

### ***Format of manuscripts***

The manuscripts will be published in English. Authors' manuscripts must be consistent in style, spelling and syntax. If English is not your native language, you are advised to ask an English speaking colleague (or co-worker) to check your paper or have it edited by a professional. Papers with inadequate English will not be published. The manuscripts should be submitted in 12 point Times New Roman font, on consecutively numbered pages of A4 with 2.5 cm margins on the top, bottom left and right. Lines should be numbered. Use templates setting final journal styles.

### ***Organization of manuscripts***

#### **1. Title page;**

It is containing the following, centered, starting at the top: title, names, affiliations and addresses of all authors. This is followed by the abstract, left-justified, which must include a concise statement of results and conclusions. (Note that abstract should be limited to less than 300 words). A maximum of 6 keywords, corresponding author, author contributions should be shown in the lowermost.

- ***Title.*** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- ***Author names and affiliations.*** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. 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. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be 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" 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.
- ***Author contributions.*** Please show name initials of each author next to the

appropriate category of their contributions such as study conception and design, acquisition of sample, analysis and/or interpretation of data, drafting of manuscript, and critical revision.

### ***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. Should be 300 words or less in a single paragraph.

### ***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.

## **2. Text;**

Text will generally consist of sections such as Introduction, Methods, Results, Discussion, Conclusions, and Acknowledgements. Divide it into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). 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***

An overview of the article, presenting the problem or context, the design of the experiment or research, and relevant previous publications. For a brief note, a formal introduction may not be necessary. State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

### ***Methods or Descriptive Background***

Articles presenting dating results should include specific detail on sample treatment

and measurement methodology. Field procedures for collection of samples should be presented; archaeological papers should include site descriptions. Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

### ***Results***

Results should be clear and concise. Use subheadings to separate results of different types, from different geographical areas, and so on. See “Appendix” for long data tables.

### ***Discussion***

May be combined with “Results” in a brief article or note, or where the content is such that findings and interpretation need to be interwoven. This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

### ***Conclusion***

Useful in longer articles to summarize the paper. Should contain no new material or references; avoid simple restatements of introductory material. 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.

### ***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.). Include sources of grant funding here.

### **3. List of references;**

The manuscripts will be evaluated according to the regular standards of the journal. The corresponding author of each manuscript will be notified about the recommendations of the referees. If revisions are requested, the corresponding author is expected to provide a response and possibly revised manuscript promptly.

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 Style***

- Arai F, Machida H, Okumura K, Miyauchi T, Soda T, Yamagata K. 1986. Catalog for late Quaternary marker-tephras in Japan II: Tephra occurring in northeast Honshu and Hokkaido. *Geographical Reports of Tokyo Metropolitan University*, no. 21, 223-250.
- Bronk Ramsey C, Staff RA, Bryant CL, Brock F, Kitagawa H, van der Plicht J, Schlolaut G, Marshall MH, Brauer A, Lamb HF, Payne RL, Tarasov PE, Haraguchi T, Gotanda K, Yonenobu H, Yokoyama Y, Tada R, Nakagawa T. 2012. A complete terrestrial radiocarbon record for 11.2 to 52.8 kyr B.P. *Science*, **338**, 370–374.
- Davies SM, Abbott PM, Pearce NJG, Wastegård S, Blockley SPE. 2012. Integrating the INTIMATE records using tephrochronology: rising to the challenge. *Quaternary Science Reviews*, **36**, 11–27.
- Froggatt PC, Lowe DJ. 1990. A review of late Quaternary silicic and some other tephra formations from New Zealand: their stratigraphy, nomenclature, distribution, volume, and age. *New Zealand Journal of Geology and Geophysics*, **33**, 89–109.
- Hayakawa Y. 1985. Pyroclastic geology of Towada volcano. *Bulletin of Earthquake Research Institute, University of Tokyo*, **60**, 507-592.
- Lowe DJ., Moriwaki H, Davies SM, Suzuki T, Pearce NJG. (eds.) 2011. Enhancing tephrochronology and its application (INTREPID Project): Hiroshi Machida commemorative volume. *Quaternary International*, **246**, 1-396.
- Machida H, Arai F. 1992. Atlas of Tephra in and around Japan. University of Tokyo Press, Tokyo. (in Japanese)
- Machida H, Arai F. 2003. Atlas of Tephra in and around Japan [revised ed.]. University of Tokyo Press, Tokyo. (in Japanese)
- Newhall CG, Punongbayan RS. (eds.) 1996. Fire and Mud: Eruptions and Lahars of Mount Pinatubo, Philippines. Philippine Institute of Volcanology and Seismology,

- Quezon City and University of Washington Press, Seattle, 1126p.
- Okuno M, Kimura K, Nakamura T, Ishizuka Y, Moriwaki H, Kim KH. 2004. Chronological research of B-Tm tephra. In H. Taniguchi ed. *10th Century great eruption of Baitoushan Volcano, Northeast China, and its Historic Effect (CNEAS Monograph Series No. 16)*, The Center for Northeast Asian Studies, Tohoku University, 5–14. (in Japanese with English abstract)
- Okuno M, Torii M, Yamada K, Shinozuka Y, Danhara T, Gotanda K, Yonenobu H, Yasuda Y. 2011. Widespread tephra in sediments from Lake Ichi-no-Megata in northern Japan: their description, correlation and significance. *Quaternary International*, **246**, 270–277.
- Reimer PJ, Bard E, Bayliss A, Beck JW, Blackwell PG, Bronk Ramsey C, Buck CE, Cheng H, Edwards RL, Friedrich M, Grootes PM, Guilderson TP, Haflidason H, Hajdas I, Hatté C, Heaton TJ, Hoffmann DL, Hogg AG, Hughen KA, Kaiser KF, Kromer B, Manning SW, Niu M, Reimer RW, Richards DA, Scott EM, Southon JR, Staff RA, Turney CSM, van der Plicht J. 2013. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. *Radiocarbon*, **55**, 1869–1887.
- Stuiver M, Reimer PJ. 1998. CALIB Manual [WWW document]. Seattle: Quaternary Research Center, University of Washington. URL: <<http://calib.qub.ac.uk/calib/manual/>>.
- Stuiver M, Reimer PJ, Bard E, Beck JW, Burr GS, Hughen KA, Kromer B, McCormac G, van der Plicht J, Spurk M. 1998. INTCAL98 radiocarbon age calibration, 24,000–0 cal BP. *Radiocarbon*, **40**, 1041–1083.

#### **4. Tables;**

Tables should be prepared using the table function of your word processor; if that is not possible, tables with columns separated by tab characters are acceptable. We prefer to set tables in a standard format, using Times Roman type, but tables with complex features or graphical presentation may be reproduced from camera-ready copy or digital files. Refer to each table in the text near the place where it should appear. Tables should be numbered Table 1, Table 2, etc. These captions should be shown above the tables.

#### **5. Figures and the captions;**

If you submit usable color figures with your accepted article, then the publisher will ensure that these figures will appear in color only online version at no charge. If you should not opt for color in both, please submit usable black and white

images. Figures should be used as sparingly as possible, and only when they contribute information or interpretation not already present in the text or data tables. They should be scaled so as to reproduce legibly within a maximum space of  $5.5 \times 7.75$  inches ( $14 \times 19.7$  cm) in normal page orientation, or  $8 \times 5.25$  inches ( $20.3 \times 13.3$  cm) in landscape orientation (assuming a one-line caption; longer captions will leave even less space for the figure). Figures should be set at a resolution of 300 dpi or greater, and they should be numbered Figure 1, Figure 2, etc. Use this numbering also for internal cross-referencing. Line drawings, graphs, and charts should be originals on clean, bright white, high-contrast paper; photographs should be sharp black-and-white glossy prints. We can reproduce color line drawings and photographs, but must charge the extra cost to the author. (However, we can print a grayscale version and make a color version available for reference on our website at no charge.) Figure captions should be included separately at the end of the manuscript; references to each figure should be placed in the text near the location where they should appear.