INFERENCIA ESTADÍSTICA: APLICACIONES Y MÉTODOS

HANWEN ZHANG & ANDRÉS GUTIÉRREZ



CONTENTS

1	INTRODUCCIÓN 1
2	FEATURES 3
3	QUICK START 5
	3.1 Preparation 5
	3.2 Installation 5
	3.3 Generate demo files 5
	3.4 Build a demo book 5
	3.5 Write your own 5
	3.6 More outputs 6
	3.7 Recommendations 6
	3.8 Models 6
4	RESULTS 7
5	CONCLUSIONS 9

LIST OF FIGURES

Figure 1 caption 7

LIST OF TABLES

Table 1 Here is a nice table! 8

ACRONYMS

DRY Don't Repeat Yourself

API Application Programming Interface

UML Unified Modeling Language

INTRODUCCIÓN

The R package bookdownplus [2] is an extension of bookdown [1]. It is a collection of multiple templates on the basis of LaTeX, which are tailored so that I can work happily under the umbrella of bookdown. bookdownplus helps you write academic journal articles, guitar books, chemical equations, mails, calendars, and diaries.

You can put some additional information here

bookdownplus extends the features of bookdown, and simplifies the procedure. Users only have to choose a template, clarify the book title and author name, and then focus on writing the text. No need to struggle in YAML and LaTeX.

With bookdownplus users can

- record guitar chords,
- write a mail in an elegant layout,
- write a laboratory journal, or a personal diary,
- draw a monthly or weekly or conference calendar,
- and, of course, write academic articles in your favourite way,
- with chemical molecular formulae and equations,
- even in Chinese,
- and more wonders will come soon.

Full documentation can be found in the book R bookdownplus Textbook. The webpage looks so-so, while the pdf file might give you a little surprise.

Although this section might not be the latest version, the general idea won't change. Please see R bookdownplus Textbook to keep up with the update.

3.1 PREPARATION

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pandoc, LaTeX, rmarkdown, rticle, knitr, etc.) which bookdown depends on. See the official manual of bookdown for details. Additionally, if you want to produce a poster, phython must be installed before using, and the path of phython might have to be added to the environmental variables for Windows users.

3.2 INSTALLATION

```
install.package("bookdownplus")
# or
devtools::install_github("pzhaonet/bookdownplus")
```

3.3 GENERATE DEMO FILES

Run the following codes, and you will get some files (e.g. index.Rmd, body.Rmd, bookdownplus.Rproj) and folders in your working directory.

getwd() # this is your working directory. run setwd() to change it. bookdownplus::bookdownplus()

3.4 BUILD A DEMO BOOK

Now open bookdownplus.Rproj with RStudio, and press ctrl+shift+b to compile it. Your will get a book file named *.pdf in _book/folder.

3.5 WRITE YOUR OWN

Write your own text in index.Rmd and body.Rmd, and build your own lovely book.

3.6 MORE OUTPUTS

By default, the book is in a pdf file. From 'bookdownplus' 1.0.3, users can get more output formats, including 'word', 'html' and 'epub'. Run:

```
bookdownplus::bookdownplus(template = 'article', more_output = c('html')
```

3.7 RECOMMENDATIONS

I have been developing some other packages, which bring more features into 'bookdown', such as:

- mindr [3], which can extract the outline of your book and turn it into a mind map, and
- pinyin [4], which can automatically generate '{#ID}' of the chapter headers even if there are Chinese characters in them.

Both of them have been released on CRAN and can be installed via:

```
install.packages('mindr')
install.packages('pinyin')
```

Enjoy your bookdowning!

3.8 MODELS

Eq. (1) is an equation.

$$E = mc^2 \tag{1}$$

It can be written as $E = mc^2$.

Fig. 1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Tab. 1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

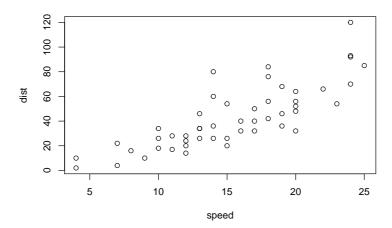


Figure 1: caption

Table 1: Here is a nice table!

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species	
5.1	3.5	1.4	0.2	setosa	
4.9	3.0	1.4	0.2	setosa	
4.7	3.2	1.3	0.2	setosa	
4.6	3.1	1.5	0.2	setosa	
5.0	3.6	1.4	0.2	setosa	
5.4	3.9	1.7	0.4	setosa	
4.6	3.4	1.4	0.3	setosa	
5.0	3.4	1.5	0.2	setosa	
4.4	2.9	1.4	0.2	setosa	
4.9	3.1	1.5	0.1	setosa	
5.4	3.7	1.5	0.2	setosa	
4.8	3.4	1.6	0.2	setosa	
4.8	3.0	1.4	0.1	setosa	
4.3	3.0	1.1	0.1	setosa	
5.8	4.0	1.2	0.2	setosa	
5.7	4.4	1.5	0.4	setosa	
5.4	3.9	1.3	0.4	setosa	
5.1	3.5	1.4	0.3	setosa	
5.7	3.8	1.7	0.3	setosa	
5.1	3.8	1.5	0.3	setosa	

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

- [1] Yihui Xie. bookdown: Authoring Books and Technical Documents with R Markdown. Chapman and Hall/CRC, Boca Raton, Florida, 2016. URL https://github.com/rstudio/bookdown. ISBN 978-1138700109.
- [2] Peng Zhao. bookdownplus: Generate Varied Books and Documents with R 'bookdown' Package, 2017. URL https://CRAN.R-project.org/package=bookdownplus. R package version 1.0.2.
- [3] Peng Zhao. mindr: Convert Files Between Markdown or Rmarkdown Files and Mindmaps, 2017. URL https://github.com/pzhaonet/mindr. R package version 1.0.4.
- [4] Peng Zhao. pinyin: Convert Chinese Characters into Pinyin, 2017. URL https://github.com/pzhaonet/pinyin. R package version 1.0.2.