

Temporal Keywords

-
- [Element Description](#)
- [Best Practices](#)
- [Element Specification](#)
- [Metadata Validation and QA/QC](#)
 - [DIF 10](#)
 - [ECHO 10](#)
 - [ISO 19115-2 MENDS](#)
 - [ISO 19115-2 SMAP](#)
- [UMM Migration](#)
- [History](#)
 - [UMM Versioning](#)
 - [ARC Documentation](#)

Element Description

The Temporal Keywords element specifies a word or phrase which serves to summarize the temporal characteristics of a dataset.

Best Practices

Temporal Keywords is an optional element. There is not a controlled vocabulary for temporal keywords. If this element is utilized it is recommended that a consistent naming convention be developed for related records or for records from the same data center.

Examples:

TemporalKeywords: "Weekly"

TemporalKeywords: "Subannual"

TemporalKeywords: "Annual Climatology"

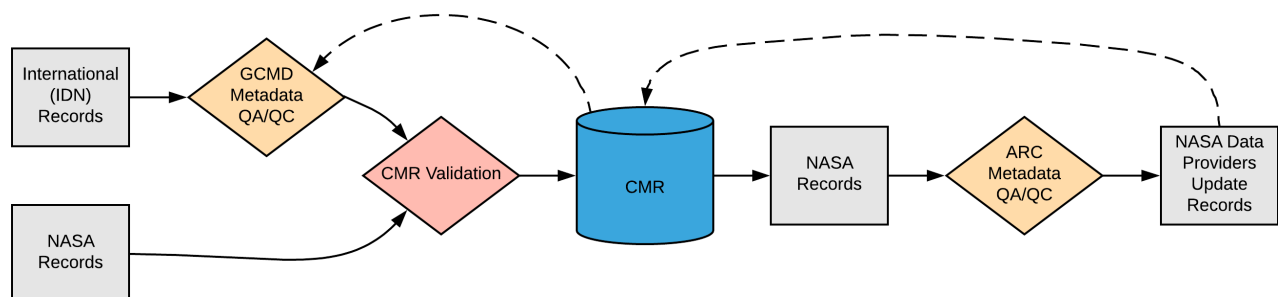
Element Specification

Providing the Temporal Keyword element is optional. Multiple Temporal Keywords may be provided (Cardinality: 0..*).

Model	Element	Type	Constraints	Required?	Cardinality
UMM-C	TemporalKeywords	String	1 - 80 Characters	No	0..*

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 'Detailed_Variable' field length is not greater than 80 characters.

TBD

ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • The Temporal Keywords is not appropriate for the dataset.
Yellow = Medium Priority Finding	This element is categorized as medium priority when: • A recommendation is made to change a Temporal Keywords to be more accurate or more consistent with related collections.
Blue = Low Priority Finding	This element is categorized as low priority when: • A recommendation is made to add a relevant Temporal Keywords to the metadata.
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 an Ancillary_Temporal_Keyword is optional. Multiple Ancillary_Temporal_Keywords may be provided (Cardinality: 0..*).

UMM-C Element	DIF 10 Path	Type	Constraints	Required in DIF 10?	Cardinality
TemporalKeywords	Temporal_Coverage/Temporal_Info/Ancillary_Temporal_Keyword	String		No	0..*

Example Mapping

DIF 10

```
<Temporal_Coverage>
  <Temporal_Info>
    <Ancillary_Temporal_Keywords>Daily Climatology<
  /Ancillary_Temporal_Keywords>
</Temporal_Info>
</Temporal_Coverage>
```

UMM

```
TemporalKeywords: [
  "Daily Climatology",
],
```

ECHO 10

Providing a Temporal Keyword is optional. Multiple Temporal Keywords may be provided (Cardinality: 0..*).

UMM-C Element	ECHO 10 Path	Type	Constraints	Required in ECHO10?	Cardinality
TemporalKeywords	TemporalKeywords/Keyword	String	1 - 80 Characters	No	0..*

Example Mapping

ECHO 10

```
<Temporal_Coverage>
  <Keyword>Daily Climatology</Keyword>
</Temporal_Coverage>
```

UMM

```
TemporalKeywords: [
  "Daily Climatology",
],
```

ISO 19115-2 MENDS

Providing a Temporal Keyword is optional. Multiple Temporal Keywords may be provided (Cardinality: 0..*).

UMM-C Element	ISO 19115-2 MENDS Path	Type
TemporalKeywords	/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:descriptiveKeywords/gmd:MD_Keywords/gmd:keyword/gco:CharacterString with /gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:descriptiveKeywords/gmd:MD_Keywords/gmd:type/gmd:MD_KeywordTypeCode codeList="https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodetlists.xml#MD_KeywordTypeCode" codeListValue="temporal"=temporal	String

Example Mapping

ISO 19115-2 MENDS

```
<gmi:MI_Metadata>
  <gmd:identificationInfo>
    <gmd:MD_DataIdentification>
      <gmd:descriptiveKeywords>
        <gmd:MD_Keywords>
          <gmd:keyword>
            <gco:CharacterString>Daily Climatology</gco:CharacterString>
          </gmd:keyword>
          <gmd:type>
            <gmd:MD_KeywordTypeCode codeList="
https://cdn.earthdata.nasa.gov/iso/resources/Codelist
/gmxCodetlists.xml#MD_KeywordTypeCode" codeListValue="
temporal"=temporal</gmd:MD_KeywordTypeCode>
            </gmd:type>
            <gmd:thesaurusName gco:nilReason="unknown"
            />
          </gmd:MD_Keywords>
        </gmd:descriptiveKeywords>
      </gmd:MD_DataIdentification>
    </gmd:identificationInfo>
  </gmi:MI_Metadata>
```

UMM

```
TemporalKeywords: [  
  "Daily Climatology",  
],
```

ISO 19115-2 SMAP

Providing a Temporal Keyword is optional. Multiple Temporal Keywords may be provided (Cardinality: 0..*).

UMM-C Element	ISO 19115-2 SMAP Path	Type
Temporal Keywords	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:descriptiveKeywords/gmd:MD_Keywords/gmd:keyword/gco:CharacterString with /gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:descriptiveKeywords/gmd:MD_Keywords/gmd:keyword/gmd:type/MD_KeywordTypeCode[@codeListValue="temporal"]	String

Example Mapping

ISO 19115-2 SMAP

```
<gmd:DS_Series>  
<gmd:seriesMetadata>  
<gmi:MI_Metadata>  
  <gmd:identificationInfo>  
    <gmd:MD_DataIdentification>  
      <gmd:descriptiveKeywords>  
        <gmd:MD_Keywords>  
          <gmd:keyword>  
            <gco:CharacterString>Daily Climatology<  
/gco:CharacterString>  
          </gmd:keyword>  
          <gmd:type>  
            <gmd:MD_KeywordTypeCode codeList="  
https://cdn.earthdata.nasa.gov/iso/resources/Codelist  
/gmxCodeLists.xml#MD_KeywordTypeCode" codeListValue="  
temporal"=temporal</gmd:MD_KeywordTypeCode>  
            </gmd:type>  
            <gmd:thesaurusName gco:nilReason="unknown"  
/>  
          </gmd:MD_Keywords>  
        </gmd:descriptiveKeywords>  
      </gmd:MD_DataIdentification>  
    </gmd:identificationInfo>  
  </gmi:MI_Metadata>  
</gmd:seriesMetadata>  
</gmd:DS_Series>
```

UMM

```
TemporalKeywords: [  
  "Daily Climatology",  
],
```

UMM Migration

None

History

UMM Versioning

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

ARC Documentation

Version	Date	What Changed	Author
1.0	01/16/2019	Recommendations/priority matrix transferred from internal ARC documentation to wiki space	Ingrid Garcia-Solera Jeanne' le Roux