

Explanation for metadata fields used in the GFZ Metadata Editor

Modified after: DataCite Metadata Working Group. (2019). DataCite Metadata Schema Documentation for the Publication and Citation of Research Data. Version 4.3. DataCite e.V. <https://doi.org/10.14454/7xq3-zf69>

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- Black font = original information from the DataCite Metadata Schema Version 4.3
- Blue font = additional information and recommendations by GFZ Data Services

Resource Information		
DOI/ Identifier	The Identifier is a unique string that identifies a resource.	DOI (Digital Object Identifier) registered by a DataCite member. Format should be 10.5880/...
Publisher	The name of the entity that holds, archives, publishes, prints, distributes, releases, issues, or produces the resource. This property will be used to formulate the citation, so consider the prominence of the role. For software, use Publisher for the code repository. If there is an entity other than a code repository, that "holds, archives, publishes, prints, distributes, releases, issues, or produces" the code, use the property Contributor/contributorType: hostingInstitution for the code repository. By default, GFZ Data Services is the publisher. If this should not be the case, e.g. in some cooperation projects, please contact us for further advice.	
Publication Year	The year when the data was or will be made publicly available. [...] If an embargo period has been in effect, use the date when the embargo period ends. In the case of datasets, "publish" is understood to mean making the data available on a specific date to the community of researchers. If there is no standard publication year value, use the date that would be preferred from a citation perspective.	
Resource Type	Audiovisual	A series of visual representations imparting an impression of motion when shown in succession. May or may not include sound. May be used for films, video, etc.
Resource Type	Collection	An aggregation of resources, which may encompass collections of one resourceType as well as those of mixed types. A collection is described as a group; its parts may also be separately described.
Resource Type	Dataset	Data encoded in a defined structure.
Resource Type	Event	A non-persistent, time-based occurrence.
Resource Type	Image	A visual representation other than text
Resource Type	InteractiveResource	A resource requiring interaction from the user to be understood, executed, or experienced, e.g. Training Modules
Resource Type	Model	An abstract, conceptual, graphical, mathematical or visualization model that represents empirical objects, phenomena, or physical processes.
Resource Type	PhysicalObject	An inanimate, three-dimensional object or substance, e.g. artifacts. specimens
Resource Type	Service	A system that provides one or more functions of value to the end-user.
Resource Type	Software	A computer program in source code (text) or compiled form. Use this type for all software components supporting scholarly research.
Resource Type	Sound	A resource primarily intended to be heard.
Resource Type	Text	A resource consisting primarily of words for reading (including "grey" literature, lab notes, accompanying materials, data management plan, conference poster).

Resource Type	Workflow	A structured series of steps which can be executed to produce a final outcome, allowing users a means to specify and enact their work in a more reproducible manner. (E.g. Computational workflows involving sequential operations made on data by wrapped software and may be specified in a format belonging to a workflow management system).
Resource Type	Other	If selected, supply a value for Resource Type.
Title		A name or title by which a resource is known. May be the title of a dataset or the name of a piece of software. The title shall describe the data and not repeat the title of the corresponding article.
Version		
Language		The primary language of the resource.
Licences and Rights		
Licence	CC BY 4.0	<p>“Creative Commons is a non-profit organization that enables the sharing and use of creativity and knowledge through free legal tools. The free, easy-to-use copyright licenses provide a simple, standardized way to give the public permission to share and use your creative work — on conditions of your choice. CC licenses let you easily change your copyright terms from the default of ‘all rights reserved’ to ‘some rights reserved.’ Creative Commons licenses are not an alternative to copyright. They work alongside copyright and enable you to modify your copyright terms to best suit your needs”. (source: creativecommons.org)</p> <p>Whenever possible, we recommend to assign the freest licence “CC BY” to your data (“use it, change it, redistribute it, but always name me as reference”), for some cases the “attribution NonCommercial” licence CC BY-NC, or CC0. We recommend the 4.0 version. “The CC0 licence is a tool to deliberately dedicate copyright-protected works to the public domain. Thus, it is basically a waiver of rights. Once it is in effect, a work belongs to the public domain and can be used by anyone without any restrictions or obligations (the citation of the sources is always recommended following the rules for good scientific practice). CC0 is nothing but a standardised declaration of such a waiver which can be used by anyone who wishes to dedicate their work to the public domain.” (source: Open content – A practical guide to using Creative Commons licences)</p>
Licence	CC BY-NC 4.0	
Licence	CC0	
Authors (persons and/or institutions), Contact, and Contributor		
Authors Name (Creator Name)	The main researchers involved in producing the data, or the authors of the publication, in priority order. May be a corporate/institutional or personal name. The personal name format should be: family, given. Non-roman names may be transliterated according to the ALA-LC schemes 10. Note: if the Editor is to be credited in place of multiple authors, the Editor’s name may be supplied as Author, with “(Ed.)” appended to the name.	
First name (givenName)	The personal or first name of the creator (author).	
Last name (familyName)	The surname or last name of the creator (author).	
Role	Valid for authors and contributors, see below	
Author ID Type/ Author Identifier (nameIdentifier-Scheme/ nameIdentifier)	Due to varying spellings of author names it is difficult to find all works of a specific researcher in catalogue systems. The nameIdentifier Uniquely identifies an individual or legal entity, according to various schemas. The provision of an Author Identifier requires the selection of the Autor ID Type. We recommend ORCID iDs.	
Contact	See description of the role of ContactPerson	May be a person or an institutional contact (e.g. Geofon Data Centre, email: geofon@gfz-potsdam.de)

Contributor	The institution or person responsible for collecting, managing, distributing, or otherwise contributing to the development of the resource. To supply multiple contributors, repeat this property. <i>As for the Authors/creators, contributors first and last names shall be provided separately</i>	
Roles for Authors and Contributors		
ContactPerson	Person with knowledge of how to access, troubleshoot, or otherwise field issues related to the resource	May also be “Point of Contact” in organization that controls access to the resource, if that organization is different from Publisher, Distributor, Data Manager
DataCollector	Person/institution responsible for finding, gathering/collecting data under the guidelines of the author(s) or Principal Investigator (PI)	May also use when crediting survey conductors, interviewers, event or condition observers, person responsible for monitoring key instrument data.
DataCurator	Person tasked with reviewing, enhancing, cleaning, or standardizing metadata and the associated data submitted for storage, use, and maintenance within a data centre or repository	While the “DataManager” is concerned with digital maintenance, the DataCurator’s role encompasses quality assurance focused on content and metadata. This includes checking whether the submitted dataset is complete, with all files and components as described by submitter, whether the metadata is standardized to appropriate systems and schema, whether specialized metadata is needed to add value and ensure access across disciplines, and determining how the metadata might map to search engines, database products, and automated feeds.
DataManager	Person (or organization with a staff of data managers, such as a data centre) responsible for maintaining the finished resource.	The work done by this person or organization ensures that the resource is periodically “refreshed” in terms of software/hardware support, is kept available or is protected from unauthorized access, is stored in accordance with industry standards, and is handled in accordance with the records management requirements applicable to it.
Distributor	Institution tasked with responsibility to generate/ disseminate copies of the resource in either electronic or print form.	Works stored in more than one archive/ repository may credit each as a distributor.
Editor	A person who oversees the details related to the publication format of the resource.	Note: if the Editor is to be credited in place of multiple authors, the Editor’s name may be supplied as Author, with “(Ed.)” appended to the name.
HostingInstitution	Typically, the organization allowing the resource to be available on the internet through the provision of its hardware/software/operating support.	May also be used for an organization that stores the data offline. Often a data centre (if that data centre is not the “publisher” of the resource.). <i>If your data was derived from a laboratory, please include the name of the laboratory (with affiliation) as contributor with the role “HostingInstitution”. There may be two hosting institutions if the data or work is stored in both.</i>
Producer	Typically a person or organization responsible for the artistry and form of a media product.	In the data industry, this may be a company “producing” DVDs that package data for future dissemination by a distributor.
ProjectLeader	Person officially designated as head of project team or	The Project Leader is not “removed” from the work that resulted in the resource; he or she remains

	subproject team instrumental in the work necessary to development of the resource.	intimately involved throughout the life of the particular project team.
ProjectManager	Person officially designated as manager of a project. Project may consist of one or many project teams and sub-teams.	The manager of a project normally has more administrative responsibility than actual work involvement.
ProjectMember	Person on the membership list of a designated project/project team.	This vocabulary may or may not indicate the quality, quantity, or substance of the person's involvement.
RegistrationAgency	Institution/organization officially appointed by a Registration Authority to handle specific tasks within a defined area of responsibility.	DataCite is a Registration Agency for the International DOI Foundation (IDF). One of DataCite's tasks is to assign DOI prefixes to the allocating agents who then assign the full, specific character string to data clients, provide metadata back to the DataCite registry, etc.
RegistrationAuthority	A standards-setting body from which Registration Agencies obtain official recognition and guidance.	The IDF serves as the Registration Authority for the International Standards Organization (ISO) in the area/domain of Digital Object Identifiers.
RelatedPerson	A person without a specifically defined role in the development of the resource, but who is someone the author wishes to recognize.	This person could be an author's intellectual mentor, a person providing intellectual leadership in the discipline or subject domain, etc.
Researcher	A person involved in analyzing data or the results of an experiment or formal study. May indicate an intern or assistant to one of the authors who helped with research but who was not so "key" as to be listed as an author.	Should be a person, not an institution. Note that a person involved in the gathering of data would fall under the contributorType "DataCollector." The researcher may find additional data online and correlate it to the data collected for the experiment or study, for example.
ResearchGroup	Typically refers to a group of individuals with a lab, department, or division; the group has a particular, defined focus of activity.	May operate at a narrower level of scope; may or may not hold less administrative responsibility than a project team.
RightsHolder	Person or institution owning or managing property rights, including intellectual property rights over the resource. -	
Sponsor	Person or organization that issued a contract or under the auspices of which a work has been written, printed, published, developed, etc.	Includes organizations that provide in-kind support, through donation, provision of people or a facility or instrumentation necessary for the development of the resource, etc.
Supervisor	Designated administrator over one or more groups/teams working to produce a resource or over one or more steps of a development process.	
WorkPackageLeader	A Work Package is a recognized data product, not all of which is included in publication. The package, instead, may include notes, discarded documents, etc. The Work Package Leader is responsible for ensuring the comprehensive contents, versioning, and availability of the Work Package during the development of the resource.	
Other	Any person or institution making a significant contribution to the development	Could be a photographer, artist, or writer whose contribution helped to publicize the resource (as opposed to creating it), a reviewer of the resource,

	and/or maintenance of the resource, but whose contribution does not “fit” other controlled vocabulary for contributorType.	someone providing administrative services to the author (such as depositing updates into an online repository, analysing usage, etc.), or one of many other roles.
Descriptions		
Type	Abstract	Abstract: A brief description of the resource and the context in which the resource was created. Note: the abstract shall be understandable for a broader scientific community. It may contain a short introduction to the project or method, names the partner/institutions, summary of datasets within the publication (e.g. 7 boreholes reaching depths from 2-14 m” or “This DOI encompasses broadband seismic data from c. 20 stations in Northern Chile, recorded since 2006”), etc. (Recommended for discovery. Use " " to indicate a line break for improved rendering of multiple paragraphs, but otherwise no html markup.)
Type	Methods	The methodology employed for the study or research. (Recommended for discovery.)
Type	Series Information	Information about a repeating series, such as volume, issue, number. For dataset series, use the property “RelatedIdentifier” and describe the relationships with “IsPartOf” or “HasPart”.
Type	Table of Contents	TableOfContents: A listing of the Table of Contents. (Use " " to indicate a line break for improved rendering of multiple paragraphs, but otherwise no html markup.)
Type	TechnicalInfo	Detailed information that may be associated with design, implementation, operation, use, and/or maintenance of a process or system. For software description, this may include the contents of a readme.txt, and necessary environmental information design, implementation, operation, use, and/or maintenance of a process or system. [...] For other uses, this can include specific and detailed information as necessary and appropriate.
Type	other	Other description information that does not fit into an existing category. GFZ Data Services uses this field to provide background information for project and licence information (including copyright statement and disclaimer) for software.
Keywords via thesauri or free keywords		
Keywords →Thesauri	Standardised metadata requires the selection of keywords of different thesauri: NASA GCMD Science Keywords, NASA GCMD Instruments, NASA GCMD Platforms, International Chronostratigraphic Chart (2014), CGI Simple Lithology, and GEMET Thesaurus (to follow INSPIRE Guidelines).	Please select at least one keyword of each thesaurus by either using the tree (access to lower categories by clicking the + to the left of each name, selection of a password by clicking the green “+” to the right) or use the search option to identify appropriate keywords

Scheme	Scheme, Scheme URI, Language	Will be filled automatically, when selecting passwords from a thesaurus
Free Keywords (Subject)	Please enter additional keywords as appropriate	Subject, keyword, classification code, or key phrase describing the resource.
Spatial Coverage		
Spatial Coverage (geoLocation, geoLocationPoint, geoLocationBox, geoLocationPlace)	Spatial region or named place where the data was gathered or about which the data is focused.	It may be a bounding box (lat min, long min, lat max, long max), one or several points (lat min, long min) or a free text description of a place (e.g. North Atlantic). You may enter the coordinates (decimal degrees with at least 4 decimal digits) directly or visually via the map (access via the "edit" symbol to the left)
Dates		
Dates	Created	The date the resource itself was put together; this could refer to a timeframe in ancient history, be a date range or a single date for a final component, e.g. the finalised file with all of the data.
	Embargo until (Available)	The date the resource is made publicly available. Use this field to indicate the end of an embargo period.
	Valid	The date or date range during which the dataset or resource is accurate
	Temporal Coverage	Temporal coverage of time series: starting date, starting time, end date, end time as appropriate. For ongoing surveys please enter only the starting date (and time). For entering the year without further specification, please use the format YYYY, for determining year and month, use YYYY-MM.
Related Work		
Relation	IsCitedBy	indicates that B includes A in a citation
Relation	Cites	indicates that A includes B in a citation
Relation	IsSupplementTo	indicates that A is a supplement to B
Relation	IsSupplementedBy	indicates that B is a supplement to A
Relation	IsReferencedBy	indicates A is used as a source of information by B
Relation	References	indicates B is used as a source of information for A
Relation	IsPartOf	indicates A is a portion of B; may be used for elements of a series
Relation	HasPart	indicates A includes the part B
Relation	IsCompiledBy	indicates B is used to compile or create A
Relation	Compiles	indicates B is the result of a compile or creation event using A
Relation	IsContinuedBy	indicates A is continued by the work B
Relation	Continues	indicates A is a continuation of the work B
Relation	IsVariantFormOf	indicates A is a variant or different form of B. Use for a different form of one thing. May be used, e.g., for different software operating systems or compiler formats.
Relation	IsOriginalFormOf	indicates A is the original form of B. May be used, e.g., for different software operating systems or compiler formats
Relation	IsIdenticalTo	indicates that A is identical to B, for use when there is a need to register two separate instances of the same resource
Relation	IsNewVersionOf	indicates A is a new edition of B, where the new edition has been modified or updated
Relation	IsPreviousVersionOf	indicates A is a previous edition of B
Relation	HasMetadata	indicates resource A has additional metadata B
Relation	IsMetadataFor	indicates additional metadata A for a resource B

Relation	IsDocumentedBy	indicates B is documentation about/explaining A; e.g. points to software documentation or a data report
Relation	Documents	indicates A is documentation about/B; e.g. points to software documentation or a data report
Relation	IsReviewedBy	indicates that A is reviewed by B
Relation	Reviews	indicates that A is a review of B
Relation	IsDerivedFrom	indicates B is a source upon which A is based. IsDerivedFrom should be used for a resource that is a derivative of an original resource. For example, a dataset is derived from a larger dataset and data values have been manipulated from their original state.
Relation	IsSourceOf	indicates A is a source upon which B is based. IsSourceOf is the original resource from which a derivative resource was created. For example, this is the original dataset without value manipulation, and the source of the derived dataset
Type/ relatedIdentifierType	The type of the RelatedIdentifier	From a controlled list
Identifier/ RelatedIdentifier	Identifiers of related resources. These must be globally unique identifiers.	Please enter DOIs without https code, i.e. as "10.5880/GFZ.4.1.2020.001". URLs must be provided as https code.
Funding Reference	GFZ Data Services uses the Crossref Funders Registry	
Funder / funderName	Name of the funding provider	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).
Funder ID/ funderIdentifier	Uniquely identifies a funding entity, according to various types	The Crossref Funders Registry uses DOI. This field will be automatically filled when a Funder is selected.
Funder ID Type/ funderIdentifierType	The type of the funderIdentifier	Controlled List Values: Crossref Funder ID; GRID; ISNI; ROR; Other. GFZ Data Services uses Crossref Funder ID. This field will be automatically filled when a Funder is selected.
Grant Number/ awardNumber	The code assigned by the funder to a sponsored award (grant).	
Grant Name	Free text	