

ProcMod Variance partitionning of vectorial data.

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ABSTRACT

With new high-throughput technologies, especially next generation sequencing platforms, ecologists are more and more faced with analysis of data sets in which a reasonable number of individuals or sites are characterized by several hundreds or even thousands of variables. Classical data analysis procedures are usually failing on such high-dimensional data sets and new techniques have to be envisaged to treat them. Metabarcoding is probably one of such new methodology providing such kind of data set. ProcMod is an R packages generalizing Procrustean analysis allows for partitioning variance of a multi-dimensional data set to be explained among several explanatory multi-dimensional data tables.

INTRODUCTION

With new high-throughput technologies, especially next generation sequencing platforms, ecologists are more and more faced with analysis of data sets in which a reasonable number of individuals or sites are characterized by several hundreds or even thousands of variables. Classical data analysis procedures are usually failing on such high-dimensional data sets and new techniques have to be envisaged to treat them. Metabarcoding is probably one of such new methodology providing such kind of data set. ProcMod is an R packages generalizing Procrustean analysis allows for partitioning variance of a multi-dimensional data set to be explained among several explanatory multi-dimensional data tables.

Procrustean Analysis

Procrustean analysis is aiming to compare to multi-dimentional data sets X and Y , both characterising n points through p and q variables.

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SOME L^AT_EX EXAMPLES

Use section and subsection commands to organize your document. L^AT_EX handles all the formatting and numbering automatically. Use ref and label commands for cross-references.

Figures and Tables

Use the table and tabular commands for basic tables — see Table @ref(tab:widgets), for example. You can upload a figure (JPEG, PNG or PDF) using the project menu. To include it in your document, use the includegraphics command as in the code for Figure @ref(fig:view) below.

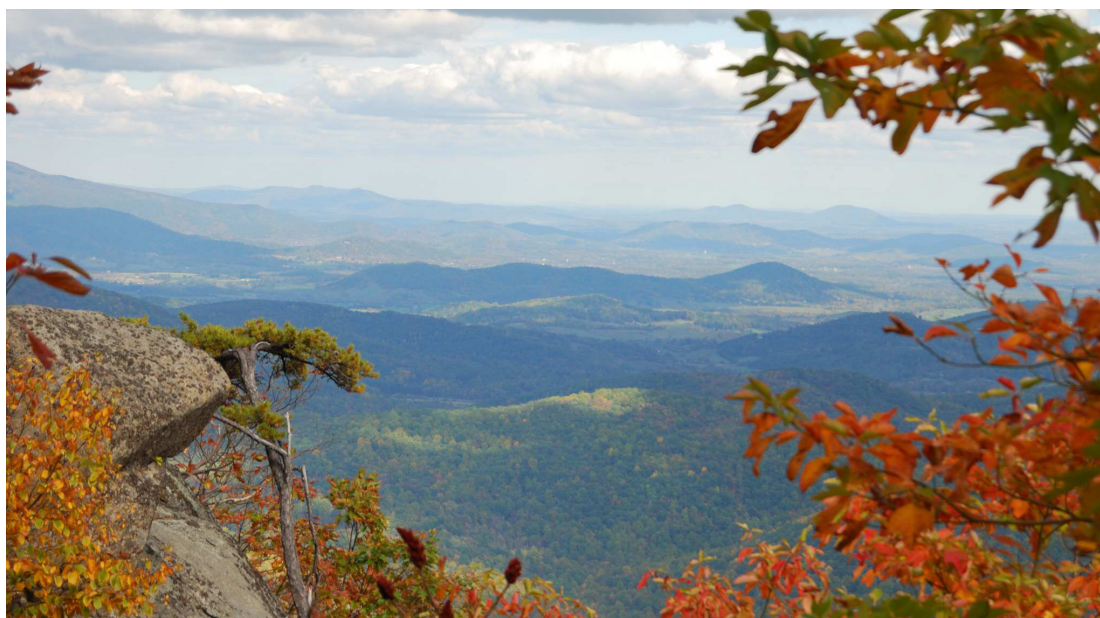


Figure 1. An example image.

Standard \LaTeX references will work as well (e.g. Fig. 1).

Table 1. (#tab:widgets) An Example Table.

Item	Quantity
Widgets	42
Gadgets	13

Citations

\LaTeX formats citations and references automatically using the bibliography records in your .bib file, which you can edit via the project menu. Use the cite command for an inline citation, like Figueredo and Wolf (2009), and the citep command for a citation in parentheses (Figueredo and Wolf 2009).

Mathematics

\LaTeX is great at typesetting mathematics. Let X_1, X_2, \dots, X_n be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $\text{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i^n X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

Lists

You can make lists with automatic numbering ...

1. Like this,
 2. and like this.
- or bullet points...

- Like this,
- and like this.

or with descriptions...

- **Word** Definition
- **Concept** Explanation
- **Idea** Text

Subsection

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Reference to Figure @ref(fig:results).

RESULTS AND DISCUSSION

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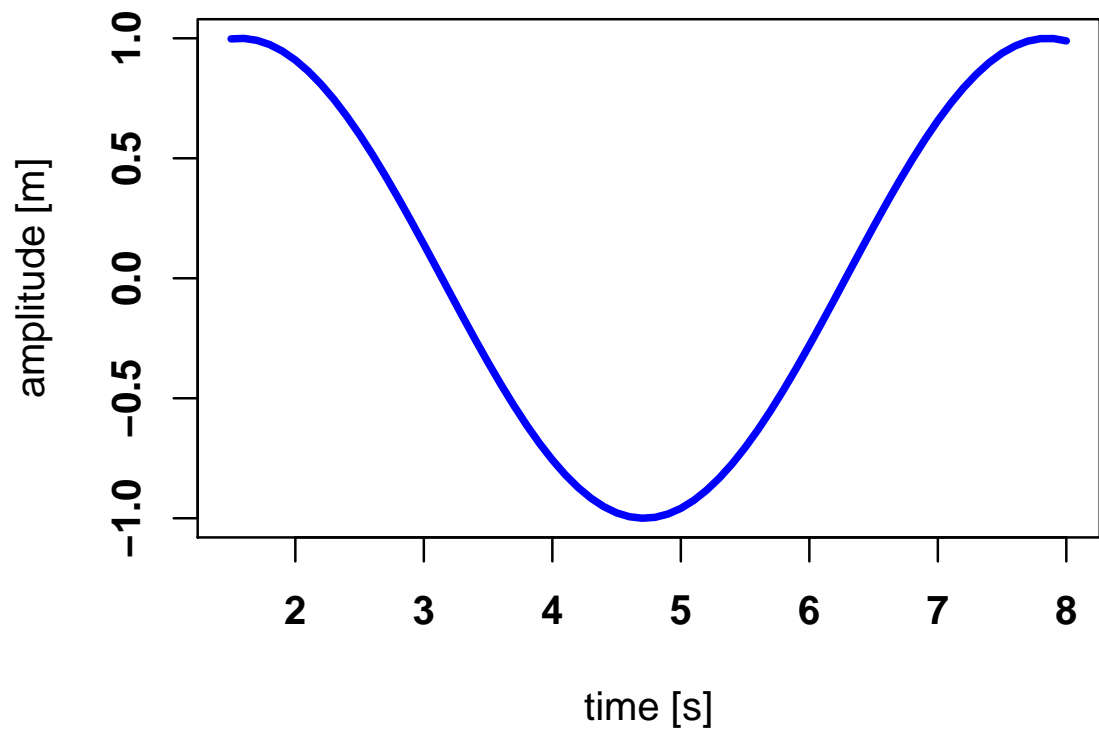


Figure 2. In-text Picture

Subsubsection

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174 **ACKNOWLEDGMENTS**

175 So long and thanks for all the fish.

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