**DOI Tool**

This space provides general information about the USGS Digital Object Identifier (DOI) Tool, including help documentation, announcements of updates and improvements, and a community forum for questions and answers about the tool and the standard it supports.

**Latest Updates and Improvements**

**Latest Release Date:** 1 April 2020 (Release 5.0.0)

Improvements, Modifications, and New Features:

- **Related Identifiers**
  - If a related identifier exists for your DOI, it will now be apparent to you in your Dashboard view of your records (both your own DOIs in your My DOIs tab, and in the results of queries in the Search tab). A new column on the far left of the Dashboard, ‘Related Identifiers,’ will have a toggle icon in the column if one or more related identifiers have been captured for your DOI. Click on the toggle to see the related DOIs and their relationship type to your data release DOI. They will also be visible in the Supplemental Information tab if you open your DOI for editing. Please don't delete these citations if you are editing your own record!
  - Related Identifiers include those provided directly by you - e.g., the DOI to your related primary publication released on/near the publication of your data release - as well as downstream citations of your data in other publications or data releases, that are being mined and pushed as updates into your DOI record (see the 4 December update below for more information about this process).
  - These citations will be included in the record views in the new USGS Science Data Catalog that is scheduled for release in Fall 2020.

**Latest Release Date:** 4 December 2019 (Release 4.8.0)

Improvements, Modifications, and New Features:

- **Improvements to USGS Author Entry**
  - USGS author entry is now separate from non-USGS author entry
    - All USGS authors can be looked up and selected from the Active Directory USGS lookup for addition to a record in a single pass.
    - Authors can be added from the Active Directory lookup even if they don't have an associated ORCid (but remember, USGS FSP Policy requires all publishing authors to have an ORCid. See the FAQ section for help regarding adding an ORCid to an Active Directory profile!)
    - The affiliation "United States Geological Survey" is added for each USGS author automatically

- **Related Identifiers**
  - We are now running a citation mining script to search for downstream citation of DOIs associated with USGS data releases. Published citations of our DOIs in downstream publications will be captured, and the DOI from that downstream publication will be linked to the USGS data release DOI in the DOI Tool. You may see new, automated additions to your DOI record in the DOI Tool as these downstream citations are discovered and captured. Please don't delete these Related Identifiers from your records!
  - In the DOI Tool Dashboard, you will be able to see which of your DOIs have Related Identifiers connected to them. If the Related Identifier is also a 10.5066 DOI, you will be able to view (and edit, depending on permissions) that DOI from an actionable link. If the related DOI is not a 10.5066 DOI, you will see it listed as a text string. Currently, this feature is available only for records that you manage/co-manage in your 'My DOIs' tab; in the next release, you will also be able to see related DOIs from the results on the 'Search DOIs' tab. This is a cool way to see at a glance what USGS DOIs have downstream citations or other relationships associated with them.

**Previous Release Date:** 2 October 2019 (Release 4.7.0)

Improvements, Modifications, and New Features:

- **Modification to the Relevant Date Types on the Supplemental Information tab:**
  - You can now enter more than one relevant date related to the data. For example, your record could document the range of dates during which the data were collected, the date the data were made publicly available, a date upon which the original data were withdrawn to correct an error, and finally, the date of update when the revised data were published.
  - This update supports new recommendations for documenting revisions to a data release and its DOI in the revised guidance for revisions to USGS data releases, published in October 2019.

**Previous Release Date:** 10 July 2019 (Release 4.6.0)

Improvements, Modifications, and New Features:

- **Addition of Date Type 'withdrawn':** The latest update to the DataCite metadata schema includes this date type value, to be used when a dataset is permanently redacted and no longer accessible. The use of 'withdrawn' must be in conjunction with a landing page notification that explains that the data are permanently removed and no longer accessible.
- **Updates to Swagger documentation for the API:** Explains the importance, and requires provision for all USGS authors, of ORCids.
- **Support for multiple related identifier types:** Previously, a resource linked to a DOI as a “Related Identifier” had to itself be a DOI. With this change, a linked related identifier can now be a URL that's not a DOI; an ARK; a bibcode; an IGSN; an ISBN; an LSID; a PMID; a PURL; or a w3id.
Change to a new, bureau-level, authoritative Data Source list: The DOI Tool has migrated to a new list of Data Sources that is built off of authoritative cost centers listed in FBMS. The advantage of this change is that the bureau now has a centrally managed, authoritative list of content sources that can be used across enterprise applications, including this tool, ScienceBase, the Publications Warehouse, IPDS, the Science Data Catalog, and other systems. For many users, your ‘Data Source’ in the DOI Tool is unchanged; for others, particularly in the Water Resources Mission Area and under national programs, the Data Source name you have used previously is now deprecated (due to center (program reorganization, renaming, or merger with another cost center). SAS will be working over the next few months to batch update as many records as possible that need to be updated to a more current Data Source; it not our intention to require centers/programs to manually update hundreds of records. For some programs that are terminated due to realignment (e.g., for Water’s National Research Program), the indicated Data Source will remain, unless a request is made to update some or all records to a current Data Source. All records should remain accessible for updates by their respective managers, regardless of the status of the Data Source name. The best practice for newly created DOIs is to choose the Data Source (i.e. the cost center) that is current and most specific to your data release. If you have questions, consult your data manager, or submit a DOI Tool Help Desk ticket.

Technical Problem With the DOI Tool or API?

If you are experiencing a technical problem with the DOI Tool or its API (e.g., problems saving or locating your record; lost data; timeout issues; a field not working as expected), please use the DOI Tool Service Desk to report the issue. You will generate a ticket to describe your issue. Using the Service Desk helps to ensure that the DOI Tool development team is promptly notified of a potential problem, and allows you to track the status and progress of your reported issue until it is resolved.

DataCite Metadata and the USGS DOI Tool

The DataCite Metadata Schema continues to expand to cover a variety of information facets about the data artifact that is the endpoint of the DOI. Many of the newer and more detailed attributes added to the DataCite schema are redundant for USGS data releases, because they are directed at more nuanced attributes of the data already described in the dataset metadata. Because USGS has FSP policies that mandate the creation of robust metadata to thoroughly describe released data, it would be be inefficient to require our scientists and data managers to also include that same information in the DataCite DOI metadata.

The USGS DOI Tool enforces all required elements of the DataCite schema, and strongly encourages completion of those optional fields which will support discovery of our data releases in downstream catalogs. We also require custom USGS information that is not part of DataCite’s schema, so that we may produce useful metrics on data releases for the bureau, as well as connect data releases to related primary publications, in order to support their joint discovery in the USGS Science Data Catalog and the USGS Publications Warehouse.

We have elected not to include certain DataCite metadata fields related to internal or external funding or funding sources, or project codes, as those information are already collected and tracked in FBMS and BASIS+. While we do require IPDS numbers, those are internal to the DOI database and are not provided to DataCite.

Most current version of the DataCite Metadata Schema: Version 4.3 (released 16 August 2019)

Current version of the DataCite Metadata Schema employed by the USGS DOI Tool: Version 4.2 (released 20 March 2019)
Planned updates for the USGS DOI Tool in the first two quarters of FY20 will include:

- Interface changes to improve usability of entry and Active Directory lookup for USGS Individual Authors
- **Automatic** embedding of Author Affiliation="U.S. Geological Survey" and the USGS Research Organization Registry (ROR) ID for all USGS authors (affiliations are new to DataCite Schema 4.3)
- Addition of optional organizational Affiliations (new to DataCite Schema 4.3) for Individual Authors who are not USGS authors
- Display of Related Identifier(s) for a given DOI in the Dashboard view of the record
- Addition of Contributor Individual Names and ORCids to the Supplemental Information tab, so that they can be recognized and credited, if desired

---

**Known and Reported Issues**

**ISSUE:** Login with Active Directory credentials is failing and taking users to the 'URL not found' page  
**REPORTED:** 10/10/2019  
**STATUS:** **Resolved.** The Crowd authentication layer that talks to USGS Active Directory is failing to complete the authentication process in the allowed interval of time. As a result, users are being redirected to the firewall error page when the wait time for authentication exceeds the allowed time interval for completion.  
**PRIORITY:** high

---

**ISSUE:** Variability in entry of IPDS numbers for data releases and related primary publications  
**REPORTED:** 05/22/2019  
**STATUS:** **Resolved.** The prefix 'IP-' is required before the numeric string for IPDS numbers; however, some users are entering the numeric string without first entering the IP- prefix. The 4.8 release of DOI Tool (scheduled for early FY20) will include the 'IP-' string by default in the text box.  
**PRIORITY:** low

---

**ISSUE:** IPDS number for the data release does not transfer over from the ScienceBase Data Release form, where it is required.  
**REPORTED:** 05/22/2019  
**STATUS:** **Resolved.** The ScienceBase Data Release (SBDR) form now passes the IPDS # of the data release to the DOI Tool, in the correct format, when SBDR is used to mint the DOI.  
**PRIORITY:** normal
**ISSUE:** The 'Search for DOI' option in the Dashboard sometimes produces no results on a known DOI string

**REPORTED:** 2/06/2019

**STATUS:** Resolved. Users often copy and paste the unique string of the DOI (what follows '10.5066/') when searching on a DOI; usually, this copy/paste is coming from a citation or their landing page. In many cases, a stray empty space or a period is inadvertently captured at the end of the DOI string; both of these are actually read as 'characters' by the search, resulting in 'no results found.' We have now trimmed the DOI search box to 8 characters, which matches the syntax of the unique string of the DOI, so any inadvertent capture of a blank space or period at the end of a pasted DOI will now be trimmed from the searched string. This should result in a known DOI being found, regardless of extra 'characters' accidentally appended to the end.

**PRIORITY:** normal