CERFACS

CENTRE EUROPÉEN DE RECHERCHE ET DE FORMATION AVANCÉE EN CALCUL SCIENTIFIQUE

Overview of Global Metadata

Christian Pagé

Research Engineer, CERFACS, Toulouse

The 3rd IS-ENES2 (CLIPC) Workshop on Metadata for Climate Indices

KNMI, De Bilt, Netherlands

15-16 March 2017

General Considerations

- Good Metadata is
  - Key for research data access and re-use (discovery and identification)
  - Provides visibility to the analytics pipeline (evaluation)
  - Simplifies tracing errors (communication)
- Following Conventions: CF-1.6 and ACDD-1.3
- Fixed Structure
- Assumes one variable per file only
- Pre-defined attribute names
- Support users and technical needs (next slide)
- Initial Work by *Milka Radojevic* && *Ruth Petrie*
- This Metadata Convention: CLIPC-CII-v1

Introduction

- General Considerations
- Users and Technical Needs
- Guidelines by Petrie et al. (2016)
  - github repository https://github.com/cerfacs-globc/impact-indicators
    1. CLIPC_DRS_for_climate_impact_indicators.xlsx
    2. CLIPC_Global_Attributes_for_climate_impact_indicators.xlsx
    3. CLIPC_status_of_climate_impact_indicator_metadata.docx
    4. Metadata_standards_for_climate_impact_indicators_v1.5.docx

User and Technical Needs

- Multi- sectoral and community users / not all experts
- Data search, discovery, access and re-use within a file
- Mapping with DRS & INSPIRE standard
- Compatibility between data producer and data publisher
- Combination of a variety of indices and input data: provenance & reproducibility
- Structure has 3 sections
  1. Knowledge discovery in a file
  2. Input metadata (lineage) with prefix *invar_*
  3. Basic spatio-temporal characteristics

Current Status

- Guidelines and Examples
- Excel Table
- Online climate4impact Checker

Remaining Issues

- Lineage/Provenance: suitable enough?
  - KNMI W3C-PROV for NetCDF files
  - All needs covered?
- High temporal and/or spatial resolution support
- history attribute: guidelines?
- Semantic standards?