Overcoming the paper publication bias — Increasing your research impact Pairing dataset and tool citations with standard publication citations using EDXTM

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Research & Innovation Center

Abstract

Research products are not just about publications and presentations anymore. Following a Nature study in 2013 that documented loss of over 80% of scientific data underlying journal publications, there has been a growing and persistent shift in the value and importance place on data products derived from R&D. As data science and commercial online systems have evolved, major institutions and entities such as the journals Science and Nature, the American Geophysical Union, Datacite.org, CODATA's Committee on Data of the International Council for Science, and all U.S. federal agencies have all mandated preservation and improved accessibility of data products stemming from research. In just a little over five years time, the value of research data products has increased, gaining recognition as significant products worthy of DOI and citations of their own to accompany more conventional publication and presentation related research products. In this poster we present examples, on NETL's Energy Data eXchange (EDX), of how data products from FE R&D have been made accessible with their own citations, complementing associated, but separate written publications. EDX offers R&D data products with a full Datacite.org formatted citation, including DOI number, and ensures long-term preservation of the data. These data citations can be referenced in publications, presentations, and other products. Publication of these research data products ensures their accessibility for use in future research efforts, provides more credibility and potential for review of the research. Finally, authors of data products are seeing these resources integrated as part of their impact factor for tenure, promotion, and research stature purposes

Why:

Major journals, governments, & international research

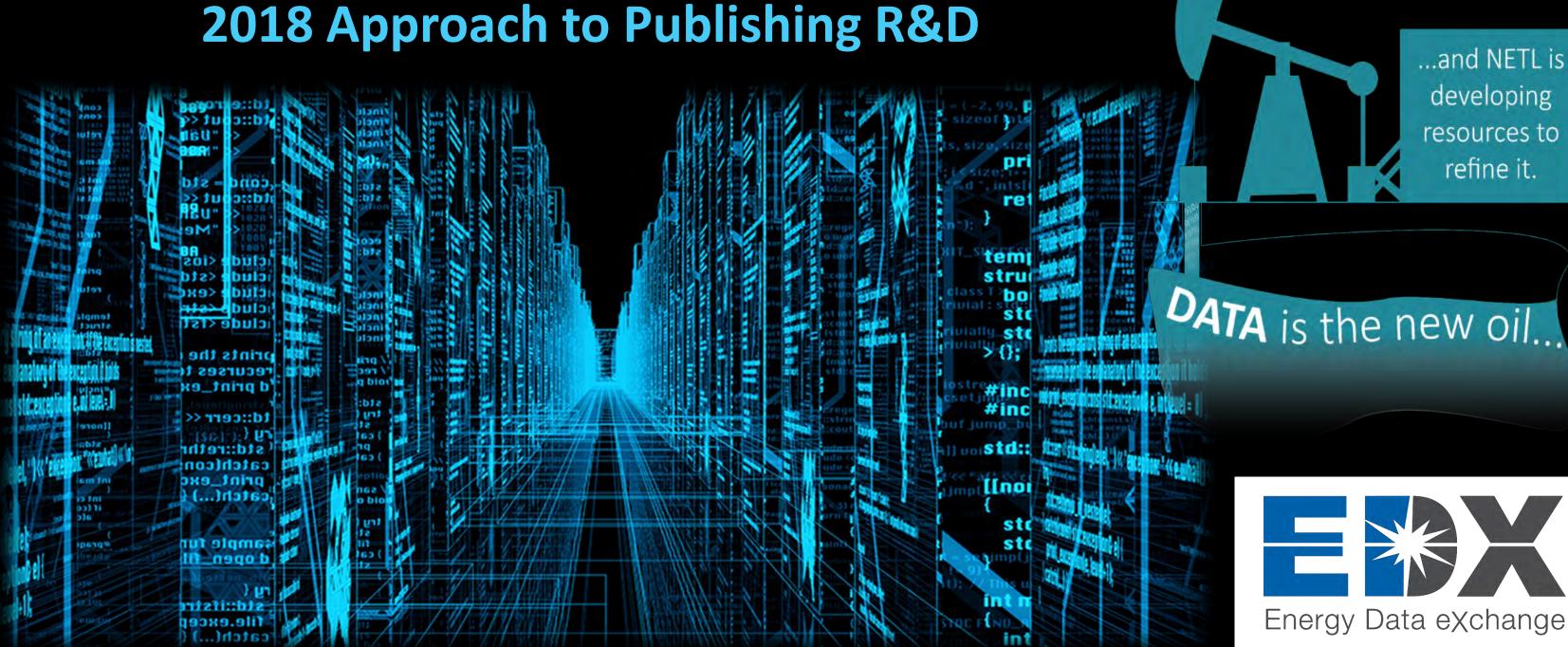
Traditional Approach to Publishing R&D

Journal manuscripts, books, reports, written results

MEMBER LOGIN

SEARCH PUBS

Custom Search



Journal manuscripts, books, reports, written results + software, tools, models, datasets



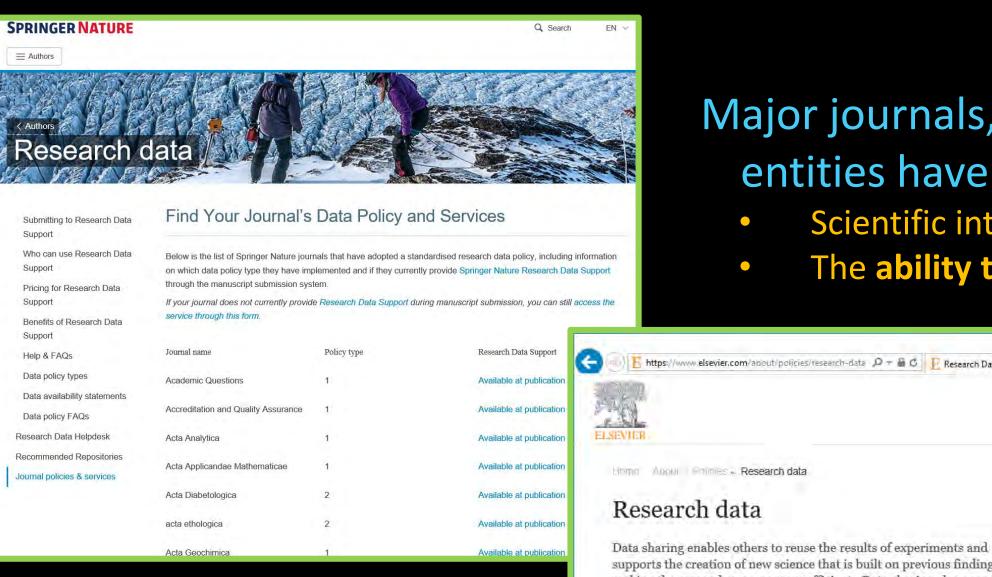
..and NETL is

developing

resources to

refine it.

Publish your research "data", tools, models, datasets, etc via EDX and get a DOI citation to go with your conventional journal publication



About Membership AGU Centennial Publications Meetings Data Services Careers Honors Science Policy

DATA MANAGEMENT ASSESSMENT PROGRAM

AGU's position statement on data affirms

credited, and preserved, they will help

future scientists understand the Earth. planetary, and heliophysics systems.

Importance of Preserving Data

Improving and Advancing Data

Importance of Preserving Data

The Challenges in Preserving Data

Reasons to Participate in a Data Management Assessment

Earth and space science data are critical to scientific advancement and our

should be openly accessible and preserved for reuse into the future

understanding of how natural systems and phenomena change over time. These data

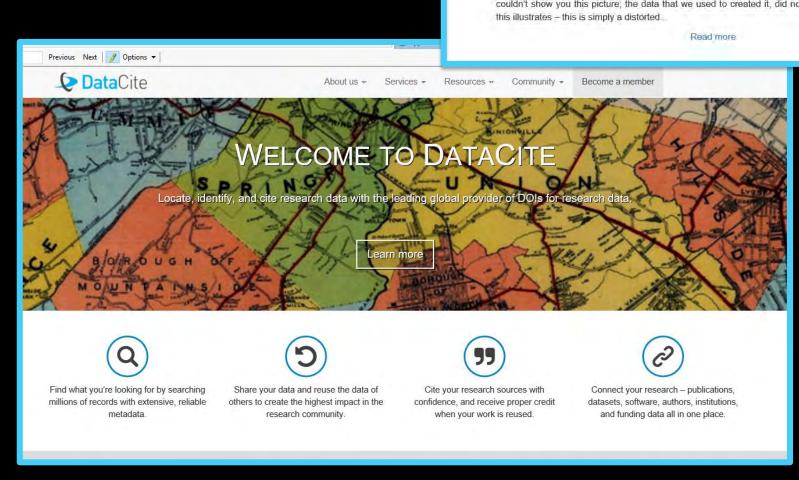
The Power of an AGU Data Management Assessment

entities have recognized over the past decade that Scientific integrity requires reproducibility of results The ability to build off of prior studies 📙 https://www.elsevier.com/about/policies/research-data 🔎 🕆 🔓 🖒 📙 Research Data - Elsevier Q SEARCH TO CART MENU

Quick links supports the creation of new science that is built on previous findings, making the research process more efficient. Data sharing also supports Read more about our transparency and reproducibility, building trust in science. Elsevier is Research data activities playing a key role in supporting researchers who want to store, share, Visit the Research Data discover and reuse data and we are committed to working with other FAQ stakeholders to address challenges in making data more effective. Although much research data is disseminated as part of journal articles, a host of other data is not made available through article publication. This policy concerns research data that often underlies, but exists outside of research articles. Publishers can help make this hidden data discoverable and our research data policy provides the framework for our support and engagement in this important area. The precise notion of what constitutes research data will differ from field to field but broadly speaking it refers to the result of observations or experimentations that validate research findings and which are not already published as part of a journal article. Research data can include but are not limited to: raw data, processed data, software, algorithms, protocols, methods, materials.

AGU Position Sta AGU Publications Da The following principles underpin Elsevier's research data policy: DATA SERVICES COI Research data should be made available free of charge to all researchers wherever possible and with Data Management Ass Shelley Stall · Researchers should remain in control of how and when their research data is accessed and used, and SStall@agu.org should be recognised and valued for the investments they make in creating their research data and making Director, Data Progra Brooks Hanson Expectations and practices around research data vary between disciplines and discipline-specific BHanson@agu.org requirements need to be taken into account. Executive Vice Presid Enabling effective reuse of research data is a shared aim and all stakeholders should work together to

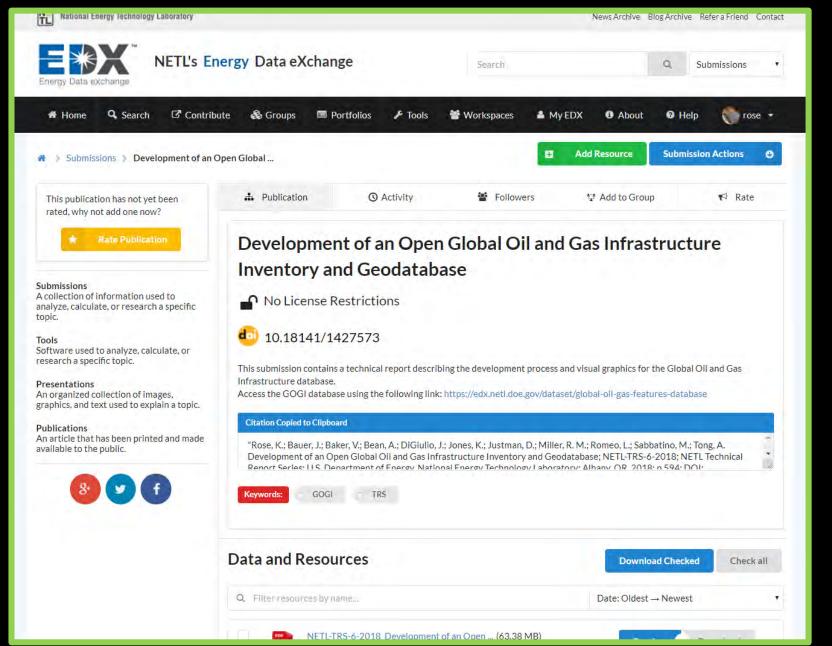
Publishing of scientific data products is now required and encouraged worldwide







Example Data & Report Publications Via EDX

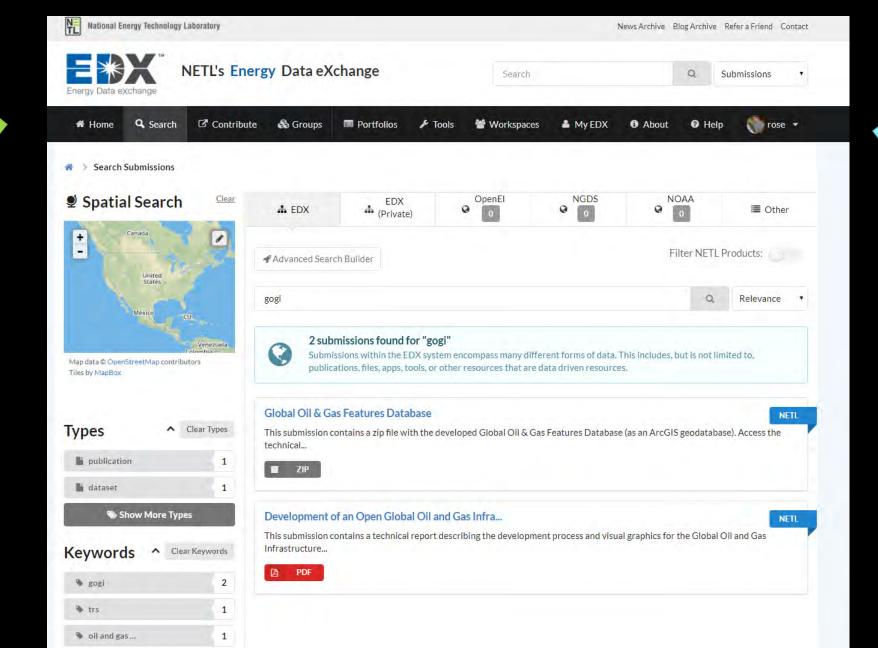


Rose, K.; Bauer, J.; Baker, V.; Bean, A.; DiGiulio, J.; Jones, K.; Justman, D.; Miller, R. M.; Romeo, L.; Sabbatino, M.; Tong, A. Development of an Open Global Oil and Gas Infrastructure Inventory and Geodatabase; NETL-TRS-6-2018; NETL Technical Report Series; U.S. Department of Energy, National Energy Technology Laboratory: Albany, OR, 2018; p 594; DOI: 10.18141/142/5/3.

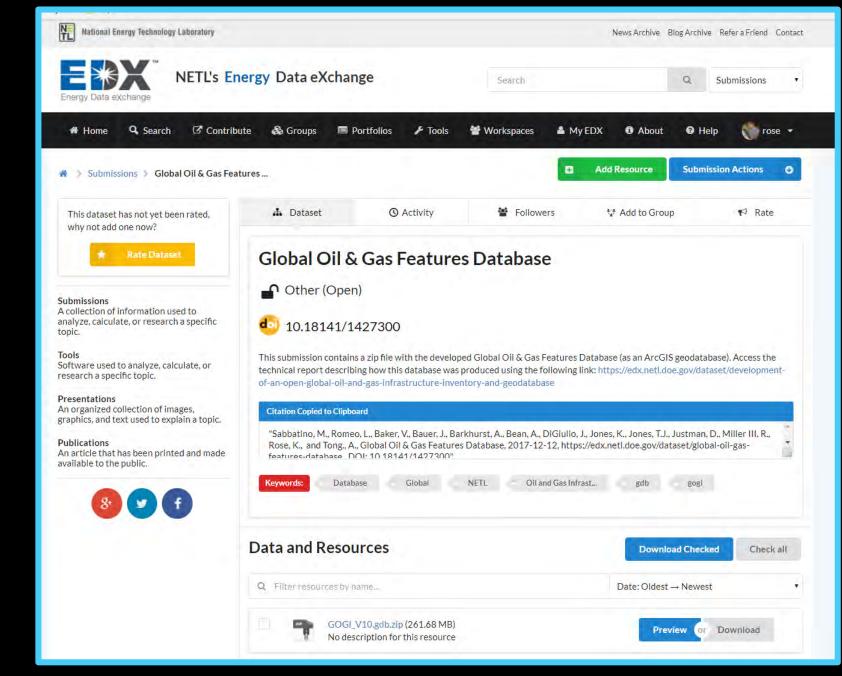


View full technical report nere

One study, multiple citable products: 1) Database (left), 2) Technical Report (right), and 3) Online digital map collection (see GOGI poster). Journal publication is in prep.



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geodatabase here

Sabbatino, M., Romeo, L., Baker, V., Bauer, J., Barkhurst, A., Bean, A., DiGiulio, J., Jones, K., Jones, T.J., Justman, D., Miller III, R., Rose, K., and Tong., A., Global Oil & Gas Features Database, 2017-12-12, https://edx.netl.doe.gov/dataset/global-oil-gasfeatures-database , DOI: 10.18141/1427300



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