Vegetation modelling

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Introduction

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)
```

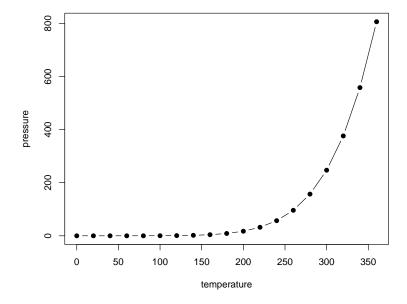


Figure 1.1: Here is a nice figure!



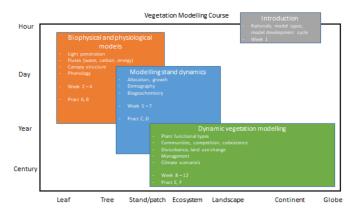


Figure 1.2: Here is a second figure!

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).

```
knitr::kable(
  head(iris, 20), caption = 'Here is a nice table!',
  booktabs = TRUE
)
```

Table 1.1: 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

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
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

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).

(PART) Biophysical and physiological models

Modelling light penetration, vegetation canopy representation and energy balance

 $10 CHAPTER\ 2.\ \ MODELLING\ LIGHT\ PENETRATION,\ VEGETATION\ CANOPY\ REPRESENTATION$

Modelling basic processes for growth and the carbon cycle (fluxes) $12 CHAPTER\ 3.\ \ MODELLING\ BASIC\ PROCESSES\ FOR\ GROWTH\ AND\ THE\ CARBON\ CYCLE\ (FROM THE CARBON\ CYCLE\ (FROM THE$

(PART) Modelling stand dynamics

14CHAPTER 3. MODELLING BASIC PROCESSES FOR GROWTH AND THE CARBON CYCLE (F.

Modelling growth, timber production and C-allocation

16CHAPTER 4. MODELLING GROWTH, TIMBER PRODUCTION AND C-ALLOCATION

Modelling vegetation dynamics and demography

18CHAPTER 5. MODELLING VEGETATION DYNAMICS AND DEMOGRAPHY

(PART) Dynamic vegetation modelling

20CHAPTER 5. MODELLING VEGETATION DYNAMICS AND DEMOGRAPHY

Representing biodiversity in vegetation models

Functional diversity

Plant functional types,

Trait based models

Competition models (competition and coexistence of species/PFTs)

Communities

$22 CHAPTER \, 6. \ REPRESENTING \, BIODIVERSITY \, IN \, VEGETATION \, MODELS$

Spatial heterogeneity, landscape scale, metapopulations

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://CRAN.R-project.org/package=bookdown.