Meteorologie en ecoklimatologie

Hans Verbeeck, Louise Terryn, Félicien Meunier

2020 - 05 - 15

Prerequisites

Chapter 1

Introduction, atmosphere of the Earth, energy and light

Textbooks

Table 1.1: Example of table directly from R

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440
Valiant	18.1	6	225	105	2.76	3.460

Lorem ipsum dolor sit amet, fermentum ornare morbi sociosqu dictumst. In malesuada nulla aliquam id tellus ridiculus eu. Ac id ridiculus nec commodo in feugiat in. Parturient amet eget suspendisse diam non platea justo. Elementum ac lacus cubilia nulla vestibulum eu, egestas. Nec non urna mi et, malesuada enim. Vitae at amet varius erat. Aenean nunc commodo sodales accumsan, nec dui posuere nec elit, etiam. Maximus faucibus magnis penatibus euismod vestibulum, tempor turpis. Ac, tincidunt potenti felis enim morbi blandit, accumsan bibendum vitae nulla senectus dictum. Ac ac sagittis ut in quam nec gravida etiam a conubia ex.

Ut non, venenatis in, scelerisque in sed, interdum ipsum. Non imperdiet, sagittis, erat tempor. Pretium ligula, augue curabitur mi luctus nam auctor fames? Tellus tristique rutrum integer fermentum dapibus, vehicula nascetur. Ante

fringilla orci, nostra maximus tempus! Donec non ligula in eu sociis sed tincidunt purus nunc. Orci nam conubia dis orci lacus. In aenean leo quis enim convallis, sagittis massa. Odio varius duis nec diam quam quis in condimentum et. Amet id, interdum vestibulum et diam quam litora eget vitae eget pharetra. Maecenas eget, donec pretium sit in condimentum ut lobortis, eu. Non, eget sed. Cras laoreet ut et a, maecenas magna inceptos malesuada.

At odio phasellus. Vel, sagittis dictumst cum litora rhoncus. Elementum suspendisse. Metus porttitor netus interdum tristique ornare augue. Faucibus nibh amet, imperdiet commodo nisl consectetur semper. Suscipit lacus, ut iaculis nibh, et sit. Sapien lorem dolor interdum in dictum. Faucibus, eleifend quis, dapibus sed. Nam purus porttitor nulla facilisis varius amet in in blandit.

Type.of.model	Description	Example
Biogeochemical	Ecosystem models with emphasis	TEM, CASA
Forst gap models	Individual trees	FORET
Ecosystem demography	As in gap models	ED

The Earth's Atmosphere

Meteorology and ecoclimatology

Energy, temperature and heat

Radiation

Energy balance

Radiation balance

Energy balance

Aurora Borealis

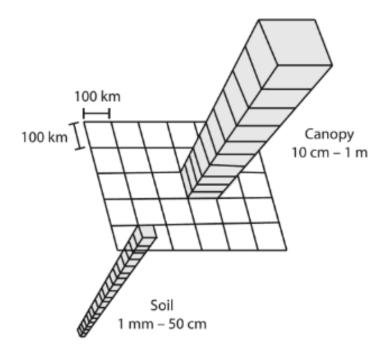


Figure 1.1: Here is a first figure!

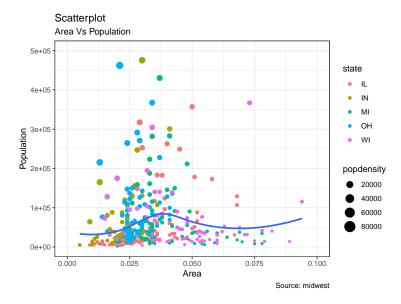


Figure 1.2: Here is a second figure! It was generated in R

(PART) In case we need parts

Chapter 2

Temperature, humidity and clouds

Chapter 3

Loose parts of text

You can label chapter and section titles using {#label} after them, e.g., we can reference Chapter @ref(intro). If you do not manually label them, there will be automatic labels anyway.

Figures and tables with captions will be placed in figure and table environments, respectively.

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

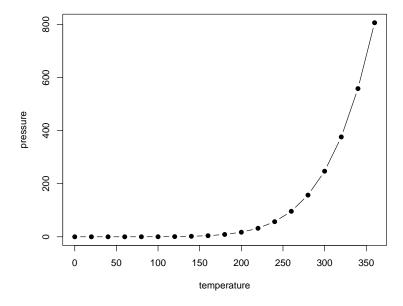


Figure 3.1: Here is a nice figure!

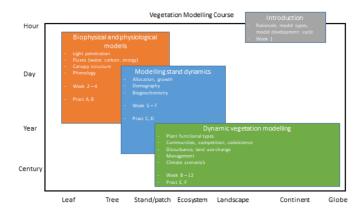


Figure 3.2: Here is a second figure!

$$\begin{array}{cccc} x_{11} & x_{12} & x_{13} \\ x_{21} & x_{22} & x_{23} \end{array}$$

Reference a figure by its code chunk label with the fig: prefix, e.g., see Figure @ref(fig:nice-fig). Similarly, you can reference tables generated from knitr::kable(), e.g., see Table @ref(tab:nice-tab).

Table 3.1: 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

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.7	3.8	1.7		setosa
5.1	3.8	1.5		setosa

You can write citations, too. For example, we are using the **bookdown** package (Xie 2020) in this sample book, which was built on top of R Markdown and **knitr** (Xie 2015).

$$f(k) = \binom{n}{k} p^k \left(1 - p\right)^{n-k}$$

Xie, Yihui. 2015. Dynamic Documents with R and Knitr. 2nd ed. Boca Raton, Florida: Chapman; Hall/CRC. http://yihui.org/knitr/.

———. 2020. Bookdown: Authoring Books and Technical Documents with R Markdown. https://github.com/rstudio/bookdown.