Practical Spatial Statistics & Econometrics with R

Session 2: Working with Tabular Data

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How to excel at spatial stats (or anything else)?

Understanding

Clear conceptual understanding

Listening, Reading, Thinking, Writing

Skill

Apply understanding to real world problems.

Doing, Trying, Failing, Coding

Watching to a lot of lectures (like this one)

Reading many programming books

What should we know/will we learn in this session?

Understanding

What we should know:

- What is R, RStudio, R package
- Tabular structure (rows and columns)
- Data types and operators
- CSV file format

Skill

What we should have already done:

- Setup our computer for R development
- Installed the **gstat** package

What we will do now:

- Install the sp package
- Examine, export tabular data in R
- Do some basic stats on tabular data
- Write our very first R script and make our very first R plot!

Demo 2: Live Coding Session with R

Summary

- Installed the sp package
- Examined and worked with the meuse data set provided by sp
- Exported data to CSV
- R functions
 - head, colnames, nrow, ncol, write.csv, read.csv, summary, var, hist
- R Operators
 - ?, [], \$
- Useful links
 - gstat <u>manual, sp manual, meuse data set tutorial</u>