

zenodo

and Software

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CERN - IT Department



Alfred P. Sloan
FOUNDATION

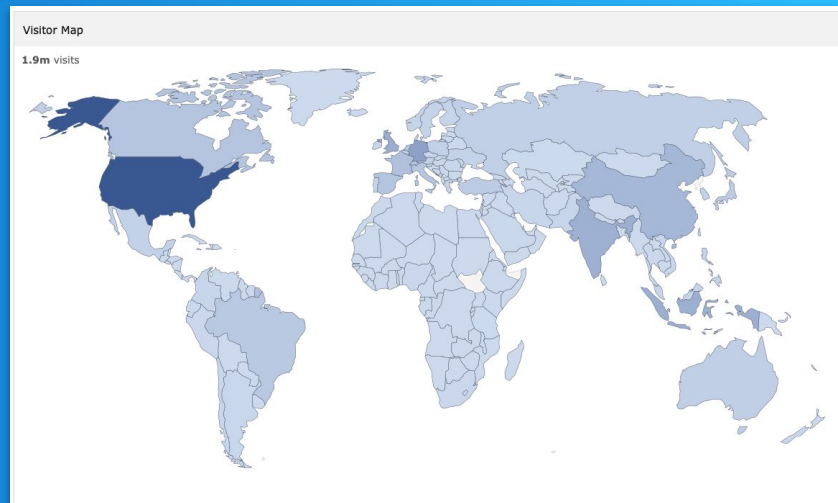


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Zenodo in numbers

- ~1.5M records
 - 800k text
 - 500k images
 - **70k software**
 - 55k datasets
- 145TB data, ~3M files
- 1.4M visitors/year



A screenshot of the Zenodo website interface. The top navigation bar is blue with the Zenodo logo, a search bar, and links for 'Upload' and 'Communities'. A user profile dropdown for 'a.ioannidis@cern.ch' is visible on the right. The main content area features a 'Recent uploads' section with a card for 'Colour 0.3.14' (Software, Open Access) by Mansencal, Thomas; Mauderer, Michael; Parsons, Michael; Shaw, Nick; Wheatley, Kevin; Cooper, Sean; Vandenberg, Jean D.; Canavan, Luke; Crowson, Katherine; Lev, Ofek; Leinweber, Katrin; Sharma, Shriramana; Sobotka, Troy James; Moritz, Dominik; Pppp, Matt; Rane, Chinmay; Eswaramoorthy, Pavithra; Mertic, John; Pearlstone, Ben; Leonhardt, Manuel. The card includes a 'View' button and a description of the software. To the right of the card are two promotional boxes: 'Zenodo now supports usage statistics!' with a link to a blog post, and 'Using GitHub?' with a link to GitHub integration. Below these is a 'Zenodo in a nutshell' section with the tagline 'Research. Shared. - all research outputs'.

GitHub integration

- Launched in 2016
- ~30k repositories integration
- ~60k releases archived
- “.zenodo.json” file for overriding metadata
- Two weeks to implement...
 - ...countless hours of addressing/discussing special use-cases with users

Making Your Code Citable
10 minute read

Digital Object Identifiers (DOI) are the backbone of the academic reference and metrics system. If you're a researcher writing software, this guide will show you how to make the work you share on GitHub citable by archiving one of your GitHub repositories and assigning a DOI with the data archiving tool Zenodo.

ProTip: This tutorial is aimed at researchers writing software. If you're a researcher writing software, this tutorial can be used to make your software citable. If you haven't yet done so, uploading your work to a repository is the first step.

zenodo-testing/my-project
DOI: 10.5072/zenodo.147412

GitHub / Releases
1.0.14 zenodo-testing/my-project: test
DOI: 10.5072/zenodo.147412
Published 1 year, 11 months ago

CoBMo - Control-oriented Building Model
November 13, 2019
Sebastian Troitzsch, Tormaso Miori, Anthony Vautrin
New features:
• Demand side flexibility evaluation.
• Data reference section in documentation.

Files (2.4 MB)

Name	Size
coBMo-0.3.0.zip	169 Bytes
gltignore	1.1 kB
LICENSE	1.3 kB
README.md	1.3 kB
coBMo	
__init__.py	0 Bytes
building.py	228.2 kB
config.py	1.0 kB
controller.py	17.6 kB
database_interface.py	2.1 kB
database_schema.sql	6.3 kB
plots.py	5.4 kB
utils.py	13.7 kB
data	
building Blind types.csv	48 Bytes
building hvac_ahtypes.csv	555 Bytes
building hvac_generic_types.csv	99 Bytes
building hvac_tu_types.csv	212 Bytes
building internal gain timeseries.csv	1.6 MB

27 views
1 download
See more details...

Available in
GitHub

Publication date:
November 13, 2019
DOI:
10.5072/zenodo.3249327

Related identifiers:
Supplement to
<https://github.com/TUMCREATE-ESTL/cobmo/tree/0.3.0>

License (for files):
CPM MIT License

Versions

Version	Date
Version 0.3.0	Nov 13, 2019
10.5072/zenodo.354	0372
Version 0.3.0	Oct 31, 2019

DOI Versioning

- Launched in 2017
- Introduces a Concept DOI
 - Always points to the latest version
 - Has metadata links for all versions
- Automatically done via the GitHub integration
- Usage statistics (views, downloads) tracked individually and across all versions

Zenodo now supports DOI versioning!

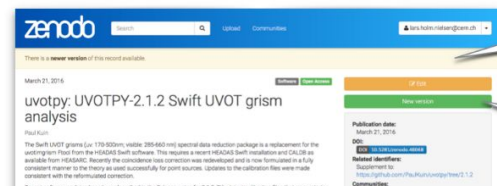
by Lars Holm Nielsen on May 30, 2017

We are pleased to announce the launch of DOI versioning support in Zenodo - the open research repository from OpenAIRE and CERN. This new feature enables users to update the record's files after they have been made public and researchers to easily cite either specific versions of a record or to cite, via a top-level DOI, all the versions of a record.

DOI versioning support was one of our most requested features for Zenodo, and it has been co-developed by OpenAIRE's Zenodo team and EUDAT's B2SHARE team as an extension module for CERN's Invenio digital repository platform, which powers both Zenodo and B2SHARE.

This update comes hot on the heels of the recent relaunch which made Zenodo faster, improved GitHub integration, integrated support for Horizon 2020 grant information, and enabled 50 gigabyte uploads!

Read more about the inner workings of new feature in the DOI Versioning FAQ.



Alert if newer version is available

Create a new version

Versions

Version v0.9.0	Jul 16, 2018
10.5281/zenodo.1313201	
Version v0.8.1	Sep 3, 2017
10.5281/zenodo.883859	
Version v0.8.0	Jul 8, 2017
10.5281/zenodo.824567	
Version v0.7.1	Jun 5, 2016
10.5281/zenodo.54844	
Version v0.7.0	Jan 25, 2016
10.5281/zenodo.45133	

[View all 8 versions](#)

Cite all versions? You can cite all versions by using the DOI [10.5281/zenodo.592845](https://doi.org/10.5281/zenodo.592845). This DOI represents all versions,

4,242 views
3,929 downloads

[See more details...](#)

	All versions	This version
Views	4,242	2,854
Downloads	3,929	3,816
Data volume	5.0 TB	4.8 TB
Unique views	4,074	2,793
Unique downloads	337	258

[More info on how stats are collected.](#)

Tweeted by 6

The Asclepias project

- Funded by the Sloan Foundation, to improve software citation across Astronomy



Alfred P. Sloan
FOUNDATION

The PID buffet problem

- Triangle.py
 - 10.5281/zenodo.10598
 - 10.5281/zenodo.11020
- Corner.py
 - 10.5281/zenodo.45906
 - 10.5281/zenodo.53155
 - 10.5281/zenodo.591491 (Concept)
- JOSS
 - 10.21105/joss.00024
- ASCL (Astronomy Source Code Library)
 - <https://ascl.net/1702.002>

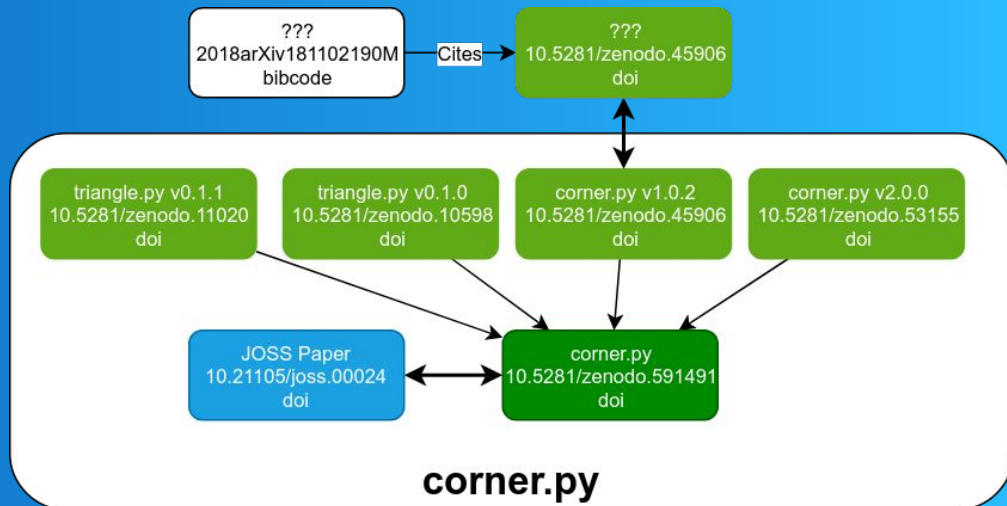
corner.py

build passing coverage 87% license BSD DOI 10.5281/zenodo.53155 JOSS 10.21105/joss.00024

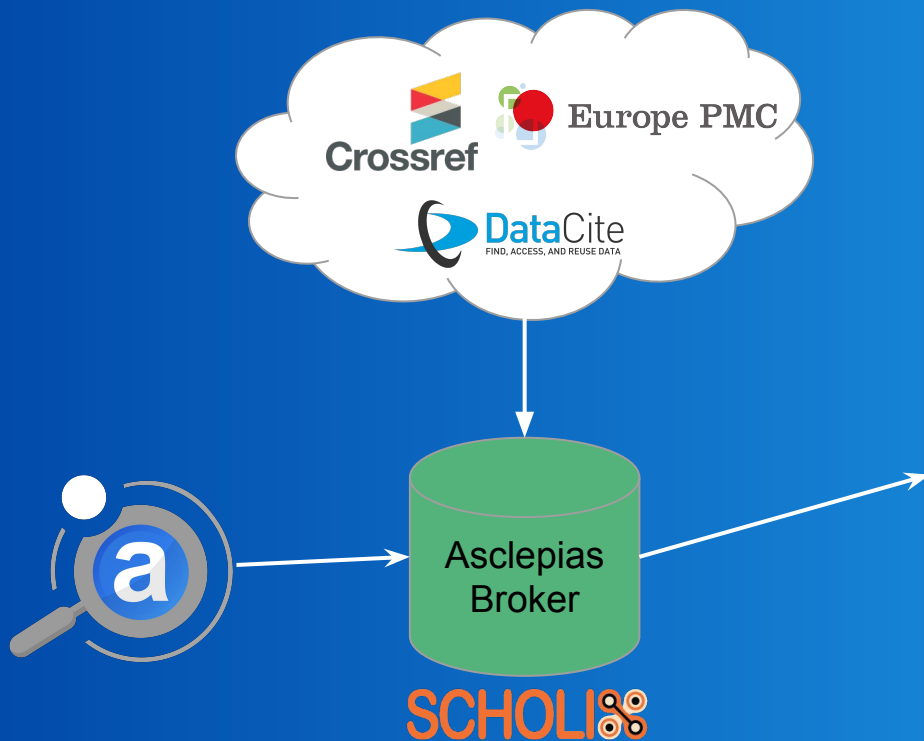
Read [the documentation](#).

If you make use of this code, please cite [the JOSS paper](#):

```
@article{corner,  
  Author = {Daniel Foreman-Mackey},  
  Doi = {10.21105/joss.00024},  
  Title = {corner.py: Scatterplot matrices in Python},  
  Journal = {The Journal of Open Source Software},  
  Year = 2016,  
  Volume = 24,  
  Url = {http://dx.doi.org/10.5281/zenodo.45906}  
}
```



The Asclepias citation broker



Beta Citations 162

Show only: ☐ Literature (160) ☐ Unknown (2) ☐ Dataset (0) ☐ Software (0) ☐ Citations to this version

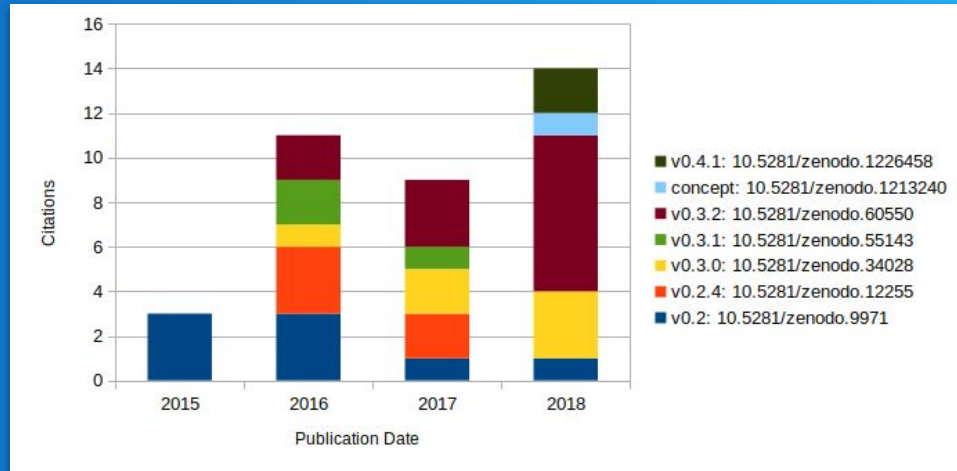
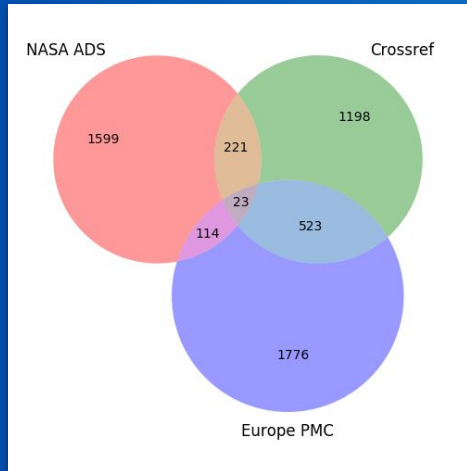
Search

	Spectral Energy Distribution of the inner accretion flow ar... Ma, Ren-Yi et al. (DOI: 10.1093/mnras/sty3039)	2018	ADS ARXIV DOI	
	Exploring the Origins of Earth's Nitrogen: Astronomical Obs... Rice, Thomas S. et al. (DOI: 10.3847/1538-4357/aadfdb)	2018	ADS ARXIV DOI	
	Eclipsing Binaries in the Open Cluster Ruprecht 147. I. EPI... Torres, Guillermo et al. (DOI: 10.3847/1538-4357/aadca8)	2018	ADS ARXIV DOI	
	Free-form modelling of galaxy clusters: a Bayesian and data... Olamaie, Malak et al. (DOI: 10.1093/mnras/sty2495)	2018	ADS ARXIV DOI	
	Observing the circumgalactic medium of simulated galaxies t... Liang, Cameron J et al. (DOI: 10.1093/mnras/sty1668)	2018	ADS ARXIV DOI	
	Low Metallicities and Old Ages for Three Ultra-diffuse Gala... Gu, Meng et al. (DOI: 10.3847/1538-4357/aabbae)	2018	ADS ARXIV DOI	
	The architecture and formation of the Kepler-30 planetary s... Panichi, F et al. (DOI: 10.1093/mnras/sty1071)	2018	ADS ARXIV DOI	
	Bayesian Analysis of Hot-Jupiter Radius Anomalies: Evidence... Thorngren, Daniel P. & Fortney, Jonathan J. (DOI: 10.3847/1538-3881/aaba13)	2018	ADS ARXIV DOI	
	RadVel: The Radial Velocity Modeling Toolkit Fulton, Benjamin J. et al. (DOI: 10.1088/1538-3873/aaaaa8)	2018	ADS ARXIV DOI	
	Source selection for cluster weak lensing measurements in t... Medezinski, Elinor et al. (DOI: 10.1093/pasj/psy009)	2018	ADS ARXIV DOI	

Zenodo software citations analysis


Practice meets Principle: Tracking Software and Data Citations to Zenodo DOIs ([arXiv pre-print](#))

- How do citation recommendations affect behavior?
- 3.2% of Zenodo software DOIs have open citations
- Ideal vs. Practical implementations
- Cross-domain software citation sources



Future plans - Zenodo clones...

[illegible][illegible]



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Is It Here? There's Yet! - Real Life Experiments of Generating/Evaluating Extreme Data Sets Across the World

[View](#)

[Andrew Chan](#)
[David Auld](#)
[Adam Smith](#)

Large scale simulations easily produce vast amounts of data that cannot always be evaluated in situ. At that point parallel systems come into play, but their data performance is essentially limited to the speed of a USB 3.0 thumb drive. This work shows the latter being faster than all other available I/O providers.

Updated on March 19, 2018

The Official 'Green HPCo'

[View](#)

[David Auld](#)

An unofficial list of HPC systems, compiled from the HPCoC benchmark and TOP500 to order to give an alternative metric for the Green500.

Updated on March 18, 2018

Resilient 1.0, 0.10.0.0.3.2.alpha

[Software](#)
[Green](#)

[View](#)

[C++](#)
[Python](#)
[API for Scientific I/O](#)
[with openPMDF](#)


[David Auld](#)
[David Auld](#)

ROSDARE is an open repository for open data scientific applications in open science. This library provides a common high-level API for openPMDF reading and writing. It provides a common interface to I/O libraries and file formats such as HPCoC and ADIOS. This repository openPMDF app implements both APIs.

Updated on March 13, 2018

More repository exist for this word


ROSDARE Docs



Have a look at the structured documentation and blog system of ROSDARE. We have not been easily really into new features. You will find tutorials here.


[Visit HPCoC provider tool download.](#)

ROSDARE now offers usage statistical



Thanks to the great folks of ROSDARE we are able to provide statistics for recent news and downloads.

[Read the blog post to get more information about the new feature.](#)




ROSDARE

ROSDAREnow data repository

Welcome to Rosdare!


The new data publication platform at H2O2n.

[Read more about Rosdare on our overview page.](#)



hasdai


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**ZENTRUM
FÜR NACHHALTIGES
FORSCHUNGSDATENMANAGEMENT**

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3D-Archivierung einer Grabplatte, Museum für Kunst und Gewerbe, Hamburg

Theopropius, Stefan

Die 3D-Archivierung einer Grabplatte aus dem Museum für Kunst und Gewerbe ist das Ergebnis einer Kooperation des DFG 190 MuseumsführerInnen in Asien, Afrika und Europa, Universität Hamburg und dem Museum für Kunst und Gewerbe. Die 3D-Daten (inkl. der Extraktionen) werden für den...

Updated on November 29, 2018

[Dataset recently used for this record](#)

Recent activity of the FDM Center

- [» Data Management](#)
- [» Research Information Systems](#)
- [» ZIMMER](#)
- [» Newsletter](#)
- [» Publishing Hamburg School of Data Science](#)

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ZfZOM Repository terms of service

[repository.fdm@uni-hamburg.de](#). Da gilt es Support.

[Project file](#) [Data file](#) [Documentation](#) [Export data](#)

Viele viele schöne Kälberchen...

Theopropius, Stefan

Viele viele schöne Kälberchen...

Updated on November 29, 2018


[Dataset recently used for this record](#)

View

The screenshot shows the homepage of the California Institute of Technology Research Data Repository. At the top right, there are links for 'Home' and 'Login'. The main header features the Caltech logo (an orange 'C' with a flame) and the text 'California Institute of Technology Research Data Repository'. Below this is a search bar with the placeholder text 'Search RDR records' and a magnifying glass icon. At the bottom, there are three orange icons representing 'Data Sets' (a document), 'Software' (a gear with a document), and 'Submit' (a document with a plus sign). A blue vertical bar is visible on the left edge of the screenshot.


InvenioRDM

- Turn-key RDM solution
- 12+ partners
- Based on Invenio and Zenodo's current featureset
 - DataCite-based metadata schema
 - DOI Versioning
 - GitHub integration



The turn-key research data management repository

🚀 Launching in the summer 2020



BROOKHAVEN
NATIONAL LABORATORY

Caltech Library

CERN

NATIONAL CENTER
FOR DATA TO HEALTH

data futures

HZDR
HELMHOLTZ
ZENTRUM DRESDEN
ROSSENDORF

NORTHWESTERN
UNIVERSITY

OpenAIRE

TIND

ULAKBIM

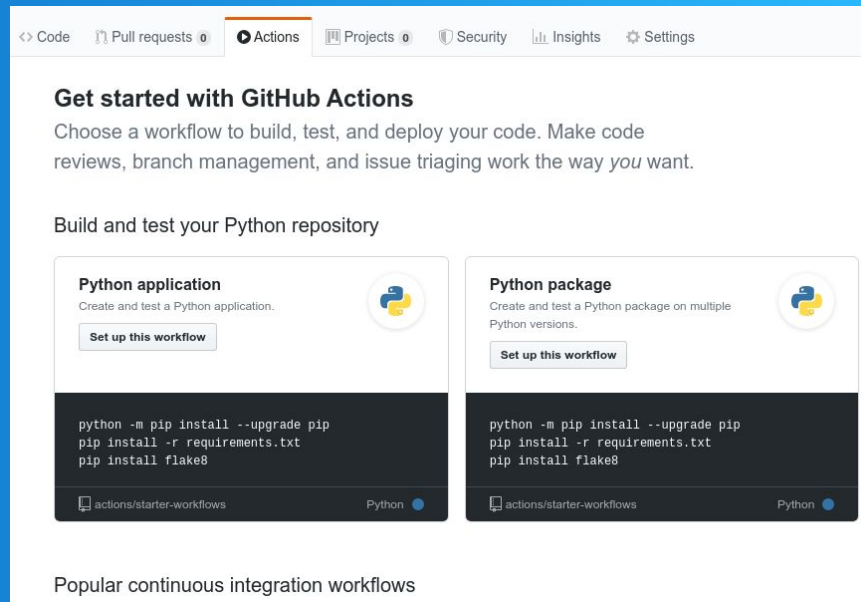
TU
Graz

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

WWU
MÜNSTER

Future plans - GitHub Actions and more

- Zenodo GH integration vs. GitHub Action
 - Better DOI and metadata integration in the repository/code/release
 - More flexibility for managing metadata (e.g. use CodeMeta)
- Uniform software citation recommendation
 - Automatic PRs to README.md with BibTex/CFF



Thank you :)

Questions, comments?