W12-1: Shiny map

This worksheet introduces you to Shiny using the same example as the one from W11-1: Version control.

After completing this worksheet you should have gained some experience in using Shiny for interactive visualizations.

Things you need for this worksheet

- Git environment for your operating system. For Windows users with little experience on the command line we recommend GitHub Windows.
- R — the interpreter can be installed on any operation system. For Linux, you should use the r-cran packages supplied for your Linux distribution. If you use Ubuntu, this is one of many starting points. If you use windows, you could install R from the official CRAN web page.
- R Studio — we recommend to use R Studio for (interactive) programming with R. You can download R Studio from the official web page.
- your deliveries from W11-1: Version control

Learning log assignments

As always, please add these entries to your today's learning log at teachwiki:

- Favorite aspect of the session (if any)
- Superfluous aspect of the session (if any)
- Eureka effect (if any)
- Links to what I've learned so far (if any)
- Questions (if any)

For more information see this short howto.

As today's special, please complete the following assignment:

For W11-1 you developed a function which visualizes a selected vector attribute on top of a raster layer in a map-type figure. Today we will use this function to create an interactive visualization app using Shiny.

The interactive visualization should allow the following:

1. Selection of one of three predefined color maps
2. Selection of the vector attribute used for visualization
3. Selection of the number of grid lines

Since the plotting function already exists, you will basically just have to call it using the interactively selected argument values.

Let's do it:

Please use your function from W11-1 as part of a shiny R Markdown file and create an interactive visualization app which allows for the three interactions noted above.

Please include your R Markdown file in your personal folder of the GitHub repository of this course (i.e. update your local copy, add the file, commit your version locally and push it to the server).