Project Proposal
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ST 810
March 19, 2015

Project description

In this project, I plan to do a data analysis of terrorist attacks in South / Central America, Europe, Africa, and Asia. More specifically, I plan to look at two different outcomes related to terrorist attacks. The first of these outcomes is the number of casualities. The second of these outcomes is ransoms demanded and paid for the attacks. For each of the outcomes, I plan to examine whether there is evidence to suggest that there have been changes over time as well as if there are differences between the regions of interest.

Data

The data for this project come from the Global Terrorism Database (`http://www.start.umd.edu/gtd/`), a database of all worldwide terrorist attacks from $1970 - 2013$ except for 1993. This database includes information for over 125,000 terrorist attacks throughout the world. I will only be considering events in South / Central America, Europe, Africa, and Asia because these continents contain many smaller countries. North America, Australasia, and Oceania will not be considered.

Analysis

First, maxima for each variable of interest will be computed for each region of interest. Then, the regional annual maxima will be fit using a Generalized Extreme Value distribution (GEV). I will also explore model fits using time-varying location and scale parameters for the GEV.