



Simulation Tools for Small Area Estimation: Introducing the R-package **saeSim**

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Abstract

The abstract of the article in English

Keywords: package, small area estimation, reproducible research, simulation, R.

1. Introduction

Besides the general objectives of the Austrian Journal of Statistics, this should contain general instructions for preparation of manuscripts to be submitted. This $\text{\LaTeX} 2_{\epsilon}$ file can also be used as a template for the setting up of a text to be submitted in computer readable form. In any case, use `pdflatex` to compile your \LaTeX file.

The style file of the Austrian Journal of Statistics uses mainly the style file from the Journal of Statistical Software (JSS) plus minor modifications. We thank Achim Zeileis for his great work on the JSS style file.

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2. Objectives of the journal

The journal is published approximately quarterly by the Austrian Statistical Society. Its general objective is to promote and extend the use of statistical methods in all kind of theoretical and applied disciplines. Special emphasis is on methods and results in official or governmental statistics.

Original papers and review articles will be published in the Austrian Journal of Statistics if judged consistently with these general aims. All papers will be refereed.

Special issues will appear from time to time. Each section will have as a theme a specialized area of statistical application, theory, or methodology.

Technical notes or problems for considerations under Shorter Communications are also invited.

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2.1. Statistics: theory and applications

The section for **theory** and methods publishes articles that make original contributions to the foundations, theoretical development, and methodology of statistics and probability. *Theory and Methods* should be interpreted broadly to include all techniques relevant to statistics and probability. This may include computational and graphical methods as well as more traditional mathematical methods. The research reported should be motivated by a scientific or practical problem and illustrated by application of the proposed methodology to that problem. Illustration of techniques with real data is especially welcomed and strongly encouraged.

Applications and case studies are published if they present original articles which

- show analysis with real data that are statistically innovative as well as scientifically and practically relevant, or
- contribute substantially to a scientific field through the use of sound statistical methods, or
- present new and useful data, such as a new life table for a segment of the population or a new social or economic indicator, or
- using empirical tests, examine or illustrate for an important application the utility of a valuable statistical technique, or
- evaluate the quality of important data sources.

Note that careful analysis of data of substantive importance may be published even there are no methodological innovations.

2.2. Official statistics

The section for **official statistics** publishes articles which deal with conceptual methods and computational issues. The different fields covered include

- population and social statistics
- economic statistics
- price statistics
- regional and urban statistics
- economic and social statistics
- tourism statistics
- research, development and innovation statistics
- environmental statistics including environmental accounting and environmental indicators
- national accounts including input-output tables and analysis.

Especially welcomed are articles which are concerned in

- statistical disclosure control methods
- model-based methods
- publication policies (presentation of statistics)
- data pre-processing
- data visualisation
- survey methodology

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Please consider title case for titles and for references. Sentence case for sections and subsections.

3.1. Submission

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3.2. Formal configuration

Each article must have a summary in English and German which inform the reader quickly on the contents and the substantial results. The length surely depends on the contents, however, it should not exceed 150 words. Mathematical formulas and references should be avoided in the summary.

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The article should be structured by enumerated sections and subsections. The title should be in title case style, sections and subsections in section case style. Graphics and tables must contain captions, above tables and below graphics (figures). Examples are (see Figure 1 and Table 1)

Here should be a graphic using the `includegraphics` command (pdf or png format).

Figure 1: The caption of the figure to be filled in.

Table 1: 80 measured values of access time.

70.0	68.6	67.9	66.3	71.0	64.2	69.6	71.0
...
71.7	70.5+	72.5-	68.2	67.6	68.6	70.5-	65.8

Mathematical formulas should be enumerated as far as they are referenced. E.g. Equation (1) shows the density ...

$$f(x) = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{(x-\mu)^2}{2\sigma^2}}. \quad (1)$$

Cited literature should be summarized at the end of the article in form of a non-enumerated section. ? is a reference to an article. If the citation is in parentheses, it should look like (?). References should be in title case.

Correspondence addresses of author(s) should be added at the end of the manuscript.

4. Submission and refereeing

Consideration of the previously stated rules are of great help for the editing process. Whenever technically possible, manuscripts should be submitted through the editorial system at www.ajs.or.at.

All contributions will be anonymously refereed. Cited literature which is hardly available should accompany the submitted manuscript. It should also be considered to place used and analyzed data at disposal for the referees (if there are no legal or technical arguments against).

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