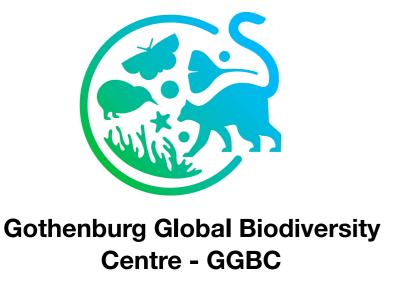
Handling spatial data in R

An introduction course







Swedish LifeWatch

workshop material

Material available at

github.com/tobiashofmann88/workshops

--> ggbc_slw_neic/spatial_r_workshop

Clone or download ▼

--> click on Clone or Download button

tutorials

tutorials on GitHub page

- click on .ipynb file in browser
- start with intro_tutorial.ipynb

--> demo

additional data

- additional data on USB stick (circulating)
- required for section C of empirical data tutorial
- total storage requirement (GitHub data + USB-stick data): ~ 2.8GB

Using R studio

Demo

vector vs. raster data

vector data

- consists of sets of coordinate pairs (x, y)
- points, lines and polygons
- points: coordinate pair and associated variables, multipoint structures
- lines: ordered sets of coordinates
- polygons: closed polyline geometry (last coordinate pair coincides with the first pair)

raster data

- spatially continuous phenomena (e.g. elevation)
- divides the world into a grid of equally sized rectangles (cell or pixel)
- each cell has one or more values associated

plotting spatial data

- a *map* is special type of plot (like a scatter plot, barplot, etc.)
- convention: order of coordinates is longitude, latitude

