Scientific Computing :: Drop In

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Activity: Shiny

Shiny web applications

Data visualisation plays a vital role in the life of a natural scientist. As you know it is easier to visualise complex data and relationships than deciphering them from spreadsheets.

Shiny is an open package available in RStudio used to build interactive web pages with R. It provides a very powerful way to share your analysis in an interactive way with your research community, in your institution or with end users (dissemination). No knowledge of HTML, CSS or JavaScript is required.

Today we will work with a template I prepared on `https://github.com/apommerening` (go to "Scientific-Computing-Drop-In" and folder "Session 8") entitled `Session8Shiny.R`.

As an example we will use the data file `Plot1.txt`. The ASCII file has 101 observations relating to the data of research plot 1 in Lligwy Woods on the Isle of Anglesey in North Wales. The data are from a natural woodland of ash (*Fraxinus excelsior* L.) and sycamore (*Acer pseudoplatanus* L.), where I studied the question of species alternation.

I will slowly walk you through `Session8Shiny.R` and explain how Shiny works.

Your task is first to listen to my little lecture on this subject and then to "play around" with `Session8Shiny.R` in such a way that you create your very

interactive website. You are also encouraged to use your own data. Try to add a scatterplot that displays variables DBH and total tree height together.