

SOP 06: Introduction to Rstudio Server and Github

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1 Introduction

As students of the environment in this course, our ability to have substantive scientific discourse rests upon our ability to draw meaningful conclusions from observations or data. In dealing with the problems of data, as in other sciences, we will utilize the language of statistics and mathematics to deal with the complexity of environmental issues. This enables us to draw on really powerful statistical and computational tools that have been developed to deal with data - in particular open source software like R, Rstudio and Git.

Once you get the hang of using these programs, you will be equipped to do many kinds of interesting and powerful analyses. However, becoming facile in using these programs can feel a lot like learning how to walk. We need to approach this process in discrete steps. The following pages will explain a little more about what Rstudio and Github are, as well as guide you through an exercise that connects the functionality of both programs!

1.1 Purpose

This document is intended as a resource and guide to help you understand how to:

- How to create projects Rstudio and connect them with your peers so you can collaborate online using Github repositories.
- How to troubleshoot when you run into problems "pushing", "pulling" and "merging" your work with your collaborators.

2 Background

2.1 What is R?

2.2 What is Git and Github?

2.3 Why does it matter? Collaboration

3 Accessing Rstudio

4 Required Materials