Analysis of Environmental Data Lab

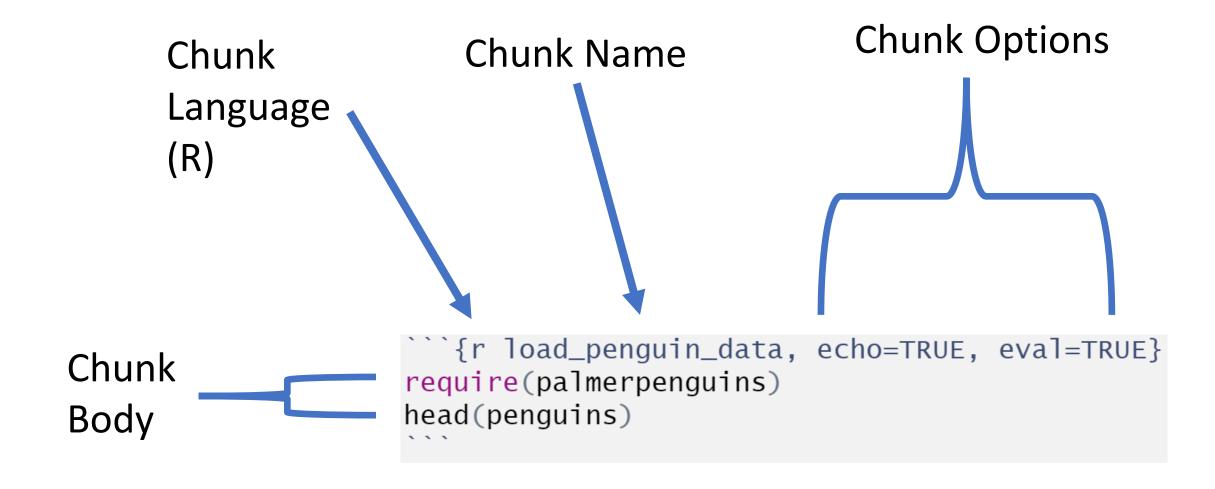
R Markdown Code Chunk Options and Tabsets

Eco 602 – University of Massachusetts, Amherst – Fall 2021 Michael France Nelson

Important Concepts

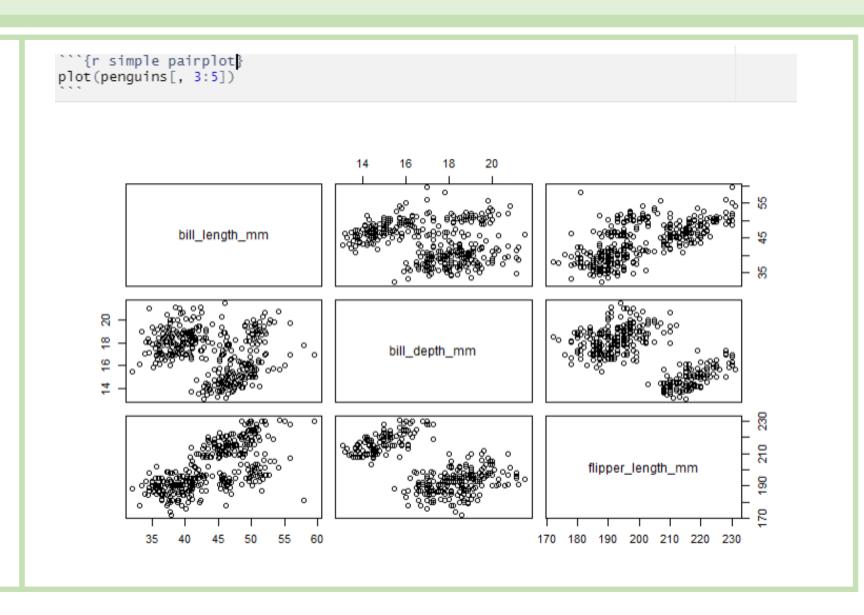
- Chunk Names
- Setup chunks
- Code visibility
- Running/not-running code
- Figure options
- Re-using chunks with ref.label
- Chunk output in console vs. inline

Anatomy of a Code Chunk



What does a chunk do?

 Allows you to include code and code output in an R Markdown document!



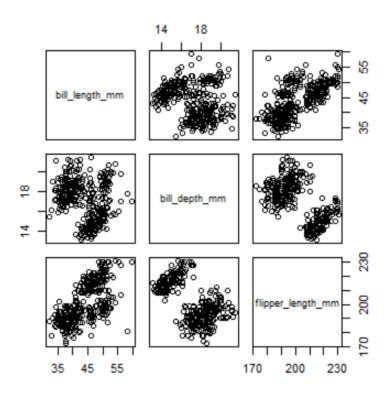
What do chunk options do?

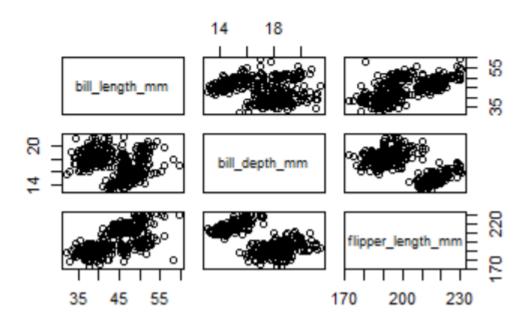
- 1. Give your chunk a name. This is always a good idea.
 - But you can't have duplicated chunk names.
- 2. Show or hide your code in the rendered document
 - echo = TRUE or echo = FALSE
- 3. Show or hide the chunk output in the rendered document
 - eval = TRUE or eval = FALSE
- 4. Set plotting options, for example:
 - Figure height and width: fig.width = 5
 - Figure aspect ratio: fig.asp = 1
 - Figure alignment: fig.align = 'center'

Some examples

```
fr simple pairplot, fig.width=4, fig.asp = 1}
plot(penguins[, 3:5])
```

```
[ `` {r simple pairplot, fig.width=4, fig.asp = 1/1.5}
plot(penguins[, 3:5])
```





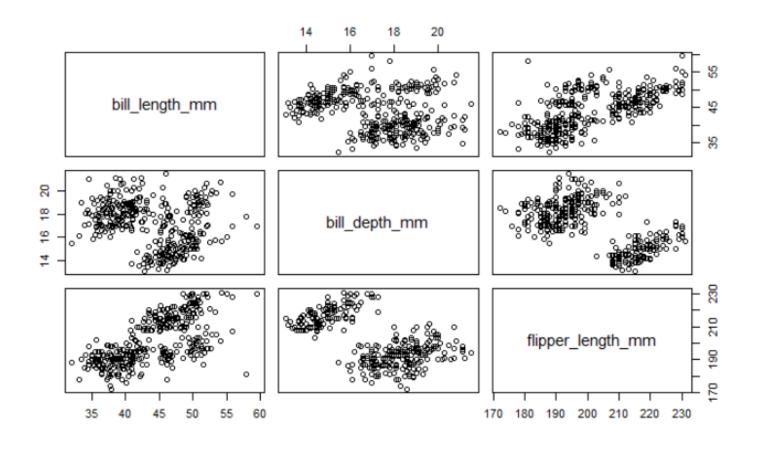
Some examples

```
```{r simple pairplot, eval = FALSE}
plot(penguins[, 3:5])
```

[Plot will not appear in rendered document]

# Some examples

```
```{r simple pairplot, echo = FALSE}
plot(penguins[, 3:5])
```



Tabsets

What do tabsets do?

- Allow you to organize long documents
- Allows reader to quickly navigate related, but distinct items

A tabset example that you might be familiar with:

Course Materials



McGarigal Readings

Computer Resources

DataCamp

Assignment Data Files

The course draws readings from diverse texts and journal articles including:

- Bolker, B.M. (2008). Ecological models and data in R (Princeton University Press). [Electronic version available at UMass Libraries]
- Zuur, A.F. (2007). Analyzing ecological data (New York; London: Springer). [Electronic version available at UMass Libraries]
- Epstein, J.M. (2008). Why Model? Journal of Artificial Societies and Social Simulation 11, 12.
- Bang, Megan, Ananda Marin, and Douglas Medin. If Indigenous Peoples Stand with the Sciences, Will Scientists Stand with Us? Daedalus 147, no. 2 (March 1, 2018): 148–59.
- Jorge Luis Borges: The Library of Babel

Tabset Example

```
# Tabset Example {.tabset}
## Tab 1
Tab 1 contents
## Tab 2
Tab 2 contents
## Tab 3
Tab 3 contents
# Next Section
Non-tabbed material
```

Tabset Example

Tab 1 Tab 2 Tab 3

Tab 1 contents

Next Section

Non-tabbed material

Tabset Example

```
# Tabset Example {.tabset .tabset-pills}
## Tab 1
Tab 1 contents
## Tab 2
Don't be a such a pill!
## Tab 3
Tab 3 contents
# Next Section
Non-tabbed material
```

Tabset Example

Tab 1



Tab 3

Don't be a such a pill!

Next Section

Non-tabbed material

Let's Practice Together!

Create a new R Markdown document – select HTML document (not notebook)