* **specified_unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Velocity | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | m/s | Units_of_Velocity maximum, minimum, and permissible values are given in the unit m/s | |

# specified_unit_id in Units_of_Voltage

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Voltage | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | V | Units_of_Voltage maximum, minimum, and permissible values are given in the unit V | |

# specified_unit_id in Units_of_Volume

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Volume | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | L | Units_of_Volume maximum, minimum, and permissible values are given in the unit L | |

# specified_unit_id in Units_of_Wavenumber

| Name: specified_unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The specified_unit_id attribute provides the units chosen for maximum_value, minimum_value, and permissible_value. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Wavenumber | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1/cm | Units_of_Wavenumber maximum, minimum, and permissible values are given in the unit 1/cm | |

# standard_deviation in Band_Bin *Deprecated*

| Name: standard_deviation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The standard_deviation attribute provides the standard deviation of values in the associated object; empty and Special_Constants values are excluded. | | | |
| Namespace Id: pds | Steward: img | Class Name: Band_Bin *Deprecated* | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# standard_deviation in Field_Statistics

| Name: standard_deviation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The standard_deviation attribute provides the standard deviation of the stored field over all records (empty fields and Special_Constants values are excluded from the computation). | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Statistics | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# standard_deviation in Object_Statistics

| Name: standard_deviation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The standard_deviation attribute provides the standard deviation of the stored array element values after application of any bit mask (Special_Constants values are excluded from the computation). | | | |
| Namespace Id: pds | Steward: pds | Class Name: Object_Statistics | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# start_bit in Field_Bit

| Name: start_bit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The start_bit attribute provides the position of the first bit within an ordered sequence of bits. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_Bit | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Bit | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# start_date in Investigation

| Name: start_date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The start_date attribute provides the date when an activity began. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Investigation | Type: ASCII_Date_ YMD |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# start_date_time in Data_Set_PDS3 *Deprecated*

| Name: start_date_time *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The start_date_time attribute provides the date and time at the beginning of the data set. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Deprecated | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# start_date_time in Time_Coordinates

| Name: start_date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The start_date_time attribute provides the date and time appropriate to the beginning of the product being labeled. | | | |

| Name: **start_date_time** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Time_ Coordinates | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# start_time in Data_Set_PDS3

| Name: **start_time** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The start_time attribute provides the date and time of the beginning of an event or observation (whether it be a spacecraft, ground-based, or system event) in UTC. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Date_ Time |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# starting_point_identifier in Document_Edition

| Name: **starting_point_identifier** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The starting_point attribute provides the local_identifier of the object to be accessed first. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Document_Edition | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# steward_id in DD_Attribute_Full

| Name: **steward_id** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The steward attribute indicates the person or organization who manages a set of registered attributes and classes. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute_Full | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* **steward_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | atm | Steward of the attribute is the PDS Atmospheres Discipline Node | |
| | geo | Steward of the attribute is the PDS Geosciences Discipline Node | |
| | img | Steward of the attribute is the PDS Imaging support node | |
| | naif | Steward of the attribute is the PDS Navigation and Ancillary Information support node | |
| | ops | Steward of the attribute is the PDS operations function | |
| | pds | Steward of the attribute is the Planetary Data System | |
| | ppi | Steward of the attribute is the PDS Planetary Plasma Interaction Discipline Node | |
| | rings | Steward of the attribute is the PDS Rings Discipline Node | |
| | rs | Steward of the attribute is the PDS radio science function | |
| | sbn | Steward of the attribute is the PDS Small Bodies Discipline Node | |

# steward_id in DD_Class_Full

| *Name:* **steward_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The steward_id attribute provides the abbreviation of the organization that manages the set of registered attributes and classes. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Full | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | atm | Steward of the attribute is the PDS Atmospheres Discipline Node | |
| | geo | Steward of the attribute is the PDS Geosciences Discipline Node | |
| | img | Steward of the attribute is the PDS Imaging support node | |
| | naif | Steward of the attribute is the PDS Navigation and Ancillary Information support node | |

| *Name:* **steward_id** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | ops | Steward of the attribute is the PDS operations function |
| | pds | Steward of the attribute is the Planetary Data System |
| | ppi | Steward of the attribute is the PDS Planetary Plasma Interaction Discipline Node |
| | rings | Steward of the attribute is the PDS Rings Discipline Node |
| | rs | Steward of the attribute is the PDS radio science function |
| | sbn | Steward of the attribute is the PDS Small Bodies Discipline Node |

# steward_id in Ingest_LDD

| *Name:* **steward_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The steward_id attribute provides the abbreviation of the organization that manages the set of registered attributes and classes. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Ingest_LDD | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# stop_bit in Field_Bit

| *Name:* **stop_bit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The stop-bit attribute provides the location of the last bit in this bit field relative to the first bit in the packed_data field. Bits are numbered continuously across byte boundaries. The first bit location in the packed data field is "1". | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_Bit | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Bit | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# stop_date in Investigation

| *Name:* **stop_date** | *Version Id:* **1.0.0.0** |
|---|---|
| *Description:* The stop_date attribute provides the date when an activity ended. | |

| Name: **stop_date** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Investigation | Type: ASCII_Date_ YMD |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# stop_date_time in Data_Set_PDS3 *Deprecated*

| Name: **stop_date_time *Deprecated*** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The stop_date_time attribute provides the date and time at the end of the data set. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Deprecated | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# stop_date_time in Time_Coordinates

| Name: **stop_date_time** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The stop_date_time attribute provides the date and time appropriate to the end of the product being labeled. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Time_ Coordinates | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# stop_time in Data_Set_PDS3

| Name: **stop_time** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The stop_time element provides the date and time of the end of an observation or event (whether it be a spacecraft, ground-based, or system event) in UTC. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Data_Set_ PDS3 | Type: ASCII_Date_ Time |

| Name: stop_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Time |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# subfacet1 in Group_Facet1

| Name: subfacet1 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The subfacet1 attribute provides a sub-categorization under the facet1 value. The allowed values are restricted according to the value of facet1. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Group_Facet1 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# subfacet2 in Group_Facet2

| Name: subfacet2 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The subfacet2 attribute provides a sub-categorization under the facet2 value. The allowed values are restricted according to the value of facet2. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Group_Facet2 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# submitter_name in DD_Attribute

| Name: submitter_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The submitter_name attribute provides the name of the author, who submits the item to the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |

| Name: submitter_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# submitter_name in DD_Attribute_Full

| Name: submitter_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The submitter_name attribute provides the name of the author, who submits the item to the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Attribute_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# submitter_name in DD_Class

| Name: submitter_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The submitter_name attribute provides the name of the author, who submits the item to the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# submitter_name in DD_Class_Full

| Name: submitter_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The submitter_name attribute provides the name of the author, who submits the item to the steward. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_Class_Full | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# subscription_id in Subscriber_PDS3

| *Name:* **subscription_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The subscriber_id provides the identification of a PDS subscription. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Subscriber_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# supported_architecture_note in Software_ Binary

| *Name:* **supported_architecture_note** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The supported architecture note attribute identifies the hardware architecture that can process the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_Binary | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Note | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# supported_architecture_note in Software_ Source

| *Name:* **supported_architecture_note** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The supported architecture note attribute identifies the hardware architecture that can process the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software_Source | *Type:* ASCII_Text_Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Note | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# supported_environment_note in Software_ Script

| Name: supported_environment_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The supported environment note attribute identifies the environment that can process the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Script | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# supported_operating_system_note in Software_Binary

| Name: supported_operating_system_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The supported operating system note attribute identifies the Operating System that supports the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Binary | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# supported_operating_system_note in Software_Source

| Name: supported_operating_system_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The supported operating system note attribute identifies the Operating System that supports the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Source | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# system_requirements_note in Software_ Binary

| Name: system_requirements_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The system requirements note attribute identifies what is necessary to process the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Binary | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# system_requirements_note in Software_ Script

| Name: system_requirements_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The system requirements note attribute identifies what is necessary to process the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Script | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# system_requirements_note in Software_ Source

| Name: system_requirements_note | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The system requirements note attribute identifies what is necessary to process the software. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software_ Source | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Note | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# target_desc in Target_PDS3

| Name: target_desc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The target_desc attribute describes the characteristics of a particular target. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Text_Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Description | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# target_name in Target_PDS3

| Name: target_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The target_name attribute provides a name by which the target is formally known. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# target_type in Target_PDS3

| Name: target_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The target_type attribute identifies the type of a named target. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Target_PDS3 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# team_name in PDS_Affiliate

| Name: team_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The team_name attribute provides the name of a group of individuals. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Affiliate | Type: ASCII_Short_String_Collapsed |

| Name: team_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Engineering | Team name is Engineering | |
| | Geosciences | Team name is Geosciences | |
| | Headquarters | Team name is Headquarters | |
| | Imaging | Team name is Imaging | |
| | Management | Team name is Management | |
| | National Space Science Data Center | Team name is National Space Science Data Center | |
| | Navigation and Ancillary Information Facility | The Node has name Navigation and Ancillary Information Facility | |
| | Planetary Atmospheres | Team name is Planetary Atmospheres | |
| | Planetary Plasma Interactions | Team name is Planetary Plasma Interactions | |
| | Planetary Rings | Team name is Planetary Rings | |
| | Radio Science | Team name is Radio Science | |
| | Small Bodies | Team name is Radio Science | |

# telephone_number in PDS_Affiliate

| Name: telephone_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The telephone_number attribute provides a telephone number in international notation in compliance with the E.164 telephone number format recommendation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: PDS_Affiliate | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Number | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# telescope_latitude in Telescope

| Name: telescope_latitude | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The latitude attribute provides the angular distance north or south from the equator of a point on the object's surface, measured on the meridian of the point. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Telescope | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |

| *Name:* **telescope_latitude** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* deg | *Attribute Concept:* Latitude | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# telescope_longitude in Telescope

| *Name:* **telescope_longitude** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The longitude attribute provides the angular distance east or west on the object's surface, measured by the angle contained between the meridian of a particular place and some prime meridian. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Telescope | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* deg | *Attribute Concept:* Longitude | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# title in Identification_Area

| *Name:* **title** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The name given to the resource. Typically, a Title will be a name by which the resource is formally known. - Dublin Core - The title is used to refer to an object in a version independent manner. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Identification_Area | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Title | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# transfer_manifest_checksum in Information_ Package_Component

| *Name:* **transfer_manifest_checksum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The transfer manifest checksum provides the checksum for the transfer manifest file. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Information_Package_ Component | *Type:* ASCII_MD5_ Checksum |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Checksum | *Conceptual Domain:* Short_String |

| *Name:* **transfer_manifest_checksum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# type in DD_Attribute_Full

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Attribute_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | PDS3 | The attribute definition is classified as being of type PDS3 | |
| | PDS4 | The attribute definition is classified as being of type PDS4 | |

# type in DD_Class_Full

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Class_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | PDS3 | The class definition is classified as being of type PDS3 | |
| | PDS4 | The class definition is classified as being of type PDS4 | |

# type in Facility

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Facility | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Laboratory | The Facility is classified as being of type Laboratory | |
| | Observatory | The Facility is classified as being of type Observatory | |

# type in Instrument

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Accelerometer | An instrument that measures proper (i.e., its own) acceleration. | |
| | Alpha Particle Detector | An instrument that measures the number and/or distribution of alpha particles. | |
| | Alpha Particle X-Ray Spectrometer | An instrument that bombards a sample with alpha particles and X-rays and measures the energy spectrum of scattered alpha particles and X-rays to determine the sample's elemental composition. | |
| | Altimeter | An instrument that measures its own altitude above a reference level (for example, a locally flat surface on the Earth) | |
| | Anemometer | An in situ instrument that measures wind speed. | |
| | Atomic Force Microscope | An instrument that uses atomic forces between a probe and a sample to produce high-resolution topographic scans of the sample. | |
| | Barometer | An in situ instrument that measures atmospheric pressure. | |
| | Biology Experiments | An instrument that conducts one or more experiments on samples to determine their potential for biological activity. | |
| | Bolometer | An instrument that estimates radiation intensity by measuring changes in electrical resistivity as the temperature of its sensor varies in response to the incident power density. | |
| | Camera | An instrument that records and stores analog images (compare 'imager'). | |

| Name: type | | Version Id: 1.0.0.0 |
|---|---|---|
| | Cosmic Ray Detector | An instrument that detects and/or measures cosmic rays. |
| | Drilling Tool | A tool that drills into samples. |
| | Dust Detector | An instrument that detects and/or measures dust. |
| | Electrical Probe | An in situ instrument that measures electrical properties (e.g., conductivity) of a medium into which it is inserted. |
| | Energetic Particle Detector | An instrument that detects and/or measures energetic charged particles. |
| | Gamma Ray Detector | An instrument that detects and/or measures gamma rays. |
| | Gas Analyzer | A high-temperature furnace combined with a mass spectrometer that heats a sample and analyzes the mass distribution of the evolved gases. |
| | Grinding Tool | A tool that grinds into samples. |
| | Hygrometer | An instrument used to measure the moisture content of its environment. |
| | Imager | An instrument that records and stores digital images (compare 'camera'). |
| | Imaging Spectrometer | An instrument that combines the functions of a spectrometer and an imager - i.e., it captures and stores multiple images, each at a slightly different wavelength. |
| | Inertial Measurement Unit | An instrument that measures changes in its own velocity and orientation by using a combination of accelerometers, gyroscopes, and/or other devices. |
| | Infrared Spectrometer | An instrument that measures the spectral distribution of infrared radiation. |
| | Laser Induced Breakdown Spectrometer | An instrument that uses an active laser to generate a plasma from a target and then measures the energy spectrum of the evolved plasma. |
| | Magnetometer | An instrument that measures the strength and/or direction of a magnetic field. |
| | Mass Spectrometer | An instrument that measures the number of particles in a sample as a function of their mass. |
| | Microwave Spectrometer | An instrument that measures the spectral distribution of microwave radiation. |
| | Moessbauer Spectrometer | An instrument that uses the Mossbauer effect to determine the abundance of Fe-bearing minerals in a sample. |
| | Naked Eye | Observations made with the naked eye and recorded in a data product. |
| | Neutral Particle Detector | An instrument that detects and/or measures neutral particles. |

| *Name:* **type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | Neutron Detector | An instrument that measures the number and/or energy distribution of neutrons. |
| | Photometer | An instrument that measures radiation intensity (e.g., of visible light), sometimes with the goal of inferring optical properties of materials illuminated by the source and observed by the photometer. |
| | Plasma Analyzer | An instrument that measures the spectral distribution of energy in a low-frequency plasma. |
| | Plasma Detector | An instrument that detects and/or measures low energy charged particles. |
| | Plasma Wave Spectrometer | An instrument that measures the energy distribution in a low-frequency plasma. |
| | Polarimeter | An instrument that measures the polarization of electromagnetic radiation. |
| | RADAR | An instrument that transmits and receives radio signals for the purpose of detecting, determining the range (distance) to, velocity of, and/or direction of one or more distant targets. |
| | Radio Science | An instrument suite used to conduct measurements at radio frequencies. |
| | Radio Spectrometer | An instrument that measures the spectral distribution of electromagnetic radiation at radio frequencies. |
| | Radio Telescope | An instrument used to focus and capture radio waves. |
| | Radiometer | An instrument which measures the radiant flux of electromagnetic radiation. |
| | Reflectometer | An instrument that measures the reflectance of surfaces. An electron reflectometer measures the properties of electrons trapped along magnetic field lines to infer the strength and direction of the field remotely. |
| | Robotic Arm | A tool used to place in-situ instruments on surface rocks or soil, dig into a surface, and/or to collect surface samples for other instruments to analyze on a spacecraft. |
| | Spectrograph Imager | See Imaging Spectrometer. |
| | Spectrometer | An instrument used to measure properties over a specific portion of a spectrum - for example, a mass spectrometer measures the number of particles in discrete mass ranges, and a radio spectrometer measures the amount of electromagnetic radiation as a function of frequency or wavelength. |
| | Thermal Imager | An instrument that captures an image at thermal infrared wavelengths. |

| *Name:* **type** | *Version Id:* **1.0.0.0** |
|---|---|
| | Thermal Probe | An in situ instrument that measures thermal properties (e.g., temperature) at one or more points along its length. |
| | Thermometer | An instrument that measures temperature. |
| | Ultraviolet Spectrometer | An instrument that measures the spectral distribution of ultraviolet radiation. |
| | Wet Chemistry Laboratory | An instrument that mixes soil samples with solutions to measure material properties such as pH, conductivity, oxidation-reduction potential, etc. |
| | X-ray Detector | An instrument that detects and/or measures X-rays. |
| | X-ray Diffraction Spectrometer | An instrument that uses a beam of X-rays to probe the internal structure of a powdered sample and identify its mineral composition. |
| | X-ray Fluorescence Spectrometer | An instrument that measures the emission of secondary X-rays to determine the elemental composition of a sample that has been irradiated with primary X-rays. |

# type in Instrument_Host

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute classifies the instrument host. When more than one value is correct, the value with the finest granularity should be selected. That is, choose "rover" rather than "spacecraft" when both would be correct since rover more narrowly defines the type of instrument host. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Instrument_Host | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Earth Based - *Deprecated* | The Instrument Host is classified as being of type Earth Based | |
| | Earth-based | The instrument host is on or near the surface of Earth (no more than 100 km altitude above the surface). | |
| | Lander | A spacecraft designed for descent to and operation at a single fixed point on the surface of a celestial body. | |
| | Rover | A spacecraft designed for descent to and mobile operation on the surface of a celestial body. | |
| | Spacecraft | A vehicle designed for travel in outer space ('outer space' is the region more than 100 km above the Earth's surface, a convention accepted | |

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | in many contexts -- see http://en.wikipedia.org/wiki/Outer_space). | |

# type in Investigation

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Investigation | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Individual Investigation | A set of experiments and/or observations with a clearly defined purpose that uses existing facilities and is under the direction of a single individual. For example, a series of related laboratory experiments/observations conducted by a small university team and funded through a single proposal could be an Individual Investigation. Library research by one person on previously published results to distill common conclusions could also be an Individual Investigation. | |
| | Mission | A set of experiments and/or observations with a clearly defined purpose that occupies the designated resources for all (or at least a significant fraction) of the available time. A mission is usually conducted by a national or international space agency using a small number (often one) of spacecraft especially designed and built for the purpose. For example: (1) the NASA Voyager mission launched two spacecraft to Jupiter and Saturn; (2) the Deep Impact (DI) mission launched a spacecraft, part of which impacted the comet Tempel 2; and (3) the EPOXI mission redefined the objectives of the surviving DI hardware for further exploration of the solar system. | |
| | Observing Campaign | A set of experiments and/or observations with a clearly defined purpose that uses (primarily) existing facilities, but not exclusively. After (and possibly during) the campaign other investigations are carried out using the same facilities. For example, the International Halley Watch mobilized observatories around the world for collection of data during the most recent apparition of Comet Halley. The Shoemaker-Levy-9 (SL9) campaign used both Earth-based | |

| Name: type | Version Id: 1.0.0.0 |
|---|---|
| | | and spacecraft instruments to monitor the SL9 impact on Jupiter. |
| | Other Investigation | Any other set of experiments and/or observations with a unifying theme. |

# type in Investigation_Area

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Investigation_Area | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Individual Investigation | A set of experiments and/or observations with a clearly defined purpose that uses existing facilities and is under the direction of a single individual. For example, a series of related laboratory experiments/observations conducted by a small university team and funded through a single proposal could be an Individual Investigation. Library research by one person on previously published results to distill common conclusions could also be an Individual Investigation. | |
| | Mission | A set of experiments and/or observations with a clearly defined purpose that occupies the designated resources for all (or at least a significant fraction) of the available time. A mission is usually conducted by a national or international space agency using a small number (often one) of spacecraft especially designed and built for the purpose. For example: (1) the NASA Voyager mission launched two spacecraft to Jupiter and Saturn; (2) the Deep Impact (DI) mission launched a spacecraft, part of which impacted the comet Tempel 2; and (3) the EPOXI mission redefined the objectives of the surviving DI hardware for further exploration of the solar system. | |
| | Observing Campaign | A set of experiments and/or observations with a clearly defined purpose that uses (primarily) existing facilities, but not exclusively. After (and possibly during) the campaign other investigations are carried out using the same facilities. For example, the International Halley Watch mobilized observatories around the world for collection of data during the most recent apparition of Comet Halley. The Shoemaker- | |

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | | Levy-9 (SL9) campaign used both Earth-based and spacecraft instruments to monitor the SL9 impact on Jupiter. | |
| | Other Investigation | Any other set of experiments and/or observations with a unifying theme. | |

# type in Observing_System_Component

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Observing_System_ Component | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Artificial Illumination | The observing system component is classified as Artificial Illumination | |
| | Instrument | The observing system component is classified as Instrument | |
| | Laboratory | The observing system component is classified as Laboratory | |
| | Literature Search | The observing system component is classified as Literature Search | |
| | Naked Eye | The observing system component is classified as Naked Eye (a person) | |
| | Observatory | The observing system component is classified as Observatory | |
| | Spacecraft | The observing system component is classified as Spacecraft | |
| | Telescope | The observing system component is classified as Telescope | |

# type in Primary_Result_Summary *Deprecated*

| Name: type *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Primary_ Result_Summary | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| *Name:* type *Deprecated* | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Deprecated | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Altimetry | Measurement of altitude. | |
| | Astrometry | Precise measurement of positions of heavenly bodies. | |
| | Count | A recording of the number of discrete events | |
| | E/B-Field Vectors | Arrays populated by values of the electric/ magnetic field in three orthogonal directions. | |
| | Gravity Model | An approximation to the gravity field of an object derived from measurement and/or theory | |
| | Image | A two-dimensional representation of a field of view | |
| | Lightcurves | This value indicates data products containing time-sequences of magnitude measurements for one or more individual targets (typically asteroids or comets). | |
| | Map | A two-dimensional representation of the plan view of a surface | |
| | Meteorology | Measurements of the meteorological conditions of an atmosphere such as pressure, temperature, wind speed, etc. | |
| | Null Result | Measurements which failed. | |
| | Occultation | Measurements conducted when one celestial body progressively hides another | |
| | Photometry | Measurement of light flux | |
| | Physical Parameters | This value indicates data products containing compilations of one or more physical parameters - like albedo, density, absolute magnitude, etc. It is generally used for data that combines these highly-derived results from multiple sources. | |
| | Polarimetry | Measurement of the polarization state of radiation. | |
| | Radiometry | Measurement of the radiation coming from a body, usually at infrared and longer wavelengths | |
| | Reference | A Reference product provides ancillary information needed to support the use of another data product. Reference products include things like tables of foot notes or lists of detailed citations, and are usually associated with data products compiled from the published literature. | |
| | Shape Model | An approximation to the shape of an object derived from measurements and/or theory | |
| | Spectrum | An array containing values of a dependent variable as a function of an independent variable. | |

# type in Quaternion

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Quaternion | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | SPICE | Quaternion is type SPICE. This quaternion system defines components zero through three, with the 0th component as the scalar, and the 1st, 2nd and 3rd the vector components. | |
| | Spacecraft Telemetry | Quaternion is type Spacecraft Telemetry. This quaternion system defines components one through four, with the fourth component as the scalar, and the 1st, 2nd and 3rd as the vector components. | |

# type in Resource

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Resource | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Information.Agency | An information resource that describes an agency. | |
| | Information.Instrument | An information resource that describes an instrument | |
| | Information.Instrument_Host | An information resource that describes an instrument host | |
| | Information.Investigation | An information resource that describes an investigation | |
| | Information.Node | An information resource that describes a node | |
| | Information.Person | An information resource that describes a person | |
| | Information.Resource | An information resource that describes a generic resource | |
| | Information.Science_Portal | An information resource that describes a science portal | |

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| | Information.Target | An information resource that describes a target | |
| | System.Browse | A system resource that provides browse functionality. | |
| | System.Directory_ Listing | A system resource that provides a directory listing. | |
| | System.Registry_Query | A system resource for registry query. | |
| | System.Search | A system resource that provides search functionality. | |
| | System.Transform | A system resource that provides transform functionality. | |
| | System.Transport | A system resource that provides transport functionality. | |

# type in Target

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Target | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Asteroid | The Target is classified as an Asteroid | |
| | Comet | The Target is classified as a Comet | |
| | Dust | The Target is classified as Dust | |
| | Dwarf Planet | The Target is classified as a Dwarf Planet | |
| | Galaxy | The Target is classified as a Galaxy | |
| | Globular Cluster | The Target is classified as a Globular Cluster | |
| | Meteorite | The Target is classified as a Meteorite | |
| | Meteoroid | The Target is classified as a Meteoroid | |
| | Meteoroid Stream | The Target is classified as a Meteoroid Stream | |
| | Nebula | The Target is classified as a Nebula | |
| | Open Cluster | The Target is classified as an Open Cluster | |
| | Planet | The Target is classified as a Planet | |
| | Planetary Nebula | The Target is classified as a Planetary Nebula | |
| | Planetary System | The Target is classified as a Planetary System | |
| | Plasma Cloud | The Target is classified as a Plasma Cloud | |
| | Ring | The Target is classified as a Ring | |
| | Satellite | The Target is classified as a Satellite | |
| | Star | The Target is classified as a Star | |

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| | Star Cluster | The Target is classified as a Star Cluster | |
| | Sun | The Target is classified as a Sun | |
| | Terrestrial Sample | The Target is classified as a Terrestrial Sample | |
| | Trans-Neptunian Object | The Target is classified as a Trans-Neptunian Object | |

# type in Target_Identification

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a target's type, used to determine correct nomenclature for the name field. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Target_Identification | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Asteroid | The Target is classified as an Asteroid | |
| | Calibration | The Target is classified as Calibration | |
| | Comet | The Target is classified as a Comet | |
| | Dust | The Target is classified as Dust | |
| | Dwarf Planet | The Target is classified as a Dwarf Planet | |
| | Galaxy | The Target is classified as a Galaxy | |
| | Globular Cluster | The Target is classified as a Globular Cluster | |
| | Meteorite | The Target is classified as a Meteorite | |
| | Meteoroid | The Target is classified as a Meteoroid | |
| | Meteoroid Stream | The Target is classified as a Meteoroid Stream | |
| | Nebula | The Target is classified as a Nebula | |
| | Open Cluster | The Target is classified as an Open Cluster | |
| | Planet | The Target is classified as a Planet | |
| | Planetary Nebula | The Target is classified as a Planetary Nebula | |
| | Planetary System | The Target is classified as a Planetary System | |
| | Plasma Cloud | The Target is classified as a Plasma Cloud | |
| | Ring | The Target is classified as a Ring | |
| | Satellite | The Target is classified as a Satellite | |
| | Star | The Target is classified as a Star | |
| | Star Cluster | The Target is classified as a Star Cluster | |
| | Sun | The Target is classified as a Sun | |
| | Terrestrial Sample | The Target is classified as a Terrestrial Sample | |
| | Trans-Neptunian Object | The Target is classified as a Trans-Neptunian Object | |

# type in Unit_Of_Measure

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Unit_Of_ Measure | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# type in Units_of_Acceleration

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Acceleration | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Acceleration | Units_of_Acceleration is classified as being of type Acceleration | |

# type in Units_of_Amount_Of_Substance

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Amount_Of_Substance | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Amount_Of_Substance | Units_of_Amount_Of_Substance is classified as being of type Amount_Of_Substance | |

# type in Units_of_Angle

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Angle | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Angle | Units_of_Angle is classified as being of type Angle | |

# type in Units_of_Angular_Velocity

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Angular_Velocity | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Angular_Velocity | Units_of_Angular_Velocity is classified as being of type Angular_Velocity | |

# type in Units_of_Area

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Area | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Area | Units_of_Area is classifed as being of type Area | |

# type in Units_of_Current

| Name: **type** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Current | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Current | Units_of_Current is classified as being of type Current | |

# type in Units_of_Frame_Rate

| Name: **type** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Frame_Rate | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Frame_Rate | Units_of_Frame_Rate is classified as being of type Frame Rate | |

# type in Units_of_Frequency

| Name: **type** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Frequency | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Frequency | Units_of_Frequency is classified as being of type Frequency | |

# type in Units_of_Length

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Length | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Length | Units_of_Length is classified as being of type Length | |

# type in Units_of_Map_Scale

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Map_Scale | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Scale | Units_of_Map_Scale is classified as being of type Scale | |

# type in Units_of_Mass

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Mass | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Mass | Units_of_Mass is classified as being of type Mass | |

# type in Units_of_Misc

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Misc | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Miscellaneous | Units_of_Misc is classified as being of type Miscellaneous | |

# type in Units_of_None

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_None | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | None | Units_of_None is classified as being of type None | |

# type in Units_of_Optical_Path_Length

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Optical_Path_Length | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Optical_Path_Length | Units_of_Optical_Path_Length is classified as being of type Optical_Path_Length | |

# type in Units_of_Pressure

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Pressure | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Pressure | Units_of_Pressure is classified as being of type Pressure | |

# type in Units_of_Radiance

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Radiance | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Radiance | Units_of_Radiance is classified as being of type Radiance | |

# type in Units_of_Rates

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Rates | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Rates | Units_of_Rates is classified as being of type Rates | |

# type in Units_of_Solid_Angle

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Solid_Angle | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Solid_Angle | Units_of_Solid_Angle is classified as being of type Solid_Angle | |

# type in Units_of_Spectral_Irradiance

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Spectral_Irradiance | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Spectral_Irradiance | Units_of_Spectral_Irradiance is classified as being of the type Spectral_Irradiance | |

# type in Units_of_Spectral_Radiance

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Spectral_Radiance | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Spectral_Radiance | Units_of_Spectral_Radiance is classified as being of the type Spectral_Radiance | |

# type in Units_of_Storage

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Storage | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Storage | Units_of_Storage is classified as being of type Storage | |

# type in Units_of_Temperature

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Temperature | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Temperature | Units_of_Temperature is classified as being of type Temperature | |

# type in Units_of_Time

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Time | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Time | Units_of_Time is classified as being of type Time | |

# type in Units_of_Velocity

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Velocity | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Velocity | Units_of_Velocity is classified as being of type Velocity | |

# type in Units_of_Voltage

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Voltage | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Voltage | Units_of_Voltage is classified as being of type Voltage | |

# type in Units_of_Volume

| Name: type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The type attribute provides a classification for the resource. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Volume | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Volume | Units_of_Volume is classified as being of the type Volume | |

# type in Units_of_Wavenumber

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Wavenumber | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Wavenumber | Units_of_Wavenumber is classified as being of the type Wavenumber | |

# type in Vector

| *Name:* **type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The type attribute provides a classification for the resource. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Acceleration | Vector is type Acceleration | |
| | Pointing | Vector is type Pointing | |
| | Position | Vector is type Position | |
| | Velocity | Vector is type Velocity | |

# unit in Axis_Array *Deprecated*

| *Name:* **unit *Deprecated*** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit attribute provides the unit of measurement. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Axis_ Array | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Text |
| *Status:* Deprecated | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# unit in Element_Array

| *Name:* **unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit attribute provides the unit of measurement. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Element_ Array | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Unit | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# unit in Field_Binary

| *Name:* **unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit attribute provides the unit of measurement. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Binary | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Unit | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# unit in Field_Bit

| *Name:* **unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit attribute provides the unit of measurement. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_Bit | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Unit | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# unit in Field_Character

| *Name:* **unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit attribute provides the unit of measurement. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Character | *Type:* UTF8_Short_ String_Collapsed |

| Name: unit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Unit | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# unit in Field_Delimited

| Name: unit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit attribute provides the unit of measurement. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Unit | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# unit in Vector_Component

| Name: unit | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit attribute provides the unit of measurement. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector_ Component | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Unit | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# unit_id in Unit_Of_Measure

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Unit_Of_ Measure | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# unit_id in Units_of_Acceleration

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Acceleration | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | cm/s**2 | The abbreviated unit for Units_of_Acceleration is cm/s**2 | |
| | km/s**2 | The abbreviated unit for Units_of_Acceleration is km/s**2 | |
| | m/s**2 | The abbreviated unit for Units_of_Acceleration is m/s**2 | |

# unit_id in Units_of_Amount_Of_Substance

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Amount_Of_Substance | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | mol | The abbreviated unit for Units_of_Amount_Of_Substance is mol | |

# unit_id in Units_of_Angle

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Angle | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | arcmin | The abbreviated unit for Units_of_Angle is arcmin | |
| | arcsec | The abbreviated unit for Units_of_Angle is arcsec | |
| | deg | The abbreviated unit for Units_of_Angle is deg | |
| | hr | The abbreviated unit for Units_of_Angle is hr | |
| | mrad | The abbreviated unit for Units_of_Angle is mrad | |
| | rad | The abbreviated unit for Units_of_Angle is rad | |

# unit_id in Units_of_Angular_Velocity

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Angular_Velocity | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | deg/day | The abbreviated unit for Units_of_Angular_Velocity is deg/day | |
| | deg/s | The abbreviated unit for Units_of_Angular_Velocity is deg/s | |
| | rad/s | The abbreviated unit for Units_of_Angular_Velocity is rad/s | |

# unit_id in Units_of_Area

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Area | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | m**2 | The abbreviated unit for Units_of_Area is m**2 | |

# unit_id in Units_of_Current

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Current | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | A | The abbreviated unit for Units_of_Current is A | |
| | mA | The abbreviated unit for Units_of_Current is mA | |

# unit_id in Units_of_Frame_Rate

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Frame_Rate | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | frames/s | The abbreviated unit for Units_of_Frame_Rate is frames/s | |

# unit_id in Units_of_Frequency

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Frequency | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Hz | The abbreviated unit for Units_of_Frequency is Hz | |

# unit_id in Units_of_Length

| Name: **unit_id** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Length | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | AU | The abbreviated unit for Units_of_Length is AU (astronomical unit) | |
| | Angstrom | The abbreviated unit for Units_of_Length is Angstrom | |
| | cm | The abbreviated unit for Units_of_Length is cm | |
| | km | The abbreviated unit for Units_of_Length is km | |
| | m | The abbreviated unit for Units_of_Length is m | |
| | micrometer | The abbreviated unit for Units_of_Length is micrometer | |
| | mm | The abbreviated unit for Units_of_Length is mm | |
| | nm | The abbreviated unit for Units_of_Length is nm | |

# unit_id in Units_of_Map_Scale

| Name: **unit_id** | | | Version Id: **1.0.0.0** |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Map_Scale | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | km/pixel | The abbreviated unit for Units_of_Map_Scale is km/pixel | |
| | m/pixel | The abbreviated unit for Units_of_Map_Scale is m/pixel | |
| | mm/pixel | The abbreviated unit for Units_of_Map_Scale is mm/pixel | |
| | pixel/deg | The abbreviated unit for Units_of_Map_Scale is pixel/deg | |

# unit_id in Units_of_Mass

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Mass | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | g | The abbreviated unit for Units_of_Mass is g | |
| | kg | The abbreviated unit for Units_of_Mass is kg | |

# unit_id in Units_of_Misc

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Misc | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | DN | The abbreviated unit for Units_of_Misc is DN | |
| | electron/DN | The abbreviated unit for Units_of_Misc is electron/DN | |
| | pixel | The abbreviated unit for Units_of_Misc is pixel | |

# unit_id in Units_of_None

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ None | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | none | The abbreviated unit for Units_of_None is none | |

# unit_id in Units_of_Optical_Path_Length

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Optical_Path_Length | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | airmass | The abbreviated unit for Units_of_Optical_Path_Length is airmass | |

# unit_id in Units_of_Pressure

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Pressure | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Pa | The abbreviated unit for Units_of_Pressure is Pa | |
| | bar | The abbreviated unit for Units_of_Pressure is bar (10**5 Pa) | |
| | hPa | The abbreviated unit for Units_of_Pressure is hPa (100 Pa) | |
| | mbar | The abbreviated unit for Units_of_Pressure is mbar (100 Pa) | |

# unit_id in Units_of_Radiance

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Radiance | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | W*m**-2*sr**-1 - *Deprecated* | The abbreviated unit of Units_of_Radiance is W*m**-2*sr**-1 | |
| | W/m**2/sr | The abbreviated unit of Units_of_Radiance is W/ m**2/sr | |

# unit_id in Units_of_Rates

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Rates | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | counts/bin | The abbreviated unit for Units_of_Rates is counts/bin | |
| | kilobits/s | The abbreviated unit for Units_of_Rates is kilobits/s | |

# unit_id in Units_of_Solid_Angle

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Solid_Angle | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | sr | The abbreviated unit for Units_of_Solid_Angle is sr | |

# unit_id in Units_of_Spectral_Irradiance

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Spectral_Irradiance | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | SFU | The abbreviated unit for Units_of_Spectral_Irradiance is SFU | |
| | W*m**-2*Hz**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-2*Hz**-1 | |
| | W*m**-2*nm**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-2*nm**-1 | |
| | W*m**-3 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-3 | |
| | W/m**2/Hz | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**2/Hz | |
| | W/m**2/nm | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**2/nm | |
| | W/m**3 | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**3 | |
| | uW*cm**-2*um**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Irradiance is uW*cm**-2*um**-1 | |
| | μW/cm**2/μm | The abbreviated unit of Units_of_Spectral_Irradiance is μW/cm**2/μm | |

# unit_id in Units_of_Spectral_Radiance

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_ Spectral_Radiance | *Type:* UTF8_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |

| Name: unit_id | | Version Id: 1.0.0.0 |
|---|---|---|
| | W*m**-2*sr**-1*Hz**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*Hz**-1 |
| | W*m**-2*sr**-1*nm**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*nm**-1 |
| | W*m**-2*sr**-1*um**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*um**-1 |
| | W*m**-3*sr**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-3*sr**-1 |
| | W/m**2/sr/Hz | The abbreviated unit of Units_of_Spectral_Radiance is W/m**2/sr/Hz |
| | W/m**2/sr/nm | The abbreviated unit of Units_of_Spectral_Radiance is W/m**2/sr/nm |
| | W/m**2/sr/μm | The abbreviated unit for Units_of_Spectral_Radiance is W/m**2/sr/μm |
| | W/m**3/sr | The abbreviated unit of Units_of_Spectral_Radiance is W/m**3/sr |
| | uW*cm**-2*sr**-1*um**-1 - *Deprecated* | The abbreviated unit for Units_of_Spectral_Radiance is uW*cm**-2*sr**-1*um**-1 |
| | μW/cm**2/sr/μm | The abbreviated unit for Units_of_Spectral_Radiance is μW/cm**2/sr/μm |

# unit_id in Units_of_Storage

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_Storage | Type: UTF8_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | byte | The abbreviated unit of Units_of_Storage is byte | |

# unit_id in Units_of_Temperature

| Name: unit_id | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | |

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Temperature | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | K | The abbreviated unit of Units_of_Temperature is K | |
| | degC | The abbreviated unit of Units_of_Temperature is degC | |

# unit_id in Units_of_Time

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Time | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | day | The abbreviated unit for Units_of_Time is day | |
| | hr | The abbreviated unit for Units_of_Time is hr | |
| | julian day | The abbreviated unit for Units_of_Time is julian day | |
| | microseconds | The abbreviated unit for Units_of_Time is microseconds | |
| | min | The abbreviated unit for Units_of_Time is min | |
| | ms | The abbreviated unit for Units_of_Time is ms | |
| | s | The abbreviated unit for Units_of_Time is s | |
| | yr | The abbreviated unit for Units_of_Time is yr | |

# unit_id in Units_of_Velocity

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Velocity | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | cm/s | The abbreviated unit for Units_of_Velocity is cm/s | |
| | km/s | The abbreviated unit for Units_of_Velocity is km/s | |
| | m/s | The abbreviated unit for Units_of_Velocity is m/s | |

# unit_id in Units_of_Voltage

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_Voltage | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | V | The abbreviated unit for Units_of_Voltage is V | |
| | mV | The abbreviated unit for Units_of_Voltage is mV | |

# unit_id in Units_of_Volume

| *Name:* **unit_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Units_of_Volume | *Type:* UTF8_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | L | The abbreviated unit for Units_of_Volume is L | |
| | m**3 | The abbreviated unit for Units_of_Volume is m**3 | |

# unit_id in Units_of_Wavenumber

| Name: unit_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_id attribute provides a character or character string which serves as an abbreviation for, or symbol representing, a unit of measure. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Units_of_ Wavenumber | Type: UTF8_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | 1/cm | The abbreviated unit of Units_of_Wavenumber is 1/cm | |
| | 1/m | The abbreviated unit of Units_of_Wavenumber is 1/m | |
| | 1/nm | The abbreviated unit of Units_of_Wavenumber is 1/nm | |
| | cm**-1 - *Deprecated* | The abbreviated unit for Units_of_Wavenumber is cm**-1 | |
| | m**-1 - *Deprecated* | The abbreviated unit for Units_of_Wavenumber is m**-1 | |
| | nm**-1 - *Deprecated* | The abbreviated unit for Units_of_Wavenumber is nm**-1 | |

# unit_of_measure_type in DD_Value_Domain

| Name: unit_of_measure_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_of_measure_type attribute provides the named grouping of units to be used for this attribute - for example Units_of_Length and Units_of_Time. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Value_Domain | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Units_of_Acceleration | The value is given in a unit which conveys acceleration | |
| | Units_of_Amount_Of_ Substance | The value is given in a unit which conveys amount of substance | |
| | Units_of_Angle | The value is given in a unit which conveys angle | |
| | Units_of_Angular_ Velocity | The value is given in a unit which conveys angular velocity | |
| | Units_of_Area | The value is given in a unit which conveys area | |

| Name: unit_of_measure_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | Units_of_Frame_Rate | The value is given in a unit which conveys frame rate |
| | Units_of_Frequency | The value is given in a unit which conveys frequency |
| | Units_of_Length | The value is given in a unit which conveys length |
| | Units_of_Map_Scale | The value is given in a unit which conveys map scale |
| | Units_of_Mass | The value is given in a unit which conveys mass |
| | Units_of_Misc | The value is given in a unit which is in a miscellaneous category |
| | Units_of_None | The value is given without regard to a unit of measure |
| | Units_of_Optical_Path_Length | The value is given in a unit which conveys optical path length |
| | Units_of_Pressure | The value is given in a unit which conveys pressure |
| | Units_of_Radiance | The value is given in a unit which conveys radiance |
| | Units_of_Rates | The value is given in a unit which conveys rates or counts per unit time |
| | Units_of_Solid_Angle | The value is given in a unit which conveys solid angle |
| | Units_of_Spectral_Irradiance | The value is given in a unit which conveys spectral irradiance |
| | Units_of_Spectral_Radiance | The value is given in a unit which conveys spectral radiance |
| | Units_of_Storage | The value is given in a unit which conveys computer storage |
| | Units_of_Temperature | The value is given in a unit which conveys temperature |
| | Units_of_Time | The value is given in a unit which conveys time |
| | Units_of_Velocity | The value is given in a unit which conveys velocity |
| | Units_of_Voltage | The value is given in a unit which conveys voltage |
| | Units_of_Volume | The value is given in a unit which conveys volume |
| | Units_of_Wavenumber | The value is given in a unit which conveys wavenumber |

# unit_of_measure_type in DD_Value_Domain_ Full

| Name: unit_of_measure_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The unit_of_measure_type attribute provides the named grouping of units to be used for this attribute - for example Units_of_Length and Units_of_Time. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Value_Domain_Full | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Units_of_Amount_Of_ Substance | The value is given in a unit which conveys amount of substance | |
| | Units_of_Angle | The value is given in a unit which conveys angle | |
| | Units_of_Angular_ Velocity | The value is given in a unit which conveys angular velocity | |
| | Units_of_Area | The value is given in a unit which conveys area | |
| | Units_of_Frame_Rate | The value is given in a unit which conveys frame rate | |
| | Units_of_Frequency | The value is given in a unit which conveys frequency | |
| | Units_of_Length | The value is given in a unit which conveys length | |
| | Units_of_Map_Scale | The value is given in a unit which conveys map scale | |
| | Units_of_Mass | The value is given in a unit which conveys mass | |
| | Units_of_Misc | The value is given in a unit which is in a miscellaneous category | |
| | Units_of_None | The value is given without regard to a unit of measure | |
| | Units_of_Optical_ Path_Length | The value is given in a unit which conveys optical path length | |
| | Units_of_Pressure | The value is given in a unit which conveys pressure | |
| | Units_of_Radiance | The value is given in a unit which conveys radiance | |
| | Units_of_Rates | The value is given in a unit which conveys rates or counts per unit time | |
| | Units_of_Solid_Angle | The value is given in a unit which conveys solid angle | |
| | Units_of_Spectral_ Irradiance | The value is given in a unit which conveys spectral irradiance | |

| *Name:* **unit_of_measure_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | Units_of_Spectral_ Radiance | The value is given in a unit which conveys spectral radiance |
| | Units_of_Storage | The value is given in a unit which conveys computer storage |
| | Units_of_Temperature | The value is given in a unit which conveys temperature |
| | Units_of_Time | The value is given in a unit which conveys time |
| | Units_of_Velocity | The value is given in a unit which conveys velocity |
| | Units_of_Voltage | The value is given in a unit which conveys voltage |
| | Units_of_Volume | The value is given in a unit which conveys volume |
| | Units_of_Wavenumber | The value is given in a unit which conveys wavenumber |

# unknown_constant in Special_Constants

| *Name:* **unknown_constant** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The unknown_constant attribute provides a value that indicates the original value was unknown. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Special_ Constants | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Constant | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# url in External_Reference_Extended

| *Name:* **url** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The url attribute provides a Uniform Resource Identifier (URI) that specifies where a resource is available and the mechanism for retrieving it. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* External_ Reference_Extended | *Type:* ASCII_AnyURI |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# url in Resource

| *Name:* **url** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The url attribute provides a Uniform Resource Identifier (URI) that specifies where a resource is available and the mechanism for retrieving it. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Resource | *Type:* ASCII_AnyURI |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# users_manual_id in Software

| *Name:* **users_manual_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The users manual id attribute provides a formal name used to refer to a manual that describes how to use the software. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Software | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# valid_maximum in Special_Constants

| *Name:* **valid_maximum** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The valid_maximum attribute specifies the maximum valid value in the field or digital object with which the Special_Constants class is associated. Values above the valid_maximum have a special meaning. Values of this attribute should be represented in the same data_type as the elements in the object or field described. (Note that PDS3 had no qube-related valid_maximum values because all special constants were set below the valid_minimum.) | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Special_ Constants | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Maximum | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# valid_minimum in Special_Constants

| Name: valid_minimum | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The valid_minimum attribute specifies the minimum valid value in the field or digital object with which the Special_Constants class is associated. Values below the valid_minimum have a special meaning. Values of this attribute should be represented in the same data_type as the elements in the object or field described. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Special_ Constants | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Minimum | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value in DD_Permissible_Value

| Name: value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value attribute provides a single, allowed numerical or character string value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Permissible_Value | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value in DD_Permissible_Value_Full

| Name: value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value attribute provides a single, allowed numerical or character string value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Permissible_Value_ Full | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Value | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value in Quaternion_Component

| Name: value | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value attribute provides a single, allowed numerical or character string value. | | | |

| *Name:* **value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Quaternion_ Component | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value in Vector_Component

| *Name:* **value** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value attribute provides a single, allowed numerical or character string value. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector_ Component | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Value | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_begin_date in DD_Permissible_Value_ Full

| *Name:* **value_begin_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_begin_date attribute provides the first date on which the permissible value is in effect. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Permissible_Value_ Full | *Type:* ASCII_Date_ Time_YMD |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_data_type in DD_Value_Domain

| *Name:* **value_data_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_data_type attribute provides the data type used to represent the value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Value_Domain | *Type:* ASCII_Short_ String_Collapsed |

| Name: value_data_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | ASCII_AnyURI | The value is expressed using the data type ASCII_AnyURI | |
| | ASCII_Boolean | The value is expressed using the data type ASCII_Boolean | |
| | ASCII_DOI | The value is expressed using the data type ASCII_DOI | |
| | ASCII_Date_DOY | The value is expressed using the data type ASCII_Date_DOY | |
| | ASCII_Date_Time | The value is expressed using the data type ASCII_Date_Time | |
| | ASCII_Date_Time_ DOY | The value is expressed using the data type ASCII_Date_Time_DOY | |
| | ASCII_Date_Time_ UTC | The value is expressed using the data type ASCII_Date_Time_UTC | |
| | ASCII_Date_Time_ YMD | The value is expressed using the data type ASCII_Date_Time_YMD | |
| | ASCII_Date_YMD | The value is expressed using the data type ASCII_Date_YMD | |
| | ASCII_Directory_ Path_Name | The value is expressed using the data type ASCII_Directory_Path_Name | |
| | ASCII_File_Name | The value is expressed using the data type ASCII_File_Name | |
| | ASCII_File_ Specification_Name | The value is expressed using the data type ASCII_File_Specification_Name | |
| | ASCII_Integer | The value is expressed using the data type ASCII_Integer | |
| | ASCII_LID | The value is expressed using the data type ASCII_LID | |
| | ASCII_LIDVID | The value is expressed using the data type ASCII_LIDVID | |
| | ASCII_LIDVID_LID | The value is expressed using the data type ASCII_LIDVID_LID | |
| | ASCII_MD5_ Checksum | The value is expressed using the data type ASCII_MD5_Checksum | |
| | ASCII_NonNegative_ Integer | The value is expressed using the data type ASCII_NonNegative_Integer | |
| | ASCII_Numeric_ Base16 | The value is expressed using the data type ASCII_Numeric_Base16 | |
| | ASCII_Numeric_Base2 | The value is expressed using the data type ASCII_Numeric_Base2 | |

| *Name:* **value_data_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | ASCII_Numeric_Base8 | The value is expressed using the data type ASCII_Numeric_Base8 |
| | ASCII_Real | The value is expressed using the data type ASCII_Real |
| | ASCII_Short_String_ Collapsed | The value is expressed using the data type ASCII_Short_String_Collapsed |
| | ASCII_Short_String_ Preserved | The value is expressed using the data type ASCII_Short_String_Preserved |
| | ASCII_Text_Collapsed | The value is expressed using the data type ASCII_Text_Collapsed |
| | ASCII_Text_Preserved | The value is expressed using the data type ASCII_Text_Preserved |
| | ASCII_Time | The value is expressed using the data type ASCII_Time |
| | ASCII_VID | The value is expressed using the data type ASCII_VID |
| | UTF8_Short_String_ Collapsed | The value is expressed using the data type UTF8_Short_String_Collapsed |
| | UTF8_Short_String_ Preserved | The value is expressed using the data type UTF8_Short_String_Preserved |
| | UTF8_Text_Preserved | The value is expressed using the data type UTF8_Text_Preserved |
| | Vector_Cartesian_3 | The value is expressed using the data type Vector_Cartesian_3 |
| | Vector_Cartesian_3_ Acceleration | The value is expressed using the data type Vector_Cartesian_3_Acceleration |
| | Vector_Cartesian_3_ Pointing | The value is expressed using the data type Vector_Cartesian_3_Pointing |
| | Vector_Cartesian_3_ Position | The value is expressed using the data type Vector_Cartesian_3_Position |
| | Vector_Cartesian_3_ Velocity | The value is expressed using the data type Vector_Cartesian_3_Velocity |

# value_data_type in DD_Value_Domain_Full

| *Name:* **value_data_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_data_type attribute provides the data type used to represent the value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Value_Domain_Full | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | ASCII_AnyURI | The value is expressed using the data type ASCII_AnyURI | |

| Name: value_data_type | | Version Id: 1.0.0.0 |
|---|---|---|
| | ASCII_Boolean | The value is expressed using the data type ASCII_Boolean |
| | ASCII_DOI | The value is expressed using the data type ASCII_DOI |
| | ASCII_Date_DOY | The value is expressed using the data type ASCII_Date_DOY |
| | ASCII_Date_Time | The value is expressed using the data type ASCII_Date_Time |
| | ASCII_Date_Time_ DOY | The value is expressed using the data type ASCII_Date_Time_DOY |
| | ASCII_Date_Time_ UTC | The value is expressed using the data type ASCII_Date_Time_UTC |
| | ASCII_Date_Time_ YMD | The value is expressed using the data type ASCII_Date_Time_YMD |
| | ASCII_Date_YMD | The value is expressed using the data type ASCII_Date_YMD |
| | ASCII_Directory_ Path_Name | The value is expressed using the data type ASCII_Directory_Path_Name |
| | ASCII_File_Name | The value is expressed using the data type ASCII_File_Name |
| | ASCII_File_ Specification_Name | The value is expressed using the data type ASCII_File_Specification_Name |
| | ASCII_Integer | The value is expressed using the data type ASCII_Integer |
| | ASCII_LID | The value is expressed using the data type ASCII_LID |
| | ASCII_LIDVID | The value is expressed using the data type ASCII_LIDVID |
| | ASCII_LIDVID_LID | The value is expressed using the data type ASCII_LIDVID_LID |
| | ASCII_MD5_ Checksum | The value is expressed using the data type ASCII_MD5_Checksum |
| | ASCII_NonNegative_ Integer | The value is expressed using the data type ASCII_NonNegative_Integer |
| | ASCII_Numeric_ Base16 | The value is expressed using the data type ASCII_Numeric_Base16 |
| | ASCII_Numeric_Base2 | The value is expressed using the data type ASCII_Numeric_Base2 |
| | ASCII_Numeric_Base8 | The value is expressed using the data type ASCII_Numeric_Base8 |
| | ASCII_Real | The value is expressed using the data type ASCII_Real |
| | ASCII_Short_String_ Collapsed | The value is expressed using the data type ASCII_Short_String_Collapsed |
| | ASCII_Short_String_ Preserved | The value is expressed using the data type ASCII_Short_String_Preserved |

| *Name:* **value_data_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | ASCII_Text_Collapsed | The value is expressed using the data type ASCII_Text_Collapsed |
| | ASCII_Text_Preserved | The value is expressed using the data type ASCII_Text_Preserved |
| | ASCII_Time | The value is expressed using the data type ASCII_Time |
| | ASCII_VID | The value is expressed using the data type ASCII_VID |
| | UTF8_Short_String_ Collapsed | The value is expressed using the data type UTF8_Short_String_Collapsed |
| | UTF8_Short_String_ Preserved | The value is expressed using the data type UTF8_Short_String_Preserved |
| | UTF8_Text_Preserved | The value is expressed using the data type UTF8_Text_Preserved |

# value_end_date in DD_Permissible_Value_ Full

| *Name:* **value_end_date** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_end_date attribute provides the last date on which the permissible value is in effect. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Permissible_Value_ Full | *Type:* ASCII_Date_ Time_YMD |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Time | *Conceptual Domain:* Time |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_meaning in DD_Permissible_Value

| *Name:* **value_meaning** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_meaning attribute provides the meaning, or semantic content, of the associated permissible value. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_ Permissible_Value | *Type:* ASCII_Text_ Preserved |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Text | *Conceptual Domain:* Text |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_meaning in DD_Permissible_Value_ Full

| Name: value_meaning | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value_meaning attribute provides the meaning, or semantic content, of the associated permissible value. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Permissible_Value_ Full | Type: ASCII_Text_ Preserved |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Text | Conceptual Domain: Text |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value_offset in Band_Bin *Deprecated*

| Name: value_offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| Namespace Id: pds | Steward: img | Class Name: Band_Bin *Deprecated* | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Offset | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value_offset in Element_Array

| Name: value_offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Element_ Array | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Offset | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# value_offset in Field_Binary

| *Name:* **value_offset** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Binary | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Offset | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_offset in Field_Bit

| *Name:* **value_offset** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_Bit | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Offset | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_offset in Field_Character

| *Name:* **value_offset** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Field_ Character | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Offset | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# value_offset in Field_Delimited

| Name: value_offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The value_offset attribute is the offset to be applied to each stored value in order to recover an original value. The observed value (Ov) is calculated from the stored value (Sv) thus: Ov = (Sv * scaling_factor) + value_offset. The default value is 0. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Field_ Delimited | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Offset | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# vector_components in Vector

| Name: vector_components | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The vector_components attribute provides a count of vector components. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Vector | Type: ASCII_Integer |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# version_id in DD_Attribute

| Name: version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: DD_ Attribute | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: ([0-9]+)(\.){1}([0-9]+) | |
| Permissible Value(s) | No Values | | |

# version_id in DD_Attribute_Full

| Name: version_id | Version Id: 1.0.0.0 |
|---|---|
| Description: The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | |

| *Name:* **version_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Attribute_Full | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* ([0-9]+)(\.){1}([0-9]+) | |
| *Permissible Value(s)* | *No Values* | | |

# version_id in DD_Class

| *Name:* **version_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* ([0-9]+)(\.){1}([0-9]+) | |
| *Permissible Value(s)* | *No Values* | | |

# version_id in DD_Class_Full

| *Name:* **version_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* DD_Class_Full | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* ([0-9]+)(\.){1}([0-9]+) | |
| *Permissible Value(s)* | *No Values* | | |

# version_id in Identification_Area

| *Name:* **version_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Identification_Area | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: ([0-9]+)(\.){1}([0-9]+) | |
| Permissible Value(s) | No Values | | |

# version_id in Instrument_Host *Deprecated*

| Name: version_id *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Instrument_Host | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Deprecated | Nillable: false | Pattern: ([0-9]+)(\.){1}([0-9]+) | |
| Permissible Value(s) | No Values | | |

# version_id in Modification_Detail

| Name: version_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: Modification_Detail | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: ([0-9]+)(\.){1}([0-9]+) | |
| Permissible Value(s) | No Values | | |

# version_id in Software *Deprecated*

| Name: version_id *Deprecated* | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The version_id attribute provides the version of the product, expressed in the PDS [m.n] notation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: Software | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Deprecated | Nillable: false | Pattern: ([0-9]+)(\.){1}([0-9]+) | |
| Permissible Value(s) | No Values | | |

# volume_de_fullname in Volume_PDS3

| Name: volume_de_fullname | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The volume_de_fullname attribute provide the full name of the data engineer. | | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_PDS3 | Type: ASCII_Short_String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | No Values | | | |

# volume_format in Volume_PDS3

| Name: volume_format | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The volume_format attribute identifies the logical format used in writing a data volume. | | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_PDS3 | Type: ASCII_Short_String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Format | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | No Values | | | |

# volume_id in Volume_PDS3

| Name: volume_id | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The volume_id attribute provides a unique identifier for a data volume. Example: MG_1001. | | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_PDS3 | Type: ASCII_Short_String_Collapsed | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 | |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String | |
| Status: Active | Nillable: false | Pattern: None | | |
| Permissible Value(s) | No Values | | | |

# volume_name in Volume_PDS3

| Name: volume_name | | | Version Id: 1.0.0.0 | |
|---|---|---|---|---|
| Description: The volume_name attribute contains the name of a data volume. | | | | |
| Namespace Id: pds | Steward: ops | Class Name: Volume_PDS3 | Type: ASCII_Short_String_Collapsed | |

| *Name:* **volume_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_series_name in Volume_Set_PDS3

| *Name:* **volume_series_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume_series_name element provides a full, formal name that describes a broad categorization of data products or data sets related to a planetary body or a research campaign (e.g. International Halley Watch). A volume series consists of one or more volume sets that represent data from one or more missions or campaigns. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_Set_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_set_id in Volume_PDS3

| *Name:* **volume_set_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume_set_id attribute identifies a data volume or a set of volumes. Volume sets are normally considered as a single orderable entity. Examples: USA_NASA_PDS_MG_1001, USA_NASA_PDS_GR_0001_TO_GR_0009 | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_set_id in Volume_Set_PDS3

| *Name:* **volume_set_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume_set_id attribute identifies a data volume or a set of volumes. Volume sets are normally considered as a single orderable entity. Examples: USA_NASA_PDS_MG_1001, USA_NASA_PDS_GR_0001_TO_GR_0009 | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_Set_PDS3 | *Type:* ASCII_Short_String_Collapsed |

| *Name:* **volume_set_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_set_name in Volume_Set_PDS3

| *Name:* **volume_set_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume_set_name element provides the full, formal name of one or more data volumes containing a single data set or a collection of related data sets. Volume sets are normally considered as a single orderable entity. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_Set_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_size in Volume_PDS3

| *Name:* **volume_size** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume size attribute provide the number of bytes in the volume. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_PDS3 | *Type:* ASCII_NonNegative_Integer |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Size | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# volume_version_id in Volume_PDS3

| *Name:* **volume_version_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volume_version_id attribute identifies the version of a data volume. All original volumes should use a volume_version_id of 'Version 1'. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_PDS3 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |

| *Name:* **volume_version_id** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None |
| *Permissible Value(s)* | *No Values* | |

# volumes in Volume_Set_PDS3

| *Name:* **volumes** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The volumes element provides the number of physical data volumes contained in a volume set. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* Volume_Set_PDS3 | *Type:* ASCII_Integer |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# wavelength_range in Science_Facets

| *Name:* **wavelength_range** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The wavelength range within which the data collection occurred or which otherwise characterizes the observation(s). Boundaries are vague, and there is overlap. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Science_Facets | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Far Infrared | 30 to 300 micrometers | |
| | Gamma Ray | less than 0.01 nm | |
| | Infrared | 0.75 to 300 micrometers | |
| | Microwave | millimeters to one meter | |
| | Millimeter | one to a few millimeters | |
| | Near Infrared | 0.65 to 5.0 micrometers | |
| | Radio | millimeters to hundreds of thousands of meters | |
| | Submillimeter | 0.3-1.0 millimeter | |
| | Ultraviolet | 10 to 400 nm | |
| | Visible | 390-700 nm | |
| | X-ray | 0.01 to 10 nm | |

# x in Vector_Cartesian_3

| *Name:* x | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The x attribute provides the value of the x coordinate in a position vector. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector_ Cartesian_3 | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# xml_schema_base_type in ASCII_AnyURI

| *Name:* xml_schema_base_type | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* ASCII_ AnyURI | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:anyURI | ASCII_AnyURI has an XML schema base type of xsd:anyURI | |

# xml_schema_base_type in ASCII_Boolean

| *Name:* xml_schema_base_type | | | *Version Id:* 1.0.0.0 |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Boolean | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:boolean | ASCII_Boolean has an XML schema base type of xsd:boolean | |

# xml_schema_base_type in ASCII_DOI

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_DOI | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_DOI has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Date | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_DOY

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Date_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_DOY has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_Time

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Date_Time | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_Time has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_Time_DOY

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Date_Time_DOY | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_Time_DOY has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_Time_UTC

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Date_Time_UTC | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_Time_UTC has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_Time_YMD

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ Date_Time_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_Time_YMD has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Date_YMD

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ Date_YMD | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Date_YMD has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Directory_Path_Name

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ Directory_Path_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:token | ASCII_Directory_Path_Name has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_File_Name

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ File_Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:token | ASCII_File_Name has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_File_ Specification_Name

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ File_Specification_ Name | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:token | ASCII_File_Specification_Name has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_Integer

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Integer | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:integer | ASCII_Integer has an XML schema base type of xsd:integer | |

# xml_schema_base_type in ASCII_LID

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_LID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_LID has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_LIDVID

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_LIDVID | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_LIDVID has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_LIDVID_LID

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: ASCII_ LIDVID_LID | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_LIDVID_LID has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_MD5_ Checksum

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ MD5_Checksum | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_MD5_Checksum has an XML schema base type xsd:string | |

# xml_schema_base_type in ASCII_ NonNegative_Integer

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_ NonNegative_Integer | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:integer | ASCII_NonNegative_Integer has an XML schema base type of xsd:integer | |

# xml_schema_base_type in ASCII_Numeric_Base16

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Numeric_Base16 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:hexBinary | ASCII_Numeric_Base16 has an XML schema base type of xsd:hexBinary | |

# xml_schema_base_type in ASCII_Numeric_Base2

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_Numeric_Base2 | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:string | ASCII_Numeric_Base2 has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Numeric_Base8

| *Name:* **xml_schema_base_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | |

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: pds | Steward: pds | Class Name: ASCII_Numeric_Base8 | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | ASCII_Numeric_Base8 has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_Real

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Real | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:double | ASCII_Real has an XML schema base type of xsd:double | |

# xml_schema_base_type in ASCII_Short_ String_Collapsed

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: ASCII_Short_String_Collapsed | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:token | ASCII_Short_String_Collapsed has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_Short_ String_Preserved

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* ASCII_ Short_String_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:string | ASCII_Short_String_Preserved has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_String

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ String | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:token | ASCII_String has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_Text_ Collapsed

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* ASCII_ Text_Collapsed | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |

| *Name:* **xml_schema_base_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None |
| *Permissible Value(s)* | *Value* | *Value Meaning* |
| | xsd:token | ASCII_Text_Collapsed has an XML schema base type of xsd:token |

# xml_schema_base_type in ASCII_Text_ Preserved

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* ASCII_ Text_Preserved | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:string | ASCII_Text_Preserved has an XML schema base type of xsd:token | |

# xml_schema_base_type in ASCII_Time

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* ASCII_ Time | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:string | ASCII_Time has an XML schema base type of xsd:string | |

# xml_schema_base_type in ASCII_VID

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* ASCII_ VID | *Type:* ASCII_Short_ String_Collapsed |

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:string | ASCII_VID has an XML schema base type of xsd:string | |

# xml_schema_base_type in Character_Data_Type

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Character_Data_Type | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# xml_schema_base_type in UTF8_Short_String_Collapsed

| *Name:* **xml_schema_base_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| *Namespace Id:* pds | *Steward:* ops | *Class Name:* UTF8_Short_String_Collapsed | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Type | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | xsd:token | UTF8_Short_String_Collapsed has an XML schema base type of xsd:token | |

# xml_schema_base_type in UTF8_Short_ String_Preserved

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: UTF8_ Short_String_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:string | UTF8_Short_String_Preserved has an XML schema base type of xsd:string | |

# xml_schema_base_type in UTF8_String

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: pds | Class Name: UTF8_ String | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | xsd:token | UTF8_String must be normalized. | |

# xml_schema_base_type in UTF8_Text_ Preserved

| Name: xml_schema_base_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The xml schema base type attribute provides the data type needed for the XML schema implementation. | | | |
| Namespace Id: pds | Steward: ops | Class Name: UTF8_ Text_Preserved | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |

| *Name:* **xml_schema_base_type** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Permissible Value(s)* | *Value* | *Value Meaning* |
| | xsd:string | UTF8_Text_Preserved has an XML schema base type of xsd:string |

# y in Vector_Cartesian_3

| *Name:* **y** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The y attribute provides the value of the y coordinate in a position vector. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector_Cartesian_3 | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# z in Vector_Cartesian_3

| *Name:* **z** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The z attribute provides the value of the z coordinate in a position vector. | | | |
| *Namespace Id:* pds | *Steward:* pds | *Class Name:* Vector_Cartesian_3 | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Number | *Conceptual Domain:* Real |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# Chapter 9. Attributes in the Rings discipline namespace.

These attributes are used by the classes defined for the Rings namespace.

## SCLK_start_time in Radio_Occultation

| *Name:* **SCLK_start_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* SCLK_start_time is the value of the spacecraft clock corresponding to the start_date_time given in the label. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## SCLK_start_time in Stellar_Occultation

| *Name:* **SCLK_start_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* SCLK_start_time is the value of the spacecraft clock corresponding to the start_date_time given in the label. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## SCLK_stop_time in Radio_Occultation

| *Name:* **SCLK_stop_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* SCLK_stop_time is the value of the spacecraft clock corresponding to the stop_date_time given in the label. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: SCLK_stop_time | | Version Id: 1.0.0.0 |
|---|---|---|
| Permissible Value(s) | No Values | |

# SCLK_stop_time in Stellar_Occultation

| Name: SCLK_stop_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: SCLK_stop_time is the value of the spacecraft clock corresponding to the stop_date_time given in the label. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# along_track_timing_offset in Radio_ Occultation

| Name: along_track_timing_offset | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: along_track_timing_offset is a timing offset to the along track spacecraft position. It is the value that minimizes differences in radii of matching circular ring features observed on the ingress and egress sides of the occultation track. Optional in labels for radio occultation. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# dsn_station_number in Radio_Occultation

| Name: dsn_station_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: dsn_station_number identifies the receiving DSN station. Required in labels for radio occultations; not used for stellar occultations. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Integer |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |

| Name: dsn_station_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# dsn_station_number in Radio_Occultation_ Support

| Name: dsn_station_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: dsn_station_number identifies the receiving DSN station. Required in labels for radio occultations; not used for stellar occultations. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation_Support | Type: ASCII_Integer |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# earth_received_start_time_utc in Radio_ Occultation

| Name: earth_received_start_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: earth_received_start_time_utc gives the UTC time corresponding to the earliest time for the data product at which telemetry or other photons were received on Earth. Optional for occultation data. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Date_Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# earth_received_stop_time_utc in Radio_ Occultation

| Name: earth_received_stop_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: earth_received_stop_time_utc gives the UTC time corresponding to the latest time for the data product at which telemetry or other photons were received on Earth. Optional for occultation data. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |

| Name: earth_received_stop_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Date_Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# frequency_band in Radio_Occultation

| Name: frequency_band | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: frequency_band is the one or two letter identifier of the frequency band. Required in labels for radio occultations; not used for stellar occultations. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | C | Frequency range: 5.85 to 8.20 GHz | |
| | D | Frequency range: 2.20 to 3.30 GHz | |
| | E | Frequency range: 3.30 to 4.90 GHz | |
| | F | Frequency range: 4.90 to 7.05 GHz | |
| | G | Frequency range: 3.95 to 5.85 GHz | |
| | H | Frequency range: 7.05 to 10.10 GHz | |
| | K | Frequency range: 5.0 to 26.5 GHz | |
| | Ka | Frequency range: 26.5 to 40.0 GHz | |
| | Ku | Frequency range: 12.4 to 18.0 GHz | |
| | Q | Frequency range: 33 to 50 GHz | |
| | R | Frequency range: 1.70 to 2.60 GHz | |
| | S | Frequency range: 2.60 to 3.95 GHz | |
| | U | Frequency range: 40 to 60 GHz | |
| | V | Frequency range: 50 to 75 GHz | |
| | W | Frequency range: 75 to 110 GHz | |
| | X | Frequency range: 8.2 to 12.4 GHz | |
| | Y | Frequency range: 325 to 500 GHz | |

# frequency_band in Radio_Occultation_ Support

| Name: frequency_band | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: frequency_band is the one or two letter identifier of the frequency band. Required in labels for radio occultations; not used for stellar occultations. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | C | Frequency range: 5.85 to 8.20 GHz | |
| | D | Frequency range: 2.20 to 3.30 GHz | |
| | E | Frequency range: 3.30 to 4.90 GHz | |
| | F | Frequency range: 4.90 to 7.05 GHz | |
| | G | Frequency range: 3.95 to 5.85 GHz | |
| | H | Frequency range: 7.05 to 10.10 GHz | |
| | K | Frequency range: 5.0 to 26.5 GHz | |
| | Ka | Frequency range: 26.5 to 40.0 GHz | |
| | Ku | Frequency range: 12.4 to 18.0 GHz | |
| | Q | Frequency range: 33 to 50 GHz | |
| | R | Frequency range: 1.70 to 2.60 GHz | |
| | S | Frequency range: 2.60 to 3.95 GHz | |
| | U | Frequency range: 40 to 60 GHz | |
| | V | Frequency range: 50 to 75 GHz | |
| | W | Frequency range: 75 to 110 GHz | |
| | X | Frequency range: 8.2 to 12.4 GHz | |
| | Y | Frequency range: 325 to 500 GHz | |

# highest_detectable_opacity in Radio_ Occultation

| Name: highest_detectable_opacity | Version Id: 1.0.0.0 |
|---|---|
| Description: highest_detectable_opacity indicates the sensitivity of a ring occultation data set to nearly opaque rings. It specifies the rough value for the largest normal ring opacity that can be detected in the data at the resolution provided, incorporating both statistical effects and calibration uncertainties. Strongly recommended in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | |

| Name: highest_detectable_opacity | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# highest_detectable_opacity in Stellar_ Occultation

| Name: highest_detectable_opacity | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: highest_detectable_opacity indicates the sensitivity of a ring occultation data set to nearly opaque rings. It specifies the rough value for the largest normal ring opacity that can be detected in the data at the resolution provided, incorporating both statistical effects and calibration uncertainties. Strongly recommended in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# light_source_incidence_angle in Radio_ Occultation

| Name: light_source_incidence_angle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: light_source_incidence_angle is an angle measured from the local surface normal vector to the direction of a photon arriving from the light source. For rings, the normal vector is that on the same side of the rings as the light source, so values always range between 0 and 90 in units of degrees. The value is always equal to 90 - \| observed_ring_elevation \| This will enable users to perform database searches based on the effective ring opening angle when they are not concerned about the the distinction between north-side and southside viewpoints. We have included the 'light source' prefix to the term so that this quantity is not confused with 'incidence angle', a term that is generally associated with sunlight rather than stars or radio transmitters. Required in the label if the value is constant for the observation. If the angle varies for the observation, the min and max attributes are required in the label. Optional as a field in the data table. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |

| Name: light_source_incidence_angle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# light_source_incidence_angle in Stellar_ Occultation

| Name: light_source_incidence_angle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: light_source_incidence_angle is an angle measured from the local surface normal vector to the direction of a photon arriving from the light source. For rings, the normal vector is that on the same side of the rings as the light source, so values always range between 0 and 90 in units of degrees. The value is always equal to 90 - \| observed_ring_elevation \| This will enable users to perform database searches based on the effective ring opening angle when they are not concerned about the the distinction between north-side and southside viewpoints. We have included the 'light source' prefix to the term so that this quantity is not confused with 'incidence angle', a term that is generally associated with sunlight rather than stars or radio transmitters. Required in the label if the value is constant for the observation. If the angle varies for the observation, the min and max attributes are required in the label. Optional as a field in the data table. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lowest_detectable_opacity in Radio_ Occultation

| Name: lowest_detectable_opacity | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: lowest_detectable_opacity indicates the sensitivity of a ring occultation data set to nearly opaque rings. It specifies the rough value for the smallest normal ring opacity that can be detected in the data at the resolution provided, incorporating both statistical effects and calibration uncertainties. Strongly recommended in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# lowest_detectable_opacity in Stellar_ Occultation

| Name: lowest_detectable_opacity | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: lowest_detectable_opacity indicates the sensitivity of a ring occultation data set to nearly opaque rings. It specifies the rough value for the smallest normal ring opacity that can be detected in the data at the resolution provided, incorporating both statistical effects and calibration uncertainties. Strongly recommended in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_light_source_incidence_angle in Radio_Occultation

| Name: maximum_light_source_incidence_angle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_light_source_incidence_angle specifes the largest value for observed_ring_elevation in the observation. Only used if the value is not constant over the observation. Values range from 0 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_observed_event_time in Radio_ Occultation_Support

| Name: maximum_observed_event_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_observed_event_time indicates the value for latest time in the described data, and is given in observed_event_tdb format. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |

| Name: maximum_observed_event_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_observed_ring_azimuth in Radio_ Occultation

| Name: maximum_observed_ring_azimuth | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_observed_ring_azimuth specifes the largest value for observed_ring_azimuth in the data file. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_observed_ring_azimuth in Stellar_ Occultation

| Name: maximum_observed_ring_azimuth | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_observed_ring_azimuth specifes the largest value for observed_ring_azimuth in the data file. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_observed_ring_elevation in Radio_Occultation

| Name: maximum_observed_ring_elevation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_observed_ring_elevation specifes the largest value for observed_ring_elevation in the data file. Only used if the value is not constant over the observation. | | | |

| *Name:* **maximum_observed_ring_elevation** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| Values range from -90 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* -90 | *Maximum Value:* 90 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_observed_ring_elevation in Stellar_Occultation

| *Name:* **maximum_observed_ring_elevation** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* maximum_observed_ring_elevation specifes the largest value for observed_ring_elevation in the data file. Only used if the value is not constant over the observation. Values range from -90 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* -90 | *Maximum Value:* 90 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_radial_sampling_interval in Radio_ Occultation

| *Name:* **maximum_radial_sampling_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* maximum_radial_sampling_interval indicates the smallest radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. If the value of radial_sampling_interval varies, the minimum and maximum attributes are required in labels. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# maximum_radial_sampling_interval in Stellar_Occultation

| Name: maximum_radial_sampling_interval | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_radial_sampling_interval indicates the smallest radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. If the value of radial_sampling_interval varies, the minimum and maximum attributes are required in labels. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_ring_longitude in Radio_Occultation

| Name: maximum_ring_longitude | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_ring_longitude specifies one boundary for the ring longitude range in the data; normally the largest value. However, for ranges that cross the prime meridian, the maximum ring longitude will have a value less than the minimum ring longitude. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_ring_longitude in Stellar_Occultation

| Name: maximum_ring_longitude | Version Id: 1.0.0.0 |
|---|---|
| Description: maximum_ring_longitude specifies one boundary for the ring longitude range in the data; normally the largest value. However, for ranges that cross the prime meridian, the maximum ring longitude will have a value less than the minimum ring longitude. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | |

| Name: maximum_ring_longitude | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_ring_radius in Radio_Occultation

| Name: maximum_ring_radius | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_ring_radius indicates the largest ring radius value in the data table. Units are km and are always positive. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_ring_radius in Stellar_Occultation

| Name: maximum_ring_radius | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_ring_radius indicates the largest ring radius value in the data table. Units are km and are always positive. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_wavelength in Radio_Occultation

| Name: maximum_wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_wavelength is the largest wavelength used in the observation. Optional in labels. Used with minimum_wavelength when the observation is over a wavelength range. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |

| Name: maximum_wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# maximum_wavelength in Stellar_Occultation

| Name: maximum_wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: maximum_wavelength is the largest wavelength used in the observation. Optional in labels. Used with minimum_wavelength when the observation is over a wavelength range. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_light_source_incidence_angle in Radio_Occultation

| Name: minimum_light_source_incidence_angle | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_light_source_incidence_angle specifes the smallest value for observed_ring_elevation in the observation. Only used if the value is not constant over the observation. Values range from 0 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_observed_event_time in Radio_ Occultation_Support

| Name: minimum_observed_event_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_observed_event_time indicates the value for earliest time in the described data, and is given in observed_event_tdb format. | | | |

| *Name:* **minimum_observed_event_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation_Support | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Time | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_observed_ring_azimuth in Radio_ Occultation

| *Name:* **minimum_observed_ring_azimuth** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* minimum_observed_ring_azimuth specifes the smallest value for observed_ring_azimuth in the data file. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* 360 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_observed_ring_azimuth in Stellar_ Occultation

| *Name:* **minimum_observed_ring_azimuth** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* minimum_observed_ring_azimuth specifes the smallest value for observed_ring_azimuth in the data file. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* 360 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_observed_ring_elevation in Radio_ Occultation

| Name: minimum_observed_ring_elevation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_observed_ring_elevation specifes the smallest value for observed_ring_elevation in the data file. Only used if the value is not constant over the observation. Values range from -90 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_observed_ring_elevation in Stellar_Occultation

| Name: minimum_observed_ring_elevation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_observed_ring_elevation specifes the smallest value for observed_ring_elevation in the data file. Only used if the value is not constant over the observation. Values range from -90 to +90 in units of degrees. Not intended for use in the data file. Nillable, in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_radial_sampling_interval in Radio_ Occultation

| Name: minimum_radial_sampling_interval | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_radial_sampling_interval indicates the smallest radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. If the value of radial_sampling_interval varies, the minimum and maximum attributes are required in labels. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |

| *Name:* **minimum_radial_sampling_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_radial_sampling_interval in Stellar_ Occultation

| *Name:* **minimum_radial_sampling_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* minimum_radial_sampling_interval indicates the smallest radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. If the value of radial_sampling_interval varies, the minimum and maximum attributes are required in labels. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_ring_longitude in Radio_ Occultation

| *Name:* **minimum_ring_longitude** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* minimum_ring_longitude specifes one boundary for the ring longitude range in the data; normally the smallest value. However, for ranges that cross the prime meridian, the minimum ring longitude will have a value greater than the maximum ring longitude. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* 360 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# minimum_ring_longitude in Stellar_ Occultation

| Name: minimum_ring_longitude | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_ring_longitude specifes one boundary for the ring longitude range in the data; normally the smallest value. However, for ranges that cross the prime meridian, the minimum ring longitude will have a value greater than the maximum ring longitude. Values range from 0 to 360 in units of degrees. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: 0 | Maximum Value: 360 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_ring_radius in Radio_Occultation

| Name: minimum_ring_radius | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_ring_radius indicates the smallest ring radius value in the data table. Units are km and are always positive. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_ring_radius in Stellar_Occultation

| Name: minimum_ring_radius | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_ring_radius indicates the smallest ring radius value in the data table. Units are km and are always positive. Required in label files for ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_wavelength in Radio_Occultation

| Name: minimum_wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_wavelength is the smallest wavelength used in the observation. Optional in labels. Used with maximum_wavelength when the observation is over a wavelength range. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# minimum_wavelength in Stellar_Occultation

| Name: minimum_wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: minimum_wavelength is the smallest wavelength used in the observation. Optional in labels. Used with maximum_wavelength when the observation is over a wavelength range. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_event_start_tdb in Radio_ Occultation

| Name: observed_event_start_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_event_start_tdb indicates the value for earliest time in the described data, and is given in observed_event_tdb format. Optional in labels; not intended for use as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_event_start_tdb in Stellar_ Occultation

| Name: observed_event_start_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_event_start_tdb indicates the value for earliest time in the described data, and is given in observed_event_tdb format. Optional in labels; not intended for use as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_event_stop_tdb in Radio_ Occultation

| Name: observed_event_stop_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_event_stop_tdb indicates the value for latest time in the described data, and is given in observed_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_event_stop_tdb in Stellar_ Occultation

| Name: observed_event_stop_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_event_stop_tdb indicates the value for latest time in the described data, and is given in observed_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |

| Name: observed_event_stop_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_ring_elevation in Radio_ Occultation

| Name: observed_ring_elevation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_ring_elevation is an angle measured at a point in the ring plane, starting from the ring plane to the direction of a photon heading to the observer. This angle is positive on the side of the ring plane defined by positive angular momentum, and negative on the opposite side. Values range from -90 to +90 in units of degrees. This angle is constant for stellar occultations, but may vary significantly during radio occultations. Note: The direction of positive angular momentum points toward the IAU-defined north side of the ring plane for Jupiter, Saturn and Neptune, but IAU-defined south side of the ring plane for Uranus. Required in the label if the value is constant for the observation. If the angle varies for the observation, the min and max attributes are required in the label, and observed_ring_elevation is strongly recommended as a field in the data table. Nillable, in which case the nil_reason should be 'inapplicable'. The above definition of observed_ring_elevation is equivalent to the most common usage of the term 'ring open angle', B. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Angle | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# observed_ring_elevation in Stellar_ Occultation

| Name: observed_ring_elevation | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: observed_ring_elevation is an angle measured at a point in the ring plane, starting from the ring plane to the direction of a photon heading to the observer. This angle is positive on the side of the ring plane defined by positive angular momentum, and negative on the opposite side. Values range from -90 to +90 in units of degrees. This angle is constant for stellar occultations, but may vary significantly during radio occultations. Note: The direction of positive angular momentum points toward the IAU-defined north side of the ring plane for Jupiter, Saturn and Neptune, but IAU-defined south side of the ring plane for Uranus. Required in the label if the value is constant for the observation. If the angle varies for the observation, the min and max attributes are required in the label, and observed_ring_elevation is strongly recommended as a field in the data table. Nillable, in which case the nil_reason should be 'inapplicable'. The above definition of observed_ring_elevation is equivalent to the most common usage of the term 'ring open angle', B. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: -90 | Maximum Value: 90 | Minimum Characters: None | Maximum Characters: None |

| *Name:* **observed_ring_elevation** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# occultation_type in Radio_Occultation

| *Name:* **occultation_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* occultation_type distinguishes between three types of occultation experiments: Stellar, Solar, and Radio. Stellar occultations involve observing a star as a targeted ring or body passes in front, as seen from either a spacecraft or Earth-based observatory. Solar occultations are similar to stellar occultations except that the Sun is used in place of a star. Radio occultations typically involve observing the continuous-wave radio transmissions from a spacecraft as it passes behind the target as seen from a radio telescope on Earth or another spacecraft. Required in labels of occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_Occultation | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Radio | Radio occultation | |
| | Solar | Solar occultation | |
| | Stellar | Stellar occultation | |

# occultation_type in Radio_Occultation_ Support

| *Name:* **occultation_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* occultation_type distinguishes between three types of occultation experiments: Stellar, Solar, and Radio. Stellar occultations involve observing a star as a targeted ring or body passes in front, as seen from either a spacecraft or Earth-based observatory. Solar occultations are similar to stellar occultations except that the Sun is used in place of a star. Radio occultations typically involve observing the continuous-wave radio transmissions from a spacecraft as it passes behind the target as seen from a radio telescope on Earth or another spacecraft. Required in labels of occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_Occultation_Support | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: occultation_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | Radio | Radio occultation | |
| | Solar | Solar occultation | |
| | Stellar | Stellar occultation | |

# occultation_type in Stellar_Occultation

| Name: occultation_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: occultation_type distinguishes between three types of occultation experiments: Stellar, Solar, and Radio. Stellar occultations involve observing a star as a targeted ring or body passes in front, as seen from either a spacecraft or Earth-based observatory. Solar occultations are similar to stellar occultations except that the Sun is used in place of a star. Radio occultations typically involve observing the continuous-wave radio transmissions from a spacecraft as it passes behind the target as seen from a radio telescope on Earth or another spacecraft. Required in labels of occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Radio | Radio occultation | |
| | Solar | Solar occultation | |
| | Stellar | Stellar occultation | |

# orbit_number in Radio_Occultation

| Name: orbit_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: orbit_number if present is the value assigned by the mission for the orbit number associated with the observation. Optional in labels of occultation observations and may be used multiple times. Nillable, the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# orbit_number in Radio_Occultation_Support

| Name: orbit_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: orbit_number if present is the value assigned by the mission for the orbit number associated with the observation. Optional in labels of occultation observations and may be used multiple times. Nillable, the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# orbit_number in Stellar_Occultation

| Name: orbit_number | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: orbit_number if present is the value assigned by the mission for the orbit number associated with the observation. Optional in labels of occultation observations and may be used multiple times. Nillable, the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# planetary_occultation_flag in Radio_ Occultation

| Name: planetary_occultation_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The planetary_occultation_flag is a yes-or-no flag that indicates whether a ring occultation track also intersects the planet. Required in labels of ring occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 1 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |

| Name: planetary_occultation_flag | | Version Id: 1.0.0.0 | |
|---|---|---|---|
| Permissible Value(s) | Value | Value Meaning | |
| | N | The ring occultation track does not intersect the planet. | |
| | Y | Some portion of the ring occultation track also intersects the planet. | |

# planetary_occultation_flag in Radio_ Occultation_Support

| Name: planetary_occultation_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The planetary_occultation_flag is a yes-or-no flag that indicates whether a ring occultation track also intersects the planet. Required in labels of ring occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 1 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | N | The ring occultation track does not intersect the planet. | |
| | Y | Some portion of the ring occultation track also intersects the planet. | |

# planetary_occultation_flag in Stellar_ Occultation

| Name: planetary_occultation_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The planetary_occultation_flag is a yes-or-no flag that indicates whether a ring occultation track also intersects the planet. Required in labels of ring occultation observations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. Normally not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 1 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | N | The ring occultation track does not intersect the planet. | |

| Name: planetary_occultation_flag | | Version Id: 1.0.0.0 |
|---|---|---|
| | Y | Some portion of the ring occultation track also intersects the planet. |

# radial_resolution in Radio_Occultation

| Name: radial_resolution | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: radial_resolution indicates the nominal radial distance over which changes in ring properties can be detected within a data product. Note: this value may be larger than the radial_sampling_interval value, because a data product can be over-sampled. Required in labels if the value is fixed, as it is for stellar occultations. If the value varies, the corresponding minimum and maximum attributes must be used instead. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# radial_resolution in Stellar_Occultation

| Name: radial_resolution | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: radial_resolution indicates the nominal radial distance over which changes in ring properties can be detected within a data product. Note: this value may be larger than the radial_sampling_interval value, because a data product can be over-sampled. Required in labels if the value is fixed, as it is for stellar occultations. If the value varies, the corresponding minimum and maximum attributes must be used instead. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# radial_sampling_interval in Radio_ Occultation

| Name: radial_sampling_interval | Version Id: 1.0.0.0 |
|---|---|
| Description: radial_sampling_interval indicates the radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. Required in labels if the value is fixed. If the value varies, the corresponding minimum and and maximum attributes must be used instead. Nillable if the observation is not a | |

| *Name:* **radial_sampling_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# radial_sampling_interval in Stellar_ Occultation

| *Name:* **radial_sampling_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* radial_sampling_interval indicates the radial spacing between consecutive points in a ring profile. In practice, this may be somewhat smaller than the radial_resolution because a profile may be over-sampled. Required in labels if the value is fixed. If the value varies, the corresponding minimum and and maximum attributes must be used instead. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended to be used as a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# reference_time_utc in Radio_Occultation

| *Name:* **reference_time_utc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* reference_time_utc provides a date and time in UTC format. Given in a label when time values in a table are given as elapsed seconds offset from a reference time. Specifically required in the label for radio occultation data, but is not used for stellar occultation data. Required in the label for radio occultation data, or anytime spacecraft_event_time is a table field. Not used for stellar occultations. Nillable, the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Date_ Time_UTC |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# reference_time_utc in Radio_Occultation_ Support

| Name: reference_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: reference_time_utc provides a date and time in UTC format. Given in a label when time values in a table are given as elapsed seconds offset from a reference time. Specifically required in the label for radio occultation data, but is not used for stellar occultation data. Required in the label for radio occultation data, or anytime spacecraft_event_time is a table field. Not used for stellar occultations. Nillable, the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_start_tdb in Radio_Occultation

| Name: ring_event_start_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_event_start_tdb indicates the value for earliest time in the described data, and is given in ring_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_start_tdb in Stellar_Occultation

| Name: ring_event_start_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_event_start_tdb indicates the value for earliest time in the described data, and is given in ring_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_start_time_utc in Radio_ Occultation

| *Name:* **ring_event_start_time_utc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* ring_event_start_time_utc gives the UTC time corresponding to the earliest time given by ring_event_time or ring_event_tdb in the data table. ring_event_start_time_utc is required for all ring occultation data. ring_event_start_time_utc is required label attribute for all ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Date_ Time_UTC |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# ring_event_start_time_utc in Stellar_ Occultation

| *Name:* **ring_event_start_time_utc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* ring_event_start_time_utc gives the UTC time corresponding to the earliest time given by ring_event_time or ring_event_tdb in the data table. ring_event_start_time_utc is required for all ring occultation data. ring_event_start_time_utc is required label attribute for all ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Date_ Time_UTC |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# ring_event_stop_tdb in Radio_Occultation

| *Name:* **ring_event_stop_tdb** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* ring_event_stop_tdb indicates the value for latest time in the described data, and is given in ring_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |

| Name: ring_event_stop_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_stop_tdb in Stellar_Occultation

| Name: ring_event_stop_tdb | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_event_stop_tdb indicates the value for latest time in the described data, and is given in ring_event_tdb format. Optional in labels; not intended for use as a table field. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_stop_time_utc in Radio_ Occultation

| Name: ring_event_stop_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_event_stop_time_utc gives the UTC time corresponding to the latest time given by ring_event_time or ring_event_tdb in the data table. ring_event_stop_time_utc is required for all ring occultation data. ring_event_stop_time_utc is required label attribute for all ring occultation data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_event_stop_time_utc in Stellar_ Occultation

| Name: ring_event_stop_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_event_stop_time_utc gives the UTC time corresponding to the latest time given by ring_event_time or ring_event_tdb in the data table. ring_event_stop_time_utc is required for all ring occultation | | | |

| Name: ring_event_stop_time_utc | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| data. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Date_ Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_observation_id in Radio_Occultation

| Name: ring_observation_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ring_observation_id uniquely identifies a single experiment or observation (image, occultation profile, spectrum, etc.) within a rings-related data set. This is the common id by which data are identified within the Rings Node catalog. It describes the smallest quantity of data that can be usefully cataloged or analyzed by itself. Note that a single observation may be associated with multiple data products (e.g. raw and calibrated versions of an image). Note also that a single data product may be associated with multiple observations (e.g. a single WFPC2 image file containing four different images). A ring observation id is constructed using numbers, upper case letters, forward slash, colon, period, dash, and underscore as follows: p/type/host/ inst/time/... where p is a single-letter planet id (one of J, S, U, or N); type is IMG for images, OCC for occultation profile, etc.; host is the instrument host id, inst is the instrument id; time is the observation time as a date or instrument clock count; further information identifying the observation can then be appended as appropriate. Optional in labels. Nillable, in which case the nil_reason should be 'inapplicable'. Examples: J/IMG/VG2/ISS/20693.01/N J/IMG/ VG2/ISS/20693.02/W S/IMG/HST/WFPC2/1995-08-10/U2TF020B/PC1 U/OCC/VG2/ RSS/1986-01-24/S U/OCC/VG2/RSS/1986-01-24/X N/OCC/VG2/PPS/1989-08-25/SIGMA_SGR | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_observation_id in Radio_Occultation_ Support

| Name: ring_observation_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ring_observation_id uniquely identifies a single experiment or observation (image, occultation profile, spectrum, etc.) within a rings-related data set. This is the common id by which data are identified within the Rings Node catalog. It describes the smallest quantity of data that can be usefully cataloged or analyzed by itself. Note that a single observation may be associated with multiple data products (e.g. raw and calibrated versions of an image). Note also that a single data product may be associated with multiple observations (e.g. a single WFPC2 image file containing four different images). A ring observation id is constructed using numbers, | | | |

| Name: ring_observation_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| upper case letters, forward slash, colon, period, dash, and underscore as follows: p/type/host/ inst/time/... where p is a single-letter planet id (one of J, S, U, or N); type is IMG for images, OCC for occultation profile, etc.; host is the instrument host id, inst is the instrument id; time is the observation time as a date or instrument clock count; further information identifying the observation can then be appended as appropriate. Optional in labels. Nillable, in which case the nil_reason should be 'inapplicable'. Examples: J/IMG/VG2/ISS/20693.01/N J/IMG/ VG2/ISS/20693.02/W S/IMG/HST/WFPC2/1995-08-10/U2TF020B/PC1 U/OCC/VG2/ RSS/1986-01-24/S U/OCC/VG2/RSS/1986-01-24/X N/OCC/VG2/PPS/1989-08-25/SIGMA_SGR | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_observation_id in Rings_Supplement

| Name: ring_observation_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The ring_observation_id uniquely identifies a single experiment or observation (image, occultation profile, spectrum, etc.) within a rings-related data set. This is the common id by which data are identified within the Rings Node catalog. It describes the smallest quantity of data that can be usefully cataloged or analyzed by itself. Note that a single observation may be associated with multiple data products (e.g. raw and calibrated versions of an image). Note also that a single data product may be associated with multiple observations (e.g. a single WFPC2 image file containing four different images). A ring observation id is constructed using numbers, upper case letters, forward slash, colon, period, dash, and underscore as follows: p/type/host/ inst/time/... where p is a single-letter planet id (one of J, S, U, or N); type is IMG for images, OCC for occultation profile, etc.; host is the instrument host id, inst is the instrument id; time is the observation time as a date or instrument clock count; further information identifying the observation can then be appended as appropriate. Optional in labels. Nillable, in which case the nil_reason should be 'inapplicable'. Examples: J/IMG/VG2/ISS/20693.01/N J/IMG/ VG2/ISS/20693.02/W S/IMG/HST/WFPC2/1995-08-10/U2TF020B/PC1 U/OCC/VG2/ RSS/1986-01-24/S U/OCC/VG2/RSS/1986-01-24/X N/OCC/VG2/PPS/1989-08-25/SIGMA_SGR | | | |
| Namespace Id: rings | Steward: rings | Class Name: Rings_ Supplement | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_observation_id in Stellar_Occultation

| Name: ring_observation_id | Version Id: 1.0.0.0 |
|---|---|
| Description: The ring_observation_id uniquely identifies a single experiment or observation (image, occultation profile, spectrum, etc.) within a rings-related data set. This is the common id by which data are identified within the Rings Node catalog. It describes the smallest quantity of | |

| Name: ring_observation_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| data that can be usefully cataloged or analyzed by itself. Note that a single observation may be associated with multiple data products (e.g. raw and calibrated versions of an image). Note also that a single data product may be associated with multiple observations (e.g. a single WFPC2 image file containing four different images). A ring observation id is constructed using numbers, upper case letters, forward slash, colon, period, dash, and underscore as follows: p/type/host/ inst/time/... where p is a single-letter planet id (one of J, S, U, or N); type is IMG for images, OCC for occultation profile, etc.; host is the instrument host id, inst is the instrument id; time is the observation time as a date or instrument clock count; further information identifying the observation can then be appended as appropriate. Optional in labels. Nillable, in which case the nil_reason should be 'inapplicable'. Examples: J/IMG/VG2/ISS/20693.01/N J/IMG/ VG2/ISS/20693.02/W S/IMG/HST/WFPC2/1995-08-10/U2TF020B/PC1 U/OCC/VG2/ RSS/1986-01-24/S U/OCC/VG2/RSS/1986-01-24/X N/OCC/VG2/PPS/1989-08-25/SIGMA_SGR | | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: true | Pattern: None | |
| Permissible Value(s) | No Values | | |

# ring_occultation_direction in Radio_ Occultation

| Name: ring_occultation_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_occultation_direction indicates the radial direction of an occultation track. This refers to the observed occultation track overall, not to the subset that might appear in a particular file. Permitted values are 'Ingress', 'Egress', 'Both', and 'Multiple'. The value 'multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Both | The ring radius along the a portion of the occultation track decreases with time, and along a different portion increases with time. | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |

| Name: ring_occultation_direction | | Version Id: 1.0.0.0 | |
|---|---|---|---|
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. | |

# ring_occultation_direction in Radio_ Occultation_Support

| Name: ring_occultation_direction | | Version Id: 1.0.0.0 | |
|---|---|---|---|
| Description: ring_occultation_direction indicates the radial direction of an occultation track. This refers to the observed occultation track overall, not to the subset that might appear in a particular file. Permitted values are 'Ingress', 'Egress', 'Both', and 'Multiple'. The value 'multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Both | The ring radius along the a portion of the occultation track decreases with time, and along a different portion increases with time. | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. | |

# ring_occultation_direction in Stellar_ Occultation

| Name: ring_occultation_direction | | Version Id: 1.0.0.0 | |
|---|---|---|---|
| Description: ring_occultation_direction indicates the radial direction of an occultation track. This refers to the observed occultation track overall, not to the subset that might appear in a particular file. Permitted values are 'Ingress', 'Egress', 'Both', and 'Multiple'. The value 'multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |

| *Name:* **ring_occultation_direction** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Both | The ring radius along the a portion of the occultation track decreases with time, and along a different portion increases with time. | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. | |

# ring_profile_direction in Radio_Occultation

| *Name:* **ring_profile_direction** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* ring_profile_direction indicates the radial direction of a ring occultation within a particular data product. Possible values are 'Ingress', 'Egress', or 'Multiple'. The value 'Multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. | |

# ring_profile_direction in Radio_Occultation_ Support

| Name: ring_profile_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_profile_direction indicates the radial direction of a ring occultation within a particular data product. Possible values are 'Ingress', 'Egress', or 'Multiple'. The value 'Multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. | |

# ring_profile_direction in Stellar_Occultation

| Name: ring_profile_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: ring_profile_direction indicates the radial direction of a ring occultation within a particular data product. Possible values are 'Ingress', 'Egress', or 'Multiple'. The value 'Multiple' is only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. Required in labels of ring occultation observations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not intended as a value for a table field. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Egress | The ring radius along the occultation track increases with time. | |
| | Ingress | The ring radius along the occultation track decreases with time. | |

| *Name:* **ring_profile_direction** | *Version Id:* **1.0.0.0** |
|---|---|
| | Multiple | Only used for some Hubble-based occultations where the occultation track is not monotonic over relatively short time scales. |

# sampling_parameter_interval in Radio_ Occultation_Support

| *Name:* **sampling_parameter_interval** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* sampling_parameter_interval specifies the spacing of points at which data are sampled and at which a value for an instrument or dataset parameter is available. Used in labels for radio occultation supplemental files. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation_Support | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sampling_parameter_name in Radio_ Occultation_Support

| *Name:* **sampling_parameter_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* sampling_parameter_name provides the name of the parameter which determines the sampling interval for uniformly sampled data. Used in labels for radio occultation supplemental files. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation_Support | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sampling_parameter_unit in Radio_ Occultation_Support

| *Name:* **sampling_parameter_unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* sampling_parameter_unit provides the units of the parameter which determines the sampling interval for uniformly sampled data. Used in labels for radio occultation supplemental files. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation_Support | *Type:* ASCII_Short_ String_Collapsed |

| *Name:* **sampling_parameter_unit** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# source_pds3_id in Radio_Occultation

| *Name:* **source_pds3_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* source_pds3_id is the PDS3 product identifier for the source product. If the source product has been archived under PDS4, use the Internal_Reference class in the Investigation_Area. source_pds3_id is required in occultation labels and may be used multiple times. The acceptable nil_reasons are 'inapplicable' and 'unknown'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_Occultation | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# source_pds3_id in Rings_Supplement

| *Name:* **source_pds3_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* source_pds3_id is the PDS3 product identifier for the source product. If the source product has been archived under PDS4, use the Internal_Reference class in the Investigation_Area. source_pds3_id is required in occultation labels and may be used multiple times. The acceptable nil_reasons are 'inapplicable' and 'unknown'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Rings_Supplement | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# source_pds3_id in Stellar_Occultation

| *Name:* **source_pds3_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* source_pds3_id is the PDS3 product identifier for the source product. If the source product has been archived under PDS4, use the Internal_Reference class in the Investigation_Area. source_pds3_id is required in occultation labels and may be used multiple times. The acceptable nil_reasons are 'inapplicable' and 'unknown'. | | | |

| *Name:* **source_pds3_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# spacecraft_event_start_time_utc in Radio_ Occultation

| *Name:* **spacecraft_event_start_time_utc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* spacecraft_event_start_time_utc gives the UTC time corresponding to the earliest time given by spacecraft_event_time in the data table. However, while spacecraft_event_time is given as seconds offset from a reference time, spacecraft_event_start_time_utc is given as a UTC date time. spacecraft_event_start_time_utc is required in the label for radio occultation data, but is not used for stellar occultation data. Required in the label for radio occultation data. Not used for stellar occultations. Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Date_ Time_UTC |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# spacecraft_event_stop_time_utc in Radio_ Occultation

| *Name:* **spacecraft_event_stop_time_utc** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* spacecraft_event_stop_time_utc gives the UTC time corresponding to the latest time given by spacecraft_event_time in the data table. However, while spacecraft_event_time is given as seconds offset from a reference time, spacecraft_event_stop_time_utc is given as a UTC date time. spacecraft_event_stop_time_utc is required in the label for radio occultation data, but is not used for stellar occultation data. Required in the label for radio occultation data. Not used for stellar occultations.Nillable if the observation is not an occultation in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Date_ Time_UTC |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* true | *Pattern:* None | |

| Name: spacecraft_event_stop_time_utc | | Version Id: 1.0.0.0 |
|---|---|---|
| Permissible Value(s) | No Values | |

# spice_filename in Radio_Occultation_ Support

| Name: spice_filename | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: spice_filename gives the file name(s) of SPICE files used in the analysis. Only used if the SPICE files can not be identified using a LID or LIDVID. Otherwise the association is made in the Reference_Class using the Internal_Reference class. Optional in labels for radio occultation. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Radio_ Occultation_Support | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# star_name in Stellar_Occultation

| Name: star_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: star_name provides the identifying name of star, including the catalog name if necessary. Examples include 'sigma Sgr' and 'SAO 123456' (for star number 123456 in the Smithsonian Astrophysical Observatory catalog). Use 'Sun' for solar occultations. Required in labels for stellar and solar occultations. Nillable if the observation is not a ring occultation in which case the nil_reason should be 'inapplicable'. Not used for radio occultations. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# sub_stellar_clock_angle in Stellar_ Occultation

| Name: sub_stellar_clock_angle | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: sub_stellar_clock_angle is an angle measured at a point in the ring plane, from the direction toward a star to the local radial direction. This angle is projected into the ring plane and measured in the clockwise (retrograde) direction. Equivalently, this is the prograde angle from the local radial direction to the direction toward the star. For stellar occultation data, this angle is equal to (180 - OBSERVED_RING_AZIMUTH) mod 360. It is available only for backward compatibility with previously published Cassini VIMS occultation data analysis; | | |

| *Name:* **sub_stellar_clock_angle** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| observed_ring_azimuth is the preferred quantity for archiving. sub_stellar_clock_angle is an optional data table field for Cassini VIMS occultation data; not recommended for other occultation data. In a label, the min and max variation attributes are optional for Cassini VIMS occultation data; not recommended for other occultation data. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* 360 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# sub_stellar_ring_azimuth in Stellar_ Occultation

| *Name:* **sub_stellar_ring_azimuth** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* sub_stellar_ring_azimuth is an angle measured at a point in the ring plane, starting from the direction of a photon arriving from a star, and ending at the direction of a local radial vector. This angle is projected into the ring plane and measured in the prograde direction. Values range from 0 to 360 in units of degrees. For stellar occultation data, this angle is equal to (observed_ring_azimuth + 180) mod 360. It is available only for backward compatibility with previously published Cassini UVIS occultation data analysis; observed_ring_azimuth is the preferred quantity for archiving. sub_stellar_ring_azimuth is an optional data table field for Cassini UVIS occultation data; not recommended for other occultation data. In a label, the min and max variation attributes are optional for Cassini UVIS occultation data; not recommended for other occultation data. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Stellar_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* 0 | *Maximum Value:* 360 | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Angle | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# wavelength in Radio_Occultation

| *Name:* **wavelength** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* wavelength of the observation. Optional in labels. If the observation is over a wavelength range, use the corresponding minimum and maximum attributes instead. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| *Namespace Id:* rings | *Steward:* rings | *Class Name:* Radio_ Occultation | *Type:* ASCII_Real |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* Units_of_Length | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |

| Name: wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# wavelength in Stellar_Occultation

| Name: wavelength | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: wavelength of the observation. Optional in labels. If the observation is over a wavelength range, use the corresponding minimum and maximum attributes instead. Nillable in which case the nil_reason should be 'inapplicable'. | | | |
| Namespace Id: rings | Steward: rings | Class Name: Stellar_ Occultation | Type: ASCII_Real |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Length | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# Chapter 10. Attributes in the Imaging discipline namespace.

These attributes are used by the classes defined for the Imaging namespace.

## application_process_id in Telemetry_Parameters

| *Name:* **application_process_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The application_process_id attribute identifies the process, or source, which created the data. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Integer |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## application_process_name in Telemetry_Parameters

| *Name:* **application_process_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The application_process_name attribute provides the name associated with the source or process which created the data. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 127 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## earth_received_start_date_time in Telemetry_Parameters

| *Name:* **earth_received_start_date_time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The earth_received_start_date_time attribute provides the earliest time at which any component telemetry data for a particular product was received. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Date_Time_UTC |

| Name: earth_received_start_date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# earth_received_stop_date_time in Telemetry_Parameters

| Name: earth_received_stop_date_time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The earth_received_stop_date_time attribute provides the latest time at which any component telemetry data for a particular product was received. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Date_Time_UTC |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Time | Conceptual Domain: Time |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# expected_packets in Telemetry_Parameters

| Name: expected_packets | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The expected_packets attribute provides the total number of telemetry packets which constitute a complete data product, i.e., a data product without missing data. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Integer |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Count | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# packet_map_mask in Telemetry_Parameters

| Name: packet_map_mask | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The packet_map_mask attribute is a binary or hexadecimal number identifying which of a data file's expected packets were actually received. The digits correspond positionally with the relative packet numbers of the data file. The bits are to be read left to right; i.e., the first (left-most) digit of the number corresponds to the first packet of the data file. A bit value of 1 indicates that the packet was received; a value of 0 indicates that it was not received. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Numeric_Base16 |

| *Name:* **packet_map_mask** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Mask | *Conceptual Domain:* Numeric |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# received_packets in Telemetry_Parameters

| *Name:* **received_packets** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The received_packets attribute provides the total number of telemetry packets which constitute a reconstructed data product, cf. expected_packets. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Integer |
| *Minimum Value:* 0 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Count | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# spice_file_name in Telemetry_Parameters

| *Name:* **spice_file_name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The spice_file_name attribute provides the names of the SPICE files used in processing the data. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* Name | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# telemetry_format_id in Telemetry_Parameters

| *Name:* **telemetry_format_id** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The telemetry_format_id attribute supplies a telemetry format code. | | | |
| *Namespace Id:* img | *Steward:* img | *Class Name:* Telemetry_Parameters | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 4 |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* ID | *Conceptual Domain:* Short_String |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |

| Name: telemetry_format_id | | Version Id: 1.0.0.0 |
|---|---|---|
| Permissible Value(s) | No Values | |

# telemetry_provider_id in Telemetry_ Parameters

| Name: telemetry_provider_id | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The telemetry_provider_id attribute identifies the provider and or version of the telemetry data used in the generation of this data. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: 20 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: ID | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# telemetry_source_name in Telemetry_ Parameters

| Name: telemetry_source_name | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The telemetry_source_name attribute identifies the telemetry source used in creation of a data set. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 60 |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: Name | Conceptual Domain: Short_String |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# telemetry_source_type in Telemetry_ Parameters

| Name: telemetry_source_type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The telemetry_source_type attribute classifies the source of the telemetry used in creation of this data collection. | | | |
| Namespace Id: img | Steward: img | Class Name: Telemetry_Parameters | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_None | Default Unit Id: None | Attribute Concept: Type | Conceptual Domain: Short_String |

| *Name:* **telemetry_source_type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *Value* | *Value Meaning* | |
| | DATA_PRODUCT | The telemetry source is a data product. | |
| | SFDU | The telemetry source is an SFDU | |

# Chapter 11. Attributes in the Display namespace.

These attributes are used by the classes defined for the Display namespace.

## blue_channel_band in Color_Display_Settings

| *Name:* **blue_channel_band** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The blue_channel_band attribute identifies the number of the band, along the band axis, that should be loaded, by default, into the blue channel of a display device. The first band along the band axis has band number 1. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Color_Display_Settings | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## color_display_axis in Color_Display_Settings

| *Name:* **color_display_axis** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The color_display_axis attribute identifies, by name, the axis of an Array (or Array subclass) that is intended to be displayed in the color dimension of a display device. I.e., bands from this dimension will be loaded into the red, green, and blue bands of the display device. The value of this attribute must match the value of one, and only one, axis_name attribute in an Axis_Array class of the associated Array. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Color_Display_Settings | *Type:* ASCII_Short_String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

## frame_rate in Movie_Display_Settings

| *Name:* **frame_rate** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The frame_rate attribute indicates the number of still pictures (or frames) that should be displayed per unit of time in a video. Note this is NOT necessarily the same as the rate at which the images were acquired. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Movie_Display_Settings | *Type:* ASCII_Real |

| Name: frame_rate | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Minimum Value: 1.0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Frame_Rate | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# green_channel_band in Color_Display_ Settings

| Name: green_channel_band | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The green_channel_band attribute identifies the number of the band, along the band axis, that should be loaded, by default, into the green channel of a display device. The first band along the band axis has band number 1. | | | |
| Namespace Id: disp | Steward: img | Class Name: Color_ Display_Settings | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# horizontal_display_axis in Display_Direction

| Name: horizontal_display_axis | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The horizontal_display_axis attribute identifies, by name, the axis of an Array (or Array subclass) that is intended to be displayed in the horizontal or "sample" dimension on a display device. The value of this attribute must match the value of one, and only one, axis_name attribute in an Axis_Array class of the associated Array. | | | |
| Namespace Id: disp | Steward: img | Class Name: Display_ Direction | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# horizontal_display_direction in Display_ Direction

| Name: horizontal_display_direction | Version Id: 1.0.0.0 |
|---|---|
| Description: The horizontal_display_direction attribute specifies the direction across the screen of a display device that data along the horizontal axis of an Array is supposed to be displayed. | |

| Name: horizontal_display_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Namespace Id: disp | Steward: img | Class Name: Display_Direction | Type: ASCII_Short_String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Left to Right | The lowest indexed element along an array axis should be displayed at the left edge of a display device and elements with higher indices should be displayed further to the right. Note that this is the standard display direction for most major image formats. | |
| | Right to Left | The lowest indexed element along an array axis should be displayed at the right edge of a display device and elements with higher indices should be displayed further to the left. Note that virtually no image display formats use this display direction. Use this only when deliberately mirroring the image around the vertical axis. | |

# loop_back_and_forth_flag in Movie_Display_Settings

| Name: loop_back_and_forth_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The loop_back_and_forth_flag attribute specifies whether or not a movie should only be "looped" or played repeatedly in the forward direction, or whether it should be played forward followed by played in reverse, iteratively. | | | |
| Namespace Id: disp | Steward: img | Class Name: Movie_Display_Settings | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | false | When looping, the movie should only be played in the forward direction. This is the default behavior. | |
| | true | When looping, the movie should be played in the forward direction, followed by the reverse direction, iteratively. | |

# loop_count in Movie_Display_Settings

| Name: loop_count | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The loop_count attribute specifies the number of times a movie should be "looped" or replayed before stopping. | | | |
| Namespace Id: disp | Steward: img | Class Name: Movie_ Display_Settings | Type: ASCII_Integer |
| Minimum Value: 1 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Integer |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# loop_delay in Movie_Display_Settings

| Name: loop_delay | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The loop_delay attribute specifies the amount of time to pause between "loops" or repeated playbacks of a movie. | | | |
| Namespace Id: disp | Steward: img | Class Name: Movie_ Display_Settings | Type: ASCII_Real |
| Minimum Value: 0.0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: Units_of_Time | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Real |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | No Values | | |

# loop_flag in Movie_Display_Settings

| Name: loop_flag | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The loop_flag attribute specifies whether or not a movie object should be played repeatedly without prompting from the user. | | | |
| Namespace Id: disp | Steward: img | Class Name: Movie_ Display_Settings | Type: ASCII_Boolean |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: Boolean |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | false | The movie should be not be 'looped' or played repeatedly. | |
| | true | The movie should be 'looped' or played repeatedly. | |

# red_channel_band in Color_Display_Settings

| *Name:* **red_channel_band** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The red_channel_band attribute identifies the number of the band, along the band axis, that should be loaded, by default, into the red channel of a display device. The first band along the band axis has band number 1. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Color_ Display_Settings | *Type:* ASCII_Integer |
| *Minimum Value:* 1 | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* Integer |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# time_display_axis in Movie_Display_Settings

| *Name:* **time_display_axis** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The time_display_axis attribute identifies, by name, the axis of an Array (or Array subclass), the bands of which are intended to be displayed sequentially in time on a display device. The frame_rate attribute, if present, provides the rate at which these bands are to be displayed. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Movie_ Display_Settings | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# vertical_display_axis in Display_Direction

| *Name:* **vertical_display_axis** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description:* The vertical_display_axis attribute identifies, by name, the axis of an Array (or Array subclass) that is intended to be displayed in the vertical or "line" dimension on a display device. The value of this attribute must match the value of one, and only one, axis_name attribute in an Axis_Array class of the associated Array. | | | |
| *Namespace Id:* disp | *Steward:* img | *Class Name:* Display_ Direction | *Type:* ASCII_Short_ String_Collapsed |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| *Unit of Measure Type:* None | *Default Unit Id:* None | *Attribute Concept:* None | *Conceptual Domain:* None |
| *Status:* Active | *Nillable:* false | *Pattern:* None | |
| *Permissible Value(s)* | *No Values* | | |

# vertical_display_direction in Display_ Direction

| Name: vertical_display_direction | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description: The vertical_display_direction attribute specifies the direction along the screen of a display device that data along the vertical axis of an Array is supposed to be displayed. | | | |
| Namespace Id: disp | Steward: img | Class Name: Display_ Direction | Type: ASCII_Short_ String_Collapsed |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| Unit of Measure Type: None | Default Unit Id: None | Attribute Concept: None | Conceptual Domain: None |
| Status: Active | Nillable: false | Pattern: None | |
| Permissible Value(s) | Value | Value Meaning | |
| | Bottom to Top | The lowest indexed element along an array axis should be displayed at the bottom edge of a display device and elements with higher indices should be displayed higher up. This is the display direction typically used for FITS formatted data. | |
| | Top to Bottom | The lowest indexed element along an array axis should be displayed at the top edge of a display device and elements with higher indices should be displayed lower down. This is the display direction typically used for VICAR formatted data. | |

# Chapter 12. Data Types in the common (pds) namespace.

These classes define the PDS4 data types.

## ASCII_AnyURI

| Name: ASCII_AnyURI | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII AnyURI class indicates a URI or its subclasses URN and URL. | | | |
| Schema Base Type: anyURI | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

## ASCII_Boolean

| Name: ASCII_Boolean | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Boolean class indicates a boolean. The allowed values are 'true' and 'false'. | | | |
| Schema Base Type: boolean | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

## ASCII_DOI

| Name: ASCII_DOI | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII DOI class indicates a digital object identifier (DOI). | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | 10\.\S+/\S+ | | |

## ASCII_Date

| Name: ASCII_Date | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Date class indicates a date in either YMD or DOY format. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |

| *Name:* **ASCII_Date** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | (-)?[0-9]{4} | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))) | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2])) | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1])) | |

# ASCII_Date_DOY

| *Name:* **ASCII_Date_DOY** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Date_DOY class indicates a date in DOY format. | | | |
| *Schema Base Type:* string | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *Pattern* | | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))) | | |

# ASCII_Date_Time

| *Name:* **ASCII_Date_Time** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Date_Time class indicates a date in either YMD or DOY format and time. | | | |
| *Schema Base Type:* string | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *Pattern* | | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6])))) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-4]))(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)24:00((:00((\.0+)?))?)(Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |

| Name: ASCII_Date_Time | Version Id: 1.0.0.0 |
|---|---|
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(([0-1][0-9])\|(2[0-4]))(Z)? |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)24:00((:00((\.0+)?))?)(Z)? |

# ASCII_Date_Time_DOY

| Name: ASCII_Date_Time_DOY | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Date_Time_DOY class indicates a date in DOY format and time. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-4]))(Z)? | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)24:00((:00((\.0+)?))?)(Z)? | | |

# ASCII_Date_Time_UTC

| Name: ASCII_Date_Time_UTC | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Date_Time_UTC class indicates a date and time in UTC format. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | | | |
| | (-)?[0-9]{4}(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)(([0-1][0-9])\|(2[0-4]))(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(T)24:00((:00((\.0+)?))?)(Z) | | |
| | (-)?[0-9]{4}-((00[1-9])\|(0[1-9][0-9])\|([1-2][0-9][0-9])\|(3(([0-5][0-9])\|(6[0-6]))))(Z) | | |

| Name: ASCII_Date_Time_UTC | Version Id: 1.0.0.0 |
|---|---|
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))(Z) | |
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-3])):[0-5][0-9](Z) | |
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z) | |
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-4]))(Z) | |
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)24:00((:00((\.0+)?))?)(Z) | |
| (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(Z) | |

# ASCII_Date_Time_YMD

| Name: ASCII_Date_Time_YMD | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Date_Time_YMD class indicates a date in YMD format and time. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-3])):[0-5][0-9](Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)(\.([0-9]{1,4}))?(Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)(((0[-1][0-9])\|(2[0-4]))(Z)? | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1]))(T)24:00((:00((\.0+)?))?)(Z)? | | |

# ASCII_Date_YMD

| Name: ASCII_Date_YMD | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Date_YMD class indicates a date in YMD format. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | (-)?[0-9]{4} | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2])) | | |
| | (-)?[0-9]{4}-((0[1-9])\|(1[0-2]))-((0[1-9])\|([1-2][0-9])\|(3[0-1])) | | |

# ASCII_Directory_Path_Name

| Name: ASCII_Directory_Path_Name | Version Id: 1.0.0.0 |
|---|---|
| Description The ASCII Directory Path Name class indicates a system directory path. | |

| *Name:* **ASCII_Directory_Path_Name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# ASCII_File_Name

| *Name:* **ASCII_File_Name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII File Name class indicates a system file name. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# ASCII_File_Specification_Name

| *Name:* **ASCII_File_Specification_Name** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII File Specification Name class indicates a system file including directory path, file name, and file extension. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# ASCII_Integer

| *Name:* **ASCII_Integer** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Integer class indicates an integer. | | | |
| *Schema Base Type:* integer | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# ASCII_LID

| *Name:* **ASCII_LID** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_LID class indicates a logical identifier. | | | |
| *Schema Base Type:* string | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 14 | *Maximum Characters:* 255 |

| Name: ASCII_LID | Version Id: 1.0.0.0 |
|---|---|
| | No Pattern |

# ASCII_LIDVID

| Name: ASCII_LIDVID | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_LIDVID class indicates a logical identifier and version identifier. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 19 | Maximum Characters: 255 |
| | No Pattern | | |

# ASCII_LIDVID_LID

| Name: ASCII_LIDVID_LID | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_LIDVID_LID class indicates a logical identifier and version identifier or simply the logical identfier. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 14 | Maximum Characters: 255 |
| | No Pattern | | |

# ASCII_MD5_Checksum

| Name: ASCII_MD5_Checksum | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII MD5 Checksum class indicates a checksum computed by the Message-Digest algorithm 5 (MD5). | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 32 | Maximum Characters: 32 |
| | Pattern | | |
| | [0-9a-fA-F]{32} | | |

# ASCII_NonNegative_Integer

| Name: ASCII_NonNegative_Integer | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_NonNegative_Integer class indicates a non-negative integer. | | | |
| Schema Base Type: integer | | | |
| Minimum Value: 0 | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# ASCII_Numeric_Base16

| Name: ASCII_Numeric_Base16 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII Numeric Base16 class indicates a ASCII encoded string constrained to hexadecimal digits. | | | |
| Schema Base Type: hexBinary | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| | No Pattern | | |

# ASCII_Numeric_Base2

| Name: ASCII_Numeric_Base2 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII Numeric Base2 class indicates a ASCII encoded string constrained to binary digits. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| | Pattern | | |
| | [0-1]{1,255} | | |

# ASCII_Numeric_Base8

| Name: ASCII_Numeric_Base8 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII Numeric Base8 class indicates a ASCII encoded string constrained to octal digits. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| | Pattern | | |
| | [0-7]{1,255} | | |

# ASCII_Real

| Name: ASCII_Real | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Real class indicates a real. | | | |
| Schema Base Type: double | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# ASCII_Short_String_Collapsed

| *Name:* **ASCII_Short_String_Collapsed** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Short_String_Collapsed class indicates a limited length, whitespace-collapsed string. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# ASCII_Short_String_Preserved

| *Name:* **ASCII_Short_String_Preserved** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Short_String_Preserved class indicates a limited length, whitespace-preserved string. | | | |
| *Schema Base Type:* string | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# ASCII_String

| *Name:* **ASCII_String** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_String class indicates a limited length ASCII text string with whitespaces removed. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| | *No Pattern* | | |

# ASCII_Text_Collapsed

| *Name:* **ASCII_Text_Collapsed** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The ASCII_Text_Collapsed class indicates an unlimited length, whitespace-collapsed text string. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* None |
| | *No Pattern* | | |

# ASCII_Text_Preserved

| Name: ASCII_Text_Preserved | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Text_Preserved class indicates an unlimited length, whitespace-preserved text string. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| | No Pattern | | |

# ASCII_Time

| Name: ASCII_Time | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_Time class indicates a time value. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | Pattern | | |
| | (([0-1][0-9])\|(2[0-3])):[0-5][0-9](Z\|) | | |
| | (([0-1][0-9])\|(2[0-3])):[0-5][0-9]:(([0-5][0-9])\|60)((\.[0-9]+)\|)(Z\|) | | |
| | (([0-1][0-9])\|(2[0-4]))(Z\|) | | |
| | 24:00((:00((\.0+)\|))\|)(Z\|) | | |

# ASCII_VID

| Name: ASCII_VID | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The ASCII_VID class indicates a version identifier. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 3 | Maximum Characters: 100 |
| | Pattern | | |
| | 0\.([1-9]\|([0-9][0-9]+)) | | |
| | [1-9][0-9]* | | |
| | [1-9][0-9]*\.[0-9]+ | | |

# Binary_Data_Type

| Name: Binary_Data_Type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The Binary Data Type class is the abstract parent class for binary data types found in the digital objects. | | | |
| Schema Base Type: None | | | |

| *Name:* **Binary_Data_Type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# Character_Data_Type

| *Name:* **Character_Data_Type** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The Character Data Type class is the parent class for data types used to classify the values of attributes in class descriptions, i.e., product labels and character digital objects. | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# Complex

| *Name:* **Complex** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Complex Binary Data Types | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# ComplexLSB16

| *Name:* **ComplexLSB16** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Complex number consisting of two LSB 8 byte decimal reals. | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# ComplexLSB8

| *Name:* **ComplexLSB8** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Complex number consisting of two LSB 4 byte decimal reals. | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# ComplexMSB16

| Name: ComplexMSB16 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Complex number consisting of two MSB 8 byte decimal reals. | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# ComplexMSB8

| Name: ComplexMSB8 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Complex number consisting of two MSB 4 byte decimal reals. | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# Data_Type

| Name: Data_Type | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The Data Type class is the abstract parent class for several classes of data types. | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# Decimal_Integer

| Name: Decimal_Integer | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Decimal Integer Binary Data Types | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# Decimal_Real

| Name: Decimal_Real | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Floating Point Binary Data Types | | | |
| Schema Base Type: None | | | |

| *Name:* **Decimal_Real** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# IEEE754LSBDouble

| *Name:* **IEEE754LSBDouble** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* IEEE 754 LSB double precision floating point | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# IEEE754LSBSingle

| *Name:* **IEEE754LSBSingle** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* IEEE 754 LSB single precision floating point | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# IEEE754MSBDouble

| *Name:* **IEEE754MSBDouble** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* IEEE 754 MSB double precision floating point | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# IEEE754MSBSingle

| *Name:* **IEEE754MSBSingle** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* IEEE 754 MSB single precision floating point | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# SignedBitString

| Name: SignedBitString | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Signed Bit String | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# SignedByte

| Name: SignedByte | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Signed 8-bit byte | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# SignedLSB2

| Name: SignedLSB2 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Signed 2's-complement LSB 2-byte integer | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# SignedLSB4

| Name: SignedLSB4 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Signed 2's-complement LSB 4-byte integer | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# SignedLSB8

| Name: SignedLSB8 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Signed 2's-complement LSB 8-byte integer | | | |
| Schema Base Type: None | | | |

| *Name:* **SignedLSB8** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# SignedMSB2

| *Name:* **SignedMSB2** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Signed 2's-complement MSB 2-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# SignedMSB4

| *Name:* **SignedMSB4** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Signed 2's-complement MSB 4-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# SignedMSB8

| *Name:* **SignedMSB8** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Signed 2's-complement MSB 8-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UTF8_Short_String_Collapsed

| *Name:* **UTF8_Short_String_Collapsed** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* The UTF8_Short_String_Collapsed class indicates a limited length, whitespace-collapsed string constrained to the UTF-8 character encoding. | | | |
| *Schema Base Type:* token | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* 1 | *Maximum Characters:* 255 |
| | *No Pattern* | | |

# UTF8_Short_String_Preserved

| Name: UTF8_Short_String_Preserved | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The UTF8_Short_String_Preserved class indicates a limited length, whitespace-preserved string constrained to the UTF-8 character encoding. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: 255 |
| | No Pattern | | |

# UTF8_String

| Name: UTF8_String | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The UTF8_String class indicates a limited length UTF8 text string with whitespaces removed. | | | |
| Schema Base Type: token | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| | No Pattern | | |

# UTF8_Text_Preserved

| Name: UTF8_Text_Preserved | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description The UTF8_Text_Preserved class indicates an unlimited length, whitespace-preserved text string constrained to the UTF-8 character encoding. | | | |
| Schema Base Type: string | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: 1 | Maximum Characters: None |
| | No Pattern | | |

# UnsignedBitString

| Name: UnsignedBitString | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Unsigned Bit String | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# UnsignedByte

| Name: UnsignedByte | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Unsigned 8-bit byte | | | |

| *Name:* **UnsignedByte** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UnsignedLSB2

| *Name:* **UnsignedLSB2** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Unsigned 2's-complement LSB 2-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UnsignedLSB4

| *Name:* **UnsignedLSB4** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Unsigned 2's-complement LSB 4-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UnsignedLSB8

| *Name:* **UnsignedLSB8** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Unsigned 2's-complement LSB 8-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UnsignedMSB2

| *Name:* **UnsignedMSB2** | | | *Version Id:* **1.0.0.0** |
|---|---|---|---|
| *Description* Unsigned 2's-complement MSB 2-byte integer | | | |
| *Schema Base Type:* None | | | |
| *Minimum Value:* None | *Maximum Value:* None | *Minimum Characters:* None | *Maximum Characters:* None |
| | *No Pattern* | | |

# UnsignedMSB4

| Name: UnsignedMSB4 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Unsigned 2's-complement MSB 4-byte integer | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# UnsignedMSB8

| Name: UnsignedMSB8 | | | Version Id: 1.0.0.0 |
|---|---|---|---|
| Description Unsigned 2's-complement MSB 8-byte integer | | | |
| Schema Base Type: None | | | |
| Minimum Value: None | Maximum Value: None | Minimum Characters: None | Maximum Characters: None |
| | No Pattern | | |

# Chapter 13. Units of Measure in the common (pds) namespace.

These classes define the PDS4 units of measure.

## Unit_Of_Measure

| Name: Unit_Of_Measure | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: The Unit_Of_Measure is a definite magnitude of a quantity. | | |
| | Unit Id | |
| | None | |

## Units_of_Acceleration

| Name: Units_of_Acceleration | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Acceleration is a magnitude of acceleration. | | |
| | Unit Id | |
| | cm/s**2 | The abbreviated unit for Units_of_Acceleration is cm/s**2 |
| | km/s**2 | The abbreviated unit for Units_of_Acceleration is km/s**2 |
| | m/s**2 | The abbreviated unit for Units_of_Acceleration is m/s**2 |

## Units_of_Amount_Of_Substance

| Name: Units_of_Amount_Of_Substance | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Amount_Of_Substance is a magnitude of mass. | | |
| | Unit Id | |
| | mol | The abbreviated unit for Units_of_Amount_Of_Substance is mol |

## Units_of_Angle

| Name: Units_of_Angle | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Angle is a magnitude of angle. | | |
| | Unit Id | |
| | arcmin | The abbreviated unit for Units_of_Angle is arcmin |
| | arcsec | The abbreviated unit for Units_of_Angle is arcsec |
| | deg | The abbreviated unit for Units_of_Angle is deg |
| | hr | The abbreviated unit for Units_of_Angle is hr |
| | mrad | The abbreviated unit for Units_of_Angle is mrad |

| Name: Units_of_Angle | | Version Id: 1.0.0.0 |
|---|---|---|
| | rad | The abbreviated unit for Units_of_Angle is rad |

# Units_of_Angular_Velocity

| Name: Units_of_Angular_Velocity | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Angular_Velocity is a magnitude of speed of rotation. | | |
| | Unit Id | |
| | deg/day | The abbreviated unit for Units_of_Angular_Velocity is deg/day |
| | deg/s | The abbreviated unit for Units_of_Angular_Velocity is deg/s |
| | rad/s | The abbreviated unit for Units_of_Angular_Velocity is rad/s |

# Units_of_Area

| Name: Units_of_Area | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Area is a magnitude of area. | | |
| | Unit Id | |
| | m**2 | The abbreviated unit for Units_of_Area is m**2 |

# Units_of_Current

| Name: Units_of_Current | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Current is a magnitude of current. | | |
| | Unit Id | |
| | A | The abbreviated unit for Units_of_Current is A |
| | mA | The abbreviated unit for Units_of_Current is mA |

# Units_of_Frame_Rate

| Name: Units_of_Frame_Rate | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Frame_Rate is a magnitude of change. | | |
| | Unit Id | |
| | frames/s | The abbreviated unit for Units_of_Frame_Rate is frames/s |

# Units_of_Frequency

| Name: Units_of_Frequency | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Frequency is a magnitude of frequency. | | |
| | Unit Id | |
| | Hz | The abbreviated unit for Units_of_Frequency is Hz |

# Units_of_Length

| Name: Units_of_Length | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Length is a magnitude of length. | | |
| | Unit Id | |
| | AU | The abbreviated unit for Units_of_Length is AU (astronomical unit) |
| | Angstrom | The abbreviated unit for Units_of_Length is Angstrom |
| | cm | The abbreviated unit for Units_of_Length is cm |
| | km | The abbreviated unit for Units_of_Length is km |
| | m | The abbreviated unit for Units_of_Length is m |
| | micrometer | The abbreviated unit for Units_of_Length is micrometer |
| | mm | The abbreviated unit for Units_of_Length is mm |
| | nm | The abbreviated unit for Units_of_Length is nm |

# Units_of_Map_Scale

| Name: Units_of_Map_Scale | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Map_Scale is a proportional representation. | | |
| | Unit Id | |
| | km/pixel | The abbreviated unit for Units_of_Map_Scale is km/pixel |
| | m/pixel | The abbreviated unit for Units_of_Map_Scale is m/pixel |
| | mm/pixel | The abbreviated unit for Units_of_Map_Scale is mm/pixel |
| | pixel/deg | The abbreviated unit for Units_of_Map_Scale is pixel/deg |

# Units_of_Mass

| Name: Units_of_Mass | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Mass is a magnitude of mass. | | |
| | Unit Id | |
| | g | The abbreviated unit for Units_of_Mass is g |
| | kg | The abbreviated unit for Units_of_Mass is kg |

# Units_of_Misc

| Name: Units_of_Misc | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Misc provides an assortment of derived units. | | |
| | Unit Id | |
| | DN | The abbreviated unit for Units_of_Misc is DN |

| *Name:* **Units_of_Misc** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | electron/DN | The abbreviated unit for Units_of_Misc is electron/DN |
| | pixel | The abbreviated unit for Units_of_Misc is pixel |

# Units_of_None

| *Name:* **Units_of_None** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* Units_of_None indicates that no unit of measure applies. | | |
| | *Unit Id* | |
| | none | The abbreviated unit for Units_of_None is none |

# Units_of_Optical_Path_Length

| *Name:* **Units_of_Optical_Path_Length** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* Units_of_Optical_Path_Length is a magnitude of optical path length. | | |
| | *Unit Id* | |
| | airmass | The abbreviated unit for Units_of_Optical_Path_Length is airmass |

# Units_of_Pressure

| *Name:* **Units_of_Pressure** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* Units_of_Pressure is a magnitude of pressure. | | |
| | *Unit Id* | |
| | Pa | The abbreviated unit for Units_of_Pressure is Pa |
| | bar | The abbreviated unit for Units_of_Pressure is bar (10**5 Pa) |
| | hPa | The abbreviated unit for Units_of_Pressure is hPa (100 Pa) |
| | mbar | The abbreviated unit for Units_of_Pressure is mbar (100 Pa) |

# Units_of_Radiance

| *Name:* **Units_of_Radiance** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* Units_of_Radiance is a magnitude of radiance. | | |
| | *Unit Id* | |
| | W*m**-2*sr**-1 | The abbreviated unit of Units_of_Radiance is W*m**-2*sr**-1 |
| | W/m**2/sr | The abbreviated unit of Units_of_Radiance is W/m**2/sr |

# Units_of_Rates

| Name: Units_of_Rates | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Rate is a magnitude of change. | | |
| | Unit Id | |
| | counts/bin | The abbreviated unit for Units_of_Rates is counts/bin |
| | kilobits/s | The abbreviated unit for Units_of_Rates is kilobits/s |

# Units_of_Solid_Angle

| Name: Units_of_Solid_Angle | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Solid_Angle is a magnitude of a solid angle. | | |
| | Unit Id | |
| | sr | The abbreviated unit for Units_of_Solid_Angle is sr |

# Units_of_Spectral_Irradiance

| Name: Units_of_Spectral_Irradiance | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: A measure of the power of radiation at a particular frequency or wavelength that passes through a unit area. | | |
| | Unit Id | |
| | SFU | The abbreviated unit for Units_of_Spectral_Irradiance is SFU |
| | W*m**-2*Hz**-1 | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-2*Hz**-1 |
| | W*m**-2*nm**-1 | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-2*nm**-1 |
| | W*m**-3 | The abbreviated unit for Units_of_Spectral_Irradiance is W*m**-3 |
| | W/m**2/Hz | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**2/Hz |
| | W/m**2/nm | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**2/nm |
| | W/m**3 | The abbreviated unit of Units_of_Spectral_Irradiance is W/m**3 |
| | uW*cm**-2*um**-1 | The abbreviated unit for Units_of_Spectral_Irradiance is uW*cm**-2*um**-1 |
| | µW/cm**2/µm | The abbreviated unit of Units_of_Spectral_Irradiance is µW/cm**2/µm |

# Units_of_Spectral_Radiance

| Name: Units_of_Spectral_Radiance | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: A measure of the power of radiation at a particular frequency or wavelength that passes through a unit area and a unit solid angle in a specified direction. | | |
| | Unit Id | |
| | W*m**-2*sr**-1*Hz**-1 | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*Hz**-1 |
| | W*m**-2*sr**-1*nm**-1 | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*nm**-1 |
| | W*m**-2*sr**-1*um**-1 | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-2*sr**-1*um**-1 |
| | W*m**-3*sr**-1 | The abbreviated unit for Units_of_Spectral_Radiance is W*m**-3*sr**-1 |
| | W/m**2/sr/Hz | The abbreviated unit of Units_of_Spectral_Radiance is W/m**2/sr/Hz |
| | W/m**2/sr/nm | The abbreviated unit of Units_of_Spectral_Radiance is W/m**2/sr/nm |
| | W/m**2/sr/μm | The abbreviated unit for Units_of_Spectral_Radiance is W/m**2/sr/μm |
| | W/m**3/sr | The abbreviated unit of Units_of_Spectral_Radiance is W/m**3/sr |
| | uW*cm**-2*sr**-1*um**-1 | The abbreviated unit for Units_of_Spectral_Radiance is uW*cm**-2*sr**-1*um**-1 |
| | μW/cm**2/sr/μm | The abbreviated unit for Units_of_Spectral_Radiance is μW/cm**2/sr/μm |

# Units_of_Storage

| Name: Units_of_Storage | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Storage is an amount of computer storage. | | |
| | Unit Id | |
| | byte | The abbreviated unit of Units_of_Storage is byte |

# Units_of_Temperature

| Name: Units_of_Temperature | | Version Id: 1.0.0.0 |
|---|---|---|
| Description: Units_of_Temperature is a magnitude of temperature. | | |
| | Unit Id | |
| | K | The abbreviated unit of Units_of_Temperature is K |

| Name: Units_of_Temperature | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| | degC | The abbreviated unit of Units_of_Temperature is degC |

# Units_of_Time

| Name: Units_of_Time | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| Description: Units_of_Time is a magnitude of time. | | |
| | *Unit Id* | |
| | day | The abbreviated unit for Units_of_Time is day |
| | hr | The abbreviated unit for Units_of_Time is hr |
| | julian day | The abbreviated unit for Units_of_Time is julian day |
| | microseconds | The abbreviated unit for Units_of_Time is microseconds |
| | min | The abbreviated unit for Units_of_Time is min |
| | ms | The abbreviated unit for Units_of_Time is ms |
| | s | The abbreviated unit for Units_of_Time is s |
| | yr | The abbreviated unit for Units_of_Time is yr |

# Units_of_Velocity

| Name: Units_of_Velocity | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| Description: Units_of_Velocity is a magnitude of velocity. | | |
| | *Unit Id* | |
| | cm/s | The abbreviated unit for Units_of_Velocity is cm/s |
| | km/s | The abbreviated unit for Units_of_Velocity is km/s |
| | m/s | The abbreviated unit for Units_of_Velocity is m/s |

# Units_of_Voltage

| Name: Units_of_Voltage | | Version Id: 1.0.0.0 |
| --- | --- | --- |
| Description: Units_of_Voltage is a magnitude of voltage. | | |
| | *Unit Id* | |
| | V | The abbreviated unit for Units_of_Voltage is V |
| | mV | The abbreviated unit for Units_of_Voltage is mV |

# Units_of_Volume

| Name: Units_of_Volume | Version Id: 1.0.0.0 |
| --- | --- |
| Description: Units_of_Volume is a magnitude of volume. | |

| *Name:* **Units_of_Volume** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| | *Unit Id* | |
| | L | The abbreviated unit for Units_of_Volume is L |
| | m**3 | The abbreviated unit for Units_of_Volume is m**3 |

# Units_of_Wavenumber

| *Name:* **Units_of_Wavenumber** | | *Version Id:* **1.0.0.0** |
|---|---|---|
| *Description:* Units_of_Wavenumber is the number of waves that occur per unit distance, i.e., inverse length | | |
| | *Unit Id* | |
| | 1/cm | The abbreviated unit of Units_of_Wavenumber is 1/cm |
| | 1/m | The abbreviated unit of Units_of_Wavenumber is 1/m |
| | 1/nm | The abbreviated unit of Units_of_Wavenumber is 1/nm |
| | cm**-1 | The abbreviated unit for Units_of_Wavenumber is cm**-1 |
| | m**-1 | The abbreviated unit for Units_of_Wavenumber is m**-1 |
| | nm**-1 | The abbreviated unit for Units_of_Wavenumber is nm**-1 |