

Platform

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Element Description

The platform elements enable the specification of platforms used to collect the data available in the dataset. Platforms provided in CMR metadata must be chosen from a controlled keyword hierarchy maintained in the [Keyword Management System \(KMS\)](#). A list of valid platform keywords can be found here: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/platforms?format=csv

Optionally, attributes specific to the platform (such as equator crossing time, inclination angle, orbital period, etc.) may be specified in the [characteristic s elements](#). Please see the [Characteristics wiki page](#) for a detailed description of the characteristics sub-elements.

Best Practices

Platform keywords are important for the discovery of data. All relevant platforms should be listed for each dataset. It is preferred that more specific platform keyword terms be chosen from the KMS when available. For example, if data were collected from the NASA DC-8 aircraft, it is preferred that "NASA DC-8" be listed as the platform as opposed to the more generic "AIRCRAFT" keyword. If a particular platform keyword is missing from the KMS, it is possible to put in a request to have it added. The KMS is managed by the Global Change Master Directory (GCMD), and new keyword requests may be made through the [GCMD Keywords Community Forum](#).

In the KMS, there is a hierarchy for platform keywords. Platform keywords should be provided in the metadata field corresponding to the appropriate position of the keyword hierarchy, otherwise the keyword will be rendered invalid. For example, the platform short name specified in the KMS should not be provided in the platform 'long name' field in the metadata. When listing platforms, a platform short name will always be required. While platform long names are not required, it is highly encouraged that long names be provided if one is listed in the KMS. Many platform short names are comprised of acronyms, so inclusion of the long name provides additional context to a user who may not be familiar with the acronym. Platform keywords are not case sensitive.

It is recommended that platform keywords be assigned in a consistent manner. For example, if data for several collections were collected by the "LANDSAT-8" satellite, it is recommended that the metadata for all of those collections list "LANDSAT-8" as the platform short name. Providing "LANDSAT-8" as the platform in some records, but the more generic "LANDSAT" as the platform in other records, results in an inconsistent experience for a user discovering data. This is especially true for users narrowing down their search results in the Earthdata Search client by using the faceted search options.

In the case that it does not make sense to provide a platform for a dataset, "Not Applicable" is an accepted value.

Examples (ShortName > LongName):

Terra > Earth Observing System, Terra (AM-1)

METOP-A > Meteorological Operational Satellite - A

VIC-LSM > Variable Infiltration Capacity (VIC) Land Surface Model

MESONET > Mesoscale Meteorological Network

BE-200 > Beechcraft King Air BE-200

Element Specification

Platform is a required element. A minimum of 1 Platform must be provided. Multiple Platforms may also be provided if necessary (Cardinality: 1..*).

Providing platform [characteristics](#) is optional. An unlimited amount of platform [characteristics](#) may be specified for a particular platform (Cardinality: 0..*). If platform [characteristics](#) are provided, all 5 sub-fields (Name, Description, DataType, Unit, Value) are required.

Model	Element	Type	Usable Valid Values	Constraints	Required?	Cardinality	Notes
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UMM-Common	Platforms/Type	String	Platform Category Keywords	KMS controlled	No	0..1	
UMM-Common	Platforms/ShortName	String	Platform Short_Name Keywords	KMS controlled	Yes	1	
UMM-Common	Platforms/LongName	String	Platform Long_Name Keywords	KMS controlled	No	0..1	
UMM-Common	Platforms/Characteristics/Name	String	n/a	1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is listed. Providing characteristics is optional.
UMM-Common	Platforms/Characteristics/Description	String	n/a	1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is listed. Providing characteristics is optional.
UMM-Common	Platforms/Characteristics/DataType	Enumeration	STRING FLOAT INT BOOLEAN DATE TIME DATETIME DATE_STRING TIME_STRING DATETIME_STRING	n/a	Yes, if applicable	1	Only required if a characteristic is listed. Providing characteristics is optional.
UMM-Common	Platforms/Characteristics/Unit	String	n/a	1 - 20 characters	Yes, if applicable	1	Only required if a characteristic is listed. Providing characteristics is optional.
UMM-Common	Platforms/Characteristics/Value	String	n/a	1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is listed. Providing characteristics is optional.

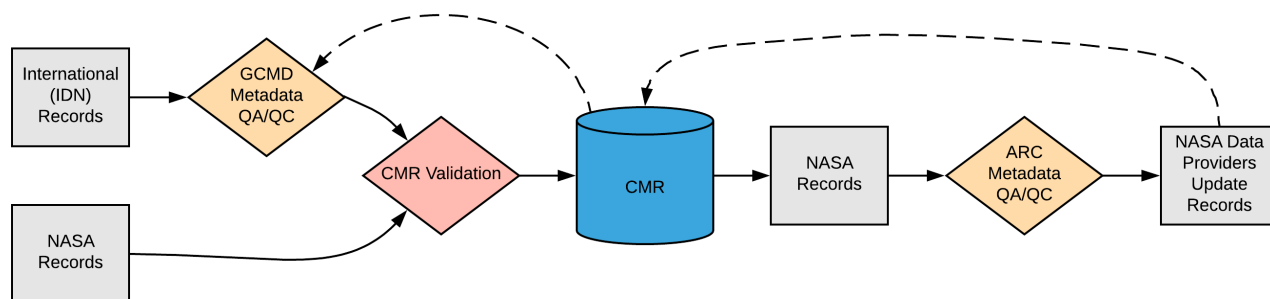
Value needed for translations:

The following value is needed by the CMR to translate older non-UMM compliant records to and from the UMM and other supported specifications where non-required elements are considered required but no value is given. This is needed partly because the CMR still allows a non UMM compliant record to be ingested with warnings.

NOT PROVIDED - DIF 10 records found to be missing platforms by software will be automatically assigned a value of "Not Provided". It should then be confirmed whether a platform can be assigned or whether "Not Applicable" should be provided. *The value "Not Provided" should not be used by metadata providers.*

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.
 - Verify that all pertinent keywords have been applied.
 - Verify that existing facets and other controlled keyword values are consistent and suitable for the data.
- Automated Review
 - Check that the field has been populated.
 - Check that the field is populated with a valid value from KMS.
 - Check that the field value is not a duplicate.
 - Check that the field length is not greater than the maximum characters allowed for each sub-element.
- The specific platform must be unique within the collection. The uniqueness is established by combining the platform short name along with its characteristic's name and value.
- The platform short name must match with what is in the KMS.
- If a granule has a platform short name in it, it must match to one that is defined in the collection.
- If removing a platform from a collection, none of its granules can reference that platform's short name.

ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • No Platform Short Name is provided. • The platform keyword does not align with the KMS. • ◦ The platform keyword does not exist in the KMS. ◦ A keyword(s) is placed in the incorrect position of the hierarchy (e.g. the Platform Short Name is placed in the Long Name field). ◦ Keywords from two different KMS hierarchies are listed in the same hierarchy in the metadata (hierarchies cannot be mixed and matched). • Not all relevant platforms are listed. • An incorrect platform is listed. • A recommendation is made to replace a valid platform with a more specific/appropriate platform keyword. • Please see the Characteristics wiki page for high priority findings related to the Platform/Characteristics sub-elements.
Yellow = Medium Priority Finding	This element is categorized as medium priority when: • A recommendation is made to add a Platform Long Name when a long name exists in the KMS. • A recommendation is made to add the Platform Type to the metadata (this aligns with the platform category keywords in KMS). • Platforms are provided in an inconsistent manner across related datasets. • Please see the Characteristics wiki page for medium priority issues related to the Platform/Characteristics sub-elements.
Blue = Low Priority Finding	This element is categorized as low priority when: • Please see the Characteristics wiki page for low priority issues related to the Platform/Characteristics sub-elements. • A recommendation is made to add a Platform Long Name when a long name exists in the KMS, and it is identical to the short name.
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

Platform is a required element. A minimum of 1 Platform must be provided. Multiple Platforms may also be provided if necessary (Cardinality: 1..*).

Providing platform [characteristics](#) is optional. An unlimited amount of platform [characteristics](#) may be specified for a particular platform (Cardinality: 0..*). If platform [characteristics](#) are provided, all 5 sub-fields (Name, Description, DataType, Unit, Value) are required.

UMM-C Element	DIF 10 Path	Type	Usable Valid Values	Constraints	Required in DIF 10?	Cardinality	Notes
---------------	-------------	------	---------------------	-------------	---------------------	-------------	-------

Platforms/Type	Platform/Type	String	Platform Category Keywords	KMS controlled	Yes	1	Corresponds to the Platform 'Category' keywords in KMS .
Platforms/ShortName	Platform/Short_Name	String	Platform Short_Name Keywords	KMS controlled	Yes	1	For each platform provided, a short name is required.
Platforms/LongName	Platform/Long_Name	String	Platform Long_Name Keywords	KMS controlled	No	0..1	It is highly recommended that a long name be provided if one is available in KMS .
Platforms/ Characteristic s/Name	Platform/Characteristics /Name	String		1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristic s/Description	Platform/Characteristics /Description	String		1 - 2048 characters	Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristic s/DataType	Platform/Characteristics /DataType	String		1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristic s/Unit	Platform/Characteristics /Unit	String		1 - 20 characters	Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristic s/Value	Platform/Characteristics /Value	String		1 - 80 characters	Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.

Example Mapping

DIF 10

```
<Platform>
  <Type>Earth Observation Satellites</Type>
  <Short_Name>ICESat</Short_Name>
  <Long_Name>Ice, Cloud and Land Elevation Satellite<
/LongName>
  <Characteristics>
    <Name>OrbitInclination</Name>
    <Description>The angle between the orbit plane
and the Earth's equatorial plane.</Description>
    <DataType>FLOAT</DataType>
    <Unit>Degrees</Unit>
    <Value>94.0</Value>
  </Characteristics>
  .....
</Platform>
```

UMM

```
Platforms: [
  {
    Type: "Earth Observation Satellites",
    ShortName: "ICESat",
    LongName: "Ice, Cloud and Land Elevation
Satellite",
    Characteristics: [
      {
        Name: "OrbitInclination",
        Description: "The angle between the orbit
plane and the Earth's equatorial plane.",
        DataType: "FLOAT",
        Unit: "Degrees",
        Value: "94.0"
      }
    ]
    .....
  }
]
```

ECHO 10

Platform is an optional element in ECHO10, however, it is required in the UMM. Therefore it is strongly recommended that a **Platform** be provided if possible. Multiple **Platforms** may also be provided if necessary (Cardinality: 0..*).

Providing platform [characteristics](#) is optional. An unlimited amount of platform [characteristics](#) may be specified for a particular platform (Cardinality: 0..*). If platform [characteristics](#) are provided, all 5 sub-fields (Name, Description, DataType, Unit, Value) are required.

UMM-C Element	ECHO 10 Path	Type	Usable Valid Values	Constraints	Required in ECHO10?	Cardinality	Notes
Platforms/Type	/Collection/Platforms/Platform/Type	String	Platform Category Keywords	KMS controlled	Yes, if applicable	1	Corresponds to the Platform 'Category' keywords in KMS .
Platforms/ShortName	/Collection/Platforms/Platform/ShortName	String	Platform Short_Name Keywords	KMS controlled	Yes, if applicable	1	For each platform provided, a short name is required. Corresponds to the 'Short_Name' keywords in KMS .
Platforms/LongName	/Collection/Platforms/Platform/LongName	String	Platform Long_Name Keywords	KMS controlled	No	0..1	It is highly recommended that a long name be provided if one is available in KMS . Corresponds to the 'Long_Name' keywords in KMS .
Platforms/ Characteristics/Name	/Collection/Platforms/Platform/Characteristics/Characteristic/Name	String			Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristics/Description	/Collection/Platforms/Platform/Characteristics/Characteristic/Description	String			Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristics/DataType	/Collection/Platforms/Platform/Characteristics/Characteristic/DataType	String			Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristics/Unit	/Collection/Platforms/Platform/Characteristics/Characteristic/Unit	String			Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.
Platforms/ Characteristics/Value	/Collection/Platforms/Platform/Characteristics/Characteristic/Value	String			Yes, if applicable	1	Only required if a characteristic is provided. Providing characteristics is optional.

Example Mapping

ECHO 10

```

<Platforms>
  <Platform>
    <Type>Earth Observation Satellites</Type>
    <ShortName>ICESat</ShortName>
    <LongName>Ice, Cloud and Land Elevation
Satellite</LongName>
    <Characteristics>
      <Characteristic>
        <Name>OrbitInclination</Name>
        <Description>The angle between the orbit
plane and the Earth's equatorial plane.</Description>
        <DataType>FLOAT</DataType>
        <Unit>Degrees</Unit>
        <Value>94.0</Value>
      </Characteristic>
    </Characteristics>
    .....
  </Platform>
</Platforms>

```

UMM

```

Platforms: [
  {
    Type: "Earth Observation Satellites",
    ShortName: "ICESat",
    LongName: "Ice, Cloud and Land Elevation
Satellite",
    Characteristics: [
      {
        Name: "OrbitInclination",
        Description: "The angle between the orbit
plane and the Earth's equatorial plane.",
        DataType: "FLOAT",
        Unit: "Degrees",
        Value: "94.0"
      }
    ]
    .....
  }
]

```

ISO 19115-2 MENDS

Platform is a required element. A minimum of 1 Platform must be provided. Multiple Platforms may also be provided if necessary (Cardinality: 1..*).

Providing platform [characteristics](#) is optional. An unlimited amount of platform [characteristics](#) may be specified for a particular platform (Cardinality: 0..*). If platform [characteristics](#) are provided, all 5 sub-fields should be provided (Name, Description, DataType, Unit, Value) to meet CMR requirements.

UMM-C Element	ISO 19115-2 MENDS Path	Type	Notes
Platforms /Type	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform id="<insert unique instrument ID here>"/ gmd:description/gco:CharacterString	String	Values should be selected from the platform 'Category' keywords in KMS . An ID should be provided directly after "eos:EOS_Platform" in the ISO x-path. This ID corresponds to the platform and is used to link the platform information to the associated instrument . The ID should be unique within the metadata record.
Platforms /ShortName	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:code/gco:CharacterString with /gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:codeSpace/gco:CharacterString = gov.nasa.esdis.umm.platformshortname	String	A list of valid platform short names can be found in the KMS under the 'Short_Name' column. For each platform listed the short name is required by CMR. The short name value goes in the gmd:code field. The value of " gov.nasa.esdis.umm.platformshortname" should be provided in gmd:CodeSpace field so that CMR can properly parse out the platform short name.
Platforms /LongName	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:description/gco:CharacterString	String	A list of valid platform long names can be found in the KMS under the 'Long_Name' column.
	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:type/eos:EOS_AdditionalAttributeTypeCode codeList="https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodetlists.xml#EOS_AdditionalAttributeTypeCode" codeListValue="platformInformation"	Codelist	The "platformInformation" codelist value must be provided so that CMR can properly identify the associated information as platform characteristics. This codelist value does not directly map to a UMM element - choosing 'platformInformation' indicates to CMR that the platform characteristic elements should be mapped.
Platforms/ Characteristics/Name	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:name/gco:CharacterString	String	
Platforms/ Characteristics/Description	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:description/gco:CharacterString	String	

Platforms/ Characteristics/ DataType	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:dataType/eos:EOS_AdditionalAttributeDataTypeCode codeList="https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodeLists.xml#MD_DatatypeCode" codeListValue=<date type> value=<data type>	Codelist	ISO codelist values (class, codelist, enumeration, codelistElement, abstractClass, aggregateClass, specifiedClass, datatypeClass, interfaceClass, unionClass, metaClass, typeClass, characterString, integer, association) UMM enum (STRING, FLOAT, INT BOOLEAN, DATE, TIME, DATETIME, DATE_STRING, TIME_STRING, DATETIME_STRING)
Platforms/ Characteristics/Unit	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterUnitsOfMeasure/gco:CharacterString	String	
Platforms/ Characteristics/Value	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:value/gco:CharacterString	String	
	/gmi:MI_Metadata/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/gmi:instrument xlink:href=<insert unique instrument ID here>	String	An ID should be provided here and should match the ID provided for the associated instrument . This ID should be unique within a metadata record. This will link all of the information provided on the platform to its associated instrument .

Example Mapping

ISO 19115-2 MENDS

```

<gmi:MI_Metadata>
  ...
  <gmi:acquisitionInformation>
    <gmi:MI_AcquisitionInformation>
      ...
      <gmi:platform>
        <eos:EOS_Platform id="d36bb8fb0-d827-4fd1-a2e9-5db6778abddc">
          <gmi:identifier>
            <gmd:MD_Identifier>
              <gmd:code>
                <gco:CharacterString>ICESat</gco:
CharacterString>
              </gmd:code>
              <gmd:codeSpace>
                <gco:CharacterString>gov.nasa.esdis.
umm.platformshortname</gco:CharacterString>
              </gmd:codeSpace>
              <gmd:description>
                <gco:CharacterString>Ice, Cloud and
Land Elevation Satellite</gco:CharacterString>
              </gmd:description>
            </gmd:MD_Identifier>
          </gmi:identifier>
          <gmi:description>
            <gco:CharacterString>Earth Observation
Satellites</gco:CharacterString>
          </gmi:description>
          <gmi:instrument xlink:href="#dfdaa96ba-483d-4e63-86ad-5dfd0eedf496"/>
          <eos:otherProperty>
            <gco:Record>
              <eos:AdditionalAttributes>
                <eos:AdditionalAttribute>
                  <eos:reference>
                    <eos:
EOS_AdditionalAttributeDescription>
                      <eos:type>
                        <eos:
EOS_AdditionalAttributeTypeCode codeList="
https://cdn.earthdata.nasa.gov/iso/resources/Codelist
/eosCodeLists.xml#EOS_AdditionalAttributeTypeCode"
codeListValue="platformInformation"
>platformInformation</eos:
EOS_AdditionalAttributeTypeCode>

```

```

        </eos:type>
        <eos:name>
          <gco:
CharacterString>OrbitInclination</gco:
CharacterString>
          </eos:name>
          <eos:description>
            <gco:CharacterString>The
angle between the orbit plane and the Earth's
equatorial plane.</gco:CharacterString>
          </eos:description>
          <eos:dataType>
            <eos:
EOS_AdditionalAttributeDataTypeCode codeList="
https://cdn.earthdata.nasa.gov/iso/resources/Codelist
/eosCodelists.
xml#EOS_AdditionalAttributeDataTypeCode"
codeListValue="FLOAT">FLOAT</eos:
EOS_AdditionalAttributeDataTypeCode>
            </eos:dataType>
            <eos:parameterUnitsOfMeasure>
              <gco:CharacterString>Degrees<
/gco:CharacterString>
            </eos:parameterUnitsOfMeasure>
          </eos:
EOS_AdditionalAttributeDescription>
          </eos:reference>
          <eos:value>
            <gco:CharacterString>94.0</gco:
CharacterString>
          </eos:value>
        </eos:AdditionalAttribute>
      </eos:AdditionalAttributes>
    </gco:Record>
  </eos:otherProperty>
  ...
</eos:EOS_Platform>
</gmi:platform>
</gmi:MI_AcquisitionInformation>
</gmi:acquisitionInformation>
</gmi:MI_Metadata>

```

UMM

```

Platforms: [
{
  Type: "Earth Observation Satellites",
  ShortName: "ICESat",
  LongName: "Ice, Cloud and Land Elevation
Satellite",
  Characteristics: [
    {
      Name: "OrbitInclination",
      Description: "The angle between the orbit
plane and the Earth's equatorial plane.",
      DataType: "FLOAT",
      Unit: "Degrees",
      Value: "94.0"
    }
  ]
}
.....
]

```

ISO 19115-2 SMAP

Platform is a required element. A minimum of 1 Platform must be provided. Multiple Platforms may also be provided if necessary (Cardinality: 1..*).

Providing platform **characteristics** is optional. An unlimited amount of platform **characteristics** may be specified for a particular platform (Cardinality: 0..*). If platform **characteristics** are provided, all 5 sub-fields should be provided (Name, Description, DataType, Unit, Value) to meet CMR requirements.

UMM-C Element	ISO 19115-2 SMAP Path	Type	Notes
Platforms /Type	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform id="<insert unique instrument ID here>"/ gmd:description/gco:CharacterString	String	Values should be selected from the platform 'Category' keywords in KMS . An ID should be provided directly after "eos:EOS_Platform" in the ISO x-path. This ID corresponds to the platform and is used to link the platform information to the associated instrument . The ID should be unique within the metadata record.
Platforms /ShortName	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:code/gco:CharacterString with /gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:codeSpace/gco:CharacterString = gov.nasa.esdis.umm.platformshortname	String	A list of valid platform short names can be found in the KMS under the 'Short_Name' column. For each platform listed the short name is required by CMR. The short name value goes in the gmd:code field. The value of " gov.nasa.esdis.umm.platformshortname" should be provided in gmd:CodeSpace field so that CMR can properly parse out the platform short name.
Platforms /LongName	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ gmi:identifier/gmd:MD_Identifier/gmd:description/gco:CharacterString	String	A list of valid platform long names can be found in the KMS under the 'Long_Name' column.
	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:type/eos:EOS_AdditionalAttributeTypeCode codeList="https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodeLists.xml#EOS_AdditionalAttributeTypeCode" codeListValue="platformInformation"	Codelist	The "platformInformation" codelist value must be provided so that CMR can properly identify the associated information as platform characteristics. This codelist value does not directly map to a UMM element - choosing 'platformInformation' indicates to CMR that the platform characteristic elements should be mapped.
Platforms/ Characteristics/Name	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:name/gco:CharacterString	String	
Platforms/ Characteristics /Description	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:description/gco:CharacterString	String	
Platforms/ Characteristics /DataType	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:dataType/eos:EOS_AdditionalAttributeDataTypeCode codeList="https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodeLists.xml#MD_DataTypeCode" codeListValue="<data type>"	Codelist	ISO codelist values (class, codelist, enumeration, codelistElement, abstractClass, aggregateClass, specifiedClass, datatypeClass, interfaceClass, unionClass, metaClass, typeClass, characterString, integer, association) UMM enum (STRING, FLOAT, INT BOOLEAN, DATE, TIME, DATETIME, DATE_STRING, TIME_STRING, DATETIME_STRING)
Platforms/ Characteristics/Unit	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:reference/eos:EOS_AdditionalAttributeDescription/ eos:parameterUnitsOfMeasure/gco:CharacterString	String	
Platforms/ Characteristics/Value	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/ /eos:otherProperty/gco:Record/eos:AdditionalAttributes/eos:AdditionalAttribute/eos:value/gco:CharacterString	String	
	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadate/gmi:acquisitionInformation/gmi:MI_AcquisitionInformation/gmi:platform/eos:EOS_Platform/gmi:instrument xlink:href="<insert unique instrument ID here>"	String	An ID should be provided here and should match the ID provided for the associated instrument . This ID should be unique within a metadata record. This will link all of the information provided on the platform to its associated instrument .

Example Mapping

```

<gmd:DS_Series>
<gmd:seriesMetadata>
<gmi:MI_Metadata>
...
<gmi:acquisitionInformation>
  <gmi:MI_AcquisitionInformation>
    ...
    <gmi:platform>
      <eos:EOS_Platform id="d36bb8fb0-d827-4fd1-
a2e9-5db6778abddc">
        <gmi:identifier>
          <gmd:MD_Identifier>
            <gmd:code>
              <gco:CharacterString>ICESat</gco:
CharacterString>
            </gmd:code>
            <gmd:codeSpace>
              <gco:CharacterString>gov.nasa.esdis.
umm.platformshortname</gco:CharacterString>
            </gmd:codeSpace>
            <gmd:description>
              <gco:CharacterString>Ice, Cloud and
Land Elevation Satellite</gco:CharacterString>
            </gmd:description>
            </gmd:MD_Identifier>
          </gmi:identifier>
          <gmi:description>
            <gco:CharacterString>Earth Observation
Satellites</gco:CharacterString>
          </gmi:description>
          <gmi:instrument xlink:href="#dfdaa96ba-
483d-4e63-86ad-5dfd0eedf496"/>
          <eos:otherProperty>
            <gco:Record>
              <eos:AdditionalAttributes>
                <eos:AdditionalAttribute>
                  <eos:reference>
                    <eos:
EOS_AdditionalAttributeDescription>
                      <eos:type>
                        <eos:
EOS_AdditionalAttributeTypeCode codeList="
https://cdn.earthdata.nasa.gov/iso/resources/Codelist
/eosCodelists.xml#EOS_AdditionalAttributeTypeCode"
codeListValue="platformInformation"
>platformInformation</eos:
EOS_AdditionalAttributeTypeCode>
                      </eos:type>
                      <eos:name>
                        <gco:
CharacterString>OrbitInclination</gco:
CharacterString>
                      </eos:name>
                      <eos:description>
                        <gco:CharacterString>The
angle between the orbit plane and the Earth's
equatorial plane.</gco:CharacterString>
                      </eos:description>
                      <eos:dataType>
                        <eos:
EOS_AdditionalAttributeDataTypeCode codeList="
https://cdn.earthdata.nasa.gov/iso/resources/Codelist
/eosCodelists.
xml#EOS_AdditionalAttributeDataTypeCode"
codeListValue="FLOAT">FLOAT</eos:
EOS_AdditionalAttributeDataTypeCode>
                        </eos:dataType>
                        <eos:parameterUnitsOfMeasure>
                          <gco:CharacterString>Degrees<

```

```

/gco:CharacterString>
    </eos:parameterUnitsOfMeasure>
  </eos:
EOS_AdditionalAttributeDescription>
    </eos:reference>
    <eos:value>
      <gco:CharacterString>94.0</gco:
CharacterString>
    </eos:value>
    </eos:AdditionalAttribute>
  </eos:AdditionalAttributes>
</gco:Record>
</eos:otherProperty>
...
</eos:EOS_Platform>
</gmi:platform>
</gmi:MI_AcquisitionInformation>
</gmi:acquisitionInformation>
</gmi:MI_Metadata>
</gmd:seriesMetadata>
</gmd:DS_Series>

```

UMM

```

Platforms: [
  {
    Type: "Earth Observation Satellites",
    ShortName: "ICESat",
    LongName: "Ice, Cloud and Land Elevation
Satellite",
    Characteristics: [
      {
        Name: "OrbitInclination",
        Description: "The angle between the orbit
plane and the Earth's equatorial plane.",
        DataType: "FLOAT",
        Unit: "Degrees",
        Value: "94.0"
      }
    ]
    .....
  }
]

```

UMM Migration

None

History

UMM Versioning

Version	Date	What Changed
1.15.5	12/3/2020	No changes were made for Platform during the transition from version 1.15.4 to 1.15.5
1.15.4	9/18/2020	No changes were made for Platform during the transition from version 1.15.3 to 1.15.4
1.15.3	7/1/2020	No changes were made for Platform during the transition from version 1.15.2 to 1.15.3
1.15.2	5/20/2020	No changes were made for Platform during the transition from version 1.15.1 to 1.15.2
1.15.1	3/25/2020	No changes were made for Platform during the transition from version 1.15.0 to 1.15.1

1.15.0	2/26/2020	No changes were made for Platform during the transition from version 1.14.0 to 1.15.0
1.14.0	10/21/2019	No changes were made for Platform during the transition from version 1.13.0 to 1.14.0
1.13.0	04/11/2019	No changes were made for Platform during the transition from version 1.12.0 to 1.13.0
1.12.0	01/22/2019	No changes were made for Platform during the transition from version 1.11.0 to 1.12.0.
1.11.0	11/28/2018	No changes were made for Platform during the transition from version 1.10.0 to 1.11.0.
1.10.0	05/02/2018	No changes were made for Platform during the transition from version 1.9.0 to 1.10.0.

ARC Documentation

Version	Date	What Changed	Author
1.0	05/14/2018	Recommendations/priority matrix transferred from internal ARC documentation to wiki space	Jeanne' le Roux