

Statistical Software Camp: Introduction to R

January 26 – 29, 2009

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Morning Session: 11 to Noon
Afternoon Session: 1 to 2

The primary goal of this statistical software camp is to get participants well prepared for POL 572, in which students will be asked to do many exercises/problem sets using R. As such, we will focus on how to use R and will not cover any other softwares (e.g. Stata, L^AT_EX, etc.) in this camp. Participants will learn the basic usage of R for data analysis (e.g. how to read and manipulate data in various file formats; how to compute basic statistics such as mean and variance; how to create various charts and graphs; how to conduct a simple simulation, etc.) as well as some introductory programming in R.

1 Logistics

- Date: January 26 to 29, 2009
- Time: 11am to noon (morning session) and 1pm to 2pm (afternoon session) each day
- Room: 005 Friend Center
- The classroom is equipped with student computers, but you might want to bring your own laptop if you have one.
- Handouts and R codes will be uploaded on the POL 572 course site on Blackboard prior to the beginning of the camp. Solutions to exercises will also be posted there. If you are not enrolled in POL 572 and do not have access to the Blackboard site, please let me know.

2 Camp Plan

Day 1 Basic Concepts and Data Manipulation

Day 2 Descriptive Statistics and Graphing

Day 3 Probability and Statistical Inference via Simulation

Day 4 R Programming

3 Useful References

Although there is no required readings for this camp, you might find the following books useful.

- Verzani, John. 2006. *Using R for Introductory Statistics*. (A shorter draft version of this monograph is available (for free!) at <http://cran.r-project.org/doc/contrib/Verzani-SimpleR.pdf>)
- Fox, John. 2002. *An R and S-Plus Companion to Applied Regression*. (This book is also one of the recommended readings for POL 572)
- Venables, W.N. and Ripley, B.D. 2002. *Modern Applied Statistics with S*, 4th ed. (A little advanced but useful)

4 Instructor Information

My contact information is:

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If you have any question, please don't hesitate to contact me either via email or just stopping by. I am usually working (or doing something less productive) at my Corwin desk from around 10am to evening.