

Quick Start Guide for publishing data with GFZ Data Services

The Quick Start Guide provides a streamlined workflow to **data and software publication with GFZ Data Services**.

1. Describe your data via the GFZ Metadata Editor¹. Mandatory fields are marked in red. We recommend to fill the form to the greatest extent possible to improve data discovery.
2. In the “data upload information” field, please provide a link to your data (e.g. cloud storage) where the editors can download your data. If you prefer or if your dataset is very large, you may also enter a request for an upload link.
3. Please use our Data Description Templates² for further technical description of your data.
4. Help on the functionality of the GFZ Data Services Metadata Editor (“Metadata Editor HowTo”³, as well as a commented list on metadata fields used in the editor (“Help on Metadata fields”⁴, is provided on the Website of GFZ Data Services⁵ and directly in the Metadata Editor (→ About/Help).

A note on fields in the Metadata Editor

Licence

We recommend a Creative Commons Attribution 4.0 Licence (CC-BY 4.0) whenever possible. This is also in accordance with the Guidelines on Research Data of the GFZ German Research Centre for Geosciences⁶. Please contact us if this is not appropriate for your data.

Authors/Contributors

We strongly recommend using ORCID iDs to identify yourself, your co-authors and contributors (You can find and create your ORCID iD on the ORCID website⁷. This website also holds the ORCID catalogue. The difference between authors and contributors is explained in the “Help on Metadata fields” document⁴. In brief: only authors are included in the citation.

Description/ Abstract

A brief description of the resource and the context in which and purpose for the data collection or creation. Next to the title, the abstract is key element for data description.

Note: the abstract shall be understandable for a broader scientific community. It should be a summary explaining the context and purpose the data was collected, the method of data collection (e.g. sampling method, location, analytical and sampling instruments, hard- and software used, secondary data sources), data file structure, format and relationships, processing steps and quality control (e.g. calibration, conversion, transformation weighting, detection limits). The abstract will appear on the DOI Landing Page and may be complemented by a detailed data description.

¹ <https://dataservices.gfz-potsdam.de/panmetaworks/metaedit/>

² https://gfzpublic.gfz-potsdam.de/pubman/item/item_5007103

³ <https://bib.telegrafenberg.de/fileadmin/dataservices.gfz-potsdam.de/Downloads/metadata-editor-how-to.pdf>

⁴ https://gfzpublic.gfz-potsdam.de/pubman/item/item_5009874

⁵ <https://dataservices.gfz-potsdam.de>

⁶ https://media.gfz-potsdam.de/gfz/wv/doc/16/GFZ_Daten_Grundsaeetze+Erg_en.pdf

⁷ <https://orcid.org/>

Thesaurus Keywords

GFZ Data Services uses several controlled vocabularies to provide consistent and comprehensive description of data and variables using hierarchical thesauri. They enable precise queries of metadata in the GFZ Data Portal. Among them, at **least one term** of the NASA Global Change Master Directory (GCMD) Keywords is required for all datasets and codes published via GFZ Data Services. Please click on the little yellow pen to the left of the rows to select or search for thesaurus keywords.

Free Keywords

In addition to the thesaurus keywords and dataset title, you may enter as many free keywords as you like. **To add multiple keywords, please use a comma as separator, paste all in one field and click "enter". This will break the keywords into different lines.** Even despite the full-text search option in GFZ Data Services, keywords are essential for data discovery and should be selected carefully and comprehensively. Keywords should also include, e.g. the project name, drilling core, expedition name and are key elements for data discovery.

Spatial extent

please enter the geographic coordinates of your dataset as decimal degrees (DD.dddd) with at least 4 decimal digits. **Geographical coordinates must range between -90 and +90 latitude and -180 and +180 degrees longitude.** For **global datasets**, please enter the maximum values (-90, 90, -180, 180). You may also enter and verify the location via the interactive map (via the yellow pen sign to the left). Several points or research areas included in the same data publication may be entered as separate rows. For a larger number of data points (e.g. tens of geochemical sample locations or paleomagnetic measurement points), it is sufficient to provide the bounding box including all sample locations in the metadata (and providing the individual data points in the data tables).

Related References

In order to improve the data description and discovery, it is important to cross reference datasets with journal articles using the data, software, physical samples, analytical and processing standards, data reports describing the datasets, or other sources of data, or other contextual information. Please enter the DOI (beginning with 10.xxx) or the URL (if no DOI is available) for the respective reference and indicate the type of relation. Please note that related references can be added to the metadata **even after** the dataset has been published if you let us know about it.

Funding References

Search for the funding agency of the project by entering the name and select from the list. Please use the funders name in their national language (e.g., "Deutsche Forschungsgemeinschaft" for DFG, "Vetenskapsrådet" for the Swedish Research Council, ...). Several grant numbers by the same funder should be entered as individual entries (several lines).