

Abstract

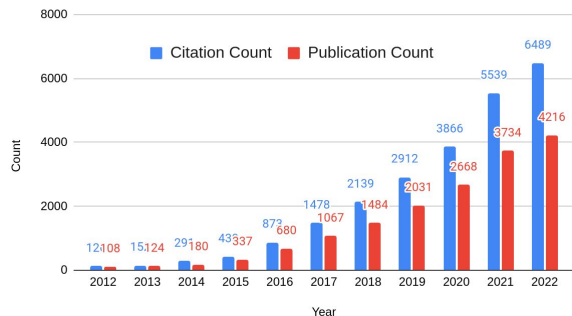
- The Earth Observing System Data and Information System (EOSDIS) began registering dataset Digital Object Identifiers (DOIs) in 2012.
- As of January 2023, there are more than 11,000 dataset DOIs registered.
- By citing datasets by DOI, automated methods can be used to collect published works from a wide range of bibliometric databases.
- Presented is an automated workflow for collecting citations and methods for accessing the resulting library of citations.
- Also presented are temporal trends of publication counts obtained from a variety of bibliometric sources.

Dataset DOI Citation Statistics [2012-2022]

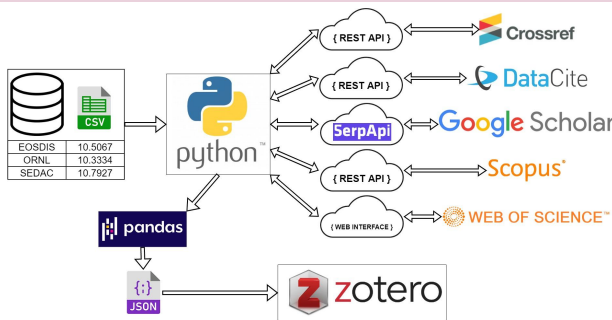
Methodology: Search [Web of Science](#), [Scopus](#), [Crossref](#), [Google Scholar](#) and [DataCite](#) for publications referencing each of EOSDIS dataset DOIs. Retain only citations of books, journal articles, conference papers, dissertations, and reports (exclude Web pages, pre-prints, discussions, works without DOI, etc).

- Count of searched EOSDIS DOIs: **11,089**
- Total count of unique publications found: **17,093**
- Count of EOSDIS DOIs cited at least once: **3,012**
- Total count of dataset citations in publications: **24,925**

Total Dataset Citation and Publication Count by Year



Publication Citation Collection Flowchart

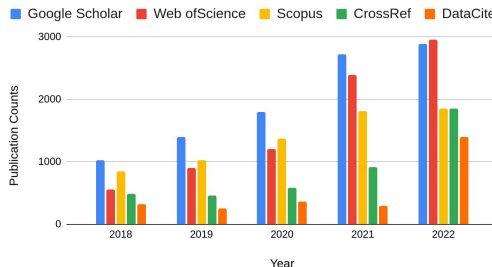


In the last five years, the numbers of publications obtained from each bibliometric source show the following trends:

- CrossRef publication counts reached Scopus counts in 2022 increasing twofold compared to 2021.
- As compared to 2021, DataCite publication counts increased fivefold in 2022.
- For earlier years, Web of Science publication counts were lower than Scopus counts, but in 2021 they exceeded Scopus counts and in 2022 reached Google Scholar counts.

Bibliometric sources return a portion of unique publications not found in other sources. The total number of publications obtained in 2022 is 4,216, contributed by Google Scholar (2,832), Web of Science (2,887), Scopus (1,818), CrossRef (1,835) and DataCite (1416).

Publication Counts Obtained from Bibliometric Sources



Accessing Citation Library from Zotero

Citation library is publicly accessible from an open source Zotero citation manager:

https://www.zotero.org/groups/4567966/eosdis_dcilibrary

zotero

Groups Documentation Forums Get Involved

Other Group Libraries	Title	Creator	Year
EOSDIS_DCILibrary			
All DAACs	Catastrophic ice-debris flow in the Rishiga...	Pandey et al.	2022
ASDC	Multi-spatiotemporal heterogeneous legac...	Lian et al.	2022
ASF	Updated trends of water management pra...	Ranghetti a...	2022
CCDIS	Development of earth observational diagn...	Park et al.	2022
GES DISC	Evaluation of MODIS-Landsat and AVHR...	Rustanto an...	2022
GHRC	Spatiotemporal inhomogeneity of total col...	Park et al.	2022
LAADS	Evaluating spatial accessibility to healthca...	Jiao et al.	2022
LP DAAC	A stacking ensemble algorithm for improvi...	Zhang et al.	2022
NSIDC	Estimation of the total dry aboveground bi...	Migolet et al.	2022
OB.DAAC	Risk assessment of rainstorm disasters in ...	Wang et al.	2022
ORNL	Digital mapping of soil organic carbon stoc...	Duarte et al.	2022
PO.DAAC	A method for reconstructing NDVI time-ser...	Liu et al.	2022
SEDAC	Mathematical vector framework for gravity...	Hu et al.	2022

Zotero library content can be filtered by tags associated with each publication:

Info Notes **Tags** Attachments Related

8 tags Add Tag

- ☐ DAAC:GES DISC
- ☐ DAAC:LP DAAC
- ☐ db:crossref
- ☐ db:datacite
- ☐ db:google
- ☐ db:wos
- ☐ doi:10.5067/9SQ1B3ZXP2C5
- ☐ doi:10.5067/MODIS/MOD13Q1.006

- Name of the EOSDIS Data Active Archive Center (DAAC), which hosts dataset whose DOI is linked to this publication.
- Name of the bibliographic source this publication was acquired from.
- Dataset DOI linked to this publication.

Future Work

Future work may include collaboration among EOSDIS DAACs on validation and expanding the citation library, depositing obtained linkages to DataCite, using the citation library for AI/machine learning and dataset discovery applications.