Workshop Examples

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Contents

Change some of the YAML settings to see what happens.

Notice, the down arrow at line 22. If you click this, you can hide the R code chunk. This is helpful when working through a large document.

On the right side of the R code chunk are additional options, Settings, a down arrow (run previous R code chunks), and a green play button (runs the current chunk). It's handy to check R code chunks as you go and to debug. Within the Assessment template, this is also the only way to see variables in your Environment.

1 Emphasis (R markdown and LaTeX)

Sebastes

Sebastes

2 Headers

Subhead

3 Commenting

4 Links

[Github]

5 Lists

R Markdown are finicky with spacing...

- Item 1
- Item 2

    - Item 2a
    - Item 2b

Bulleted list

- [Git]
- [R]

Numbered list

1. [Git]
2. [R]

6 References and Citations

We can reference a document section, see Lists in Section [5].

Citations: (Love et al. [2002]) Love ([2002])

₄₈ # 7   Figure from a file

₄₉ You can use any file extension, including PDFs

Figure 1: Here's my caption fig:fig_example

₅₀ Figures are referenced using LaTeX syntax 1.

₅₁ Put a space between the] and (above. Knit the document.

₅₂ Now try adding your own picture to the directory, adding it in here, and referencing it.

₅₃ # 8   R code chunks

₅₄ You can embed an R code chunk like this:

```
## 55      speed            dist
## 56   Min.   : 4.0   Min.    :  2.00
## 57   1st Qu.:12.0   1st Qu.: 26.00
## 58   Median :15.0   Median : 36.00
## 59   Mean   :15.4   Mean    : 42.98
## 60   3rd Qu.:19.0   3rd Qu.: 56.00
## 61   Max.   :25.0   Max.    :120.00
```

₆₂ Play witht the r code chunk options, echo=TRUE, include=FALSE, results='asis'

₆₃ # 9   Figure from R code chunk

₆₄ You can also embed plots, for example:

₆₅ Note, you need extra \s when using LaTeX syntax within an R code chunk, or when inserting
₆₆ a backslash in R markdown. The same goes with percent signs and any other LaTeX reserved
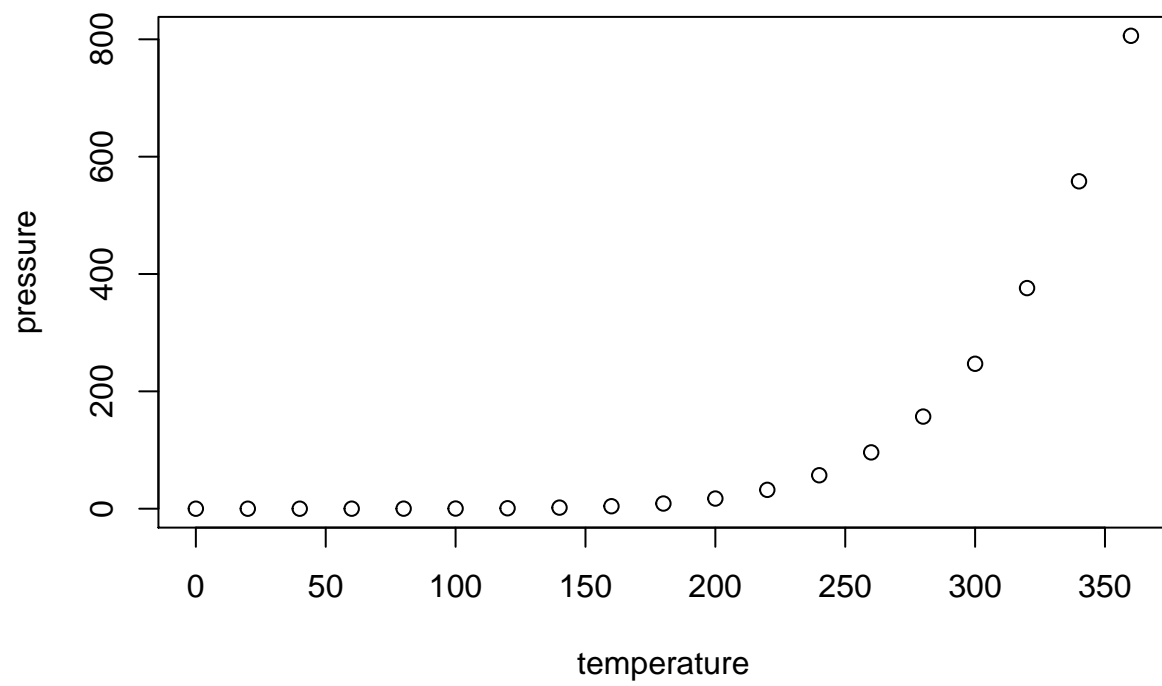₆₇ symbol.

Figure 2: Figure of something at $40°10'$. `fig:pressure`

68 We can now reference Figure 2. Note where this text ends up.

69 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of
70 the R code that generated the plot.

10 Tables

Table 1: This is where you write your caption

Sample	Test1	Test2	Test3	Test4	Test5	Test6	Test7	Test8	Test9	Test10
1	333000000000.0	97.0	45	7169	5656	2642	8534	9173.0	230	2733
3	345.0	976.0	6	105	6382	2277	5848	7339495403.0	8613	5025
5	34.0	3333333333.0	7	2395	5632	5542	1645	380.0	1263	6728
7	234.0	34.0	46	5619	6063	8973	9362	1870.0	7651	683
9	234.0	0.0	45	6531	6824	3609	7627	3363.0	1534	8333

72 Try changing the R chunk options above.

73 We can now reference Table 1.

74 Now, try putting the R code chunk within and HTML comment.

11 Create your own table

76 Either create a .csv file or copy one into the repo folder on your computer.

77 Now, create a table!

Common.name.on.label	Expected.species	Assignation.from.DNA.in.GenBank	Assignation.in.BOLD	Geographic.origin
Red Gurnard	Chelidonichthys cuculus	Trigloporus lastoviza (JQ774947.1	99%)	Trigloporus lastoviza (AAB8166
Atlantic Cod	Gadus morhua	Gadus macrocephalus (EU752085.1	99%)	Gadus macrocephalus (AAB3717
Atlantic Cod	Gadus morhua	Molva molva		North Atlantic
Tope Shark	Galeorhinus galeus	Prionace glauca (JQ654713.1	99%)	Prionace glauca (AAA7096
Anglerfish	Lophius piscatorius	Lophius litulon (EU660706.1	100%)	Lophius litulon (AAC1166
Capelin	Mallotus villosus	Cyclopterus lumpus (AM498314.1	99%)	Cyclopterus lumpus (AAA9151
Sardine	Sardina pilchardus	Engraulis encrasicolus (AP009137.1	100%)	Engraulis encrasicolus (AAB2317
Alba-core Tuna	Thunnus alalunga	Thunnus obesus (JN086152.1	100%)	Thunnus obesus (AAA7352
Bonito	Thunnus spp.	Katsuwonus pelamis (JN086155.1	99%)	Katsuwonus pelamis (AAA5421

Table 2: Seafood

12 Math mode

79 You can use LaTeX math mode both inline and for inserting equations. It's handy for using
80 inline math mode for management measure and lat/long.

81 Inline looks like this: $SPR_{40\%}$

82 Note the % sign has a when used in math mode, but not in R markdown text.

83 To get degrees and minutes type: $40°10'$

References

Love, M., Yoklavich, M., and Thorsteinson, L. 2002. The rockfishes of the northeast Pacific. University of California Press, Berkeley, CA, USA.