Thanks a lot for participating!



Artwork by Allison Horst

Bring your own data

Day 4 - Introduction to Data Analysis with R

Selina Baldauf Freie Universität Berlin - Theoretical Ecology

September 29, 2025

Organization

Schedule of today

- Now 14.30: Work on the data set(s)
 - Take break(s) as best fits your needs
- 14.30 15: Short feedback round
 - What did you find out about your data set? Plots, summaries, ...
 - Which methods did you use?
 - Did you learn something new?
 - Was there something you struggled with?
 - **.**..
- 15-16: Feedback, conclusion

Data set 1: What makes a good wine?

see here



Frederik Vandaele - originally posted to Flickr as Château Pétrus, CC BY 2.0,

https://commons.wikimedia.org/w/index.php?curid=5145286

Data set 2: Paralympic games from 1980-2016

see here

Data set 4: Ice cover and temperature

see here



Image by LTER under CC BY-SA 4.0

Source ice data: Magnuson, J.J., S.R. Carpenter, and E.H. Stanley. 2021. North Temperate Lakes LTER: Ice Duration - Madison Lakes Area 1853 - current ver 35. Environmental Data Initiative.

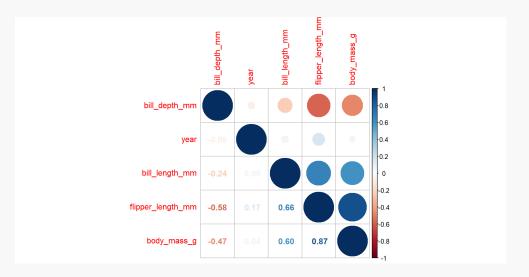
Data set 5: RNAseq data

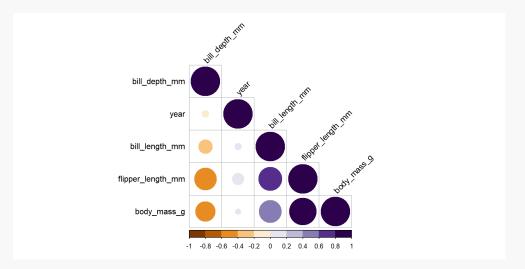
see here

New methods: Read multiple files at once

- If you have multiple files with data you can
 - Read them all in at the same time
 - Combine them into one tibble

New methods: Correlation plots





New methods: PCAS



Some general tips

- First make a plan:
 - What do you want to achieve and what are the steps?
 - Start with something small, e.g. reading in the data and bringing it into the right format.
 - If you want, stop by in general to discuss your plan or write me in the chat
- Google, ask AI tools if you want, look at the function help (?)
 - Hint: Set your RStudio error messages to English: Sys.setenv(LANGUAGE='en') in the console
- If you get stuck, ask in the chat or stop by in General

Now you

Working with real data

- Meet in your group (if you want)
- Work on your data set
- Take breaks as you need and be back at 2.30 p.m.

Sharing

In **1-2 mins**:

- What was the highlight of your analysis?
 - Your favorite plot
 - Some cool code
 - A problem that you finally solved
 - Something new you learned
- What was difficult?
- If you want: Share a screenshot in the chat or share your screen

Feedback

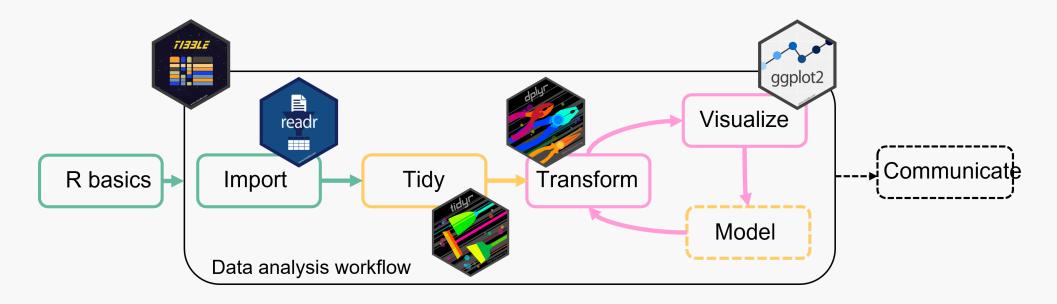
Please take 10 mins to complete the feedback survey for the Graduate center (don't use Internet Explorer)

https://votingo.cedis.fu-berlin.de/PCNLP3

Feedback

• Any other feedback or comments from your side?

Conclusion

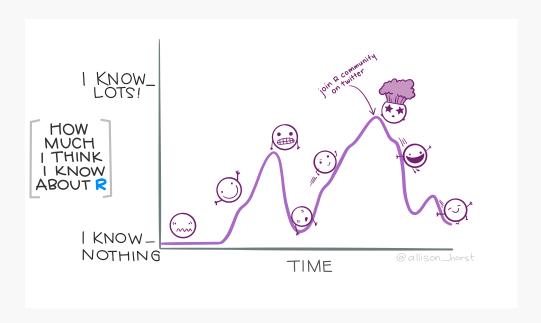


We learned a lot of stuff!

Conclusion

How to continue from here?

- Learning by doing!
- Have a look at some online ressoures
- FU statistical consulting for questions regarding statistical methods
- R Consulting by me
- Tools and Tips lecture



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The End