

Additional Attributes

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Element Description

The Additional Attribute element is used to describe unique characteristics of the resource which extend beyond those defined in other metadata fields.

Best Practices

The Additional Attributes metadata concept can be used to describe unique characteristics of a dataset beyond what is covered in the existing metadata model. For example: cloud cover, tile number, or acquisition mode could be provided as additional attributes, since there are no existing metadata fields for these particular characteristics in the Unified Metadata Model (UMM). All Additional Attributes **must** be defined in the collection level metadata and should also be provided in the granule level metadata. If an additional attribute in the granule level metadata has not been defined in the parent collection, then validation errors may occur.

There are twelve sub-elements that comprise Additional Attributes:

Name: The name/ label for the additional attribute. Providing a name is required.

Description: A free-text description of the additional attribute. Providing a description is required.

Value: The value of the additional attribute. Provide the value in the collection level record if it is the same for all granules in the collection. If the value of the additional attribute differs by granule, then leave the value field blank at the collection level (see below for examples).

DataType: The data type of the additional attribute value. Providing a data type is required. This is a controlled vocabulary field in UMM-Common with the following options: STRING, FLOAT, INT, BOOLEAN, DATE, TIME, DATETIME, DATE_STRING, TIME_STRING, DATETIME_STRING

Measurement Resolution: The smallest unit increment to which the additional attribute value is measured. Providing a measurement resolution is optional.

Parameter Range Begin: The minimum value of the additional attribute over the whole collection. This only applies to attributes that are continuous in nature. Providing a parameter range begin is optional.

Parameter Range End: The maximum value of the additional attribute over the whole collection. This only applies to attributes that are continuous in nature. Providing a parameter range end is optional.

Parameter Units Of Measure: The standard unit of measurement for the additional attribute. For example: meters, hertz. Providing a parameter unit of measure is optional, but is highly recommended if the additional attribute value has an associated unit. Use of SI Base Units are recommended: <https://www.nist.gov/pml/weights-and-measures/metric-si/si-units>

Parameter Value Accuracy: An estimate of the accuracy of the values of the additional attribute. The accuracy must be specified as a percentage or the unit with which the parameter is measured. Providing a parameter value accuracy is optional.

Value Accuracy Explanation: Describes the method used for determining the parameter value accuracy. Providing a value accuracy explanation is optional.

Group: Identifies a namespace for the additional attribute name. Providing a group is optional.

Update Date: The date this additional attribute information was updated. Providing an update date is optional.

The Additional Attribute Value might be the same for all data in a collection, or it may vary. This results in 2 possible scenarios:

Scenario 1

The Additional Attribute value is the same for all data in the collection. In this case, the additional attribute "Value" field should be populated in the collection level metadata. Populating the "Value" field at the collection level indicates that the value is the same for all granules in the collection. For example, if cloud cover is the same (let's say 50%) for the entire dataset, the metadata would look like this:

Example 1: Additional Attribute that is the same for all granules in a dataset. Note that the value field is populated at the collection level and that the value remains the same at the granule level.

Collection Level Metadata	Granule Level Metadata file 1	Granule Level Metadata file 2
<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Description": "Percent cloud cover", "Value": "50", "DataType": "INT", "ParameterUnitsOfMeasure": "Percent" },</pre>	<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Value": "50", },</pre>	<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Value": "50", },</pre>

Scenario 2

The Additional Attribute value varies across the collection. In this case, the additional attribute "Value" field should be left blank in the collection level metadata. Excluding the "Value" field at the collection level indicates that the value changes from granule to granule, and that the granule level metadata should be referenced to determine the value of the attribute for that particular data file. For example, if cloud cover varies across the dataset, the metadata would look like this:

Example 2: Additional Attribute that varies from granule to granule. Note that the value field is not provided at the collection level and that the value is different for each of the granules.

Collection Level Metadata	Granule Level Metadata file 1	Granule Level Metadata file 2
<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Description": "Percent cloud cover", "DataType": "INT", "ParameterUnitsOfMeasure": "Percent" },</pre>	<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Value": "30", },</pre>	<pre>"AdditionalAttributes": [{ "Name": "Cloud Cover", "Value": "73", },</pre>

Examples:

Name: "Polarization"

Description: "Transmit and receive polarization specification for the SAR file"

Value: "HV"

Data Type: "STRING"

Name: "Band Center Frequency"

Description: "Central transmission frequency of the instrument"

Data Type: "FLOAT"

ParameterUnitsOfMeasure: "GHz"

Name: "MODIS SIN TILE HORIZ"

Description: "The horizontal tile number of the MODIS sinusoidal tile grid"

Type: "INT"

ParameterRangeBegin: "0"

ParameterRangeEnd: "35"

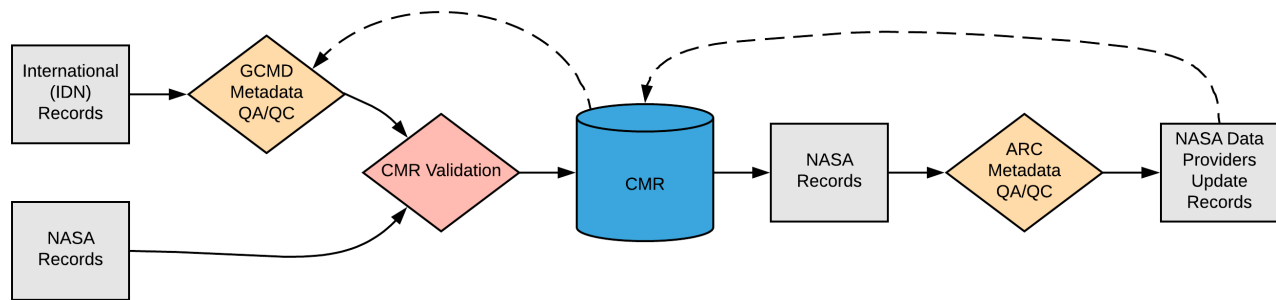
Element Specification

Providing the Additional Attributes element is optional (Cardinality: 0..*)

Model	Element	Type	Constraints	Required?	Cardinality	Notes
UMM-C	AdditionalAttribute/Name	String	1 - 50 characters	Yes	1	
UMM-C	AdditionalAttribute/Description	String	1 - 2048 characters	Yes	1	
UMM-C	AdditionalAttribute/Value	String	1 - 500 characters	No	0..1	
UMM-C	AdditionalAttribute/DataType	Enumeration	STRING FLOAT INT BOOLEAN DATE TIME DATETIME DATE_STRING TIME_STRING DATETIME_STRING	Yes	1	
UMM-C	AdditionalAttribute/MeasurementResolution	String	1 - 80 characters	No	0..1	
UMM-C	AdditionalAttribute/ParameterRangeBegin	String	1 - 80 characters	No	0..1	
UMM-C	AdditionalAttribute/ParameterRangeEnd	String	1 - 80 characters	No	0..1	
UMM-C	AdditionalAttribute/ParameterUnitsOfMeasure	String	1 - 80 characters	No	0..1	
UMM-C	AdditionalAttribute/ParameterValueAccuracy	String	1 - 80 characters	No	0..1	
UMM-C	AdditionalAttribute/ValueAccuracyExplanation	String	1 - 2048 characters	No	0..1	
UMM-C	AdditionalAttribute/Group	String	1 - 50 characters	No	0..1	
UMM-C	AdditionalAttribute/UpdateDate	date-time	N/A	No	0..1	Dates must comply with the ISO 8601 Standard .

Metadata Validation and QA/QC

All metadata entering the CMR goes through the below process to ensure metadata quality requirements are met. All records undergo CMR validation before entering the system. The process of QA/QC is slightly different for NASA and non-NASA data providers. Non-NASA providers include interagency and international data providers and are referred to as the International Directory Network (IDN).



Please see the expandable sections below for flowchart details.

- Manual Review
 - Identify errors, discrepancies or omissions.
 - Proof all content for conciseness and readability.
- Automated Review
 - Checks that the field length is not greater than that established in the schema for each "Additional Attribute" sub-group.
 - Checks "DIF/Additional_Attributes/DataType" for enumerations; "STRING", "FLOAT", "INT", "BOOLEAN", "DATE", "TIME", "DATETIME", "DATE_STRING", "TIME_STRING", "DATETIME_STRING".

Checks to determine if string falls within maximum field lengths.

ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • Any Additional Attribute sub-element contains a major spelling or grammatical error. • An incorrect or invalid Additional Attribute/Data Type is provided. • An Additional Attribute is provided at the granule level that is not defined at the collection level.
Yellow = Medium Priority Finding	This element is categorized as medium priority when: • A recommendation is made to improve the readability and/or consistency of the Additional Attribute.
Blue = Low Priority Finding	This element is categorized as low priority when: • The Additional Attribute contains a URL which needs to be updated from http to https. • Any other miscellaneous suggestions (minor in nature).
Green = No Findings/Issues	The element is provided and follows all applicable criteria specified in the best practices section above.

ARC Automated Checks

ARC uses the [pyQuARC library](#) for automated metadata checks. Please see the [pyQuARC GitHub](#) for more information.

Dialect Mappings

DIF 9 (Note: DIF-9 is being phased out and will no longer be supported after 2018)

DIF 10

Providing the `Additional_Attributes` element is optional in DIF 10 (Cardinality: 0..*)

DIF 10 also supports an element called `Extended_Metadata` which cross-walks to `Additional_Attributes` when being converted from DIF 10 to the UMM. Providing the `Extended_Metadata` element is optional (Cardinality: 0..*).

UMM-C Element	DIF 10 Path	Type	Constraints	Required in DIF 10?	Cardinality	Notes
AdditionalAttribute/Group	Extended_Metadata/Metadata/Group	String		No	0..1	

AdditionalAttribute/Name	Extended_Metadata/Metadata/Name	String		Yes	1	
AdditionalAttribute/DataType	Extended_Metadata/Metadata/Type	String		No	0..1	
AdditionalAttribute/Description	Extended_Metadata/Metadata/Description	String		No	0..1	"AdditionalAttribute/Description" is required by the UMM. If no description is provided in the extended metadata, a value of "Not provided" will automatically be populated in the "AdditionalAttribute/Description" field upon conversion from DIF 10 to the UMM-JSON metadata standard.
AdditionalAttribute/UpdateDate	Extended_Metadata/Metadata/Update_Date	String		No	0..1	
AdditionalAttribute/Value	Extended_Metadata/Metadata/Value	String		No	0..*	
Additional_Attributes/Name	Additional_Attributes/Name	String		Yes	1	
AdditionalAttribute/DataType	Additional_Attributes/DataType	String		Yes	1	This sub element "Path/Type" will change from "String" to "Enumeration" in future versions. The usable valid values for the enumeration will map to UMM-C (STRING, FLOAT, INT, BOOLEAN, DATE, TIME, DATETIME, DATE_STRING, TIME_STRING, DATETIME_STRING)
AdditionalAttribute/Description	Additional_Attributes/Description	String		Yes	0..1	
AdditionalAttribute/MeasurementResolution	Additional_Attributes/MeasurementResolution	String		No	0..1	
AdditionalAttribute/ParameterRangeBegin	Additional_Attributes/ParameterRangeBegin	String		Yes	0..1	
AdditionalAttribute/ParameterRangeEnd	Additional_Attributes/ParameterRangeEnd	String		No	0..1	
AdditionalAttribute/ParameterUnitsOfMeasure	Additional_Attributes/ParameterUnitsOfMeasure	String		No	0..1	
AdditionalAttribute/ParameterValueAccuracy	Additional_Attributes/ParameterValueAccuracy	String		No	0..1	
AdditionalAttribute/ValueAccuracyExplanation	Additional_Attributes/ValueAccuracyExplanation	String		No	0..1	
AdditionalAttribute/Value	Additional_Attributes/Value	String		No	0..1	

Example Mapping

DIF 10

```

<Additional_Attributes>
  <Name>Geolocated</Name>
  <Description>Denotes whether the data is
geolocated.</Description>
  <DataType>STRING</DataType>
  <Value>False</Value>
</Additional_Attributes>
<Additional_Attributes>
  <Name>Laser Footprint</Name>
  <Description>The diameter of the laser beam that
reaches the ground.</Description>
  <DataType>FLOAT</DataType>
  <ParameterUnitsOfMeasure>Meters<
/ParameterUnitsOfMeasure>
</Additional_Attributes>
----- with -----
<Extended_Metadata>
  <Metadata>
    <Group>gov.nasa.gsfc.gc<md>/Group>
    <Name>metadata.keyword_version</Name>
    <Value>8.1</Value>
  </Metadata>
  <Metadata>
    <Group>gov.nasa.gsfc.disc</Group>
    <Name>Data Granularity</Name>
    <Description>The time coverage of individual
data granules.</Description>
    <Value>1 day</Value>
  </Metadata>
</Extended_Metadata>

```

UMM

```

"AdditionalAttributes": [
  {
    "Value": "False",
    "Name": "Geolocated",
    "Description": "Denotes whether the data is
geolocated.",
    "DataType": "STRING"
  },
  {
    "Name": "Laser Footprint",
    "Description": "The diameter of the laser beam
that reaches the ground.",
    "DataType": "FLOAT",
    "ParameterUnitsOfMeasure": "Meters"
  },
  {
    "Group": "gov.nasa.gsfc.gc<md>",
    "Value": "8.1",
    "Name": "metadata.keyword_version",
    "Description": "Not provided"
  },
  {
    "Group": "gov.nasa.gsfc.disc",
    "Value": "1 day",
    "Name": "Data Granularity",
    "Description": "The time coverage of
individual data granules."
  }
]

```

ECHO 10

Providing the Additional Attributes element is optional (Cardinality: 0..*)

UMM-C Element	ECHO 10 Path	Type	Constraints	Required in ECHO10?	Cardinality
AdditionalAttribute/Name	AdditionalAttributes/AdditionalAttribute/Name	String	1 - 80 characters	Yes	1
AdditionalAttribute/DataType	AdditionalAttributes/AdditionalAttribute/DataType	Enumeration	STRING FLOAT INT BOOLEAN DATE TIME DATETIME DATE_STRING TIME_STRING	Yes	1
AdditionalAttribute/Description	AdditionalAttributes/AdditionalAttribute/Description	String	1 - 2048 characters	Yes	1
AdditionalAttribute/MeasurementResolution	AdditionalAttributes/AdditionalAttribute/MeasurementResolution	String	1 - 80 characters	No	0..1
AdditionalAttribute/ParameterRangeBegin	AdditionalAttributes/AdditionalAttribute/ParameterRangeBegin	String	1 - 80 characters	No	0..1
AdditionalAttribute/ParameterRangeEnd	AdditionalAttributes/AdditionalAttribute/ParameterRangeEnd	String	1 - 80 characters	No	0..1
AdditionalAttribute/ParameterUnitsOfMeasure	AdditionalAttributes/AdditionalAttribute/ParameterUnitsOfMeasure	String	1 - 80 characters	No	0..1
AdditionalAttribute/ParameterValueAccuracy	AdditionalAttributes/AdditionalAttribute/ParameterValueAccuracy	String	1 - 80 characters	No	0..1
AdditionalAttribute/ValueAccuracyExplanation	AdditionalAttributes/AdditionalAttribute/ValueAccuracyExplanation	String	1 - 2048 characters	No	0..1
AdditionalAttribute/Value	AdditionalAttributes/AdditionalAttribute/Value	String	1 - 500 characters	No	0..1

Example Mapping

ECHO 10

```

<AdditionalAttributes>
  <AdditionalAttribute>
    <Name>Geolocated</Name>
    <DataType>STRING</DataType>
    <Description>Denotes whether the data is
geolocated.</Description>
    <Value>False</Value>
  </AdditionalAttribute>
  <AdditionalAttribute>
    <Name>Laser Footprint</Name>
    <DataType>FLOAT</DataType>
    <Description>The diameter of the laser beam that
reaches the ground.</Description>
    <ParameterUnitsOfMeasure>Meters<
/ParameterUnitsOfMeasure>
  </AdditionalAttribute>
</Additional_Attributes>

```

UMM

```

"AdditionalAttributes": [
  {
    "Value": "False",
    "Name": "Geolocated",
    "Description": "Denotes whether the data is
geolocated.",
    "DataType": "STRING"
  },
  {
    "Name": "Laser Footprint",
    "Description": "The diameter of the laser beam
that reaches the ground.",
    "DataType": "FLOAT",
    "ParameterUnitsOfMeasure": "Meters"
  }
]

```

ISO 19115-2 MENDS

Disclaimer: ISO to UMM mapping for Additional Attributes subject to change

Providing the Additional Attributes element is optional (Cardinality: 0..*)

If the additional attribute type is known it can be mapped to the correct section of ISO. Currently additional attributes are mapped to several sections within ISO depending on if the attribute is geographical, describes coverage, describes data quality, describes acquisition, or maps to a keyword.

UMM-C Element	ISO Path	Type
Additional Attribute /Name	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:name/gco:CharacterString	String
Additional Attribute /DataType	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:dataType/eos:EOS_AdditionalAttributeDataTypeCode codeList=" http://earthdata.nasa.gov/metadata/resources/Codelists.xml#EOS_AdditionalAttributeDataTypeCode " codeListValue="*dataType*">*dataType*</eos:EOS_AdditionalAttributeDataTypeCode> where *dataType* = STRING,FLOAT,INT, etc.	String
Additional Attribute /Description	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/eos:description/gco:CharacterString	String
Additional Attribute /MeasurementResolution	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:measurementResolution/gco:CharacterString	String
Additional Attribute /ParameterRangeBegin	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterRangeBegin/gco:CharacterString	String
Additional Attribute /ParameterRangeEnd	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterRangeEnd/gco:CharacterString	String
Additional Attribute /ParameterUnitsOfMeasure	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterUnitsOfMeasure/gco:CharacterString	String

Additional Attribute /ParameterValueAccuracy	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterValueAccuracy/gco:CharacterString	String
Additional Attribute /ValueAccuracyExplanation	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:valueAccuracyExplanation/gco:CharacterString	String
Additional Attribute /Value	/gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd:processStep/gmi:LE_ProcessStep/gmi:processingInformation/ eos:EOS_Processing/eos:otherProperty/gco:Record/eos:AdditionalAttributes /eos:AdditionalAttribute/eos:value/gco:CharacterString	String

Example Mapping

ISO 19115-2 MENDS

```

<gmi:MI_Metadata>
...
  <gmd:dataQualityInfo>
    <gmd:DQ_DataQuality>
      <gmd:lineage>
        <gmd:LI_Lineage>
          <gmd:processStep>
            <gmi:LE_ProcessStep>
              <gmi:processingInformation>
                <eos:EOS_Processing>
                  <eos:otherProperty>
                    <gco:Record>
                      <eos:AdditionalAttributes>
                        <eos:AdditionalAttribute>
                          <eos:reference>
                            <eos:
EOS_AdditionalAttributeDescription>
                              <eos:name>
                                <gco:
CharacterString>Geolocated</gco:CharacterString>
                                  </eos:name>
                                  <eos:dataType>
                                    <eos:
EOS_AdditionalAttributeDataTypeCode codeList="
http://earthdata.nasa.gov/metadata/resources
/CodeLists.xml#EOS_AdditionalAttributeDataTypeCode"
codeListValue="STRING">STRING
                                      </eos:
EOS_AdditionalAttributeDataTypeCode>
                                      </eos:dataType>
                                      <eos:description>
                                        <gco:
CharacterString>Denotes whether the data is
geolocated.</gco:CharacterString>
                                          </eos:description>
                                          </eos:
EOS_AdditionalAttributeDescription>
                                          </eos:reference>
                                          <eos:value>
                                            <gco:CharacterString>False<
/gco:CharacterString>
                                              </eos:value>
                                              </eos:AdditionalAttribute>
                                              </eos:AdditionalAttributes>
                                              </gco:Record>
                                              </eos:otherProperty>
                                              </eos:EOS_Processing>
                                              </gmi:processingInformation>
                                              </gmi:LE_ProcessStep>
                                              </gmd:processStep>
                                              </gmd:LI_Lineage>
                                              </gmd:lineage>
                                              </gmd:DQ_DataQuality>
                                              </gmd:dataQualityInfo>
...
</gmi:MI_Metadata>

```

UMM

```

"AdditionalAttributes": [
  {
    "Value": "False",
    "Name": "Geolocated",
    "Description": "Denotes whether the data is
geolocated.",
    "DataType": "STRING"
  },
]

```

ISO 19115-2 SMAP

Disclaimer: ISO to UMM mapping for Additional Attributes subject to change

Providing the Additional Attributes element is optional (Cardinality: 0..*)

UMM-C Element	ISO Path	Type
AdditionalAttribute/Name	TBD	String
AdditionalAttribute/Name	TBD	String
AdditionalAttribute/Type	TBD	String
AdditionalAttribute/Identifier	TBD	String
AdditionalAttribute/DataType	TBD	String
AdditionalAttribute/Description	TBD	String
AdditionalAttribute/MeasurementResolution	TBD	String
AdditionalAttribute/ParameterRangeBegin	TBD	String
AdditionalAttribute/ParameterRangeEnd	TBD	String
AdditionalAttribute/ParameterUnitsOfMeasure	TBD	String
AdditionalAttribute/ParameterValueAccuracy	TBD	String
AdditionalAttribute/ValueAccuracyExplanation	TBD	String

Example Mapping

ISO 19115-2 SMAP

```

<gmd:DS_Series>
<gmd:seriesMetadata>
<gmi:MI_Metadata>
...
  <gmd:dataQualityInfo>
    <gmd:DQ_DataQuality>
      <gmd:lineage>
        <gmd:LI_Lineage>
          <gmd:processStep>
            <gmi:LE_ProcessStep>
              <gmi:processingInformation>
                <eos:EOS_Processing>
                  <eos:otherProperty>
                    <gco:Record>
                      <eos:AdditionalAttributes>
                        <eos:AdditionalAttribute>
                          <eos:reference>
                            <eos:
EOS_AdditionalAttributeDescription>
                              <eos:name>
                                <gco:
CharacterString>Geolocated</gco:CharacterString>
                                  </eos:name>
                                  <eos:dataType>
                                    <eos:
EOS_AdditionalAttributeDataTypeCode codeList="
http://earthdata.nasa.gov/metadata/resources
/CodeLists.xml#EOS_AdditionalAttributeDataTypeCode"
codeListValue="STRING">STRING
                                  </eos:
EOS_AdditionalAttributeDataTypeCode>
                                    </eos:dataType>
                                    <eos:description>
                                      <gco:
CharacterString>Denotes whether the data is
geolocated.</gco:CharacterString>
                                      </eos:description>
                                      </eos:
EOS_AdditionalAttributeDescription>
                                        </eos:reference>
                                        <eos:value>
                                          <gco:CharacterString>False<
/gco:CharacterString>
                                          </eos:value>
                                        </eos:AdditionalAttribute>
                                        </eos:AdditionalAttributes>
                                      </gco:Record>
                                    </eos:otherProperty>
                                  </eos:EOS_Processing>
                                </gmi:processingInformation>
                              </gmi:LE_ProcessStep>
                            </gmd:processStep>
                          </gmd:LI_Lineage>
                        </gmd:lineage>
                      </gmd:DQ_DataQuality>
                    </gmd:dataQualityInfo>
...
  </gmi:MI_Metadata>
</gmd:seriesMetadata>
</gmd:DS_Series>

```

```

"AdditionalAttributes": [
  {
    "Value": "False",
    "Name": "Geolocated",
    "Description": "Denotes whether the data is
geolocated.",
    "DataType": "STRING"
  },
]

```

UMM Migration

UMM Version 1.9.0	Translation Direction	UMM Version 1.10.0

History

UMM Versioning

Version	Date	What Changed
1.15.5	12/3/2020	No changes were made for Additional Attributes during the transition from version 1.15.4 to 1.15.5
1.15.4	9/18/2020	No changes were made for Additional Attributes during the transition from version 1.15.3 to 1.15.4
1.15.3	7/1/2020	No changes were made for Additional Attributes during the transition from version 1.15.2 to 1.15.3
1.15.2	5/20/2020	No changes were made for Additional Attributes during the transition from version 1.15.1 to 1.15.2
1.15.1	3/25/2020	No changes were made for Additional Attributes during the transition from version 1.15.0 to 1.15.1
1.15.0	2/26/2020	No changes were made for Additional Attributes during the transition from version 1.14.0 to 1.15.0
1.14.0	10/21/2019	No changes were made for Additional Attributes during the transition from version 1.13.0 to 1.14.0
1.13.0	04/11/2019	No changes were made for Additional Attributes during the transition from version 1.12.0 to 1.13.0
1.12.0	01/22/2019	No changes were made for Additional Attributes during the transition from version 1.11.0 to 1.12.0.
1.11.0	11/28/2018	No changes were made for Additional Attributes during the transition from version 1.10.0 to 1.11.0.
1.10.0	05/02/2018	During the transition from version 1.9.0 to 1.10.0, the sub element 'AdditionalAttributesDataType' was enumerated.
1.9.0		

ARC Documentation

Version	Date	What Changed	Author
1.0	11/16/18	Recommendations/priority matrix transferred from internal ARC documentation to wiki space	Jeanne' le Roux Ingrid Garcia-Solera