

# Latex Template for International Congress of the Brazilian Geophysical Society

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## **Abstract**

Write the abstract after to finalize the article. The main orientations to writing a good abstract are:

The Abstract is a summary of the study, with the primary emphasis on results and conclusions. Very briefly present the question(s) asked, the experimental design, a summary of observations, and list conclusions. Be very succinct - the abstract should be a single paragraph. It should stand on its own; therefore, do not refer to any other part of the report, such as a figure or table. Avoid long sections of introductory or explanatory material. As a summary of work done, it is written in past tense.

## Introduction

After to write the Results section, start to write the Introduction. The main orientations to writing a good introduction are:

- Presentation of the problem or research question
- Contextualize
  - briefly review of the literature to help the reader
  - to mention the used research methodology
  - scope of the study contextualize the reader about the methods used
- The purpose of the study
  - explain the scope of the study
  - explain why some aspects was chosen and other not.
  - explain why the chosen theory was applied to the data.
  - avoid a detailed bibliography review
  - avoid a summary of results
- · Establish the objective os the work



Figure 1: Example using figures side by side a) Figure on the left. b) Figure on the right.

making a citation

First, you need a bibliography file. Google it to discover how to do it. Tips: The Mendeley program could provide a good solution.

I save the file with the name references.bib in this folder.

Example of indirect citation (Yilmaz, 2001).

The book of professor Claerbout (1984) is a good choice for who want to learn more about seismic processing and imaging. This was an example of the direct citation.

## **Materials and Methods**

This section must be written at first. The main orientations to write a good Materials and Methods are:

- · Briefly describe the methods used
- Cite references to the reader to find more information
- Describe the new methods providing sufficient details to others researches can reproduce your experiment
- Use subtitles to separate different methodologies
- Describe what you did in the past

## Optional subsection

Bellow is an example of how to write an equation using the Latex's math ambient:

$$\frac{1}{c^2(\mathbf{x})} \frac{\partial^2}{\partial t^2} p(\mathbf{x}, t) - \nabla^2 p(\mathbf{x}, t) = w(\mathbf{x}_s, t), \tag{1}$$

or it possible to use the math symbols inside the text like the following example. The previous wave equation is the 2D wave equation, where  $c(\mathbf{x})$  is the P wave velocity of the medium.

Example of an equation using 2 lines:

LATEX TEMPLATE 2

 $\mathcal{L}(w, p, p^{\dagger}) = \frac{1}{2} \int_{T} \|\mathbf{d}_{obs}(z_{rec}, t) - \mathbf{d}_{cal}(z_{rec}, t)\|^{2} dt - \int_{T} p^{\dagger} \left[ F\left(p(z, t)\right) - w(t) \right] dt,$ (2)



Figure 2: Example using a simple figure

## **Results**

The second section that should be written is the result section. The main orientations to write a good results section:

- The results must be presented in a logical sequence
- Don't duplicate data among figures, tables, and text
- Describe all parameters used in the experiments
- Provide sufficient information to the other researchers can reproduce the experiment
- Use subtitles to separate the different experiments



Figure 3: Example using 4 figures at once. a) Above on the left b)Above on the right c)Bellow on the left d) Bellow on the right.

An example of table

## **Discussion and Conclusion**

After to write the introduction, start to write the discussion and conclusion section. You could separate it in two or not. The main orientation are:

 Briefly describe the limitation of the study showing the you considered the weakness of your experiments

Table 1: Descrição tabela.

Methods	column 1	column 2	column 3
Seismological			
Gravitational			
Electric			
Magnetic			
Electromagnetic			
Thermal			

- Discuss the conclusion from most important to less important
- Highlight the most important findings in a few words
- · Relate the results with the hypothesis
- Identify methodological proceedings with relevant results
- If your finding are preliminaries, suggest new experiments

## References

Claerbout, J. F., 1984, Imaging the Earth's Interior:, volume 86.

Yilmaz, Ö., 2001, Seismic Data Analysis:.

## **Acknowledgments**

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