Introduction to landscape ecology with R

Prerequisites

Equipment and software requirements

Attendees are expected to use their own computers with a working version of R (version 3.6 or higher) and RStudio (version 1.2 or higher) installed.

R and RStudio are supported by PC, Linux, and Mac OS and can be downloaded for free by following these links http://www.r-project.org/ and https://www.rstudio.com/products/rstudio/download/#download.

R packages

Run the code below in R to install all of the required R packages.

```r
install.packages("landscapemetrics")
install.packages("usethis")
install.packages("remotes")
remotes::install_github("mtennekes/tmaptools", upgrade = TRUE)
remotes::install_github("mtennekes/tmap", upgrade = TRUE)
remotes::install_github("rspatial/raster", upgrade = TRUE)
```
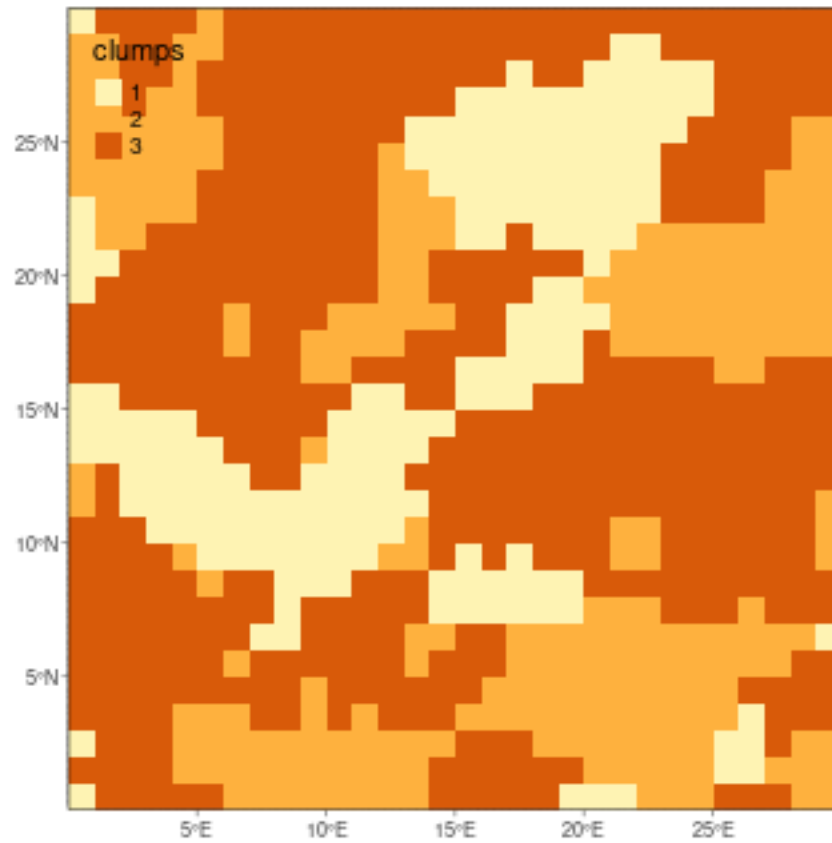
Check if it works

Afterwards, run the code below (you should see the map as a result):

```r
library(tmap)
library(landscapemetrics)
tm_shape(landscape) +
  tm_graticules() +
  tm_raster()
```

```
## Warning: Currect projection of shape landscape unknown. Long lat (epsg 4326)
## coordinates assumed.
```

```
## Linking to GEOS 3.7.1, GDAL 2.3.2, PROJ 5.2.0
```

Please see https://datacarpentry.org/geospatial-workshop/setup.html for instructions on how to install geospatial library dependencies.