

Assignment B Quantitative Thinking in the Life Sciences (Fall 2012)
 (Assigned on October 24th. Due on October 31st – 50 points)

Simulations

Using the provided functions for distributions (from R Chapter 7), take a first pass at simulating data for each of your components where you will be taking data. Assume that data will be measured perfectly (no measurement error).

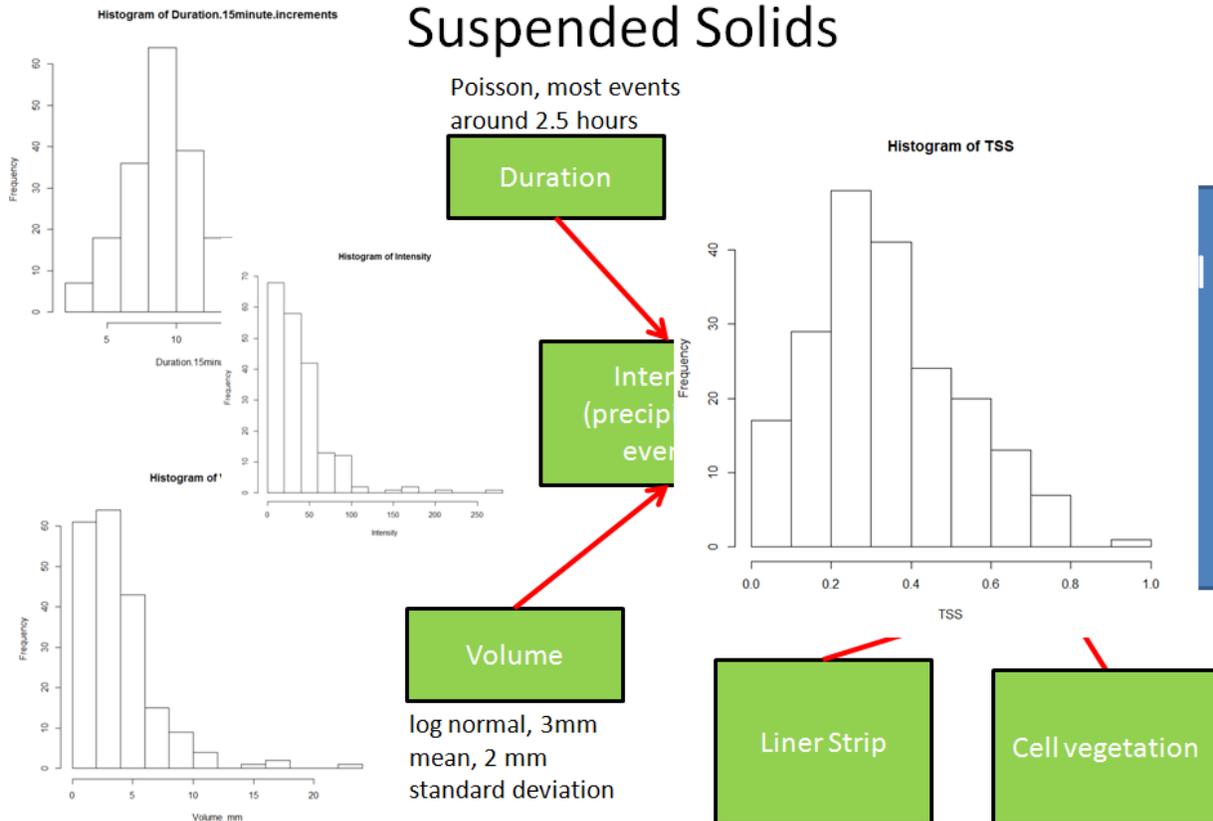
Write up in manuscript form for a few of the components. That is, introduce the system (you can self-plagiarize but make it clean), describe how you will sample (or already sampled) components (Methods section), describe your simulation inputs, include output plots. Discuss in brief.

Steps

- Look at the data distributions that you have created for your concept map
- Look over the R Chapter 7 distributions
- Figure out one that looks like it fits
- Adjust the values so that distribution parameters fit your data

Remember the example from class (October 17th)

Testing a Bioretention systems: Total Suspended Solids



Poisson, most events around 2.5 hours

Duration

Intensity (precipitation event)

Volume

log normal, 3mm mean, 2 mm standard deviation

Histogram of TSS

Liner Strip

Cell vegetation