Collection Data Type

Element Description

The Collection Data Type 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.

Best Practices

If a collection does not contain this field, it will be assumed to be of science quality.

The Type must be selected from a controlled vocabulary list. There are five options available for Type:

> **NEAR_REAL_TIME**: Data available 1-3 hours after acquisition. Data from the source that are available for use within a time that is short in comparison to important time scales in the phenomena being studied. For EOSDIS, near real time data is not considered science quality and is not retained by EOSDIS once the SCIENCE_QUALITY product is archived.
>
> **LOW_LATENCY:** Data available 3-24 hours after acquisition.
>
> **EXPEDITED:** Data available 1-4 days after acquisition.
>
> **SCIENCE_QUALITY:** Most data products that are permanently archived should be of science quality. Science quality means the data is in a state where it is trustworthy enough for use in scientific analyses (given known limitations of the data).
>
> **OTHER:** Any data and data products that are not SCIENCE_QUALITY and do not fall under NEAR_REAL_TIME holdings.

Examples:

CollectionDataType: NEAR_REAL_TIME

CollectionDataType: SCIENCE_QUALITY

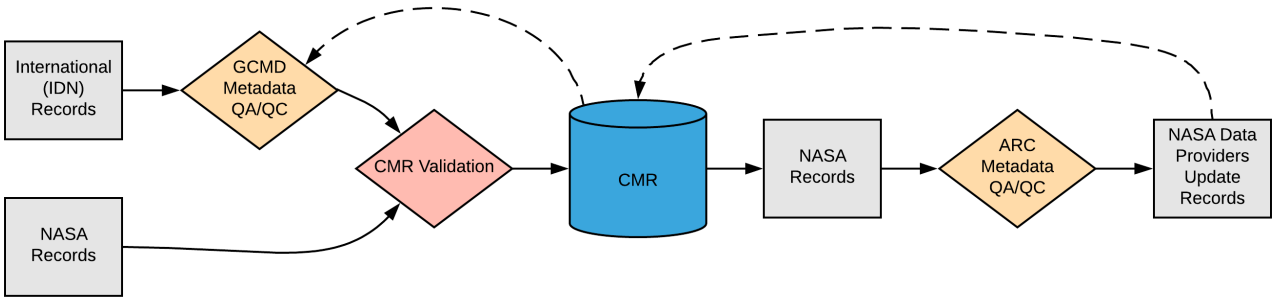
Element Specification

Providing the Collection Data Type element is optional (Cardinality: 0..1)

Model	Element	Type	Constraints	Required?	Cardinality
UMM-C	CollectionDataType	Enumeration	NEAR_REAL_TIME LOW_LATENCY EXPEDITED SCIENCE_QUALITY OTHER	No	0..1

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.
- Automated Review
  - Check that the field value matches the enumeration value: SCIENCE_QUALITY; NEAR_REAL_TIME; OTHER
- If this element is included in the record then one of the enumeration values must be used.

ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • The Collection Data Type is not a valid value: NEAR_REAL_TIME, LOW_LATENCY, EXPEDITED, SCIENCE_QUALITY, OTHER • The Collection Data Type provided is incorrect.
Yellow = Medium Priority Finding	Not Applicable
Blue = Low Priority Finding	Not Applicable
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 Collection Data Type element is optional (Cardinality: 0..1)

UMM-C Element	DIF 10 Path	Type	Constraints	Required in DIF 10?	Cardinality
CollectionDataType	Collection_Data_Type	Enumeration	NEAR_REAL_TIME LOW_LATENCY EXPEDITED SCIENCE_QUALITY OTHER	No	0..1

Example Mapping

DIF 10

```
<Collection_Data_Type>SCIENCE_QUALITY<
/Collection_Data_Type>
```

UMM

```
CollectionDataType: "SCIENCE_QUALITY",
```

ECHO 10

Providing the Collection Data Type element is optional (Cardinality: 0..1)

UMM-C Element	ECHO 10 Path	Type	Constraints	Required in ECHO10?	Cardinality
CollectionDataType	CollectionDataType	Enumeration	NEAR_REAL_TIME LOW_LATENCY EXPEDITED SCIENCE_QUALITY OTHER	No	0..1

Example Mapping

ECHO 10

```
<CollectionDataType>SCIENCE_QUALITY<
/CollectionDataType>
```

UMM

```
CollectionDataType: "SCIENCE_QUALITY",
```

ISO 19115-2 MENDS

Providing the Collection Data Type element is optional (Cardinality: 0..1)

UMM-C Element	ISO Path	Type
CollectionDataType	/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:citation/gmd:CI_Citation/gmd:identifier/gmd:MD_Identifier/[=> [=> gmd:code/gco:CharacterString with [=> gmd:codeSpace/gco:CharacterString = gov.nasa.esdis.umm.collectiondatatype with [=>gmd:description/gco:CharacterString = Collection Data Type	String

Example Mapping

ISO 19115-2 MENDS

```
<gmi:MI_Metadata>
  ...
  <gmd:identificationInfo>
    <gmd:MD_DataIdentification>
      <gmd:citation>
        <gmd:CI_Citation>
          ...
          <gmd:identifier>
            <gmd:MD_Identifier>
              <gmd:code>
                <gco:CharacterString>SCIENCE_QUALITY<
/gco:CharacterString>
              </gmd:code>
              <gmd:codeSpace>
                <gco:CharacterString>gov.nasa.esdis.
umm.collectiondatatype</gco:CharacterString>
              </gmd:codeSpace>
              <gmd:description>
                <gco:CharacterString>Collection Data
Type</gco:CharacterString>
              </gmd:description>
            </gmd:MD_Identifier>
          </gmd:identifier>
          ...
        </gmd:CI_Citation>
      </gmd:citation>
      ...
    </gmd:MD_DataIdentification>
  </gmd:identificationInfo>
  ...
</gmi:MI_Metadata>
```

UMM

```
CollectionDataType: "SCIENCE_QUALITY",
```

ISO 19115-2 SMAP

Providing the Collection Data Type element is optional (Cardinality: 0..1)

UMM-C Element	ISO Path	Type
CollectionDataType	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:citation /gmd:CI_Citation/gmd:identifier/gmd:MD_Identifier/[=> [=> gmd:code/gco:CharacterString with [=> gmd:codeSpace/gco:CharacterString = gov.nasa.esdis.umm.collectiondatatype with [=>gmd:description/gco:CharacterString = Collection Data Type	String

Example Mapping

ISO 19115-2 SMAP

```
<gmd:DS_Series>
  <gmd:seriesMetadata>
    <gmi:MI_Metadata>
      ...
      <gmd:identificationInfo>
        <gmd:MD_DataIdentification>
          <gmd:citation>
            <gmd:CI_Citation>
              ...
              <gmd:identifier>
                <gmd:MD_Identifier>
                  <gmd:code>
                    <gco:
CharacterString>SCIENCE_QUALITY</gco:CharacterString>
                  </gmd:code>
                  <gmd:codeSpace>
                    <gco:CharacterString>gov.nasa.
esdis.umm.collectiondatatype</gco:CharacterString>
                  </gmd:codeSpace>
                  <gmd:description>
                    <gco:CharacterString>Collection
Data Type</gco:CharacterString>
                  </gmd:description>
                </gmd:MD_Identifier>
              </gmd:identifier>
              ...
            </gmd:CI_Citation>
          </gmd:citation>
          ...
        </gmd:MD_DataIdentification>
      </gmd:identificationInfo>
      ...
    </gmi:MI_Metadata>
  </gmd:seriesMetadata>
</gmd:DS_Series>
```

UMM

```
CollectionDataType: "SCIENCE_QUALITY",
```

UMM Migration

None

History

UMM Versioning

Version	Date	What Changed
1.16.7	3/2/2022	Added Low_Latency, and Expedited enumerations to CollectionDataType.
1.16.6	12/1/2021	No changes were made for Collection Data Type during the transition from version 1.16.5 to 1.16.6
1.16.5	7/13/2021	No changes were made for Collection Data Type during the transition from version 1.16.4 to 1.16.5
1.16.4	6/30/2021	No changes were made for Collection Data Type during the transition from version 1.16.3 to 1.16.4
1.16.3	5/19/2021	No changes were made for Collection Data Type during the transition from version 1.16.2 to 1.16.3
1.16.2	4/7/2021	No changes were made for Collection Data Type during the transition from version 1.16.1 to 1.16.2
1.16.1	4/7/2021	No changes were made for Collection Data Type during the transition from version 1.16 to 1.16.1
1.16	3/24/2021	No changes were made for Collection Data Type during the transition from version 1.15.5 to 1.16

1.15.5	12/3/2020	No changes were made for Collection Data Type during the transition from version 1.15.4 to 1.15.5
1.15.4	9/18/2020	No changes were made for Collection Data Type during the transition from version 1.15.3 to 1.15.4
1.15.3	7/1/2020	No changes were made for Collection Data Type during the transition from version 1.15.2 to 1.15.3
1.15.2	5/20/2020	No changes were made for Collection Data Type during the transition from version 1.15.1 to 1.15.2
1.15.1	3/25/2020	No changes were made for Collection Data Type during the transition from version 1.15.0 to 1.15.1
1.15.0	2/26/2020	No changes were made for Collection Data Type during the transition from version 1.14.0 to 1.15.0
1.14.0	10/21/2019	No changes were made for Collection Data Type during the transition from version 1.13.0 to 1.14.0
1.13.0	04/11/2019	No changes were made for Collection Data Type during the transition from version 1.12.0 to 1.13.0.
1.12.0	01/22/2019	No changes were made for Collection Data Type during the transition from version 1.11.0 to 1.12.0.
1.11.0	11/28/2018	No changes were made for Collection Data Type during the transition from version 1.10.0 to 1.11.0.
1.10.0	05/02/2018	No changes were made for Collection Data Type during the transition from version 1.9.0 to 1.10.0.

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