# AQUATIC DATA

Open access journal to share, discover and reuse marine & freshwater data

---

## TABLE OF CONTENTS

- **Description** p.1
- **Editorial Board** p.2
- **Guide for Authors** p.3

---

## DESCRIPTION

**Aquatic Data** is an open access journal that publishes peer-reviewed articles describing research data from fundamental and applied research, as well as citizens’ involvement in the field of aquatic sciences.

We publish three novel publication types: **Data in Context Articles** are the perfect companion to books, journal articles, presentations, or posters that contain research data. They are short and include a preformatted table that characterises your data. Please use our [Data in Context Article template](#); **Data in Focus Articles** bring together and harmonise collections of research data from already published and unpublished sources. They are more detailed and include statistical distributions of data. Please use our [Data in Focus Article template](#); **Data Perspective Articles** highlight the latest initiatives, tools and opportunities that may improve data sharing, discovery and reuse in aquatic sciences. They are short review type articles. Please use our [Data Perspective Article template](#).

**Aquatic Data** Articles follow Creative Commons user licenses CC-BY 4.0 permitting third party (re)use (see [https://www.elsevier.com/openaccesslicenses](https://www.elsevier.com/openaccesslicenses)).

**Aquatic Data** has an open access fee, also known as article publishing charge (APC), which needs to be paid by the authors or on their behalf e.g. by their research funder or institution. The discounted fee per Open Access Article for 2016 and 2017 is 500 US Dollars per Article.

**Research data** refers to the results of observations or experimentation that are necessary to validate research findings, including raw and processed data, video, code, software, algorithms, protocols, and methods.

**Aquatic Data** is the place to publish your research data describing: Pelagic, deep sea, benthic, coastal and shore habitats; Oceanic, shelf, estuarine, brackish, freshwater river and lake systems; Interactions with ice, land and atmosphere systems, and global climate.

Before submitting your article, you must deposit your data in a free-to-use, open access repository. Elsevier Database Linking services are available for supported data repositories, offering easy access to data from your published article online. **Aquatic Data** recommends the following data archives: **Mendeley** offers basic curation services for any type of research data. You can also deposit your data at the same time as your article using Elsevier’s integrated Mendeley Data upload system. Your data can be deposited privately at Mendeley. Private access will be given to the reviewers of the article and your data will become publicly available when the article is published. **PANGAEA** offers advanced...
curation services for environmental data. **INSDC** offers advanced curation services for nucleotide sequence data.

**Contextual data** improves sharing, discovery and reuse of your research data. Aquatic Data enriches them with FAIR (Findable, Accessible, Interoperable, Reusable) contextual data. The Article templates include an Excel file that we ask you to fill as best as you can and to submit along with the manuscript. The editorial team will assist you in improving your contextual data and will generate corresponding tables online. The costs of this service are currently included in the open Access fee.

Contextual Data comprises the following 7 components: **Environments** provide a list of geographic places, political and economic zones, ecosystems, habitats, and any environmental features that relate to your data. It includes links to quality-controlled terms in gazetteers and ontologies; **Events** provide spatial and/or temporal references for any field and/or experimental work. The granularity of an event can range from an entire study/experiment to each deployment/use of an instrument over the course of a study. Events with different granularity can be organised in a hierarchical way as needed; **Methods** provide a list of sampling and/or experimental protocols, instrumentation, formulae, equations, codes, or models used in your work. It includes links to methods published in specialised journals such as MethodsX and SoftwareX or registered in online resources such as GitHub and Protocols.io; **Samples** provide a list of physical samples used in your work, including those used-up during analyses and those preserved in collections. It includes links to sample descriptors registered in online resources; **Entities** provide a list of chemical and biological entities described in your work (e.g. proteins, organisms), including "sub" entities (e.g. molecular bonds, body parts) and "super" entities (e.g. "algae", "colony"). It includes links to quality-controlled terms in online resources such as chemical registers and taxonomic registers; **Qualities** provide a list of qualitative parameters (e.g. colour, shape, treatment) and their values used in your work, including traits (e.g. blue, red, round, elongated), and natural or artificial conditions used during experiments (e.g. elevated CO2 levels). It provides links to quality-controlled terms in morphological traits data bases and ontologies; **Quantities** provide a list of quantitative parameters/variables used in your work, detailing their quantity kind, name, abbreviation, dimension, units, quartiles, accuracy and precision. It includes links to quality-controlled terms in online ontologies.

Elsevier's Content Innovation apps allows you to enrich the content of your online article. Aquatic Data encourages you to use the following apps: **AudioSlides** are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about; **Interactive Map Viewer** (Google) provides annotated geospatial information on an interactive (Google) map. This is enabled by listing events in the Data in Context Section of the manuscript. You can also include KML or KMZ files with your article submission; **Interactive Graphic Viewer (.csv)** provides easy visualisation and access to data used in online Figures. Readers can switch between plots and table view, download data or hover over data points to see the value. This is enabled when your data is archived in .csv or tab-delimited format; **Interactive Graphic Viewer** (MATLAB) provides easy visualisation and access to figures created in MATLAB. This is enabled by submitting figures in .fig format with your article. **Interactive 2D Viewer** The award winning Virtual Microscope lets your reader explore high resolution microscopic images that are featured in your article. This is enabled by submitting 2D images with your article; **Interactive 3D Viewer** lets your reader explore high resolution 3D images that are featured in your article. This is enabled by submitting 3D images with your article.

**EDITORIAL BOARD**

*Editor-in-Chief*

Stéphane Pesant, MARUM - Center for Marine Environmental Sciences, Universität Bremen, Bremen, Germany

*Associate Editors*

Gwen Moncoiffe, National Oceanography Centre, Liverpool, UK

*Editorial Board*

Kerstin Lehnert, Palisades, New York, USA
GUIDE FOR AUTHORS

Introduction
Aquatic Data is an open access journal that publishes peer-reviewed articles describing research data from fundamental and applied research, as well as citizens' involvement in the field of aquatic sciences. Aquatic Data Articles follow Creative Commons user licenses CC-BY 4.0 permitting third party (re)use (see https://www.elsevier.com/openaccesslicenses). Aquatic Data has an open access fee, also known as article publishing charge (APC), which needs to be paid by the authors or on their behalf e.g. by their research funder or institution. The discounted fee per Open Access Article for 2016 and 2017 is 500 US Dollars per Article.

Types Of Papers
We welcome submissions of three article types: Data in Context Articles are the perfect companion to books, journal articles, presentations, or posters that contain research data. They are short and include a preformatted table that characterises your data. Please use our Data in Context Article template. Data in Focus Articles bring together and harmonise collections of research data from already published and unpublished sources. They are more detailed and include statistical distributions of data. Please use our Data in Focus Article template. Data Perspective Articles highlight the latest initiatives, tools and opportunities that may improve data sharing, discovery and reuse in aquatic sciences. They are short review type articles. Please use our Data Perspective Article template.

Submission checklist
Ensure that the following items are present:

One author has been designated as the corresponding author with contact details: E-mail address Full postal address All necessary files have been uploaded:

Manuscript: Include keywords Include all figure captions Include all tables captions Figures and tables (if very large) Use the format specified in the Artwork Section below Ensure that the filenames match the figure citations in the text (e.g. Figure 1)
Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

Further considerations: Indicate clearly if color should be used for any figures in print Manuscript has been 'spell checked' and 'grammar checked' All references mentioned in the Reference List are cited in the text, and vice versa Permission has been obtained for use of copyrighted material from other sources (including the Internet) Relevant declarations of interest have been made Journal policies detailed in this guide have been reviewed Referee suggestions and contact details provided, based on journal requirements

BEFORE YOU BEGIN

Ethics in publishing
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Declaration of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. If there are no conflicts of interest then please state this: 'Conflicts of interest: none'. More information.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see 'Multiple, redundant or concurrent publication' section of our ethics policy for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service CrossCheck.
Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Elsevier supports responsible sharing
Find out how you can share your research published in Elsevier journals.

Role of the funding source
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Open Access
This is an open access journal. All articles will be immediately and permanently free for everyone to read and download. To provide open access, this journal has an open access fee (also known as an article publishing charge APC) which needs to be paid by the authors or on their behalf e.g. by their research funder or institution. Permitted third party (re)use is defined by the following Creative Commons user licenses (see https://www.elsevier.com/openaccesslicenses): The discounted fee per Open Access Article for 2016 and 2017 is 500 US Dollars per Article.

Funding body agreements and policies
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the Open Access Publication Fee. Details of existing agreements are available online.

Elsevier Publishing Campus
The Elsevier Publishing Campus (www.publishingcampus.com) is an online platform offering free lectures, interactive training and professional advice to support you in publishing your research. The College of Skills training offers modules on how to prepare, write and structure your article and explains how editors will look at your paper when it is submitted for publication. Use these resources, and more, to ensure that your submission will be the best that you can make it.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop.

Submission
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Referees
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

PREPARATION
Peer review
Data articles submitted to Aquatic Data undergo an initial assessment by the Editor-in-Chief (or handling Editor) and are then sent out for technical peer-review by a data specialist (editorial board member) and for scientific peer-review by at least one researcher in a relevant field.

Editor's initial assessment
Originality: The Article has not been published elsewhere in whole or in large parts. A plagiarism check report is available to all reviewers in the EVISE editorial system.

Long-term preservation and publication of data: Data described in the article are archived in a trusted repository that meets the following criteria: Data are citable with author(s), title, year of publication, and a persistent identifier (e.g. doi, accession numbers) The integrity of data is preserved on the long term, i.e. the archive supports versioning or similar functionalities ensuring that data described in the Article will always be available exactly as it was at the time of the Article's publication Data are available online in free and open access See list of data repositories recommended by Aquatic Data (Link)

Contextual data: Contextual data are provided as carefully as possible using the Journal's template (Excel)
Article structure and clarity: The structure of the Article follows the Journal's template (Word)
Content innovation: The materials provided by the authors to enrich their article follow the requirements of Elsevier's Content innovation apps. The Editor may contact the authors to suggest other ways to enrich their article.

Technical peer-review
Technical peer-review focuses on (1) the curation of data cited in Section "Open Research Data", (2) the "Methods and Quality Assurance" described in the Article, and (3) the contextual data provided in a separate Excel file. At this stage, we ask authors to provide as much context as possible, and the Editor-in-Chief (or handling Editor) is expected to improve the contextual data. The technical review may address the following criteria:

Data provenance: The authors provide enough details about campaigns/studies, stations/sites, experiments/sampling events, and samples taken for analysis or storage: Geolocation (e.g. date/time, latitude, longitude, elevation, depth/altitude) Methods (e.g. devices/instruments, sampling/experimental protocols, sample treatments) References (e.g. data products, journal articles, software, consumable reference code)

Data interoperability: The authors provide, as much as possible, relevant terms from controlled vocabularies, gazetteers, registers and/or ontologies that are openly available and generally accepted by the aquatic sciences community;

Data quality: Data available online from the selected long-term archives are curated to a high technical standard and the quality assurance steps are described in sufficient details in the Article;

Data fitness for reuse: From the point of view of a data specialist, data described in the Article are (choose one):
a. fit for reuse in the form available at the selected long-term repositories;
b. fit for reuse only when combined with Contextual Data provided in the Article;
c. fit for reuse only when combined with additional tools described in the Article;
d. not fit for reuse.

Scientific peer-review
The scientific peer-review focuses on the quality of data cited in Section "Open Research Data", and on the Article's Sections "Scientific Interest", "Methods and Quality Assurance" and "Data Description". The scientific review may address the following criteria:

Article structure and clarity: The Article is presented in an intelligible way and is written in standard English

Scientific interest: The authors clearly describe the background, novelty, scientific interest and potential reuse of the data described in the Article.

Data reproducibility: The Article describes in sufficient details:
the sampling, experimental and/or model designs (if applicable) the methodology used for the treatment and analysis of samples (if applicable) the methodology used to calculate or transform data

Data coverage: The data constitute an original and valuable contribution to the field. In the case of a Data in Context Article, the volume or geographic/time coverage of the data can be relatively small. In the case of Data in Focus Articles, the volume or the geographic/time coverage of the data must be significant.
Data quality: The treatments and analysis are performed to a high technical standard and are described in sufficient detail.

Data fitness for reuse: From the point of view of a scientist, data described in the article are:
- easy to access from online data repositories easy to cite with author(s), title, year of publication, and a persistent identifier (e.g. doi, accession number) easy to combine with other data sets

Use of word processing software
It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Article Structure
The structure of each article type is given in the templates provided here:
Data in Context Articles are the perfect companion to books, journal articles, presentations, or posters that contain research data. They are short and include a preformatted table that characterises your data. Please use our Data in Context Article template.

Data in Focus Articles bring together and harmonise collections of research data from already published and unpublished sources. They are more detailed and include statistical distributions of data. Please use our Data in Focus Article template.

Data Perspective Articles highlight the latest initiatives, tools and opportunities that may improve data sharing, discovery and reuse in aquatic sciences. They are short review type articles. Please use our Data Perspective Article template.

Submit your article: To submit a data article directly to Aquatic Data Fill in this template
Submit the document along with any computer code used to analyze the data through the journal's online submission system.

All data described in an article submitted to Aquatic Data must be made publicly available. This can be via: Public repositories. There are many public repositories to which you can upload your datasets. See our list of supported data repositories. Mendeley Data. If you aren't sure where exactly you should put your data, or you have data that falls outside of the data accepted by the established repository in your field, you can upload your files to Mendeley Data which has a limit of 10GB per dataset (uploading and labelling each individual .zip file would be best here). Mendeley Data, with which Aquatic Data is collaborating, is free for the journal's authors. If you choose this route, you upload all your data files into Mendeley Data without hitting 'publish'. This means the editor and reviewers can look at your data during the review process (and you can still make changes to the data and metadata), but the data is not yet publicly available. Then, when you submit your final, revised version, you can formally publish your dataset on Mendeley Data, which makes it fully open access to everyone, and provides the final dataset DOI in your Aquatic Data article. The two will be both linked and archived after that.

Graphical abstract
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.
Authors can make use of Elsevier's Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.
Highlights
Highlights are a short collection of bullet points that convey the core findings of the article. Highlights are optional and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view example Highlights on our information site.

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Units
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

Math formulae
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork
Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.
A detailed guide on electronic artwork is available.
You are urged to visit this site; some excerpts from the detailed information are given here.
**Formats**

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- **EPS (or PDF):** Vector drawings, embed all used fonts.
- **TIFF (or JPEG):** Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
- **TIFF (or JPEG):** Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- **TIFF (or JPEG):** Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

**Color artwork**

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF) or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites). Further information on the preparation of electronic artwork.

**Illustration services**

Elsevier's WebShop offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

**Figure captions**

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

**References**

**Citation in text**

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

**Reference links**

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is encouraged.

A DOI can be used to cite and link to electronic articles where an article is in-press and full citation details are not yet known, but the article is available online. A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.
Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference style
Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.
Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ....'
List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.
Examples:
Reference to a journal publication:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:

Journal abbreviations source
Journal names should be abbreviated according to the List of Title Word Abbreviations.

Video
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB in total. Any single file should not exceed 50 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.
Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

RESEARCH DATA
Research data refers to the results of observations or experimentation that are necessary to validate research findings, including raw and processed data, video, code, software, algorithms, protocols, and methods.

Aquatic Data is the place to publish your research data describing: pelagic, deep sea, benthic, coastal and shore habitats oceanic, shelf, estuarine, brackish, freshwater river and lake systems interactions with ice, land and atmosphere systems, and global climate

Before submitting your article, you must deposit your data in a free-to-use, open access repository. Elsevier Database Linking services are available for supported data repositories, offering easy access to data from your published article online. Aquatic Data recommends the following data archives: Mendeley offers basic curation services for any type of research data. You can also deposit your data at the same time as your article using Elsevier's integrated Mendeley Data upload system. Your data can be deposited privately at Mendeley. Private access will be given to the reviewers of the article and your data will become publicly available when the article is published. PANGAEA offers advanced curation services for environmental data INSDC offers advanced curation services for nucleotide sequence data

Contextual data improves sharing, discovery and reuse of your research data. Aquatic Data enriches them with FAIR (Findable, Accessible, Interoperable, Reusable) contextual data. The Article templates include an Excel file that we ask you to fill as best as you can and to submit along with the manuscript. The editorial team will assist you in improving your contextual data and will generate corresponding tables online. The costs of this service are currently included in the open Access fee.

Contextual Data comprises the following 7 components: Environments provide a list of geographic places, political and economic zones, ecosystems, habitats, and any environmental features that relate to your data. It includes links to quality-controlled terms in gazetteers and ontologies; Events provide spatial and/or temporal references for any field and/or experimental work. The granularity of an event can range from an entire study/experiment to each deployment/use of an instrument over the course of a study. Events with different granularity can be organised in a hierarchical way as needed; Methods provide a list of sampling and/or experimental protocols, instrumentation, formulae, equations, codes, or models used in your work. It includes links to methods published in specialised journals such as MethodsX and SoftwareX or registered in online resources such as GitHub and Protocols.io; Samples provide a list of physical samples used in your work, including those used-up during analyses and those preserved in collections. It includes links to sample descriptors registered in online resources; Entities provide a list of chemical and biological entities described in your work (e.g. proteins, organisms), including "sub" entities (e.g. molecular bonds, body parts) and "super" entities (e.g. "algae", "colony"). It includes links to quality-controlled terms in online resources such as chemical registers and taxonomic registers; Qualities provide a list of qualitative parameters (e.g. colour, shape, treatment) and their values used in your work, including traits (e.g. blue, red, round, elongated), and natural or artificial conditions used during experiments (e.g. elevated CO2 levels). It provides links to quality-controlled terms in morphological traits data bases and ontologies; Quantities provide a list of quantitative parameters/variables used in your work, detailing their quantity kind, name, abbreviation, dimension, units, quartiles, accuracy and precision. It includes links to quality-controlled terms in online ontologies.

Data linking
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.
There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the [database linking page](https://www.elsevier.com/locate/aqdata).

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

**Mendeley Data**
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to [Mendeley Data](https://www.elsevier.com/locate/aqdata). The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the [Mendeley Data for journals page](https://www.elsevier.com/locate/aqdata).

**ARTICLE ENRICHMENTS**

**AudioSlides**
The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

**Google Maps and KML files**
KML (Keyhole Markup Language) files (optional): You can enrich your online articles by providing KML or KMZ files which will be visualized using Google maps. The KML or KMZ files can be uploaded in our online submission system. KML is an XML schema for expressing geographic annotation and visualization within Internet-based Earth browsers. Elsevier will generate Google Maps from the submitted KML files and include these in the article when published online. Submitted KML files will also be available for downloading from your online article on ScienceDirect. More information.

**Interactive Phylogenetic Trees**
You can enrich your online articles by providing phylogenetic tree data files (optional) in Newick or NeXML format, which will be visualized using the interactive tree viewer embedded within the online article. Using the viewer it will be possible to zoom into certain tree areas, change the tree layout, search within the tree, and collapse/expand tree nodes and branches. Submitted tree files will also be available for downloading from your online article on ScienceDirect. Each tree must be contained in an individual data file before being uploaded separately to the online submission system, via the 'phylogenetic tree data' submission category. Newick files must have the extension .new or .nwk (note that a semicolon is needed to end the tree). Please do not enclose comments in Newick files and also delete any artificial line breaks within the tree data because these will stop the tree from showing. For NeXML, the file extension should be .xml. Please do not enclose comments in the file. Tree data submitted with other file extensions will not be processed. Please make sure that you validate your Newick/NeXML files prior to submission. More information.

**Interactive MATLAB Figure Viewer**
This journal features the Interactive MATLAB Figure Viewer, allowing you to display figures created in MATLAB in the .FIG format in an interactive viewer next to the article. More information and submission instructions.

**3D models**
You can enrich your online articles by providing 3D models (optional) in PLY, OBJ or U3D format, which will be visualized using the interactive viewer next to the article. Each 3D model will have to be zipped and uploaded to the online submission system via the '3D models' submission category. Please be advised that the recommended model size before zipping is maximum 150 MB. Multiple models can be submitted. Please provide a short informative description for each model by filling in...
the 'Description' field when uploading a dataset. Note: all datasets will be available for download from the online article on ScienceDirect. If you have concerns about your data being downloadable, please provide a video instead. More information on OBJ and PLY models or U3D models.

**Interactive plots**
This journal enables you to show an Interactive Plot with your article by simply submitting a data file. [Full instructions.](#)

**Virtual Microscope**
The journal encourages authors to supplement in-article microscopic images with corresponding high resolution versions for use with the Virtual Microscope viewer. The Virtual Microscope is a web based viewer that enables users to view microscopic images at the highest level of detail and provides features such as zoom and pan. This feature for the first time gives authors the opportunity to share true high resolution microscopic images with their readers. [More information and examples.](#) Authors of this journal will receive an invitation e-mail to create microscope images for use with the Virtual Microscope when their manuscript is first reviewed. If you opt to use the feature, please contact virtualmicroscope@elsevier.com for instructions on how to prepare and upload the required high resolution images.

**AFTER ACCEPTANCE**

**Online proof correction**
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors. If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF. We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. [More information.](#)

**Offprints**
The corresponding author will be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier’s [Webshop.](#) Authors requiring printed copies of multiple articles may use Elsevier Webshop's 'Create Your Own Book' service to collate multiple articles within a single cover.

**AUTHOR INQUIRIES**
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published. [More information.](#)

**Author Inquiries**
You can track your submitted article at [https://www.elsevier.com/track-submission.](https://www.elsevier.com/track-submission) You can track your accepted article at [https://www.elsevier.com/trackarticle.](https://www.elsevier.com/trackarticle) You are also welcome to contact Customer Support via [http://support.elsevier.com.](http://support.elsevier.com)