

# testfile

Jakob

3/25/2021

## How to Start

1. You should have a working version of RStudio (From within RStudio, go to Help > Check for Updates to install newer version of RStudio (if available).)
2. Install and load Rmarkdown with `install.packages("Rmarkdown")` and `library(rmarkdown)`
3. You will be asked to give some information, that information will show up in your YAML header (which is some kind of human readable non-markup format)
  - Important: the header can tell `render()` what to output → html for example

## Basics

### Flavor

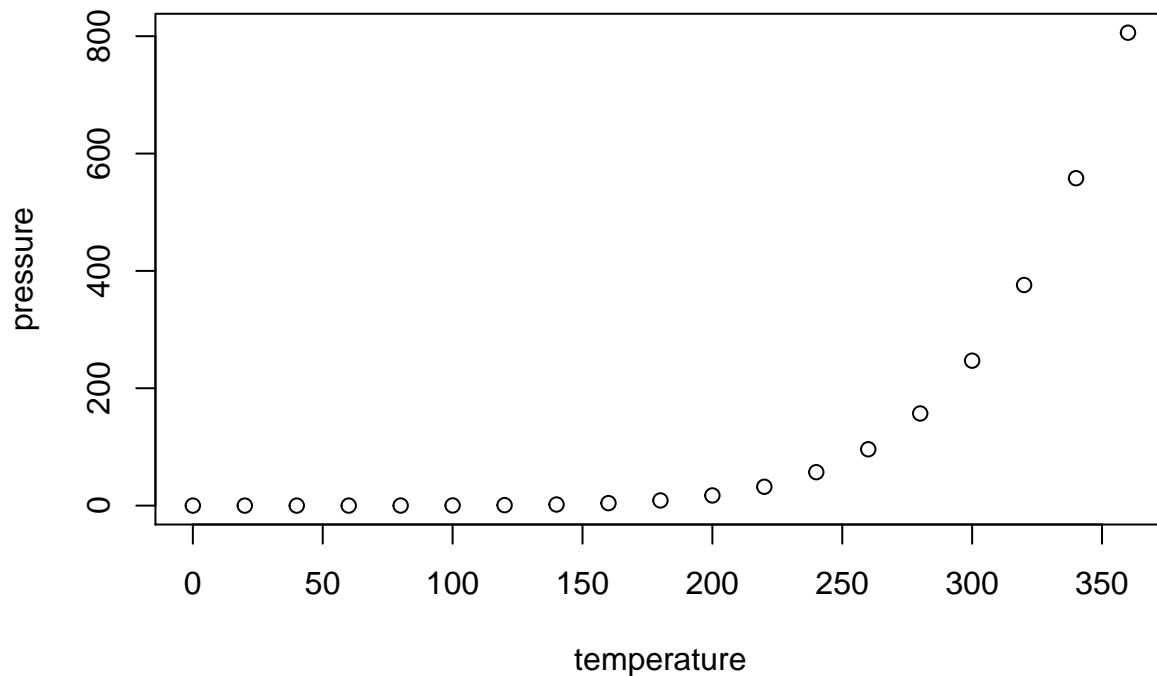
Rmarkdown has not the same “flavor” as GitHub Markdown... So unfortunately you will have to use a slightly different syntax for some things. - you have to use 4 spaces to indent a list element.

### Code blocks:

- create code-blocks as you would do in normal Markdown.
- The difference is, that you can have actual executable code blocks in your R-Markdown file and decide if to render everything, just the results, just the plots or nothing.
- You have to declare a language in a `{r}` curly brackets syntax for this.

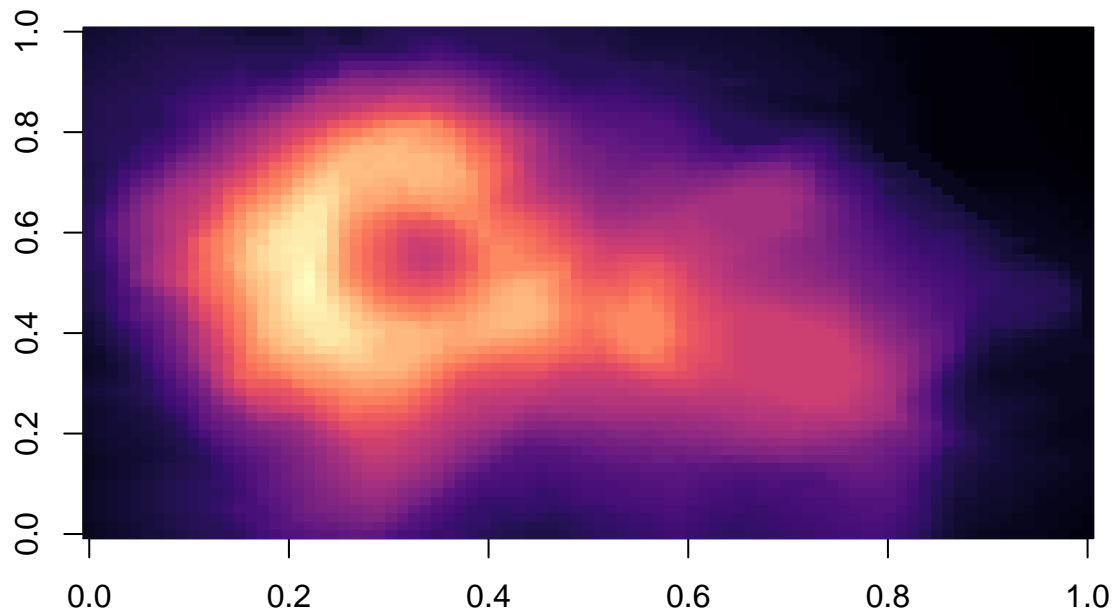
```
` ```${r, include=True, echo=False}
# This is an R code block, which will be included in the rendered output file.
# ... It would not show the source code but the result/output/plot
# ... you only need three ``` , the first one is necessary here
# ... to escape within the actual code block.
` ````
```

You can also embed plots, for example:



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

```
## Loading required package: viridisLite
```



## Rendering

- Rendering will make a pdf, TeX, HTML, notebook, ... or whatever-you-chose-file from your \*.Rmd file.
  - You can Render from the command line (or from an R code block) with `render(markdownfile.Rmd)`
  - To render your current Rmd File, use the shortcut: SHIFT+command+K (macOS) or CTRL+SHIFT+K (Windows)
- Now the Header comes in Handy, we can tell it to make a Html document by writing:

```

title: "testfile"
author: "Jakob"
date: "3/25/2021"
output: html_document

```

get a TeX file

```

4. • For example you can use: {}      title: "testfile"      author: "Jakob"      date:
    "3/25/2021"      output:      pdf_document:      keep_tex: true
    citation_package: biblatex      bibliography: bibliography.bib

```

## Math Block

- as you know it from Markdown

$$\longrightarrow c_1 + c_2 * h \Sigma_{bottom}^{top}$$

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

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

```