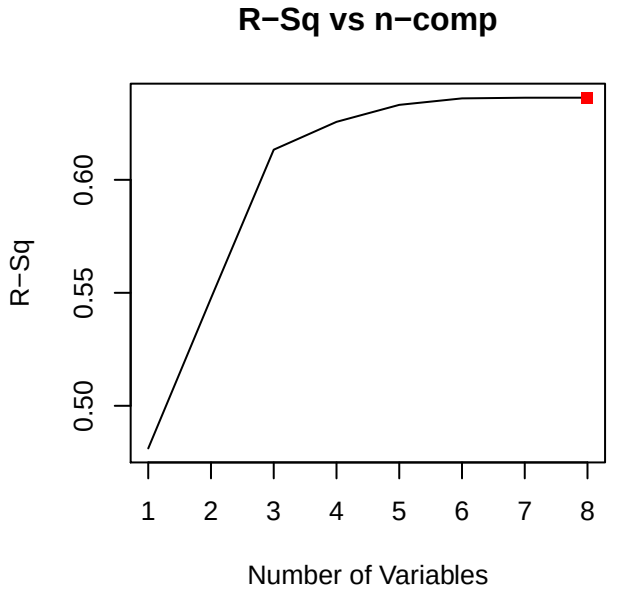
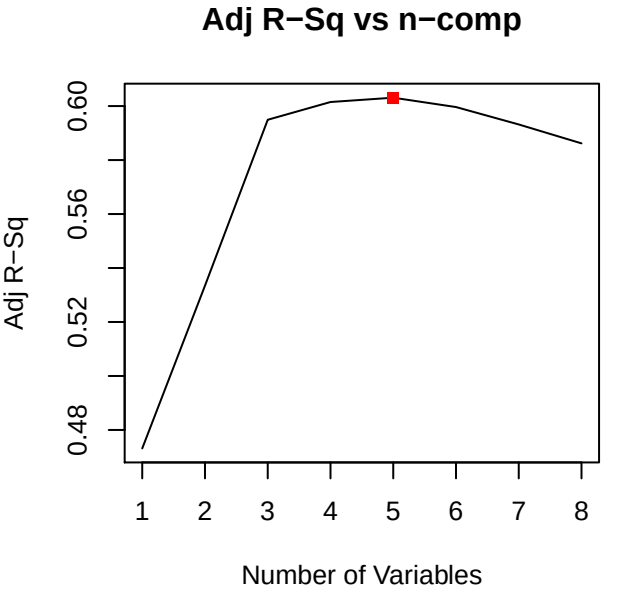
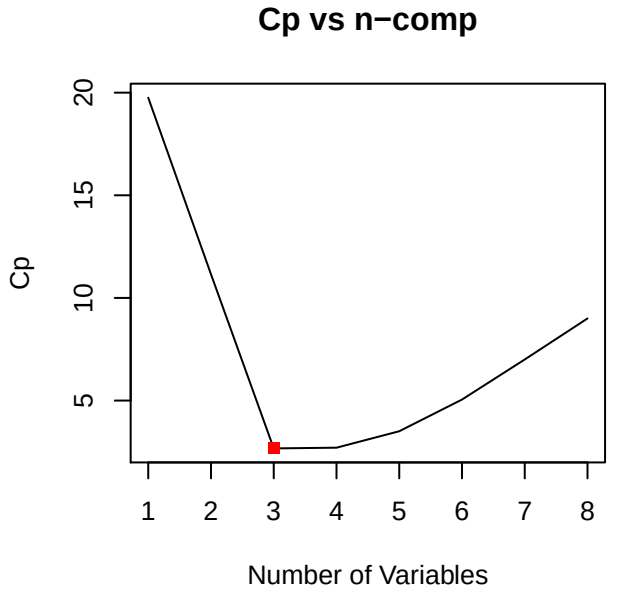
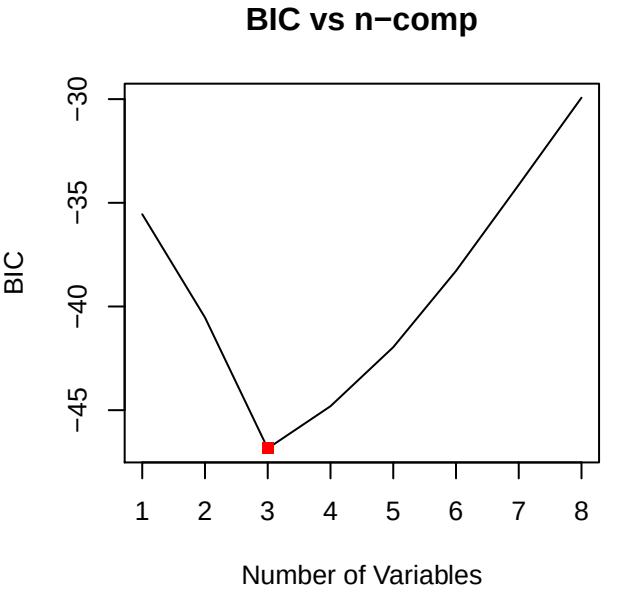
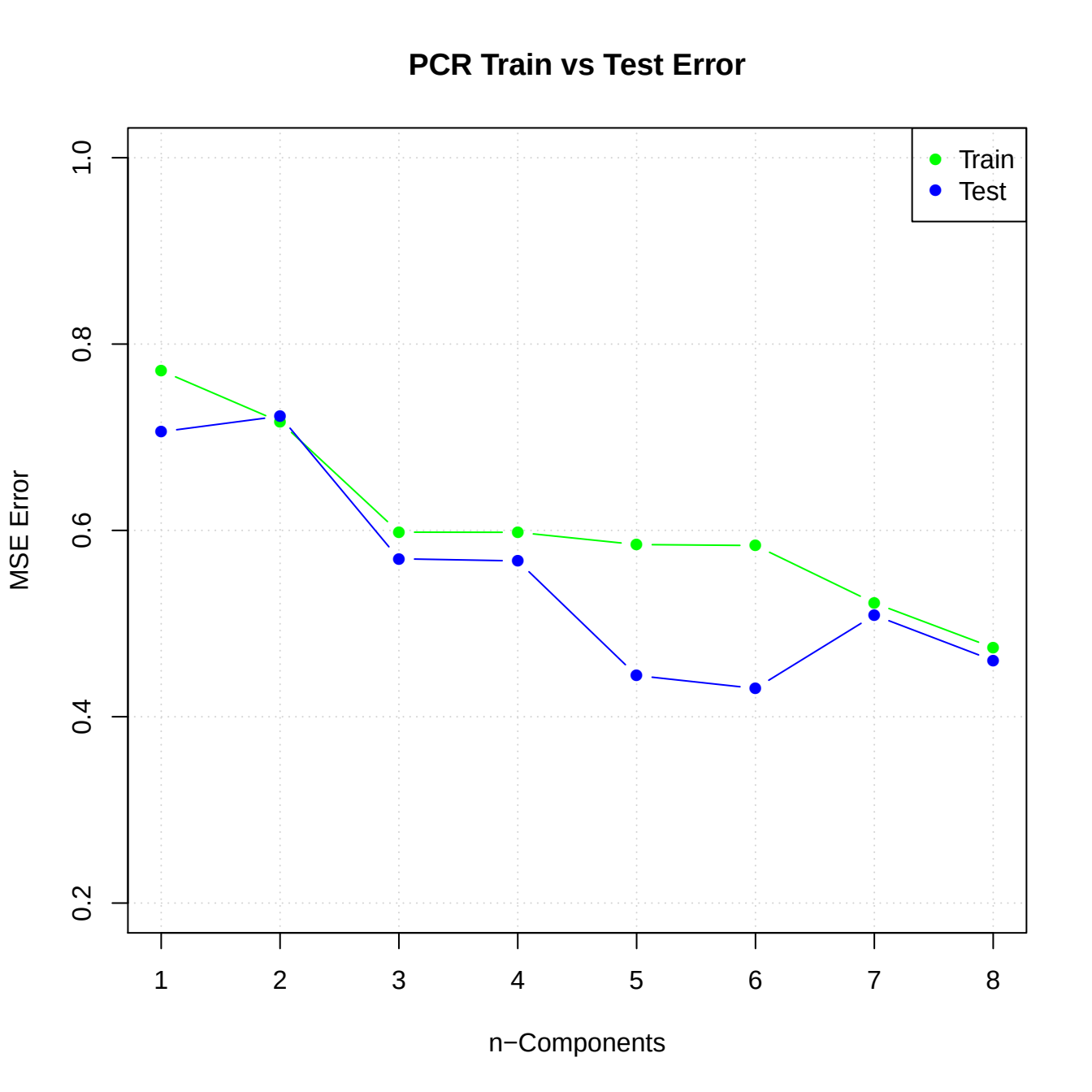
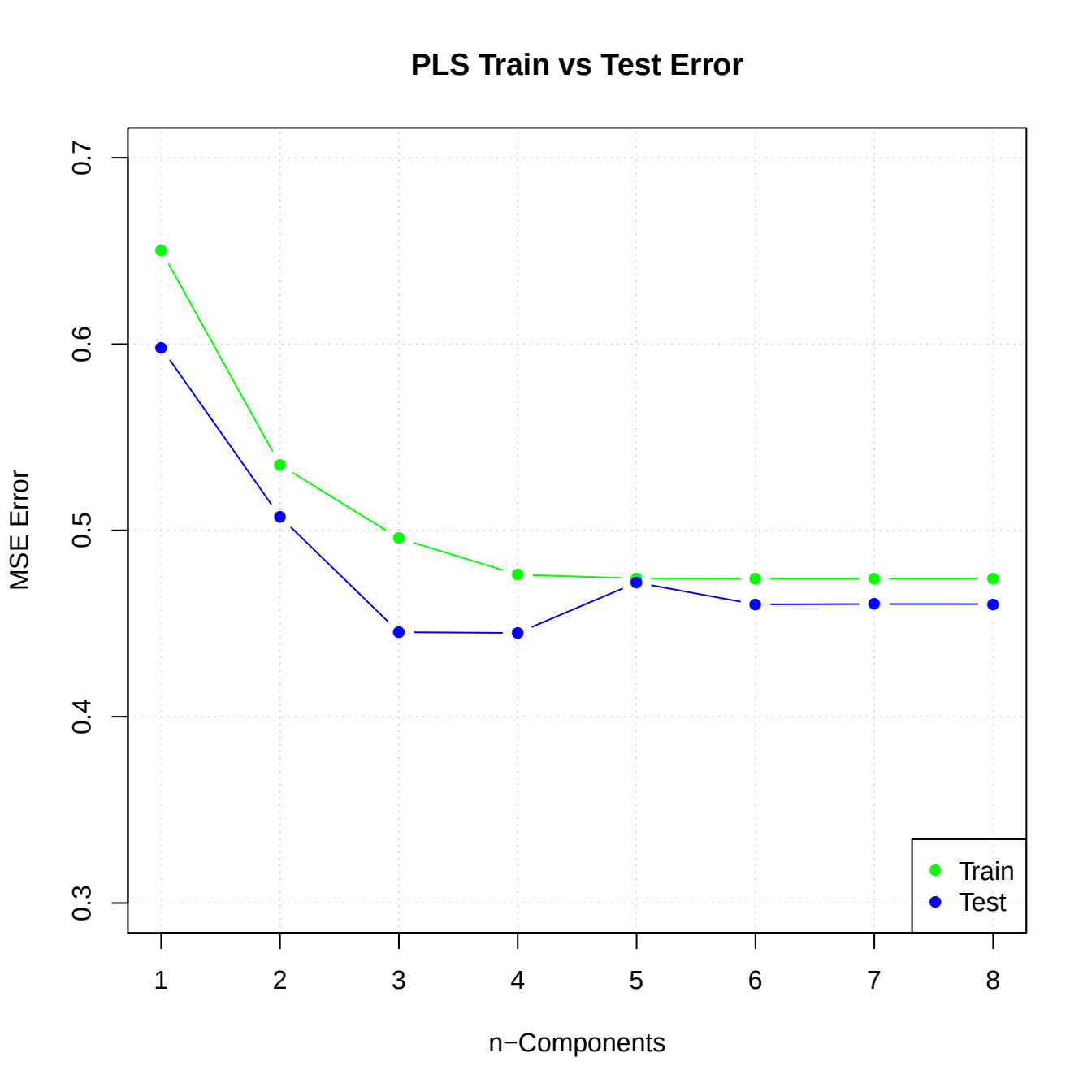

R−Sq vs n−comp
R−Sq
0.50
0.55
0.60
1
2
3
4
5
6
7
8
Number of Variables

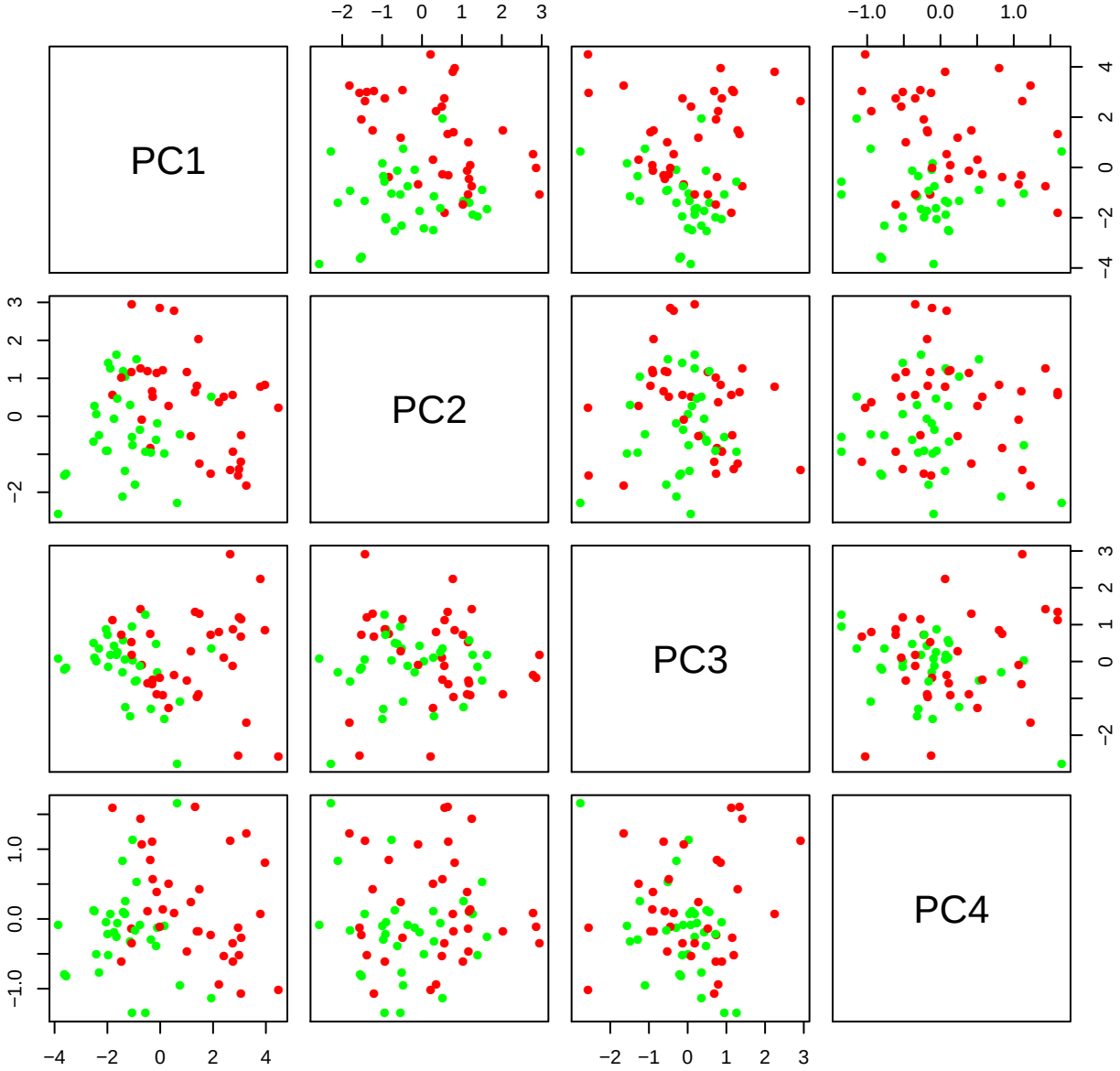

Adj R−Sq vs n−comp
Adj R−Sq
0.48
0.52
0.56
0.60
1
2
3
4
5
6
7
8
Number of Variables


Cp vs n−comp
Cp
5
10
15
20
1
2
3
4
5
6
7
8
Number of Variables

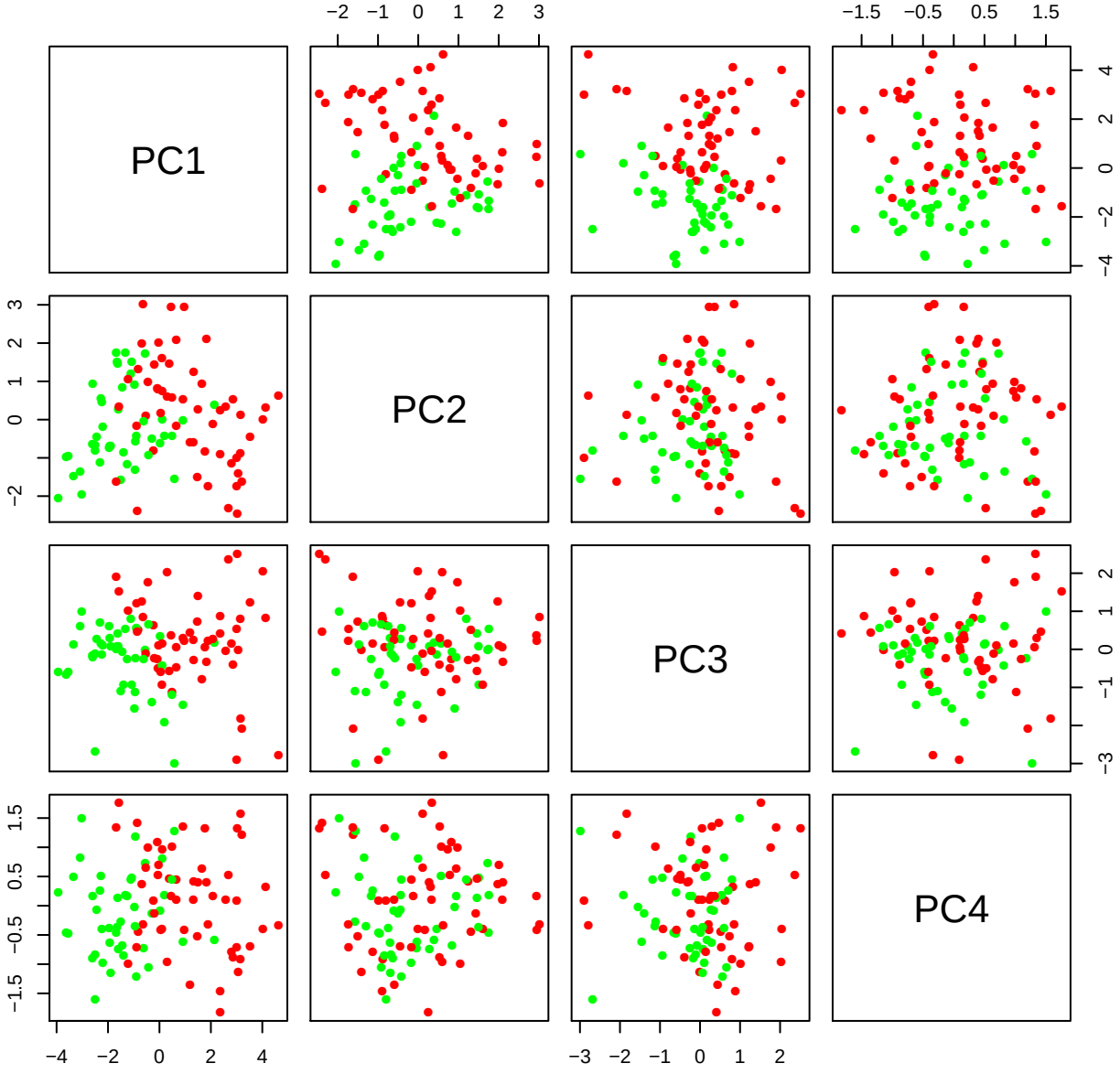

BIC vs n−comp
BIC
−45
−40
−35
−30
1
2
3
4
5
6
7
8
Number of Variables


PCR Train vs Test Error
Train
Test
MSE Error
1.0
0.8
0.6
0.4
0.2
1
2
3
4
5
6
7
8
n−Components

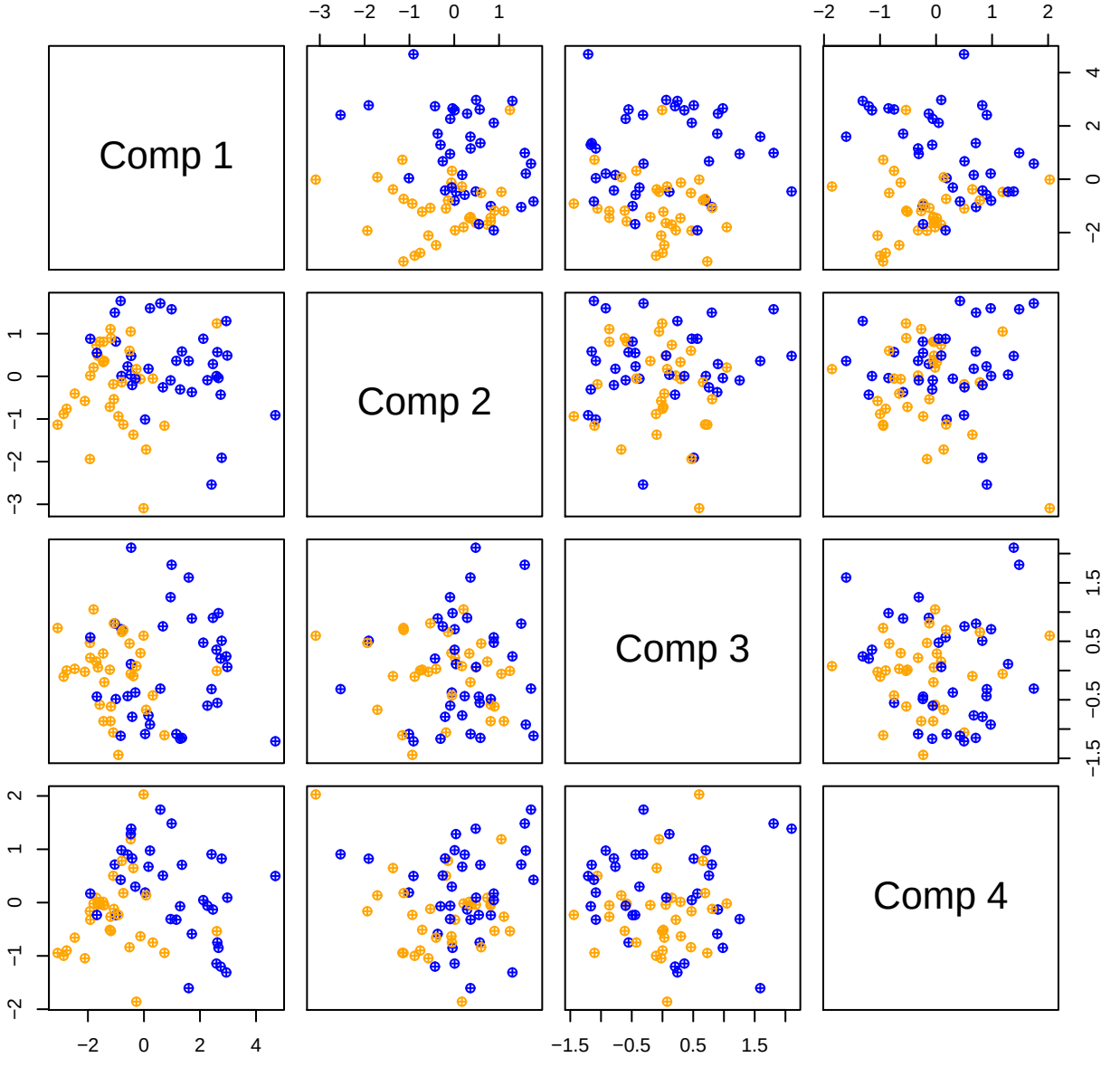

PLS Train vs Test Error
MSE Error
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
n−Components
Train
Test

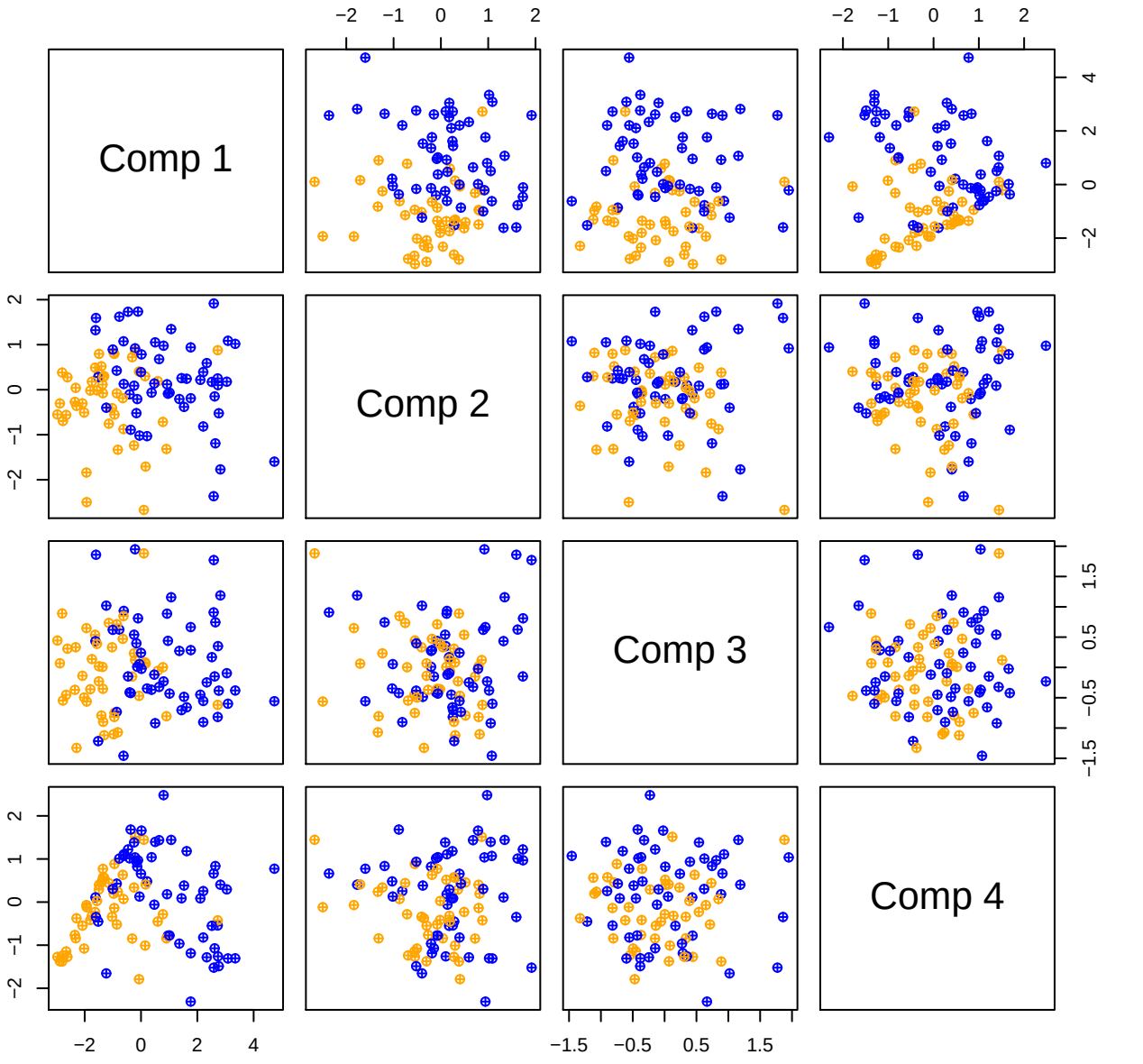

PCA Plot – Train Data
PC1
PC2
PC3
PC4
−2 −1 0 1 2 3
−1.0 0.0 1.0
−4 −2 0 2 4
−2 −1 0 1 2 3
−1.0 0.0 1.0
−4 −2 0 2 4
−2 −1 0 1 2 3
−2 −1 0 1 2 3
−4 −2 0 2 4

PCA Plot – Whole Data



PLS Plot − Train Data




PLS Plot − Whole data
Comp 1
Comp 2
Comp 3
Comp 4
−2 −1 0 1 2
−2 −1 0 1 2
−2 0 2 4
−1.5 −0.5 0.5 1.5