UMM-G Schema Representation

Canonical UMM-G schema

Element	Definition	Required
GranuleUR	This element describes the Universal Reference ID of the granule referred by the data provider. This ID is unique per data provider.	Yes
ProviderDates	This element describes the dates related to activities involving the granule and the data provider database with the exception of Delete. For Create, Update, and Insert the date is the date that the granule file is created, updated, or inserted into the provider database by the provider. Delete is the date that the CMR should delete the granule metadata record from its repository.	Yes
CollectionReference	This element describes the collection metadata record's short name and version, or entry title to which this granule metadata record belongs.	Yes
AccessConstraints	This element allows the author to constrain access to the granule. The value field is used for special ACL rules (Access Control Lists (http://en.wikipedia.org/wiki/Access_control_list)). For example, it can be used to hide metadata when it isn't ready for public consumption.	No
DataGranule	This category of elements describe basic descriptive characteristics associated with a granule such as file archive and distribution information, when data was collected (day vs night), when this granule was produced, and any granule identifiers that a provider may want to store in the metadata. Elements that fall under DataGranule include: • Identifiers • ReprocessingPlanned • ReprocessingActual • DayNightFlag • ProductionDateTime • ArchiveAndDistributionInformation	No
PGEVersionClass	This element describes basic descriptive characteristics related to the Product Generation Executable associated with a granule.	No
TemporalExtent	This element contains attributes that describe the data acquisition date or date range.	No
SpatialExtent	This element contains attributes that describe the horizontal (geographical) and/or vertical region over which the data was acquired. Spatial Extent includes any or all of Granule Localities, Horizontal Spatial Domain, and Vertical Spatial Domain.	No
SpatialExtent/GranuleLocalities	The Granule Localities element is a method for naming a granule's spatial location.	No
SpatialExtent/Track	The Track element provides orbit information for data collected via satellite including Cycle, Pass and Tiles. This allows for file level searches on these orbital parameters.	No
OrbitCalculatedSpatialDomains	This element describes the characteristics of the orbit calculated spatial domain to include the model name, orbit number, start and stop orbit number, equator crossing date and time, and equator crossing longitude.	No
MeasuredParameters	This element describes the name of the geophysical parameter expressed in the data as well as associated quality flags and quality statistics. The quality statistics element contains measures of quality for the granule. The parameters used to set these measures are not preset and will be determined by the data producer. Each set of measures can occur many times either for the granule as a whole or for individual parameters. The quality flags contain the science, operational and automatic quality flags which indicate the overall quality assurance levels of specific parameter values within a granule.	No
Platforms	This element describes a reference to a platform in the parent collection that is associated with the acquisition of the granule. The platform must exist in the parent collection. For example, Platform types may include (but are not limited to): ADEOS-II, AEM-2, Terra, Aqua, Aura, BALLOONS, BUOYS, C-130, DEM, DMSP-F1, etc.	No
Projects	This element describes the name of the scientific program or project from which the data were collected. This element is intended for non-space assets such as aircraft, ground systems, balloons, sondes, ships, etc. associated with campaigns. This element may also cover a long term project that continuously creates new data sets — like MEaSUREs from ISCCP and NVAP or CMARES from MISR. Project also includes the Campaign sub-element to support multiple campaigns under the same project.	No
AdditionalAttributes	This element describes a reference to an additional attribute in the parent collection. The attribute reference may contain a granule specific value that will override the value in the parent collection for this granule. An attribute with the same name must exist in the parent collection.	No
InputGranules	This element describes the identification of the input granule(s) for a specific granule.	No

TilingIdentificationSystem	This element describes the tiling identification system for the granule. The tiling identification system information is an alternative way to express granule's spatial coverage based on a certain two-dimensional coordinate system defined by the providers. The name must match the name in the parent collection.	No
CloudCover	This element describes a percentage value indicating how much of the area of a granule (the EOSDIS data unit) has been obscured by clouds. It is worth noting that there are many different measures of cloud cover within the EOSDIS data holdings and that the cloud cover parameter that is represented in the archive is dataset-specific.	No
RelatedUrls	This element describes any data/service-related URLs that include project home pages, services, related data archives /servers, metadata extensions, direct links to online software packages, web mapping services, links to images, or other data.	No
NativeProjectionNames	Represents the native projection of the granule if the granule has a native projection.	No
GridMappingNames	Represents the native grid mapping of the granule, if the granule is gridded.	No
MetadataSpecification	Requires the user to add schema information into every granule record. It includes the schema's name, version, and URL location. The information is controlled through enumerations at the end of this schema.	Yes