Advanced R Programming for Bioinformatics

Exercises for Session 2: Graphics.

The course site contains the data file SEAflight.csv, of information on all flights in and out of Seattle-Tacoma airport, during 2008. The accompanying file airportlocations.csv contains the geographic location of the destination/departure airports.

- 1. Using hexbin() from the hexbin package, illustrate which areas of the US have most flights to and from Seattle
- 2. Using transparent colors, indicate the areas of the US most overflown by flights in and out of Seattle. (Hint: use straight lines as a first attempt, then use gcIntermediate() in the geosphere package to provide great circle routes. You may also find the maps package useful)
- 3. Using coplot(), can you find any differences in Arrival Delay Departure Delay, given airline, and destination/departure airport?
- 4. Explore this dataset, and illustrate what else you find.