Bulletin of the Geological Society of Finland

Instructions for preparing your revised manuscript and final submission

Dear author,

To avoid any delays, please strictly follow the instructions below when preparing your revised manuscript. The instructions that are different from those related to the original submission given on the Bulletin website are highlighted in blue. **Note that submitting your revised manuscript does not mean that it will be accepted by default**. In case of major revisions, a second revision round may be commenced.

Revised manuscripts, conforming to the instructions given below, should be sent **by e-mail to the Handling Editor AND the Editor-in-Chief**. Traditional research articles should be concise, generally no more than 20 printed pages. Short communications are independent write ups representing significant research or novel ideas and should not contain more than about 3000 words and 2–3 figures or tables.

Structure of the submission file(s)

Revised manuscripts should be submitted by e-mail to the **Editor-in-Chief** (not the Handling Editor!) and follow these major guidelines:

- Send the **manuscript text, figures and their captions, and references** compiled into a single file (.DOC/.DOCX/.RTF/.PDF). **Number the sections** with three section levels allowed (i.e. X., X.X., and X.X.X.; does not apply to Acknowledgements, Authorship contribution statement, Supplementary data, or References). Add **line numbers** to the manuscript file with changes marked (see below). **Figures and their captions should be placed within text**, near places where they are first cited.
- **Send two manuscript files**: **one with all changes marked** and **one with all changes accepted** (final revised version).
- **In the finalized manuscript file**:
  - **Do not use indentation or spacing** – separate paragraphs with empty rows instead.
  - **List the authors and abbreviations on the title page as (example)**: Ville Järvinen[1]*, Tapio Halkoaho[2], Jukka Konnunaho[3], Jussi S. Heinonen[1], Tuomo Karinen[3] and O. Tapani Rämö[1]. Write the corresponding author after the Keywords as "*Corresponding author (e-mail: xxx.xxx@xxx.xx).
  - **You should always double-check** the contents and ordering of the title page and other parts of the manuscript as given in the latest articles published on the website.
- **Prepare a revision letter** that explains how you have reacted to all of the reviewers' and editors' comments that do not concern only typos or grammar. In the revision letter, the line numbers that refer to the reviewers' original comments, **should refer to the original submitted version**. When referring to the parts that have been modified in the revised submission, **refer to the line numbers in the manuscript file with changes marked**.
- **The manuscript files should not exceed 15 Mb in size**, so make sure to compress the images or use low-resolution versions if needed. The images should be clearly readable, however. Consult the Editor-in-Chief if this is not possible.
- **Tables and their captions** should be sent in a separate file (.DOC/.DOCX/.RTF/.PDF) in a layout that is easily readable.

If your paper is accepted, we ask you to send us high-quality electronic figures separately. More information below.

Language and terminology

Articles must be written clearly and concisely in English (British or American, consistently). **Make sure that the used terminology and classifications conform to the most recent recommendations within the field**. Editors use Glossary of Geology (latest edition) as the main terminological reference. In the case of bedrock and soil stratigraphy of Finland, the authors should consult "*Stratigraphic framework in Finland – formal classification and practical guidance*" published in 2024 in the Bulletin of the Geological Survey of Finland (vol. 418, edited by Juha Köykkä, Antti E. K. Ojala & Timo Tarvainen). Chronostratigraphy should follow the International Chronostratigraphic Chart (ICS; see www.stratigraphy.org). **Deviations from such guidelines need to be justified and explained.**

Examples:

YES	NO
NW-trending	NW-SW trending
(Fig. 1a)	(Fig. 1A)
biotite-hornblende granite	biotite–hornblende granite
Cretaceous–Paleogene	Cretaceous-Paleogene
1870–1890	1870-1890
Vihanti–Pyhäsalmi	
Fennoscandian Shield	Baltic Shield
Formation, Group (formal units)	
formation, group (informal units)	
layered series	Layered Series
wt.%	wt% or wt. %
Fo > 77.0 mol.%; high Fo (>77.0 mol.%)	Fo>77.0 mol.%; high Fo (> 77.0 mol.%)
65 %	65%
1830 ± 10 Ma	1830±10 Ma
$An_{35–60}$	$An_{35}–An_{60}$
MPa	kb, kbar
isotopic age	radiometric age
10 000	10,000; 10.000; 10000

Note about the use of Artificial Intelligence (AI) Tools:

The use of generative artificial intelligence (AI) tools, including large language models (LLMs), for the creation of manuscript text or other content from scratch is not permitted. In terms of text modification, AI tools may be used only for limited editorial assistance, such as grammar and language correction or checking compliance with journal formatting and submission requirements. Any such use must be disclosed in the manuscript in the Acknowledgements section. Authors remain fully responsible for all submitted content and must verify its accuracy, originality, and integrity. AI systems may not be listed as authors.

Where AI tools form part of the research methodology, including data analysis, prediction, classification, coding, image analysis, or model development, their use must be fully described in the Methods section with sufficient detail to permit evaluation of the research. Authors must also ensure that the use of AI tools complies with all applicable requirements concerning confidentiality, intellectual property, data protection, and research ethics.

Bulletin of the Geological Society of Finland

Abstract and keywords

Articles must be preceded by a short ca. 200 word abstract that presents the content and conclusions of the paper in a concise form. Abstracts for short communications should be shorter than this. Keywords (5–10; lower case if applicable) separated by semicolon should follow the abstract.

Authorship contribution statement

This section should appear after Acknowledgements and before References and should list how each of the authors have contributed to the preparation of the submitted manuscript. Exemplary keywords to be used for different tasks: writing, editing, analytical work, data curation, modeling, visualization, interpretation, conceptualization, background. Example:
A.A. Author – writing, modeling, interpretation; B.B. Coauthor – analytical work, data curation, interpretation; C.C. Coauthor – editing, interpretation, conceptualization, background.

Note about the use of Artificial Intelligence (AI) Tools

The use of generative artificial intelligence (AI) tools, including large language models (LLMs), for the creation of manuscript text or other content from scratch is not permitted. In terms of text modification, AI tools may be used only for limited editorial assistance, such as grammar and language correction or checking compliance with journal formatting and submission requirements. Any such use must be disclosed in the manuscript in the Acknowledgements section. Authors remain fully responsible for all submitted content and must verify its accuracy, originality, and integrity. AI systems may not be listed as authors.

Where AI tools form part of the research methodology, including data analysis, prediction, classification, coding, image analysis, or model development, their use must be fully described in the Methods section with sufficient detail to permit evaluation of the research. Authors must also ensure that the use of AI tools complies with all applicable requirements concerning confidentiality, intellectual property, data protection, and research ethics.

References

In the revised version, please write the references so that they follow the guidelines and examples given below. **Please check that all the references cited in the text are found in the "References" section and vice versa.** A Digital Object Identifier (DOI) should be included and written as "https://doi.org/10..." following every reference for which it exists. **Papers in preparation or in manuscript should not be cited**. Meeting abstracts that have not been peer-reviewed should not be cited for data or interpretations.

Examples of referring practice: in the main text

…as suggested by Mutanen & Huhma (1986).
(Huhma 1986; Downes et al. 2003)
(Kontinen pers. comm. 2003)

…as suggested in an earlier study (Downes et al. 2003).
(Grönholm 2000a, 2000b)
(Huhma 1986; Grönholm 2000a; Kontinen in press)

Examples of referring practice: in the References-section

General notes:

- When separating page numbers, do not use short dash "-"but medium dash "–" (En Dash).

- The order of the references in the reference list should be alphabetical by the surname of the first author (Å and Ä considered as A, Ö considered as O) and, if the same surname appears more than once, conform to the following rules:
    1. One author -> ascending by year, e.g.:
       Author, A. A., 1999…
       Author, B. C., 2001…
       Author, A. A., 2005…
    2. Two authors -> alphabetically by the surname of the 2nd author then ascending by year, e.g.:
       Author, A. A. & Coauthor, C. C., 1977…
       Author, B. C. & Secondauthor, S. S., 1973…
       Author, A. A. & Secondauthor, S. S., 1975…
    3. Three or more authors -> ascending by year, e.g.:
       Author, B. C., Secondauthor, S. S. & Thirdauthor, T. T., 1924…
       Author, A. A., Coauthor, S. S. & Thirdauthor, T. T., 1963…

Article:
Eklund, O., Konopelko, D., Rutanen, H., Fröjdö, S. & Shebanov, A.D., 1998. 1.8 Ga Svecofennian post-collisional shoshonitic magmatism in the Fennoscandian shield. Lithos 45, 87–108. https://doi.org/10.1016/S0024-4937(98)00027-9

Monograph:
Korsman, K., Hölttä, P., Hautala, T. & Wasenius, P., 1984. Metamorphism as an indicator of evolution and structure of the crust in Eastern Finland. Geological Survey of Finland, Bulletin 328, 40 p.

Wilson, B.M., 1989. Igneous Petrogenesis – a Global Tectonic Approach. Unwin Hyman, London, 466 p. https://doi.org/10.1007/978-1-4020-6788-4

Chapter in an edited volume:
Peltonen, P., 2005. Ophiolites. In: Lehtinen, M. et al. (ed.), The Precambrian Geology of Finland – Key to the Evolution of the Fennoscandian Shield. Elsevier B.V., Amsterdam, pp. 237–278. https://doi.org/10.1016/s0166-2635(05)80007-6

Thesis
Lalli, K., 2002. Pudasjärven granuliittivyöhykkeen Isokummun alueen petrografia, geokemia ja metamorfinen petrologia. MSc Thesis, University of Oulu, Finland, 105 p.

Geological Map
Nykänen, O., 1987. Virmutjoki. Geological map of Finland 1:100 000, pre-Quaternary rocks, sheet 4121, Geological Survey of Finland.

Explanation to a Geological map sheet
Nykänen, O., 1988. Virmutjoki. Explanation to the Geological map of Finland 1: 100 000, pre-Quaternary rocks, sheet 4121, Geological Survey of Finland, 64 p. (in Finnish with an English summary)

Supplementary Data (see further instructions below)
Heinonen, J.S. & Luttinen, A.V., 2025. Handheld XRF data collected from Jurassic continental flood basalts during the FINNARP 2022/2023 expedition to Antarctica. Dataset. Zenodo. https://doi.org/10.5281/zenodo.17341457

Bulletin of the Geological Society of Finland

Figures

BGSF is printed in full color throughout and the authors are encouraged to use color in their figures. Present the figures and number the figure captions in the order in which they are cited in the paper.

- Present a legend for every figure, in which symbols and/or colors are used to distinguish data groups.
- Place a white background behind lettering that crosses a dark or textured area.
- Use lines preferably no thinner than 0.5 points.
- On maps, please include latitude and longitude, a north arrow, and a scale in kilometers.
- All photographs should include a scale (either in the image or drawn on the image).
- Please, use small letters (a, b, c…), when indicating subsections of the figure in the body text, e.g.: (Fig. 1) or (Fig. 1 and 2b, d) or (Fig. 1; 2b, d; 3a–c). If outside of parentheses, write open: "Figures 1 and 2a show…". In the figure caption (starting with "**Figure X**." in bold), refer to the subsections as follows: a), b), c).
- **Make sure that all the figures and their text and symbols are readable in the final submission file**. Use a clear sans serif typeface such as Helvetica or Arial. If accepted and published, the illustrations are preferably sized to fit the width of a column (74 mm) or a page (153 mm) that is 220 mm high.

If the manuscript is accepted, we will also ask you to send us high-resolution electronic figures separately (300 dpi resolution, CMYK color scheme), preferably via a file transfer service. Figures generated using drawing programs should be sent in PDF, EPS (text vectorised), or high-resolution TIF format. Avoid using JPG format for line drawings. Photographs should be sent in TIF or JPG format. Please, use small letters (a, b, c…), when indicating subsections in the figure and in figure caption refer to the subsections as follows: a), b), c).

Tables

Number the tables in the order in which they are cited in the paper and, if several table files are sent separately, label the different files (e.g., SurnameOfTheFirstAuthor_Table 1.DOC). Use dot "." as the decimal point in numerical data and align columns on the decimal. Do not leave blank spaces in analytical tables; these should be filled with, for example, n.a. (not analysed) or b.d.l. (below detection limit). **Make sure that all analytical data includes clear descriptions of analytical accuracy and precision (either in the Tables, in the body text, and/or in appendices). Manuscripts without such information will not be accepted.**

Electronic Appendices

To support data accessibility, we encourage authors to include large datasets as Electronic Appendices or include a weblink to the stored data or a data repository. Typical datasets include analytical data, coordinate data (e.g., spatial geological models), but also other types of data and related formats can be suggested for editors. These could be sent in a form that is most relevant for the material in question (e.g., text as .PDF and data tables as .XLS/.XLSX). Please submit all appendices in a single compressed .ZIP file. Separate documents in the compressed file should be labeled in the order they appear in the text (e.g., SurnameOfTheFirstAuthor_ElectronicAppendixA.xls). If the file size exceeds 15 Mb, consult the Editor-in-Chief on how the appendices could be submitted. **Again, make sure that all analytical data includes clear descriptions of analytical accuracy and precision.**

Starting from 2026, we will not publish supplementary data on the Bulletin website anymore. If the submitted article gets accepted, we ask the authors to publish the supplementary data in a separate data

repository, which provides a permanent DOI string for the data (such as Zenodo, Figshare, Dryad, Harvard Dataverse, Mendeley Data, or Open Science Framework). The reference and its DOI should then be cited in the accepted manuscript.

Refer to the supplementary data publication in the text ("XXX et al. 20XX" in place of Electronic Appendix X) and add it in the reference list. In case of several appendices stored under same DOI, it is also possible to cite: (XXX et al. 20XX: Appendix X) to be more specific. In addition, write the following section between the Authorship contribution statement and References:

"

Supplementary data

Supplementary data for this article is available via XXX data repository: https://doi.org/XXX (Reference)
"