

Research Data Policy Type 3

Submission of a manuscript to the Journal implies that materials described in the manuscript, including all relevant raw data, will be freely available to any researcher wishing to use them for non-commercial purposes, without breaching participant confidentiality.

The journal strongly encourages that all datasets on which the conclusions of the paper rely be available to reviewers and readers. We encourage authors to ensure that their datasets are either deposited in publicly available repositories or presented in the main manuscript or additional supporting files. Please see Springer Nature's [information on recommended repositories](#) and Research Data Policy [Frequently Asked Questions](#).

General repositories - for all types of research data - such as [figshare](#) and [Dryad](#) may be used where appropriate.

The journal also requires that authors cite any publicly available data on which the conclusions of the paper rely in the manuscript. Data citations should include a persistent identifier (such as a DOI) and should ideally be included in the reference list. Citations of datasets, when they appear in the reference list, should include the minimum information recommended by [DataCite](#) and follow *<imprint>* style. Dataset identifiers including DOIs should be expressed as full URLs. For example:

Nature reference style:

Research dataset

Hao, Z., AghaKouchak, A., Nakhjiri, N., Farahmand, A. Global Integrated Drought Monitoring and Prediction System (GIDMaPS) Data sets. figshare. <http://dx.doi.org/10.6084/m9.figshare.853801> (2014)

Where a widely established research community expectation for data archiving in public repositories exists, submission to a community-endorsed, public repository is mandatory. Persistent identifiers (such as DOIs and accession numbers) for relevant datasets must be provided in the paper

For the following types of data set, submission to a community-endorsed, public repository is mandatory:

Mandatory deposition	Suitable repositories
Protein sequences	Uniprot
DNA and RNA sequences	Genbank
	DNA DataBank of Japan (DDBJ)
	EMBL Nucleotide Sequence Database (ENA)
DNA and RNA sequencing data	NCBI Trace Archive
	NCBI Sequence Read Archive (SRA)
Genetic polymorphisms	dbSNP
	dbVar
	European Variation Archive (EVA)
Linked genotype and phenotype data	dbGAP
	The European Genome-phenome Archive (EGA)

Macromolecular structure	Worldwide Protein Data Bank (wwPDB)
	Biological Magnetic Resonance Data Bank (BMRB)
	Electron Microscopy Data Bank (EMDB)
Microarray data (must be MIAME compliant)	Gene Expression Omnibus (GEO)
	ArrayExpress
Crystallographic data for small molecules	Cambridge Structural Database

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Data availability

All original articles must include a Data availability statement. Data availability statements should include information on where data supporting the results reported in the article can be found, including, where applicable, hyperlinks to publicly archived datasets analysed or generated during the study. By data we mean the minimal dataset that would be necessary to interpret, replicate and build upon the findings reported in the article. We recognise it is not always possible to share research data publically, for instance when individual privacy could be compromised, and in such instances data availability should still be stated in the manuscript along with any conditions for access.

Data Availability statements can take one of the following forms (or a combination of more than one if required for multiple datasets):

1. The datasets generated during and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS]
2. The datasets generated during and/or analysed during the current study are not publicly available due [REASON WHY DATA ARE NOT PUBLIC] but are available from the corresponding author on reasonable request.
3. The datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request.
4. Data sharing not applicable to this article as no datasets were generated or analysed during the current study.
5. All data generated or analysed during this study are included in this published article [and its supplementary information files].
6. The data that supports the findings of this study are available from [third party name] but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publically available. Data are however available from the authors upon reasonable request and with permission of [third party name].

More examples of template data availability statements, which include examples of openly available and restricted access datasets, are available [here](#).

A statement on Data Availability must appear before the References in all Articles.

With the corresponding text in the Data availability statement please include the below:

The datasets generated during and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS].^[Reference number]

Peer Review of Data

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