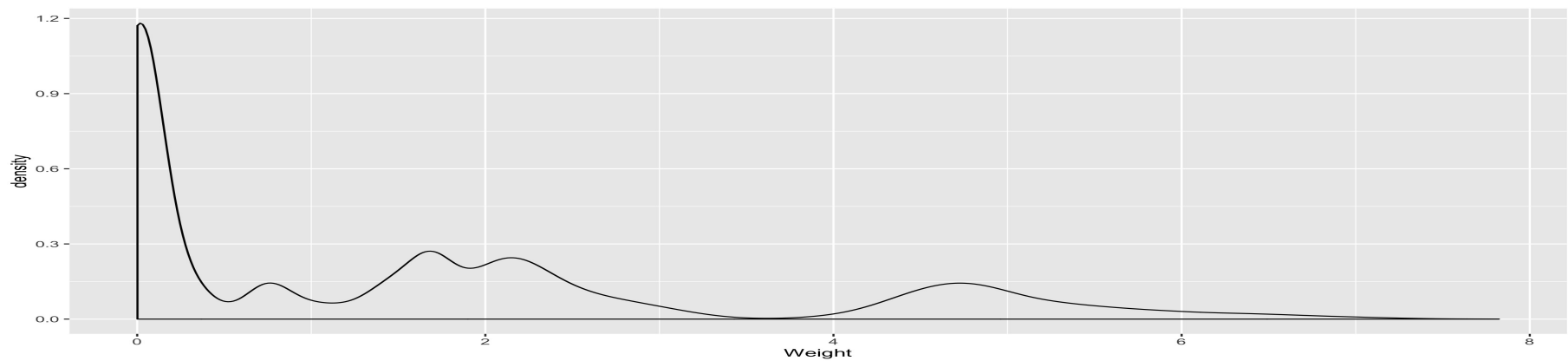
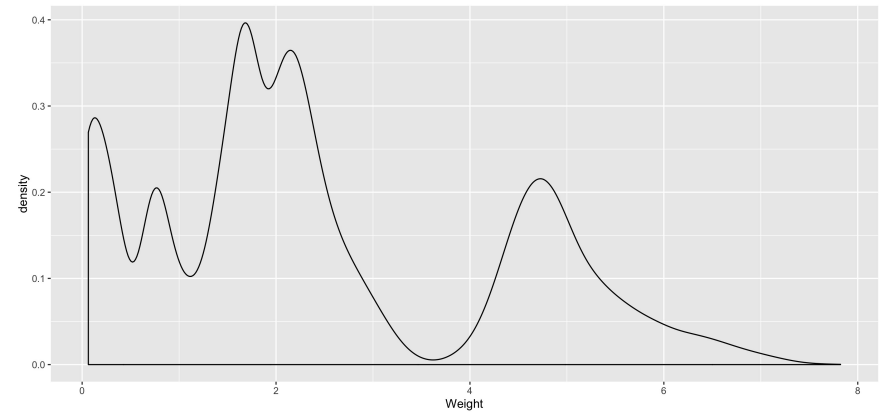
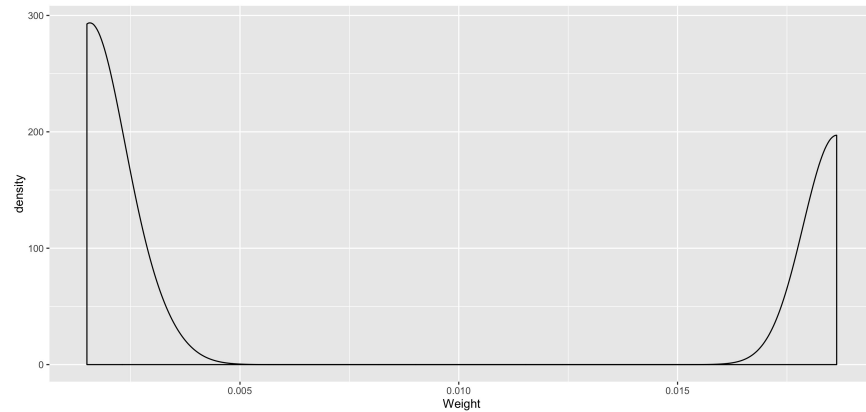


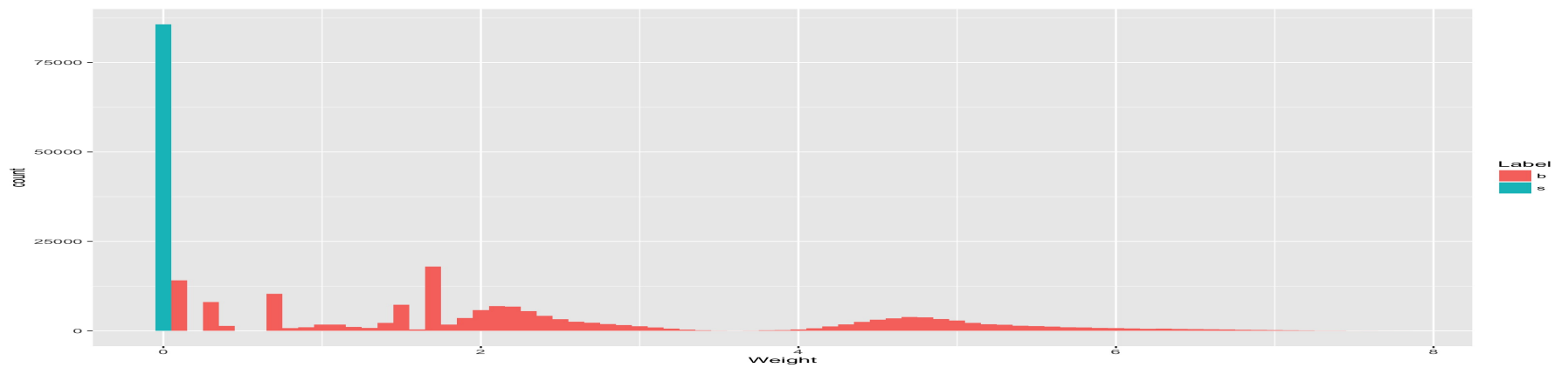
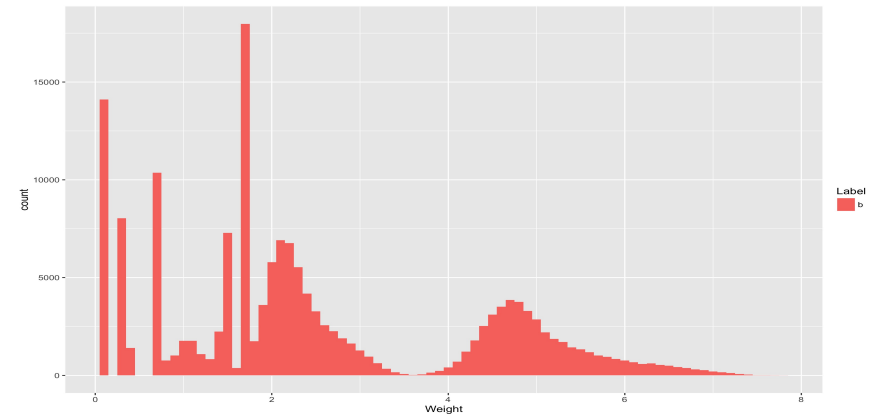
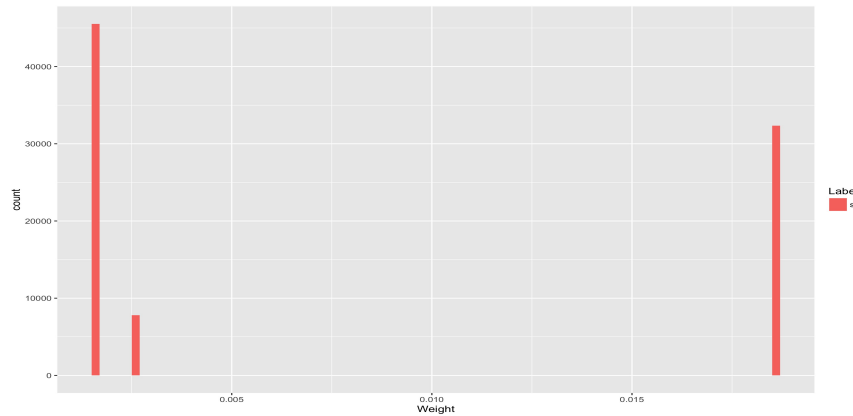
EDA



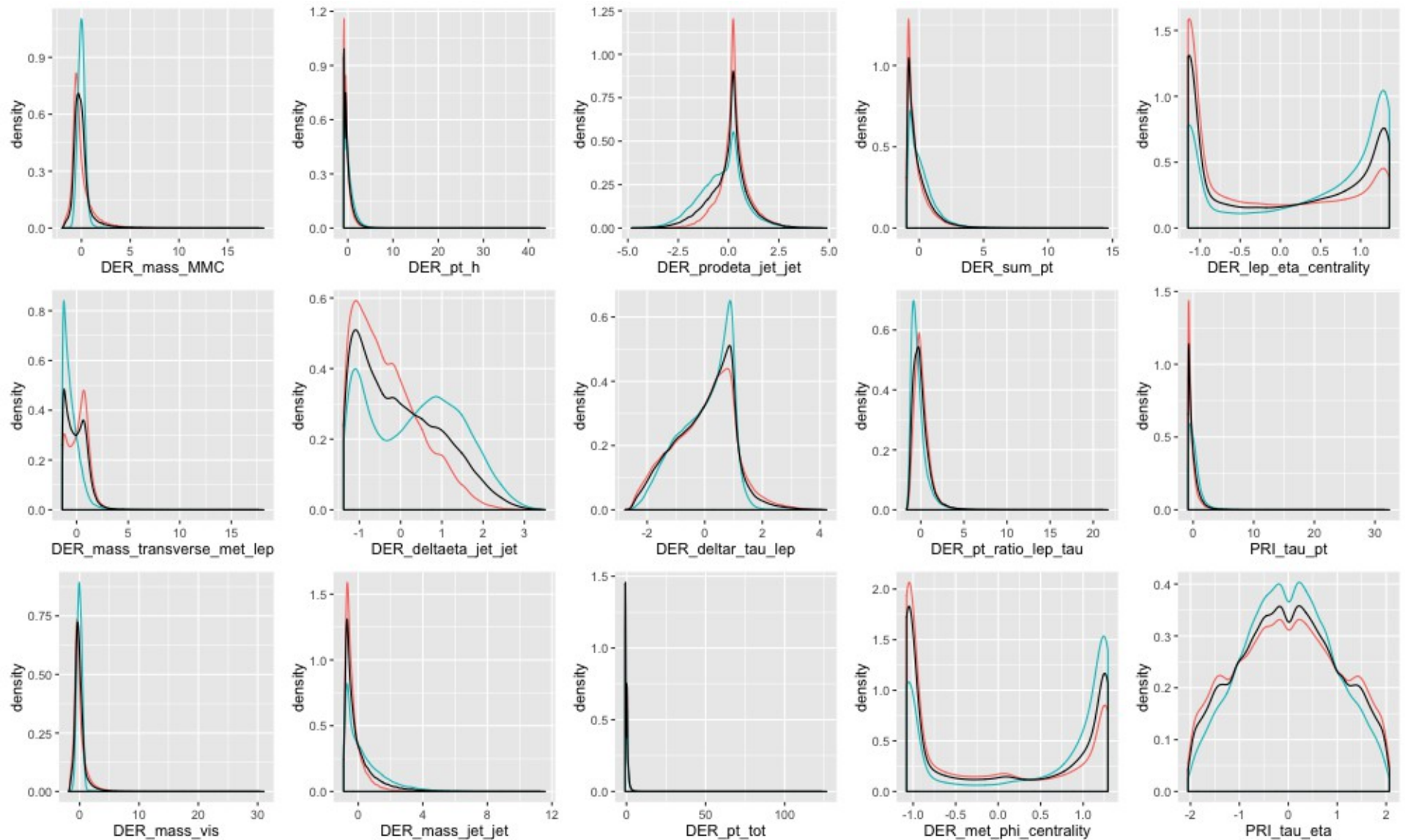
S & B Density



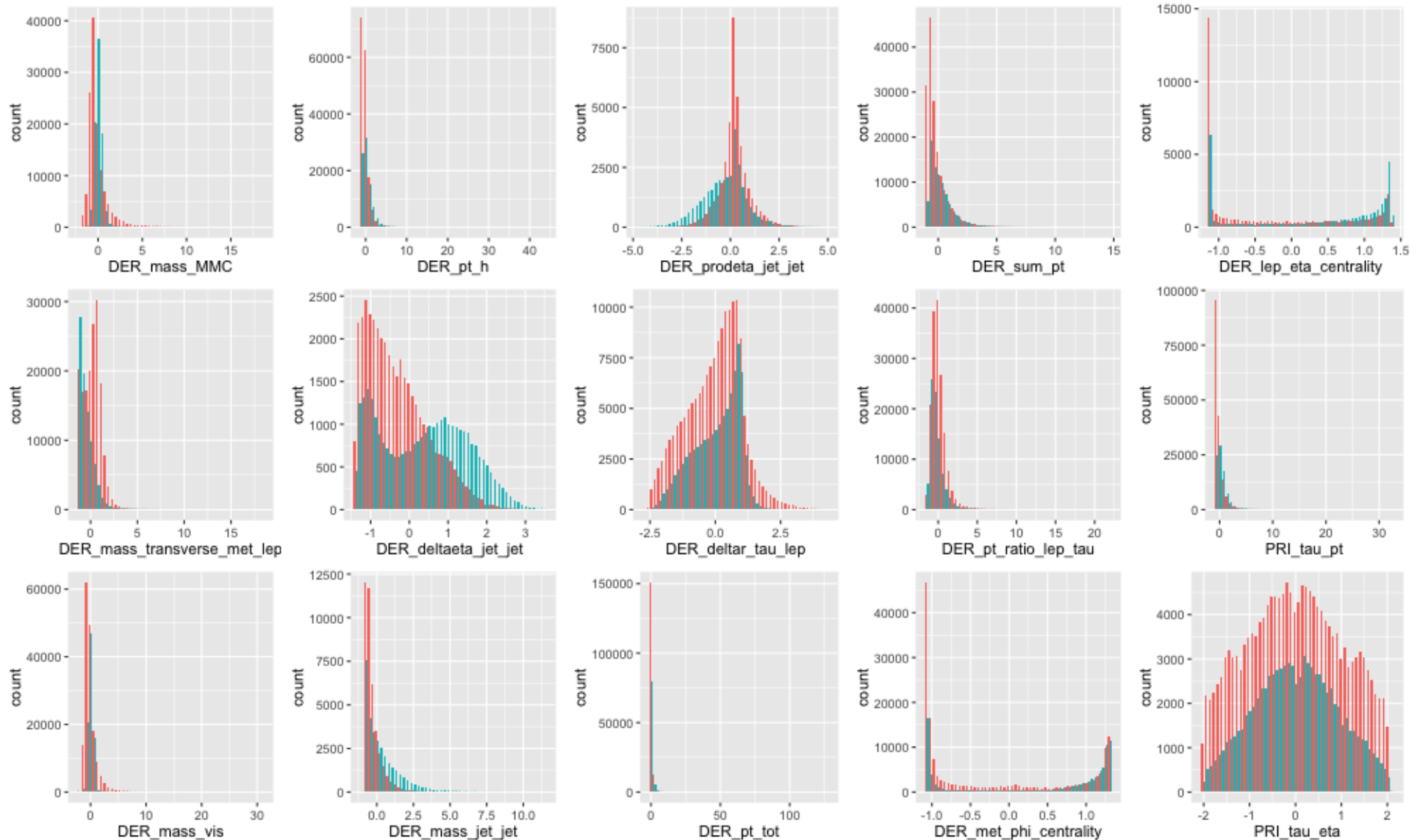
S & B Histogram



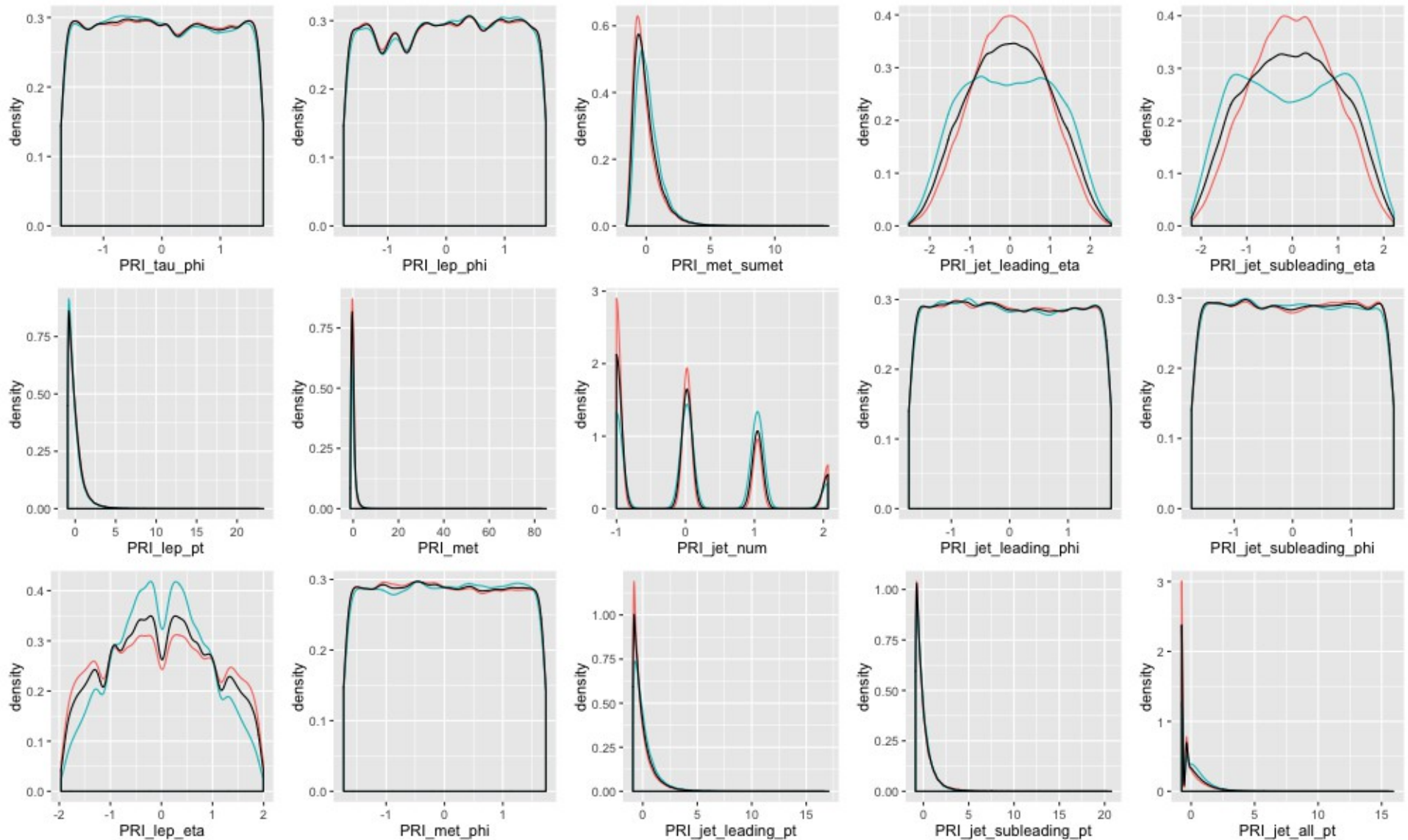
First 15 Variables Density



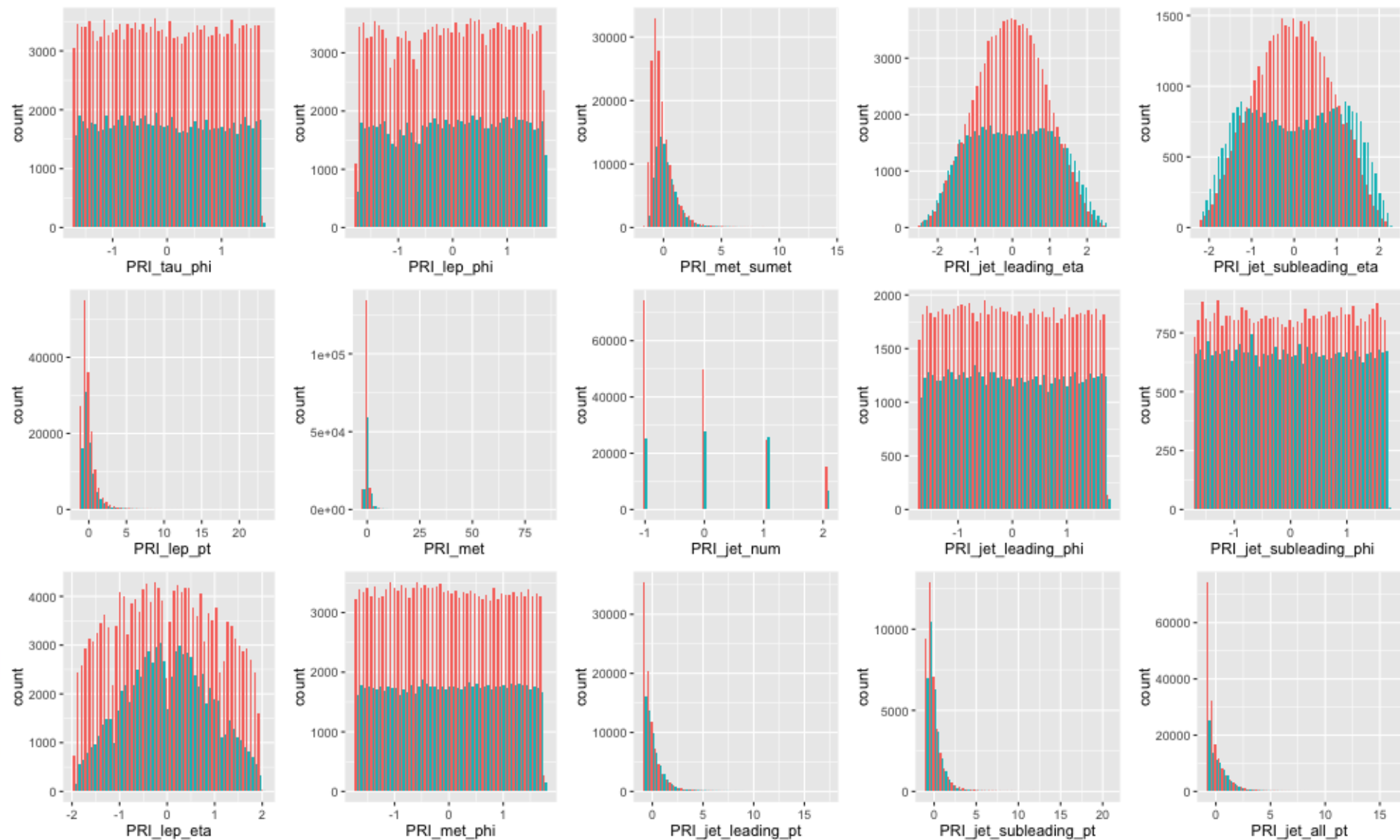
First 15 Variable Histogram



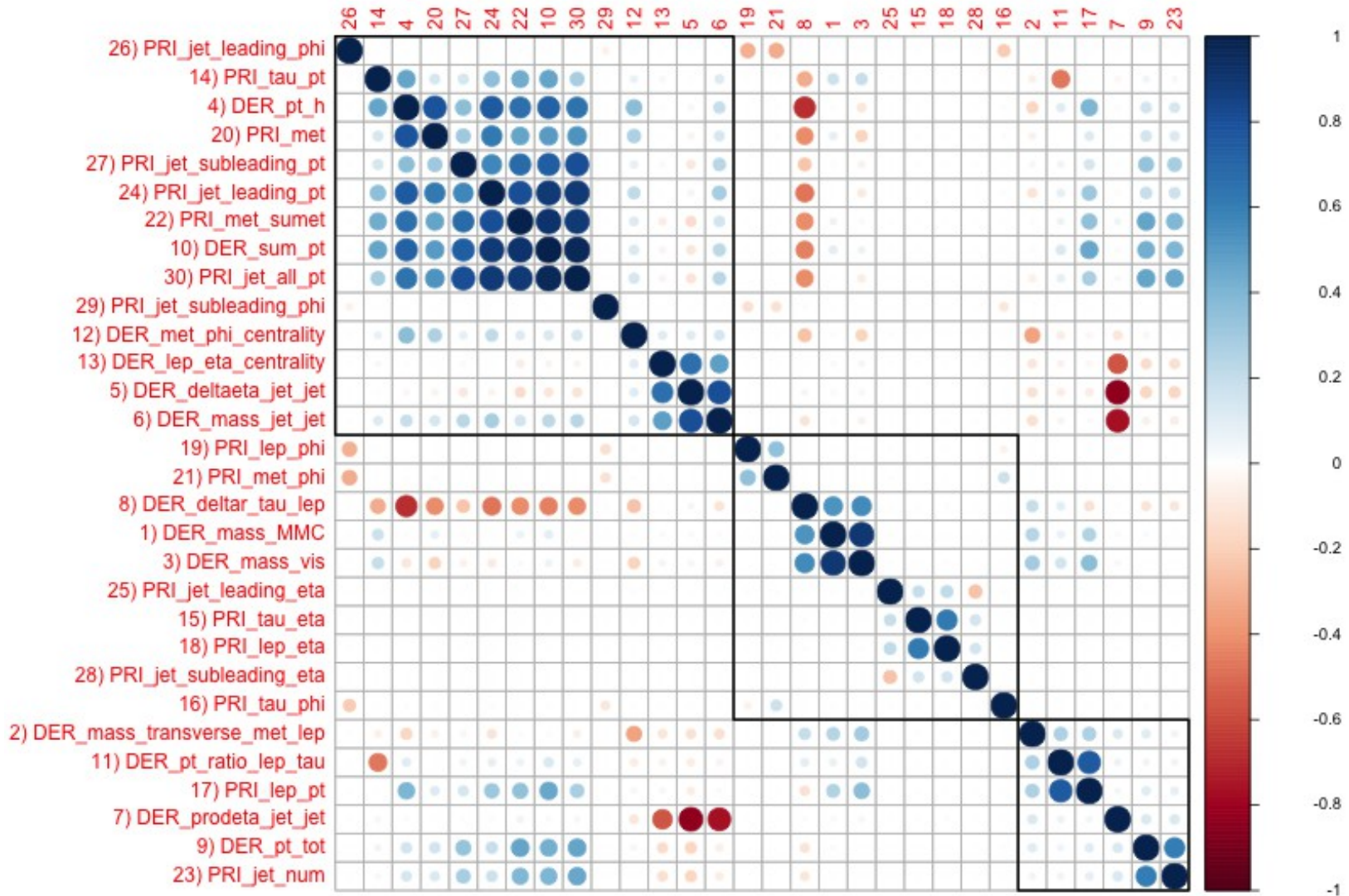
Last 15 Variables Density



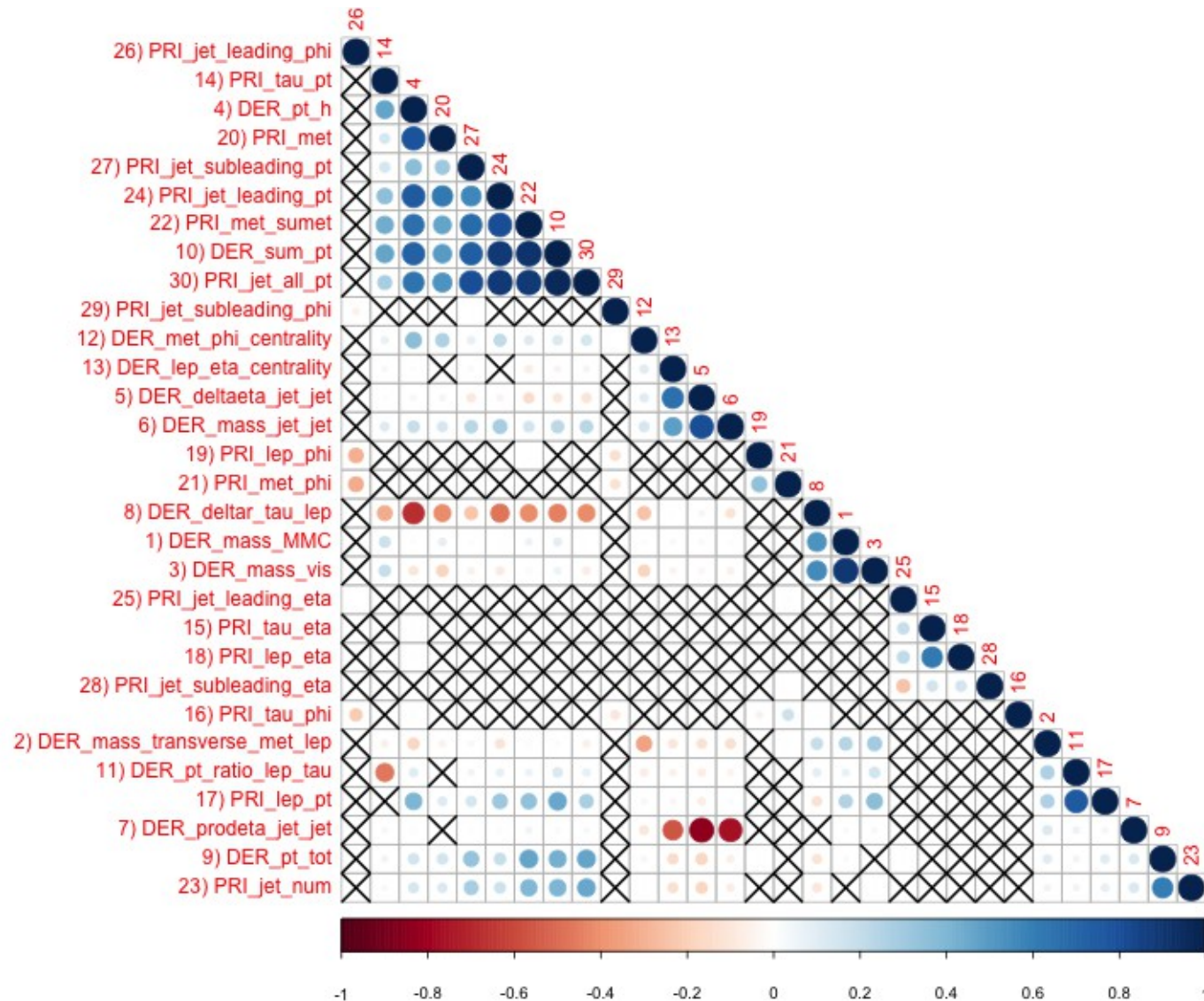
Last 15 Variables Histogram



Correlation

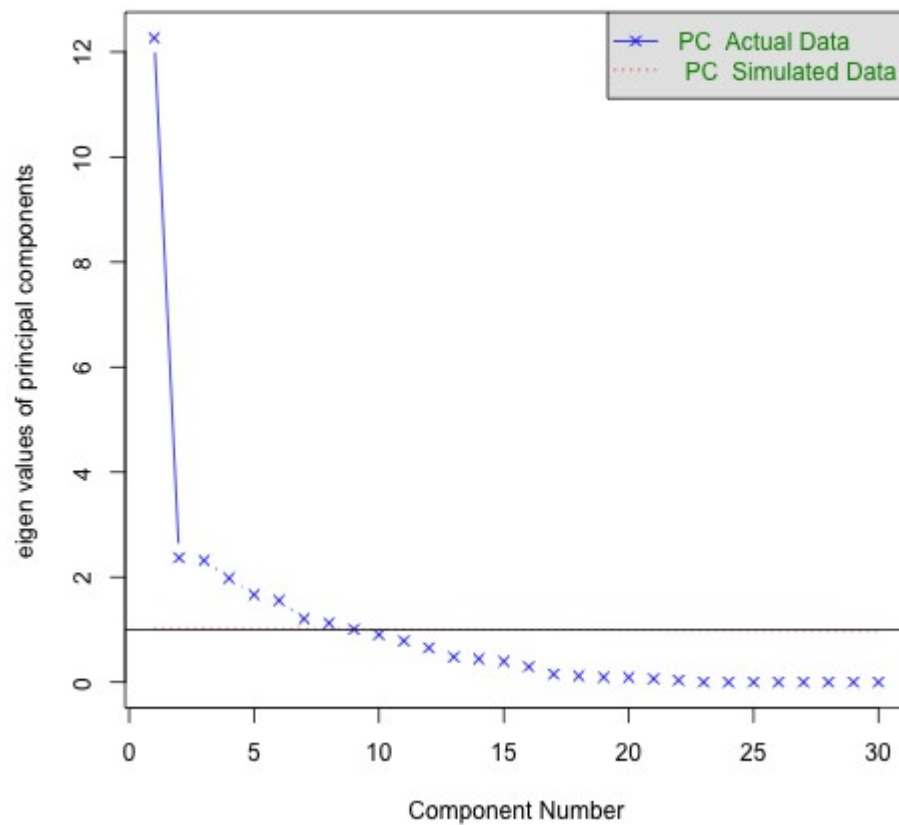


-1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1

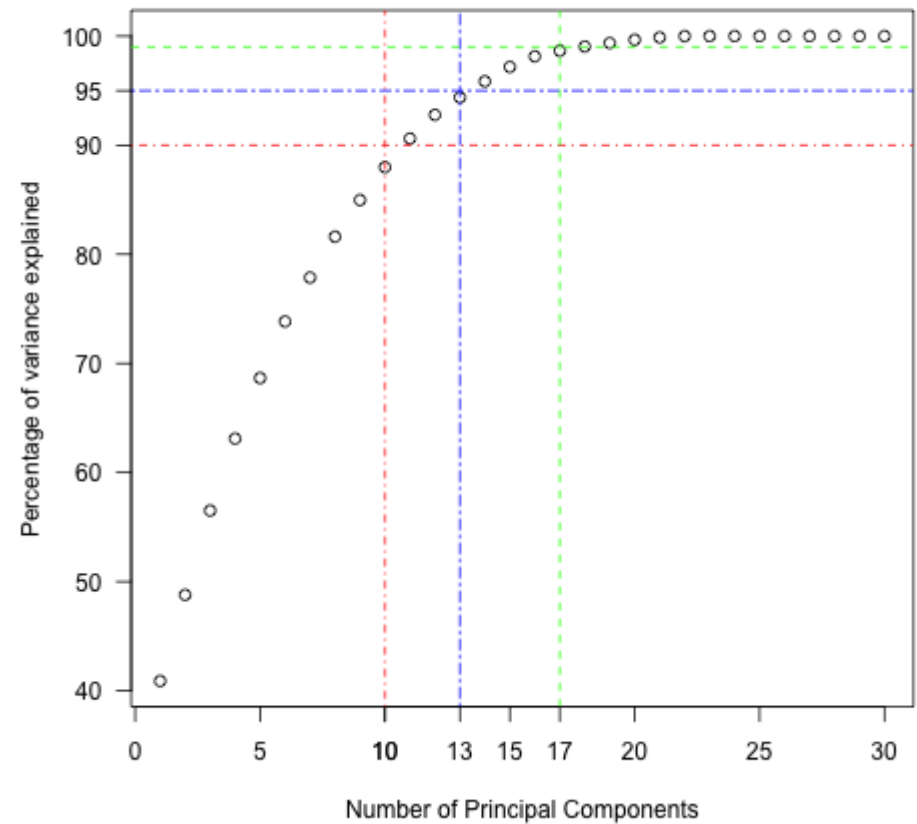


PCA

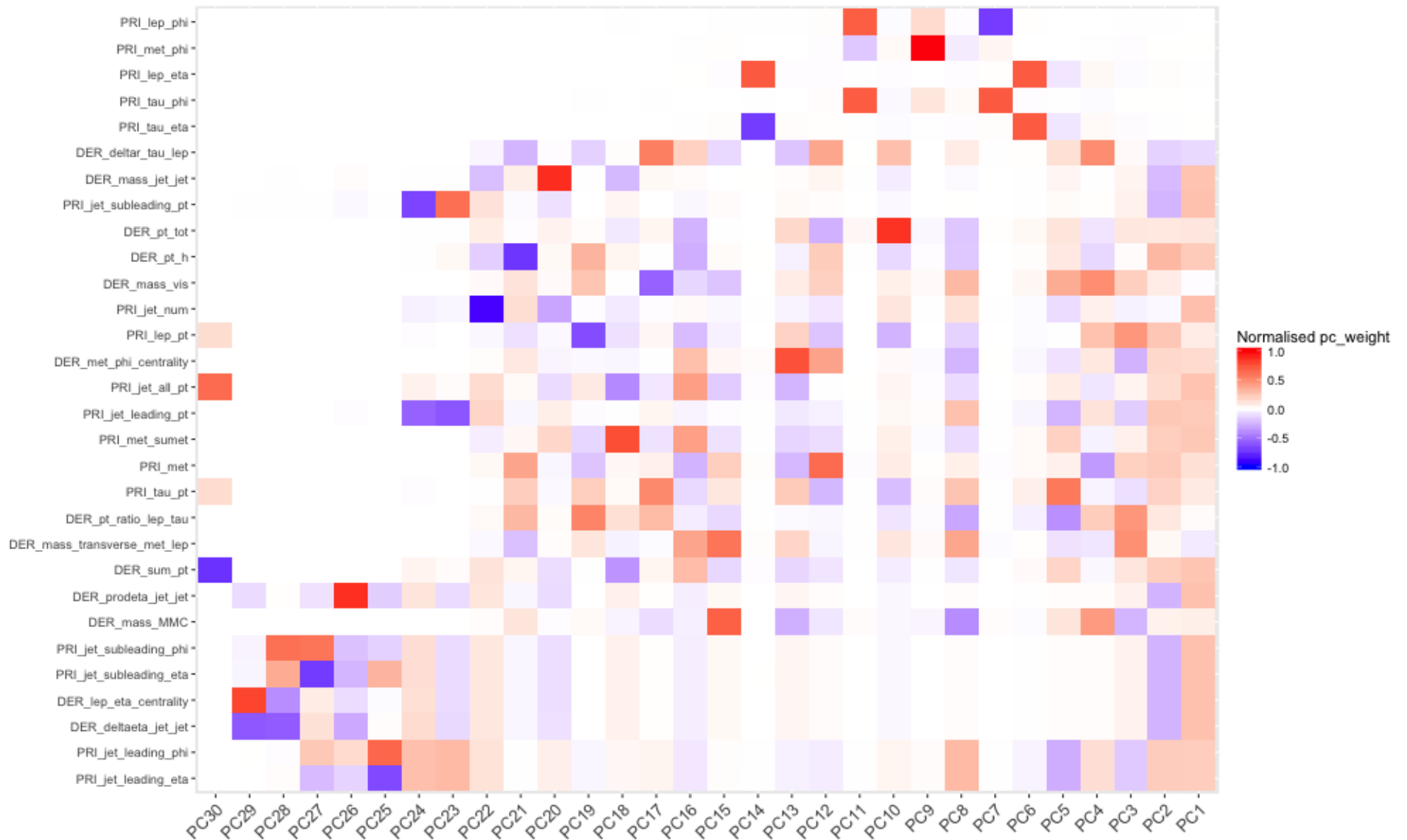
Parallel Analysis Scree Plots



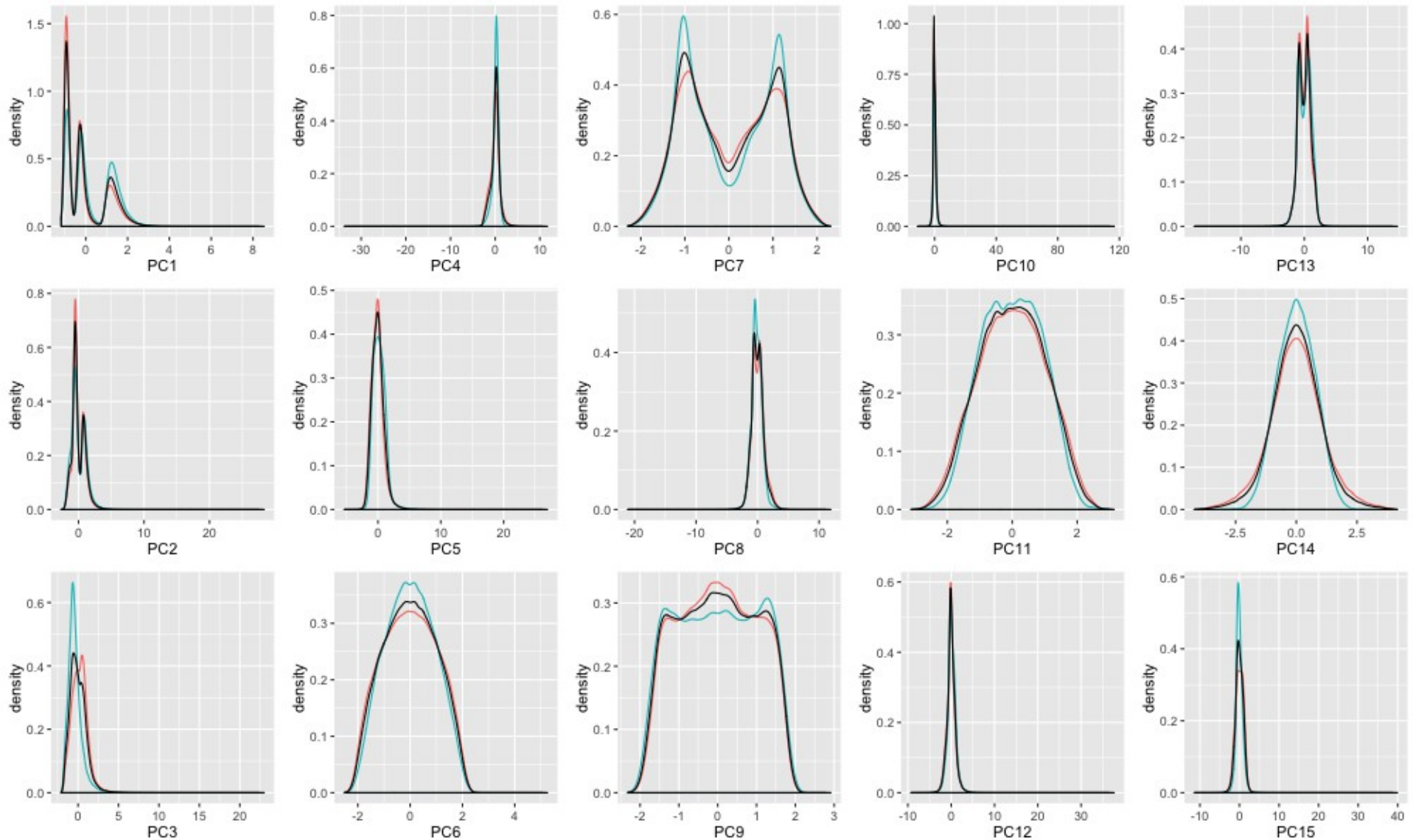
PCA



PCA Vectors



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_prodeteta_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