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Seismica's Data and Code Policy in Action

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Abstract Seismica launched in July 2022 with a strong policy in support of data and code sharing. Two years later, the journal has upheld the policy while guiding authors toward successful compliance. Our authors are engaged and willing to share and cite their generated data and code, as well as reuse and cite others' data and code. Notable achievements include the consistent use of Data and Code Availability Statements (DCAS), which ensure transparency and reproducibility. Authors also cite software, with a preference for open source options, and frequently use shared infrastructure such as GitHub and Zenodo for data and code archiving. Beyond mere citation, authors prioritize persistence, utilizing generalist, institutional, and disciplinary repositories to ensure the longevity of research outputs. However, challenges remain. While compliance with the data and code sharing policy is high, the lack of standardization in Data and Code Availability Statement (DCAS) formatting and acknowledgment practices can lead to inconsistencies in Seismica's articles. Authors often use a mix of informal acknowledgments or web links over formal citations with DOIs, complicating attribution for organizations that rely on citations to bolster support. Moreover, software packages often lack clear citation guidance which may necessitate journal-level recommendations. Infrastructure limitations further hinder the seamless hosting and integration of data and code. As we move forward, Seismica should consider how to stay aligned with best practices in the field, and potentially offer standardized templates or examples to facilitate simplified and consistent data and code citation practices for authors.

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1 Introduction

Seismica's policies require authors to cite and make available data and code both used and produced by their research, and to describe how they can be accessed in a Data and Code Availability Statement (DCAS). These policies align with our support for transparent, reproducible research, as further demonstrated by the establishment of an Open Science Editor position within our 5-member Executive Board. Data and code sharing are part of Seismica's larger goals of publishing research that is open and accessible to all readers. In our first editorial (Rowe et al., 2022), we pledged to "continue to publish research articles while also piloting non-traditional publication types and open options for data, software and code." Advancing outputs beyond articles is a key step in opening research, but before we can move in that direction, we need to assess how our authors are currently creating, using, and documenting data and code in their published Seismica articles.

Seismica's policy emerged amid many other national and international efforts to implement public access to data, in addition to the articles themselves. The "Nelson memo" from the White House Office of Science and Technology Policy (Nelson et al., 2022) requires US federal agencies to update public access policies for publications and their supporting data created through federally funded research by December 31, 2025. Unlike the earlier "Holdren memo" (Holdren et al., 2013) which focused on access to scholarly publications resulting from federally funded research, the 2022 memo includes a Scientific Data Section. Scientific data underlying the results of scholarly articles must be made accessible at the time of publication with some exceptions described related to privacy, ethics, technical limitations, intellectual property and security.

Similar efforts outside of the US have influenced the data sharing ethos practiced by Seismica editors and authors. In Canada, the Tri-Agency Research Data Management Policy was released in 2021 (Government of Canada, 2021), and European efforts include research data management guidance and coordination by Science Europe (Science Europe, 2021) and the European Research Council's Scientific Council (2022). These are just a few examples of emerging recommendations for data management and sharing around the world.

Data sharing policies at the journal level complement these national and international guidelines. Federer et al. (2018)'s analysis of data availability statements in PLOS journals showed that between March 2014 (when the policy went into effect) and May 2016, 23.8% of articles did not contain a data availability statement. The majority of articles without a data availability statement were published just at the time the policy was implemented; following the implementation of the policy, those without a data availability statement dropped to 0.7%. The American Geophysical Union's (AGU) data citation pilot also demonstrates the effectiveness of well-managed data sharing policies, but Vrouwenvelder et al. (2024) note that such successes rely on a network of par-

ticipants (and ideally staff) to enforce them. This support has enabled AGU journals to increase data citations from 1% in 2019 to 72% in 2024 and software citations from 0.2% to 25% in the same time period (2025). Without dedicated staff, Sholler et al. (2019)'s study of the enforcement of data policies in ecology journals found a lack of consensus regarding how the policies should be enforced and by whom. A combination of editors and reviewers confirmed the presence of data, but no one role consistently scrutinized data availability statements or the data itself for quality controls. With limited time, and in some cases, expertise, the journal editors in Sholler et al.'s study rely on "reviewer's attention to datasets and trust in authors to submit appropriate data," as well as the work of community repositories to ensure that included data meets disciplinary standards.

Seismica also relies on its community of participants, including production editors, reviewers, authors, and copy editors, to monitor and improve data and code sharing practices. As a result, Seismica authors demonstrate broad compliance with the journal's policies in both practice and spirit. This editorial reviews Seismica's Data and Code Sharing Policy, inventories modes of data and code sharing from Seismica's first 2.5 years in production, and suggests challenges to tackle in the future for Seismica, and the field more broadly.

2 Seismica's Data and Code Policy

Seismica affirms the importance of sharing data and code to support scientific reproducibility in our policies. [1] Seismica's policies offer guidance on handling digital data, codes and scripts, proprietary and embargoed data, and preparing data for peer review. They are also informed by evolving conversations and practices within Earth Sciences (Stall et al., 2025), adhere to similar policies of peer journals and guidance from advisory bodies (Stall et al., 2023), and incorporate the majority of the Research Data Alliance (RDA)'s suggested policy features (Hrynaszkiewicz et al., 2019). The 14 RDA policy features—guidelines intended to help journals standardize their policies to minimize confusion for authors—are included below along with Seismica's policy specifics for greater context. The first ten policy features are well-aligned with Seismica's policy and practice, while the last four have less strong alignment between RDA and Seismica. We are not only asking authors to share data, but educating our authors on broader data sharing expectations, giving context to practices within the discipline, and offering actionable pathways both for sharing data and conveying that effort within the written article.

1. **Definition of research data**: Seismica defines data to include raw, processed, and other forms of data common to the field. Data include seismometer and GNSS time series, laboratory sensor readings, and satellite imagery. Data may be collected by the authors, collected by others, sourced from a public repository, or any/all of the above.

2. **Data formats and standards** asks whether there is a position on specific data standards or formats. The Seismica policy cites the importance of metadata and documentation, the inclusion of a readme file, and the need for specialized formats to include more details for access and interpretation. Seismica strongly recommends the use of non-proprietary or cross-platform compatible file formats.

3. **Exceptions to the policy**: Privacy & ethical concerns such as sensitive data, data derived from Raspberry Shake seismometers placed in homes, and drone imagery in urban areas are considered viable exceptions to the policy on data sharing. In the examples given above, authors could consider masking segments of data, or applying differential privacy algorithms (even when only aggregated statistics are presented).

4. **Embargoes**: Seismica's policy addresses various scenarios that require data to be restricted or embargoed. Data may be restricted due to geopolitical conditions, corporate non-disclosure agreements, or privacy regulations, among other reasons. In some cases derived data (earthquake catalogs, inferred velocity models, simulation output) do not fall under the same restrictions and can be shared in accordance with Seismica policies. When important data cannot be made available, Seismica asks authors to include a statement in the manuscript explaining why the data have not been made available.

5. **Supplementary materials** Seismica permits the inclusion of supplementary materials as downloadable files alongside published articles, with a preference for text, tables and figures. All other supplementary files should be uploaded to a relevant separate repository. When using Zenodo, Seismica specifically recommends tagging the Seismica community using Zenodo's metadata label.

6. **Data repositories** Seismica's policy suggests that repositories should be digital object identifier (DOI) citable and guarantee long-term archiving. **Code repositories** are described in further detail: Github and other dynamic repositories that allow for versioning and collaboration are acceptable for active development, but authors should deposit the versions of codes used to generate results shown in articles in an archival, static repository with a citable DOI.

7. **Researcher and author support**: Seismica invites authors to contact editors for assistance regarding data availability.

8. A **data availability statement** is required and must detail where all data and codes used in the study can be accessed.

9. **Mandatory data sharing - community norms** refer to whether data sharing is mandatory for specific types of research data, specifically where there

[1] See Availability of data, materials, and codes at: https://seismica.library.mcgill.ca/policies.

is a community mandate and the mechanism by which these data types must be shared. In fields published by Seismica, there is a strong practice of data reuse borne from governmental and institutionally supported investments in seismic networks and other repositories.

10. **Mandatory data sharing - all papers** While Seismica's policies do require mandatory data sharing, exceptions are made on a case by case basis when privacy, ethics and proprietary obligations are expressed.

The final four policy features are either not applicable to Seismica or have seen less adherence:

11. **Data citation:** All studies cited in Seismica articles are required to include DOIs. We also require DOIs for data where the study has used data from a seismic network, noting that the full citation from the International Federation of Digital Seismograph Networks (FDSN) should be given if it exists, and we otherwise encourage authors to cite from DOI-citable repositories. Note: with the variety of sources cited in Seismica articles, this recommendation has not been followed fully.

12. **Data & code licensing**: Seismica articles are published under a Creative Commons Attribution (CC-BY 4.0) License, but we do not specifically describe how or if data should be licensed. We do note: "Code should include comprehensive documentation, and a license specifying how it may be used or reused by others."

13. **Peer review of data**: Seismica requires that reviewers have access to data, codes, and other materials, but an in-depth review of these materials is not required. Reviewers are asked to verify that Seismica data policies are met but are not asked to rerun code or reproduce analyses.

14. **Data management plans** are not mentioned specifically in Seismica's data policy and are considered the purview of funders and sponsors. However, data accessibility information required by Seismica often overlap significantly with the data management plans associated with the research.

Seismica's Data and Code Sharing policies are available on our website, and linked within our submission guidelines. Compliance with the data policy, particularly the first 10 features supported by the Research Data Alliance, is confirmed by the production editor, and a shortfall in data or code accessibility is a common reason for submission to be sent back to authors for additional information. In the course of Seismica's operations, four articles were ultimately withdrawn by authors who preferred not to comply with data or code policies.

3 In practice

Two years in, the data policy has proven to be effective. As of December 31, 2024, 123 articles have been published. Excluding five opinion pieces and editorials, 118 (97%) of publications have shared data. Of the three articles whose authors did not share data, one article cited privacy and cybersecurity protections, one collaborated with a private company that required a non-disclosure agreement, and one did not use data. These exceptions were approved by Seismica handling editors in consultation with production editors.

Data and Code Availability Statements (DCAS) come in many forms and often include a wealth of resources that cannot be described through the templates or examples offered by many journals (SpringerNature, 2024; Wiley Author Services, 2024; Seismological Society of America, 2024) to assist authors. Seismica does not require a standardized format, and most statements take a narrative approach. As a result, DCAS in Seismica articles vary in length and detail making an analysis difficult. For this analysis, all Data and Code Availability Statements were excerpted from their articles, then parsed and analyzed individually. DCAS from October 2022 – December 2024 are available in full in Supplement 1. Figure 1 summarizes the elements of each article's DCAS which adhere to the following questions (Table 1) for both data and code. These questions are adapted from Graf et al.'s data availability statement topic designations and Federer et al. (2018)'s codebook which categorizes data statements in PLOS articles. Federer's categories (access restricted, combination, in paper, in paper and supplement, in supplement, no location stated, repository, upon request, other, N/A) were not all applicable, as the majority of Seismica articles fell under the category of "combination" as both data and code were often shared or cited in multiple locations. The resulting features are organized as **essential** features that are required to appear in the DCAS, **optional** features that appear according to the focus of the study, and **discouraged** practices that result in less per-

Importance	Feature
Essential	Was a Data and Code Availability Statement included?
Essential	Were data generated in the course of the study? (Must be noted when present)
Essential	Were data cited or acknowledged within DCAS? (Must be noted when present)
Essential	Were code or software cited or acknowledged within DCAS? (Must be noted when present)
Optional	If a DOI-generating repository was cited, was it a: - general repository - disciplinary repository - government repository or site - institutional repository
Optional	Was a seismic network or station cited?
Discouraged	Are data or code cited with a url but not a persistent identifier, citation or link?
Discouraged	Does the author request to be contacted for data access?
Discouraged	Are third party restrictions noted?
Discouraged	Is there an embargo on data?
Noted	Are data or code published in a supplement?
Noted	Are there privacy or ethics related restrictions?

Table 1 Data and Code Availability Statement features

sistent and sustainable access to the study's data and/or code. The final two features, publishing data and code in a supplement or restricting data due to privacy are not preferred but are sometimes the best option. These are **noted** features rather than discouraged.

Seismica articles (Figure 1) all include a Data and Code Availability Statement, note whether data were generated or used, and cite data and code as appropriate. The production editor and handling editors advise authors on the inclusion of these essential features which helps explain the high compliance. Of the 118 articles that utilize data, 107 (91%) include a data citation in some form and 96 (81%) cite code in the DCAS. In most cases, authors cite data and code via multiple pathways, including some combination of citations, links and DOIs depending on the source. Of those articles referencing data, 47 cite that data (using the Author, Year format), 43 include DOIs, 54 include URLs or links to a website or other source, and 4 mention a data source by name. Of those articles referencing code, 56 include citations (as in Author, Year), 32 include DOIs, 46 include URLs or links to a website or other source, and 3 mention a code or software source by name. A small number note when the data (11) or code (5) were accessed which is a common policy in other journals, but not required by Seismica. The varying modes of citation speak to some confusion among authors who are trying to adhere to policy; authors sometimes give more information than requested, and at other times are limited by citation options of the source. For example, if the citation is included within the reference list with a DOI, perhaps there is no need to duplicate the DOI in the DCAS as well.

This analysis only references the DCAS as published in Seismica articles, and does not examine further detail that may be contained within the data or code repositories themselves. A full scientific workflow that results in a Seismica article may engage with and scaffold various datasets, software, and tools that each have their own permissions, citing preferences, and reuse requirements. These details cannot and should not be described in every DCAS, but can make comparisons challenging. More resources were likely used in the authoring of Seismica articles than are cited in a DCAS.

Additionally, at the moment Seismica offers no supported storage or workspace for research outputs beyond the written article and some supplemental material, though we do recommend repositories that authors may use and give authors the option of "tagging" their data to connect to the Seismica Community in Zenodo. The most common solutions utilized by authors were to access data from or store it in a generalist repository; a disciplinary repository; a government site, database, or repository; a seismic network; an institutional repository; or an institutional website.

What we have termed "discouraged" or "noted" practices were rare in this analysis. There were few cases of third-party restrictions, embargoes, and privacy or ethics restrictions, all of which were discussed and approved by the editors. The most concerning practice which may be a source of future policy updates is the use of non-persistent URLs by authors, though in many cases a URL is listed in addition to correctly cited data and code. When a URL and a DOI are both available, citations including the DOI are preferable. In cases where a non-persistent URL is the only available link, Seismica can encourage authors to follow software citation guidance as offered by Katz et al. (2021) and include details such as access date and version.

Table 2 goes into further detail describing the main source and type of data and code sharing acknowledged by Seismica authors. It is often the case that data sets are accessed from or stored in one repository, code is created and managed elsewhere, and both are later deposited in a site like Zenodo.

Type	Name	No. Articles
Generalist Repository	Zenodo	63
	–> Seismica Zenodo Community	10
Generalist Repository	Github	42
Disciplinary Repository		67
Government Site		49
Seismic Network/Station		38
Institutional Website		21
Institutional Repository		18
Supplement hosted by Seismica		18
Email request		6

Table 2 Common Repositories and Platforms listed in DCAS

3.1 Data Inventory

In the 123 articles analyzed, the citation of DOI-generating repositories was high. Engagement with these repositories varies according to the focus of the work, with some articles citing multiple repositories due to data reuse from different sources as well as the authors' potential data generation and archiving to an additional site.

Generalist repositories offer storage for outputs from a variety of disciplines in a variety of formats. Seismica authors are most likely to use or reference Github for active projects and Zenodo for versioned or completed projects. Seismica authors also used Figshare (1), Mendeley data (1), Gitlab (1), and OSF (1).

Disciplinary repositories or sites specific to seismology or earthquake science were referenced by 72 articles, including citations of FDSN (13); various combinations of IRIS (18), Earthscope (7), SAGE (7), UNAVCO (4); GEOFON (6); EIDA (6); INGV (5); NCEDC (5); SCEDC (4); ISC (4); GFZ (3). In addition, **seismic networks or stations** were cited in 38 articles. These repositories are generally cited as requested by the host organizations, though references can be quite in-depth when data from several overlapping projects were sourced. Although some Seismica authors produce and deposit their own data, the common (re)use of these public datasets by Seismica authors exemplifies the community's engagement with open, reproducible sources.

Government sites include databases, repositories and sites where data is generated by a government

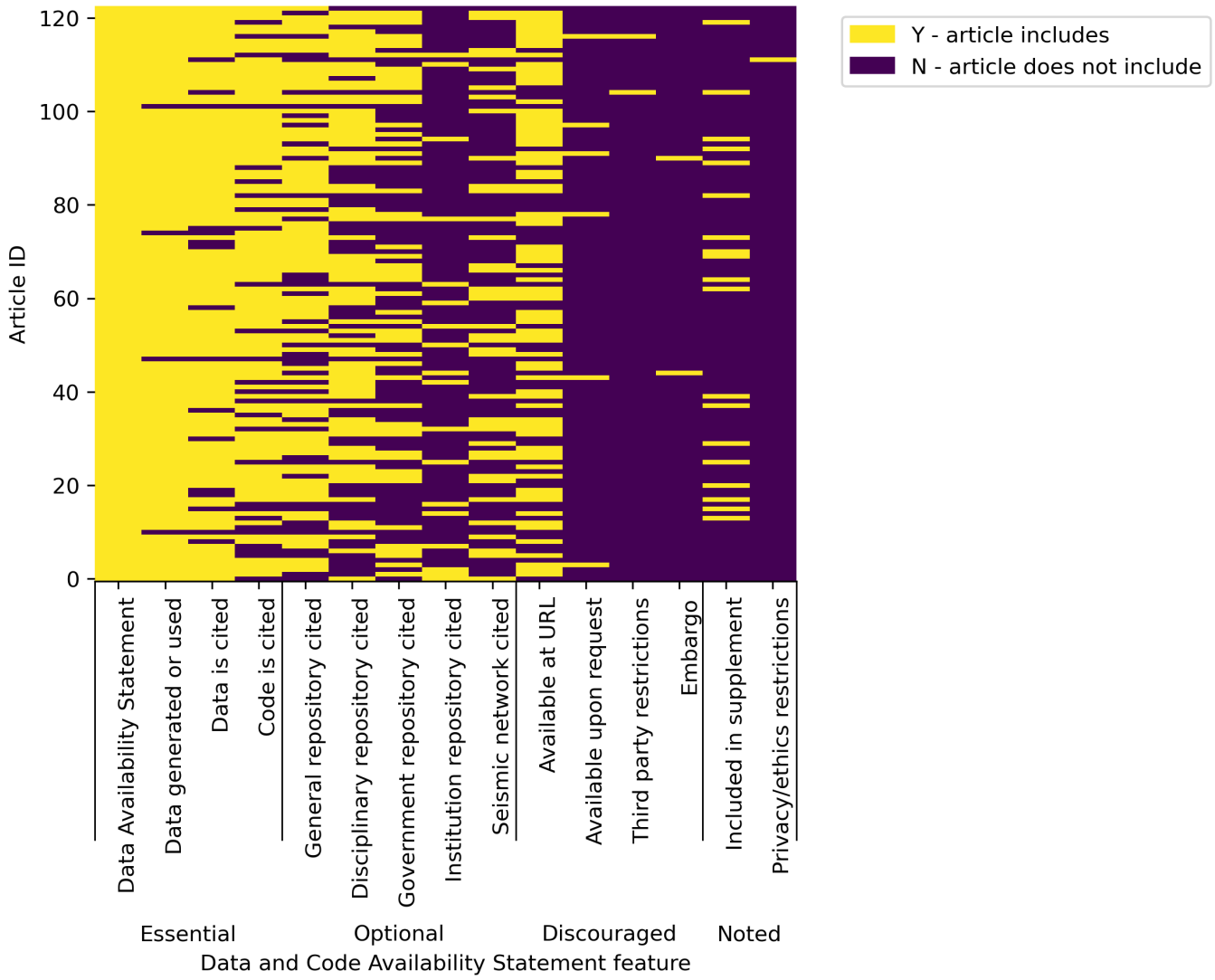

Figure 1 Adherence to common Data and Code Availability Statement features in Seismica articles published between 2022-2024.

agency or hosted by that agency. These include many sources like USGS earthquake catalog (https://earthquake.usgs.gov/earthquakes/search/) and USGS ScienceBase (https://www.sciencebase.gov), and several national, regional and government sources. There was some overlap with disciplinary repositories above, but enough unique government entities were cited that it was useful to differentiate them.

Institutional repositories refer to a hosted database or site that is managed and curated for authors affiliated with that institution. Institutional repositories often license an underlying platform like Dataverse while display local branding like "Borealis". The combination of platform choice, local naming, and institutional branding can make the terms and permissions unclear, but institutional repositories are an appropriate long-term destination for Seismica created data or code.

In contrast, an **institutional website** refers to a site maintained by a lab group, individual or organization that links to data or code but not in a permanent way and without a permanent identifier. We differentiate institutional websites from repositories as they offer less long-term sustainability.

Seismica prefers not to host **supplements**, but this is often the best place for additional flat figures and tables. A total of 64 articles include supplements, though only 18 mention the use of supplements explicitly in the DCAS. A further 46 articles include supplements but do not explicitly mention them within the DCAS.

Email requests referring to statements like "data or code available upon request" were rare as they are heavily discouraged by Seismica's policy. In the six documented cases, these statements were adapted to initiate collaborations, mediate permissions, or mediate access to larger data sets with more detail than was possible to share, as well as access to raw data in addition to the processed data documented in the study.

3.2 Software and Code Inventory

Code and software sharing are more complex. Of the 123 articles analyzed, 28 do not mention code. In the remaining 95 articles, 98 separate software products, libraries, languages, or packages are named, including common software or languages like Python, GMT, and MATLAB, as well as packages like SciPy, NumPy, and

Matplotlib. Mentions range from in-text acknowledgments, citations, and occasional mentions of software versions. Table 3 lists the ten most common packages or products used in Seismica articles.

Name	No. articles citing
ObsPy	22
GMT	15
Matplotlib	12
MATLAB	10
Python	10
PyGMT	7
Pyrocko	5
NumPy	5
MudPy	4
SciPy	4

Table 3 Common Software, Packages, Libraries

The most used and cited packages specific to Seismology were ObsPy, Pyrocko, and MudPy, all written in Python and hosted on Github. ObsPy is described as an "open-source project dedicated to provide a Python framework for processing seismological data," Pyrocko as an "open source seismology toolbox and library," and MudPy as a "code to run forward models of dislocation sources as well as invert for them with multiple geophysical data types." A full list of software, packages, and libraries can be found in Supplement 2.

3.2.1 Example: ObsPy

ObsPy serves as an interesting example of the various ways software is cited in practice. The package is hosted on Github and lists three possible citations (Beyreuther et al., 2010), (Krischer et al., 2015), and (Megies et al., 2011). The Obspy documentation states: "For better reproducibility, specific versions of ObsPy can be cited using the DOIs assigned to releases of ObsPy or ObsPy in general can be cited using a concept DOI." [2] Yet, ObsPy is acknowledged or cited in 22 Seismica articles in several different ways: as Beyreuther et al. (2010) 11 times; as Krischer et al. (2015) 9 times; with its website "Obspy.org" 4 times; with its Github repository once; with its Zenodo link once; and mentioned by name "Obspy" twice. A version or access date are listed 3 times.

3.2.2 Other examples of code citation

It is common for software and code to be cited as journal articles instead of directly in its repository. This is seen with ObsPy but also with code published in the Journal of Open Source Software, Geophysical Journal International, and others. Seismica authors make use of many open source and/or Python packages. In the future, Seismica editors and authors should stay up-to-date with evolving citation practices and preferences for code and software.

Some articles that used proprietary software specifically noted how the software was accessed through an institutional license.

Three articles specifically mentioned software or tools to create accessible color sequences for maps and figures. Seismica's manuscript preparation instructions for authors specifically request colorblind-friendly formats and suggest several references for best practice. Many articles are likely compliant with this policy without specific attribution to software or tools in the DCAS.

[2] https://docs.obspy.org/changelog.html

4 Successes and challenges

Seismica authors comply with our data policy as required for publication and as mediated by our production editors, handling editors, copyeditors, and peer reviewers. The long list of repositories, networks, and sites suggests that data sharing is normalized in the field, perhaps as required by funders, institutions, or other journals. Our "data set of data sets" may be too small to draw broad conclusions, but we can point to many positive attributes related to data sharing among Seismica authors, challenges to address both as a journal and a discipline, and potential future updates to Seismica policies.

4.1 Successes:

1. **Data reuse:** Data sharing is required to ensure both the accuracy and reproducibility of a study, but also to encourage the reuse of previously collected data. The authors of Seismica articles show a tendency (common to seismology and earthquake science as a discipline) to access or reuse data collected through various projects and networks.

2. **Data and Code Availability Statements:** Every Seismica article that includes data or code makes use of a **Data and Code Availability Statement**. This is a requirement for publication, and all authors have complied.

3. **Open Source:** Seismica authors are well-versed in acknowledging both **open source software packages** and proprietary software, although not always in a consistent manner.

4. **Infrastructure:** Seismica authors are also well-versed in the use and acknowledgment of **common "free" infrastructure**. Twenty-seven articles (23%) referenced both Github and Zenodo, either pairing active projects in Github with archival deposits in Zenodo or using each platform as an access point or a storage site for different outputs.

5. **Persistence over citation:** Seismica authors generally recognize that there is a difference between sharing and referencing data and code, and making sure that these research outputs persist. As mentioned above, authors archive their work in Zenodo and also make use of institutional and disciplinary repositories to provide such long-term services.

4.2 Challenges for the future:

Seismica's authors demonstrate successful adherence to the policy, but with different interpretations and much support from production and copy editors. As we

review our policies, and continue to align with expectations of the discipline, we should consider the following challenges.

1. **Standardization of data statement and acknowledgments:** Seismica authors are so compliant that they tend to cover all of their bases by using Data and Code Availability Statements, acknowledgments, and in-text citation to reference data and code. Seismica authors and editors can confirm that data and code are cited in the DCAS, appear in the Reference list with a DOI, and that Acknowledgments are only used for informal appreciation.

2. **Persistent citations:** Similar to the point above, Seismica can encourage citations (with DOIs) over links to a resource or dataset. When links are the only option, access dates should be included.

3. **Narrative layers and expectations of detail:** There's a difference between how a Data and Code Availability Statement is written and what underlies it. When authors cite a package like ObsPy that relies on Github, is a reference to Github necessary? How many layers deep are required? Datasets are cited inconsistently; sometimes a foundational paper is cited instead of the dataset itself via its host repository. Ideally, authors cover key resources and craft a brief yet comprehensive DCAS.

4. **Citation of software:** Packages and software themselves do not always offer explicit instructions for citation. In the absence of clear instructions, Seismica should follow emerging guidelines from key groups, such as RDA Complex Citation Working Group (Agarwal et al., 2025), FORCE11 Software Citation Implementation Working Group (Katz et al., 2021), and recommend citations for the most commonly used software including version number– a key requirement for reproducibility. These citations could be included in a model Seismica .bib file, or otherwise posted on our website for author reference.

5. **Licenses:** When authoring articles that include newly created data or codes, authors should be encouraged to choose appropriate licenses for reuse. This is easily accomplished for any package archived in Zenodo.

6. **Data support and hosting:** Should data support and hosting happen at the journal level? Seismica's infrastructure is limited to the OJS platform supported through our relationship with the McGill University Library. We do not have a parallel platform to support data or code. Early on, we established a Seismica Zenodo community so that our authors could tag their submissions as connected to Seismica. Not all eligible authors make use of this feature. Data that is hosted in Zenodo and reused beyond the Seismica article may not make sense to have linked to the Seismica community. Seismica volunteer editors can encourage authors to tag, but tagging benefits Seismica most, as it allows us to collate as much of our associated data as possible.

7. **Shared infrastructure:** Seismica authors rely heavily on shared infrastructure for their research. Seismica can confirm that networks, organizations, and shared infrastructure are cited correctly, and begin to implement the use of RORs, RRIDs (Bandrowski and French, 2024) or other standard identifiers for organizations, networks and repositories as appropriate.

8. **Global perspective:** Seismica strives to reach a global audience and acknowledges different practices around the world. We aim to have a broader perspective on data use, reuse and citation. The preparation of data and code for sharing requires additional time beyond authoring. In the future, Seismica should consider whether a standardized template or checklist for a DCAS would assist with smoothing this process.

5 Conclusion

Seismica's Data and Code sharing policy has been implemented successfully in our first two years of operation. The policy's success is due in large part to diligent efforts of our production editors, handling editors, copy editors, and reviewers who enforce the policy and have made significant strides in educating our authors. Authors who publish in Seismica are amenable to the policy requirements and treat Data and Code Availability Statements with care, generally adding more information than is needed to ensure that their work is reproducible and improving these statements with editorial assistance to achieve compliance. Going forward, Seismica should stay attuned to policy changes from funders and governments, and continue to align our expectations for authors with broader trends being piloted among publishers and infrastructure providers. In the meantime, small adjustments can be made to discourage less persistent practices like URL references and incomplete software citations. In the next updates to author submissions, we might also consider offering several examples for model Data and Code Availability Statements, as well as checklists that both educate authors on data and code sharing practices and minimize additional administrative hurdles they face to publish with us.

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Data and code availability

Data and Code Availability Statements (DCAS) from Seismica's 2022-24 articles serve as the data for this edi-

torial. Supplement 1 includes all DCAS in one file. Supplement 2 includes an inventory of code and software cited in the DCAS. Both supplements and other relevant files to recreate the analysis are hosted on Zenodo at 10.5281/zenodo.14715254 (Teplitzky, 2025) .

Competing interests

The author has no competing interests.

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