Meeting 8

PLS-PM Cross-validation and Simulated Data

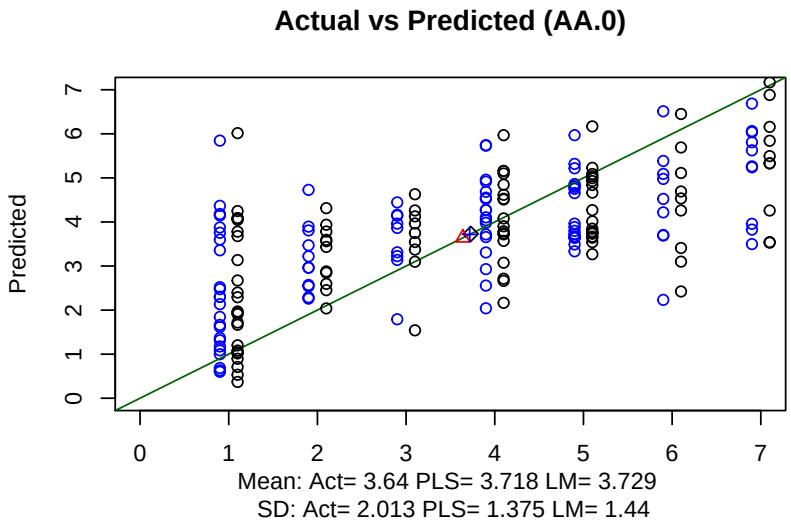
04/27/2015

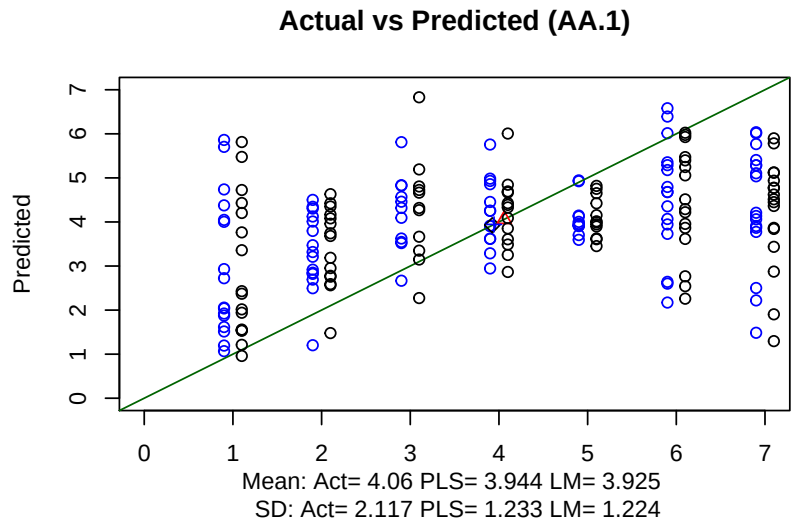
Cross-validation Method

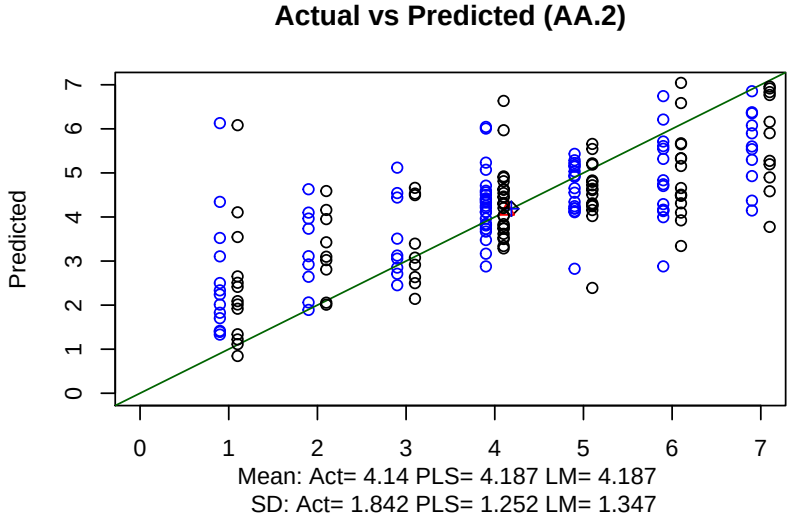
This is the process performed to produce the Cross-validation Samples:

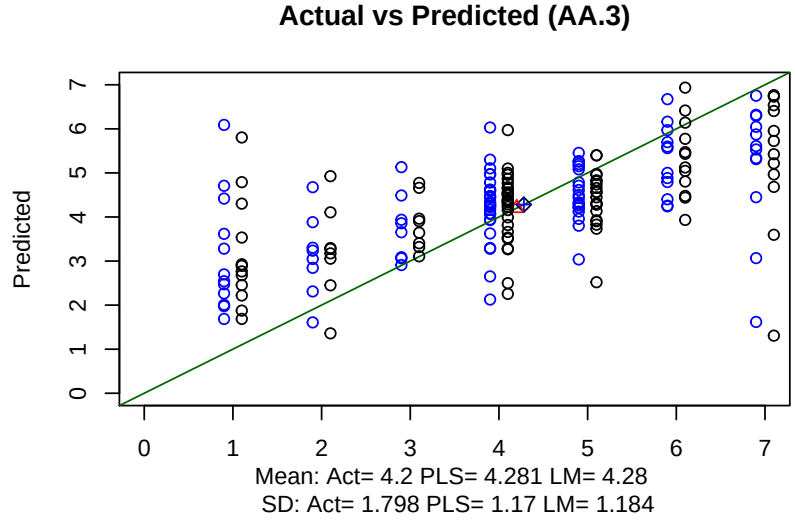
- Load the original 183 observations.
- Select a random sample of 183 observations from the original data (Randomize the Observations).
- The first 100 randomized observations were divided into 10 subsamples of 10 observations each one.
- Each subset of 10 observations was taken as a holdout for an individual model, and the remaining 173 observations as a training data.
- Each model produced its own predictions.
- All the predictions were combined together to produce a set of 100 predictions based on 10 different models, with different training and holdout data.

Actual vs Predicted Scatterplot (PLS vs LM)

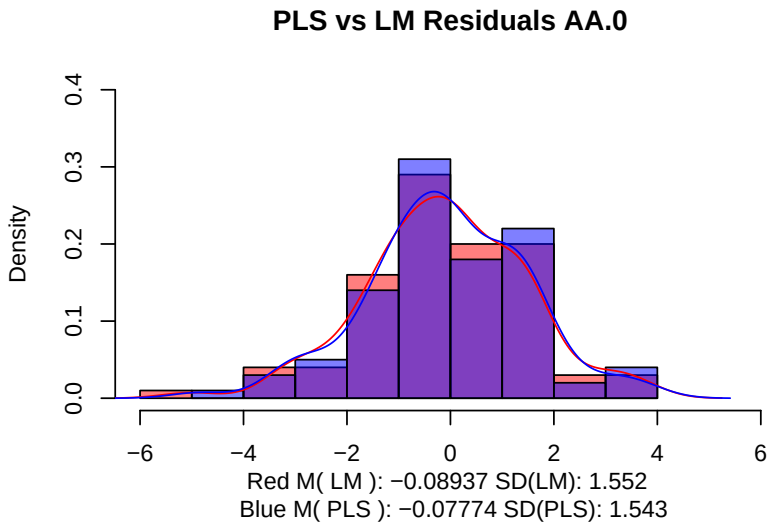


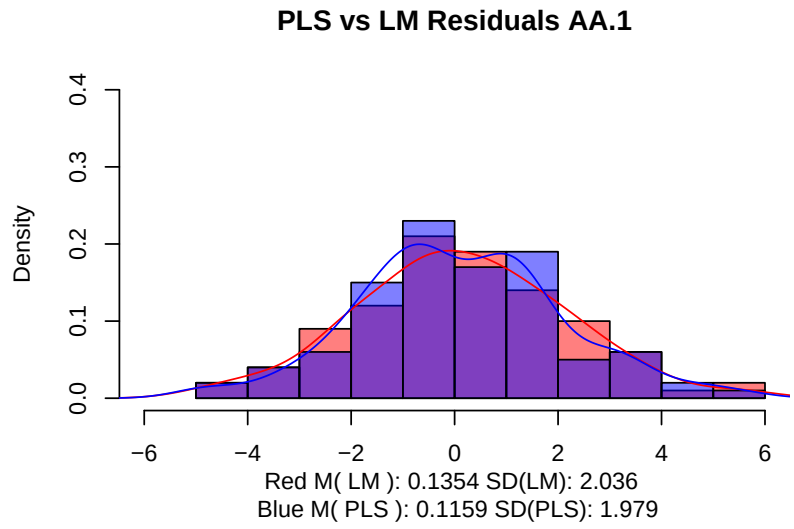


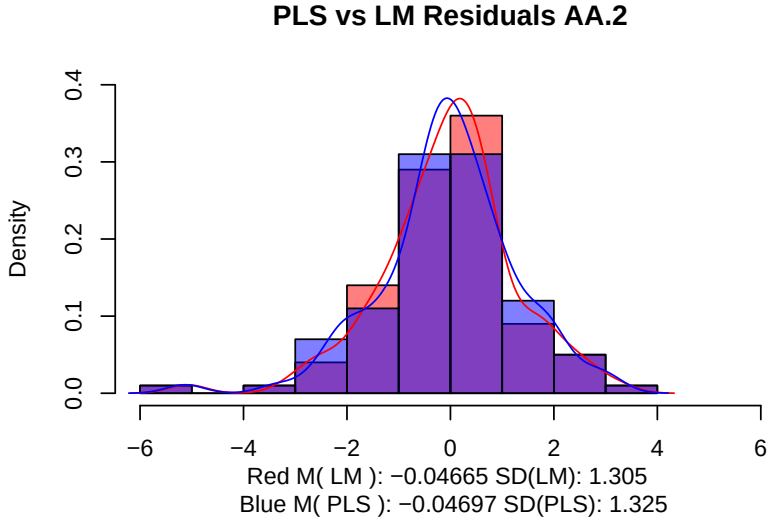


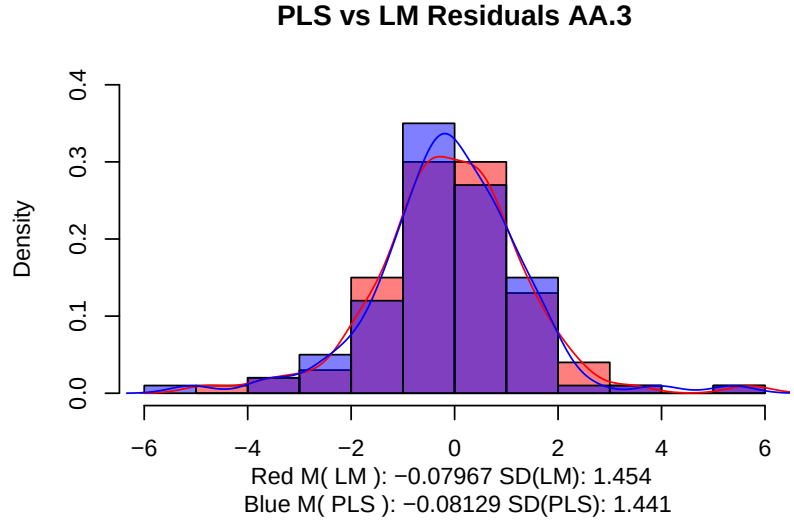


PLS vs Linear Regression: Joint Histogram



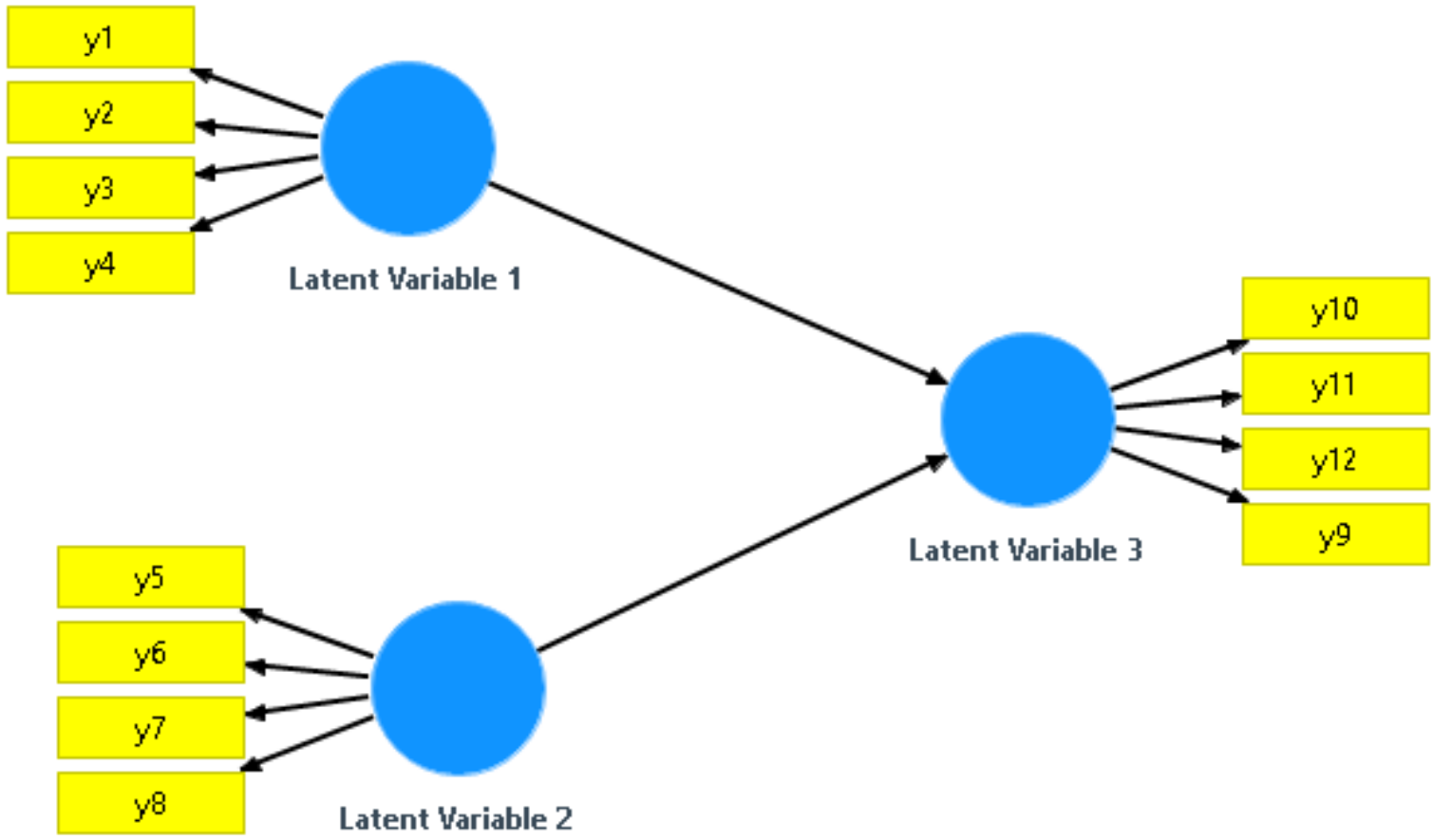




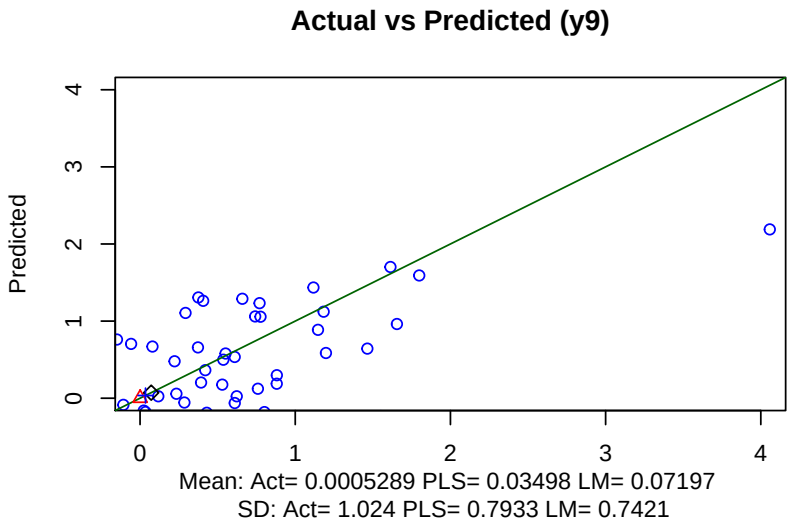


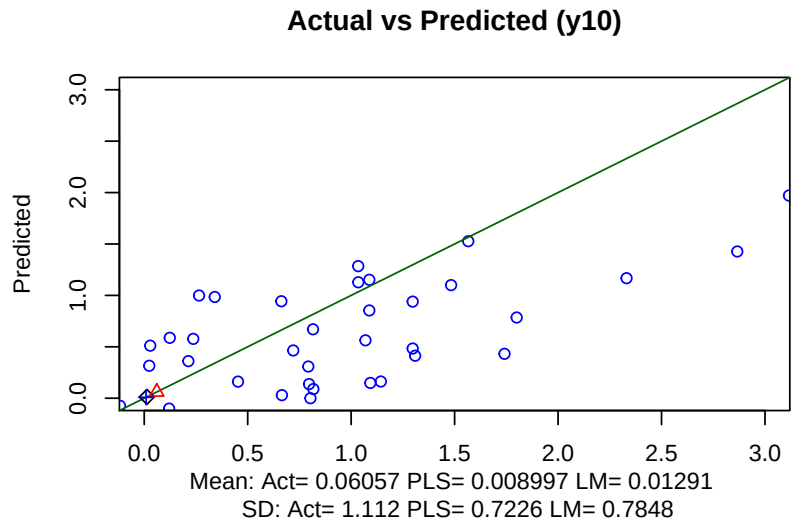
Simulated Data Model

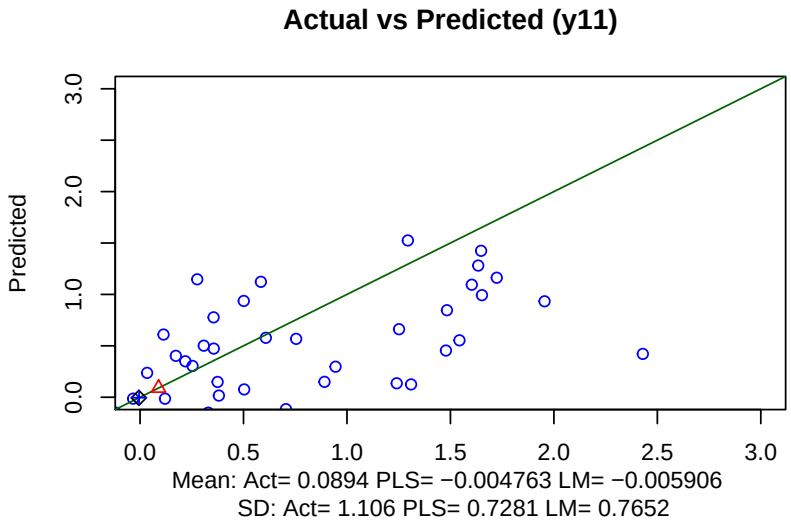
Suneel prepared simulated data which resulted in the following model:

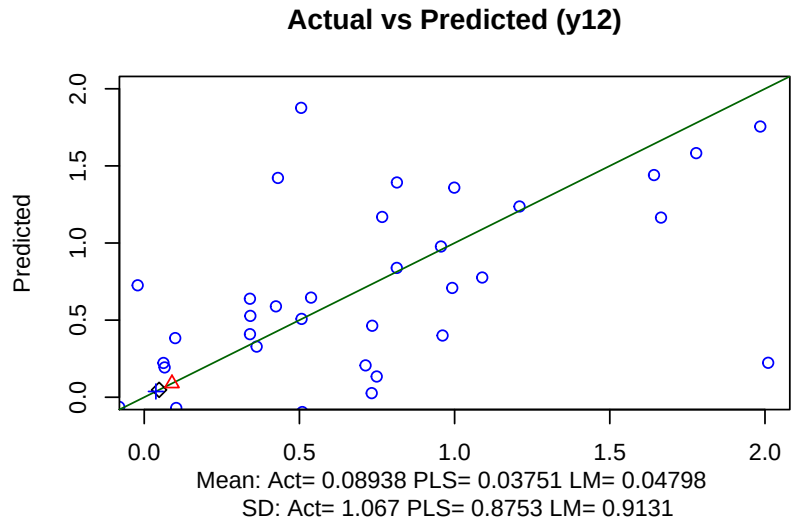


Actual vs Predicted Scatterplot (Simulated Data)









PLS Residuals (Simulated Data)