Workshop Examples

Melissa Monk

3 Contents

| 4 | 1 | Epmhasis (R markdown and LaTeX) | 2 |
|----------|------------|---|----|
| 5 | 2 | Headers | 2 |
| 6 | 3 | Commenting | 2 |
| 7 | 4 | Links | 2 |
| 8 | 5 | Lists | 2 |
| 9 | 6 | References and Citations | 2 |
| 10 | 7 | Figure from a file | 2 |
| 11 | 8 | R code chunks | 3 |
| 12 | 9 | Figure from R code chunk | 3 |
| 13 | 10 | Tables | 4 |
| 14 | 11 | Create you own table | 4 |
| 15 | 12 | Math mode | 5 |
| 16 | Re | eferences | 5 |
| 17 | Ch | ange some of the YAML settings to see what happens. | |
| 18 19 | | tice, the down arrow at line 22. If you click this, you can hide the R code chunk. This pful when working through a large document. | is |
| 22 | pre che | the right side of the R code chunk are additional options, Settings, a down arrow (revious R code chunks), and a green play button (runs the current chunk). It's handy eck R code chunks as you go and to debug. Within the Assessment template, this is also only way to see variables in your Environment. | to |

²⁴ 1 Epmhasis (R markdown and LaTeX)

epmhasis-r-markdown-and-latex

25 **Headers**

headers

26 3 Commenting

commenting

₂₇ 4 Links

links

₂₈ 5 Lists

lists

₂₉ 6 References and Citations

references-and-citations

- We can reference a document section, see Lists in Section 5.
- Citations: (Love et al. 2002)

$_{32}$ 7 Figure from a file

figure-from-a-file

You can use any file extension, including PDFs



Figure 1: Here's my caption fig:fig_example



Figure 2: Here's my caption 2 fig:fig_example

- Figures are referenced using LaTeX syntax 2.
- Put a space between the and above. Knit the document.
- Now try adding your own picture to the directory, adding it in here, and referencing it.

³⁷ 8 R code chunks

r-code-chunks

You can embed an R code chunk like this:

```
##
           speed
                             dist
                                   2.00
   ##
               : 4.0
       Min.
                                :
40
       1st Qu.:12.0
                        1st Qu.: 26.00
   ##
       Median:15.0
   ##
                        Median: 36.00
   ##
               :15.4
                                : 42.98
       Mean
                        Mean
43
       3rd Qu.:19.0
                        3rd Qu.: 56.00
   ##
       Max.
               :25.0
                        Max.
                                :120.00
```

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

$_{\scriptscriptstyle 47}$ 9 Figure from R code chunk

figure-from-r-code-chunk

You can also embed plots, for example:

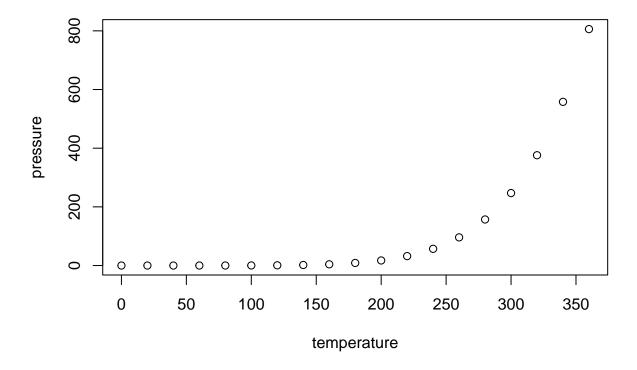


Figure 3: Figure of something at 40°10′. fig:pressure

- Note, you need extra \s when using LaTeX syntax within an R code chunk, or when inserting
- 50 a backslash in R markdown. The same goes with percent signs and any other LaTeX reserved
- 51 symbol. You can use a % in line without dollar signs, if in math mode you need dollar signs.
- 52 ex: %
- This is inline math mode for Latex 40°10′
- ⁵⁴ We can now reference Figure 3. Note where this text ends up.
- Note that the echo = FALSE parameter was added to the code chunk to prevent printing of
- 56 the R code that generated the plot.

$_{57}$ 10 Tables

tables

Table 1: This is where you write your caption

| | | | | | | | | tal | o:Tab | le_examp |
|--------|-----------------|---------------|-------|-------|-------|-------|-------|---------------|-------|----------|
| Sample | Test1 | Test2 | Test3 | Test4 | Test5 | Test6 | Test7 | Test8 | Test9 | Test10 |
| 1 | 333000000000.00 | 97.00 | 45 | 7169 | 5656 | 2642 | 8534 | 9173.00 | 230 | 2733 |
| 3 | 345.00 | 976.00 | 6 | 105 | 6382 | 2277 | 5848 | 7339495403.00 | 8613 | 5025 |
| 5 | 34.00 | 3333333333.00 | 7 | 2395 | 5632 | 5542 | 1645 | 380.00 | 1263 | 6728 |
| 7 | 234.00 | 34.00 | 46 | 5619 | 6063 | 8973 | 9362 | 1870.00 | 7651 | 683 |
| 9 | 234.00 | 0.00 | 45 | 6531 | 6824 | 3609 | 7627 | 3363.00 | 1534 | 8333 |

- Try changing the R chunk options above.
- We can now reference Table 1.
- Now, try putting the R code chunk within and HTML comment.

61 11 Create you own table

create-you-own-table

- Either create a .csv file or copy one into the repo folder on your computer.
- Now, create a table!

Table 2: This is da caption.

tab:Table_example2

| X | Size | Color |
|------------|--------------|------------|
| Lee CF | XL | Maroon |
| Kristin PJ | M | Dark Green |
| Lukas DF | L | Light Blue |
| Thomas B | \mathbf{S} | Maroon |
| Kaija K | \mathbf{S} | Light Blue |
| Zack O | \mathbf{M} | Dark Green |
| Zach K | \mathbf{M} | Lavender |
| Kate R | \mathbf{S} | Light Blue |
| Jon S | L | Purple |
| Melissa K | Μ | Light Blue |

64 12 Math mode

math-mode

- You can use LaTeX math mode both inline and for inserting equations. It's handy for using
- inline math mode for management measure and lat/long.
- Inline looks like this: $SPR_{40\%}$
- Note the % sign has a when used in math mode, but not in R markdown text.
- To get degrees and minutes type: 40°10′

70 References

references

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