

Replication materials for “What Do Transnational Terrorists Target? Has It Changed? Are We Safer?”

Journal of Conflict Resolution

Patrick T. Brandt
pbrandt@utdallas.edu
School of Economic, Political and Policy Sciences
The University of Texas, Dallas

October 23, 2009

The analyses and figures in Brandt and Sandler’s (2010) “What Do Transnational Terrorists Target? Has It Changed? Are We Safer?” were generated using the R statistical program (<http://www.R-project.org/>).

The data source is ITERATE 5. Since ITERATE is a proprietary database of transnational terrorism events you must have a license from Vinyard Software to use the data. Because of this licensing issue, we cannot provide the original raw data used to construct the time series we analyze. Instead, we provide the aggregated ITERATE events and covariates used in our analyses. In order to see how these data are aggregated and coded the replication files include an R script `setup.R` that shows how we created the datasets for the figures and the Bayesian Poisson changepoint regression analyses.

Several R libraries are used in the course of setting up the data and analyses. These are listed at the beginning of each R script and include `zoo`, `MCMCpack`, and `mvtnorm`.

The remaining files in the replication materials and their descriptions are

TargetSorted.RData An R data file which is output from the `setup.R` file. It contains the data in `zoo` package formatted lists. These are inputs used to make Figure 2 in the paper.

MonthlySeries.RData An R data files of the monthly data series used in the Bayesian Poisson changepoint analyses. The series are stored in a list of `zoo` class objects named `x.m`.

SummarizeTS.R Generates Figures 1 and 2 in the paper (and some other variants).

MCMCpoissonRegChangepoint.R Code by Jong Hee Park that uses `MCMCpack` to estimate the Bayesian Poisson changepoint models. This will be included in future versions of `MCMCpack` and should be much faster.

utility.R Utility functions called in the `MCMCpoissonRegChangepoint.R` file. Code by Jong Hee Park.

PoissonCP*-V4.R Two files that run the Bayesian Poisson changepoint models for each of the four series analyzed in the paper (Officials, Military, Business and Private Parties). The file labeled “1” estimates the model for the Officials and Military series which correspond to the first two items in the `x.m` list in the `MonthlySeries.RData` file. The file labeled “2” does the estimation for the other two series. Note that each file contains a series of loops to look at the different time series and 1 to 4 lag models for each. The output is saved in a list format defined in the script.

PoissonRegPosterior-V4.R Analysis of the posterior distribution and reporting of the results is handled in this script. This file generates the results in Tables 1 and 2, and color figures summarizing the posterior results. These figures were used in earlier drafts of the paper and in presentations.

PoissonRegPosterior-BW.R Analysis of the posterior distribution and reporting of the results is handled in this script. This file generates the results in Tables 1 and 2, and black and white figures summarizing the posterior results. These figures were used in earlier drafts of the paper and in presentations.

For some of the R scripts, the associated output files are also included. These are the files with the `.Rout` extensions. These can be used to compare any replication results to what we report in the paper.

Liberal comments are provided in the `*.R` script files. If you have questions, contact me at `pbrandt@utdallas.edu`.