## Reliquaries at DataCite

Martin Fenner, DataCite Technical Director





#### Reliquary (reh·luh·kweh·ree)

- Wikipedia: A reliquary (also referred to as a shrine) is a container for relics.
- Data Citation Community of Practice: an object collection where the collection can contain datasets, software, papers, etc.



#### Reliquaries in DataCite Metadata

- Dataset: Data encoded in a defined structure
- 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.



# Properties of a DataCite Collection (Reliquary)

- Typically organized around a theme (e.g. data and software used in an analysis, a large composite dataset describing a geographic region, a collection of a type of measurement, etc.)
- Has a unique identifier and well-defined citation components.
- Each object in the reliquary has a unique identifier within the reliquary (ideally a globally unique identifier).
- Each object in the reliquary has descriptive metadata providing, at a minimum, information needed to cite the object individually if needed.
- The type and role of objects in the reliquary can be designated from well defined vocabularies.



The reliquary appears in the reference section of a paper and each citation of the reliquary should indicate what subset of the reliquary is being cited if it is not the whole reliquary.

- The model for citing parts of a work that is common e.g. for books (specifying a chapter and/or page range) appears brittle for a collection with no natural structure.
- Rather, subsets of a reliquary should be cited using their respective unique identifiers and metadata.
- Dynamic data citation (following the RDA guidelines) can be used for complex subsets.



### Force 11 Data Citation Principles

- 2. Credit and Attribution. Data citations should facilitate giving scholarly credit and normative and legal attribution to all contributors to the data, recognizing that a single style or mechanism of attribution may not be applicable to all data.
- 7. Specificity and Verifiability. Data citations should facilitate identification of, access to, and verification of the specific data that support a claim. Citations or citation metadata should include information about provenance and fixity sufficient to facilitate verifying that the specific timeslice, version and/or granular portion of data retrieved subsequently is the same as was originally cited.

Tracking of primary citation credit for objects in a reliquary is possible without additional help from the entity that created the reliquary. In addition, access to an object in the reliquary can be accomplished from the description of the object contained in the reliquary.

- Citation credit for citations of the reliquary or its contents should be aggregated around the reliquary.
- In the long run more fine-grained tracking of credit should be possible, including citations of specific parts and/or versions, and specific contributor roles.

