

Recommendations for uploading data

Here is a checklist of information you can include to facilitate findability and reusability of your data in your chosen repository.

Type of object

The type of object you are sharing may influence your choice of repository. Your object may fall into one of the following categories:

- Vertebrate
- Invertebrate
- Plant
- Geological
- Planetary
- Polymer
- Crystalline inorganic material
- Synthetic Composites (e.g. ceramic matrix composite)
- Other (please describe)

Preparation type

May vary widely depending on the type of object

- Dry
 - Skeletal
 - Dried (i.e. entomological specimens)
- Fluid
 - Include details about storage solution
- Any notable damage (This can be useful to know in case the region of interest is damaged or missing)
 - Dissection performed
 - Visible broken or damaged anatomy
 - Missing parts
- Preservation history (often unknown but is useful to have)
 - Was the specimen frozen or subject to multiple freeze/thaw cycles?
 - How was the specimen fixed?
- Processing Method/Conditions
 - Additive Manufacturing
 - Extrusion
 - Tape Casting

Contrast enhancing treatment

- Staining agent used, may include:
 - lodine
 - PTA
 - PMA



- Ruthenium Red
- Sudan Black
- Osmium tetroxide
- Perfusion contrast enhancing treatments, examples include:
 - Barium injections
 - SpiceCT
 - BriteVu
 - Scarlet tissue stain
 - Angiofil
 - Nanofil
- Other details on staining solutions (e.g. was solution aqueous or ethylic, was a pH buffer added?)
- Concentration of staining agent
- Duration in staining solution

Record of object

- Institution
- Department/division
- Catalog number
- Link to record in database (e.g. institutional database, Specify, iDigBio)
- Details about object collection (may be included in object record)
 - Locality data
 - Collection date
 - Whether tissues were sampled
 - A contact person for that specimen (e.g. lab manager/curator/collection manager)
- Object dimensions
 - For biological objects, may include body weight, body length, etc.
 - For non biological objects, may include width, depth, height, and weight.

Scan/subscan

What part of the object was scanned? Examples include:

- For biological specimens
 - Whole body
 - Head
 - Appendage
 - Dissected body part
 - Disarticulated bones
- For non-biological specimen
 - Whole object
 - Subsection of object (describe region of interest)

Note: while voxel size should be included in scan metadata, it can also be helpful to share it here, so that users can get an idea of the resolution of the object/subscan of the object.