

RESEARCH

Template of the T_EX file for a Research article or a Methodology of the Progress in Earth and Planetary Science: an example

Masaki Satoh^{1*}, Hodaka Kawahata², Ryuji Tada³ and Jun Matsumoto⁴

*Correspondence:

AAAA@AAAAAAA

¹Atmosphere and Ocean Research Institute, The University of Tokyo, 5-1-5 Kashiwanoha, Kashiwa, Chiba 277-8564, Japan

Full list of author information is available at the end of the article

Abstract

A short, unstructured, single paragraph summary, no more than 350 words, of the major points raised, making evident the key work highlighted in the article. Minimize the use of abbreviations and do not cite references in the abstract.

Keywords

Three to ten keywords representing the main content of the article. Keywords should be separated by a comma (,) and a space as shown in the following example.

Computational seismology, Crustal structure, Finite-difference method simulation, Lg wave, Regional wave, Sn wave, Wave propagation

If a keyword includes a comma, place a semicolon (;) and a space between keywords as below.

Computational seismology; Crustal structure; Lg wave; Red, white and blue; Regional wave; Sn wave; Wave propagation

Introduction

This should explain the background to the article, its aims, a summary of a search of the existing literature and the issue under discussion, and may also be broken into subsections with short, informative headings.

Subsection ABC

This is a subsection in Introduction section.

Methods/Experimental

The methods section should include the aim, design and setting of the study, the characteristics of participants or description of materials involved, a clear description of all processes and methodologies employed, and the type of statistical analysis used, to enable replication.

Subsection DEF

This is a subsection in Methods section.

Results

This should include the findings of the study including, if appropriate, results of statistical analysis which must be included either in the text or as tables and figures.

Subsection GHI

This is a subsection in Results section.

Discussion (can be combined in 'Results and Discussion' section)

For research articles this section should discuss the implications of the findings in context of existing researches and highlight limitations of the study. For methodology manuscripts this section should include a discussion of any practical or operational issues involved in performing the study and any issues not covered in other sections.

Subsection JKL

This is a subsection in Discussion section.

Conclusions

This should state clearly the main conclusions and include a clear explanation of their relevance or importance to the field.

Abbreviations

CMB: Core-mantle boundary; GOSAT: Greenhouse Gases Observing Satellite; JAXA: Japan Aerospace eXploration Agency; TRMM: Tropical rainfall measuring mission

Availability of data and material

All manuscripts must include an 'Availability of data and materials' statement. It should include information on where to find data supporting the results reported in the article.

For example:

The dataset(s) supporting the conclusions of this article is(are) available in the [repository name] repository, [unique persistent identifier and hyperlink to dataset(s) in http:// format].

The dataset(s) supporting the conclusions of this article is(are) included within the article (and its additional file(s)).

If it is not possible to share research data publicly:

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

Please contact author for data requests.

If your manuscript does not contain any data:

'Not applicable'

Competing interests

The authors declare that they have no competing interest.

Funding

All sources of funding for the research reported should be declared.

This work was supported by JSPS KAKENHI Grant Number 12345678.

HK was partly funded by ABC project (ABC-123-456).

Authors' contributions

The individual contributions of authors to the manuscript should be specified in this section. The authors should be referred to by their initials.

MS proposed the topic, conceived and designed the study. HK carried out the experimental study. RT analyzed the data and helped in their interpretation. JM collaborated with the corresponding author in the construction of manuscript. All authors read and approved the final manuscript.

Authors' information

You may choose to use this section to include any relevant information about the author(s) that may aid the reader's interpretation of the article, and understand the standpoint of the author(s). This may include details about the authors' qualifications, current positions they hold at institutions or societies, or any other relevant background information. Please refer to authors using their initials. Note this section should not be used to describe any competing interests.

Acknowledgements

This acknowledges anyone who contributed towards the article who does not meet the criteria for authorship including anyone who provided professional writing services or materials.

We thank XXXXX and YYYYY for their assistance in our experiments. We also thank ZZZZ for the English language review. MS gratefully acknowledges the travel grant from Japan Geoscience Union to attend the ABC symposium 2015 held at Tokyo, Japan.

Endnotes

Text for this section ...

Author details

¹Atmosphere and Ocean Research Institute, The University of Tokyo, 5-1-5 Kashiwanoha, Kashiwa, Chiba 277-8564, Japan. ², ³, ⁴, ...

References

- Aaron, M (1999) The future of genomics. In: Williams, H (ed.) *Proceedings of the Genomic Researchers*, Boston
- Adorno, T.W (1966) *Negative Dialektik*. Suhrkamp, Frankfurt. English edition: Adorno TW (1973) *Negative Dialectics* (trans: Ashton EB). Routledge, London
- Brown, B, Aaron, M (2001) The politics of nature. In: Smith, J (ed.) *The Rise of Modern Genomics*, 3rd edn. Wiley, New York
- Chung, S-T, Morris, R (1978) Isolation and characterization of plasmid deoxyribonucleic acid from streptomyces fradiae. In: *Abstracts of the 3rd International Symposium on the Genetics of Industrial Microorganisms*. University of Wisconsin, Madison. 4-9 June 1978
- Chung, S-T, Morris, R (1978) Isolation and characterization of plasmid deoxyribonucleic acid from streptomyces fradiae. *Abstracts of the 3rd international symposium on the genetics of industrial microorganisms*. 4-9 June 1978
- Doe, J (1999) Title of preprint. <http://www.uni-heidelberg.de/mydata.html>, Accessed 25 Dec 1999
- Doe, J (1999) Title of subordinate document. Available via DIALOG. <http://www.rsc.org/dose/title> of subordinate document. Accessed 15 Jan 1999
- Doe, J (1999) Trivial [http](http://ftp.isi.edu/in-notes/rfc2169.txt), rfc2169. [ftp](ftp://ftp.isi.edu/in-notes/rfc2169.txt)://ftp.isi.edu/in-notes/rfc2169.txt. Accessed 12 Nov 1999
- Doe, J (2000) Title of supplementary material. <http://www.privatehomepage.com>, 22 Feb 2000
- Healthwise Knowledgebase (1998). US Pharmacopeia, Rockville, <http://www.healthwise.org>, 21 Sept 1998
- International Anatomical Nomenclature Committee (1966) *Nomina Anatomica*. Excerpta Medica, Amsterdam
- Kawahata, H (2017) Current status and future development of Progress in Earth and Planetary Science. Abstract U01-08 presented at the JpGU-AGU Joint Meeting 2017, Makuhari, Japan. <https://confit.atlas.jp/guide/event/jpguagu2017/subject/U01-08/advanced>. Accessed 1 Sept 2017
- Major, M (2007) Recent developments. In: Jones, W (ed.) *Surgery Today*. Springer, Dordrecht. in press
- McMullen, M.D, Kresovich, S, Villeda, H.S, Bradbury, P, Li, H, Sun, Q, Flint-Garcia, S, Thornsberry, J, Acharya, C, Bottoms, C, Brown, P, Browne, C, Eller, M, Guill, K, Harjes, C, Kroon, D, Lepak, N, Mitchell, S.E, Peterson, B, Pressoir, G, Romero, S, Oropeza Rosas, M, Salvo, S, Yates, H, Hanson, M, Jones, E, Smith, S, Glaubitz, J.C, Goodman, M, Ware, D, et al. (2009) Genetic properties of the maize nested association mapping population. *Science* 325, 737–740
- Mod Genomics J (1998) Rodent genes. *Mod Genomics J* 14(6), 126–233
- Norman, L.O (1998) *Lightning Rods*. US Patent 4,379,752, 1998
- Saito, Yukio, Hyuga, Hiroyuki (2007). Rate equation approaches to amplification of enantiomeric excess and chiral symmetry breaking. *Topics in Current Chemistry*. doi:10.1007/128_2006_108.
- Schmidt, H (1989) *Negative dialektik*. In: Hutzinger, O (ed.) *Handbook of Environmental Chemistry* vol 2E. Springer, Heidelberg, p 111
- Slifka, M.K, Whitton, J.L Clinical implications of dysregulated cytokine production. *J Mol Med*. doi:10.1007/s001090000086
- Slifka, M.K, Whitton, J.L (2000) Clinical implications of dysregulated cytokine production. *J Mol Med* 78, 74–80. doi:10.1007/s001090000086
- Slifka, M.K, Whitton, J.L (2000) Clinical implications of dysregulated cytokine production. *J Mol Med* 1, 4. doi:10.1007/s001090000086
- Smith, S.E (1976) Neuromuscular blocking drugs in man. In: Zaimis, E (ed.) *Neuromuscular Junction*. Handbook of Experimental Pharmacology vol 42. Springer, Heidelberg, pp 593–660
- Smith, J (ed.) (1998) Rodent genes. *Mod Genomics J* 14(6), 126–233
- Smith, J, Jones, M.J, Houghton, L (1999) Future of health insurance. *N Engl J Med* 341, 325–329
- Smith, J, Brown, B (eds.) (2001) *The Demise of Modern Genomics*. Blackwell, London
- South, J, Blass, B (2001) *The Future of Modern Genomics*. Blackwell, London
- SSN International Centre (2006) The issn register. <http://www.issn.org>. Accessed 20 Feb 2007
- Trent, J.W (1975) Experimental acute renal failure. Dissertation. University of California
- Zowghi, D (1996) A framework for reasoning about requirements in evolution. In: Foo, N, Goebel, R (eds.) *PRICAI'96: Topics in Artificial Intelligence*. 4th Pacific Rim Conference on Artificial Intelligence, Cairns, August 1996. Lecture Notes in Computer Science (Lecture Notes in Artificial Intelligence), vol 1114. Springer, Heidelberg, p 157

Figure legends

Figures should be provided as separate files, not embedded in the text file.

The figure legends should be included in the main manuscript text file at the end of the document.

For each figure, the following information should be provided: Figure number (in sequence, using Arabic numerals - i.e. Figure 1, 2, 3 etc); short title of figure (maximum 15 words); detailed legend, up to 300 words.

Figure 1 Distributions of aerosol optical thickness and cloud droplet effective radius from the NICAM-SPRINTARS simulations. Global geographical distributions of (a, c) aerosol optical thickness and (b, d) cloud droplet effective radius from (c, d) the NICAM-SPRINTARS simulations in comparison to those obtained from (a, b) the MODIS satellite observations for 1 to 8 July 2006 (cited from Suzuki et al. 2008). The unit of cloud droplet effective radius is micrometers.

Figure 2 XXXXXXXXXXXXX

Figure 3 YYYYYYYYYYYY

Tables

Each table should be numbered and cited in sequence using Arabic numerals (i.e. Table 1, 2, 3 etc.). Tables should have a title (above the table) that summarizes the whole table; it should be no longer than 15 words. Detailed captions may then follow, but they should be concise. The title and any captions associated with each table should not be included in the main manuscript file, but be placed with the table in the relevant table file.

Even small tables that are integral to the manuscript should be uploaded as separate files, not embedded in the main manuscript file. These will be typeset and displayed in the final published form of the article.

Larger datasets or tables too wide for a portrait page should be uploaded separately as supplementary material files. These additional files will not be displayed in the final article, but a link will be provided to them in the published PDF.

Table 1 $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ values of bulk carbonate samples from the studied core

Depth (mbsf)	Lithostratigraphic Unit	Segment boundary	$\delta^{13}\text{C}$ (‰ VPDB)	$\delta^{18}\text{O}$ (‰ VPDB)
2614.92	Unit 12	C7/C8	2.76	−6.04
2615.32	Unit 12		2.75	−5.65
2617.16	Unit 12		2.41	−5.37
2618.78	Unit 12		3.12	−5.14
2619.99	Unit 11		2.88	−5.61
2620.66	Unit 11		3.09	−6.17
2621.31	Unit 11		3.44	−4.47
2621.91	Unit 11		3.17	−5.53
2622.31	Unit 11		3.28	−6.18
2622.57	Unit 11		3.33	−5.94
2623.06	Unit 11		3.21	−5.34
2623.72	Unit 11		3.64	−5.75
2624.07	Unit 11		3.41	−5.77
2624.28	Unit 11		3.47	−5.82
2624.82	Unit 11		3.49	−6.58

Table 2 Sample table title. This is where the description of the table should go.

	B1	B2	B3
A1	0.1	0.2	0.3
A2
A3

Additional Files

Additional file 1 — Sample additional file title

Additional file descriptions text (including details of how to view the file, if it is in a non-standard format or the file extension). This might refer to a multi-page table or a figure.

Additional file 2 — Sample additional file title

Additional file descriptions text.