

Standard Names & Vocabulary

M. Fiebig

NILU – Norsk Institutt for Luftforskning

O. Godøy

Norwegian Meteorological Institute

Why Vocabulary?

- Structured data archive more usable than «unordered» archive based on semantic search.
- Need to speak a common language.
- Avoid spelling ambiguities.
- Machine readable / actionable.

Climate Forecast (CF) Convention Standard Names

- CF convention builds on NetCDF file format.
- Defines e.g. axis, projections, units to be used in NetCDF
- Defines vocabulary for variables!

<https://cfconventions.org/Data/cf-standard-names/74/build/cf-standard-name-table.html>

- Structure:
[[surface](#)] [[component](#)] standard_name [at [surface](#)] [in [medium](#)] [due to [process](#)] [assuming [condition](#)]
- Qualifiers are part of the standard name.

Attribute Convention for Data Discovery (ACDD)

- Builds on top of NetCDF and CF convention.
- Addresses metadata specification missing in CF convention, especially discovery metadata.
- Mostly compatible with ISO19115 metadata specification.
- https://wiki.esipfed.org/Attribute_Convention_for_Data_Discovery_1-3

Global Change Master Directory (GCMD) Keywords

- Hierarchical set of controlled vocabularies.
- Contact [GCMD Keyword Community Forum](#) to request new keywords.
- Structure:
Category > Topic > Term > Variable > Detailed Variable
- <https://earthdata.nasa.gov/earth-observation-data/find-data/gcmd/gcmd-keywords>
- Focus on space-borne remote sensing,

