

Resources

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Books (free online)

- James Long & Paul Teetor (2019) *R Cookbook*. <https://rc2e.com/>
- Winston Chang (2018) *R Graphics Cookbook*. <https://r-graphics.org/>
- Garrett Grolemund & Hadley Wickham (2016) *R for Data Science*. <https://r4ds.had.co.nz/>
 - uses Tidyverse
- Julia Silge & David Robinson (2017) *Text Mining With R*. <https://www.tidytextmining.com/>
- Robin Lovelace *et al.* (2019) *Geocomputation with R*. <https://r.geocompx.org/>
- Yihui Xie (2022) *RMarkdown: the Definitive Guide*. <https://bookdown.org/yihui/rmarkdown/>

Books (in print)

- Brunsdon & Comber (2014) *An Introduction to R for Spatial Analysis & Mapping*. London: SAGE Publications.
- Carlson (2017) *Quantitative Methods in Archaeology Using R*. Cambridge: Cambridge University Press.

Guides

- R Studio: <https://docs.posit.co/ide/user/>
- R Studio cheatsheets: <https://www.rstudio.com/resources/cheatsheets/>
- *Finding your way to R*: <https://education.rstudio.com/learn/>
- Bookdown: <https://bookdown.org/>

- Winston Chang: *Cookbook for R*. <http://www.cookbook-r.com>
- Quarto: <https://quarto.org/>

Subject-related guides

General

- CRAN Task Views: <https://www.stats.bris.ac.uk/R/> then click on Task Views

Statistics

- Ismay and Kim (2018) *A modern dive into data with R: An introduction to statistical and data sciences via R*. <https://moderndive.com/index.html>
- Chester Ismay (2018) *Statistical inference: a Tidy approach*. https://ismayc.github.io/talks/ness-infer/slide_deck.html#1

Archaeology

- Mike Baxter (2015) *Notes on Quantitative Archaeology and R*. https://www.academia.edu/12545743/Notes_on_Quantitative_Archaeology_and_R
- Ben Marwick (2018) *Using R and Related Tools for Reproducible Research in Archaeology*. <http://www.practicereproducibleresearch.org/case-studies/benmarwick.html>
 - in Kitzes *et al.* (eds.) (2018) *The Practice of Reproducible Research: Case Studies and Lessons from the Data-Intensive Sciences*. <http://www.practicereproducibleresearch.org/>
- Rchaeology Community resources list: <https://rchaeology.github.io/resources/archaeology/>
 - Mastodon: @Rchaeology@archaeo.social

Examples

- R graph gallery: <https://www.r-graph-gallery.com>
- Ben Marwick's list of archaeology publications with R code
 - <https://github.com/benmarwick/ctv-archaeology#publications-that-include-r-code>
 - also @archpaperscode Twitter bot: <https://twitter.com/archpaperscode>

- Tidy Tuesday 2022 examples gallery: <https://github.com/deepdk/TidyTuesday-2022>
 - Tom Mock explains the Tidy Tuesday project at <https://www.youtube.com/watch?v=H8rhQOj7vDY>

Video

- Simon Jackson's *Wrangling Data in the Tidyverse* (useR! 2018 workshops & tutorials)
 - Part 1 (1:16:10): <https://www.youtube.com/embed/E-Vvg8uzcVM>
 - Part 2 (1:11:43): <https://www.youtube.com/embed/DwWH1mTerOc>

Packages

- Tidyverse <https://www.tidyverse.org/>
 - Paper: Wickham *et al.* (2019) <https://doi.org/10.21105/joss.01686>

Reusable code, open science, reproducibility

- Code quality: Trisovic, A. *et al.* (2022) A large-scale study on research code quality and execution. *Scientific Data* 9, 60
 - see *Best practices and recommendations* section

Tools

- [Rstudio](#) — widely-used Integrated Development Environment (IDE) for R
- [Tabula](#) — extracting CSVs from PDFs
- Git — for version control
 - [GitHub](#) — sharing code
 - [Github Pages](#) — for websites
 - [Using Git with R](#)

Teaching materials (for the tutors)

- RStudio Education: <https://education.rstudio.com/teach/>