Introduction to R-Markdown

Arjun

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Include a first-level header, second-level header, and third-level header in your R Markdown document naming them Section 1, Subsection 1, and Subsubsection 1, respectively.

# Section 1

This is first level header

## Subsection 1: Section 2

This is a second level header

### Subsubsection 1: Section 3

This is a third level header

Include a hyperlink in the R Markdown document linking to the Google homepage.

<http://www.google.com>

or

[Google Home](http://www.google.com)



Here is an image

### Different formats of text

**Bold** text.

*Italicized* text.

code style text.

subscriptPM

superscriptAM

#### Add a new code chunk at the bottom of the R Markdown document, naming the chunk uptownChunk. In the chunk, use the include\_graphics() function from the knitr package to include the image at the following URL: <https://github.com/dilernia/STA418-518/blob/main/uptownFunk.png?raw=true>



Let’s make a scatterplot

library(tidyverse)

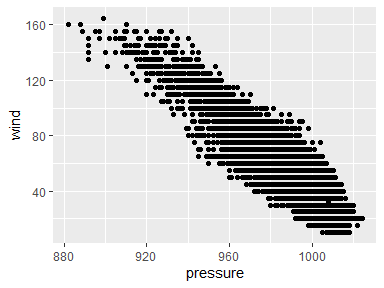
## Warning: package 'tidyverse' was built under R version 4.3.2

## Warning: package 'ggplot2' was built under R version 4.3.2

## Warning: package 'dplyr' was built under R version 4.3.2

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
## ✔ dplyr 1.1.3 ✔ readr 2.1.4  
## ✔ forcats 1.0.0 ✔ stringr 1.5.1  
## ✔ ggplot2 3.4.4 ✔ tibble 3.2.1  
## ✔ lubridate 1.9.3 ✔ tidyr 1.3.0  
## ✔ purrr 1.0.2   
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()  
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

# Load storms data set  
data(storms)  
  
storms |> ggplot(aes(x = pressure, y = wind)) +   
 geom\_point()



#### Inline code

The 95% confidence interval for the mean is (-0.548, 4.548).

This is an example for inline code.

## Tables

# Seven largest sustained wind speeds recorded  
storms\_summary <- storms |>   
 group\_by(name, year) |>   
 summarize(max\_wind\_knots = max(wind)) |>   
 ungroup() |>   
 slice\_max(max\_wind\_knots, n = 4)

## `summarise()` has grouped output by 'name'. You can override using the  
## `.groups` argument.

library(knitr)

## Warning: package 'knitr' was built under R version 4.3.2

storms\_summary |>   
 kable(caption = "Table 1. Storm summary statistics with kable()")

Table 1. Storm summary statistics with kable()

| name | year | max\_wind\_knots |
| --- | --- | --- |
| Allen | 1980 | 165 |
| Dorian | 2019 | 160 |
| Gilbert | 1988 | 160 |
| Wilma | 2005 | 160 |

library(flextable)

## Warning: package 'flextable' was built under R version 4.3.2

##   
## Attaching package: 'flextable'

## The following object is masked from 'package:purrr':  
##   
## compose

storms\_summary |>   
 flextable() |>   
 set\_caption(caption = "Table 1. Storm summary statistics with flextable()") |>   
 colformat\_double(big.mark = "", digits = 0) |>   
 autofit()

Table 1. Storm summary statistics with flextable()

| name | year | max\_wind\_knots |
| --- | --- | --- |
| Allen | 1980 | 165 |
| Dorian | 2019 | 160 |
| Gilbert | 1988 | 160 |
| Wilma | 2005 | 160 |

library(gt)

## Warning: package 'gt' was built under R version 4.3.2

storms\_summary |>   
 gt() |>   
 tab\_header(title = "Table 1. Storm summary statistics with gt()")

Table 1: Table 1. Storm summary statistics with gt()

| name | year | max\_wind\_knots |
| --- | --- | --- |
| Allen | 1980 | 165 |
| Dorian | 2019 | 160 |
| Gilbert | 1988 | 160 |
| Wilma | 2005 | 160 |