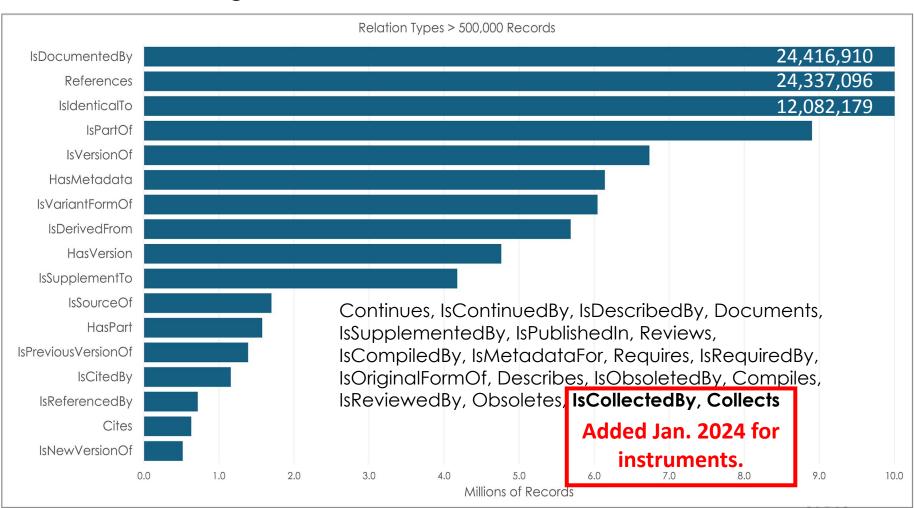
Connecting PIDs (9/25)

Ted Habermann, Metadata Game Changers



A DOI provider and identifier metadata repository encompassing ~3000+ members.

DataCite includes over 95,000,000 resources with 28 different types and 36 relation types.



https://datacite.org/

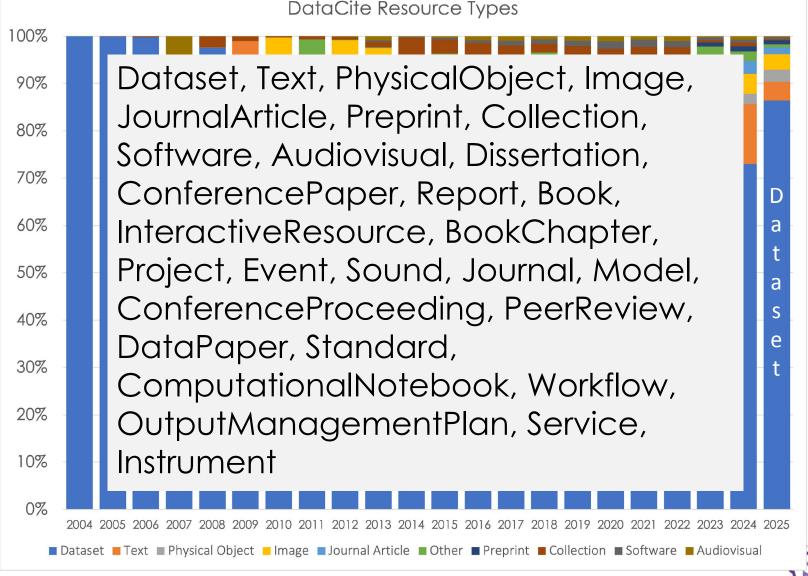
ted@metadatagamechangers.com erin@metadatagamechangers.com https://orcid.org/0000-0003-3585-6733 https://orcid.org/0000-0001-9998-0114



Resource Type History

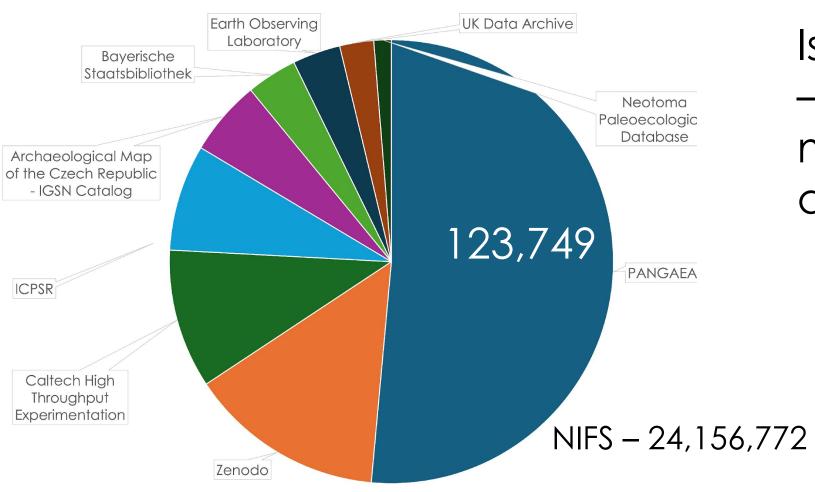
How Many When (2025 Update): Dataset Bright Spot in the Driver's Seat

Scaling for Impact: How NIFS and DataCite Are Advancing Global Discoverability of Japanese Research





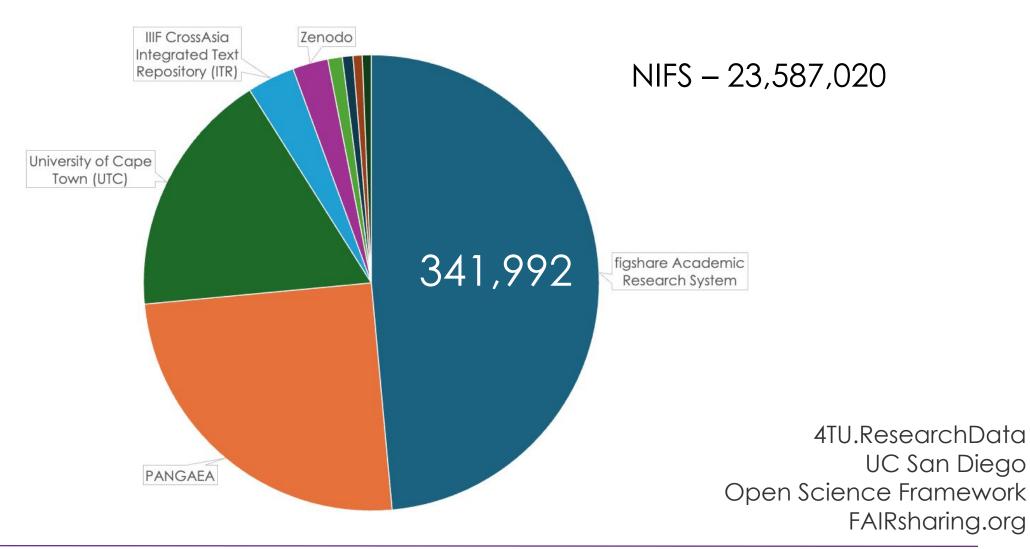
IsDocumentedBy = 24,397,308



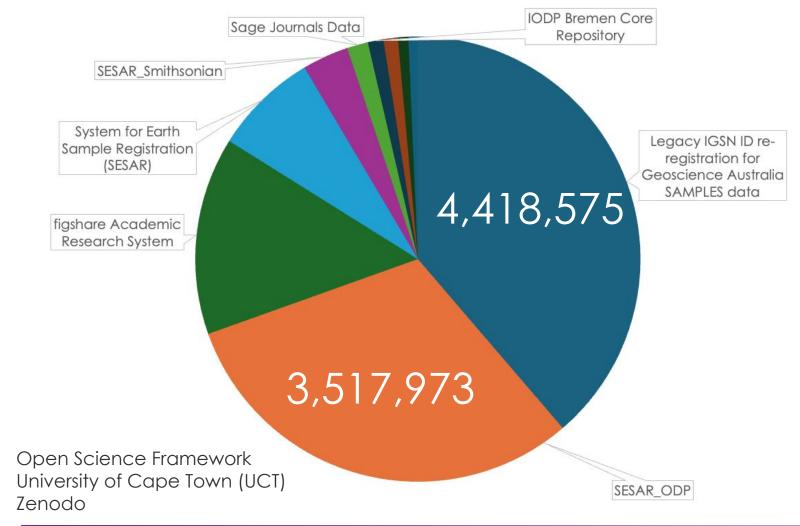
IsDocumentedBy
– connecting
metadata to
documentation



References = 24,291,554



IsIdenticalTo = 11,412,723

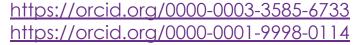


IGSN merged into DataCite and legacy IGSNs were connected to new DOIs using IsldenticalTo

Enriching IGSN

Metadata in DataCite

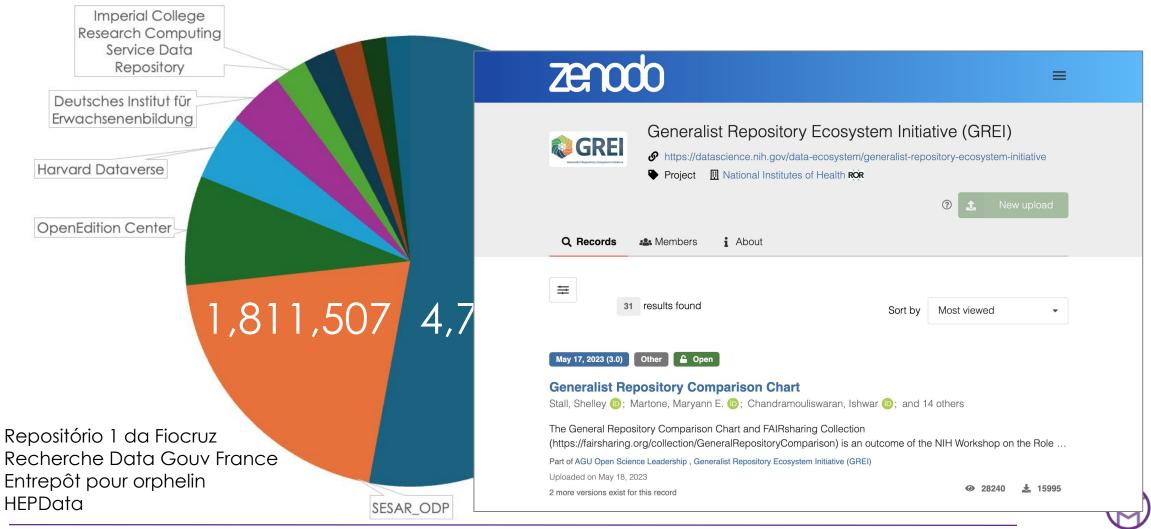








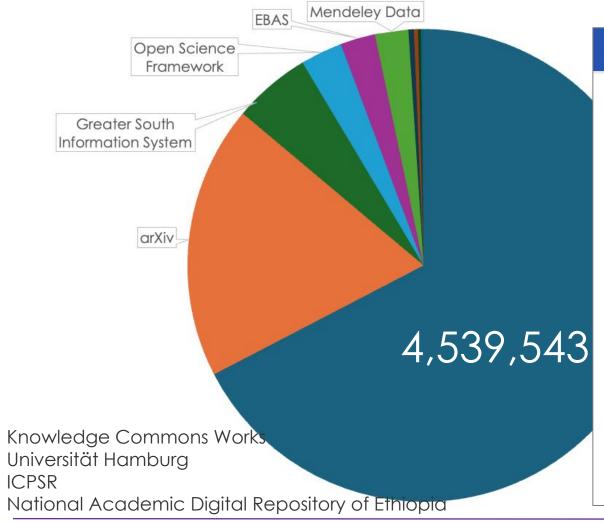
IsPartOf = 8,903,662 Communities



ted@metadatagamechangers.com erin@metadatagamechangers.com https://orcid.org/0000-0003-3585-6733 https://orcid.org/0000-0001-9998-0114



IsVersionOf = 6,737,569



zenodo

DOI versioning

What is DOI versioning?

DOI versioning allows you to:

- edit/update the record's files after they have been published.
- · cite a specific version of a record.
- cite all of versions of a record.

How does DOI versioning work?

When you publish an upload for the first time, we register two DOIs:

- a DOI representing the specific version of your record.
- a DOI representing all of the versions of your record.

Afterwards, we register a DOI for every new version of your upload.

This is best illustrated by an example of a software package. If the software has been released in two versions (v1.0 and v1.1), then the following DOIs would have been registered:

- v1.0 (specific version): 10.1234/7s0da-05p39
- v1.1 (specific version): 10.1234/chc5z-w0r30
- Concept (all versions): 10.1234/3s67k-pd636

The first two DOIs for versions **v1.0** and **v.1.1** represent the specific versions of the software. The last DOI represents all the versions of the given software I only want to change the title of my upload, do I still get a new DOI?

=

No, you can continue to edit the metadata of your upload without creating a new version of a record. You should only create a new version if you want to update the files of your record.

Why don't the DOIs have a version number suffix like ".v1"?

Including semantic information such as the version number in a DOI is bad practice, because this information may change over time, while DOIs must remain persistent and should not change.

Moreover, DOI versioning is linear, which means that the version number may in fact not be the real version number of the resource. Take for instance software, where it is common practice to have dot versions and make new releases in a non-linear order (e.g. first v1.0, then v1.1, then v2.0, then v1.2).

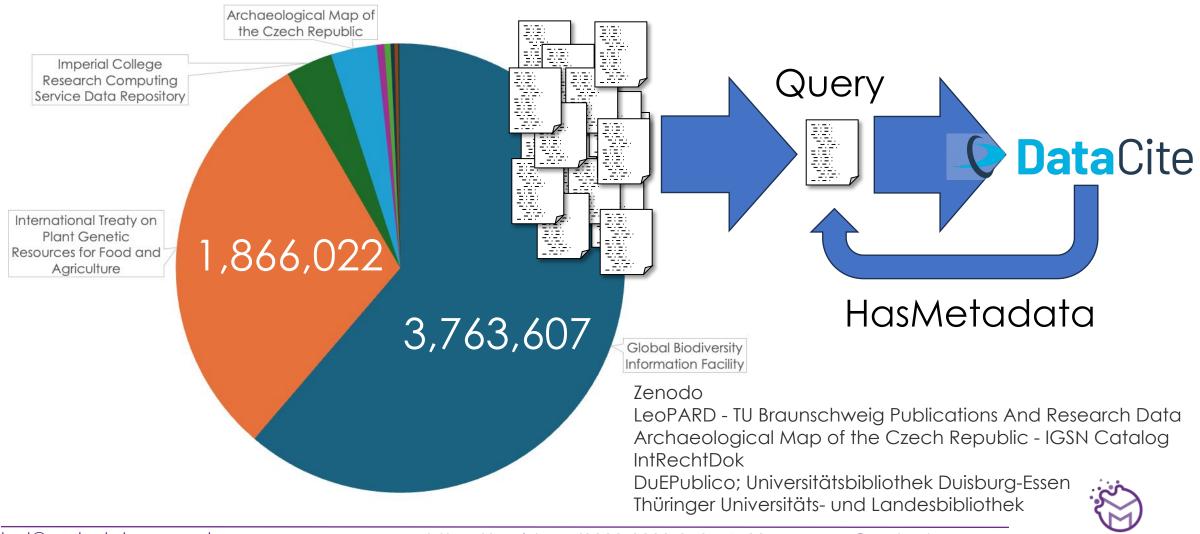
The versioning suffix is also not a functionality of the DOI system, i.e. adding .v2 to a DOI will not resolve to version 2 of a resource for any DOI from any provider. Different providers also use different patterns such as e.g. .v2, .2, /2.

Most importantly, version suffixes are not machine readable. A discovery system that understands DOIs, will not know that .v1 and .v2 of a DOI are in fact two versions of the same resource.

ted@metadatagamechangers.com erin@metadatagamechangers.com https://orcid.org/0000-0003-3585-6733 https://orcid.org/0000-0001-9998-0114



HasMetadata = 6,143,604



ted@metadatagamechangers.com erin@metadatagamechangers.com https://orcid.org/0000-0003-3585-6733 https://orcid.org/0000-0001-9998-0114



International Treaty on Plant Genetic Resources for Food and Agriculture fao.itpgrfa

```
"schemeUri": "http://www.fao.org/plant-treaty/areas-of-work/global-information-system/descriptors", "schemeType": "XML",
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"relationType": "HasMetadata",

"relatedIdentifier": "https://glis.fao.org/glisapi/v1/pgrfas?doi=10.18730/1N4C34",

"related "schemeUri": "http://rs.tdwg.org/dwc/terms/guides/text/index.htm",

related "schemeType": "DwC-A",

relation type: Hasimetaaata,

"relatedIdentifier": "https://glis.fao.org/glisapi/v1/pgrfas?_format=dwc&doi=10.18730/1N4C34",

"relatedIdentifierType": "URL",

"relatedMetadataScheme": "Darwin Core Archive"



Instrument Connections

Two relationTypes were added specifically for instruments during January 2024: IsCollectedBy and Collects

RelationType	Repositories	Count
IsCollectedBy	Radboud Data Repository	49
IsCollectedBy	Space Physics Data Facility	31
IsCollectedBy	Observatoire de Paris	10
IsCollectedBy	Helmholtz-Zentrum Berlin für Materialien und Energie GmbH	2
IsCollectedBy	DOE SLAC National Accelerator Laboratory Repository, ROSA P, Afrischolar Discovery, innsbruck university press	1
Collects	OICC Press Journals	2
Collects	DOE SLAC National Accelerator Laboratory Repository, Platforms, INIST/CNRS Institut de l'Information Scientifique et Technique, PRESSES UNIVERSITAIRES DE GRENOBLE, Leibniz Institute of Ecological Urban and Regional Development, Deutsches Zentrum für Altersfragen (DZA)	1



Metadata Detail @ DataCite

resourceTypeGeneral = Instrument

identifier = DOI and alternatives

resourceType = Instrument Type

title = Instrument name

alternativeTitle = acronym

description = TechnicalInfo

description = Abstract

Description Detail Increases

relatedIdentifier = DescribedBy

relatedIdentifier = HasPart / IsPartOf

Connections - ntifier =

relatedidentifier = HasMetadata

relatedIdentifier = IsVersionOf

References / IsCitedBy

relatedIdentifier =
Collects /
IsCollectedBy

contributor = HostingInstitution

Contributors

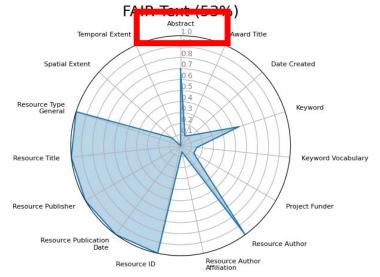
Contributor = DataCollector

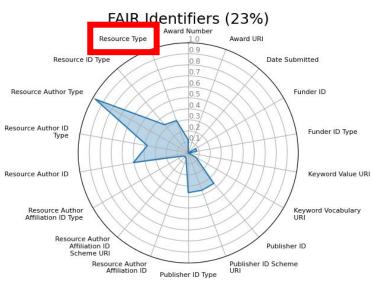
contributor = Sponsor (in kind)

funderReference Funders

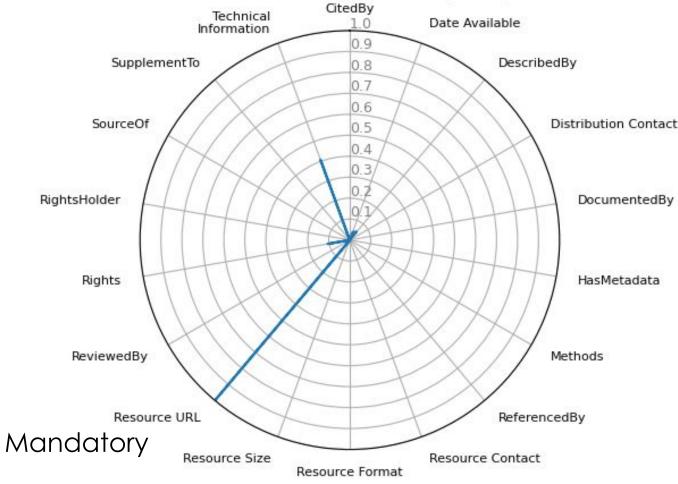
awardTitle awardNumber

Instrument Metadata (368 records)









https://orcid.org/0000-0003-3585-6733 https://orcid.org/0000-0001-9998-0114



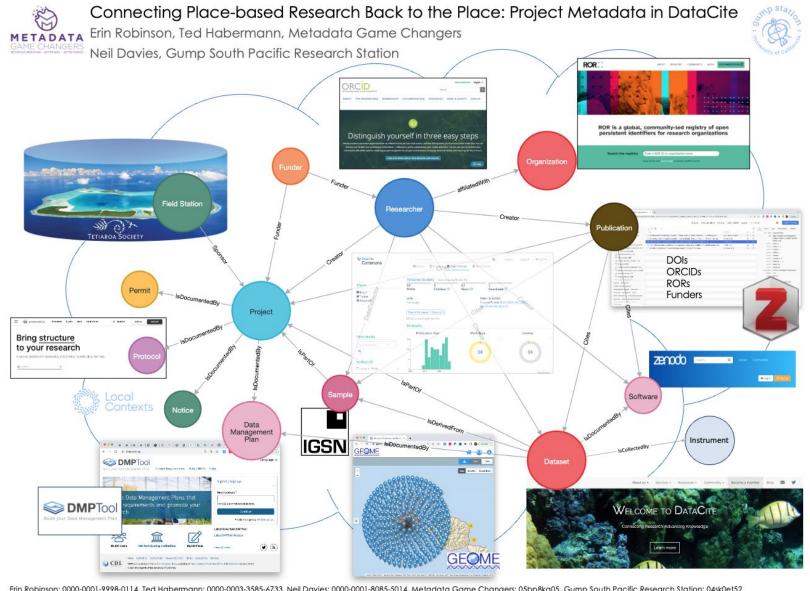
Resource Types (full text):

36 resourceTypes are used 115 times in 368 records (253 records without resourceType). The two most common resourceTypes are Project and Pre-registration (46 / 115)

Resource Type	
Project	29
Pre-registration	17
BER II Beamline	15
ProjectComponent	
BESSY II Beamline	
BESSY II Experimental Station	
Cluster, Atomic force microscope	
Supercomputer, Storage, Tactile 3D coordinate measuring machine, Optical scanner for digital replication of surfaces, Raman microscope	



The Goal: A Connected Information Ecosystem



https://doi.org/10.6084/m9.figshare.236719





Questions?

Recent Work:

- Connecting PIDs in DataCite Metadata
- University and College Connectivity @ DataCite
- BrightSpots Get Brighter
- The Global Research Infrastructure and the NSF Public Access Repository
- <u>FAIR DataCite Metadata University and College Bright Spots</u>
- Funder Acronyms Are Still Not Enough

Work with us on:

- Repository Re-Curation
- Repository and Journal Connectivity
- FAIR Metadata evaluation and improvement
- Community building strategy
- International Metadata Standards (ISO, DataCite, schema.org)
- Workshop design and facilitation
- Community conventions / profiles
- Leadership coaching



Your Repository Insights!

ted@metadatagamechangers.com

erin@metadatagamechangers.com