CES TEMS Data Policy for

Depositing & Sharing Paper Related Data V1.0

1. The Significance of Paper Related Data Sharing

"Paper Related Data" refers to the data generated through basic research, applied research, experimental opening, etc. to support the publication of academic papers, as well as data obtained through observation, investigation, inspection and testing, etc. and used to form papers' charts and the raw data or its derived data support the research conclusions of the paper. The sharing of paper related data is an important evidence for the research results and conclusions of the paper, improving the verifiability and transparency of the research; the sharing of data improves the attention and influence of scientific journal papers; the reuse of data saves manpower and material resources, allowing scientists focus on innovative research; paper related data as a new type of academic achievement will promote innovative cooperation and talent training among disciplines, and promote open scientific practice.

2. Types and Requirements of the Paper Related Data

The following data are encouraged to be shared:

(1) The data used to directly support the conclusions of the paper;
(2) The data generated from the research of the paper and reflected in the paper, or the data reused or analyzed for the research of the paper;
(3) The raw data, unprocessed data from paper related experiments or observations that are not reflected in the paper are shared voluntarily.
(4) It is suggested to share the original data involved in the paper chart.

The following data should not be shared:

Data involving research ethics issue, sensitive information, confidential information, or sharing data that would damage the legitimate rights and interests of third parties should not be shared.

For data that should not be shared, if irreversible desensitization processing has been performed or it can be shared for other legitimate and reasonable reasons, the data author can share it after providing a desensitization statement or other supporting documents.

3. Preferred File Format

The journal does not impose restrictions on the format or subject area of the data submission. However, in terms of data reusability and long-term access, it is better to refer to the list of recommended formats first.

File type	Preferred format
Plain text	Unicode text(.txt)
Markup language	XML(.xml) HTML(.html) Related files: .css, .xslt, .js, .es
Text documents	PDF/A(.pdf)
RDF	RDF/XML (.rdf) Trig (.trig) Turtle (.ttl) NTriple (.nt) JSON-LD
Spreadsheets	CSV(.csv) ODS(.ods)
Databasefile	SQL(.sql) SIARD (siard) DB tables (.csv)
Statistical data	SPSS Portable (.por) STATA (.dta) DDI (.xml) Data and setup (.csv +.txt) R
Raster images	JPEG (.jpg, .jpeg) TIFF (.tif, .tiff) PNG (.png) JPEG 2000 (.jp2) DICOM (.dcm)
Images (vector)	SVG (.svg)
Audios	BWF (.bwf) MXF (.mxf) Matroska (.mka) FLAC (.flac)

If the file format you use is not in the below list, the journal suggest you evaluate it by the three criteria:

(1) whether the format is common in your discipline;
(2) whether the format has open standards;
(3) whether the format is independent of a peculiar software application, developer or supplier.

If the format you use is not in the list, your submission should meet all or most of the criteria above.

4. Data License

When sharing data, authors need to specify the license agreement that applies to the data. Authors can choose from the following 8 international data licenses:CC0, CC-BY 4.0, CC BY-SA 4.0, CC BY-NC 4.0, CC BY-NC-SA 4.0, CC BY-ND 4.0, CC BY-NC-ND 4.0 (in descending order of openness of the above data license) and ODbL (for database). Data users must use the data in accordance with the data license agreement chosen by the author.

The license agreement for the data and the paper can be same or different.

5.   Data Sharing Method

(1) Data Access

There are two kinds of data access options. Authors could choose one applicable option for the data sharing.

A.   Open Access

When authors choose the open access mode, the submission of the data will be open accessed on data repository immediately once acceptance by data repositoryadministrators. The open content includes both metadata and data files.

B.   Conditional Access

        a.   Accessing after the embargo period

        This option is applicable for data that should not be shared immediately. Authors are allowed to set an embargo period for your research data. During the period, only metadata could be accessed openly, and data files would be forbidden to the public. After the embargo period, the data is automatically converted to open access status, and its metadata and data files are accessible to the public.

        b.   Accessing on requesting

        This option is applicable for data that should not be shared openly but can be accessed on reasonable requesting. The decision whether to grant/deny access is solely under the responsibility of the data authors.

(2) Data Repository

The paper related data is encouraged to be submitted and shared in a data repository.Our selection criteria and recommended list of data repositories are as follows:

A.   Selection Criteria:

a. The data repository shall follow the FAIR principle to ensure the discoverability, accessibility, interoperability and reusability of scientific data. Specifically, it includes the following contents and requirements:

b. The data repository shall provide discoverable data identifiers for scientific data.

c. When data is stored in the repository, links and publicly shared permanent access addresses should be provided for editorial department and reviewers to review.

d. Metadata and files should support interoperability and provide an open metadata harvesting interface.

e. The data repository should support the reuse of data, provide a common standard metadata and dissemination distribution path, and provide support for data reuse.

B. Recommendation List:

Science Data Bank (ScienceDB)(https://www.scidb.cn/en)

6. Data Review

The data repository ScienceDB will execute the stylistic review of the paper related data submitted by authors, mainly checking whether the data has been uploaded, whether the uploaded data is accessible, and whether the submit the Data Availability Statement, etc.

The paper review still follows the original procedures and standards, and data submission is not a prerequisite for paper review.

If the author completes the data submission before publication, the data information may be noted in the article. If the author needs to associate the published data with the published data, the journal will publish it in the form of notification.

7. Data Availability Statement

"Data Availability Statement" is an explanatory document or text on whether the paper related data can be obtained and the specific way of obtaining it. It mainly includes the storage method and access link of the paper related data. The use of the "Data Availability Statement" helps to improve research transparency and reproducibility, and is of great significance to the repeated verification of the paper's conclusions, data reuse, and research integrity.

The Data Availability Statement should include the following: how the data is stored and access links, a unique identifier for the data , and the name of the software or tool that opens or uses the data. If the paper related data is data that should not be shared, the specific conditions and methods for accessing the data should be clearly stated and given. If an article has related data submitted, authors could attach the Data Availability Statement after the main body of the paper and before the reference.

The Data Availability Statement template is as follows or download the journal paper template directly for writing. The author can choose one or the other, or write the statement as the case may be. This statement must be consistent with the content submitted to the Platform.

(1) General Template: The related data (DOI:) for this paper is available in the (database name)database(permanent web link).

(2) Data requiring special software tools to open: The related data (DOI:) of this paper can be accessed in the (database name) database(permanent web link), and the software for opening the data is (software name).

(3) Data that should not be shared: The related data of this paper is data that should not be shared, and can be obtained from the author for reasonable reasons. The author's contact information:.

8. Data Citation

(1) Why data should be cited formally

Paper related data should be credited as the result of the author's intelligent labor. Data citation can enhance the influence of scientific data and provide evidence for the research that cites the data. This journal provides standardized data citation format for the data.

(2) How to cite research data

The journal requires others to formally cite the paper related data and to follow the citation format as:
[1] Author.(date month, year)Title. *Title of platform*.[Online]. Available: https://doi.org/10.57760/sciencedb.j00001.00417.
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9. Help and Support

(1) Data Submission Process: Science Data Bank (ScienceDB)

A. Registration and Login: The author can choose the account of the data repository to register and log in, or select the third-party user to authenticate login supported by the repository.

B. Data Submission and Edit: The author creates a new data through the data submission entry ***https://www.scidb.cn/c/cestems***, at which time the data is assigned a unique identifier (DOI) and private link. In this process, the author fills in metadata information, uploads data files, selects open sharing mode and other information. At this time, the author can temporarily save the draft and edit the information until submission. After data submission, if the data auditor revises the data, users need to modify the data until the data is approved. Before data release, data can only be reviewed by editorial department through the private link.

C. Data Release and Dissemination: After releasing, the unique identification of the data takes effect and the data can be retrieved on the repository and dissemination index platform.

D. Data Update: Once the data is published, if additional files or other data update operations are needed, the author shall initiate the creation of a new version of the data and submit the updated information. As with the old version, the submission needs to be reviewed first before releasing.

(2) Contact Information

For more questions about paper related data submission, please contact:CES TEMS Editorial Department

Tel:010-63256823.
Mail: cestems@126.com.