Meteorologie en ecoklimatologie

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Prerequisites

Chapter 1

Introduction, atmosphere of the Earth, energy and light

Textbooks

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

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.

Example of table from Bonan

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

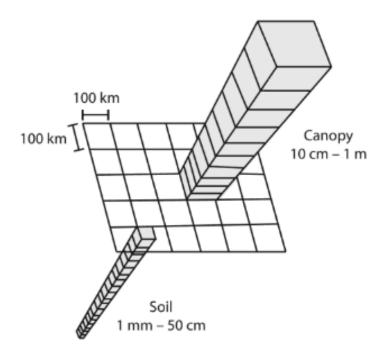


Figure 1.1: Here is a first figure!

Radiation balance

Energy balance

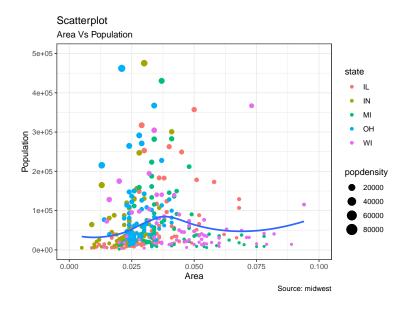


Figure 1.2: Here is a second figure!

Aurora Borealis

(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)
```

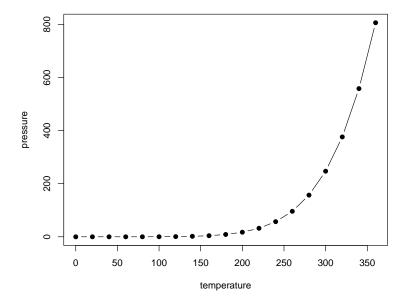


Figure 3.1: Here is a nice figure!

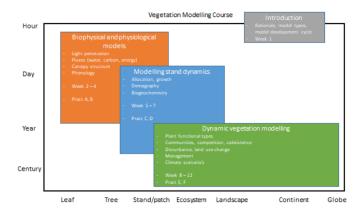


Figure 3.2: Here is a second figure!

```
\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).

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

 ${\bf setosa}$

4.7

3.2

1.3

0.2

setosa

4.6

3.1

1.5

0.2

setosa

5.0

3.6

1.4

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5.4

3.9

1.7

0.4

 ${\bf setosa}$

4.6

3.4

1.4

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5.0

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4.4

2.9

1.4

0.2

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4.9

3.1

1.5

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5.4

3.7

1.5

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setosa

4.8

3.4

1.6

0.2

setosa

4.8

3.0

1.4

0.1

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3.0

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5.7

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3.9

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5.1

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 ${\bf setosa}$

5.7

3.8

1.7

0.3

setosa

5.1

3.8

1.5

0.3

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).

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

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.