

RESEARCH

# Template of the T<sub>E</sub>X file for a Research article or a Methodology of the Progress in Earth and Planetary Science: an example

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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 Minimize the use of abbreviations and do not cite references in the abstract.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

## 1 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.

### 1.1 Subsection ABC

This is a subsection in Introduction section.

## 2 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.

### 2.1 Subsection DEF

This is a subsection in Methods section.

## 3 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.

### 17 3.1 Subsection GHI

18 This is a subsection in Results section.

#### 19 3.1.1 Sub-subsection JKL

#### 20 3.1.2 Sub-subsection MNO

### 21 3.2 Subsection PQR

## 22 4 Discussion (can be combined in 'Results and Discussion' section)

23  
24 For research articles this section should discuss the implications of the findings in  
25 context of existing researches and highlight limitations of the study. For methodol-  
26 ogy manuscripts this section should include a discussion of any practical or opera-  
27 tional issues involved in performing the study and any issues not covered in other  
28 sections.

### 29 4.1 Subsection STU

30 This is a subsection in Discussion section.

## 31 5 Conclusions

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

### 34 Abbreviations

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

### 37 Availability of data and material

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

40 For example:

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

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44 If it is not possible to share research data publicly:

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

46 Please contact author for data requests.

47 If your manuscript does not contain any data:

48 'Not applicable'

### 49 Competing interests

50 The authors declare that they have no competing interest.

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### 55 Authors' contributions

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

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

### 61 Authors' information

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

74 Text for this section ...

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### 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	..	.	.

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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.

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