Practical Spatial Statistics & Econometrics with R

Session 2: Working with Tabular Data

Saif Ali, IIIT Delhi

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)
- 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` manual, `sp` manual, `meuse data set` tutorial