visualize\_sim\_dist

Gabrielle Lemire

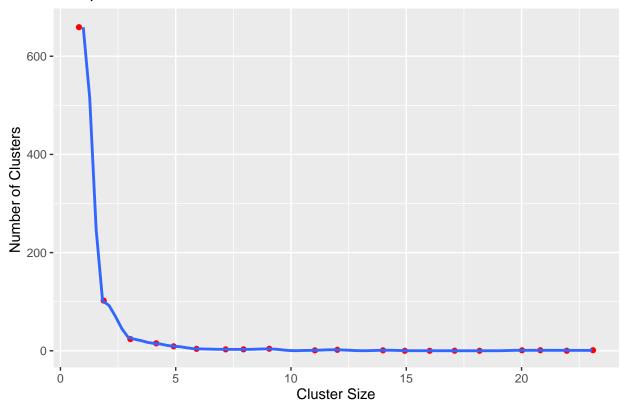
3/12/2021

# Component Distribution for Simulated Genetic Networks

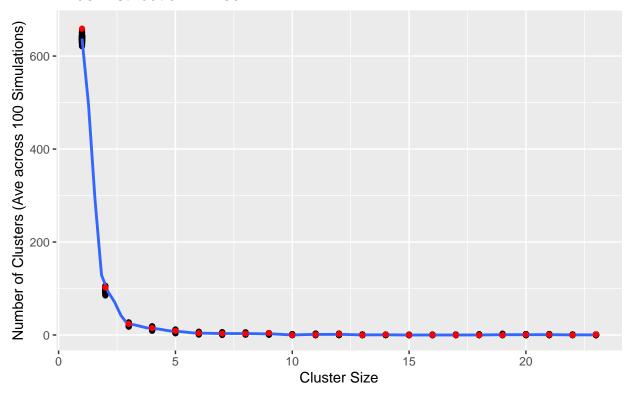
#### 1 Unstandardized Visuals for Simulated Genetic Networks

Not divided by total number of nodes

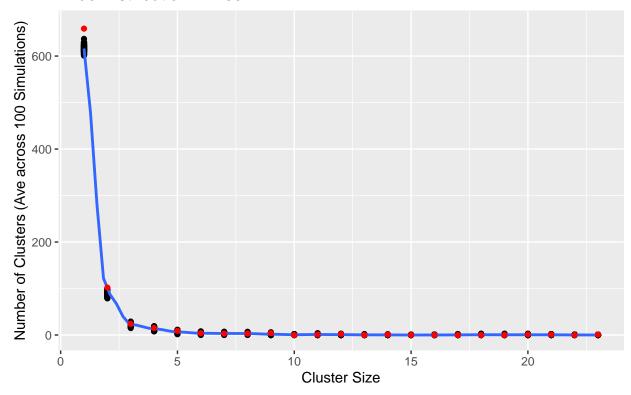
## Component Distribution for True Distribution



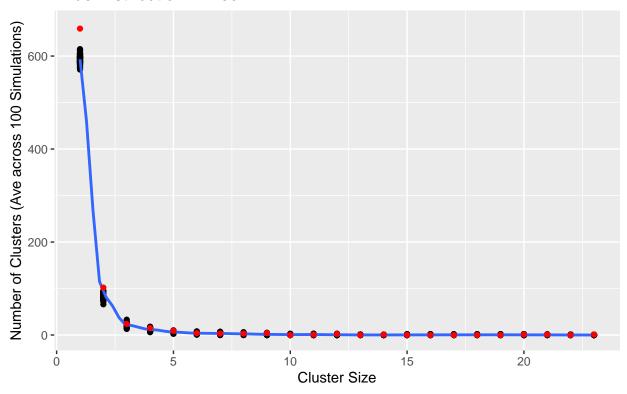
Component Distribution for Proportion 0.95 True Distribution in Red



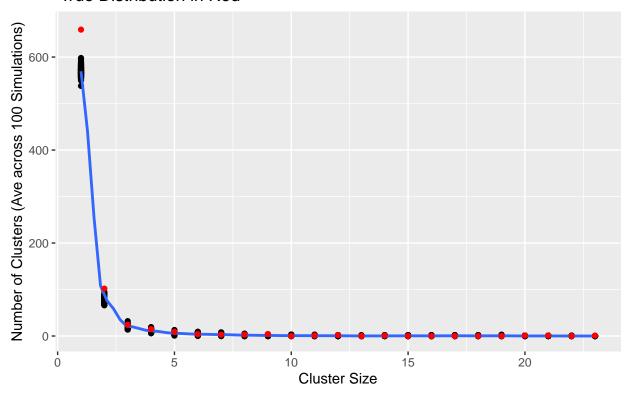
Component Distribution for Proportion 0.9 True Distribution in Red



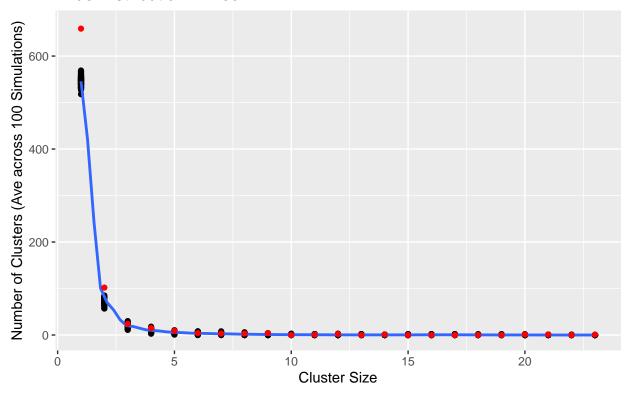
Component Distribution for Proportion 0.85 True Distribution in Red



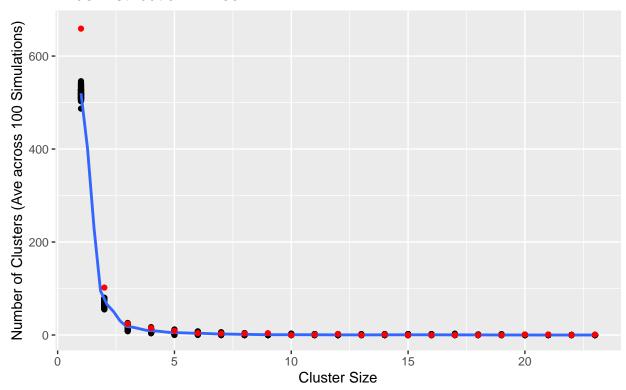
Component Distribution for Proportion 0.8 True Distribution in Red



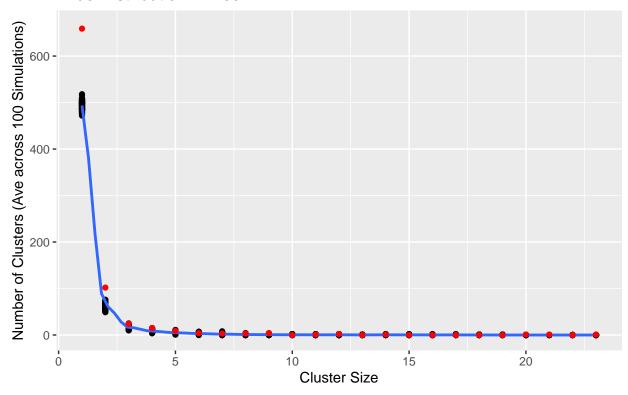
Component Distribution for Proportion 0.75 True Distribution in Red



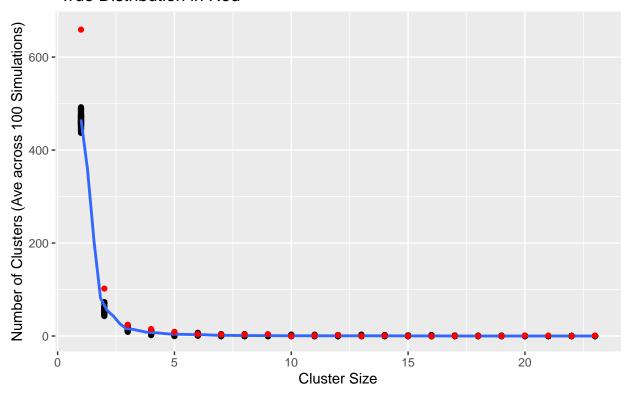
Component Distribution for Proportion 0.7 True Distribution in Red



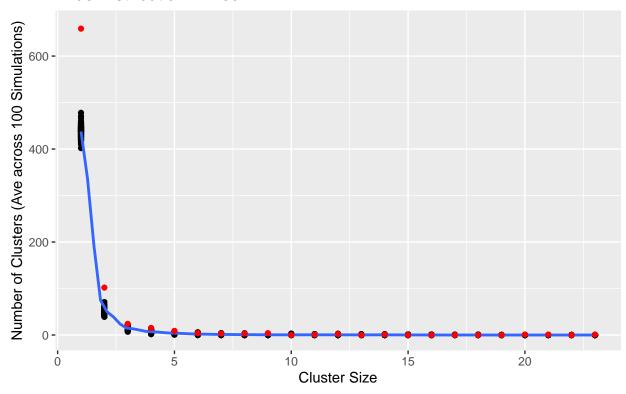
Component Distribution for Proportion 0.65 True Distribution in Red



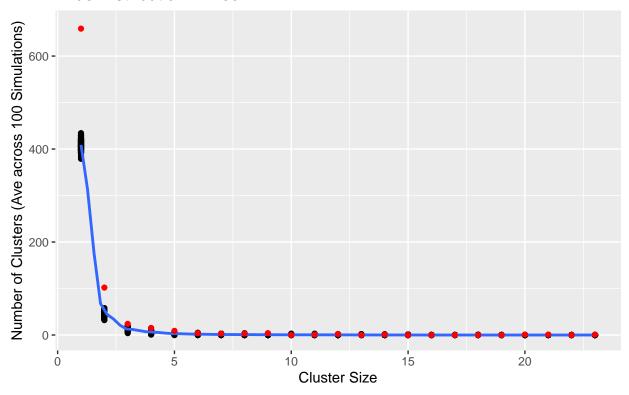
Component Distribution for Proportion 0.6 True Distribution in Red



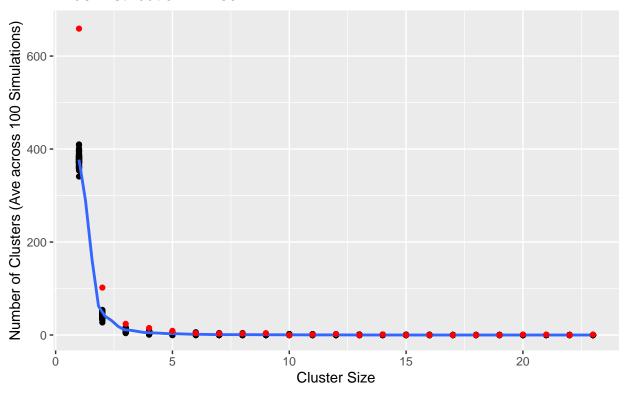
Component Distribution for Proportion 0.55 True Distribution in Red



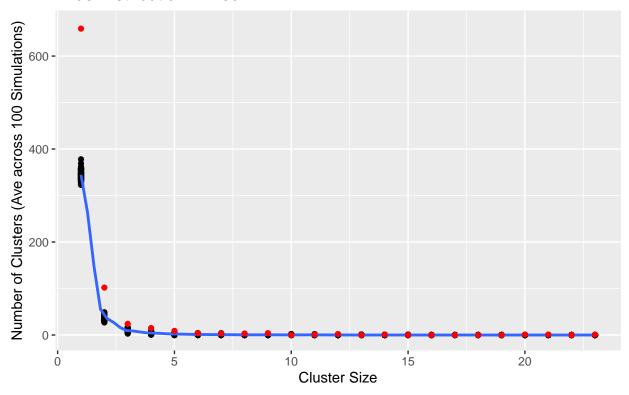
Component Distribution for Proportion 0.5 True Distribution in Red



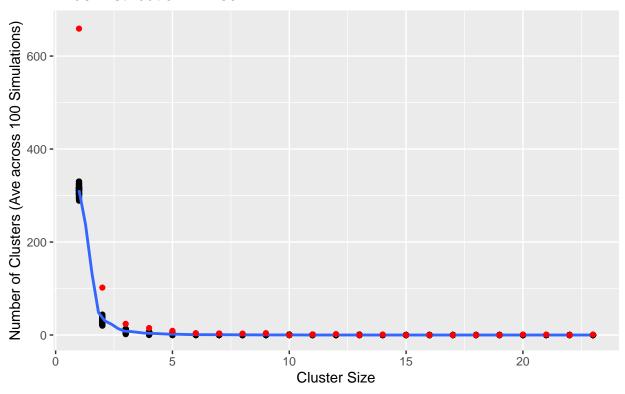
Component Distribution for Proportion 0.45 True Distribution in Red



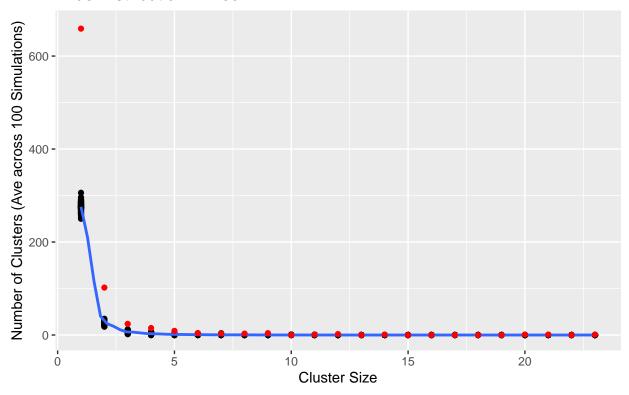
Component Distribution for Proportion 0.4 True Distribution in Red



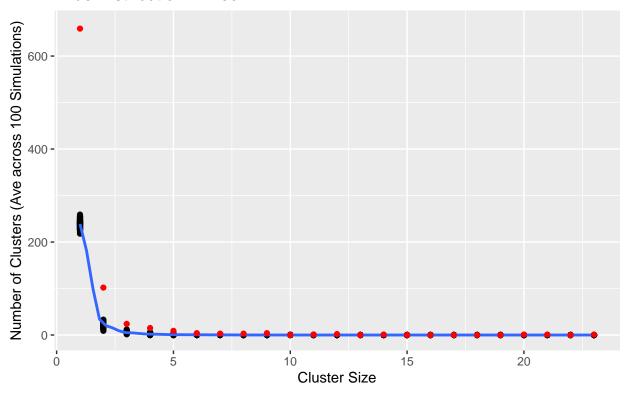
Component Distribution for Proportion 0.35 True Distribution in Red



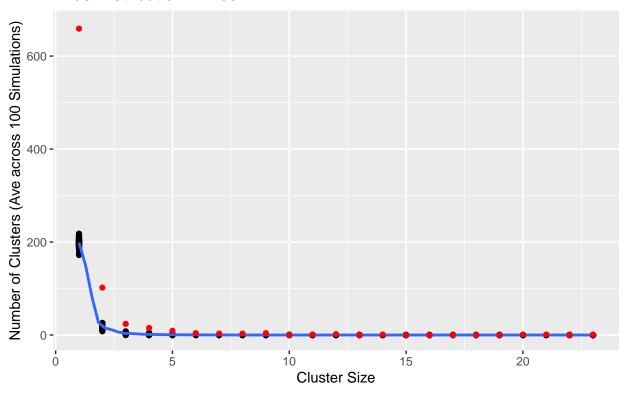
Component Distribution for Proportion 0.3 True Distribution in Red



Component Distribution for Proportion 0.25 True Distribution in Red



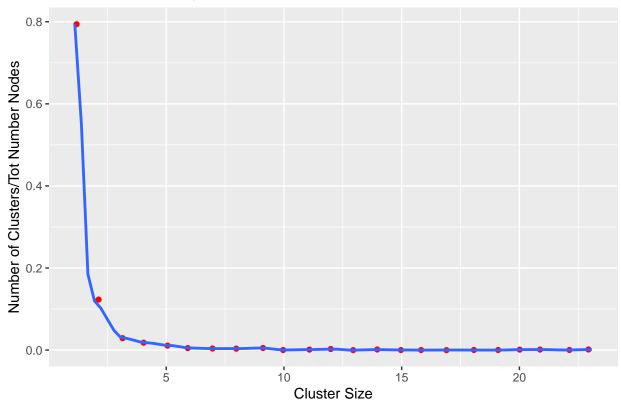
# Component Distribution for Proportion 0.2 True Distribution in Red

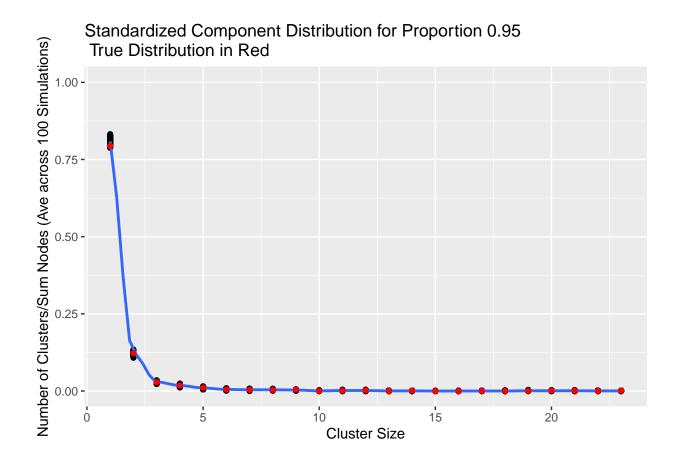


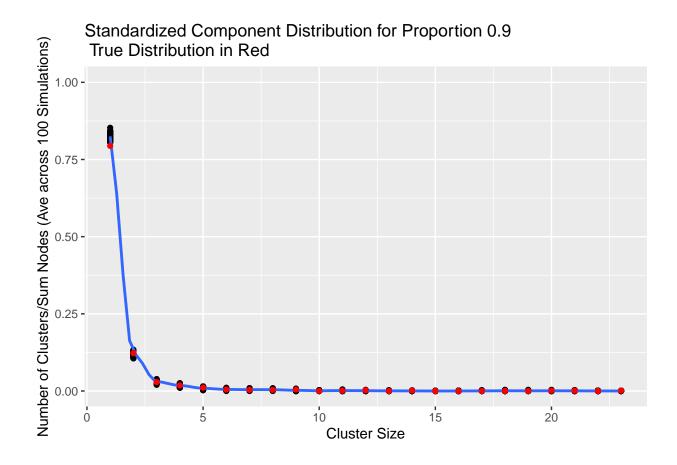
### 2 Standardized Visuals for Simulated Genetic Networks

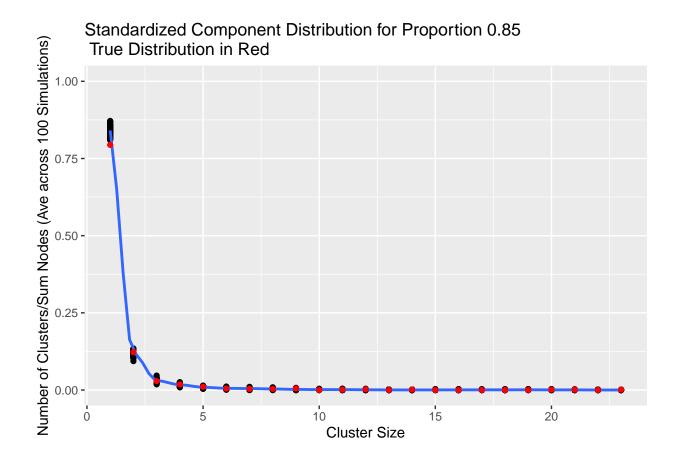
Standardize # clusters/# nodes

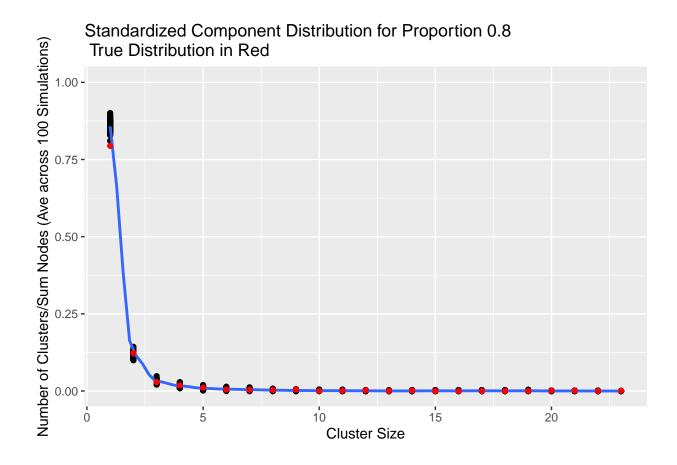
# Standardized Component Dist for True Dist

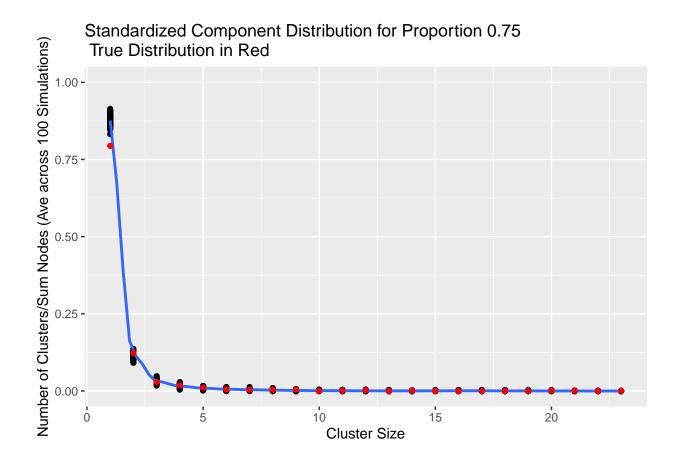


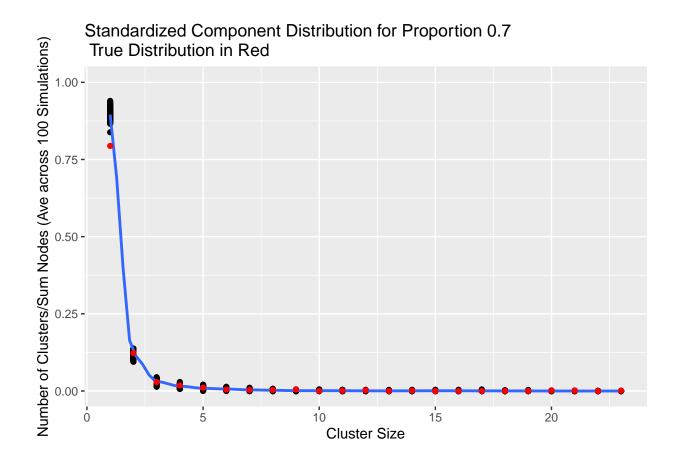


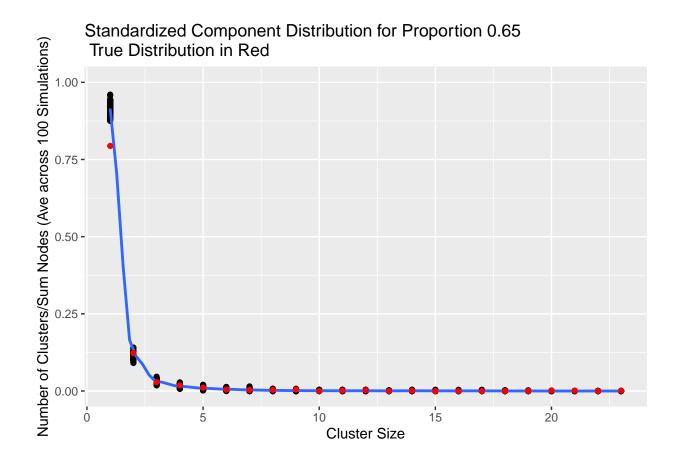


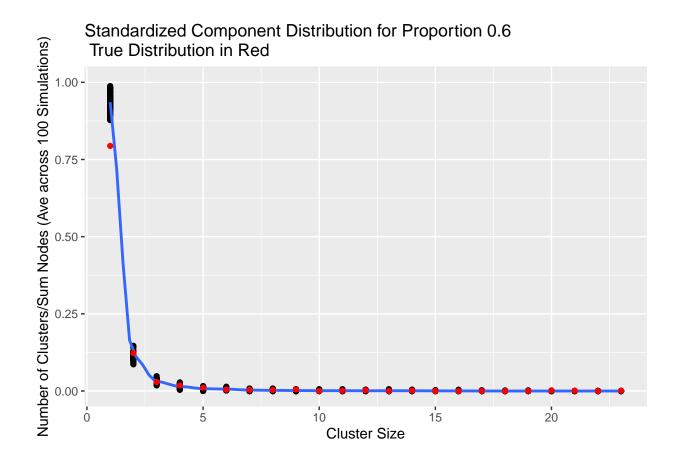


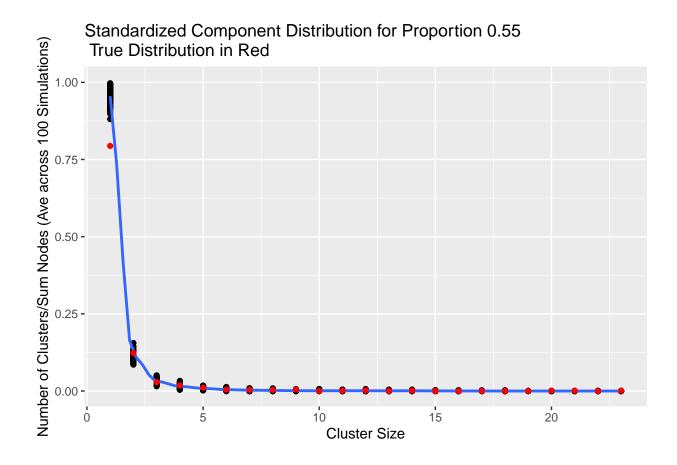


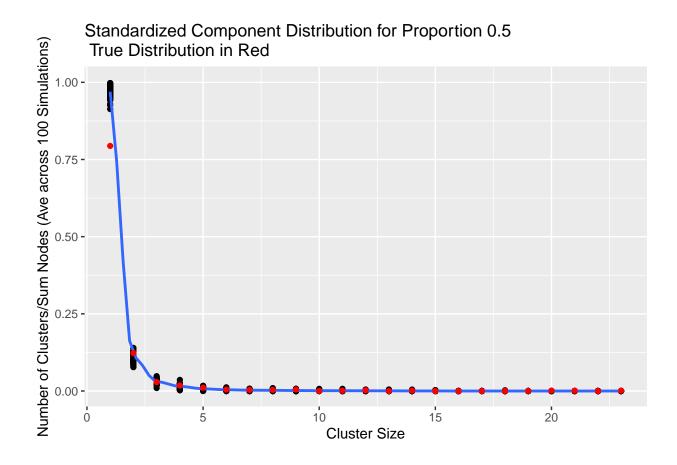


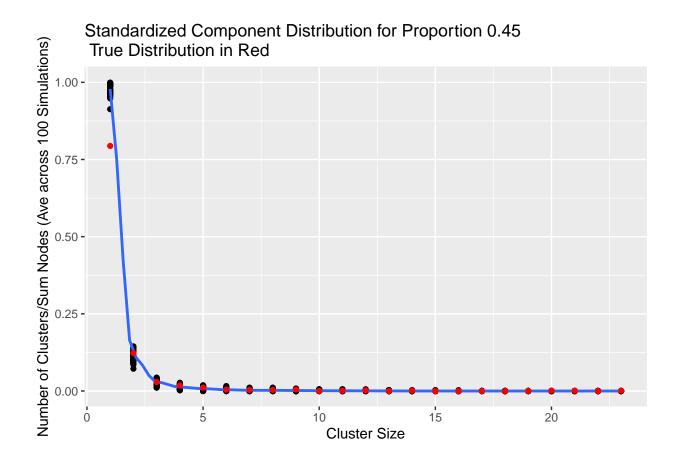


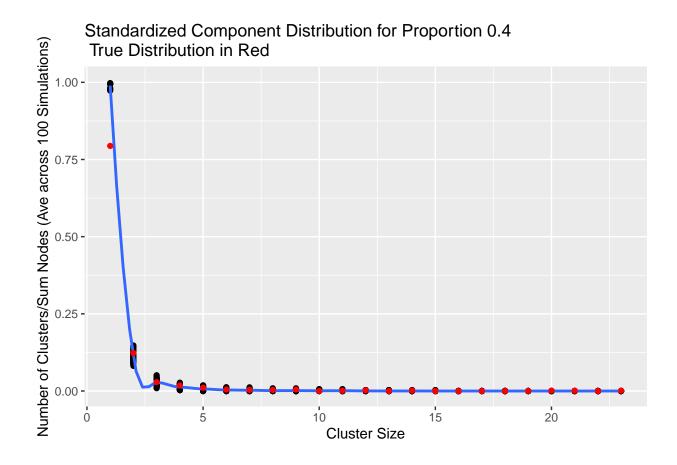


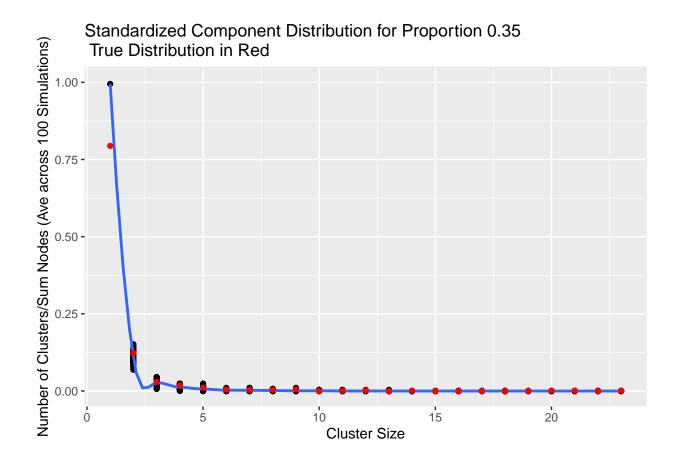


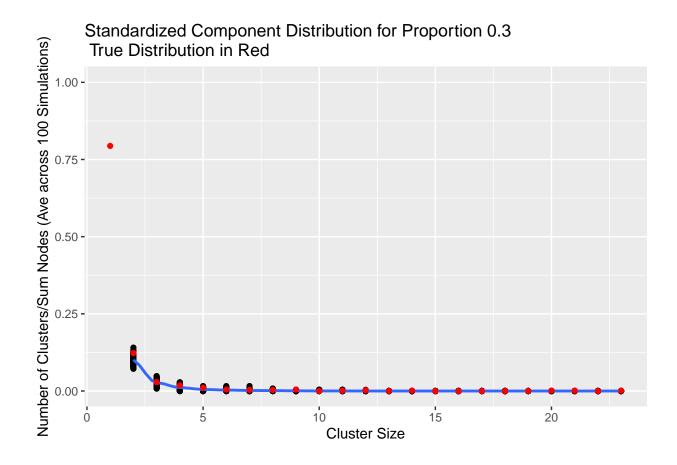


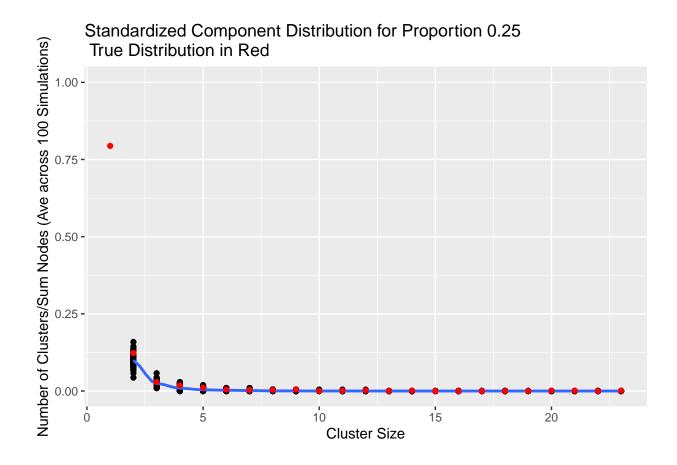


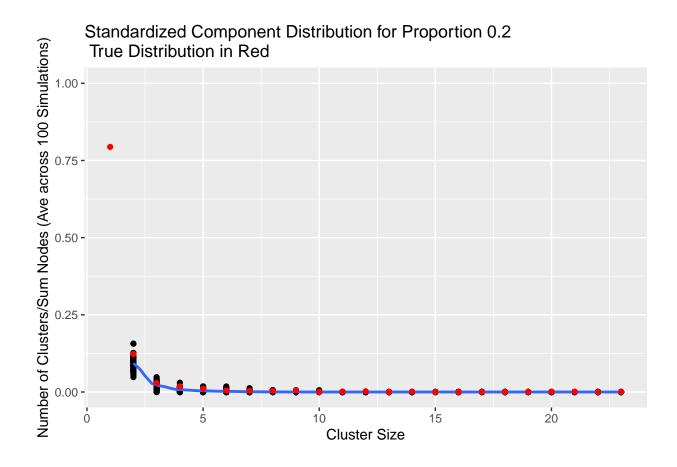








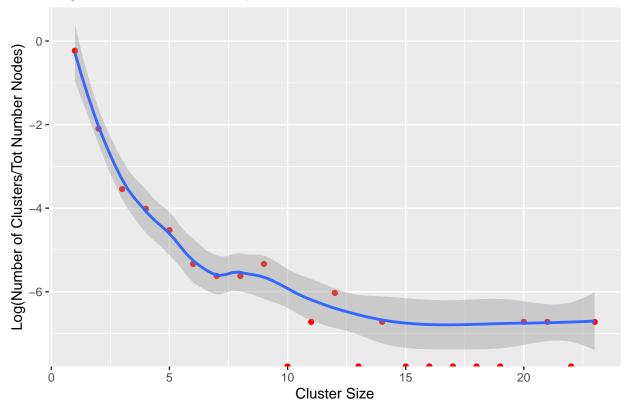




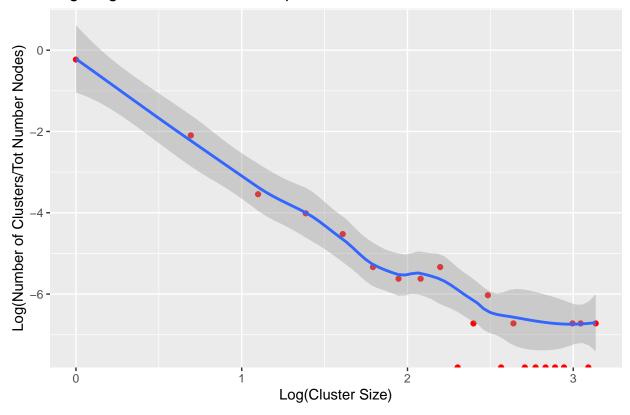
## Visualizing - Log vs Log-Log Scales

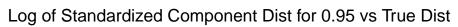
Results - the true distribution looks linear(ish) on the log-log scale. What do we do with the 0's? leave them in? Will the skew our data downwards? Maybe not an issue for simulated data because there will be fewer 0's? are empties better though? Think about this..

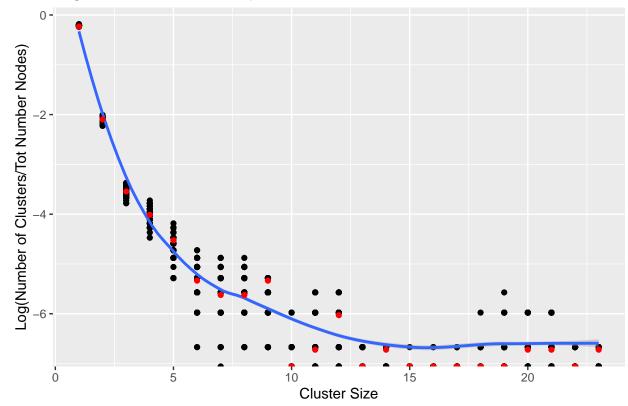




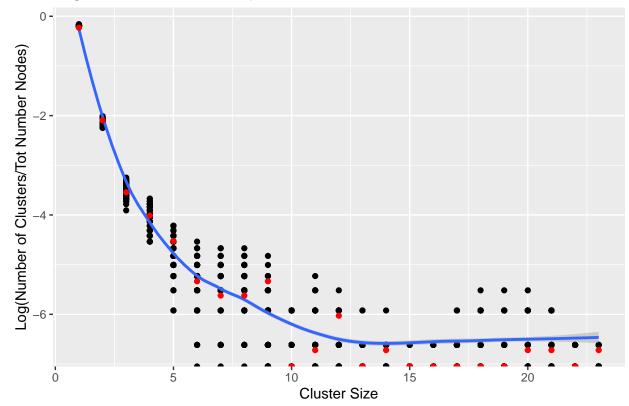


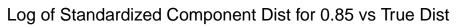


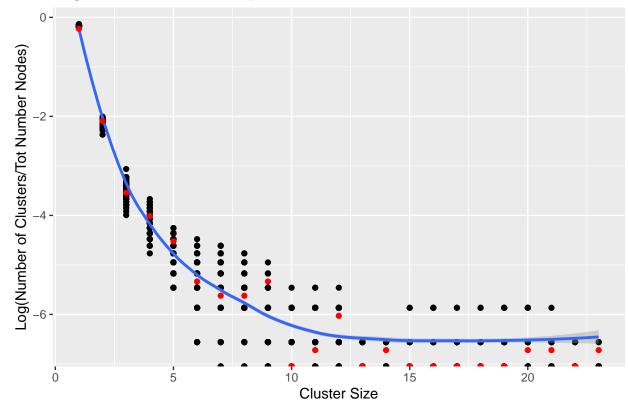




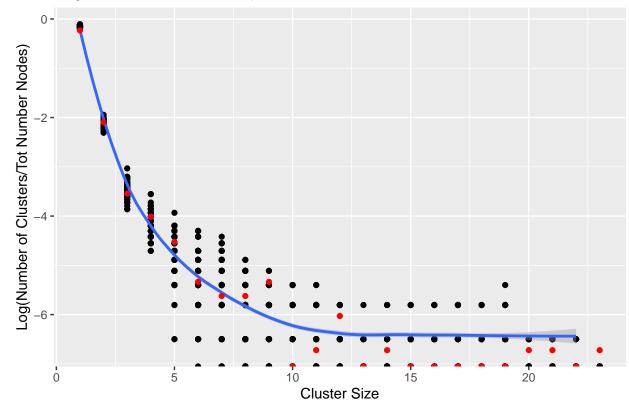




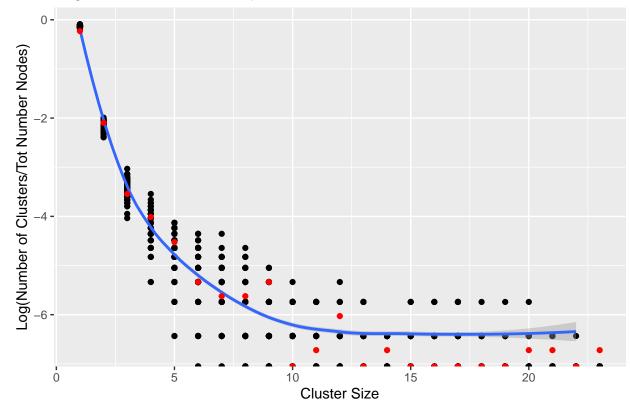


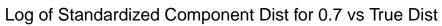


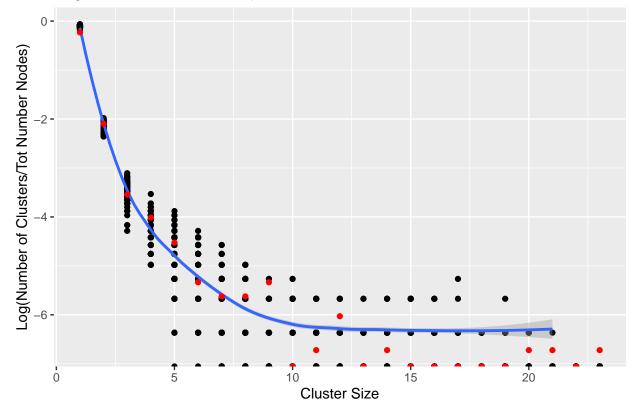


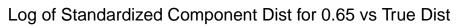


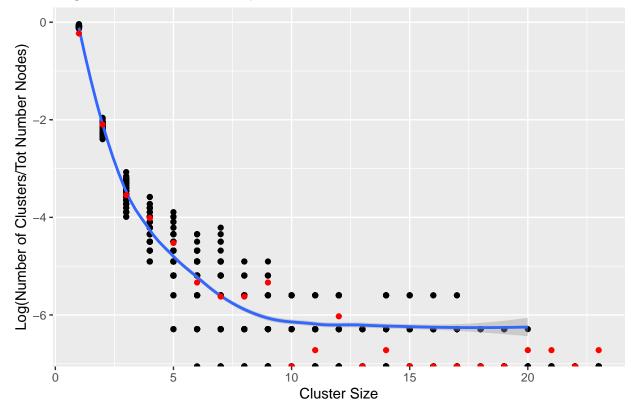


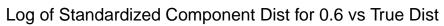


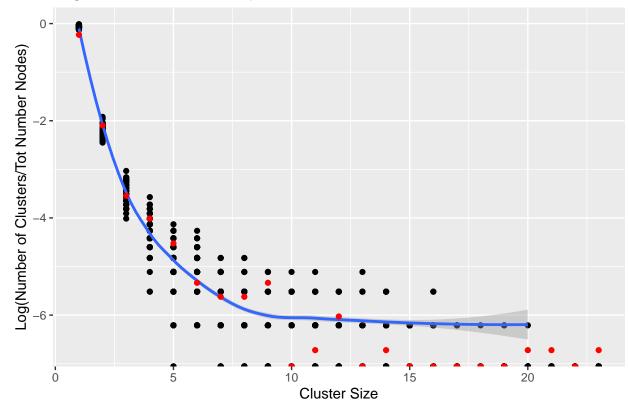


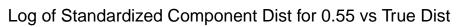


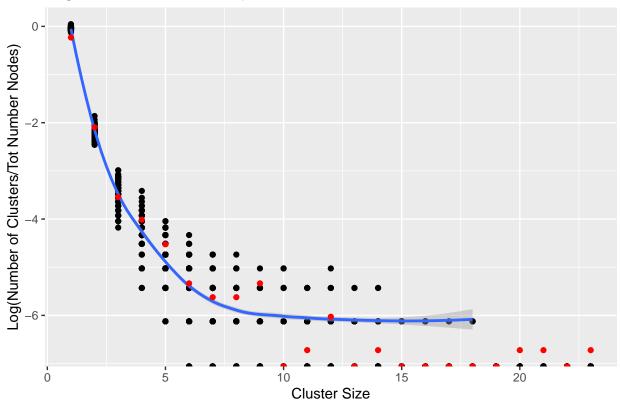


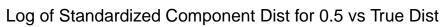


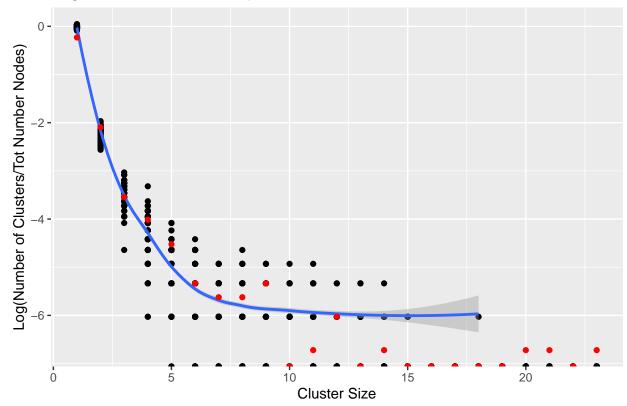


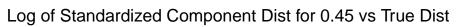


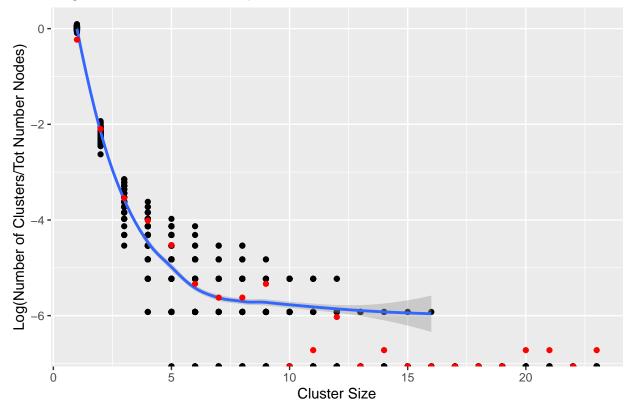


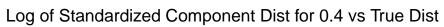


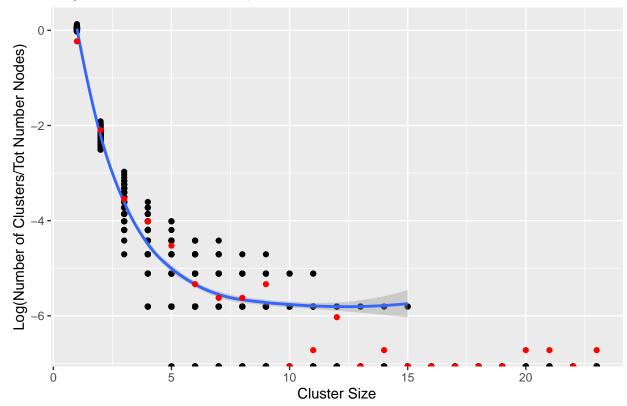


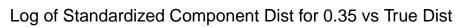


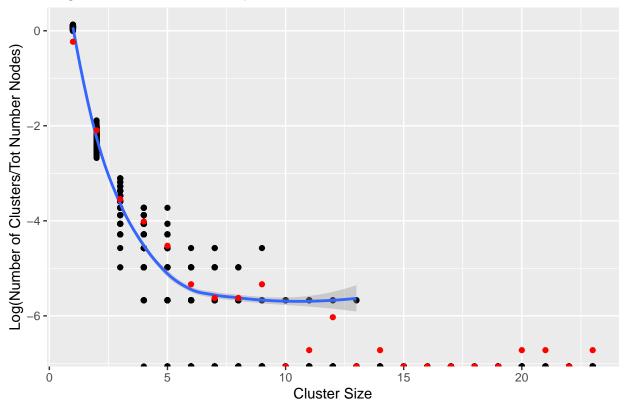


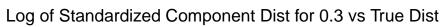


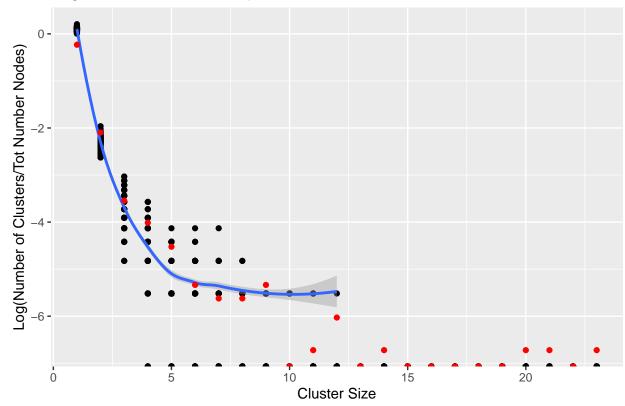


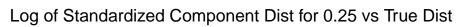


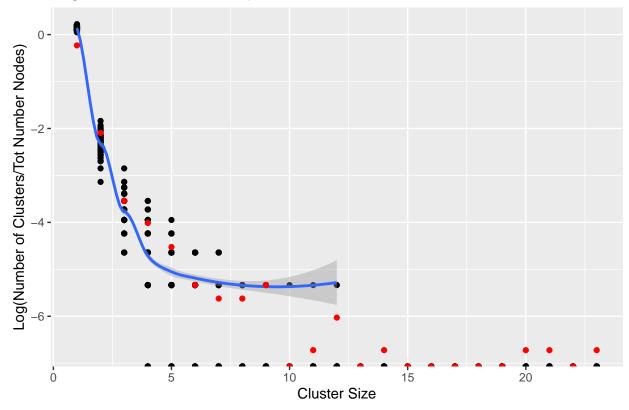


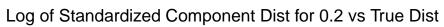


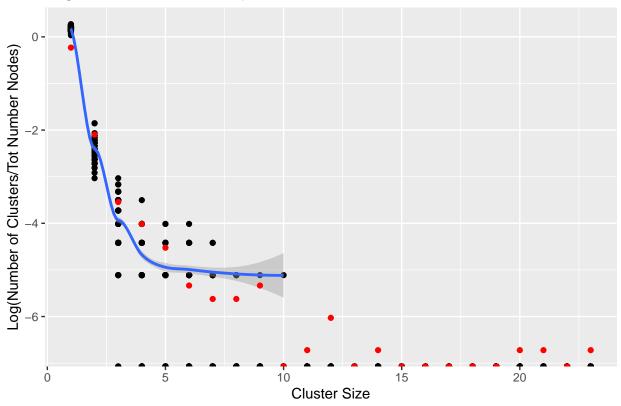






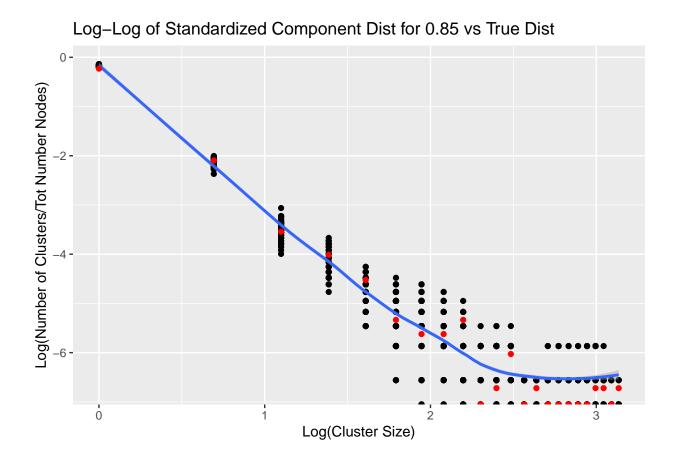


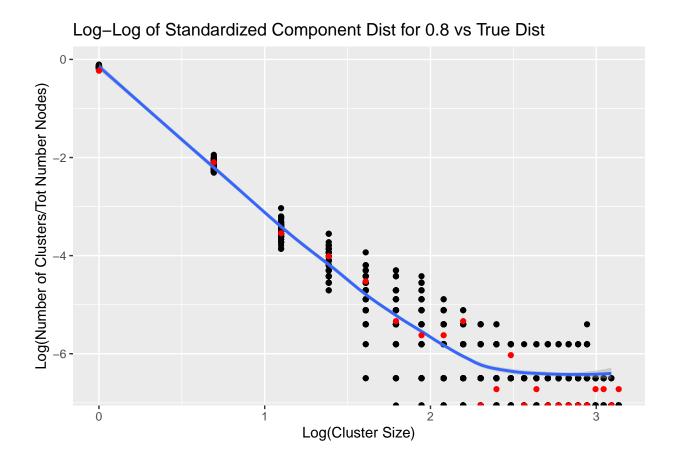




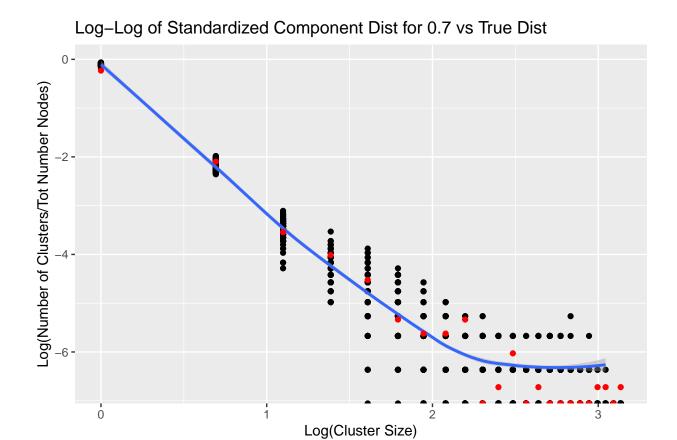
Log-Log of Standardized Component Dist for 0.95 vs True Dist



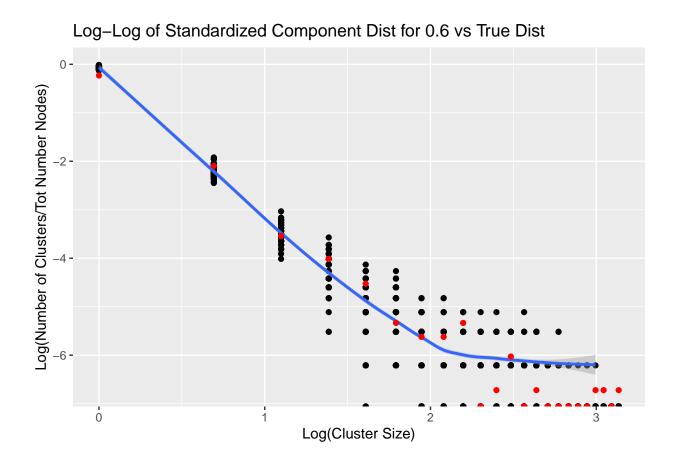


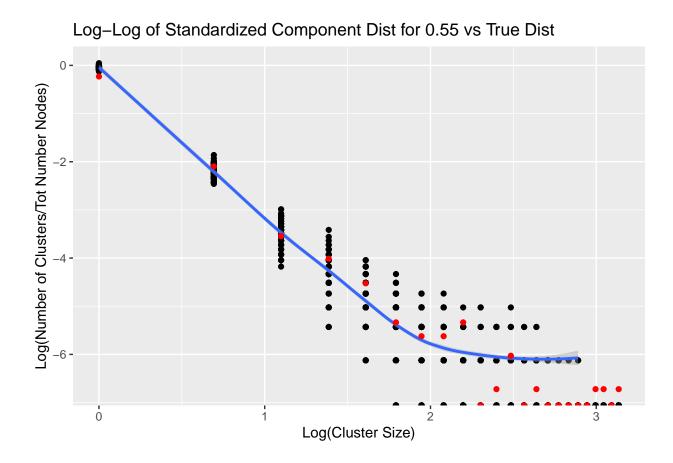






Log-Log of Standardized Component Dist for 0.65 vs True Dist





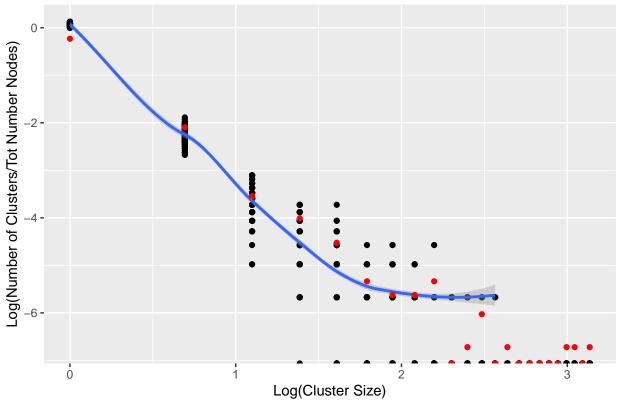


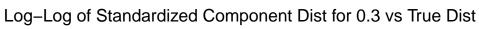
Log-Log of Standardized Component Dist for 0.45 vs True Dist

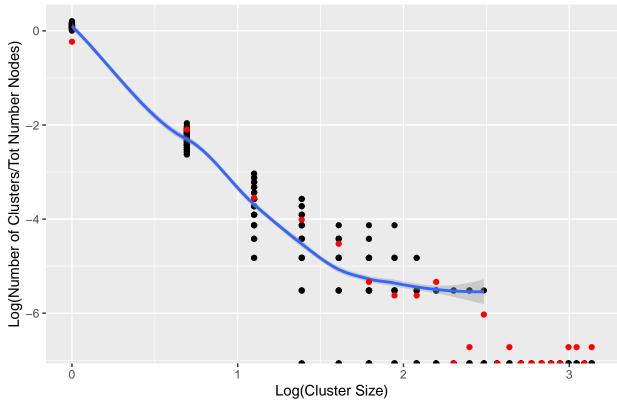
Log-Log of Standardized Component Dist for 0.4 vs True Dist

Log(Cluster Size)









Log-Log of Standardized Component Dist for 0.25 vs True Dist

