DESCRIPTION

The aim of the *Journal of Commodity Markets (JCM)* will be to publish high-quality research in all areas of economics and finance related to commodity markets. The research may be theoretical, empirical, or policy-related. The *JCM* will place an emphasis on originality, quality, and clear presentation.

The purpose of the journal is also to stimulate international dialog among academics, industry participants, traders, investors, and policymakers with mutual interests in commodity markets. The mandate for the journal is to present ongoing work within commodity economics and finance. Topics can be related to financialization of commodity markets; pricing, hedging, and risk analysis of commodity derivatives; risk premia in commodity markets; real option analysis for commodity project investment and production; portfolio allocation including commodities; forecasting in commodity markets; corporate finance for commodity-exposed corporations; econometric/statistical analysis of commodity markets; organization of commodity markets; regulation of commodity markets; local and global commodity trading; and commodity supply chains. Commodity markets in this context are energy markets (including renewables), metal markets, mineral markets, agricultural markets, livestock and fish markets, markets for weather derivatives, emission markets, shipping markets, water, and related markets. This interdisciplinary and trans-disciplinary journal will cover all commodity markets and is thus relevant for a broad audience. Commodity markets are not only of academic interest but also highly relevant for many practitioners, including asset managers, industrial managers, investment bankers, risk managers, and also policymakers in governments, central banks, and supranational institutions.

For queries related to the journal, please contact jocm@elsevier.com

ABSTRACTING AND INDEXING

The Journal Whitelist (Cabells)
Emerging Sources Citation Index (ESCI)
Journal of Economic Literature
Scopus
RePEc
INSPEC
EDITORIAL BOARD

Editors
M. Prokopczuk, Leibniz Universität Hannover, Hannover, Germany
B. Simkins, Oklahoma State University, Stillwater, Oklahoma, USA
S. Westgaard, Norwegian University of Science & Technology NTNU, Trondheim, Norway

Advisory Editor
C. Alexander, University of Sussex, Brighton, England, UK

Associate Editors
C. Baumeister, University of Notre Dame, Notre Dame, Indiana, USA
O. Bergland, Norges miljø- og biovitenskapelige universitet (NMBU), Aas, Norway
A. Cartea, University of Oxford, Oxford, UK
C. Carter, University of California, Davis, Davis, California, USA
J. Casassus, Pontificia Universidad Católica de Chile, Santiago, Chile
M. Coulon, University of Sussex, Brighton, England, UK
G. Davis, Colorado School of Mines, Golden, Colorado, USA
W. Drobotz, Universität Hamburg, Hamburg, Germany
R.F. Engle, New York University, New York, New York, USA
F. Espen Benth, University of Oslo, Oslo, Norway
C. Ewald, University of Glasgow, Glasgow, Scotland, UK
T.R. Fortenberry, Washington State University, Pullman, Washington, USA
R. Fuess, Universität St. Gallen, St. Gallen, Switzerland
D. Gay, Georgia State University, Atlanta, Georgia, USA
T. Kanamura, Kyoto University, Kyoto, Japan
R. Kiesel, Universität Duisburg-Essen, Essen, Germany
S. Koekoek, Universitetet i Agder, Kristiansand, Norway
A. Kurov, West Virginia University, Morgantown, West Virginia, USA
S.C. Linn, University of Oklahoma, Norman, Oklahoma, USA
P. Liu, Cornell University, New York, New York, USA
B.M. Lucey, Trinity College, Dublin, Ireland
J. Miffre, Audencia Nantes, Nantes, France
S.K. Mohanty, City University of New York (CUNY), New York, New York, USA
N. Nomikos, Cass Business School, London, UK
F. Paraschiv, Universität St. Gallen, St. Gallen, Switzerland
C. Pirrong, University of Houston, Houston, Texas, USA
G.J. Power, Université Laval, Quebec City, Quebec, Canada
R. Ripple, University of Tulsa, Tulsa, Oklahoma, USA
P. Ritchken, Case Western Reserve University, Cleveland, Ohio, USA
M.A. Robe, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA
D. Rogers, Portland State University, Portland, Oregon, USA
A. Roncoroni, ESSEC Business School, Cergy-Pontoise Cedex, France
E. Ronn, University of Texas at Austin, Austin, Texas, USA
K.G. Rouwenhorst, Yale University, New Haven, Connecticut, USA
T. Schroeder, Kansas State University, Manhattan, Kansas, USA
E. Schwartz, University of California at Los Angeles (UCLA), Los Angeles, California, USA
G. Skiadopoulos, University of Piraeus, Piraeus, Greece
K. Tang, Tsinghua University, Beijing, China
L. Taschini, London School of Economics and Political Science (LSE), London, UK
S. Titman, University of Texas at Austin, Austin, Texas, USA
S. Trueck, Macquarie University, Sydney, Australia
A. Worthington, Griffith University, Southport, Queensland, Australia
J. Yang, University of Colorado Denver, Denver, Colorado, USA
GUIDE FOR AUTHORS

Your Paper Your Way
We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article.
To find out more, please visit the Preparation section below.

SUBMISSION FEE
All submissions must be accompanied by a submission fee of US$80. Submissions will only be considered after payment of the submission fee via SubmissionStart. Submission fee is non-refundable and a paper may be rejected by the Editor without being sent for review, should a paper be inconsistent with the Aims and Scope of the Journal as set out on the Journal website, not adhere to the style requirements as outlined in the Guide for Authors or the Editor consider that the paper is in its present form unpublishable. The proceeds of submission fees are used for the development of academic activities in the interest of the Journal's audience.

INTRODUCTION
Authors thinking of submitting an article to the Journal of Commodity Markets (JCOMM) should first consider carefully whether the paper falls within the 'Aims and Scope' of the journal as described on the journal homepage, http://www.journals.elsevier.com/journal-of-commodity-markets, i.e. that it presents ongoing work within commodity economics and finance. The Aims and Scope also includes a list of topics covered which may provide further guidance as to whether the paper is likely to be of interest to JCOMM.

In addition, authors need to bear in mind that JCOMM readers include not only academics but also a range of professionals including: industry participants, traders, investors, and policymakers with mutual interests in commodity markets. Therefore, authors need to be mindful that their research has non-trivial applications to the interests of professionals in the banking and finance industry. Amongst other things, this includes a clear statement of the research questions at the outset, and thereafter engaging substantially with the body of literature surrounding the questions asked. Moreover, they should ensure that the paper is likely to be of interest to a large proportion of JCOMM's wide-ranging readership (i.e. the paper should be neither too narrow nor too technical).

First-time authors and authors who are new to Elsevier may be interested in additional information about the process for submitting a manuscript or the process for publishing in scholarly journals, in general, please visit http://www.publishingcampus.elsevier.com

Editorial Strategy and Policies

Desk Rejection Policy
Reasons for desk rejection are clearly explained below. Desk rejection will normally be done within 3 weeks of submission.

Submitted papers that have little direct relationship to the core JCOMM issues, even if such papers are good, are likely to be desk rejected as 'out of scope'. In addition, papers that do address a JCOMM issue, but do not meet our quality standards, are also likely to be desk rejected. Problems with quality include: insufficient intellectual depth; an analysis that is inappropriate to the research question being asked, or not sufficiently rigorous; that the language, style, or grammar does not conform to accepted standards of scholarship; or that the paper is excessively long. Authors should write in a complete but concise style and, if possible, submit manuscripts that are no longer than about 40 pages, when formatted according to our preparation guidelines described below. The third reason and final reason for desk rejection is that the paper makes only a marginal contribution to the field of research.

Review Process
Submitted papers are first considered by one of the three main Editors and then allocated to a Handling Editor, one of the Associate Editors who is a specialist on that topic. Papers that are not desk rejected are then typically sent out to two referees. If one or more of these turns down the invitation to provide a review, other referees will subsequently be appointed. Normally, at least two authoritative reviews are needed before the Handling Editor can make a decision (or recommendation to the Editor, if the Handling Editor is an Associate Editor) as to whether to accept, reject, or ask for a revision of the submitted paper. However, in some cases only one review will be obtained and it is up to the Editor in charge of that manuscript to make a final decision.

No more than two major revisions will be allowed for each paper, followed by a minor revision (which entails such things as removing typos, clarifying meanings, updating references, etc). Major revisions must be resubmitted within 25 weeks from request for revision and minor revisions should not take more than 2 weeks, unless there are mitigating circumstances. All major revisions that are not submitted within the expected time frame will be ‘dropped’ and are considered as new submission, should they be submitted at a later stage. All papers that do not make it to the minor-revisions-only stage after two major revisions will be rejected.

**Special Issues/Sections**

JCOMM welcomes publication of Special Issues, or a shorter Special Section version. Thematic issues are strongly preferred to a group of loosely connected papers from a conference on a fairly standard subject.

Special Issues/Sections can fulfill a number of important functions, such as: bringing together and integrating work on a specific theme (for instance, bringing together theoretical and empirical work, or work based on different methodological approaches); opening up a previously under-researched area (or one that has perhaps struggled with a rather conservative peer review process in its efforts to achieve recognition); or constructing a bridge between formerly rather separate research communities, who have been focusing on similar or related topics.

Proposals should be submitted via online submission system [https://www.evise.com/profile/api/navigate/JCOMM](https://www.evise.com/profile/api/navigate/JCOMM). All proposals are being reviewed by the main Editors on the basis of certain criteria that include: the novelty, importance and topicality of the theme; whether the papers will form an integrated whole; the standing of the authors; the experience of the proposed/assigned Guest Editors in handling a task of this magnitude; and the overall 'added value' of a Special Issue or Section (as compared with publishing these papers separately in 'normal' issues).

**Contact details for submission**

All new manuscripts must be submitted through the online submission and peer review website [https://www.evise.com/profile/api/navigate/JCOMM](https://www.evise.com/profile/api/navigate/JCOMM).

**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 competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. 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, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' 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 Crossref Similarity Check.

**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

**Author contributions**

For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

**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.

**Article transfer service**

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

**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.

**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 gold open access publication fee. Details of existing agreements are available online.

The gold open access publication fee for this journal is **1352 EUR**, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.
Elsevier Researcher Academy

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

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 Author Services.

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.

Submit your article

Please submit your article to the journal mailbox: https://www.evise.com/profile/api/navigate/JCOMM

PREPARATION

NEW SUBMISSIONS

Submission to this journal proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts your files to a single PDF file, which is used in the peer-review process.

As part of the Your Paper Your Way service, you may choose to submit your manuscript as a single file to be used in the refereeing process. This can be a PDF file or a Word document, in any format or layout that can be used by referees to evaluate your manuscript. It should contain high enough quality figures for refereeing. If you prefer to do so, you may still provide all or some of the source files at the initial submission. Please note that individual figure files larger than 10 MB must be uploaded separately.

References

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

Formatting requirements

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions.

If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes.

Divide the article into clearly defined sections.

Figures and tables embedded in text

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file. The corresponding caption should be placed directly below the figure or table.

Peer review

This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.
**Double-blind review**
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

*Title page (with author details):* This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.

*Blinded manuscript (no author details):* The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

**REVISED SUBMISSIONS**

*Use of word processing software*
Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). 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.

*LaTeX*
You are recommended to use the Elsevier article class *elsarticle.cls* ([http://www.ctan.org/tex-archive/macros/latex/contrib/elsarticle](http://www.ctan.org/tex-archive/macros/latex/contrib/elsarticle)) to prepare your manuscript and BibTeX ([http://www.bibtex.org](http://www.bibtex.org)) to generate your bibliography.

For detailed submission instructions, templates and other information on LaTeX, see [https://www.elsevier.com/latex](https://www.elsevier.com/latex).

*Article structure*

*Subdivision - numbered sections*
Section heading style examples (all flush left):

3. Methodology and data: An explanation (Level 1. 12 font in bold. Period after number.)

3.1. Empirical methods (Level 2. Subheading in italics NOT bold. Periods after numbers.)

3.1.1. Testing vectors (Level 3. This subheading in italics NOT bold. Periods after numbers.)

Use this numbering also for internal cross-referencing: do not just refer to "the text". Any subsection may be given a brief heading. Each heading should appear on its own separate line.

*Introduction*
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

*Material and methods*
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

*Theory/calculation*
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

*Results*
Results should be clear and concise.

*Conclusions*
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

*Appendices*
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.
Submission Checklist
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

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
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print
Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

Further considerations
- 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)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

Essential title page information
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Highlights
Highlights are optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights 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).
**Abstract**
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

The abstract should not be more than 100-150 words.

**Keywords**
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Classification codes**
Please provide up to 6 standard JEL codes. The available codes may be accessed at JEL.

**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.

Because of the international character of the journal, no rigid rules concerning notation or abbreviation need to be observed by the authors but each paper should be self-consistent as to symbols and units which should be properly defined. When using a full stop (period) in an abbreviation, the full stop indicates letters omitted. A full stop should not be used if the abbreviation ends with the same letter as the original word. "Volume" may be abbreviated "Vol.", "section" may be abbreviated "sec.", etc., but "Doctor" should be abbreviated "Dr" without an ending full stop.

**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**
Displayed formulae should be numbered consecutively throughout the manuscript as (1), (2), etc. against the right-hand margin of the page. In cases where the derivation of formulae has been abbreviated, it is of great help to the referees if the full derivation can be presented on a separate sheet (not to be published).

Please be sure to carefully check your equations after the PDF has been built. If you are having difficulties with equations, please refer to this author support article.
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.

The footnotes should be double spaced

Electronic artwork

General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Preferred fonts: Arial (or Helvetica), Times New Roman (or Times), Symbol, Courier.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Indicate per figure if it is a single, 1.5 or 2-column fitting image.
• For Word submissions only, you may still provide figures and their captions, and tables within a single file at the revision stage.
• Please note that individual figure files larger than 10 MB must be provided in separate source files.
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
Regardless of the application used, 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 the font or save the text as 'graphics'.
- TIFF (or JPEG): Color or grayscale photographs (halftones): always use a minimum of 300 dpi.
- TIFF (or JPEG): Bitmapped line drawings: use a minimum of 1000 dpi.
- TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale): a minimum of 500 dpi is required.
Please do not:
• Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); the resolution is too low.
• 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) regardless of whether or not these illustrations are reproduced in color in the printed version. For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article. Please indicate your preference for color: in print or online only. Further information on the preparation of electronic artwork.

Figure captions
Ensure that each illustration has a caption. 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.

Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.
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 highly encouraged.

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 formatting

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

Reference style

Text: All citations in the text should refer to:
1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
2. Two authors: both authors' names and the year of publication;
3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references can be listed either first alphabetically, then chronologically, or vice versa.

Examples: 'as demonstrated (Allan, 2000a, 2000b, 1999; Allan and Jones, 1999).... Or, as demonstrated (Jones, 1999; Allan, 2000).... Kramer et al. (2010) have recently shown ...'

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.
Examples:
Reference to a journal publication:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:

Journal Abbreviations Source
Journal titles should not be abbreviated.

Research Data

This journal requires and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. When sharing data in one of these ways, you are expected to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

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 give 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. 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. 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.

Data statement

To foster transparency, we require you to state the availability of your data in your submission if your data is unavailable to access or unsuitable to post. This may also be a requirement of your funding body or institution. You will have the opportunity to provide a data statement during the submission process. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

Research data

This journal requires and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. When sharing data in one of these ways, you are expected to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

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.

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. 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.

Data statement

To foster transparency, we require you to state the availability of your data in your submission if your data is unavailable to access or unsuitable to post. This may also be a requirement of your funding body or institution. You will have the opportunity to provide a data statement during the submission process. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

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.

**Offprints**

The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. 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 Author Services. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**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.

**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: [https://www.elsevier.com/guidepublication](https://www.elsevier.com/guidepublication)). 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.

The paper text must be double spaced in times new roman 12 font with one inch margins. Smaller fonts and/or less than double spacing is not acceptable. Similar types of fonts and spacing should be used with scientific word processors.

Remove names, affiliations, and acknowledgment footnote from the cover page. That is, the paper uploaded should be an anonymous draft for review.

**Reference Management Software**

Most Elsevier journals have a standard template available in key reference management packages. This covers packages using the Citation Style Language, such as Mendeley ([http://www.mendeley.com/features/reference-manager](http://www.mendeley.com/features/reference-manager)) and also others like EndNote ([http://www.endnote.com/support/enstyles.asp](http://www.endnote.com/support/enstyles.asp)) and Reference Manager ([http://refman.com/support/rmstyles.asp](http://refman.com/support/rmstyles.asp)). Using plug-ins to word processing packages which are available from the above sites, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style as described in
this Guide. The process of including templates in these packages is constantly ongoing. If the journal you are looking for does not have a template available yet, please see the list of sample references and citations provided in this Guide to help you format these according to the journal style.