

FAIR metadata guidelines

UNDER CONSTRUCTION

Use these guidelines to make your data FAIR in a step-wise approach. The currently available data formats are NetCDF, GeoTIFF, vector/Shapefile and CSV/Excel.

NetCDF | *.nc

Metadata
Following CF conventions (source):
☐ Title: what's in the file
☐ History: Audit trail of processing operations
☐ Description of the data
☐ units: units can be udunits strings e.g. 1, degC, Pa, mbar, W m ⁻² , kg/m ² /s, mm day ⁻¹
☐ standard_name: Use CF standard names
☐ long_name: not standardised
☐ ancillary variables: a pointer to variables providing metadata about the individual data values e.g. standard error or data quality information
☐ *_FillValue, missing_value, valid_max, valid_min, valid_range
☐ Dimensions establish the index space of data variables
☐ Time (year, month, day, hour, minute, second) is encoded with units "time unit since reference time"
*Optional for numeric data variables

GeoTIFF | *.tif

Metadata
Embedded tags (tif tags):
☐ Spatial extent
☐ Temporal extent
☐ Coordinate reference system
☐ Resolution
☐ No data value
☐ Layers
For more documentation, create a README file.

Vector/shapefile | *.shp

Metadata
Use a *.shp.xml to store the metadata in XML format (such as ISO 19115 or other XML schema):
☐ Spatial extent
☐ Temporal extent
☐ Coordinate reference system
☐ Attribute(s) meaning

CSV/Excel | *.csv *.xlsx

Metadata
Write in sheet/top lines of csv:
☐ Title: what's in the file
☐ Abstract
☐ Measurement details