

R Markdown Example

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R Markdown

This is a section header. Demonstration of markdown features.

Lists and other things

- Packages
 - markdown
 - knitr
 - Output
 - pdf
 - HTML
 - word
1. Packages
 1. rmarkdown
 2. knitr
 3. ggplot2
 2. Output
 1. Pdf
 2. HTML
 3. Word

This is Text. This word is **bold**. And here there is one printed in *italics*.

Underscores are also possible:

- **bold**
- *italics* using underscores __
- ~~strike~~
- standard

Links

<https://github.com/apommerening/Scientific-Computing-Drop-In>

Arne's github repository for the drop-in sessions

[Markdown cheat sheet 1] (<https://www.markdownguide.org/cheat-sheet/>)

[Markdown cheat sheet 2] (<https://en.support.wordpress.com/markdown-quick-reference/>)

Equations (use Latex syntax)

$$\bar{d} = \frac{1}{k} \sum_{i=1}^k d_i$$

Including data and calculations

```
myData <- read.table("Allmitwald.txt", header = T)
dim(myData)
```

```
## [1] 121 8
```

```
names(myData)
```

```
## [1] "plotNumber" "radius" "treeNumber" "species" "azimuth"
## [6] "distance" "dbh" "height"
```

Note you can set `echo = FALSE` in the code chunk to prevent printing of the R code that generated the plot:

```
## [1] 121 8
```

```
## [1] "plotNumber" "radius" "treeNumber" "species" "azimuth"
## [6] "distance" "dbh" "height"
```

Number of trees per plot:

```
## 1 2 3 4
## 44 23 28 26
```

Number of species (BE - beech, NS - Norway spruce, SF - silver fir, SP - Scots pine):

```
table(myData$species)
```

```
##
## BE NS SF SP
## 77 35 8 1
```

Mean and range of h/d ratios:

```
mean(100 * myData$height / myData$dbh)
```

```
## [1] 82.32766
```

```
range(100 * myData$height / myData$dbh)
```

```
## [1] 16.31579 276.24309
```

Including Plots

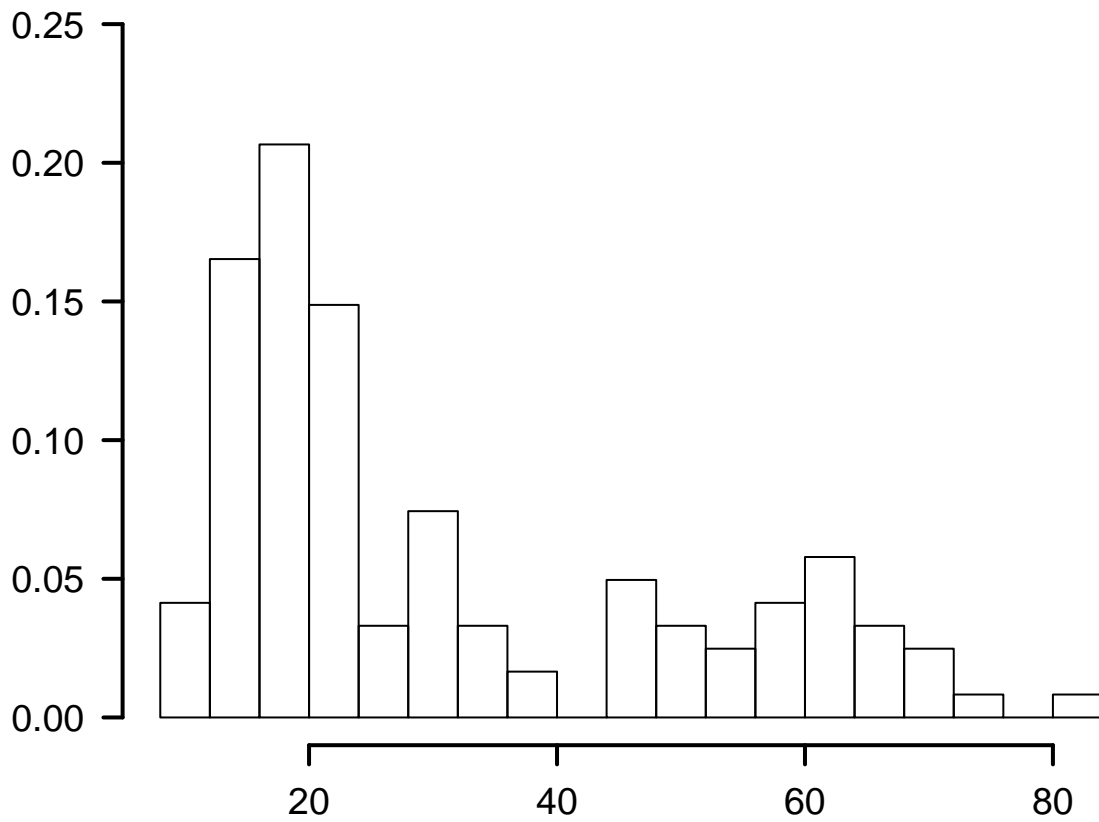
You can also embed plots, for example the empirical stem diameter distribution:

First let's check the stem diameter range:

```
range(myData$dbh)
```

```
## [1] 9.9 82.5
```

Now let's plot the empirical distribution:



Of course, it makes sense to include some text on your interpretation here. For example you could note that the stem diameter distribution is bimodal and that it might be a good idea to find out what species contribute to which mode.

And to have a map of one of the plots may also be helpful:

Plot 1

