University of Zurich[UZH]

Department of Geography

# GEO 812
# Getting started with R for Spatial Analysis

## Session 2: Tips and Cautionary Tales

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# Learning objectives

You know how to

- write reproducible and transparent R code
- collaborate on a project, sometimes even simultaneously
- ask for help in times of trouble

# Mini conference

Topic 1: Reproducibility

Topic 2: Collaborative work

Topic 3: Asking for help in times of trouble


Three topics -> three groups

Each group prepares a topic (2 hours, material see next slides) and then presents the topic (max 15 minutes per group).

# Reproducibility

Your presentation should show how to prepare and compile an RMarkdown document and answer the following questions:

- What is open science? What is reproducible research?
- What is RMarkdown and how does it work?
- How does RMarkdown contribute to reproducible research?

Useful sources:

- What Is Open Reproducible Science
- R Markdown: The Definitive Guide
- Introduction to R Markdown
- R Markdown Cheat Sheet

# Collaborative work

Your presentation should show how to use Github for collaborative work and answer the following questions:

- What is collaborative research? What is version control?
- What is GitHub and how does it enable collaborative research?

Useful sources:

- Learn How To Use GitHub to Collaborate on Open Science Projects
- What Is Version Control
- Collaborative & Reproducible Research

# Asking for help in times of trouble

Your presentation should demonstrate how to find help when working with R and address the following questions:

- What are the strategies for getting help with coding in R?
- What is Stack Overflow and how do you use it?
- How and when should you use AI, such as ChatGPT, for your coding problems?

Useful sources:

- Getting Help with R
- The Best and Worst Ways to Use Stack Overflow
- How to R code faster with ChatGPT
- How to use ChatGPT to write code

# Learning objectives revisited

You know how to

- write reproducible and transparent R code
- collaborate on a project, sometimes even simultaneously
- ask for help in times of trouble