

Samples

TerraLID ID

ID and name: S0 terralid_sample_id

Provided by: TerraLID system

Obligation: mandatory

Occurrences: 1

Definition: The ID of the sample in the TerraLID database.

Allowed values and other constraints: t.b.d.

Example: t.b.d.

1. Sample identifiers

ID and name: S1 sample_identifiers

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Identifiers assigned to the sample.

with the three subproperties:

1.1 Laboratory ID

ID and name: S1.1 sample_id_lab

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The identifier by which the sample was identified in the lab or publication.

Allowed values and other constraints: free text

Example: 2024/02

1.2 Persistent Identifier

ID and name: S1.2 sample_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Persistent identifier(s) assigned to the analysed material.

with the two subproperties:

1.2.1 Value of persistent Identifier

ID and name: S1.2.1 sample_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: A persistent identifier assigned to the analysed material.

Allowed values and other constraints: valid persistent identifier according to [S1.2.2 Type of persistent identifier](#)

Example: 10.60510/ICDP5054ESYI201

1.2.2 Type of persistent identifier

ID and name: S1.2.2 sample_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The type of a persistent identifier that was assigned to the sample.

Allowed values and other constraints: controlled vocabulary

2. Objective of sampling

ID and name: S2 sample_objective

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Short note for which purpose the sample was originally taken.

Allowed values and other constraints: free text

Example: provenance analysis

3. Sampled material

ID and name: S3 sample_material

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The material that was sampled. This may often be the material recorded at [012 Material](#) but can also be different, especially when a heterogeneous material is sampled.

Allowed values and other constraints: controlled vocabulary

4. Sampling location

ID and name: S4 sample_location

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Information about where on the object the sample was taken.

with the two subproperties:

4.1 Description of sampling location

ID and name: S4.1 sample_location_description

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Description of location the sample was taken from.

Allowed values and other constraints: free text

Example: edge of the coin

4.2 Photo of sampling location

ID and name: S4.2 sample_location_photo

Provided by: data provider

Obligation: optional

Occurrences: 0–1

Definition: Photograph of the sample location. File size must be smaller than 2 MB.

Allowed values and other constraints: file path

Example: t.b.d.

5. Sample type

ID and name: S5 sample_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the sampled material.

Allowed values and other constraints: controlled vocabulary

6. Sample weight

ID and name: S6 sample_weight

Provided by: data provider

Obligation: optional

Occurrences: 0–1

Definition: The weight of the sample before analysis.

with the two subproperties:

6.1 Value

ID and name: S6.1 sample_weight_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The value of the weight.

Allowed values and other constraints: decimal number

Example: 3.25

6.2 Unit

ID and name: S6.2 sample_weight_unit

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: SI unit in which the weight is given.

Allowed values and other constraints: controlled vocabulary

7. Sampling method

ID and name: S7 sample_method

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The method used to take the sample.

Allowed values and other constraints: controlled vocabulary

8. Sample condition

ID and name: S8 sample_condition

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The state of the sample after analysis.

Allowed values and other constraints: controlled vocabulary

9. Sampling date

ID and name: S9 sample_date

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Date when the sample was taken.

Allowed values and other constraints: date formatted as YYYY-MM-DD

Example: 2024-02-24

10. Sampling laboratory

ID and name: S10 sample_laboratory

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Name (and address) of the laboratory, in which the sample was taken.

Allowed values and other constraints: free text

Example: Geochemistry laboratory of the University of Dreamland

11. Sample description

ID and name: S11 sample_description

Provided by: data provider

Obligation: optional

Occurrences: 0–1

Definition: Additional information about the sampling process not captured elsewhere.

Allowed values and other constraints: free text

Example: Sample was drilled with diamond-sputtered steel drill.

12. Bulk Pb concentration

ID and name: S12 sample_chemistry_pb

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The bulk lead concentration of the sample.

with the eight subproperties:

12.1 Analytical method

ID and name: B4.1 chemistry_method

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The method used to determine the chemical composition.

Allowed values and other constraints: controlled vocabulary

12.2 Analysed compound

ID and name: B4.2 chemistry_compound

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The analysed chemical compound (chemical element or oxide).

Allowed values and other constraints: controlled vocabulary, not available if a mass spectrometric-method is recorded in B4.1 Analytical method.

12.3 Analysed isotope

ID and name: B4.3 chemistry_icp_isotope

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The isotope used for quantification of a chemical element.

Allowed values and other constraints: controlled vocabulary, only available if a mass spectrometric-method is recorded in B4.1 Analytical method.

12.4 Value

ID and name: B4.4 chemistry_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The concentration of the analysed chemical compound.

Allowed values and other constraints: decimal number

Example: 15.3

12.5 Unit

ID and name: B4.5 chemistry_unit

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The unit in which the concentration of the analysed chemical compound is given.

Allowed values and other constraints: controlled vocabulary

12.6 Uncertainty type

ID and name: B4.6 chemistry_uncertainty_type

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The type of analytical uncertainty.

Allowed values and other constraints: controlled vocabulary

12.7 Confidence level

ID and name: B4.7 chemistry_uncertainty_sigma

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Sigma value of the reported absolute analytical uncertainty.

Allowed values and other constraints: 1, 2, 3

Example: 2

12.8 Uncertainty value

ID and name: B4.8 chemistry_uncertainty_value

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Value of the absolute analytical uncertainty.

Allowed values and other constraints: decimal number

Example: 0.3

13. Sampling person

ID and name: S13 sample_creator

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Information about the person that took the sample.

with the nine subproperties:

13.1 Role

ID and name: B1.1 person_role

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The role in which the person is related to the linked information.

Allowed values and other constraints: controlled vocabulary

Example: Author

13.2 First names

ID and name: B1.2 person_name_first

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–1

Definition: The first and middle name(s) of the person.

Allowed values and other constraints: free text

Example: Jane

13.3 Last Name

ID and name: B1.3 person_name_last
Provided by: data provider, API (ORCID ID)
Obligation: mandatory
Occurrences: 1
Definition: The last name of the person.
Allowed values and other constraints: free text
Example: Doe

13.4 Persistent Identifier

ID and name: B1.4 person_pid
Provided by: data provider
Obligation: recommended
Occurrences: 0–n
Definition: Persistent identifier(s) assigned to the person.

with the two subproperties:

13.4.1 VALUE OF PERSISTENT IDENTIFIER

ID and name: B1.4.1 person_pid_value
Provided by: data provider
Obligation: mandatory
Occurrences: 1
Definition: A persistent identifier assigned to the analysed material.
Allowed values and other constraints: Valid persistent identifier according to B1.4.2 Type of persistent identifier
Example: 0000–0001–2345–678X

13.4.2 TYPE OF PERSISTENT IDENTIFIER

ID and name: B1.4.2 person_pid_type
Provided by: data provider
Obligation: mandatory
Occurrences: 1
Definition: The type of the persistent identifier.
Allowed values and other constraints: controlled vocabulary

13.5 Affiliation name

ID and name: B1.5 person_affiliation_name
Provided by: data provider, API (ORCID ID, ROR ID)
Obligation: mandatory
Occurrences: 1–n
Definition: The name of the person's affiliation.
Allowed values and other constraints: free text
Example: Institute of Time Travels

13.6 ROR ID

ID and name: B1.6 person_affiliation_ror

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The [ROR](#) of the person's affiliation.

Allowed values and other constraints: is valid ROR ID

Example: 09af7gtg53

13.7 Address

ID and name: B1.7 person_affiliation_address

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The address of the person's affiliation.

Allowed values and other constraints: free text

Example: Teleporter Avenue 123, Ankh–Morpok, United States of Humanities

13.8 Mail address

ID and name: B1.8 person_mail

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–n

Definition: The mail address of the person.

Allowed values and other constraints: is valid mail address

Example: jane.doe@timetravels.int

13.9 Website

ID and name: B1.9 person_url

Provided by: data provider, API (ORCID ID)

Obligation: optional

Occurrences: 0–1

Definition: The URL of a person.

Allowed values and other constraints: is valid URL

Example: [https://www.timetravels.int/members/jane–doe](https://www.timetravels.int/members/jane-doe)

14. Sample status

ID and name: S14 sample_status

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Information about the current status of the sample and how to access it.

with the two subproperties:

14.1 Institution

ID and name: B2.1 status_institution

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The institution at which the material is located.

with the five subproperties:

14.1.1 NAME

ID and name: B2.1.1 status_institution_name

Provided by: data provider, API (ROR ID)

Obligation: mandatory

Occurrences: 1

Definition: Name of the institution.

Allowed values and other constraints: free text

Example: Institute of Time Travels

14.1.2 ROR

ID and name: B2.1.2 status_institution_ror

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: [ROR](#) of the institution.

Allowed values and other constraints: is valid ROR ID

Example: 09af7gtg53

14.1.3 ADDRESS

ID and name: B2.1.3 status_institution_address

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Address of the institution.

Allowed values and other constraints: free text

Example: Teleporter Avenue 123, Ankh–Morpok, United States of Humanities

14.1.4 STORAGE LOCATION

ID and name: B2.1.4 status_institution_location

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Location of the item within the institution.

Allowed values and other constraints: free text

Example: Archive 9, shelf 3, box 1

14.1.5 CONTACT

ID and name: B2.1.5 status_institution_contact

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Contact information for inquiries about the material. This may include, for example, a mail address or phone number of the respective department within the institution or the identification of a specific contact person as well as constraints on the availability of the point of contact such as opening hours.

Allowed values and other constraints: free text

Example: t.b.d.

14.2 Accessibility

ID and name: B2.2 status_accessibility

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Is the material accessible to other researchers and do restrictions apply?

Allowed values and other constraints: controlled vocabulary

15. Relations

ID and name: S15 sample_relation

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Information about related entities, including analysis made on the sample, and other research output such as publications providing relevant information about the sample. This includes any literature from which information about the sample was extracted.

with the five subproperties:

15.1 Persistent Identifier

ID and name: B5.1 relation_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The persistent identifier or TerraLID ID associated with a resource or related research output. If referring to another entity in the TerraLID database, the TerraLID identifier must be used.

with the two subproperties:

15.1.1 VALUE

ID and name: B5.1.1 relation_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Value of the persistent identifier or TerraLID ID.

Allowed values and other constraints: valid persistent identifier according to the options listed in B5.1.2 Type .

Example: 10.60510/ICDP5054ESYI201

15.1.2 TYPE

ID and name: B5.1.2 relation_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the identifier.

Allowed values and other constraints: controlled vocabulary

15.2 Full reference

ID and name: B5.2 relation_text

Provided by: data provider, API (DOI)

Obligation: recommended

Occurrences: 0–1

Definition: The full reference of a publication.

Allowed values and other constraints: free text

Example: Palinkaš, L. A., 1985, Lead isotope patterns in galenas from some selected ore deposits in Croatia and NW Bosnia, Geološki Vjesnik, 38, 175–89.

15.3 Kind of relation

ID and name: B5.3 relation_kind

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Relationship between item and the research output.

Allowed values and other constraints: controlled vocabulary

15.4 Type of resource

ID and name: B5.4 relation_resource

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Type of resource or research output.

Allowed values and other constraints: controlled vocabulary

15.5 Additional details

ID and name: B5.5 relation_detail

Provided by: data provider

Obligation: optional

Occurrences: 0–n

Definition: Additional information about the relation, e.g., if the related work addresses a specific aspect of the item (e.g., the geological setting).

Allowed values and other constraints: free text

Example: Information about the dating of the site.