

# UMM-C Schema Representation

Canonical UMM-C schema definitions

| Element                              | Definition   | Required |
|--------------------------------------|--|----------|
| Metadata Language                    | This element specifies the language used in the metadata record (i.e. English, French, Chinese, etc.).   | No       |
| Metadata Dates                       | This element is used to identify dates when the <i>metadata</i> changed in some way. This element is made of two sub-elements, Type and Date.  | No       |
| Directory Names                      | This element has been used historically by the GCMD internally to identify association, responsibility and/or ownership of the dataset, service or supplemental information. Note: This field only occurs in the DIF. When a DIF record is retrieved in the ECHO10 or ISO 19115 formats, this element will not be translated.  | No       |
| Entry Title                          | This element describes the title of the dataset described by the metadata.   | Yes      |
| DOI                                  | This element stores the DOI (Digital Object Identifier) that identifies the dataset.   | Yes      |
| Associated DOIs                      | This element stores the associated DOIs that identifies associated collections or other items to this collection.  | No       |
| Abstract                             | This element provides a brief description of the dataset the metadata represents.  | Yes      |
| Purpose                              | This element contains suggested usage for the data and/or a description for why the resource exists.   | No       |
| Data Language                        | This element describes the language used in the preparation, storage, and description of the collection. It is the language of the collection data itself. It does not refer to the language used in the metadata record (although this may be the same language)  | No       |
| Data Dates                           | This element is used to identify dates when the <i>data</i> or <i>resource itself</i> changed in some way.   | No       |
| Data Center                          | This element is used to identify and provide contact information for the organization responsible for originating, processing, archiving, and/or distributing the dataset being described in the metadata.   | Yes      |
| Contact Group                        | This element is used to provide contact information for a group associated with the dataset.   | No       |
| Contact Person                       | This element is used to provide contact information for an individual associated with the dataset.   | No       |
| Collection Data Type                 | This element is used to identify the collection as a Science Quality Collection or as a non-science-quality collection such as a Near Real Time collection.  | No       |
| Processing Level                     | This element describes an identifier indicating the level at which the data in the collection are processed, ranging from level 0 (raw instrument data at full resolution) to level 4 (model output or analysis results).  | Yes      |
| Collection Citation                  | This element provides the information required to properly cite the collection in professional scientific literature.  | No       |
| Collection Progress                  | This element describes the production status of the dataset.   | Yes      |
| Quality                              | This element describes the quality of the dataset.   | No       |
| Use Constraints                      | This element defines how data may or may not be used to assure the protection of privacy or intellectual property. This includes license information, or any special restrictions, legal prerequisites, terms and conditions, and/or limitations on using the dataset.   | No       |
| Access Constraints                   | This element describes any restrictions imposed on data access. Access Constraints can be described in a free text field with the option to provide an access control list (ACL) value.  | No       |
| Archive and Distribution Information | This element and all of its sub elements allow a data provider to provide archive and distribution file information up front to an end user, to help them decide if they can use the product. The file information includes AverageFileSize - typically used for granules as well as file formats and other file information.  | No       |
| Direct Distribution Information      | The direct distribution information main element allows data providers to provide users information on getting direct access to data products that are stored in the Amazon Web Service (AWS) S3 buckets when they are initially looking at a collection. The end users get information such as the S3 credentials end point, a credential documentation URL, as well as bucket prefix names, and an AWS region. | No       |

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| Publication Reference        | This element describes key bibliographic citations pertaining to the collection.   | No  |
| ISO Topic Category           | This element identifies the topic category (or categories) from the EN ISO 19115 Topic Category Code List that pertain to a collection.  | No  |
| Science Keywords             | This element enables specification of Earth Science keywords.  | Yes |
| Ancillary Keywords           | This element allows metadata authors to provide words or phrases beyond the controlled <a href="#">Science Keyword</a> vocabulary, to further describe the the collection.   | No  |
| Additional Attributes        | This element stores the data's distinctive attributes (i.e. attributes used to describe the unique characteristics of the resource which extend beyond those defined in this mapping).   | No  |
| Metadata Association         | This element is used to identify other metadata resources that are dependent on or related to the data described by the metadata.  | No  |
| Temporal Extent              | This element describes when data were acquired or collected.   | No  |
| Paleo Temporal Coverage      | This element defines the time period for geologic and/or paleoclimate data. The element is predominantly used for data samples that originated prior to 01-01-0001.  | No  |
| Temporal Keywords            | This element specifies a word or phrase which serves to summarize the temporal characteristics of a dataset.   | No  |
| Spatial Extent               | This element describes the geographic coverage of the data.  | No  |
| Tiling Identification System | This element defines a named two-dimensional tiling system related to the collection.  | No  |
| Spatial Information          | This element stores information about the reference frame from which horizontal and vertical spatial domains are measured. The horizontal reference frame includes fields for Geodetic Model, Geographic Coordinates, and Local Coordinates. The Vertical reference frame includes fields for altitudes (elevations) and depths. | No  |
| Location Keywords            | This element contains keywords that characterize the study area/region where data was collected.   | No  |
| Platform                     | This element describes the relevant platforms used to acquire the data.  | Yes |
| Instrument                   | This element is used to register the device that measured or recorded the data, including direct human observation.  | Yes |
| Project                      | This element describes the scientific endeavor(s) with which the collection is associated.   | No  |
| Related URL                  | This element describes any resource-related URLs that include project home pages, resource information pages, services, related data, archives/servers, metadata extensions, direct links to online software packages, web mapping services, links to images, documents, or other data.  | Yes |
| Short Name                   | This element describes the dataset short name.   | Yes |
| Version                      | This element describes the dataset version.  | Yes |
| Version Description          | This element describes the version of the dataset.   | No  |