

# Your article title goes here

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- 7 Author contributions: Conceptualization: Name Firstauthor, Name Thirdauthor. Formal Analysis: Name Firstauthor, Name Secondauthor. Writing -
- 8 Original draft: Name Firstauthor.
- Abstract The text for the first abstract goes here. This should be in English, no longer than 200
- words, and should not include references.

#### 1 Section name

- All articles must include an abstract, author ORCIDs and author contributions (in the preamble of this tex file), a data
- and code availability statement, and a list of references.
- Section names are at the discretion of the authors. A simple structure for an article would include an Introduction,
- Methods and Data, Results, Discussion, and Conclusions, but authors are encouraged to choose a structure that best
- 16 presents their work.

#### 1.1 Bibliographic citations

- In the text of an article, citations may either be in-line, as in the case of citing Metropolis and Ulam (1949), or in
- parentheses (e.g., Metropolis and Ulam, 1949), as appropriate. All citations in the text must be listed in the references
- section, and all listed references must be cited at least once in the text.

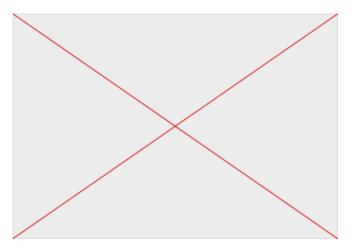
#### 21 1.2 Headings

#### 22 1.2.1 Subsubsection

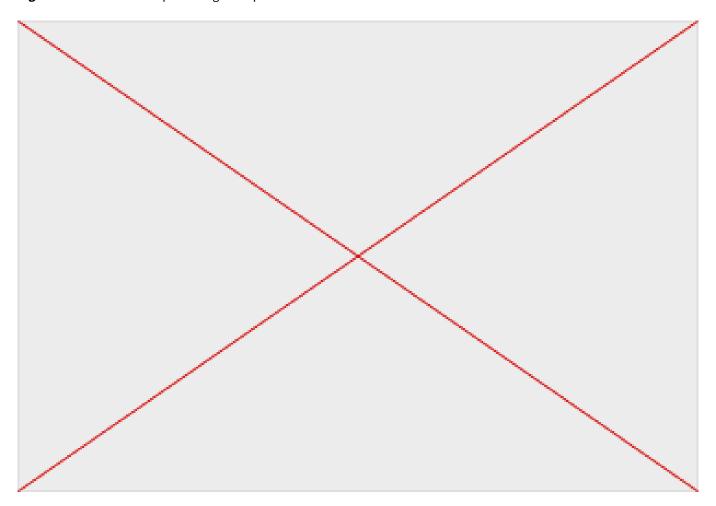
- Three levels of section headings is the maximum<sup>1</sup> no subsubsubsections, please! Note that footnotes are permitted,
- 24 as in the previous sentence, though we encourage authors to really think about whether a footnote is necessary or if
- 25 the information it contains could be included in the main text.

#### **1.3** Figures and Tables

- 27 Figures should be labeled, captioned, and referenced within the text (e.g., Fig. 1 and Figs 1a, b, 2c). When an article
- is accepted, separate full-resolution files must be uploaded for each figure. While Figure 1 is a one-column figure,
- Figure 2 is a full-width figure.



**Figure 1** This is an example of a figure caption.



**Figure 2** This is a caption on wider figure.

Tables can also be included, with captions.

Event ID	Location	Magnitude	A random number
1	Here	2.5	17
2	There	4.1	1350

Table 1 Caption

Tab. 1 (use Tabs if several tables) is an example of a relatively simple table. We strongly encourage authors to

31

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<sup>&</sup>lt;sup>1</sup>Seriously, the maximum

- put tables in Supplementary Materials, and/or into a csv or similar format, upload them to a data repository such as
- zenodo, and reference them in the section on data availability instead of including them in the article itself.

#### **1.4** Equations and maths

Equations can be included in the text, and should be labeled so they can be referenced. One example is Equation (1):

$$G = \frac{1}{2}(2\cos z) + (1/2)(2\cos z + j\sin z - j\sin z) + (1/2)(\cos z + j\sin z + \cos z - j\sin z) - (1/2)(e^{jz} + e^{-jz})$$
(1)

Please type vectors and matrices in bold:  $\mathbf{X} = [x_1, x_2, \dots, x_n]^T$ .

#### 37 1.5 Code

- 38 Code examples should be concise and descriptive. They should introduce core functionality or specific syntax and
- should be included using the lstlisting environment. Note that lines longer than 45 characters will be broken
- when using the prepress option. Extended examples or use cases should be uploaded separately. Individual words
- of code can be written inline, for example:
- To improve stability of the inversion, the Model object accepts the strict keyword, which disables piecewise
- linear approximation of the target function (Listing 1).

#### **Listing 1** Example use of Model

```
#2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 |

import mymodule as mm

model = mm.Model(strict=True)

mdls = model.perturb()

for mdl in mdls:

var = mdl.get_variance()
```

### **Acknowledgements**

53 Thank all relevant parties and acknowledge funding sources, if any.

### 54 Data and code availability

- 55 Authors should direct readers to an open access repositories where data and code used in the study are made avail-
- able. Zenodo, figshare, and Dryad are examples of repositories where authors can archive their data and code. Ci-
- 57 tations for datasets and codes should be included in the references, including citations for any seismic networks
- from which data was used. Github is not considered a persistent repository, and we encourage authors to archive a
- 59 snapshot of any github-hosted code on zenodo.

### Competing interests

- <sub>61</sub> Declare any competing interests, financial or otherwise, pertaining to any of the authors. If there are none, state that
- the authors have no competing interests.

## References

- 64 Metropolis, N. and Ulam, S. The Monte Carlo Method. *Journal of the American Statistical Association*, 44(247):335–341, Sept. 1949.
- doi: 10.1080/01621459.1949.10483310.