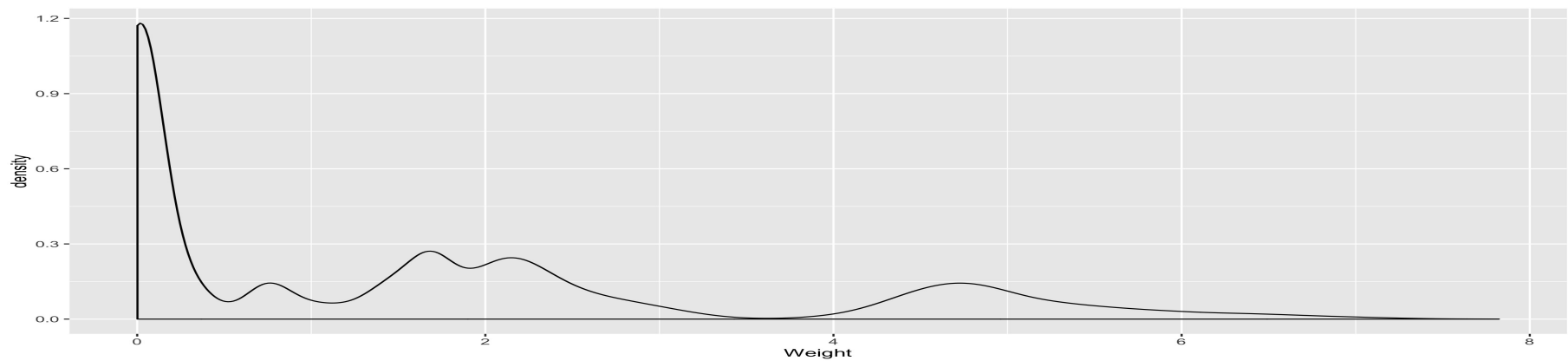
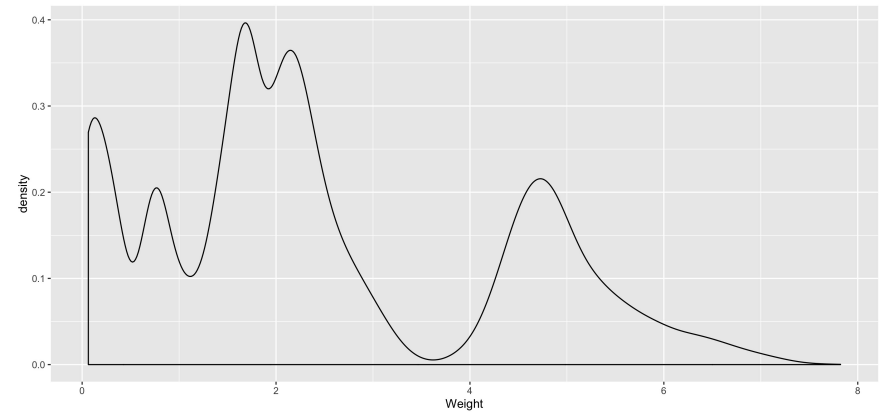
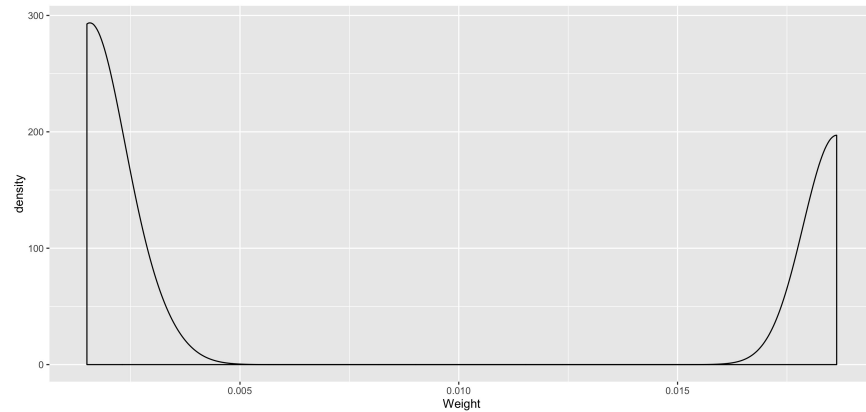


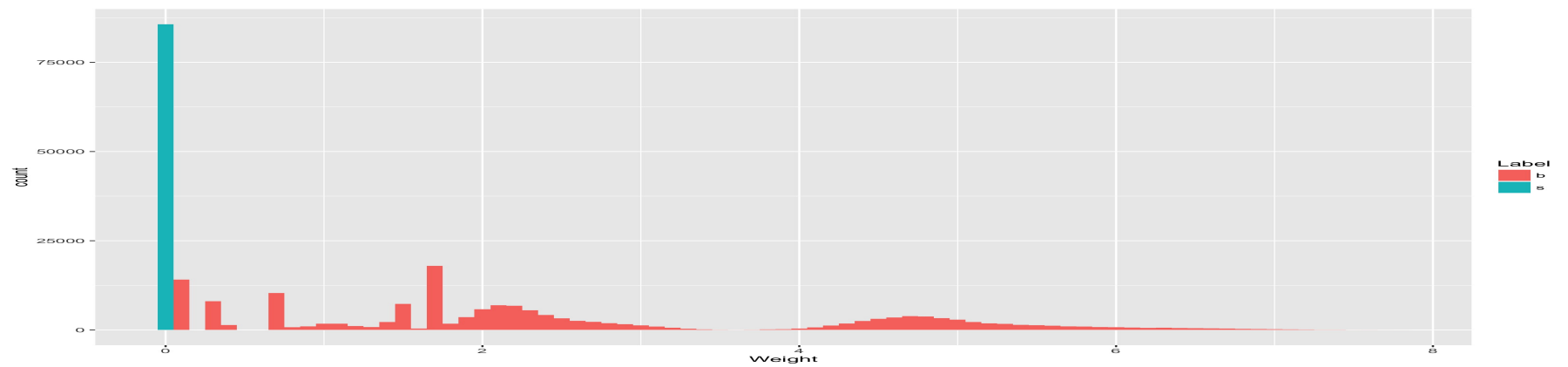
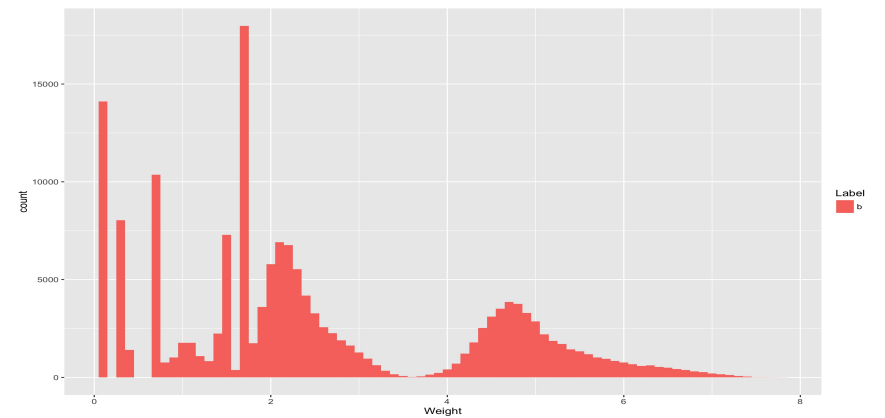
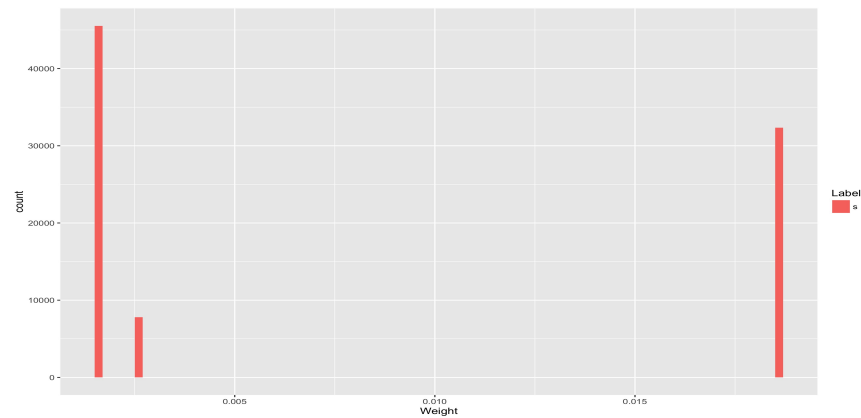
EDA



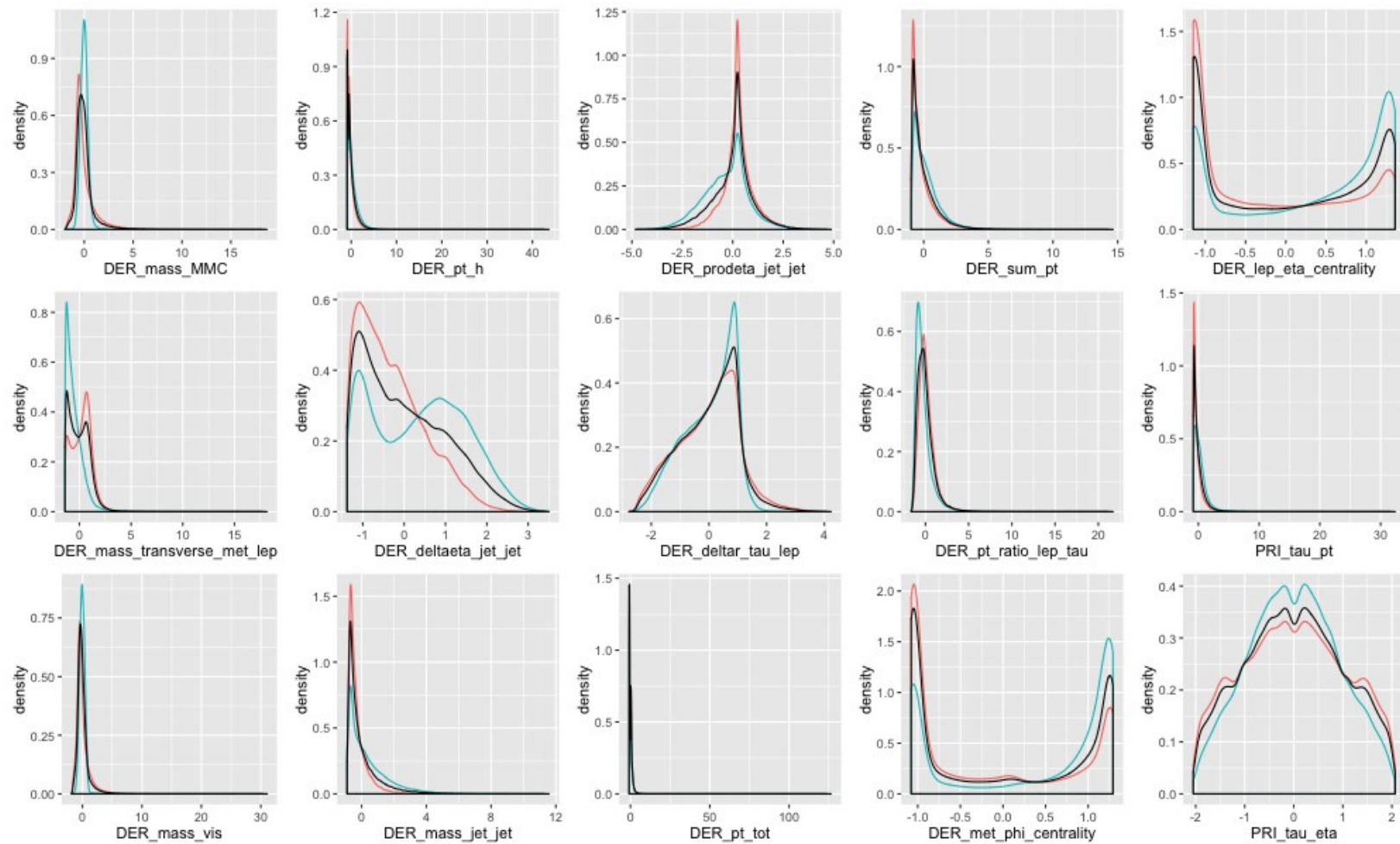
S & B Density



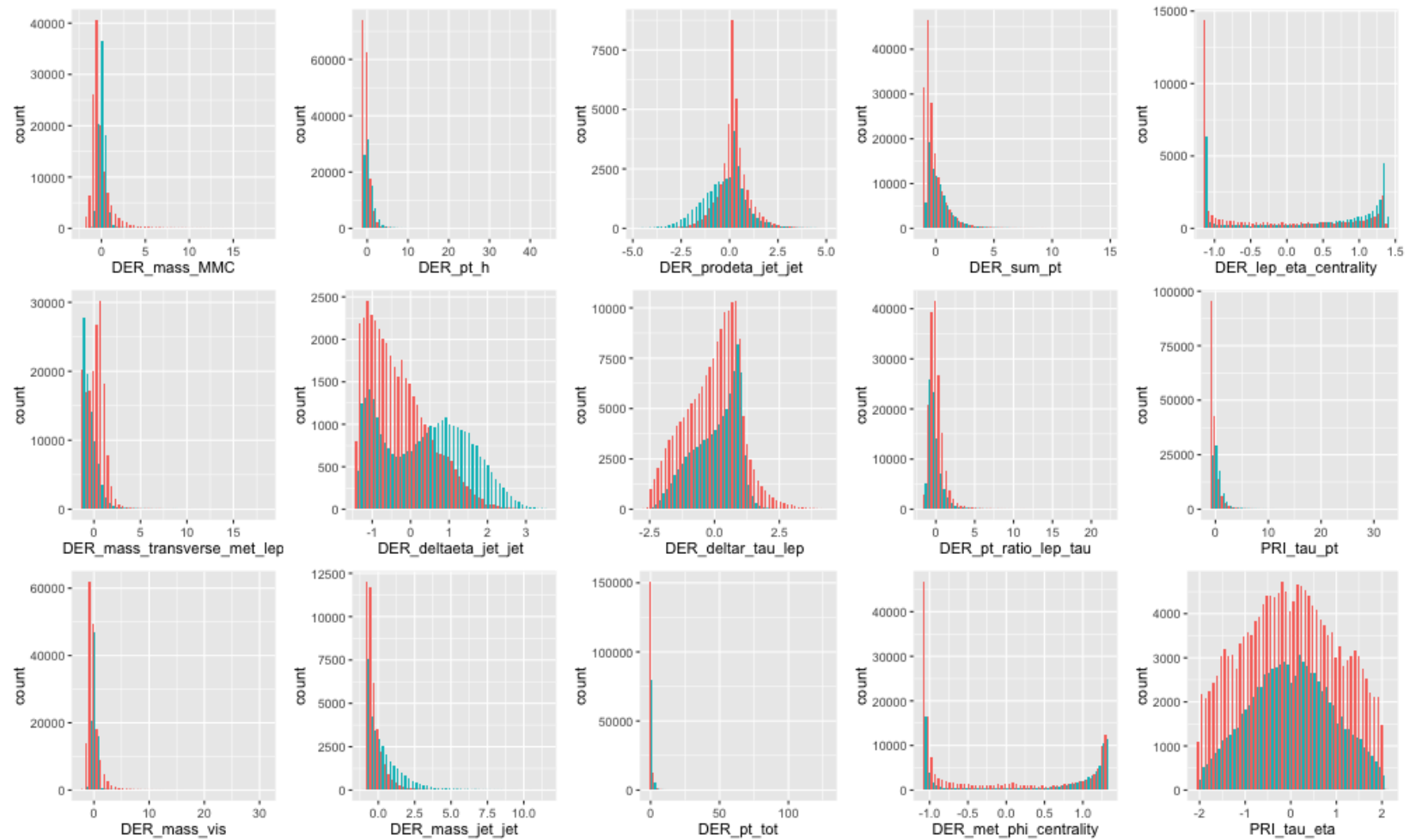
S & B Histogram



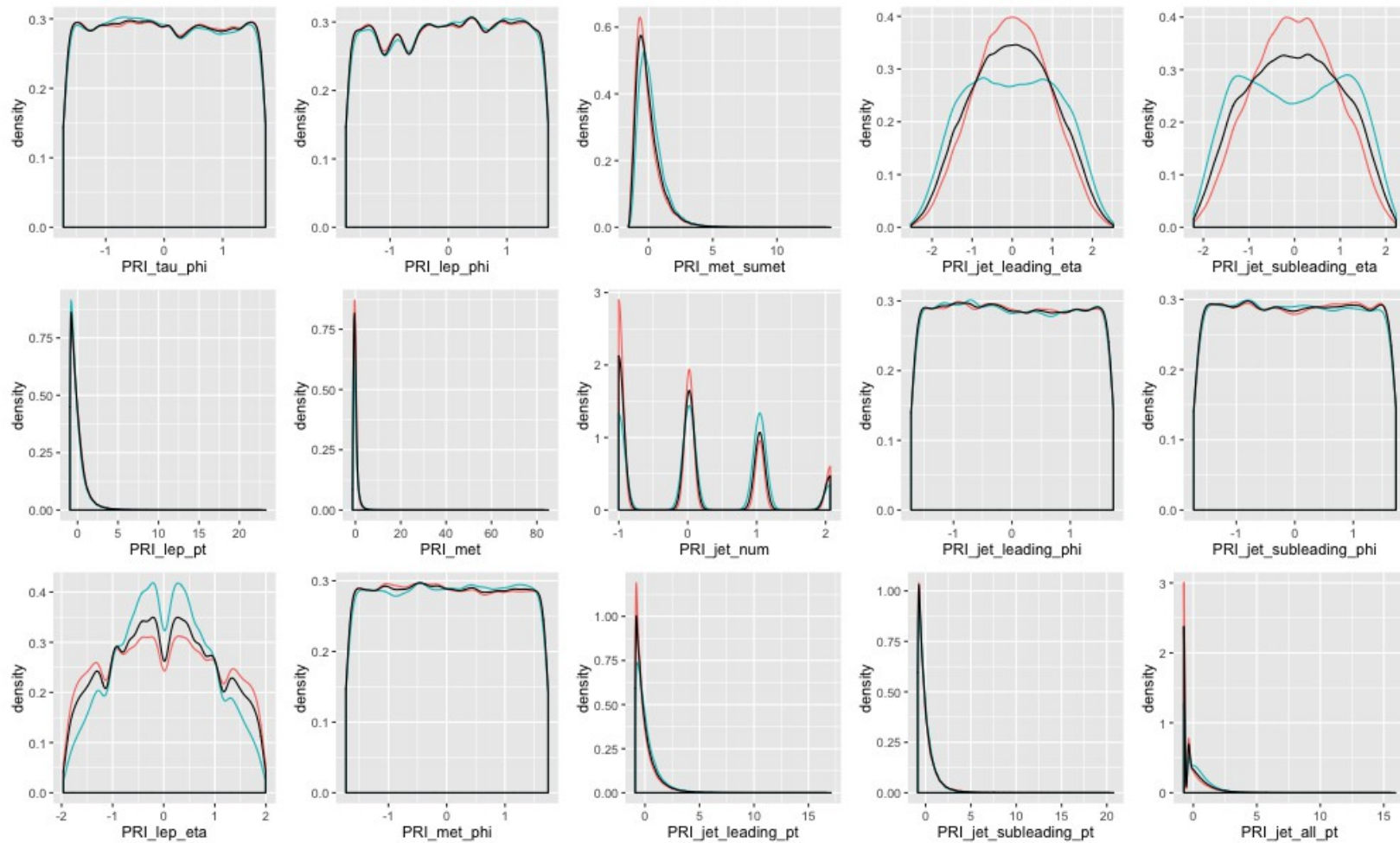
First 15 Variables Density



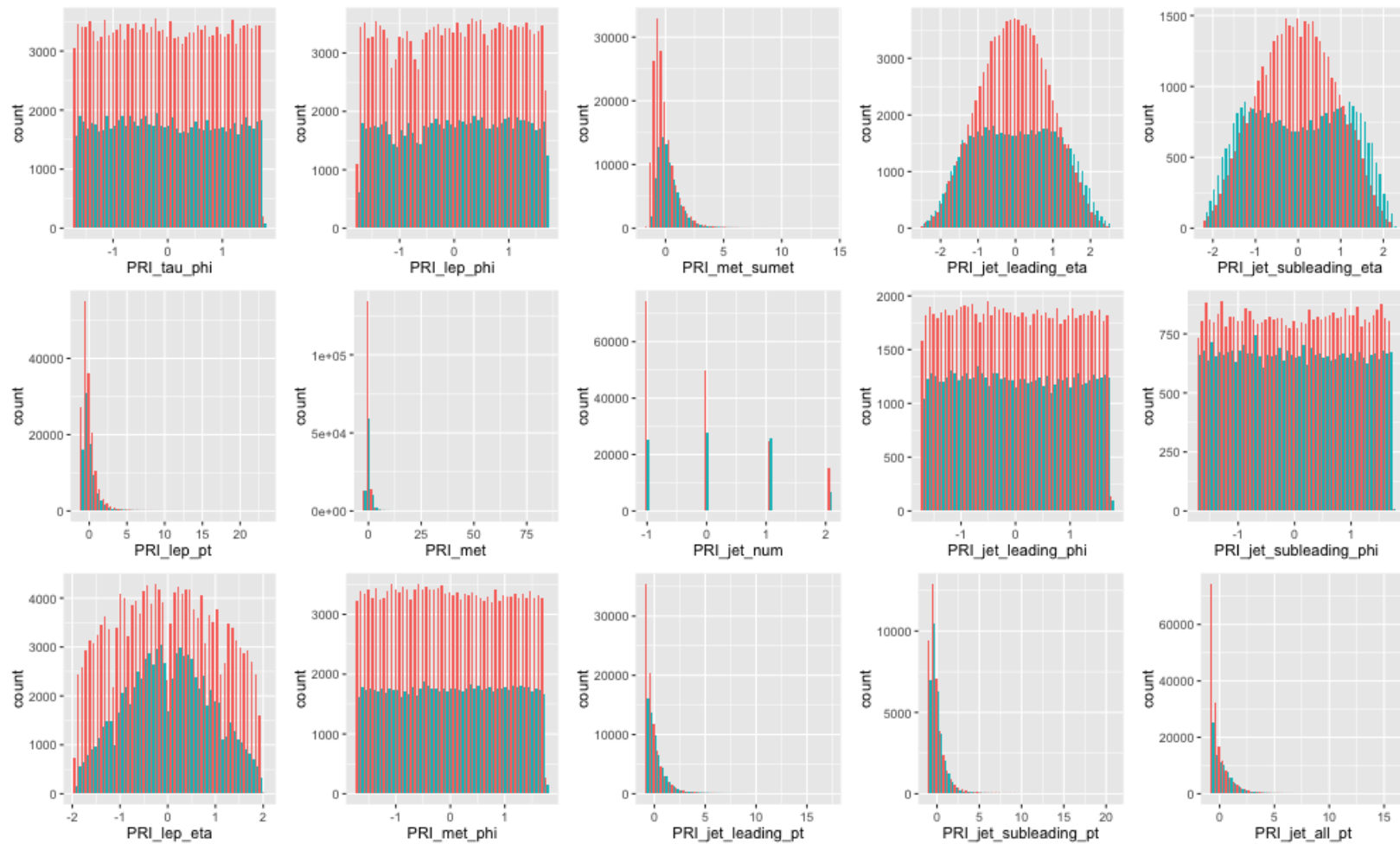
First 15 Variable Histogram



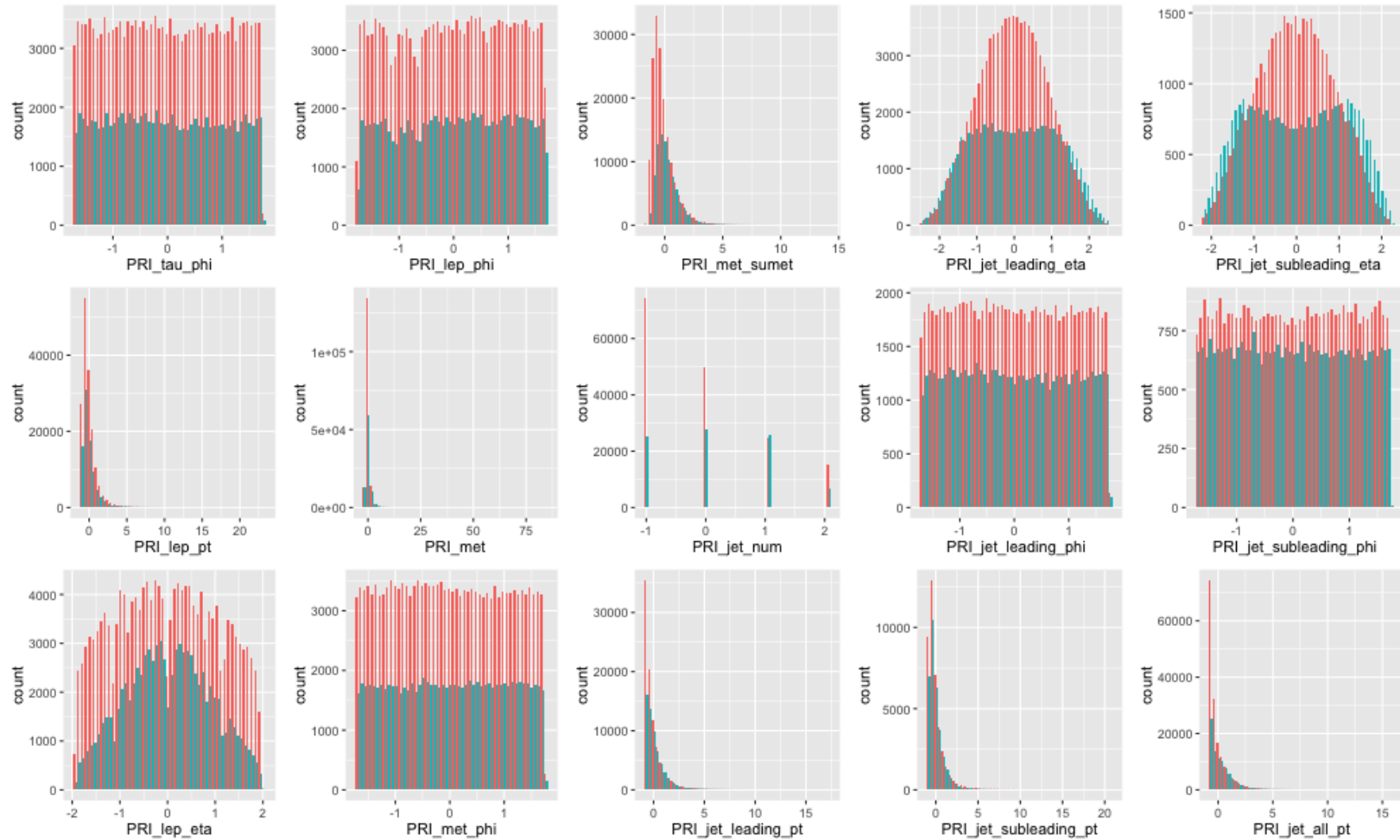
Last 15 Variables Density

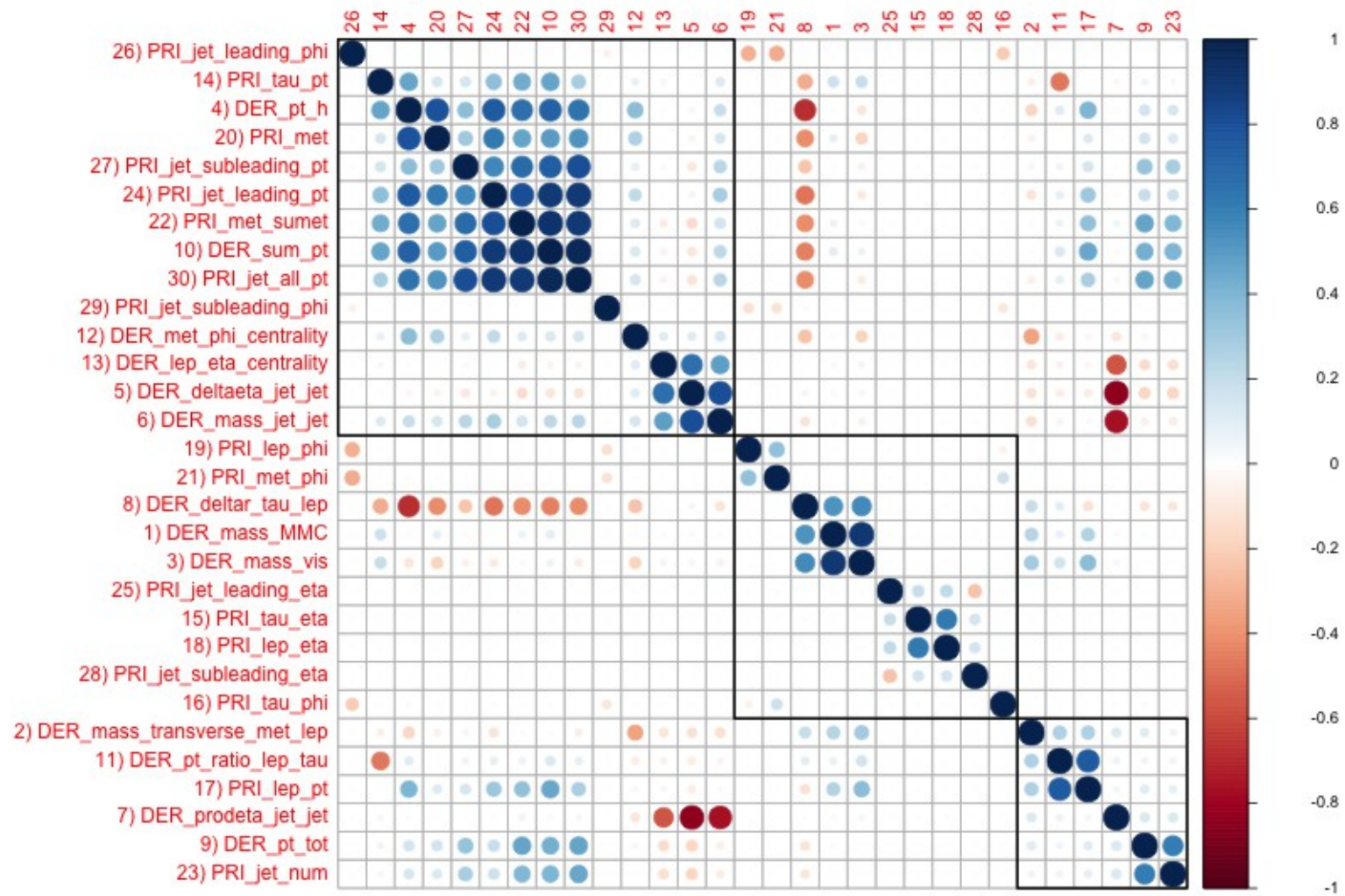


Last 15 Variables Histogram

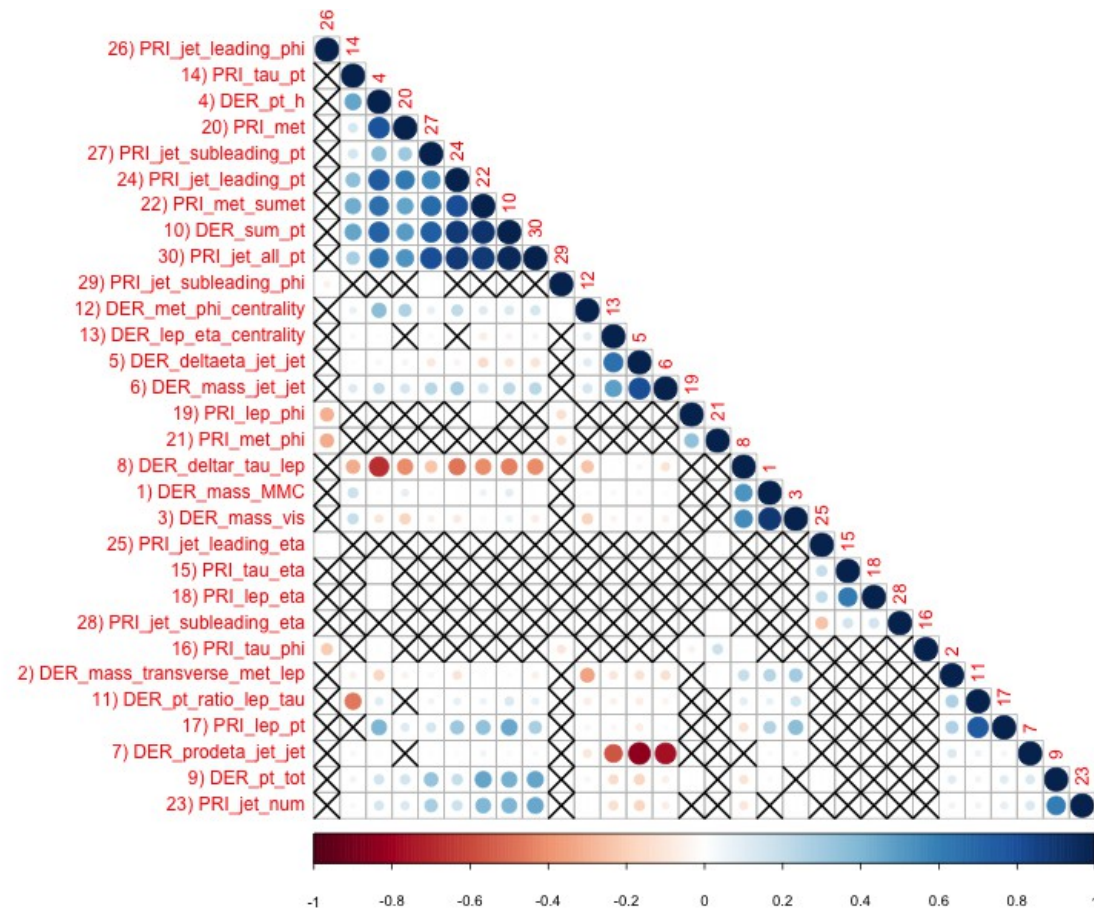


Last 15 Variables Histogram



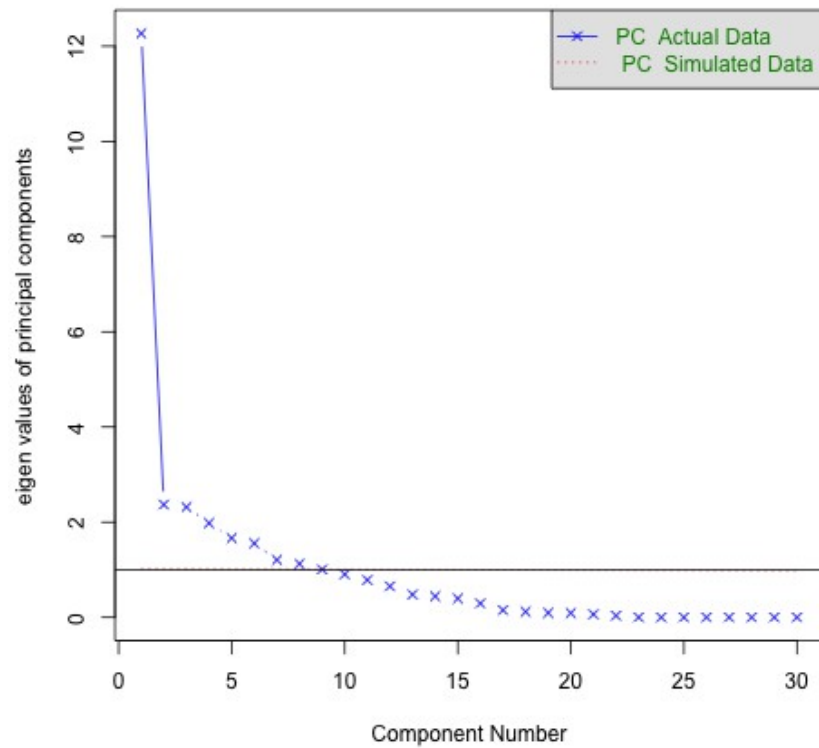


Significant Correlation

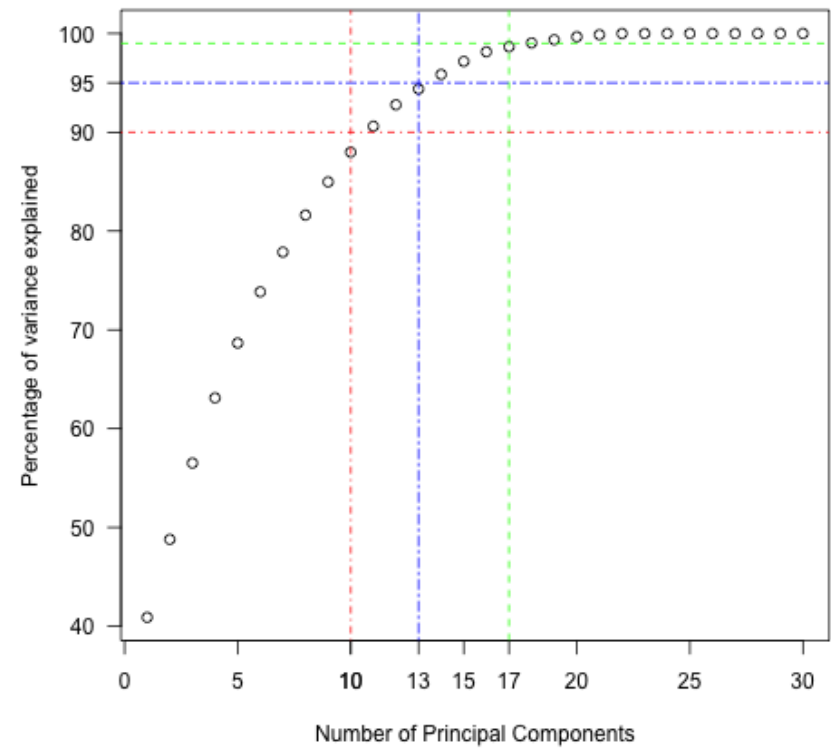


PCA

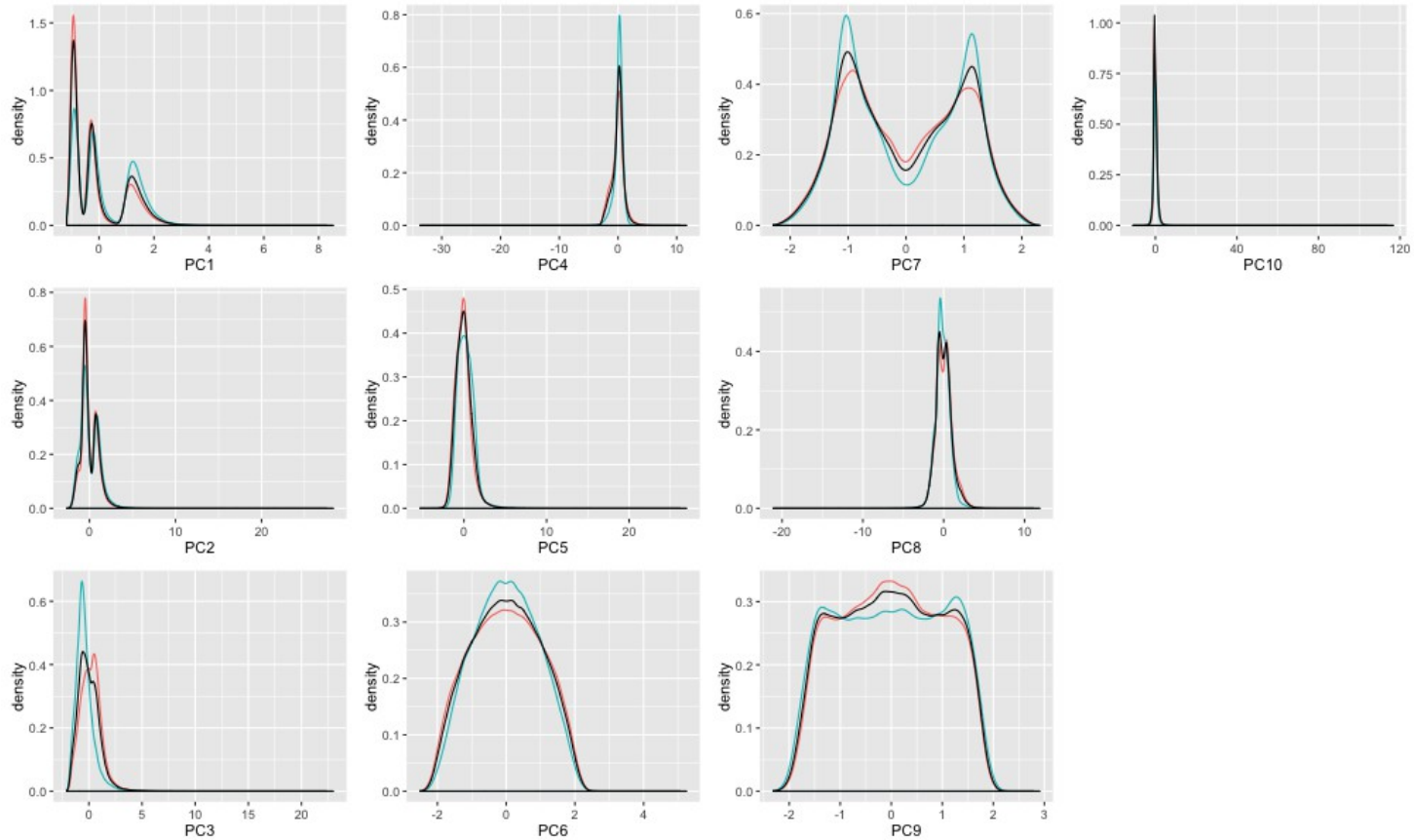
Parallel Analysis Scree Plots



PCA



PCA components density



Undefined Variables

- 1 15.2456 1 DER_mass_MMC
- 2 39.9652 24 PRI_jet_leading_pt
- 3 39.9652 25 PRI_jet_leading_eta
- 4 39.9652 26 PRI_jet_leading_phi
- 5 70.9828 5 DER_deltaeta_jet_jet
- 6 70.9828 6 DER_mass_jet_jet
- 7 70.9828 7 DER_prodelta_jet_jet
- 8 70.9828 13 DER_lep_eta_centrality
- 9 70.9828 27 PRI_jet_subleading_pt
- 10 70.9828 28 PRI_jet_subleading_eta
- 11 70.9828 29 PRI_jet_subleading_phi

Undefined Variables by Jet No.

- All Jets (0,1,2,3)

1 15.2456 1 DER_mass_MMC

- No Jets(0)

2 39.9652 24 PRI_jet_leading_pt

3 39.9652 25 PRI_jet_leading_eta

4 39.9652 26 PRI_jet_leading_phi

- No Jet and 1 Jet (0,1)

5 70.9828 5 DER_deltaeta_jet_jet

6 70.9828 6 DER_mass_jet_jet

7 70.9828 7 DER_prodetta_jet_jet

8 70.9828 13 DER_lep_eta_centrality

9 70.9828 27 PRI_jet_subleading_pt

10 70.9828 28 PRI_jet_subleading_eta

11 70.9828 29 PRI_jet_subleading_phi

Ideas

- Remove all Derived variables (13) + Phi Variables (5) and use SVM and Neural Networks to find structures
- Use jet number tag to remove Undefined Variables