

File Instructions

GFZ Data Services has no special data format requirements for submissions. However, for data preservation and publication, it is essential that all datasets are saved in an appropriate file format to ensure long-term accessibility of data. If you are not directly using these formats, please convert your data to formats that are

- widely used within your discipline (e.g. RINEX, mSeed).
- open and non-proprietary (e.g. csv, txt, netCDF).
- publicly documented, i.e. the complete file specification is publicly available.
- self-documenting, i.e. the file itself can include useful metadata. Please consider also here the use of standards as, e.g. NetCDF_cf.
- endorsed by standards agencies such as the International Organisation for Standardization (ISO).

Geographic coordinates

- Please use decimal degrees (DD.dddd) where southern latitudes and western longitudes have negative values.

Persistent identifiers for samples

- If you used samples with an IGSN, please list them in your data table (e.g. GFHHA001A).
- Tables in csv or txt formats should include the full link (e.g. <https://igsn.org/GFHHA001A>).

Date and time

- Please always define the date and time formats and their notation in the data headers and/or description.
- Please use YYYY (for year) or YYYY-MM-DD (Year-month-date) or any other format described in W3CDTF. (<https://www.w3.org/TR/NOTE-datetime>).

Units

- Please use SI units (see: www.bipm.org/en/measurement-units/) for your measurement variables.
- Define units in your data description.
- Include units in table column labels.

Data formats

- Please use non-proprietary and persistent file formats (e.g. txt, csv, geoTIFF, netCDF) whenever possible.
- Please submit tabular data as TAB delimited text files (ASCII). In addition to ASCII files, you may submit tabular data in Excel-format or PDF/ PDF/A if these formats provide for special formatting or functionality that would otherwise be lost.
- **Please note:** Information in the headline of Excel tables are lost after the conversion to csv or tab-delimited txt formats. To avoid this, please include the headline information directly in the data table.

Metaheader

- Whenever possible, data files published with GFZ Data Services shall contain a [Metaheader](#) at the beginning of the file marked by “#”. It shall contain the license and citation information.

```
# Citation: Förster, Hans-Jürgen; Gottesmann, Bärbel (2021): Accessory Minerals in Felsic Igneous Rocks - Part 8: Composition of fluorapatite from late-Variscan granites of the Erzgebirge?Vogtland metallogenic province, Germany. GFZ Data Services. https://doi.org/10.5880/GFZ.4.8.2021.002
#
# Licence: Creative Commons Attribution 4.0 International (CC BY 4.0) https://creativecommons.org/licenses/by/4.0/
#
granite group    massif/suite    sub-intrusion  sample No      Latitude       Longitude      Hochwert
Rechtswert      spot No.       host mineral    origin/remarks WR - SiO2      WR - TiO2      WR - P205      WR
- F            WR - A/CNK     species P205    SiO2           Al2O3          Y2O3           La2O3          Ce2O3          Nd2O3          Sm2O3          Gd2O3          Dy2O3
Yb2O3          CaO            MnO            FeO            SrO            MgO            BaO            Na2O           F              Cl              H2O            sum            O=F           O=Cl
total          P              Si             Al             Y              La             Ce             Nd             Sm             Gd             Dy             Yb            Ca            Mn            Fe
Sr             Mg            Ba             Na             F              Cl             OH             FU P           FU Si          FU Al          FU Y          FU La          FU Ce          FU Nd          FU
Sm            FU Gd         FU Dy          FU Yb          FU Ca          FU Mn          FU Fe          FU Sr          FU Mg          Fu Ba          FU Na          F              Cl            OH            sum
LaN           CeN           NdN            SmN            GdN            DyN            YN             YbN
DD WGS 84    DD WGS 84      GK DHDN        GK DHDN
wt%           wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%            wt%
```

Example of a metaheader for tabular data in txt format (marked in blue)

Miscellaneous

- Please use descriptive file names wherever possible.
- Define all abbreviations in the data description.
- Use a period (“.”) as decimal delimiter.
- For comprehensive technical description of your data, please use our data description templates at https://gfzpublic.gfz-potsdam.de/pubman/item/item_5007103_2. They are available in commented and “ready-to-use” versions.
- Group tables with identical format, if necessary, add a column to describe e.g. treatment, group, etc.
- Please define empty fields in tables. For example, an empty field may indicate a measurement was not made or the measurement fell below the detection limit. Please always define the abbreviations you are using.
- Avoid including summary statistics in data files.
- Use English.

More about data format recommendations can be found at, e.g.:

- UK Data Service:
<https://ukdataservice.ac.uk/learning-hub/research-data-management/format-your-data/recommended-formats/>
- Research data information service by the University of Edinburgh:
<https://www.ed.ac.uk/information-services/research-support/research-data-service/after/data-repository/choosing-file-formats>
- University of Sidney:
Archive digital content (<https://www.library.sydney.edu.au/research/archiving-data.html>)
File format recommendations (<https://libguides.library.usyd.edu.au/datapublication/step4>)