R & GIS: Geospatial Plotting

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Abstract: Examples of spatial data within the R environment and the combination of R with data sets, spatial tools, libraries and other software products, which are common in real life environments, are provided in this paper.
Beginning with the setup of a new project using Git and an online repository, a Document build by Sweave - a combination of R and LaTeX - is explained. Once the fundamental setup is working rudimentarily, the import of data and (geo-) spatial information from different sources is shown. Finnaly some examples of spatial plots using the *sp* package in R are included.
Additionally some tools like "integrated development environments" (IDE), which may be supportive during the daily work and help newcomers learning the presented techniques, are mentioned and specific programs are recommended.

Keywords: R, Sweave, LaTeX, Spatial Data, Git

1. INTRODUCTION

Building a sophisticated report including spatial data, plots and usefule information (normally) takes some effort.

2. SETUP OF THE PROJECT

Git

3. DOCUMENT STRUCTURE

LaTeX, Sweave

4. ABOUT DATA

getting Data from files, DB and online resources

5. GEOSPATIAL PLOTTING

examples of Geospatial Plots

6. CONCLUSION

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