STATISTICAL METHODS II
ASSIGNMENT 08
DUE: 8 MARCH 2011

As we are now moving into a different part of the course, let us also change our usual assignment patterns. The homework will have (at most) one problem with a lengthy written answer. The rest will be short answers and graphs. For the lengthy answer, make sure you provide the statistics and graphs that you need to provide. Also make sure (for those) that you test your assumptions.

You still need to include your R script as an appendix and make sure that there is no R code outside the appendix *unless* I specifically request it.

Finally, as usual, if you have any questions or issues, let me know as soon as possible.

Good luck!

PROBLEM 08.1   [[2]]

Write a function called `logit` that calculates the logit of a value. Use the natural logarithm (not the common logarithm). If you do not know the logit function (which you probably will not), then you need to find it. What is your default way of searching for something?

PROBLEM 08.2   ⟦2⟧

For the remaining three problems, you will be using the `sri2010pres` dataset. The variables you will need are vote for Rajapakse, vote declared invalid, total vote in the division, registered voters in the division, and the division name. Again, let us remove the Postal and Displace votes from consideration.

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Now, what is the correlation between the proportion of vote for Rajapakse and the proportion of votes declared invalid?

PROBLEM 08.3 ⟦3⟧

Create a scatterplot of proportion of the vote rejected against proportion of the vote for Rajapakse. Make sure it looks appropriate.

PROBLEM 08.4   ⟦3⟧

Create a scatterplot of voter turnout against proportion of the vote for Rajapakse. Make
sure it looks appropriate.