

**IPET-MDRD TASK TEAM ON THE APPLICATION OF METADATA SECOND MEETING**



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Date: 08.08.2013

**Comment [K1]:** ?Should this be amended?

TOKYO, 25-28 JUNE 2013

Original Language: English

## **GUIDANCE ON USAGE OF CODE LISTS, FOR CREATORS OF “WMO CORE METADATA PROFILE 1.3” COMPLIANT METADATA**

### **1. BACKGROUND**

The WMO Core Profile version 1.3 specification (WMCPv1.3) defines the metadata standard required for data published as part of the WMO Information System (WIS) Discovery-Access-Retrieval (DAR) Catalogue. An understanding of the use of WMCPv1.3 code lists is key to creating metadata compliant with WMCPv1.3. This document provides a detailed guide to the code lists, including details of changes between WMCPv1.3 and WMO Core Profile version 1.2, as well as an explanation of WMCPv1.3 codelist differences with ISO 19115:2003.

The WMCPv1.3 specification is available from <http://wis.wmo.int/2012/metadata/> with “Part 2 –Abstract Test Suite, Data Dictionary and Code Lists” being of particular relevance.

Other references related to applying ISO19115 metadata (such as the “UK Metadata Guide Introduction”) will be listed and available from: [http://wis.wmo.int/page=MDG\\_others\(\(URL-to-be-confirmed\)\).html](http://wis.wmo.int/page=MDG_others((URL-to-be-confirmed)).html)  
Available validation tools, as identified, will also be listed on that website.

**Comment [K2]:** Steve: you mentioned that you would like this to refer to a webpage. Can you confirm that the url is OK, pls?

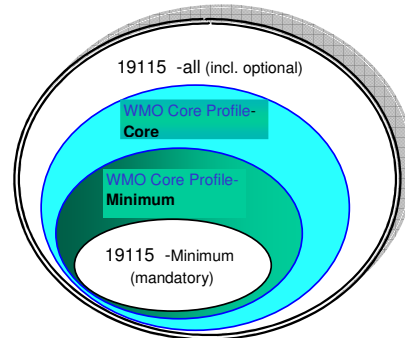
The WMCPv1.3 is a subset of ISO19115. Metadata records that conform to the rules within the WMCP v1.3 Profile, and also include other 19115-compliant fields not listed in the WMCPv1.3 specification, are still seen as WMCP v1.3-compliant.

Therefore metadata creators might need to consult additional documentation, to understand the other ISO19115 fields (and related code lists).

All ISO19115 field names, and code lists are detailed in WMCP v1.2, as follows

Annex D (ISO19115 code lists); and

Annex C, pg.95+ (ISO19115 uml, with field names and cardinality).



In addition, further information can be obtained from other ISO19115 Profile documentation (such as for the INSPIRE Profile<sup>1</sup>), or from the ISO19115 specification (for a cost), available from:

- ISO 19115 ([http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=26020](http://www.iso.org/iso/catalogue_detail.htm?csnumber=26020))
- ISO 19139 ([http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=32557](http://www.iso.org/iso/catalogue_detail.htm?csnumber=32557))

<sup>1</sup> INSPIRE MD implementing rules (2008) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008R1205:EN:NOT>  
INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119  
[http://inspire.jrc.ec.europa.eu/reports/implementingRules/metadata/MD\\_IR\\_and\\_ISO\\_20090218.pdf](http://inspire.jrc.ec.europa.eu/reports/implementingRules/metadata/MD_IR_and_ISO_20090218.pdf)

## 2. CODELISTS AND ENUMERATIONS

### Terminology:

A **codelist** can be (and in WMCP v1.3, sometimes has been) extended with new elements, but an **enumeration** cannot.

Please note also that, in this document, the term “**code list**” is a generic term referring to both or either codelists and/ or enumerations.

In WMCP v1.3, Part 2, Section 4 : all the WMCP “codelists” and “enumerations” (that is, all codelists that might be needed to create a minimum WMCP Core profile metadata record) are shown.

Table 8 to Table 13 includes those Code Lists defined in ISO 19115:2003 and ISO 19115:2003/Cor.1:2006, that are referenced in the WMO Core Metadata Specification. Additional terms added by the WMO Core Metadata Profile are in **bold**.

Table 14 to Table 17 includes the new or revised Code Lists particular to the WMO Core Metadata Profile.

A GML Code List Dictionary implementation of the new and amended Code Lists is published at:

<http://wis.wmo.int/2012/codelists/WMOCodeLists.xml>

### 2.a INDEX of CODE LISTS

The INDEX on the following page lists the Code Lists expected to typically be needed for a WMO Core Metadata Profile 1.3 record, as well as those code lists otherwise included in ISO19115 (all of which may also be included in a WMCP record).

Column B: indicates whether the field referring to the code list is conditional, optional or mandatory;

Column C: notes whether the contents of a WMCP v1.3 code list ‘matches’, or is an extension, of the ISO19115 code list of the same ‘table name’.

Column D: indicates the source, in WMCP v1.3, of the controlled vocabulary.

Column G: URLs to be used in **codelist**=[url]#[Table Name]

E.g. in `<gmd:CI_DateTypeCode`

`codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_DateTypeCode"`

`codeListValue="publication">publication</gmd:CI_DateTypeCode>`

Url1 - **WMO 1.3** = <http://wis.wmo.int/2012/codelists/WMOCodeLists.xml>

Url2 - **ISO** = [http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\\_19139\\_Schemas/resources/codelist/gmxCodelists.xml](http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/codelist/gmxCodelists.xml)

All code lists referred to in Column E are represented in WMCP v1.3, Part 2 (pages 17-23), since they are assumed to be needed for minimal WMCP v1.3 metadata records.

Of these:

- Tables 9, 11, 12 and 13 are the same as those in ISO19115.
- Tables 8 and 10 include **additional terms\* (in bold)**, compared with the code list of the same name, in ISO19115
- Tables 14-17 are not in ISO19115

**\*URL values for** `codelist="[url]#[Table name]"`, for Tables 8 and 10:

- When using a WMCPv1.3-specific term (such as ‘reference’ in DateTypeCode), **Url1 must** be used, in the `codelist=[url]#[table name]`.
- When using a term that is in the original ISO codelist (not bold), either Url1 or Url2 may be used.

The WMCP XML version of Tables 8, 10, and 14-17 is available from **Url1**.

The XML version of Tables 9, 11-13 and all other codelists referred to in Column F\*, are available from **Url2**.

Where metadata refers to an ISO or WMCP v1.3 codelist, the codelist's "Table Name", referred to by **codelist="**[url]#[Table name], must match the table Name in the INDEX below.

A tabular representation of the code lists referred to in **Column F** (which are from ISO19115-1 (2003) standard, Annex B, Sections B.5.2-B.5.28 (pg.92-104) ), are also listed in WMCP v1.2, available from: <http://wis.wmo.int/2010/metadata/> The XML version of these is available from **Url2**.

| INDEX All code lists for <b>WMO Core Metadata Profile 1.3</b> , and for other ISO19115 fields which may be included in a WMCP v1.3 compliant record |     |  |                           |                               |   |   |
|---|-----|--|---------------------------|-------------------------------|---|---|
| A.<br>Table Name  | B.  | C.<br>WMO - Profile 1.3<br>relative to ISO 19139                   | D.<br>Code List<br>Source | E.<br>WMCP<br>v1.3<br>Table # | F.<br>ISO19115<br>Table #<br><small>(19115: pg 92- 102)</small> | G.<br>Codelist url                                    |
| CI_DateTypeCode   | M   | <b>Extends</b> 19115<br><small>(added "reference" in 1.1)</small>  | WMO1.3                    | <b>8</b>                      | Original is<br><b>B.5.2</b>                                     | Url1*<br><b>(Url1 or URL2 for original ISO terms)</b> |
| CI_OnLineFunctionCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.3</b>  | Url2  |
| CI_PresentationFormCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.4</b>  | Url2  |
| CI_RoleCode   | M   | Matches 19115  | ISO                       | <b>9</b>                      | <b>B.5.5</b>  | Url2  |
| CountryCode   | O   |  | ISO3166-1                 |                               |   |   |
| DQ_EvaluationMethodTypeCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.6</b>  | Url2  |
| DS_AssociationTypeCode  | M   | Matches 19115  | ISO                       |                               | <b>B.5.7</b>  | Url2  |
| DS_InitiativeTypeCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.8</b>  | Url2  |
| LanguageCode  | M   |  | ISO639-2                  |                               |   |   |
| MD_CellGeometryCode   | M   | Matches 19115  | ISO                       |                               | <b>B.5.9</b>  | Url2  |
| MD_CharacterSetCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.10</b>   | Url2  |
| MD_ClassificationCode   | M   | Matches 19115  | ISO                       |                               | <b>B.5.11</b>   | Url2  |
| MD_CoverageContentTypeCode  | M   | Matches 19115  | ISO                       |                               | <b>B.5.12</b>   | Url2  |
| MD_DatatypeCode   | M   | Matches 19115  | ISO                       |                               | <b>B.5.13</b>   | Url2  |
| MD_DimensionNameTypeCode  | M   | Matches 19115  | ISO                       |                               | <b>B.5.14</b>   | Url2  |
| MD_GeometricObjectTypeCode  | M   | Matches 19115  | ISO                       |                               | <b>B.5.15</b>   | Url2  |
| MD_ImagingConditionCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.16</b>   | Url2  |
| MD_KeywordTypeCode  | O   | <b>Extends</b> 19115<br><small>(added "dataCentre" in 1.3)</small> | WMO1.3                    | <b>10</b>                     | Original is<br><b>B.5.17</b>                                    | Url1*<br><b>(Url1 or URL2 for original ISO terms)</b> |
| MD_MaintenanceFrequencyCode   | C   | Matches 19115  | ISO                       |                               | <b>B.5.18</b>   | Url2  |
| MD_MediumFormatCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.19</b>   | Url2  |
| MD_ObligationCode   | C   | Matches 19115  | ISO                       |                               | <b>B.5.21</b>   | Url2  |
| MD_PixelOrientationCode   | M   | Matches 19115  | ISO                       |                               | <b>B.5.22</b>   | Url2  |
| MD_ProgressCode   | O   | Matches 19115  | ISO                       |                               | <b>B.5.23</b>   | Url2  |
| MD_RestrictionCode  | C/O | Matches 19115  | ISO                       | <b>11</b>                     | <b>B.5.24</b>   | Url2  |
| MD_ScopeCode  | O   | Matches 19115  | ISO                       | <b>12</b>                     | <b>B.5.25</b>   | Url2  |
| MD_SpatialRepresentationTypeCode  | O   | Matches 19115  | ISO                       |                               | <b>B.5.26</b>   | Url2  |
| MD_TopicCategoryCode  | C   | Matches 19115  | ISO                       | <b>13</b>                     | <b>B.5.27</b>   | Url2  |
| MD_TopologyLevelCode  | O   | Matches 19115  | ISO                       |                               | <b>B.5.28</b>   | Url2  |
| WMO_DataLicenceCode **  | O   | WMOcodes<br><small>(changed since v1.2)</small>                    | WMO1.3                    | <b>14</b>                     |   | Url1  |
| WMO_GTSProductCategoryCode**  | O   | WMOcodes<br><small>(changed since v1.2)</small>                    | WMO1.3                    | <b>15</b>                     |   | Url1  |
| WMO_CategoryCode  | O   | WMOcodes   | WMO1.3                    | <b>16</b>                     |   | Url1  |
| WMO_DistributionScopeCode   | O   | WMOcodes<br><small>(new in 1.3)</small>                            | WMO1.3                    | <b>17</b>                     |   | Url1  |

### If converting from WMCP v1.2 to v1.3 :

When converting metadata records from to **WMO v1.2** to **WMO v1.3** , the url in `codelist="[url]#[Table name]"` should be changed

from `codelist= "http://wis.wmo.int/2010/metadata/version_1-2/WMOCodelists.xml #[Table Name]"`,  
to `codelist= "http://wis.wmo.int/2012/codelists/WMOCodelists.xml#[Table Name]"`,

In addition, **two** of the code lists which were in to **WMO v1.2** have been modified, as follows :

- **\*\***For all terms in Table 14 ( `WMO_DataLicenseCode` ) and Table 15 ( `WMO_GTSPProductCategoryCode` ), the terms to be referenced have had spaces removed (eg 'WMO Additional' is now 'WMOAdditional'), and
- the `WMO_DataLicenseCode` code list has an additional term ('WMOOther')

### 3. CODE LIST TABLE - GUIDANCE

*The following pages refer to the code list tables as detailed in the WMCP v1.3, Part2*

*( "WMO Core Metadata Profile version 1.3 Specification Part 2 – Conformance Requirements C.1.3-Part 2" )*

*The code lists' Table numbers, and their order, have been replicated from the WMCP v1.3/Part.2, to provide ease in cross referencing.*

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**Table 8: CI\_DateTypeCode «CodeList»** (including addition to the ISO19115 codelist)

WMCP v1.3, Part2, page17

|   | Name            | Domain Code | Definition   |
|---|-----------------|-------------|--|
| 1 | CI_DateTypeCode | DateTypCd   | identification of when a given event occurred                          |
| 2 | creation        | 001         | date identifies when the resource was brought into existence           |
| 3 | publication     | 002         | date identifies when the resource was issued                           |
| 4 | revision        | 003         | date identifies when the resource was examined and improved or amended |
| 5 | reference       | 004         | date identifies when the resource was referenced or accessed           |

### XML Snippet

This example is for a publication date of 7th April 2005.

```
<gmd:date>
  <gmd:CI_Date>
    <gmd:date>
      <gco>Date>2005-04-07T10:40:15Z</gco>Date>
    </gmd:date>
    <gmd:dateType>
      <gmd:CI_DateTypeCode
        codeList="http://wis.wmo.int/2012/codlists/WMOCodeLists.xml#CI_DateTypeCode"
        codeListValue="publication">publication
      </gmd:CI_DateTypeCode>
    </gmd:dateType>
  </gmd:CI_Date>
</gmd:date>
```

### Notes and guidance

1. Conversion to Version 1.3 from Version 1.2 will require replacing the codelist reference. Replace [http://wis.wmo.int/2010/metadata/version\\_1-2/WMOCodeLists.xml](http://wis.wmo.int/2010/metadata/version_1-2/WMOCodeLists.xml) with <http://wis.wmo.int/2012/codlists/WMOCodeLists.xml>
2. When the term being used is not available in the original ISO19115 codelist (eg 'reference'), the url in your metadata's **codeList** attribute (codeList=[url#[table name]]) should refer to the abovementioned WIS url (Url1). When using the other terms, Url1 or Url2 may be used.
3. When adding date, and where the timezone is significant, it is recommended that a trailing Z is added, to indicate a UTC time zone; or +/-hh[:mm] is added to signify the dateTime's offset from UTC. (eg 2012-01-11T02:15:00+10 for Australian Eastern Standard Time). Absence of "Z" or another timezone qualifier, will be interpreted as 'local time'.
4. Either date or dateTime are acceptable, in the **date** field. (see [http://en.wikipedia.org/wiki/ISO\\_8601](http://en.wikipedia.org/wiki/ISO_8601))
5. **The date field is of type [date]**. This means that although **date** is entered as a simple string, it needs to be an acceptable format (see the url above) for the record to "validate", so care is needed, to ensure that punctuation is accurate.

### Additional references

1. WMCP v1.3, Pt.1 [page 20](#) UML for WMCP v1.3
2. WMCP v1.2 [page 86](#) Provides more guidance on Date format and content
3. WMCP v1.3/Pt.2 [Page 16](#) Data Dictionary for CI\_Date

**Table 9: CI\_RoleCode «CodeList»**

WMCP v1.3, Part2, page17

|    | Name                  | Domain Code | Definition   |
|----|-----------------------|-------------|--|
| 1  | CI_RoleCode           | CI_RoleCode | function performed by the responsible party  |
| 2  | resourceProvider      | 001         | party that supplies the resource   |
| 3  | custodian             | 002         | party that accepts accountability and responsibility for the data and ensures appropriate care and maintenance of the resource |
| 4  | owner                 | 003         | party that owns the resource   |
| 5  | user                  | 004         | party who uses the resource  |
| 6  | distributor           | 005         | party who distributes the resource   |
| 7  | originator            | 006         | party who created the resource   |
| 8  | pointOfContact        | 007         | party who can be contacted for acquiring knowledge about or acquisition of the resource  |
| 9  | principalInvestigator | 008         | key party responsible for gathering information and conducting research  |
| 10 | processor             | 009         | party who has processed the data in a manner such that the resource has been modified  |
| 11 | publisher             | 010         | party who published the resource   |
| 12 | author                | 011         | party who authored the resource  |

This code list is the same as the code list of the same name, in ISO19115

**XML Snippet**

This example is for a party who can be contacted for acquiring knowledge about or acquisition of the resource i.e. a point of contact.

```
<gmd:role>
  <gmd:CI_RoleCode
    codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodelists.xml#CI_RoleCode"
    codeListValue="pointOfContact">pointOfContact
  </gmd:CI_RoleCode>
</gmd:role>
```

**Notes and guidance**

- When using a term from this code list, the **codeList** attribute should use the following URL (Url2), in the [url#[codelistName] formula.:  
[http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\\_19139\\_Schemas/resources/Codelist/gmxCodelists.xml](http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodelists.xml)
- For WMCP v1.3 records, it is recommended that at least one **MD\_Metadata/contact** be provided. That "contact" element must have a CI\_RoleCode field containing the term "pointOfContact" (from the CI\_RoleCode codelist).  
 The Xpath for the CI\_RoleCode field containing the term is:  
**/gmd:MD\_Metadata/gmd:contact/gmd:CI\_ResponsibleParty/gmd:role/gmd:CI\_RoleCode.**  
 The named party will be the party that can be contacted for acquiring knowledge about the metadata.

**Comment [K3]:** WMCP v1.3/Pt.1/pg.11 says that it "should" have the 'POC' value; however, the compliance testing listed in WMCP v1.3 doesn't include that; So it appears to NOT be a validation"rule"?

As well, even though the UML says that the cardinality of /**contact** is [1..n], its unclear whether the absence of it would prompt an "INVALID" response?

**Additional references**

- WMCP v1.3/Pt.1  
[Page 11](#) 8.2 Provision of information to support discovery within WIS DAR Catalogue
- WMCP v1.3/Pt.2  
[Page 15](#)- Table 6: Data Dictionary for "Citation and responsible party information";

**Table 10: MD\_KeywordTypeCode «CodeList»** (including addition to the ISO19115 codelist)

WMCP v1.3, Part2, page18

|   | Name               | Domain Code | Definition  |
|---|--------------------|-------------|---|
| 1 | MD_KeywordTypeCode | KeyTypCd    | methods used to group similar keywords  |
| 2 | discipline         | 001         | keyword identifies a branch of instruction or specialised learning  |
| 3 | place              | 002         | keyword identifies a location   |
| 4 | stratum            | 003         | keyword identifies a the layer(s) of any deposited substance  |
| 5 | temporal           | 004         | keyword identifies a time period related to the dataset   |
| 6 | theme              | 005         | keyword identifies a particular subject or topic  |
| 7 | <b>dataCentre</b>  | <b>006</b>  | <b>keyword identifies a repository or archive that manages and distributes data</b> (from ISO/DIS 19115-1:2013) |

### XML Snippets

This example is for setting the **MD\_KeywordTypeCode** code list value to "theme":

(*'theme'* must be used when supplying a keyword from Table 16 (**WMO\_CategoryCode**), & may also be used when supplying other thematic keywords ) :

```
<gmd:type>
  <gmd:MD_KeywordTypeCode
    codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodlists.xml#MD_KeywordTypeCode"
    codeListValue="theme">theme</gmd:MD_KeywordTypeCode>
</gmd:type>
```

This example is for setting the **MD\_KeywordTypeCode** codelist value to "dataCentre"

(only used when supplying a keyword from Table 17 (**WMO\_DistributionScopeCode**) ) :

```
<gmd:type>
  <gmd:MD_KeywordTypeCode
    codeList="http://wis.wmo.int/2012/codlists/WMOCodeLists.xml#MD_KeywordTypeCode"
    codeListValue="dataCentre">dataCentre</gmd:MD_KeywordTypeCode>
</gmd:type>
```

### Guidance and Note

1. The Xpath is for the field ('type') containing a term from this codelist is:  
**/MD\_Metadata/identificationInfo/\*/descriptiveKeywords/MD\_Keywords/type**
2. In accordance with sections 8.2.1 and 8.2.2 of the WMCP v1.3/Pt.1, it is a mandatory obligation that  
*"Each WIS Discovery Metadata record shall include at least one keyword from the WMO\_CategoryCode code list, and "Keywords from WMO\_CategoryCode code list shall be defined as keyword type "theme" from the MD\_KeywordType code list".*  
The **thesaurusName** details for Table 16 (**WMO\_CategoryCode**) must also be provided (see APPENDIX, lines 423 - 476).
3. WMCP v1.3/Part.2/2.3.1 indicates that metadata records describing data for global exchange via the WIS shall indicate the scope of distribution using the keyword term "GlobalExchange" from Table 17 (**WMO\_DistributionScopeCode**).
4. When any term from Table 17 is provided, the KeywordTypeCode of "dataCentre" must be assigned, as well as a thesaurusName class, detailing Table 17 (see Appendix 1, Lines 441-494).
5. As with Table 8, the codelist url for the additional WMCP term ('dataCentre') must be Url1 (as shown above);  
The codelist url for all other terms from this codelist may be either Url1 or Url2. (In the 'theme' example above, Url2 has been used).

6. When assigning, as a keyword, a "Station Index Number" from WMO Publication No.9, the KeywordTypeCode should be 'place' (see APPENDIX, Lines 545-644).

7. Data Parameters may be added as keywords, using the code of 'discipline'. (see APPENDIX, Lines 646- 798, & 801 -1049)

**Comment [K4]:** I think ideally, thisodelist would have an additional term, such as 'dataParameter' dedicated to this purpose.

Has there been any discussion of extending thisodelist to include such a term?

#### Additional references

1. Refer to the "Data Policy Guidelines", or to "Table 17" in this document, for related **resourceConstraints**, **hierarchyLevel** and **fileIdentifier** content required, when a metadata record uses 'globalExchange' from Table 17, and 'dataCentre' from Table 10.  
(SUMMARY of "required content" rule:  
-MD\_Metadata/resourceConstraints/MD\_LegalConstraints must contain a term from Tables 14 & 15  
-the **hierarchyLevel** must be "dataset", and  
-the **fileIdentifier** must contain particular content)

**Table 11 : MD\_RestrictionCode «CodeList»**


WMCP v1.3, Part2, page17

|   | Name                       | Domain Code     | Definition   |
|---|----------------------------|-----------------|--|
| 1 | MD_Restriction             | Code RestrictCd | limitation(s) placed upon access or use of the data  |
| 2 | copyright                  | 001             | exclusive right to the publication, production, or sale of the rights to a literary, dramatic, musical or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist or distributor |
| 3 | Patent                     | 002             | government has granted exclusive right to make, sell, use or license an invention or discovery   |
| 4 | patentPending              | 003             | produced or sold information awaiting a patent   |
| 5 | trademark                  | 004             | a name, symbol, or other device identifying a product, officially registered and legally restricted to the use of the owner or manufacturer  |
| 6 | License                    | 005             | formal permission to do something  |
| 7 | intellectualPropertyRights | 006             | Rights to financially benefit from and control of distribution of nontangible property that is the result of creativity  |
| 8 | restricted                 | 007             | Withheld from general circulation or disclosure  |
| 9 | otherRestrictions          | 008             | limitation not listed  |

This code list is the same as the code list of the same name, in ISO19115

**XML Snippet**

The example below is for where "otherConstraints" contains **WMOOther** (from Table 14), and the data is being distributed on the GTS with a priority of 4. The **WMOOther** example for where neither WMOEssential nor WMO additional apply, but there customised use/access constraints need to be declared, and the data is from a NC or DCPC.

Both access and use constraints are set as "otherRestrictions" (see ) , and further explained in the subsequent **.../otherConstraints** fields.

**Comment [K5]:** ?Not sure if this is a legitimate use-case. Should we change it?

```

<gmd:resourceConstraints>
  <gmd:MD_LegalConstraints>
    <gmd:accessConstraints>
      <gmd:MD_RestrictionCode
        codeList="http://standards.iso.org/ittf/PublicallyAvailableStandards/ISO_19139_Schemas/resources/CodeList/gmxCodeLists.xml#MD_RestrictionCode"
        codeListValue="otherRestrictions">otherRestrictions
      </gmd:MD_RestrictionCode>
    </gmd:accessConstraints>
    <gmd:useConstraints>
      <gmd:MD_RestrictionCode
        codeList="http://standards.iso.org/ittf/PublicallyAvailableStandards/ISO_19139_Schemas/resources/CodeList/gmxCodeLists.xml#MD_RestrictionCode"
        codeListValue="otherRestrictions">otherRestrictions
      </gmd:MD_RestrictionCode>
    </gmd:useConstraints>
    <gmd:otherConstraints>
      <gco:CharacterString> Modified CC-BY-NonCommercial Licence, available from
        http://my.url.htm</gco:CharacterString>
    </gmd:otherConstraints>
    <gmd:otherConstraints>
      <gco:CharacterString>WMOOther</gco:CharacterString>
    </gmd:otherConstraints>
  </gmd:MD_LegalConstraints>
</gmd:resourceConstraints>

```

```

<gmd:otherConstraints>
  <gco:CharacterString>GTSPriority4</gco:CharacterString>
</gmd:otherConstraints>
<gmd:otherConstraints>
  <gco:CharacterString>
    WMOOther : "Data identified for global distribution via WMO infrastructure (GTS / WIS) that is not covered by
    WMO Resolution 25 or WMO Resolution 40; e.g. aviation OPMET data. Data marked with "WMOOther" data policy
    shall be treated like "WMOAdditional" where a more precise definition of the data policy may be additionally
    supplied within the metadata. In all cases it shall be the responsibility of the data consumer to ensure that they
    understand the data policy specified by the data provider – which may necessitate dialogue with the data publisher
    for confirmation of terms and conditions.", as per
    http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_DataLicenseCode ;

    GTSPriority4 : "Product category used for prioritising messages on the WMO Global
    Telecommunications System (GTS); Lowest Priority", as per
    http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_GTSPriorityCode ;
  </gco:CharacterString>
</gmd:otherConstraints>
</gmd:MD_LegalConstraints>
</gmd:resourceConstraints>

```

**Comment [K6]:** This option is just added, for consideration / discussion. As per feedback noted in the "Data Policy guidelines" doc, the process of adding a codelist term to ../otherConstraints can result in the metadata readers struggling to know what the terms mean.

There seem to be 3 ways to signify where the definitions can be accessed:

- use of Anchor (which cant be guaranteed to display properly, and is now being advocated against, in this document);
- addition of another /otherConstraints where the definition is provided;
- addition of an additional ../otherConstraints where the codelist url is provided; or
- a combination of b) and c);

Further examples are in APPENDIX 1

### Guidance and Note

- The **MD\_RestrictionCode** may be used in either or (preferably) both the accessConstraints and UseConstraints.
  - resourceConstraints/MD\_LegalConstraints/accessConstraints/MD\_RestrictionCode and
  - resourceConstraints/MD\_LegalConstraints/useConstraints/MD\_RestrictionCode.
 While statements in /otherConstraints implicitly apply to both access and use Constraints for the data, it is more clearly expressed by setting both the above fields to have the value of 'otherRestrictions'.
- If the data is for "GlobalExchange", then that term (from Table 17) must be assigned as a keyword. As well, a term from both Tables 14 & 15 must be assigned to ../MD\_LegalConstraints/otherConstraints ; and the term 'otherRestrictions' (from Table 11) should be assigned to both ../accessConstraints and ../useConstraints.
- Note that **WMOOther** and **GTSPriority4** have not referenced a code list (using Anchor) in the above example; however, the url to access definitions for these terms is provided in an additional ../otherConstraints. This is because although the WMCP v1.3 (part 1, pg.7) provides an example where Anchor replaces CharacterString, e.g.
 

```

<gmx:Anchor xlink:href="
http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_DataLicenseCode">WMOEssential</gmx:Anchor>

```

 , metadata editors might use either approach. Additionally, not all systems will necessarily handle (display) the Anchor field reliably. For this reason, an additional <gmd:otherConstraints> field, containing (? an explanation that this is related licences), the (?definitions and?) urls, should also be added.
- There may be one or more constraints for each restriction type.
- Also note guidance for Table 14 and Table 15 below.

**Comment [K7]:** This is a suggestion only, and needs to be discussed and agreed. Instead, recommend addition of the extra otherConstraints field?

### Additional references

- WMCP v1.3/Pt.1 Pages 16-18 Section **9.3 Defining WMO Data Policy and GTS Priority for data published for global exchange**, (note snippet on page 16)
- WMCP v1.3/Pt.2 Page 11 **Table 4: Constraint information (includes legal)**

**Table 12 : MD\_ScopeCode «CodeList»**

WMCP v1.3, Part2, page17

|    | Name                 | Domain Code | Definition   |
|----|----------------------|-------------|--|
| 1  | MD_ScopeCode         | ScopeCd     | class of information to which the referencing entity applies   |
| 2  | attribute            | 001         | information applies to the attribute class   |
| 3  | attributeType        | 002         | information applies to the characteristic of a feature   |
| 4  | collectionHardware   | 003         | information applies to the collection hardware class   |
| 5  | collectionSession    | 004         | information applies to the collection session  |
| 6  | dataset              | 005         | information applies to the dataset   |
| 7  | series               | 006         | information applies to the series  |
| 8  | nonGeographicDataset | 007         | information applies to non-geographic data   |
| 9  | dimensionGroup       | 008         | information applies to a dimension group   |
| 10 | feature              | 009         | information applies to a feature   |
| 11 | featureType          | 010         | information applies to a feature type  |
| 12 | propertyType         | 011         | information applies to a property type   |
| 13 | fieldSession         | 012         | information applies to a field session   |
| 14 | software             | 013         | information applies to a computer programme or routine   |
| 15 | service              | 014         | information applies to a capability which a service provider entity makes available to a service user entity through a set of interfaces that define a behaviour, such as a use case |
| 16 | model                | 015         | information applies to a copy or imitation of an existing or hypothetical object   |
| 17 | tile                 | 016         | information applies to a tile, a spatial subset of geographic data   |

This code list is the same as the code list of the same name, in ISO19115

#### XML Snippet

The example below is for a metadata record that applies to the dataset.

```
<gmd:hierarchyLevel>
  <gmd:MD_ScopeCode
    codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/
    gmxCodelists.xml#MD_ScopeCode" codeListValue="dataset">dataset
  </gmd:MD_ScopeCode>
</gmd:hierarchyLevel>
```

#### Guidance and Note

1. In order to maintain simple GISC implementation, discrete metadata records will be used to describe GTS products intended for global exchange, defining the hierarchy level as “dataset”.

#### Additional references

1. WMO Core Metadata Profile version 1.2 Guidelines on the use of Metadata for WIS Document version: 0.1 (DRAFT) Annex C (ISO19115 UML diagrams) :  
Annex C [page 19](#) Section **A.2 Metadata package UML diagrams**,  
Annex C [page 22](#) Section **A.2.4 Data quality information**,  
Annex C [page 25](#) Section **A.2.5 Maintenance information**
2. WMCP v1.3/Pt.2 [Page 9](#) **Table 1: Metadata entity set information**, showing that (unlike ISO19115) WMCP v1.3 allows a maximum of 1 term, for **MD\_Metadata /hierarchyLevel**

**Table 13: MD\_TopicCategoryCode «Enumeration»**

|    | Name                             | Domain Code | Definition  |
|----|----------------------------------|-------------|---|
| 1  | MD_TopicCategoryCode             | TopicCatCd  | high-level geographic data thematic classification to assist in the grouping and search of available geographic datasets, Can be used to group keywords as well. Listed examples are not exhaustive. NOTE It is understood there are overlaps between general categories and the user is encouraged to select the one most appropriate. |
| 2  | farming                          | 001         | rearing of animals and/or cultivation of plants<br>Examples: agriculture, plantations, herding, pests and diseases affecting crops and livestock  |
| 3  | biota                            | 002         | flora and/or fauna in natural environment<br>Examples: wildlife, vegetation, biological sciences, Ecology sea-life, habitat   |
| 4  | boundaries                       | 003         | legal land descriptions<br>Examples: political and administrative boundaries  |
| 5  | climatologyMeteorologyAtmosphere | 004         | processes and phenomena of the atmosphere<br>Examples: weather, climate, atmospheric conditions, climate change, precipitation  |
| 6  | economy                          | 005         | activities, conditions and employment<br>Examples: production, labour, revenue, commerce, industry, tourism and ecotourism, forestry, fisheries, commercial or subsistence hunting, exploration and exploitation of resources such as minerals, oil and gas   |
| 7  | elevation                        | 006         | height above or below sea level<br>Examples: altitude, bathymetry, digital elevation models, slope, derived products  |
| 8  | environment                      | 007         | environmental resources, protection and conservation<br>Examples: environmental pollution, waste storage and treatment, environmental impact assessment, monitoring environmental risk, nature reserves, landscape  |
| 9  | geoscientificInformation         | 008         | information pertaining to earth sciences<br>Examples: geophysical features and processes, geology, minerals, sciences dealing with the composition, structure and origin of the earth's rocks, risks of earthquakes, volcanic activity, landslides, gravity information, soils, permafrost, hydrogeology, erosion                       |
| 10 | health                           | 009         | health, health services, human ecology, and safety<br>Examples: disease and illness, factors affecting health, hygiene, substance abuse, mental and physical health, health services  |
| 11 | imageryBaseMapsEarthCover        | 010         | base maps<br>Examples: land cover, topographic maps, imagery, unclassified images, annotations  |
| 12 | intelligenceMilitary             | 011         | military bases, structures, activities<br>Examples: barracks, training grounds, military transportation, information collection   |
| 13 | inlandWaters                     | 012         | inland water features, drainage systems and their characteristics<br>Examples: rivers and glaciers, salt lakes, water utilization plans, dams, currents, floods, water quality, hydrographic charts   |
| 14 | location                         | 013         | positional information and services<br>Examples: addresses, geodetic networks, control points, postal   |

|    |                        |     |   |
|----|------------------------|-----|---|
|    |                        |     | zones and services, place names   |
| 15 | oceans                 | 014 | features and characteristics of salt water bodies (excluding inland waters) Examples: tides, tidal waves, coastal information, reefs  |
| 16 | planningCadastre       | 015 | information used for appropriate actions for future use of the land Examples: land use maps, zoning maps, cadastral surveys, land ownership   |
| 17 | society                | 016 | characteristics of society and cultures Examples: settlements, anthropology, archaeology, education, traditional beliefs, manners and customs, demographic data, recreational areas and activities, social impact assessments, crime and justice, census information  |
| 18 | structure              | 017 | man-made construction Examples: buildings, museums, churches, factories, housing, monuments, shops, towers  |
| 19 | transportation         | 018 | means and aids for conveying persons and/or goods Examples: roads, airports/airstrips, shipping routes, tunnels, nautical charts, vehicle or vessel location, aeronautical charts, railways   |
| 20 | utilitiesCommunication | 019 | energy, water and waste systems and communications infrastructure and services Examples: hydroelectricity, geothermal, solar and nuclear sources of energy, water purification and distribution, sewage collection and disposal, electricity and gas distribution, data communication, telecommunication, radio, communication Networks |

This code list is the same as the code list of the same name, in ISO19115

#### XML Snippet

##### Example for CLIMAT

```
<gmd:topicCategory>
  <gmd:MD_TopicCategoryCode>climatologyMeteorologyAtmosphere
</gmd:MD_TopicCategoryCode>
</gmd:topicCategory>
```

#### Notes and guidance

1. The MD\_TopicCategoryCode is an Enumeration and as such cannot be extended.
2. Generally the most appropriate category for WMO metadata will be climatologyMeteorologyAtmosphere.  
Select one or more categories that most closely represent the topic of the data resource.
3. The MD\_TopicCategoryCode is a high-level geographic data thematic classification to assist in the grouping and search of available geographic data sets.
4. The MD\_TopicCategoryCode is mandatory for a dataset or series.
5. Use of the MD\_TopicCategoryCode, in a search, allows results to be restricted to resources pertaining to a particular theme or topic. This may be more relevant as WIS catalogues extend.

#### Additional references:

1. WMCP v1.3/Pt.2 [Page 10](#) **Table 2: DataIdentification information.**

**Table 14 : WMO\_DataLicenseCode «CodeList»**

WMCP v1.3, Part2, page22

|   | Name                | DomainCode         | Definition   |
|---|---------------------|--------------------|--|
| 1 | WMO_DataLicenseCode | WMODataLicenseCode | WMO Data License applied to the data resource – derived from WMO Resolution 25 and Resolution 40 ( <a href="http://www.wmo.int/pages/about/exchangingdata_en.html">http://www.wmo.int/pages/about/exchangingdata_en.html</a> )   |
| 2 | WMOEssential        | 001                | WMO Essential Data: free and unrestricted international exchange of basic meteorological data and products.  |
| 3 | WMOAdditional       | 002                | WMO Additional Data: free and unrestricted access to data and products exchanged under the auspices of WMO to the research and education communities for non-commercial activities. A more precise definition of the data policy may be additionally supplied within the metadata. In all cases it shall be the responsibility of the data consumer to ensure that they understand the data policy specified by the data provider – which may necessitate dialogue with the data publisher for confirmation of terms and conditions.   |
| 4 | WMOOther            | 003                | Data identified for global distribution via WMO infrastructure (GTS / WIS) that is not covered by WMO Resolution 25 or WMO Resolution 40; e.g. aviation OPMET data. Data marked with “WMOOther” data policy shall be treated like “WMOAdditional” where a more precise definition of the data policy may be additionally supplied within the metadata. In all cases it shall be the responsibility of the data consumer to ensure that they understand the data policy specified by the data provider – which may necessitate dialogue with the data publisher for confirmation of terms and conditions. |

A code list of this name does not exist in ISO19115.

The term “WMOOther” has been added, since WMCP v1.2.

For people converting from WMCP 1.2 to 1.3, please see the notes on page 3 (names have had spaces removed)

**XML Snippet**

This example is for data for Global Exchange, available under an **WMOEssential** DataPolicy, with a GTS priority of 4.

OPTION includes an additional “otherConstraints” to convey the Licence definition

```

<gmd:MD_LegalConstraints>
  <gmd:accessConstraints>
    <gmd:MD_RestrictionCode
      codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodelists.xml#MD_RestrictionCode" codeListValue="otherRestrictions">
      otherRestrictions
    </gmd:MD_RestrictionCode>
  </gmd:accessConstraints>
  <gmd:useConstraints>
    <gmd:MD_RestrictionCode
      codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodelists.xml#MD_RestrictionCode" codeListValue="otherRestrictions">
      otherRestrictions
    </gmd:MD_RestrictionCode>
  </gmd:useConstraints>
  <gmd:otherConstraints>
    <gco:CharacterString>WMOEssential</gco:CharacterString>
  </gmd:otherConstraints>
  <gmd:otherConstraints>
    <gco:CharacterString>
      "WMOEssential" is defined at http://wis.wmo.int/2012/metadata/version\_1-3/WMO\_Codelists.xml#WMO\_DataLicenseCode.
      "WMOEssential" represents the WMO Data License for WMO Essential Data, which is defined as: "free and unrestricted international exchange of basic meteorological data and products WMOEssential". WMO Data License is derived from WMO Resolution 25 and Resolution 40.
      For further information, see: (http://www.wmo.int/pages/about/exchangingdata\_en.html)
    </gco:CharacterString>
  </gmd:otherConstraints>
</gmd:MD_LegalConstraints>

```

**Comment [K8]:** for discussion. See also comments K6, K7 & K9

**Comment [K9]:** Even the WMOCPP 1.3, Pt2 provides an example of using ANCHOR, for this codelist, the Anchor option is (until we get feedback) being discouraged, in this document, or at least, it is proposed that whether the anchor or characterString is used, then an additional otherConstraints block would also, ideally, be provided.

Issue: Licencing details need to be as up-front and as clearly stated as possible. The addition of another otherConstraints (containing the definition, or url or both), makes it easier for a user to access the term's definition.

To manage the risk of the Data Licence conditions being unclear or hard to access, I'd suggest that consideration be given to the guideline that - a second "otherConstraints" should be supplied, which spells out the Licence details.

An example is provided in this code snippet.

```
</gco:CharacterString>
</gmd:otherConstraints>
<gmd:otherConstraints>
<gco:CharacterString>GTSPriority4</gco:CharacterString>
</gmd:otherConstraints>
```

```
</gmd:MD_LegalConstraints>
```

### Notes and guidance

1. When adding a term from Table 14 to *otherConstraints*, it is also necessary to provide the term "otherRestrictions" in both *gmd:MD\_LegalConstraints/gmd:accessConstraints* and *gmd:MD\_LegalConstraints/gmd:useConstraints*, as shown above.
2. The code name **WMOOther** can be used for data that is for non-GTS distribution, as well as for data that IS for GTS distribution.

**Comment [K10]:** Not sure whether this is correct. Can others please review?

### Additional references:

1. WMCP v1.2 [page 58-60](#) **A.4.1 Usage constraints**  
(Caution: Code list terms have changed since WMCP v1.2 [see Page 3 of this document] )
2. WMCP v1.3/Pt.1  
[Page 15-20](#)  
Section **9.3 Defining WMO Data Policy and GTS Priority for data published for global exchange**,  
Section **10 SUMMARY OF ADDITIONAL RESTRICTIONS** and  
Section **11 AMENDMENTS TO CODE LISTS / NEW CODE LISTS**
3. WMCP v1.3/Pt.1  
[Page 7](#) Section 2.3.2 **Specification of WMO Data Policy for globally exchanged data**;  
[Page 22](#) **Table 14: WMO\_DataLicenseCode «CodeList»**

**Table 15: WMO\_GTSPriorityCode «CodeList»**

WMCP v1.3, Part2, page22

|   | Name                | Domain Code | Definition  |
|---|---------------------|-------------|---|
| 1 | WMO_GTSPriorityCode | WMOGTSCatCd | Product category used for prioritising messages on the WMO Global Telecommunications System (GTS) |
| 2 | GTPriority1         | 001         | GTS Priority 1 – highest priority products.   |
| 3 | GTPriority2         | 002         | GTS Priority 2  |
| 4 | GTPriority3         | 003         | GTS Priority 3  |
| 5 | GTPriority4         | 004         | GTS Priority 4  |

A code list of this name does **not** exist in ISO19115.

No additional terms have been added, since WMCP v1.2.

For people converting from WMCP 1.2 to 1.3, please see the notes on page 3 (names have had spaces removed)

### XML Snippet

Example for Data for Global Exchange of WMOEssential data, with a GTS priority of 4.

```

<gmd:MD_LegalConstraints>
  <gmd:accessConstraints>
    <gmd:MD_RestrictionCode
      codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodeLists.xml#MD_RestrictionCode" codeListValue="otherRestrictions">
        otherRestrictions
      </gmd:MD_RestrictionCode>
    </gmd:accessConstraints>
  <gmd:useConstraints>
    <gmd:MD_RestrictionCode
      codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/gmxCodeLists.xml#MD_RestrictionCode" codeListValue="otherRestrictions">
        otherRestrictions
      </gmd:MD_RestrictionCode>
    </gmd:useConstraints>
  <gmd:otherConstraints>
    <gco:CharacterString>WMOEssential</gco:CharacterString>
  </gmd:otherConstraints>
  <gmd:otherConstraints>
    <gmx:Anchor
      xlink:href="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_GTSPriorityCode">
      GTPriority4</gmx:Anchor>
    </gmd:otherConstraints>
  </gmd:MD_LegalConstraints>

```

### Notes and guidance

1. The term used for **WMO\_GTSPriorityCode** may be stored as a free text character string, or as an Anchor.
2. It is essential that the term used is identical to one of the 'names' in the above table.
3. When assigning a term from Table 15, it is also necessary to include *gmd:MD\_LegalConstraints/gmd:accessConstraints* and *gmd:MD\_LegalConstraints/gmd:useConstraints* using *gmd:MD\_RestrictionCode* "otherRestrictions" as shown above.
4. Where the data is for GlobalExchange, that term (from Table 17) must also be added (using the KeywordType of 'dataCentre'), and the relevant term from WMO\_DataLicenseCode must also be specified, as a free text character string.
5. For data that is not distributed on the GTS, this code list (Table 15) should not be used.

Additional references:

1. WMCP v1.3/Pt.1  
page 15 - 20  
Section **9.3** Defining WMO Data Policy and GTS Priority for data published for global exchange,  
Section **10** SUMMARY OF ADDITIONAL RESTRICTIONS and  
Section **11** AMENDMENTS TO CODE LISTS / NEW CODE LISTS
  
2. WMCP v1.3/Pt.1  
Page 7 Section **2.3.2**, Specification of WMO Data Policy for globally exchanged data,  
Page 22 Table **15**: WMO\_GTSPProductCategoryCode «CodeList»

**Table 16: WMO\_CategoryCode «CodeList»**

WMCP v1.3, Part2, page23

|    | Name                    | Domain Code | Definition                                    |
|----|-------------------------|-------------|---|
| 1  | WMO_CategoryCode        | WMOCatCd    | additional topic categories for WMO community |
| 2  | weatherObservations     | 001         | weather observations                          |
| 3  | weatherForecasts        | 002         | weather forecasts                             |
| 4  | meteorology             | 003         | Meteorology                                   |
| 5  | hydrology               | 004         | Hydrology                                     |
| 6  | climatology             | 005         | Climatology                                   |
| 7  | landMeteorologyClimate  | 006         | land meteorology climate                      |
| 8  | synopticMeteorology     | 007         | synoptic meteorology                          |
| 9  | marineMeteorology       | 008         | marine meteorology                            |
| 10 | agriculturalMeteorology | 009         | agricultural meteorology                      |
| 11 | aerology                | 010         | Aerology                                      |
| 12 | marineAerology          | 011         | marine aerology                               |
| 13 | oceanography            | 012         | Oceanography                                  |
| 14 | landHydrology           | 013         | land hydrology                                |
| 15 | rocketSounding          | 014         | rocket sounding                               |
| 16 | pollution               | 015         | Pollution                                     |
| 17 | waterPollution          | 016         | water pollution                               |
| 18 | landWaterPollution      | 017         | land water pollution                          |
| 19 | seaPollution            | 018         | sea pollution                                 |
| 20 | landPollution           | 019         | land pollution                                |
| 21 | airPollution            | 020         | air pollution                                 |
| 22 | glaciology              | 021         | Glaciology                                    |
| 23 | actinometry             | 022         | Actinometry                                   |
| 24 | satelliteObservation    | 023         | satellite observation                         |
| 25 | airplaneObservation     | 024         | airplane observation                          |
| 26 | observationPlatform     | 025         | observation platform                          |

A code list of this name does **not** exist in ISO19115.

No additional terms have been added, since WMCP v1.2.

For people converting from WMCP 1.2 to 1.3, please see the notes on page 3 (names have had spaces removed)

#### XML Snippet

```
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords id="WMOCodeListKeywords">
    <gmd:keyword>
      <gco:CharacterString>landMeteorologyClimate</gco:CharacterString>
    </gmd:keyword>
    <gmd:keyword>
      <gco:CharacterString>weatherForecasts</gco:CharacterString>
    </gmd:keyword>
    <gmd:type>
      <gmd:MD_KeywordTypeCode
        codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/codelist/gmxCodeLists.xml#MD_KeywordTypeCode" codeListValue="theme">theme
      </gmd:MD_KeywordTypeCode>
    </gmd:type>
  </gmd:descriptiveKeywords>
  <gmd:thesaurusName>
    <gmd:CI_Citation id="WMOCodeList">
      <gmd:title>
        <gco:CharacterString>WMO_CategoryCode</gco:CharacterString>
      </gmd:title>
      <gmd:date>
        <gmd:CI_Date>
```

```

<gmd:date>
  <gco:Date>2013-02-14Z</gco:Date>
</gmd:date>
<gmd:dateType>
  <gmd:CI_DateTypeCode
    codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_DateTypeCode"
    codeListValue="revision">
    revision
  </gmd:CI_DateTypeCode>
</gmd:dateType>
</gmd:CI_Date>
</gmd:date>
<gmd:citedResponsibleParty>
  <gmd:CI_ResponsibleParty>
    <gmd:organisationName>
      <gco:CharacterString>WMO Secretariat</gco:CharacterString>
    </gmd:organisationName>
    <gmd:role>
      <gmd:CI_RoleCode
        codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/codelist/gmxCodelists.xml#CI_RoleCode" codeListValue="publisher">publisher
      </gmd:CI_RoleCode>
    </gmd:role>
  </gmd:CI_ResponsibleParty>
</gmd:citedResponsibleParty>
</gmd:CI_Citation>
</gmd:thesaurusName>
</gmd:MD_Keywords>
</gmd:descriptiveKeywords>

```

#### Guidance and Note

1. In accordance with sections 8.2.1 and 8.2.2 of the WMCP v1.3/Pt.2, it is a mandatory obligation that “*Each WIS Discovery Metadata record shall include at least one keyword from the WMO\_CategoryCode code list (Table 16), and “Keywords from WMO\_CategoryCode code list shall be defined as keyword type “theme” from the MD\_KeywordTypeCode code list (Table 10).*”
2. It is suggested that, where possible, only one WMO\_CategoryCode keyword be selected, per metadata record; however, more than 1 may be selected, where applicable.
3. When the metadata creator is selecting the category which best matches the data being described by the metadata, a more specific term should be used, over a more general term.
4. Where no term matches the data type being described in the metadata record, the creator should report this to their principal GISC
5. The other primary sources for ‘theme’ keywords are the “*International Meteorological Vocabulary*” (WMO-No. 182), and “*NASA Global Change Master Directory vocabulary*” (GCMD). When assigning terms from these other vocabularies (or other), an additional `descriptiveKeywords` will be required, and the details of the particular thesaurusName should also supplied within that `descriptiveKeywords` class. (see Appendix , Lines 423 - 476)
6. The task team is looking to extend this codelist (Table 16) to include space weather, and forecasts.
7. As noted in “*WMCP v1.2 WMO Core Metadata Profile version 1.2 Guidelines on the use of Metadata for WIS Document version: 0.1 (DRAFT)*”, WMO maintains a number of controlled vocabulary resources including:
  - *GRIB Code table 0.0 – Discipline of processed data in the GRIB message*

**Comment [K11]:** What should they do, meanwhile, given that >=1 WMO\_CatCode term is required? Can nilReason be used here (Not Applicable) (&, should the codelist include “noneApplicable”, to handle this use-case?)

- GRIB Code table 4.0 – Product definition
- BUFR Table A – Data Category
- Common Code Table C-13 – Data sub-categories
- International Meteorological Vocabulary (WMO-No. 182)
- WMO Table-Driven Code Forms (TDCF) tables

8. The Thesaurus block is optional, to allow for where there isn't a known THESAURUS for a "needed" term. However, where the term provided in the <keyword> field IS from a Vocabulary / Thesaurus, the details of that thesaurus should always be provided within the related ThesaurusName section. For instance, the thesaurusName must be provided, to accompany any keyword(s) from **WMO\_CategoryCode (Table 16)**.

**Comment [K12]:** I'd suggest adding an explanation of why its optional (such as this) and adding a strong recommendation to use the ThesaurusName.

### Additional references

1. WMCP v1.3/Pt.1  
Page 12 Section 8.2.1 -8.2.4,  
Page 17-18 Table 5 – Metadata uniqueness and discovery within WIS DAR Catalogue (8)  
Page 18-19 Table 7 – Modifications and additions to the ISO 19115:2003 Code Lists
2. WMCP v1.3/Pt.2  
Page 4-5 Section 2.2.2 Mandatory WMO\_CategoryCode keyword and  
Page 23 Table 16 - WMO\_CategoryCode «CodeList»

**Table 17: WMO\_DistributionScopeCode «CodeList»**

WMCP v1.3, Part2, page23

|   | Name                      | Domain Code | Definition  |
|---|---------------------------|-------------|---|
| 1 | WMO_DistributionScopeCode | WMODisScoCd | Scope of distribution for data published for exchange within WIS                                    |
| 2 | GlobalExchange            | 001         | Data are published for global exchange via the WIS. Data shall be incorporated into the GISC Cache. |
| 3 | RegionalExchange          | 002         | Data are published for regional exchange via a GISC.  |
| 4 | OriginatingCentre         | 003         | Data are published for exchange directly via the originating centre                                 |

A code list of this name does **not** exist in ISO19115. This codelist is new in WMCP v1.3. Terms from this codelist are only ever used as a keyword.

### XML Snippet

```

<!-- keyword for stating the scope of distribution: Global Exchange -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords>
    <gmd:keyword>
      <gco:CharacterString>GlobalExchange</gco:CharacterString>
    </gmd:keyword>
    <gmd:type>
      <gmd:MD_KeywordTypeCode
        codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#MD_KeywordTypeCode"
        codeListValue="dataCentre">dataCentre</gmd:MD_KeywordTypeCode>
      </gmd:type>
    <gmd:thesaurusName>
      <gmd:CI_Citation>
        <gmd:title>
          <gco:CharacterString>
            WMO_DistributionScopeCode, WMOCodeLists dictionary Version 1.3
            [http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_DistributionScopeCode]
          </gco:CharacterString>
        </gmd:title>
        <gmd:date>
          <gmd:CI_Date>
            <gmd:date>
              <gco:Date>2013-02-14Z</gco:Date>
            </gmd:date>
            <gmd:dateType>
              <gmd:CI_DateTypeCode
                codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_DateTypeCode"
                codeListValue="publication">publication</gmd:CI_DateTypeCode>
              </gmd:dateType>
            </gmd:CI_Date>
          </gmd:date>
        </gmd:CI_Citation>
      </gmd:thesaurusName>
    </gmd:MD_Keywords>
  </gmd:descriptiveKeywords>

```

**Comment [K13]:** This might be contentious and need discussion.

Some template records just have 'WMO\_DistributionScopeCode', but my suggestion is to (at the very least) add the related URL (which would ideally be a PURL!), and possibly to also add the name of the dictionary.

### Guidance and Note

1. A metadata record describing data for global exchange via the WIS shall indicate the scope of distribution, using the keyword "GlobalExchange" (of KeywordTypeCode "dataCentre") from thesaurus WMO\_DistributionScopeCode.

2. Terms from this codelist (Table 17) are only ever used as a keyword.  
As noted under Table 10, whenever a term from Table 17 is used as a keyword:
  - i) the related KeywordTypeCode must be 'dataCentre' from Table 10; and
  - ii) the relevant thesaurusName details must also be supplied,

#### **Additional references**

1. WMCP v1.3/Pt.1  
[Page 14](#) **9.1 Identifying the scope of distribution,**  
[Page 18](#) **Table 6: Description of data for global exchange via WIS (9), and**  
[Page 18-19](#) **Table 7: Modifications and additions to the ISO 19115:2003 Code Lists**
2. WMCP v1.3/Pt.2  
[Page 4-5](#) **2.3 Description of data for global exchange via WIS, and**  
[Page 23](#) **Table 17: WMO\_DistributionScopeCode «CodeList»**

See next pages for **Appendix**, containing an example WMCPv1.3 metadata record for the **WMO Monthly Bulletin (FM71 - CSAU01)** produced by Australian Bureau of Meteorology for selected Australian land-based stations [[CSAU01AMMC](#)].

# 1 APPENDIX 1

2

3 <?xml version="1.0" encoding="UTF-8"?>

4 <gmd:MD\_Metadata xmlns:gmd="http://www.isotc211.org/2005/gmd"

5 xmlns:srv="http://www.isotc211.org/2005/srv"

6 xmlns:gco="http://www.isotc211.org/2005/gco"

7 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

8 xmlns:xlink="http://www.w3.org/1999/xlink"

9 xmlns:gml="http://www.opengis.net/gml/3.2"

10 xsi:schemaLocation="http://www.isotc211.org/2005/gmd

11 http://www.isotc211.org/2005/gmd/gmd.xsd http://www.isotc211.org/2005/gmx

12 http://www.isotc211.org/2005/gmx/gmx.xsd http://www.isotc211.org/2005/srv

13 http://schemas.opengis.net/iso/19139/20060504/srv/srv.xsd">

14 <gmd:fileIdentifier>

15 <gco:CharacterString>urn:x-wmo:md:int.wmo.wis::CSAU01AMMC</gco:CharacterString>

16 </gmd:fileIdentifier>

17 <gmd:language>

18 <gco:CharacterString>eng</gco:CharacterString>

19 </gmd:language>

20 <gmd:characterSet>

21 <gmd:MD\_CharacterSetCode codeListValue="utf8"

22 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Sche  
23 mas/resources/codelist/gmxCodellists.xml#MD\_CharacterSetCode"/>

24 </gmd:characterSet>

25 <gmd:hierarchyLevel>

26 <gmd:MD\_ScopeCode

27 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Sche  
28 mas/resources/codelist/gmxCodellists.xml#MD\_ScopeCode" codeListValue="dataset"/>

29 </gmd:hierarchyLevel>

30 <gmd:hierarchyLevelName>

31 <gco:CharacterString>

32 CSAU01 (latest month only)</gco:CharacterString>

33 </gmd:hierarchyLevelName>

34 <gmd:contact>

35 <gmd:CI\_ResponsibleParty id="publishr">

36 <gmd:individualName gco:nilReason="missing">

37 <gco:CharacterString/>

38 </gmd:individualName>

39 <gmd:organisationName>

40 <gco:CharacterString>

41 NMC AUSTRALIA - Bureau of Meteorology</gco:CharacterString>

42 </gmd:organisationName>

43 <gmd:positionName>

44 <gco:CharacterString>WIS Metadata Officer</gco:CharacterString>

45 </gmd:positionName>

46 <gmd:contactInfo>

47 <gmd:CI\_Contact>

48 <gmd:phone>

49 <gmd:CI\_Telephone>

50 <gmd:voice>

51 <gco:CharacterString>61 396694000</gco:CharacterString>

52 </gmd:voice>

53 <gmd:facsimile>

54 <gco:CharacterString>61 396694699</gco:CharacterString>

55 </gmd:facsimile>

56 </gmd:CI\_Telephone>

57 </gmd:phone>

58 <gmd:address>

59 <gmd:CI\_Address>

60 <gmd:deliveryPoint>

61 <gco:CharacterString>

```

62         GPO Box 1289, 700 Collins Street Docklands</gco:CharacterString>
63     </gmd:deliveryPoint>
64     <gmd:city>
65         <gco:CharacterString>Melbourne</gco:CharacterString>
66     </gmd:city>
67     <gmd:administrativeArea>
68         <gco:CharacterString>Vic.</gco:CharacterString>
69     </gmd:administrativeArea>
70     <gmd:postalCode>
71         <gco:CharacterString>3001</gco:CharacterString>
72     </gmd:postalCode>
73     <gmd:country>
74         <gco:CharacterString>Australia</gco:CharacterString>
75     </gmd:country>
76     <gmd:electronicMailAddress>
77         <gco:CharacterString>gisc-md@bom.gov.au</gco:CharacterString>
78     </gmd:electronicMailAddress>
79     <gmd:electronicMailAddress gco:nilReason="missing">
80         <gco:CharacterString/>
81     </gmd:electronicMailAddress>
82 </gmd:CI_Address>
83 </gmd:address>
84 <gmd:onlineResource>
85     <gmd:CI_OnlineResource>
86         <gmd:linkage>
87             <gmd:URL>http://www.bom.gov.au/</gmd:URL>
88         </gmd:linkage>
89         <gmd:protocol>
90             <gco:CharacterString>WWW:LINK-1.0-http--link</gco:CharacterString>
91         </gmd:protocol>
92         <gmd:name gco:nilReason="missing">
93             <gco:CharacterString/>
94         </gmd:name>
95         <gmd:description gco:nilReason="missing">
96             <gco:CharacterString/>
97         </gmd:description>
98     </gmd:CI_OnlineResource>
99 </gmd:onlineResource>
100 </gmd:CI_Contact>
101 </gmd:contactInfo>
102 <gmd:role>
103     <gmd:CI_RoleCode
104         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_S
105         chemas/resources/codelist/gmxCodetlists.xml#CI_RoleCode"
106         codeListValue="pointOfContact"/>
107 </gmd:role>
108 </gmd:CI_ResponsibleParty>
109 </gmd:contact>
110 <gmd:dateStamp xmlns:gmx="http://www.isotc211.org/2005/gmx">
111     <gco:DateTime>2012-01-20T16:00:00Z</gco:DateTime>
112 </gmd:dateStamp>
113 <gmd:metadataStandardName>
114     <gco:CharacterString xmlns:gmx="http://www.isotc211.org/2005/gmx">
115         WMO Core Metadata Profile of ISO 19115 (WMO Core), 2003/Cor.1:2006 (ISO 19115),
116         2007 (ISO/TS 19139)</gco:CharacterString>
117 </gmd:metadataStandardName>
118 <gmd:metadataStandardVersion>
119     <gco:CharacterString
120     xmlns:gmx="http://www.isotc211.org/2005/gmx">1.3</gco:CharacterString>
121 </gmd:metadataStandardVersion>
122
123 <gmd:dataSetURI>
124     <gco:CharacterString>
125         http://wis.bom.gov.au/openwis-user-
126         portal/srv/en/metadata.show.embedded?uuid=urn%3Ax-
127         wmo%3Amd%3Aint.wmo.wis%3A%3ACSAU01AMMC&currTab=ISOAll&download_scripts=true</gco:
128     CharacterString>
129 </gmd:dataSetURI>
130

```

```

131 <gmd:referenceSystemInfo>
132   <gmd:MD_ReferenceSystem>
133     <gmd:referenceSystemIdentifier>
134       <gmd:RS_Identifier>
135         <gmd:authority>
136           <gmd:CI_Citation>
137             <gmd:title>
138               <gco:CharacterString>
139                 EPSG Geodetic Parameter Dataset</gco:CharacterString>
140             </gmd:title>
141             <gmd:date>
142               <gmd:CI_Date>
143                 <gmd:date>
144                   <gco:Date>20070716</gco:Date>
145                 </gmd:date>
146                 <gmd:dateType>
147                   <gmd:CI_DateTypeCode
148                     codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_Date
149                     TypeCode" codeListValue="revision"/>
150                   </gmd:dateType>
151                 </gmd:CI_Date>
152             </gmd:date>
153             <gmd:edition>
154               <gco:CharacterString>Version 6.13</gco:CharacterString>
155             </gmd:edition>
156           </gmd:CI_Citation>
157         </gmd:authority>
158         <gmd:code gco:nilReason="missing">
159           <gco:CharacterString/>
160         </gmd:code>
161       </gmd:RS_Identifier>
162     </gmd:referenceSystemIdentifier>
163   </gmd:MD_ReferenceSystem>
164 </gmd:referenceSystemInfo>
165
166 <gmd:identificationInfo>
167   <gmd:MD_DataIdentification>
168     <gmd:citation>
169       <gmd:CI_Citation>
170         <gmd:title>
171           <gco:CharacterString>
172             (CSAU01) Bureau of Meteorology - (CSAU01) CLIMAT reports from selected
173             Australian land-based stations </gco:CharacterString>
174         </gmd:title>
175         <gmd:date>
176           <gmd:CI_Date>
177             <gmd:date>
178               <gco:DateTime>2005-01-07T00:15:00</gco:DateTime>
179             </gmd:date>
180             <gmd:dateType>
181               <gmd:CI_DateTypeCode
182                 codeList="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_DateType
183                 Code" codeListValue="publication"/>
184               </gmd:dateType>
185             </gmd:CI_Date>
186           </gmd:date>
187         <gmd:citedResponsibleParty>
188           <gmd:CI_ResponsibleParty>
189             <gmd:organisationName>
190               <gco:CharacterString>Bureau of Meteorology</gco:CharacterString>
191             </gmd:organisationName>
192             <gmd:contactInfo>
193               <gmd:CI_Contact>
194                 <gmd:phone>
195                   <gmd:CI_Telephone>
196                     <gmd:voice>
197                       <gco:CharacterString>61 39669 4000</gco:CharacterString>
198                     </gmd:voice>
199                   </gmd:CI_Telephone>

```

**Comment [K14]:** This is the author that should be cited, when the dataset is used and referred to.

```

200     <gmd:facsimile>
201       <gco:CharacterString>61 39669 4699</gco:CharacterString>
202     </gmd:facsimile>
203   </gmd:CI_Telephone>
204 </gmd:phone>
205 <gmd:address>
206   <gmd:CI_Address>
207     <gmd:deliveryPoint>
208       <gco:CharacterString>
209         GPO Box 1289, 700 Collins Street Docklands</gco:CharacterString>
210     </gmd:deliveryPoint>
211     <gmd:city>
212       <gco:CharacterString>Melbourne</gco:CharacterString>
213     </gmd:city>
214     <gmd:administrativeArea>
215       <gco:CharacterString>Vic.</gco:CharacterString>
216     </gmd:administrativeArea>
217     <gmd:postalCode>
218       <gco:CharacterString>3001</gco:CharacterString>
219     </gmd:postalCode>
220     <gmd:country>
221       <gco:CharacterString>Australia</gco:CharacterString>
222     </gmd:country>
223     <gmd:electronicMailAddress>
224       <gco:CharacterString>gisc-op@bom.gov.au</gco:CharacterString>
225     </gmd:electronicMailAddress>
226   </gmd:CI_Address>
227 </gmd:address>
228 <gmd:onlineResource>
229   <gmd:CI_OnlineResource>
230     <gmd:linkage>
231       <gmd:URL>http://www.bom.gov.au/</gmd:URL>
232     </gmd:linkage>
233     <gmd:protocol>
234       <gco:CharacterString>
235         WWW:LINK-1.0-http--link</gco:CharacterString>
236     </gmd:protocol>
237     <gmd:name gco:nilReason="missing">
238       <gco:CharacterString/>
239     </gmd:name>
240   </gmd:CI_OnlineResource>
241 </gmd:onlineResource>
242 </gmd:CI_Contact>
243 </gmd:contactInfo>
244 <gmd:role>
245   <gmd:CI_RoleCode
246     codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Schemas/resources/codelist/gmxCodetlists.xml#CI\_RoleCode"
247     codeListValue="author" />
248   </gmd:role>
249 </gmd:CI_ResponsibleParty>
250 </gmd:citedResponsibleParty>
251
252 <gmd:presentationForm>
253   <gmd:CI_PresentationFormCode
254     codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Schemas/resources/codelist/gmxCodetlists.xml#CI\_PresentationFormCode"
255     codeListValue="documentDigital" />
256   </gmd:CI_PresentationFormCode>
257 </gmd:presentationForm>
258 </gmd:CI_Citation>
259 </gmd:citation>
260 </gmd:abstract>
261 <gco:CharacterString>
262   ---- A CLIMAT bulletin is for the latest month only.
263   It is delivered to the GTS between the 5th and 8th day of the following
264   month.
265   CLIMAT bulletins provide averaged monthly values (of daily averages of raw
266   data) for each station, for the preceding month.
267
268

```

**Comment [K15]:** See K14 as well. Some communities always use "author", to signify the parties that are to be cited in a data citation; Others use "originator", because that was what was available in the earlier metadata standard that they used.

269 ---- The bulletin collects CLIMAT reports:  
270 FM 71 (CLIMAT, Report of monthly values from a land station).  
271 (Refer to WMO No.306 - Manual on Codes for the definition of WMO  
272 international codes)  
273  
274 ---- The CSAU01 TTAAii Data Designators decode (2) as:  
275 T1 (C): Climatic data.  
276 T2 (S): Monthly means (surface).  
277 A1A2 (AU): Australia.  
278 (2: Refer to WMO No.386 - Manual on the GTS - Attachment II.5)  
279  
280 A brief cribsheet of data parameters, data format and code decryption is  
281 under &quot;Supplementary Info&quot;.  
282 Data Parameters are also summarised under &quot;Keywords&quot;.  
283  
284 ---- This bulletin began being provided in 2005.  
285 The report (latest month only) collates reports from 11 stations: Darwin  
286 airport, Tindal raaf, Gove airport, Weipa aero, Broome airport, Halls creek  
287 airport, Tennant creek airport, Burketown airport, Cairns aero, Townsville  
288 aero and Willis island.</gco:CharacterString>  
289 </gmd:abstract>  
290 <gmd:status>  
291 <gmd:MD\_ProgressCode  
292 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Schemas  
293 /resources/codelist/gmxCodelists.xml#MD\_ProgressCode" codeListValue="onGoing"/>  
294 </gmd:status>  
295 <gmd:pointOfContact>  
296 <gmd:CI\_ResponsibleParty id="NC-AU-2">  
297 <gmd:organisationName>  
298 <gco:CharacterString>  
299 NMC AUSTRALIA - Bureau of Meteorology</gco:CharacterString>  
300 </gmd:organisationName>  
301 <gmd:positionName>  
302 <gco:CharacterString>WIS data coordinator</gco:CharacterString>  
303 </gmd:positionName>  
304 <gmd:contactInfo>  
305 <gmd:CI\_Contact>  
306 <gmd:phone>  
307 <gmd:CI\_Telephone>  
308 <gmd:voice>  
309 <gco:CharacterString>61 3 96694000</gco:CharacterString>  
310 </gmd:voice>  
311 <gmd:facsimile>  
312 <gco:CharacterString>61 3 96694699</gco:CharacterString>  
313 </gmd:facsimile>  
314 </gmd:CI\_Telephone>  
315 </gmd:phone>  
316 <gmd:address>  
317 <gmd:CI\_Address>  
318 <gmd:deliveryPoint>  
319 <gco:CharacterString>  
320 GPO Box 1289, 700 Collins Street Docklands</gco:CharacterString>  
321 </gmd:deliveryPoint>  
322 <gmd:city>  
323 <gco:CharacterString>Melbourne</gco:CharacterString>  
324 </gmd:city>  
325 <gmd:administrativeArea>  
326 <gco:CharacterString>Vic.</gco:CharacterString>  
327 </gmd:administrativeArea>  
328 <gmd:postalCode>  
329 <gco:CharacterString>3001</gco:CharacterString>  
330 </gmd:postalCode>  
331 <gmd:country>  
332 <gco:CharacterString>Australia</gco:CharacterString>  
333 </gmd:country>  
334 <gmd:electronicMailAddress>  
335 <gco:CharacterString>  
336 gisc-op@bom.gov.au </gco:CharacterString>  
337 </gmd:electronicMailAddress>

```

338     </gmd:CI_Address>
339 </gmd:address>
340 <gmd:onlineResource>
341   <gmd:CI_OnlineResource>
342     <gmd:linkage>
343       <gmd:URL>http://www.bom.gov.au/</gmd:URL>
344     </gmd:linkage>
345   </gmd:CI_OnlineResource>
346 </gmd:onlineResource>
347 <gmd:hoursOfService>
348   <gco:CharacterString>Normal office hours</gco:CharacterString>
349 </gmd:hoursOfService>
350 <gmd:contactInstructions gco:nilReason="missing">
351   <gco:CharacterString/>
352 </gmd:contactInstructions>
353 </gmd:CI_Contact>
354 </gmd:contactInfo>
355 <gmd:role>
356   <gmd:CI_RoleCode
357     codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Schemas/resources/codelist/gmxCodetlists.xml#CI\_RoleCode"
358     codeListValue="pointOfContact" />
359 </gmd:role>
360 </gmd:CI_ResponsibleParty>
361 </gmd:pointOfContact>
362
363 <gmd:resourceMaintenance>
364   <gmd:MD_MaintenanceInformation>
365     <gmd:maintenanceAndUpdateFrequency>
366       <gmd:MD_MaintenanceFrequencyCode
367         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO\_19139\_Schemas/resources/codelist/gmxCodetlists.xml#MD\_MaintenanceFrequencyCode"
368         codeListValue="monthly" />
369       </gmd:maintenanceAndUpdateFrequency>
370     <gmd:userDefinedMaintenanceFrequency>
371       <gts:TM_PeriodDuration
372         xmlns:gts="http://www.isotc211.org/2005/gts">P0Y1M0DT0H0M0S</gts:TM_PeriodDuration>
373       </gmd:userDefinedMaintenanceFrequency>
374     <gmd:updateScopeDescription>
375       <gmd:MD_ScopeDescription>
376         <gmd:dataset>
377           <gco:CharacterString>Data covers "Latest month" only; Data (Latest
378             month) is published 5 to 8 days after the month-end.
379             In the WMO GISC: the data is retained for a minimum of 24 hours (though the data is
380             sometimes retained on a GISC node for a little longer)
381             On the NOAA ftp site, the latest month replaces previous month's data.
382           </gco:CharacterString>
383         </gmd:dataset>
384       </gmd:MD_ScopeDescription>
385     </gmd:updateScopeDescription>
386   </gmd:MD_MaintenanceInformation>
387 </gmd:resourceMaintenance>
388
389 <gmd:resourceFormat>
390   <gmd:MD_Format>
391     <gmd:name>
392       <gco:CharacterString>FM71-CLIMAT - text</gco:CharacterString>
393     </gmd:name>
394     <gmd:version>
395       <gco:CharacterString>XIII</gco:CharacterString>
396     </gmd:version>
397     <gmd:specification>
398       <gco:CharacterString>
399         "FM71-XII CLIMAT" format is explained at
400         ftp://ftp.wmo.int/Documents/MediaPublic/Publications/CodesManual\_WMO\_No\_306/Sel4.pdf pgs A137-139; BGD:
401         http://www.wmo.int/pages/prog/www/WMOcodes.html </gco:CharacterString>
402       </gco:CharacterString>
403     </gmd:specification>
404   </gmd:MD_Format>
405 </gmd:resourceFormat>

```

```

407     </gmd:specification>
408 </gmd:MD_Format>
409 </gmd:resourceFormat>
410 <gmd:descriptiveKeywords>
411 <gmd:MD_Keywords id="WMOCodeListKeywords">
412 <gmd:keyword>
413 <gco:CharacterString>landMeteorologyClimate</gco:CharacterString>
414 </gmd:keyword>
415 <gmd:keyword>
416 <gco:CharacterString>weatherForecasts</gco:CharacterString>
417 </gmd:keyword>
418 <gmd:type>
419 <gmd:MD_KeywordTypeCode
420 <b>codeList</b>="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#MD_KeywordTy
421 peCode" <b>codeListValue</b>="theme"/>
422 </gmd:type>
423 <gmd:thesaurusName>
424 <gmd:CI_Citation id="WMOCodeList">
425 <gmd:title>
426 <gco:CharacterString>
427 WMO_CategoryCode
428 [http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_CategoryCode]</g
429 co:CharacterString>
430 </gmd:title>
431 <gmd:date>
432 <gmd:CI_Date>
433 <gmd:date>
434 <gco:Date>2013-02-14</gco:Date>
435 </gmd:date>
436 <gmd:dateType>
437 <gmd:CI_DateTypeCode
438 <b>codeList</b>="http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#CI_Date
439 TypeCode" <b>codeListValue</b>="revision"/>
440 </gmd:dateType>
441 </gmd:CI_Date>
442 </gmd:date>
443 <gmd:citedResponsibleParty>
444 <gmd:CI_ResponsibleParty>
445 <gmd:organisationName>
446 <gco:CharacterString>WMO Secretariat</gco:CharacterString>
447 </gmd:organisationName>
448 <gmd:contactInfo>
449 <gmd:CI_Contact>
450 <gmd:onlineResource>
451 <gmd:CI_OnlineResource>
452 <gmd:linkage>
453 <gmd:URL>
454 http://www.wmo.int/pages/about/sec/sg_en.html</gmd:URL>
455 </gmd:linkage>
456 <gmd:protocol>
457 <gco:CharacterString>
458 WWW:LINK-1.0-http--link</gco:CharacterString>
459 </gmd:protocol>
460 <gmd:name gco:nilReason="missing">
461 <gco:CharacterString/>
462 </gmd:name>
463 </gmd:CI_OnlineResource>
464 </gmd:onlineResource>
465 </gmd:CI_Contact>
466 </gmd:contactInfo>
467 <gmd:role>
468 <gmd:CI_RoleCode
469 <b>codeList</b>="http://standards.iso.org/ittf/PubliclyAvailableStandards/I
470 SO_19139_Schemas/resources/codelist/gmxCodelists.xml#CI_RoleCode"
471 <b>codeListValue</b>="publisher"/>
472 </gmd:role>
473 </gmd:CI_ResponsibleParty>
474 </gmd:citedResponsibleParty>
475 </gmd:CI_Citation>

```

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476     </gmd:thesaurusName>
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487       Code" codeListValue="dataCentre"/>
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494           [http://wis.wmo.int/2012/codelists/WMOCodeLists.xml#WMO_DistributionScop
495           eCode]</gco:CharacterString>
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524                       WWW:LINK-1.0-http--link</gco:CharacterString>
525                   </gmd:protocol>
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532           </gmd:contactInfo>
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536               SO_19139_Schemas/resources/codelist/gmxCodeLists.xml#CI_RoleCode"
537               codeListValue="publisher"/>
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539           </gmd:CI_ResponsibleParty>
540         </gmd:citedResponsibleParty>
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544 </gmd:descriptiveKeywords>

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545 <gmd:descriptiveKeywords>
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584 </gmd:type>
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590 Radiosondes [http://www.wmo.int/pages/prog/www/ois/volume-a/vola-
591 home.htm]</gco:CharacterString>
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609 </gmd:organisationName>
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613 <gmd:CI_OnlineResource>

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623             </gmd:name>
624         </gmd:CI_OnlineResource>
625     </gmd:onlineResource>
626 </gmd:CI_Contact>
627 </gmd:contactInfo>
628 <gmd:role>
629     <gmd:CI_RoleCode
630         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/I
631         SO_19139_Schemas/resources/codelist/gmxCodelists.xml#CI_RoleCode"
632         codeListValue="publisher"/>
633     </gmd:role>
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635 </gmd:citedResponsibleParty>
636 <gmd:otherCitationDetails>
637     <gco:CharacterString>Definitions (Lat, Long, name) are in the document
638     &quot;Flatfile of data on Observing Stations&quot;;, available from:
639     ftp://ftp.wmo.int/wmo-dpbs/Pub9volA131021.flatfile</gco:CharacterString>
640 </gmd:otherCitationDetails>
641 </gmd:CI_Citation>
642 </gmd:thesaurusName>
643 </gmd:MD_Keywords>
644 </gmd:descriptiveKeywords>
645
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648         <gmd:keyword>
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650             </gco:CharacterString>
651         </gmd:keyword>
652         <gmd:keyword>
653             <gco:CharacterString>
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655         </gmd:keyword>
656         <gmd:keyword>
657             <gco:CharacterString>
658             Atmosphere|Atmospheric Temperature|Air Temperature</gco:CharacterString>
659         </gmd:keyword>
660         <gmd:keyword>
661             <gco:CharacterString>
662             Atmosphere|Atmospheric Temperature|Maximum/Minimum Temperature
663             </gco:CharacterString>
664         </gmd:keyword>
665         <gmd:keyword>
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667             Atmosphere|Atmospheric Temperature|Surface Air Temperature
668             </gco:CharacterString>
669         </gmd:keyword>
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672             Atmosphere|Atmospheric Winds|Surface Winds</gco:CharacterString>
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675             <gco:CharacterString>
676             Atmosphere|Precipitation|Precipitation Amount</gco:CharacterString>
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682         <gmd:keyword>

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688     Atmosphere|Atmospheric Winds|Surface Winds</gco:CharacterString>
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693     </gco:CharacterString>
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702 3/WMOCodeLists.xml#MD_KeywordTypeCode" codeListValue="discipline"/>
703 </gmd:type>
704 <gmd:thesaurusName>
705     <gmd:CI_Citation>
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712             <gco:CharacterString>GCMD Science Keywords</gco:CharacterString>
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722 3/WMOCodeLists.xml#CI_DateTypeCode" codeListValue="revision"/>
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733                     </gmd:organisationName>
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738                                     <gmd:linkage>
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740                                             <gco:CharacterString>
741                                             http://gcmd.gsfc.nasa.gov/learn/keyword_list.html</gco:CharacterString>
742                                         </gmd:URL>
743                                     </gmd:linkage>
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755 </gmd:contactInfo>
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759 /resources/codelist/gmxCodelists.xml#CI_RoleCode" codeListValue="author"/>
760 </gmd:role>
761 </gmd:CI_ResponsibleParty>
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767 </gmd:organisationName>
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778 </gco:CharacterString>
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781     <gco:CharacterString>Terms and definitions (as
782 SKOS)</gco:CharacterString>
783 </gmd:name>
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785 </gmd:onlineResource>
786 </gmd:CI_Contact>
787 </gmd:contactInfo>
788 <gmd:role>
789     <gmd:CI_RoleCode
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791 /resources/codelist/gmxCodelists.xml#CI_RoleCode" codeListValue="distributor"/>
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794 </gmd:citedResponsibleParty>
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798 </gmd:descriptiveKeywords>
799
800 <gmd:descriptiveKeywords>
801 <gmd:MD_Keywords>
802 <gmd:keyword>
803     <gco:CharacterString>
804     Air pressure--at sea level or agreed datum; normal(30 year) [in 0.1 hPa]//
805 </gco:CharacterString>
806 </gmd:keyword>
807 <gmd:keyword>
808     <gco:CharacterString>
809     Air pressure--at sea level or agreed datum level; mean monthly [in 0.1 hPa]//
810 </gco:CharacterString>
811 </gmd:keyword>
812 <gmd:keyword>
813     <gco:CharacterString>
814     Air pressure--at station level; mean monthly [in 0.1 hPa]//
815 </gco:CharacterString>
816 </gmd:keyword>
817 </gmd:keyword>
818 </gmd:keyword>

```

```

819     <gco:CharacterString>
820     Air pressure--at station level; normal(30 year) [in 0.1 hPa]//
821     </gco:CharacterString>
822 </gmd:keyword>
823 <gmd:keyword>
824     <gco:CharacterString>
825     Air pressure--Number of days in the month missing a value//
826     </gco:CharacterString>
827 </gmd:keyword>
828 <gmd:keyword>
829     <gco:CharacterString>
830     Air pressure--normal(30 year), Number of years(y) missing//
831     </gco:CharacterString>
832 </gmd:keyword>
833 <gmd:keyword>
834     <gco:CharacterString>
835     Hail--Number of days with//</gco:CharacterString>
836 </gmd:keyword>
837 <gmd:keyword>
838     <gco:CharacterString>
839     Horizontal visibility--less than 100 m . Number of days(d) of month with
840 horizontal visibility &lt; 100 m//
841     </gco:CharacterString>
842 </gmd:keyword>
843 <gmd:keyword>
844     <gco:CharacterString>
845     Horizontal visibility--less than 50 m . Number of days(d) of month with
846 horizontal visibility &lt; 50 m//
847     </gco:CharacterString>
848 </gmd:keyword>
849 <gmd:keyword>
850     <gco:CharacterString>
851     Partial vapour pressure--at station level, mean daily [in 0.1 hPa]//
852     </gco:CharacterString>
853 </gmd:keyword>
854 <gmd:keyword>
855     <gco:CharacterString>
856     Partial vapour pressure--at station level, mean monthly; [in 0.1 hPa]//
857     </gco:CharacterString>
858 </gmd:keyword>
859 <gmd:keyword>
860     <gco:CharacterString>
861     Partial vapour pressure--at station level; normal (30 year) [in 0.1 hPa]//
862     </gco:CharacterString>
863 </gmd:keyword>
864 <gmd:keyword>
865     <gco:CharacterString>
866     Precipitation equivalent--for the month [in mm]//</gco:CharacterString>
867 </gmd:keyword>
868 <gmd:keyword>
869     <gco:CharacterString>
870     Precipitation; Number of days in the month missing a value//
871     </gco:CharacterString>
872 </gmd:keyword>
873 <gmd:keyword>
874     <gco:CharacterString>
875     Precipitation--greater than or equal to 1mm, 5mm, 10mm,50mm,100mm,150mm);
876 Number of days of month with precipitation value &gt;= .. .. //
877     </gco:CharacterString>
878 </gmd:keyword>
879 <gmd:keyword>
880     <gco:CharacterString>Precipitation--greater than or equal to 1.0mm,
881 Number of days of month, normal (30 year), with precipitation//
882     </gco:CharacterString>
883 </gmd:keyword>
884 <gmd:keyword>
885     <gco:CharacterString>
886     Precipitation--Highest daily value of month (date, & value [in 0.1 mm])//
887     </gco:CharacterString>

```

```

888     </gmd:keyword>
889     <gmd:keyword>
890     <gco:CharacterString>
891     Precipitation--monthly; normal (30 year) [in mm]//</gco:CharacterString>
892     </gmd:keyword>
893     <gmd:keyword>
894     <gco:CharacterString>
895     Precipitation--normal (30 year), Number of years missing//
896     </gco:CharacterString>
897     </gmd:keyword>
898     <gmd:keyword>
899     <gco:CharacterString>
900     Snow depth-- greater than 0 cm, 1cm, 10cm, 50cm. Number of days(d) of
901     month with snow depth value &gt; .. .. //</gco:CharacterString>
902     </gmd:keyword>
903     <gmd:keyword>
904     <gco:CharacterString>
905     Sunshine duration--total; for the month [in h]//</gco:CharacterString>
906     </gmd:keyword>
907     <gmd:keyword>
908     <gco:CharacterString>
909     Sunshine duration--total; for the month, as a percentage of 30 year normal
910     [in h]//
911     </gco:CharacterString>
912     </gmd:keyword>
913     <gmd:keyword>
914     <gco:CharacterString>
915     Sunshine duration--total; for the month; normal (30 year) [in h]//
916     </gco:CharacterString>
917     </gmd:keyword>
918     <gmd:keyword>
919     <gco:CharacterString>
920     Sunshine duration--total; for the month; normal (30 year), Number of
921     years(y) missing//
922     </gco:CharacterString>
923     </gmd:keyword>
924     <gmd:keyword>
925     <gco:CharacterString>
926     Sunshine duration--Total; No.of days missing a value//
927     </gco:CharacterString>
928     </gmd:keyword>
929     <gmd:keyword>
930     <gco:CharacterString>
931     Temperature--daily maximum and minimum, mean monthly [in 0.1 degrees C]//
932     </gco:CharacterString>
933     </gmd:keyword>
934     <gmd:keyword>
935     <gco:CharacterString>
936     Temperature--extremes, Number of years(y) missing//</gco:CharacterString>
937     </gmd:keyword>
938     <gmd:keyword>
939     <gco:CharacterString>
940     Temperature--highest and lowest mean daily temperature (date, and value
941     [in 0.1 degrees C])//
942     </gco:CharacterString>
943     </gmd:keyword>
944     <gmd:keyword>
945     <gco:CharacterString>
946     Temperature--highest and lowest temperature (date, and value [in 0.1
947     degrees C])//
948     </gco:CharacterString>
949     </gmd:keyword>
950     <gmd:keyword>
951     <gco:CharacterString>
952     Temperature--maximum and minimum; Number of days missing a value//
953     </gco:CharacterString>
954     </gmd:keyword>
955     <gmd:keyword>
956     <gco:CharacterString>

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```

957     Temperature--maximum &lt; 0 degC;. Number of days(d) of month with
958 maximum temperature &lt; 0 degC//
959     </gco:CharacterString>
960     </gmd:keyword>
961     <gmd:keyword>
962     <gco:CharacterString>
963     Temperature--maximum and minimum ( reading time [in UTC])//
964     </gco:CharacterString>
965     </gmd:keyword>
966     <gmd:keyword>
967     <gco:CharacterString>
968     Temperature--maximum &gt;=25, 30,35,40 degC. Number of days(d) of month
969 with max.temperature &gt;= .. .. .//
970     </gco:CharacterString>
971     </gmd:keyword>
972     <gmd:keyword>
973     <gco:CharacterString>
974     Temperature--mean monthly [in 0.1 degrees C]//</gco:CharacterString>
975     </gmd:keyword>
976     <gmd:keyword>
977     <gco:CharacterString>
978     Temperature--mean monthly standard deviation [in 0.1 degrees C]//
979     </gco:CharacterString>
980     </gmd:keyword>
981     <gmd:keyword>
982     <gco:CharacterString>
983     Temperature--mean; Number of days missing a value//</gco:CharacterString>
984     </gmd:keyword>
985     <gmd:keyword>
986     <gco:CharacterString>
987     Temperature--minimum &lt; 0 degC. Number of days(d) of month with minimum
988 temperature &lt; 0 degC//
989     </gco:CharacterString>
990     </gmd:keyword>
991     <gmd:keyword>
992     <gco:CharacterString>
993     Temperature--monthly maximum and minimum; normal (30 year) [in 0.1
994 degrees C]//
995     </gco:CharacterString>
996     </gmd:keyword>
997     <gmd:keyword>
998     <gco:CharacterString>
999     Temperature--normal mean (30 year), Number of years(y) missing//
1000    </gco:CharacterString>
1001    </gmd:keyword>
1002    <gmd:keyword>
1003    <gco:CharacterString>
1004    Temperature--normal (30 year) [in 0.1 degrees C]//</gco:CharacterString>
1005    </gmd:keyword>
1006    <gmd:keyword>
1007    <gco:CharacterString>
1008    Temperature--normal (30 year) 'its normal standard deviation [in 0.1
1009 degrees C]//
1010    </gco:CharacterString>
1011    </gmd:keyword>
1012    <gmd:keyword>
1013    <gco:CharacterString>
1014    Thunderstorms--Number of days with//</gco:CharacterString>
1015    </gmd:keyword>
1016    <gmd:keyword>
1017    <gco:CharacterString>
1018    Vapour pressure--daily; , No.of days missing a value//
1019    </gco:CharacterString>
1020    </gmd:keyword>
1021    <gmd:keyword>
1022    <gco:CharacterString>
1023    Vapour pressure--normal (30 year), Number of years(y) missing//
1024    </gco:CharacterString>

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```

1025     </gmd:keyword>
1026     <gmd:keyword>
1027         <gco:CharacterString>
1028             Wind gust speed--Highest (date, and value [in 0.1 m/s or knots])//
1029         </gco:CharacterString>
1030     </gmd:keyword>
1031     <gmd:keyword>
1032         <gco:CharacterString>
1033             Wind speed--maximum. Number of days(d) of month with max.wind speed &gt;=
1034     10 m/s//
1035         </gco:CharacterString>
1036     </gmd:keyword>
1037     <gmd:keyword>
1038         <gco:CharacterString>
1039             Wind speed--maximum. Number of days(d) of month with max.wind speed &gt;=
1040     20 m/s//
1041         </gco:CharacterString>
1042     </gmd:keyword>
1043     <gmd:type>
1044         <gmd:MD_KeywordTypeCode
1045     codeList="http://wis.wmo.int/2012/metadata/version_1-
1046     3/WMOCodeLists.xml#MD_KeywordTypeCode" codeListValue="discipline"/>
1047     </gmd:type>
1048 </gmd:MD_Keywords>
1049 </gmd:descriptiveKeywords>
1050
1051
1052
1053
1054 <gmd:resourceConstraints>
1055 <gmd:MD_LegalConstraints>
1056 <gmd:useLimitation>
1057 <gco:CharacterString>
1058 License conditions apply, as indicated below.</gco:CharacterString>
1059 </gmd:useLimitation>
1060 <gmd:accessConstraints>
1061 <gmd:MD_RestrictionCode
1062 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_1913
1063 9_Schemas/resources/codelist/gmxCodeLists.xml#MD_RestrictionCode"
1064 codeListValue="otherRestrictions"/>
1065 </gmd:accessConstraints>
1066 <gmd:useConstraints>
1067 <gmd:MD_RestrictionCode
1068 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_1913
1069 9_Schemas/resources/codelist/gmxCodeLists.xml#MD_RestrictionCode"
1070 codeListValue="otherRestrictions"/>
1071 </gmd:useConstraints>
1072 <gmd:otherConstraints>
1073 <gco:CharacterString>WMOEssential</gco:CharacterString>
1074 </gmd:otherConstraints>
1075 <gmd:otherConstraints>
1076 <gco:CharacterString>GTSPriority4</gco:CharacterString>
1077 </gmd:otherConstraints>
1078 <gmd:otherConstraints>
1079 <gco:CharacterString>
1080 "WMOEssential" is defined at
1081 http://wis.wmo.int/2012/metadata/version_1-3/WMOCodeLists.xml#WMO_DataLicenseCode.
1082
1083 "WMOEssential" represents the WMO Data License for WMO Essential Data, which is
1084 defined as: "free and unrestricted international exchange of basic meteorological
1085 data and products WMOEssential". WMO Data License is derived from WMO Resolution
1086 25 and Resolution 40.
1087 For further information, see: |
1088 (http://www.wmo.int/pages/about/exchangingdata_en.html)
1089
1090 </gco:CharacterString>
1091 </gmd:otherConstraints>
1092 </gmd:MD_LegalConstraints>
1093 </gmd:resourceConstraints>

```

**Comment [K16]:** DEPENDING ON GROUP DECISION: potentially include this additional otherConstraints, to provide the term, definition and url, for the DataPolicy code.

```

1094
1095     <gmd:aggregationInfo>
1096         <gmd:MD_AggregateInformation>
1097             <gmd:aggregateDataSetName>
1098                 <gmd:CI_Citation>
1099                     <gmd:title>
1100                         <gco:CharacterString>
1101                             ISCK01 collection of CLIMAT reports contains the same content as
1102 CSAU01 [with additional data], but is in BUFR format; & is available from
1103 AMMC.</gco:CharacterString>
1104                         </gmd:title>
1105                     <gmd:date>
1106                         <gmd:CI_Date>
1107                             <gmd:dateType>
1108                                 <gmd:CI_DateTypeCode>
1109 codeList="http://wis.wmo.int/2012/metadata/version_1-
1110 3/WMOCodeLists.xml#CI_DateTypeCode" codeListValue="creation"/>
1111                                 </gmd:dateType>
1112                             </gmd:CI_Date>
1113                         </gmd:date>
1114                     <gmd:edition>
1115                         <gco:CharacterString>Released monthly; Latest month replaces previous
1116 month</gco:CharacterString>
1117                     </gmd:edition>
1118                 <gmd:identifier>
1119                     <gmd:MD_Identifier>
1120                         <gmd:code>
1121                             <gco:CharacterString>urn:x-
1122 wmo:md:int.wmo.wis::ISCK01AMMC</gco:CharacterString>
1123                         </gmd:code>
1124                     </gmd:MD_Identifier>
1125                 </gmd:identifier>
1126                 <gmd:otherCitationDetails gco:nilReason="missing">
1127                     <gco:CharacterString/>
1128                 </gmd:otherCitationDetails>
1129             </gmd:CI_Citation>
1130         </gmd:aggregateDataSetName>
1131         <gmd:associationType>
1132             <gmd:DS_AssociationTypeCode>
1133 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas
1134 /resources/codelist/gmxCodeLists.xml#DS_AssociationTypeCode"
1135 codeListValue="crossReference"/>
1136             </gmd:associationType>
1137         </gmd:MD_AggregateInformation>
1138     </gmd:aggregationInfo>
1139
1140
1141     <gmd:spatialRepresentationType>
1142         <gmd:MD_SpatialRepresentationTypeCode>
1143             codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_S
1144 chemas/resources/codelist/gmxCodeLists.xml#MD_SpatialRepresentationTypeCode"
1145             codeListValue="vector"/>
1146         </gmd:spatialRepresentationType>
1147
1148     <gmd:language>
1149         <gco:CharacterString>eng</gco:CharacterString>
1150     </gmd:language>
1151
1152     <gmd:topicCategory>
1153         <gmd:MD_TopicCategoryCode>
1154             climatologyMeteorologyAtmosphere</gmd:MD_TopicCategoryCode>
1155     </gmd:topicCategory>
1156
1157
1158     <gmd:extent>
1159         <gmd:EX_Extent>
1160             <gmd:description>
1161                 <gco:CharacterString>Darwin Airport (WMO Station Index Number: 94120) {BOM
1162 station Index Number 014015}

```

```

1163         (Coordinates of Lat/Long [height] are: -12.4239 130.8925 [30.4m]);
1164         http://www.bom.gov.au/climate/change/map/stations/014015.shtml
1165
1166 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.014015.SiteInf
1167 o.pdf</gco:CharacterString>
1168 </gmd:description>
1169 <gmd:geographicElement>
1170 <gmd:EX_GeographicBoundingBox id="bbox.02">
1171 <gmd:westBoundLongitude>
1172 <gco:Decimal>130.8925</gco:Decimal>
1173 </gmd:westBoundLongitude>
1174 <gmd:eastBoundLongitude>
1175 <gco:Decimal>130.8925</gco:Decimal>
1176 </gmd:eastBoundLongitude>
1177 <gmd:southBoundLatitude>
1178 <gco:Decimal>-12.4239</gco:Decimal>
1179 </gmd:southBoundLatitude>
1180 <gmd:northBoundLatitude>
1181 <gco:Decimal>-12.4239</gco:Decimal>
1182 </gmd:northBoundLatitude>
1183 </gmd:EX_GeographicBoundingBox>
1184 </gmd:geographicElement>
1185 </gmd:EX_Extent>
1186 </gmd:extent>
1187 <gmd:extent>
1188 <gmd:EX_Extent>
1189 <gmd:description>
1190 <gco:CharacterString>Tindal RAAF (WMO Station Index Number: 94131) {BOM
1191 station ID 014932}
1192 (Coordinates of Lat/Long [height] are: -14.5229 132.3826 [133.6m]);
1193 http://www.bom.gov.au/climate/change/map/stations/014932.shtml
1194
1195 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.014932.SiteIn
1196 fo.pdf
1197 </gco:CharacterString>
1198 </gmd:description>
1199 <gmd:geographicElement>
1200 <gmd:EX_GeographicBoundingBox id="bbox.03">
1201 <gmd:westBoundLongitude>
1202 <gco:Decimal>132.3826</gco:Decimal>
1203 </gmd:westBoundLongitude>
1204 <gmd:eastBoundLongitude>
1205 <gco:Decimal>132.3826</gco:Decimal>
1206 </gmd:eastBoundLongitude>
1207 <gmd:southBoundLatitude>
1208 <gco:Decimal> -14.5229</gco:Decimal>
1209 </gmd:southBoundLatitude>
1210 <gmd:northBoundLatitude>
1211 <gco:Decimal> -14.5229</gco:Decimal>
1212 </gmd:northBoundLatitude>
1213 </gmd:EX_GeographicBoundingBox>
1214 </gmd:geographicElement>
1215 </gmd:EX_Extent>
1216 </gmd:extent>
1217 <gmd:extent>
1218 <gmd:EX_Extent>
1219 <gmd:description>
1220 <gco:CharacterString>GOVE AIRPORT (WMO Station Index Number: 94150) {BOM
1221 station ID: 014508}
1222 (Coordinates of Lat/Long [height] are: -12.2741 136.8203 [51.6m]);
1223 http://www.bom.gov.au/climate/change/map/stations/014508.shtml
1224
1225 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.014508.SiteI
1226 nfo.pdf;</gco:CharacterString>
1227 </gmd:description>
1228 <gmd:geographicElement>
1229 <gmd:EX_GeographicBoundingBox id="bbox.04">
1230 <gmd:westBoundLongitude>
1231 <gco:Decimal>136.8203</gco:Decimal>

```

**Comment [K17]:** This dataset is for multipoint data along the coast of Australia. Rather than adding a single BoundingBox encompassing all stations, we have added one BBox per station.

This is added here as a suggestion, for discussion.

The reason for not using a single BBox encompassing all stations, is that that would misrepresent the actual data coverage (and thus will not support metadata search accuracy).

Initially, we applied a polygon/Point per station, But because of the WMCP mandate of requiring a BoundingBox, we found that the "search inaccuracy / false hits" problem was still not resolved. So we replaced the polygons with boundingBoxes.

Without the WMCP BBox rule, & if we could assume that relevant software COULD handle polygon/point geographic searching, then multiple "Points" might be preferable, in the longterm.

```

1232     </gmd:westBoundLongitude>
1233     <gmd:eastBoundLongitude>
1234         <gco:Decimal>136.8203</gco:Decimal>
1235     </gmd:eastBoundLongitude>
1236     <gmd:southBoundLatitude>
1237         <gco:Decimal>-12.2741</gco:Decimal>
1238     </gmd:southBoundLatitude>
1239     <gmd:northBoundLatitude>
1240         <gco:Decimal>-12.2741</gco:Decimal>
1241     </gmd:northBoundLatitude>
1242 </gmd:EX_GeographicBoundingBox>
1243 </gmd:geographicElement>
1244 </gmd:EX_Extent>
1245 </gmd:extent>
1246 <gmd:extent>
1247     <gmd:EX_Extent>
1248         <gmd:description>
1249             <gco:CharacterString>WEIPA AERO (WMO Station Index Number: 94170) {BOM
1250 station ID: 027045}
1251             (Coordinates of Lat/Long [height] are: -12.6778 141.9208 [17.96m]);
1252             http://www.bom.gov.au/climate/change/map/stations/027045.shtml
1253
1254             http://www.bom.gov.au/clim\_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.027045.SiteI
1255 nfo.pdf;</gco:CharacterString>
1256         </gmd:description>
1257     </gmd:geographicElement>
1258     <gmd:EX_GeographicBoundingBox id="bbox.05">
1259         <gmd:westBoundLongitude>
1260             <gco:Decimal>141.9208</gco:Decimal>
1261         </gmd:westBoundLongitude>
1262         <gmd:eastBoundLongitude>
1263             <gco:Decimal>141.9208</gco:Decimal>
1264         </gmd:eastBoundLongitude>
1265         <gmd:southBoundLatitude>
1266             <gco:Decimal>-12.6778</gco:Decimal>
1267         </gmd:southBoundLatitude>
1268         <gmd:northBoundLatitude>
1269             <gco:Decimal>-12.6778</gco:Decimal>
1270         </gmd:northBoundLatitude>
1271     </gmd:EX_GeographicBoundingBox>
1272 </gmd:geographicElement>
1273 </gmd:EX_Extent>
1274 </gmd:extent>
1275 <gmd:extent>
1276     <gmd:EX_Extent>
1277         <gmd:description>
1278             <gco:CharacterString>BROOME AIRPORT (WMO Station Index Number: 94203) {BOM
1279 station ID: 003003}
1280             (Coordinates of Lat/Long [height] are: -17.9475 122.2353 [7.42m]);
1281             http://www.bom.gov.au/climate/change/map/stations/003003.shtml
1282
1283             http://www.bom.gov.au/clim\_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.003003.SiteIn
1284 fo.pdf;</gco:CharacterString>
1285         </gmd:description>
1286     </gmd:geographicElement>
1287     <gmd:EX_GeographicBoundingBox id="bbox.06">
1288         <gmd:westBoundLongitude>
1289             <gco:Decimal>122.2353</gco:Decimal>
1290         </gmd:westBoundLongitude>
1291         <gmd:eastBoundLongitude>
1292             <gco:Decimal>122.2353</gco:Decimal>
1293         </gmd:eastBoundLongitude>
1294         <gmd:southBoundLatitude>
1295             <gco:Decimal>-17.9475</gco:Decimal>
1296         </gmd:southBoundLatitude>
1297         <gmd:northBoundLatitude>
1298             <gco:Decimal>-17.9475</gco:Decimal>
1299         </gmd:northBoundLatitude>
1300 </gmd:EX_GeographicBoundingBox>

```

```

1301     </gmd:geographicElement>
1302     </gmd:EX_Extent>
1303 </gmd:extent>
1304 <gmd:extent>
1305     <gmd:EX_Extent>
1306     <gmd:description>
1307         <gco:CharacterString>HALLS CREEK AIRPORT (WMO Station Index Number: 94212)
1308 {BOM station ID: 002012}
1309         (Coordinates of Lat/Long [height] are:  -18.2292  127.6636 [422m]);
1310         http://www.bom.gov.au/climate/change/map/stations/002012.shtml;
1311
1312         http://www.bom.gov.au/clim\_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.002012.SiteInfo.pdf;
1313     </gco:CharacterString>
1314     </gmd:description>
1315     <gmd:geographicElement>
1316     <gmd:EX_GeographicBoundingBox id="bbox.07">
1317     <gmd:westBoundLongitude>
1318         <gco:Decimal>127.6636</gco:Decimal>
1319     </gmd:westBoundLongitude>
1320     <gmd:eastBoundLongitude>
1321         <gco:Decimal>127.6636</gco:Decimal>
1322     </gmd:eastBoundLongitude>
1323     <gmd:southBoundLatitude>
1324         <gco:Decimal>-18.2292</gco:Decimal>
1325     </gmd:southBoundLatitude>
1326     <gmd:northBoundLatitude>
1327         <gco:Decimal>-18.2292</gco:Decimal>
1328     </gmd:northBoundLatitude>
1329     </gmd:EX_GeographicBoundingBox>
1330     </gmd:geographicElement>
1331 </gmd:EX_Extent>
1332 </gmd:extent>
1333 <gmd:extent>
1334     <gmd:EX_Extent>
1335     <gmd:description>
1336         <gco:CharacterString>TENNANT CREEK AIRPORT (WMO Station Index Number:
1337 94238) {BOM station ID: 015135}
1338         (Coordinates of Lat/Long [height] are:  -19.6423  134.1833 [375.7m]);
1339         http://www.bom.gov.au/climate/change/map/stations/015135.shtml;
1340
1341         http://www.bom.gov.au/clim\_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.015135.SiteInfo.pdf;
1342     </gco:CharacterString>
1343     </gmd:description>
1344     <gmd:geographicElement>
1345     <gmd:EX_GeographicBoundingBox id="bbox.08">
1346     <gmd:westBoundLongitude>
1347         <gco:Decimal>134.1833</gco:Decimal>
1348     </gmd:westBoundLongitude>
1349     <gmd:eastBoundLongitude>
1350         <gco:Decimal>134.1833</gco:Decimal>
1351     </gmd:eastBoundLongitude>
1352     <gmd:southBoundLatitude>
1353         <gco:Decimal>-19.6423</gco:Decimal>
1354     </gmd:southBoundLatitude>
1355     <gmd:northBoundLatitude>
1356         <gco:Decimal>-19.6423</gco:Decimal>
1357     </gmd:northBoundLatitude>
1358     </gmd:EX_GeographicBoundingBox>
1359     </gmd:geographicElement>
1360 </gmd:EX_Extent>
1361 </gmd:extent>
1362 <gmd:extent>
1363     <gmd:EX_Extent>
1364     <gmd:description>
1365         <gco:CharacterString>BURKETOWN AIRPORT (WMO Station Index Number: 94260)
1366 {BOM station ID:r 029077}
1367         (Coordinates of Lat/Long [height] are:  -17.74833  139.5356 [5.699m]);
1368         http://www.bom.gov.au/climate/change/map/stations/029077.shtml;

```

```

1369
1370 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.029077.SiteInf
1371 o.pdf;</gco:CharacterString>
1372 </gmd:description>
1373 <gmd:geographicElement>
1374 <gmd:EX_GeographicBoundingBox id="bbox.09">
1375 <gmd:westBoundLongitude>
1376 <gco:Decimal>139.5356</gco:Decimal>
1377 </gmd:westBoundLongitude>
1378 <gmd:eastBoundLongitude>
1379 <gco:Decimal>139.5356</gco:Decimal>
1380 </gmd:eastBoundLongitude>
1381 <gmd:southBoundLatitude>
1382 <gco:Decimal>-17.7483</gco:Decimal>
1383 </gmd:southBoundLatitude>
1384 <gmd:northBoundLatitude>
1385 <gco:Decimal>-17.7483</gco:Decimal>
1386 </gmd:northBoundLatitude>
1387 </gmd:EX_GeographicBoundingBox>
1388 </gmd:geographicElement>
1389 </gmd:EX_Extent>
1390 </gmd:extent>
1391 <gmd:extent>
1392 <gmd:EX_Extent>
1393 <gmd:description>
1394 <gco:CharacterString>CAIRNS AERO (WMO Station Index Number: 94287) {BOM
1395 station ID: 031011}
1396 (Coordinates of Lat/Long [height] are: -16.8736 145.7458 [2.22m]);
1397 http://www.bom.gov.au/climate/change/map/stations/031011.shtml;
1398
1399 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.031011.SiteIn
1400 fo.pdf;</gco:CharacterString>
1401 </gmd:description>
1402 <gmd:geographicElement>
1403 <gmd:EX_GeographicBoundingBox id="bbox.10">
1404 <gmd:westBoundLongitude>
1405 <gco:Decimal>145.7458</gco:Decimal>
1406 </gmd:westBoundLongitude>
1407 <gmd:eastBoundLongitude>
1408 <gco:Decimal>145.7458</gco:Decimal>
1409 </gmd:eastBoundLongitude>
1410 <gmd:southBoundLatitude>
1411 <gco:Decimal>-16.8736</gco:Decimal>
1412 </gmd:southBoundLatitude>
1413 <gmd:northBoundLatitude>
1414 <gco:Decimal>-16.8736</gco:Decimal>
1415 </gmd:northBoundLatitude>
1416 </gmd:EX_GeographicBoundingBox>
1417 </gmd:geographicElement>
1418 </gmd:EX_Extent>
1419 </gmd:extent>
1420 <gmd:extent>
1421 <gmd:EX_Extent>
1422 <gmd:description>
1423 <gco:CharacterString>TOWNSVILLE AERO (WMO Station Index Number: 94294) {BOM
1424 station ID: 032040}
1425 (Coordinates of Lat/Long [height] are: -19.283 146.7661 [4.34m]);
1426 http://www.bom.gov.au/climate/change/map/stations/032040.shtml
1427
1428 http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.032040.SiteI
1429 nfo.pdf;</gco:CharacterString>
1430 </gmd:description>
1431 <gmd:geographicElement>
1432 <gmd:EX_GeographicBoundingBox id="bbox.11">
1433 <gmd:westBoundLongitude>
1434 <gco:Decimal>146.7661</gco:Decimal>
1435 </gmd:westBoundLongitude>
1436 <gmd:eastBoundLongitude>
1437 <gco:Decimal>146.7661</gco:Decimal>

```

```

1438     </gmd:eastBoundLongitude>
1439     <gmd:southBoundLatitude>
1440         <gco:Decimal>-19.283</gco:Decimal>
1441     </gmd:southBoundLatitude>
1442     <gmd:northBoundLatitude>
1443         <gco:Decimal>-19.283</gco:Decimal>
1444     </gmd:northBoundLatitude>
1445     </gmd:EX_GeographicBoundingBox>
1446 </gmd:geographicElement>
1447 </gmd:EX_Extent>
1448 </gmd:extent>
1449 <gmd:extent>
1450     <gmd:EX_Extent>
1451         <gmd:description>
1452             <gco:CharacterString>WILLIS ISLAND (WMO Station Index Number: 94299) {BOM
1453 station ID: 200283}
1454             (Coordinates of Lat/Long [height] are: -16.2878 149.9652 [9.29m]);
1455             http://www.bom.gov.au/climate/change/map/stations/200283.shtml
1456
1457             http://www.bom.gov.au/clim_data/cdio/metadata/pdf/siteinfo/IDCJMD0040.200283.SiteI
1458 nfo.pdf;</gco:CharacterString>
1459         </gmd:description>
1460     </gmd:geographicElement>
1461     <gmd:EX_GeographicBoundingBox id="bbox.12">
1462         <gmd:westBoundLongitude>
1463             <gco:Decimal>149.9652</gco:Decimal>
1464         </gmd:westBoundLongitude>
1465         <gmd:eastBoundLongitude>
1466             <gco:Decimal>149.9652</gco:Decimal>
1467         </gmd:eastBoundLongitude>
1468         <gmd:southBoundLatitude>
1469             <gco:Decimal>-16.2878</gco:Decimal>
1470         </gmd:southBoundLatitude>
1471         <gmd:northBoundLatitude>
1472             <gco:Decimal>-16.2878</gco:Decimal>
1473         </gmd:northBoundLatitude>
1474     </gmd:EX_GeographicBoundingBox>
1475 </gmd:geographicElement>
1476 </gmd:EX_Extent>
1477 </gmd:extent>
1478
1479 <gmd:extent>
1480     <gmd:EX_Extent>
1481         <gmd:temporalElement>
1482             <gmd:EX_TemporalExtent id="TemporalExtent">
1483                 <gmd:extent>
1484                     <gml:TimePeriod gml:id="d290336e555a1052958">
1485                         <gml:begin>
1486                             <gml:TimeInstant gml:id="d290336e557a1052958">
1487                                 <gml:timePosition>2005-04-07</gml:timePosition>
1488                             </gml:TimeInstant>
1489                         </gml:begin>
1490                         <gml:end>
1491                             <gml:TimeInstant gml:id="d290336e561a1052958">
1492                                 <gml:timePosition indeterminatePosition="now" />
1493                             </gml:TimeInstant>
1494                         </gml:end>
1495                     </gml:TimePeriod>
1496                 </gmd:extent>
1497             </gmd:EX_TemporalExtent>
1498         </gmd:temporalElement>
1499     </gmd:EX_Extent>
1500 </gmd:extent>
1501
1502 <gmd:supplementalInformation>
1503     <gco:CharacterString>Data parameters and format decoding is explained in
1504 &quot;Practical Help for Compiling
1505 CLIMAT Reports&quot;; (2009), from
1506 http://www.wmo.int/pages/prog/gcos/Publications/GCOS-127_EN.pdf

```

**Comment [K18]:** This isn't correct information, and will result in incorrect search results. However, there doesn't seem to be a way, in ISO19108, to express "latest month".

Another (unsatisfactory, like this one) approach would be to have both the start and end time as "indeterminate". (The result would be that this record would never get retrieved in a temporal search)

A 3<sup>rd</sup> option is to have the begin time as last month, and revise that every year (which would at least reduce the search inaccuracy, but retrieve it when people do do a temporal search)?

The title includes the phrase "Latest month only"; and the abstract also says:  
 "---- This bulletin began being provided in 2005.  
 The report (latest month only) collates reports fro..."

What do others think?

```

1507     </gco:CharacterString>
1508 </gmd:supplementalInformation>
1509
1510
1511 </gmd:MD_DataIdentification>
1512 </gmd:identificationInfo>
1513 <gmd:distributionInfo>
1514   <gmd:MD_Distribution>
1515     <gmd:distributionFormat>
1516       <gmd:MD_Format>
1517         <gmd:name>
1518           <gco:CharacterString>FM 71 CLIMAT - text</gco:CharacterString>
1519         </gmd:name>
1520         <gmd:version>
1521           <gco:CharacterString>XIII EXT</gco:CharacterString>
1522         </gmd:version>
1523         <gmd:specification>
1524           <gco:CharacterString>
1525             &quot;FM71-XII CLIMAT&quot; format is explained at
1526             http://www.wmo.int/pages/prog/www/WMOCodes.html</gco:CharacterString>
1527           </gmd:specification>
1528         </gmd:MD_Format>
1529       </gmd:distributionFormat>
1530     <gmd:distributor>
1531       <gmd:MD_Distributor>
1532         <gmd:distributorContact>
1533           <gmd:CI_ResponsibleParty>
1534             <gmd:individualName>
1535               <gco:CharacterString>
1536                 Weiqing QU</gco:CharacterString>
1537             </gmd:individualName>
1538             <gmd:organisationName>
1539               <gco:CharacterString>
1540                 Bureau of Meteorology (BOM) - RTH Melbourne</gco:CharacterString>
1541             </gmd:organisationName>
1542             <gmd:positionName>
1543               <gco:CharacterString>(RTH Focal Point)</gco:CharacterString>
1544             </gmd:positionName>
1545             <gmd:contactInfo>
1546               <gmd:CI_Contact>
1547                 <gmd:address>
1548                   <gmd:CI_Address>
1549                     <gmd:deliveryPoint>
1550                       <gco:CharacterString>
1551                         GPO Box 1289, 700 Collins Street Docklands</gco:CharacterString>
1552                     </gmd:deliveryPoint>
1553                     <gmd:city>
1554                       <gco:CharacterString>Melbourne</gco:CharacterString>
1555                     </gmd:city>
1556                     <gmd:administrativeArea>
1557                       <gco:CharacterString>Vic.</gco:CharacterString>
1558                     </gmd:administrativeArea>
1559                     <gmd:postalCode>
1560                       <gco:CharacterString>3001</gco:CharacterString>
1561                     </gmd:postalCode>
1562                     <gmd:country>
1563                       <gco:CharacterString>Australia</gco:CharacterString>
1564                     </gmd:country>
1565                     <gmd:electronicMailAddress>
1566                       <gco:CharacterString>W.Qu@bom.gov.au</gco:CharacterString>
1567                     </gmd:electronicMailAddress>
1568                     <gmd:electronicMailAddress>
1569                       <gco:CharacterString>gisc-op@bom.gov.au</gco:CharacterString>
1570                     </gmd:electronicMailAddress>
1571                   </gmd:CI_Address>
1572                 </gmd:address>
1573               </gmd:CI_Contact>
1574             </gmd:contactInfo>
1575           </gmd:role>

```

```

1576     <gmd:CI_RoleCode
1577         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_1
1578         9139_Schemas/resources/codelist/gmxCodelists.xml#CI_RoleCode"
1579         codeListValue="pointOfContact"/>
1580     </gmd:role>
1581 </gmd:CI_ResponsibleParty>
1582 </gmd:distributorContact>
1583 <gmd:distributorTransferOptions>
1584     <gmd:MD_DigitalTransferOptions>
1585         <gmd:onLine>
1586             <gmd:CI_OnlineResource>
1587                 <gmd:linkage>
1588                     <gmd:URL>
1589                         http://PROVIDER_HOSTNAME/PROVIDER_PATH/urn%3Ax-
1590                         wmo%3Aint.wmo.wis%3Amd%3A%3ACSAU01AMMC</gmd:URL>
1591                     </gmd:linkage>
1592                 <gmd:protocol>
1593                     <gco:CharacterString>WWW:LINK-1.0-http--link</gco:CharacterString>
1594                 </gmd:protocol>
1595                 <gmd:name>
1596                     <gco:CharacterString>
1597                         DataForDownload-url; RTH Melbourne</gco:CharacterString>
1598                 </gmd:name>
1599                 <gmd:description>
1600                     <gco:CharacterString>
1601                         CSAU01 collection of CLIMAT reports available from AMMC at RTH
1602                         Melbourne</gco:CharacterString>
1603                 </gmd:description>
1604                 <gmd:function>
1605                     <gmd:CI_OnLineFunctionCode
1606                         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/I
1607                         SO_19139_Schemas/resources/codelist/gmxCodelists.xml#CI_OnLineFunci
1608                         onCode" codeListValue="download"/>
1609                     </gmd:function>
1610                 </gmd:CI_OnlineResource>
1611             </gmd:onLine>
1612         </gmd:MD_DigitalTransferOptions>
1613     </gmd:distributorTransferOptions>
1614 </gmd:MD_Distributor>
1615 </gmd:distributor>
1616
1617 <gmd:distributor>
1618     <gmd:MD_Distributor>
1619         <gmd:distributorContact>
1620             <gmd:CI_ResponsibleParty>
1621                 <gmd:organisationName>
1622                     <gco:CharacterString>NOAA</gco:CharacterString>
1623                 </gmd:organisationName>
1624                 <gmd:role>
1625                     <gmd:CI_RoleCode
1626                         codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas
1627                         /resources/codelist/gmxCodelists.xml#CI_RoleCode" codeListValue="distributor"/>
1628                     </gmd:role>
1629                 </gmd:CI_ResponsibleParty>
1630             </gmd:distributorContact>
1631         <gmd:distributorTransferOptions>
1632             <gmd:MD_DigitalTransferOptions>
1633                 <gmd:onLine>
1634                     <gmd:CI_OnlineResource>
1635                         <gmd:linkage>
1636                             <gmd:URL>
1637                                 ftp://tgftp.nws.noaa.gov/data/raw/cs/csau01.ammc..txt</gmd:URL>
1638                             </gmd:linkage>
1639                             <gmd:protocol gco:nilReason="missing">
1640                                 <gco:CharacterString/>
1641                             </gmd:protocol>
1642                             <gmd:name>

```

**Comment [K19]:** Should this be amended to be a real url???

**Comment [K20]:** I suggest that we agree on some consistent wording to go here, for data, etc

```

1643         <gco:CharacterString>DataForDownload-url; Latest month (CSAU01)
1644 [retained for one month];
1645 ftp://tgftp.nws.noaa.gov/data/raw/cs/csau01.ammc..txt</gco:CharacterString>
1646     </gmd:name>
1647     <gmd:function>
1648         <gmd:CI_OnLineFunctionCode
1649 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas
1650 /resources/codelist/gmxCodelists.xml#CI_OnLineFunctionCode"
1651 codeListValue="download"/>
1652     </gmd:function>
1653     </gmd:CI_OnlineResource>
1654 </gmd:onLine>
1655 </gmd:MD_DigitalTransferOptions>
1656 </gmd:distributorTransferOptions>
1657 </gmd:MD_Distributor>
1658 </gmd:distributor>
1659
1660 </gmd:MD_Distribution>
1661 </gmd:distributionInfo>
1662
1663 <gmd:metadataConstraints>
1664 <gmd:MD_LegalConstraints>
1665 <gmd:useLimitation>
1666 <gco:CharacterString>
1667     COPYRIGHT is retained, for this metadata record.
1668
1669     This metadata record was created based on the WMO No.9 Volume C1 declaration
1670 for bulletin CSAU01AMMC. Other references were used in the process,
1671 including WMO No.9 Volume A, WMO No.386 Manual on the GTS and WMO No.306
1672 Manual on Codes.</gco:CharacterString>
1673 </gmd:useLimitation>
1674 <gmd:useConstraints>
1675 <gmd:MD_RestrictionCode
1676 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_S
1677 chemas/resources/codelist/gmxCodelists.xml#MD_RestrictionCode"
1678 codeListValue="copyright"/>
1679 </gmd:useConstraints>
1680 <gmd:otherConstraints>
1681 <gco:CharacterString>
1682     This metadata, if re-distributed outside WIS, may not be extended, or
1683 altered. It also may not be subsetted, or displayed with different field names,
1684 unless
1685 a) prior permission has been given by the Bureau of Meteorology GISC, or
1686 b) this statement is displayed, AND, a clear statement is made, adjacent to the re-
1687 distributed metadata, indicating:-
1688     (i) (if true) that the metadata displayed is incomplete, and in what way (eg has
1689 been subsetted) &amp;/or the fieldtags changed, and
1690     (ii) that the original, authoritative and &amp; complete version of the
1691 metadata (available from [URL from DatasetURI field]), & should also be consulted
1692 prior to accessing the data.
1693
1694 Ideally, the contents in this field should always be displayed.
1695 </gco:CharacterString>
1696 </gmd:otherConstraints>
1697 </gmd:MD_LegalConstraints>
1698 </gmd:metadataConstraints>
1699 <gmd:metadataMaintenance>
1700 <gmd:MD_MaintenanceInformation>
1701 <gmd:maintenanceAndUpdateFrequency>
1702 <gmd:MD_MaintenanceFrequencyCode
1703 codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_S
1704 chemas/resources/codelist/gmxCodelists.xml#MD_MaintenanceFrequencyCode"
1705 codeListValue="asNeeded"/>
1706 </gmd:maintenanceAndUpdateFrequency>
1707 </gmd:MD_MaintenanceInformation>
1708 </gmd:metadataMaintenance>
1709 </gmd:MD_Metadata>

```



Filename: GA\_TaskGuidanceOnCodelistCreation\_bwilson-  
KR\_v20140218\_-wChangeAcceptd2.doc  
Directory: G:\stdm-wk\new\\_WMO1.3\Guidelines-  
docs\_\_Reviewg\CodelistUsage  
Template: C:\Documents and Settings\kroberts\Application  
Data\Microsoft\Templates\Normal.dot  
Title: TT-ApMD-2 Task guidance on codelist creation  
Subject: Task guidance on codelist creation for TT-ApMD-2  
Author: Bob Wilson  
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