

Christine Cai  
STA250 HW4  
Winter 2014

The map `airports.svg` is a map of the (contiguous) United States, with dots representing the 30 most frequented airports in 1989. When the user mouses over an airport, a tooltip of the form “airport code (city, state)” is displayed. The user can also click on an airport for a plot of median arrival delays by carrier to and from said airport. This map has been tested and should be compatible with Chrome, Firefox, and Internet Explorer. Please make sure the plots directory is in the same directory as `airports.svg`.

The map `airports.svg` is made with R package `maps`. After plotting a map of the United States and using `points()` to add the airports, the plot is saved as `airports.svg`. The package `SVGAnnotation` is used to parse `airports.svg` and to get the plot points. Note that several other packages, such as `XML`, are loaded when loading `SVGAnnotation`. Once the nodes for plotting the airports are identified, they are passed into `addToolTips()` and `addLink()`.

The map `index.html` in the folder `airports-anim` is created with R package `animint`. Similar to `airports.svg`, `index.html` consists of a map of the United States, with dots representing the 30 airports. However, the airports are color coded based on mean departure delays of flights leaving the given airport. Every five seconds, the carrier changes. Please refer to the legend to the right of the map; NA means there were no flights leaving the given airport of the selected carrier. The plot below the map shows the overall (across all airports) mean departure delays by carrier. Although the plot will change carrier automatically every five seconds, the user can also click on the carrier he/she wishes to see.