

GCMD Keywords

Introduction

The Global Change Master Directory (GCMD) Keywords are a widely-used collection of controlled, structured vocabularies. Although created for use within the specific domain of earth sciences, the Keywords are also used more broadly across the sciences.

Research Vocabularies Australia republishes the GCMD Keywords as a service for southern-hemisphere users. The content is made available through a variety of access formats. (See the section "ARDC modifications" below for details of how the content has been adapted for republication.)

Publication policy

Vocabularies

The GCMD Keywords are republished in Research Vocabularies Australia in these ways:

- Each of these concept schemes is available as a separate vocabulary:
 - Earth Science and Earth Science Services Keywords
 - Project Keywords
 - Instrument/Sensors Keywords
 - Platform/Sources Keywords
 - Locations Keywords
 - Horizontal Data Resolution Keywords
 - Vertical Data Resolution Keywords
 - Temporal Data Resolution Keywords
 - URL Content Types Keywords
 - Chronostratigraphic Units Types Keywords
 - Measurement Name Keywords
 - Granule Data Format Keywords
- There is an additional vocabulary [GCMD Combined Keywords](#) whose content is the combination of all of the keywords of the concept schemes listed above.

You can get a list of the vocabularies using this search: [All GCMD vocabularies on Research Vocabularies Australia](#).

From Version 9.1, there are several additional concept schemes that are officially part of the GCMD Keywords, but which are used only internally in GCMD's Unified Metadata Model for Services (UMM-S) and its Common Metadata Repository (CMR). (For example, "Chained Operations" and "Operations".) At present, ARDC does not republish these concept schemes. If you have a requirement to make use of these concept schemes, please contact services@ardc.edu.au.

Versions

ARDC has been republishing the releases of the GCMD Keywords from Version 8.6 onwards, and will continue to maintain access to versions as they are superseded. You can use [Research Vocabularies Australia's notification system](#) to subscribe to updates to the GCMD Keywords if you wish to be alerted as soon as a new version becomes available through Research Vocabularies Australia.

It has been the practice of the maintainers of the GCMD Keywords to release a tagged, major version on approximately a yearly basis; these are numbered 9.0, 10.0, etc. (The major releases were formerly the "dot" releases, e.g., 9.1, 9.2, etc.) ARDC will republish each such major version. However, we have no current plans to republish the intermediate, unnumbered versions made as part of the "fast track" process. Contact services@ardc.edu.au if you require access to keywords that have been added since the release of the most recent major version.

Version titles

Each republished version of a concept scheme has a version title, which is derived from the top-level metadata contained in the vocabulary data fetched from NASA. For example, the [GCMD Chronostratigraphic Units Types Keywords](#) vocabulary has a version with title "8.6 2015-09-02". The format of these titles is "*VERSION DATE*", where *VERSION* is the major version (8.6), and *DATE* is the date included in the concept scheme's metadata (2015-09-02). Note that across the various concept schemes, there may be versions with the same major version, but with different dates.

The combination vocabulary [GCMD Combined Keywords](#) has version titles that work differently. The date on which ARDC republishes an updated set of versions is used as the *DATE* component of this version title. For example, there is a version with version title "8.6 2019-01-10", which means that the vocabulary data was last downloaded from NASA on 2019-01-10.

Access formats

The vocabulary data of each version is available as a direct download, through a [SPARQL endpoint](#), the [Linked Data API](#), and the [Vocabulary Widget](#).

ARDC modifications

The RDF data in the vocabularies has been modified by ARDC as follows:

- Triples have been added to express `skos:hasTopConcept` and `skos:topConceptOf` relations. This makes it easier for other services to "consume" the vocabulary data. In particular, the addition of these triples enables the RVA Vocabulary Widget to operate correctly in "tree" mode.
- (As of version 10.2.) For each concept scheme, triples have been added to express values for the `rdf:type`, `skos:prefLabel`, and `dcterms:title` properties.

For more information

- [NASA information about the GCMD Keywords](#), and [how to cite the GCMD Keywords](#).
- Please contact services@ardc.edu.au if you have any suggestions for improvement of the support within Research Vocabularies Australia for the GCMD Keywords, or if you have questions about the service.