Formatvorlage UNIGIS MSc

Subtitle

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Contents

Welcome

bla bla bla

Good luck and have fun!

Chapter 1

Some formatting examples

1.1 Block formatting

This is a comment block

This is a caution block

This is an insight block.

This is an exercise block.

This is a tip block.

1.2 Videos

videos embeded based on html syntax (see above) are not displayed in the PDF.

1.3 Images

This is a reference to Fig. 1.1.

Image referencing is not possible by means of RMarkdown syntax.

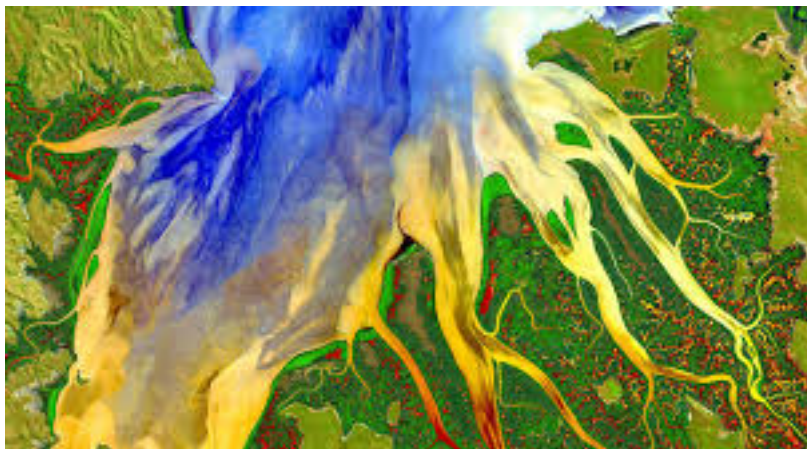It is advisable to stick to a syntax within a document (Rmarkdown or R).
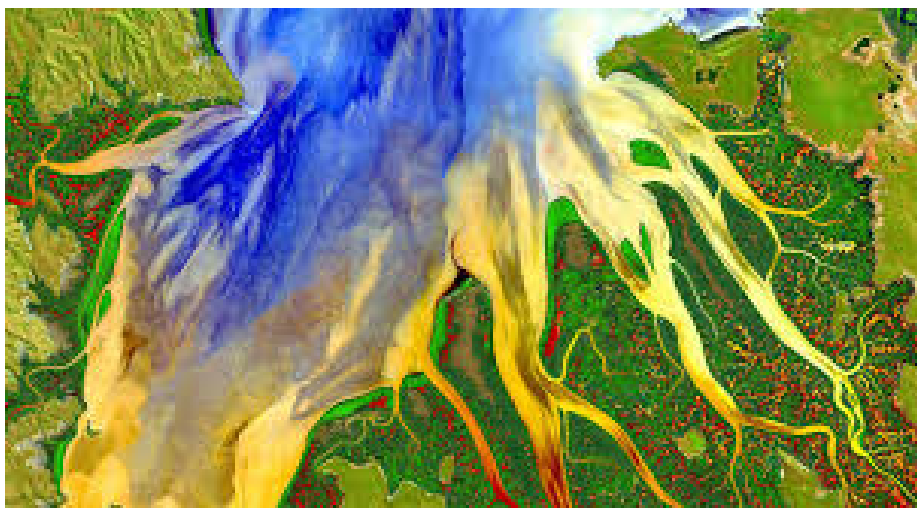
Figure 1.1: This is R Syntax

Figure 1.2: This is Rmarkdown Syntax

1.4 Headlines

- Heading 1 - <#Heading Title>
- Heading 2 - <##Heading Title>
- Heading 3 - <###Heading Title>
- Heading without numbering - <# Title {-}>
- Appendix - <## (APPENDIX) Appendix {-}>

1.5 Referencing

> ℹ The reference list in html is generated by means of an r statement (see 04-references.Rmd). YAML Metadata parameters in index.Rmd are used to render the reference list in PDF. If "link-citations: yes" is enabled, reference list will be added to the end of every chapter (not alphabetical!).

(Holland, 1992)

some text bla bla (Alexandrowicz, 1980).

(Grimm et al., 2005)

some text bla bla Eden (1961).

1.6 CSS Text formatting

Pay attention to this!

> 💬 The css class "emphasized" is defined in css/custom.css and may be applied to text and headlines using HTML tags. Classes assigned to headlines are applied in the entire chaper.More information on css customization in BookDown is available here. Formats based on css are not rendered in the PDF!

Chapter 2

Introduction to Bookdownplus

The R package `bookdownplus` (**?**) is an extension of `bookdown` (**?**). 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.

> This is a comment block

> This is a caution block

> This is an insight block.

> This is an exercise block.

> This is a tip block.

2.1 Features

`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.

2.2   Quick start

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

2.2.1   Preparation

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pan-doc, 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.

2.2.2   Installation

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

2.2.3   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()
```

2.2.4   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.

2.2.5   Write your own

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

2.2.6   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', 'word', 'epub'))
```

2.2.7   Recommendations

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

- mindr (**?**), which can extract the outline of your book and turn it into a mind map, and
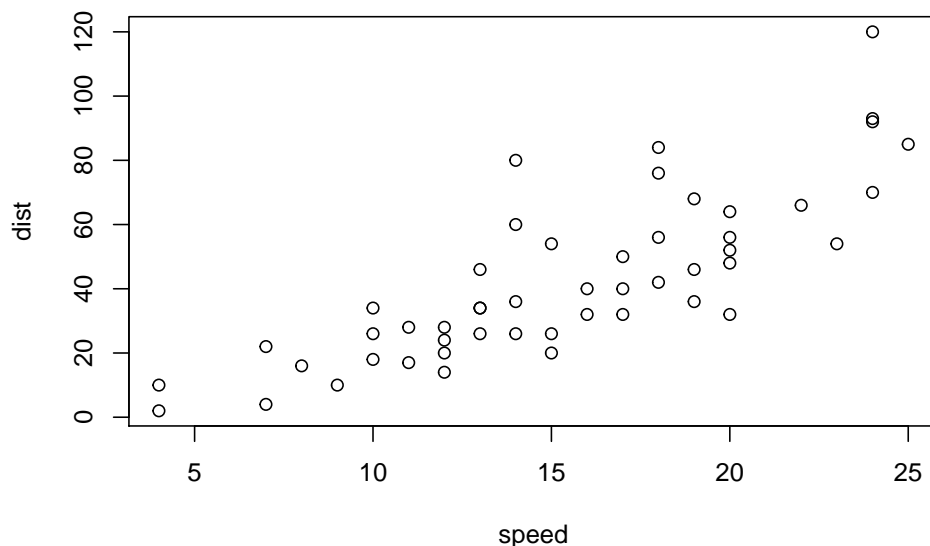
Figure 2.1: caption

- pinyin (**?**), 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!

2.2.8 Models

Eq. (2.1) is an equation.

$$E = mc^2 \tag{2.1}$$

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

Theorem 2.1. *This is a theorem.*

Proof. This is a proof. $\square$

Exercise 2.1. This is an exercise

2.3 Results

Fig. 2.1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Tab. 2.1 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Table 2.1: 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

2.4   Conclusions

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

Chapter 3

Sandbox

Use this section for testing!

This is a reference to Fig. 1.1.

Bibliography

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