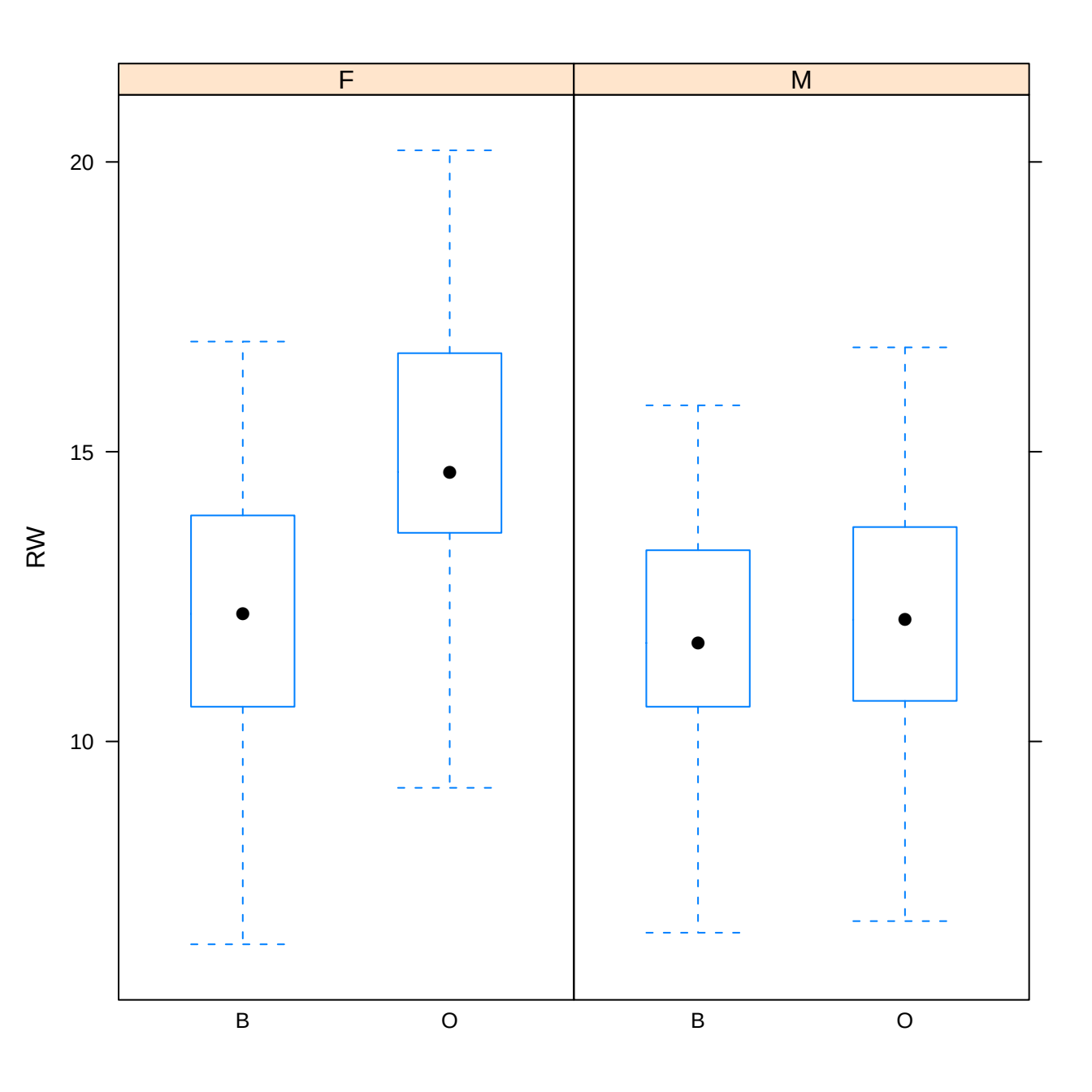
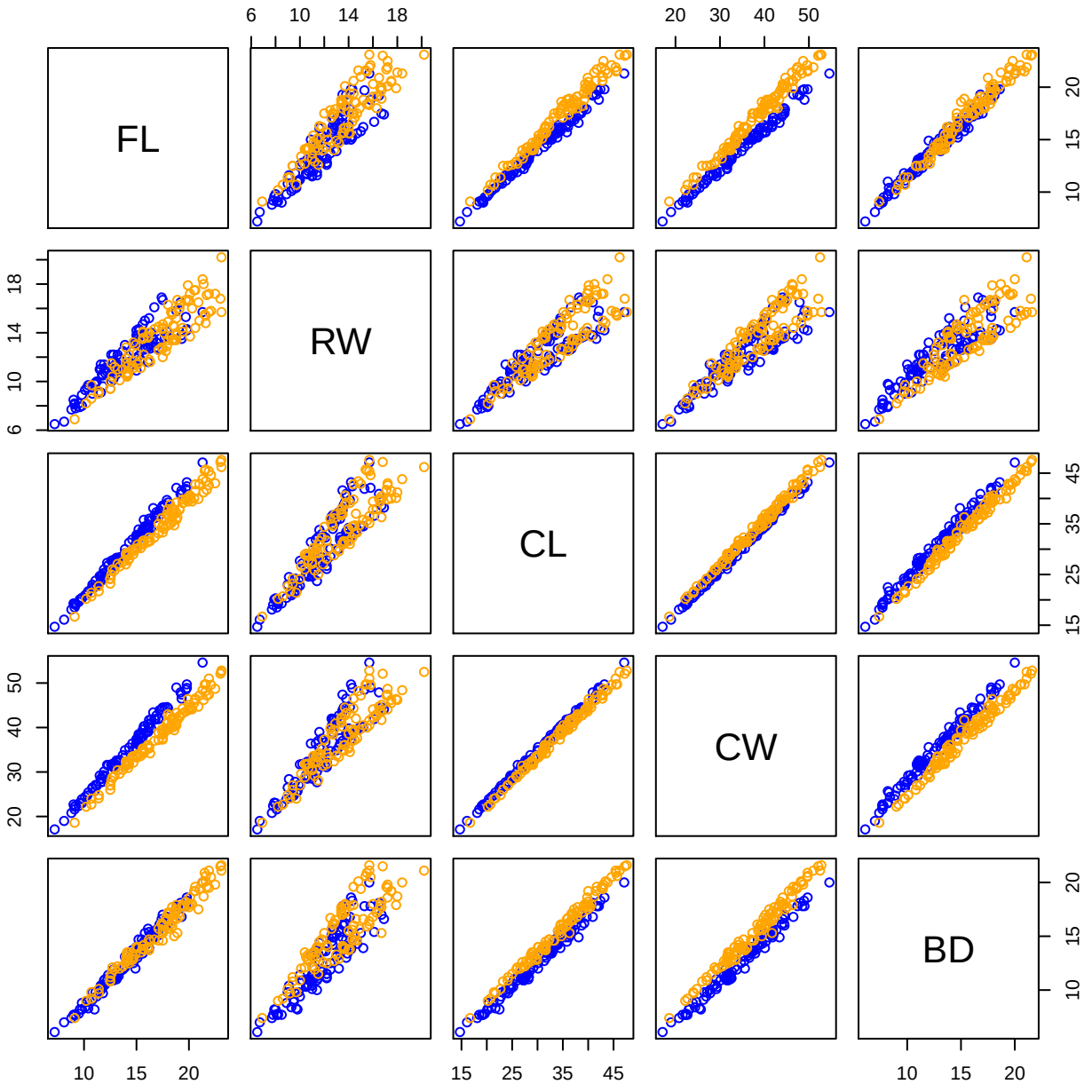
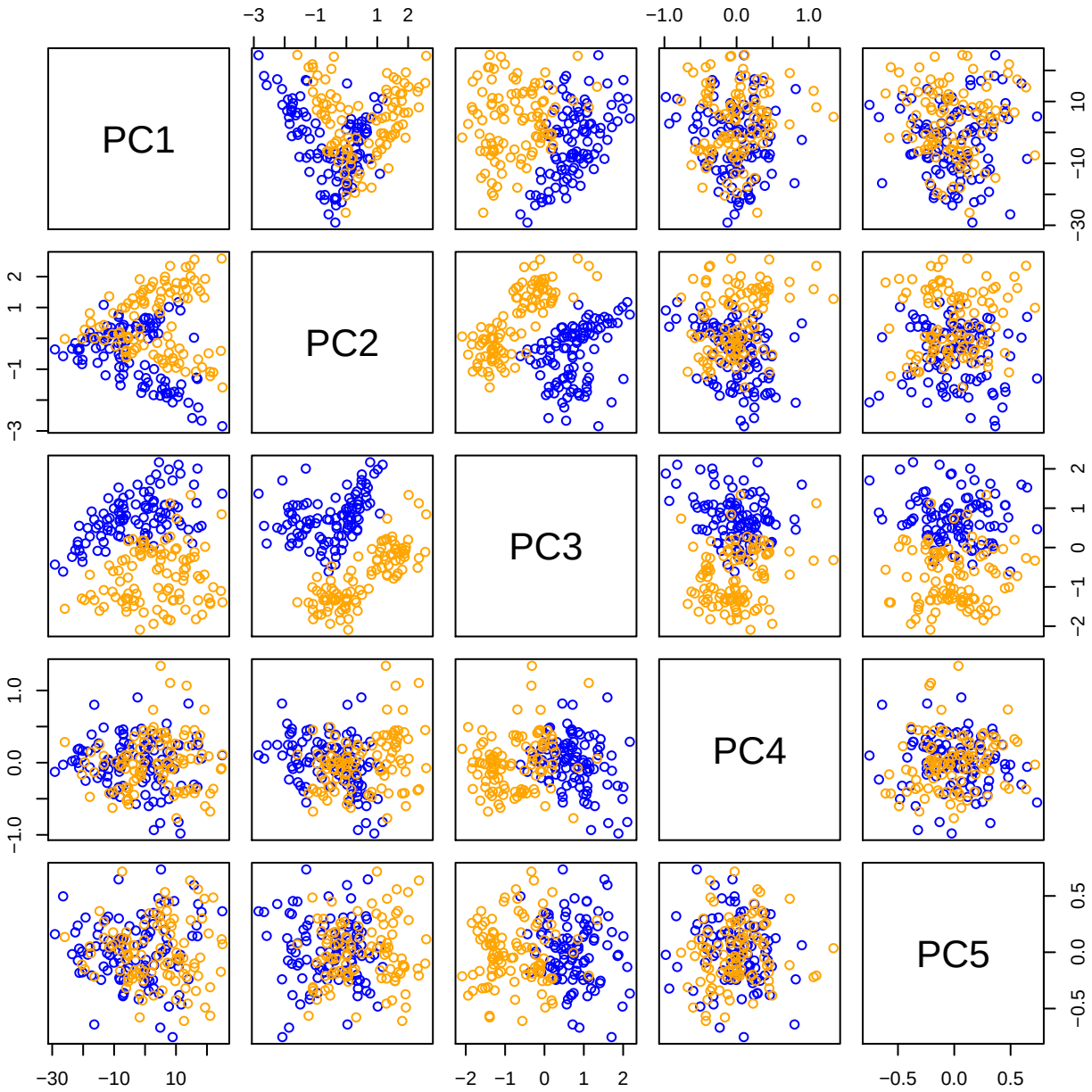
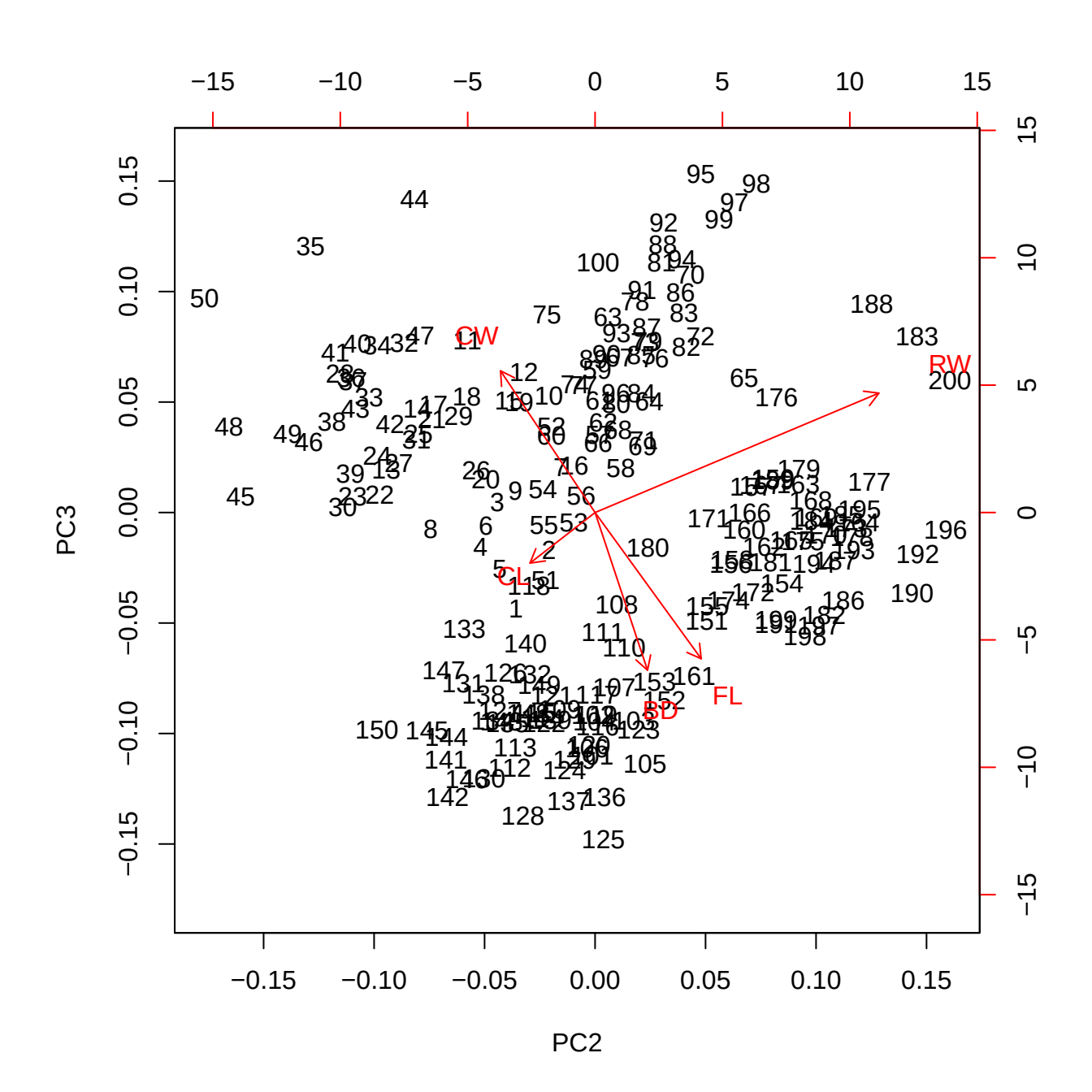
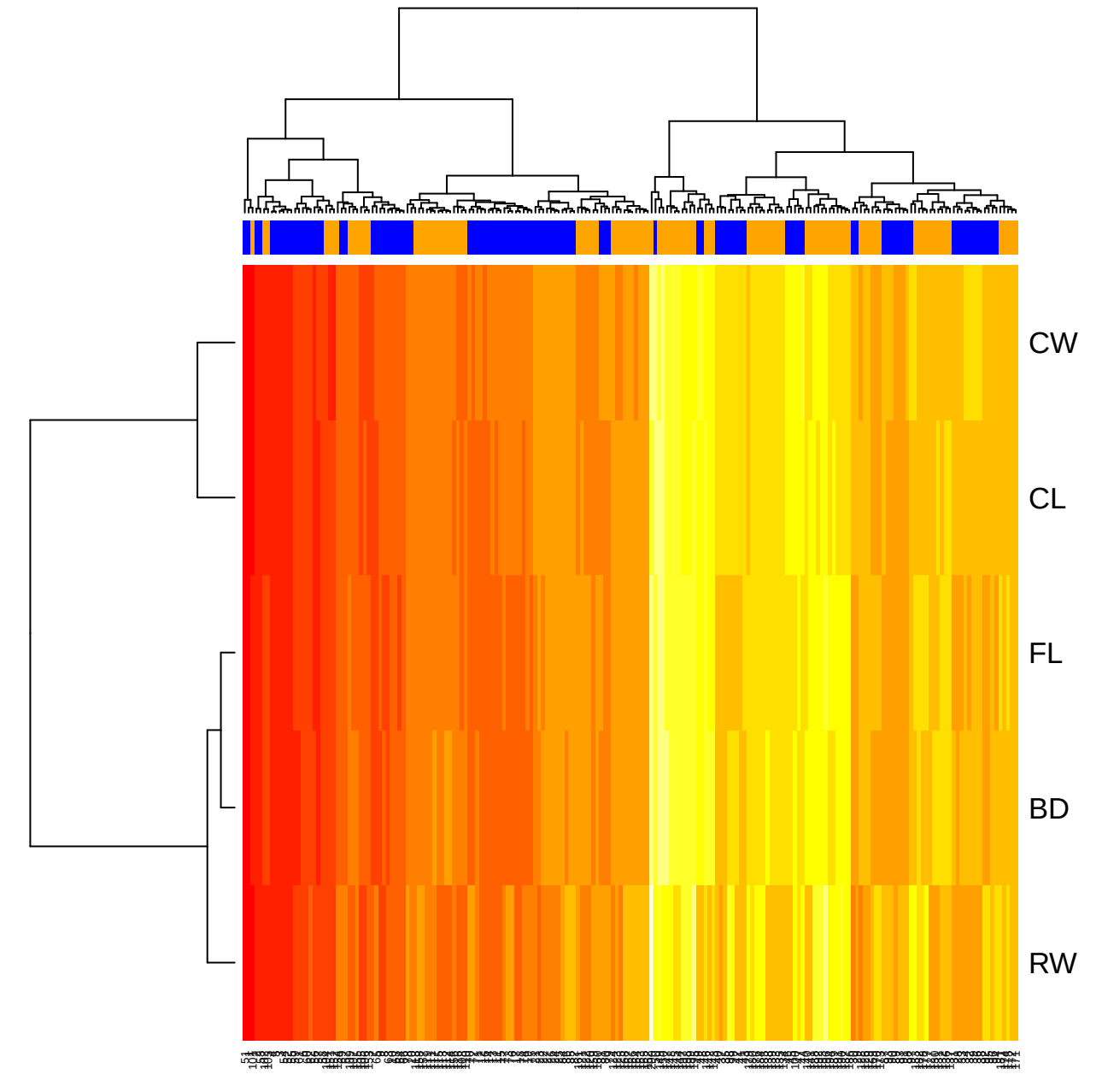
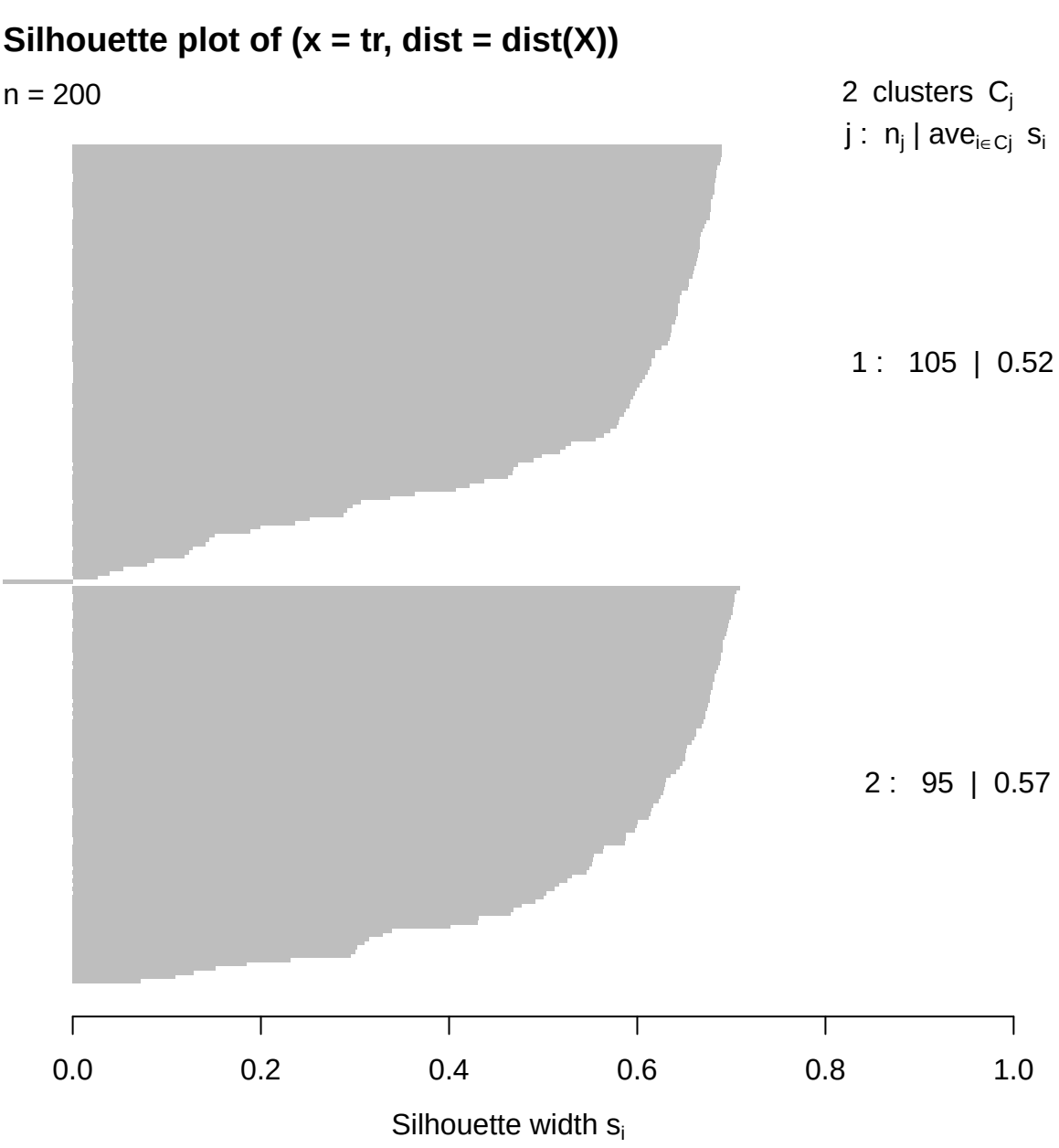

F
M
20
15
10
RW
B
O
B
O

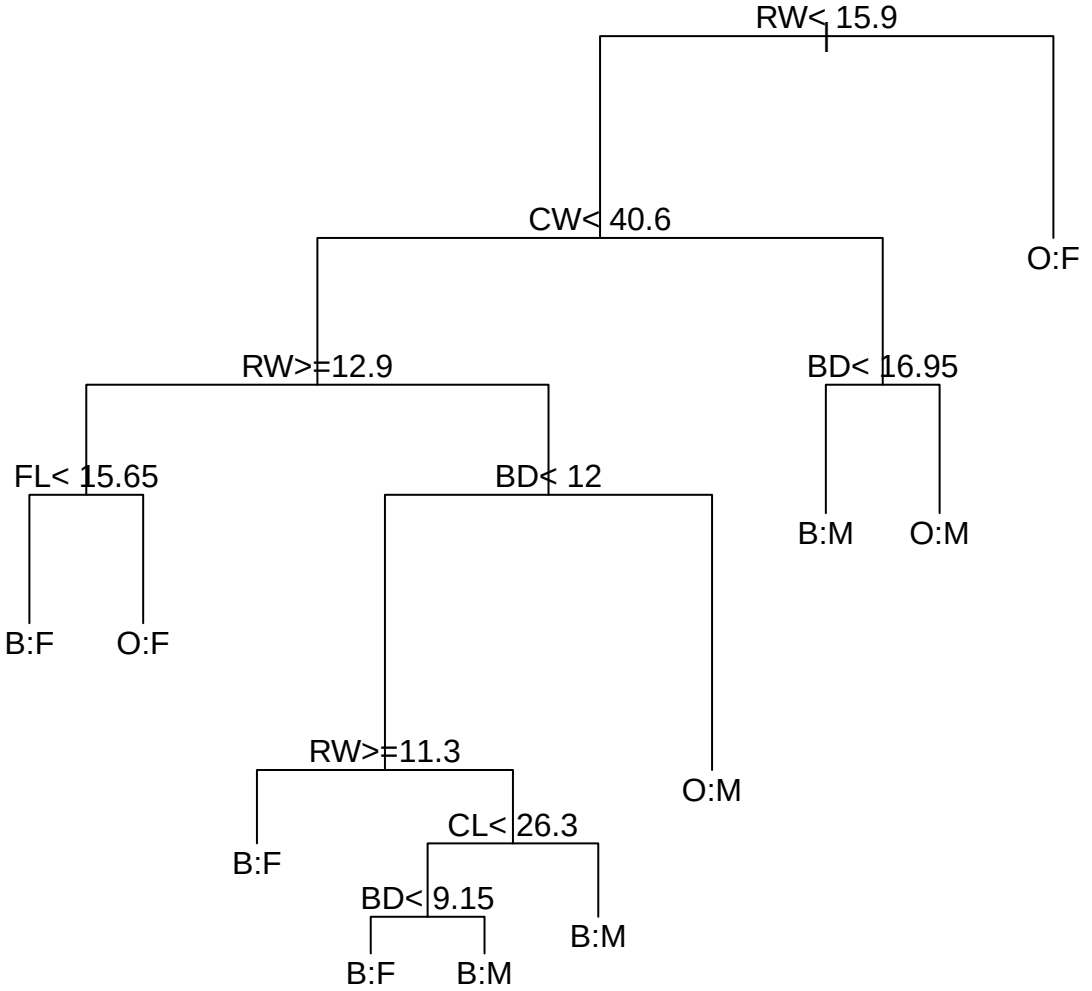

FL
RW
CL
CW
BD
6
10
14
18
20
30
40
50
10
15
20
15
25
35
45
10
15
20

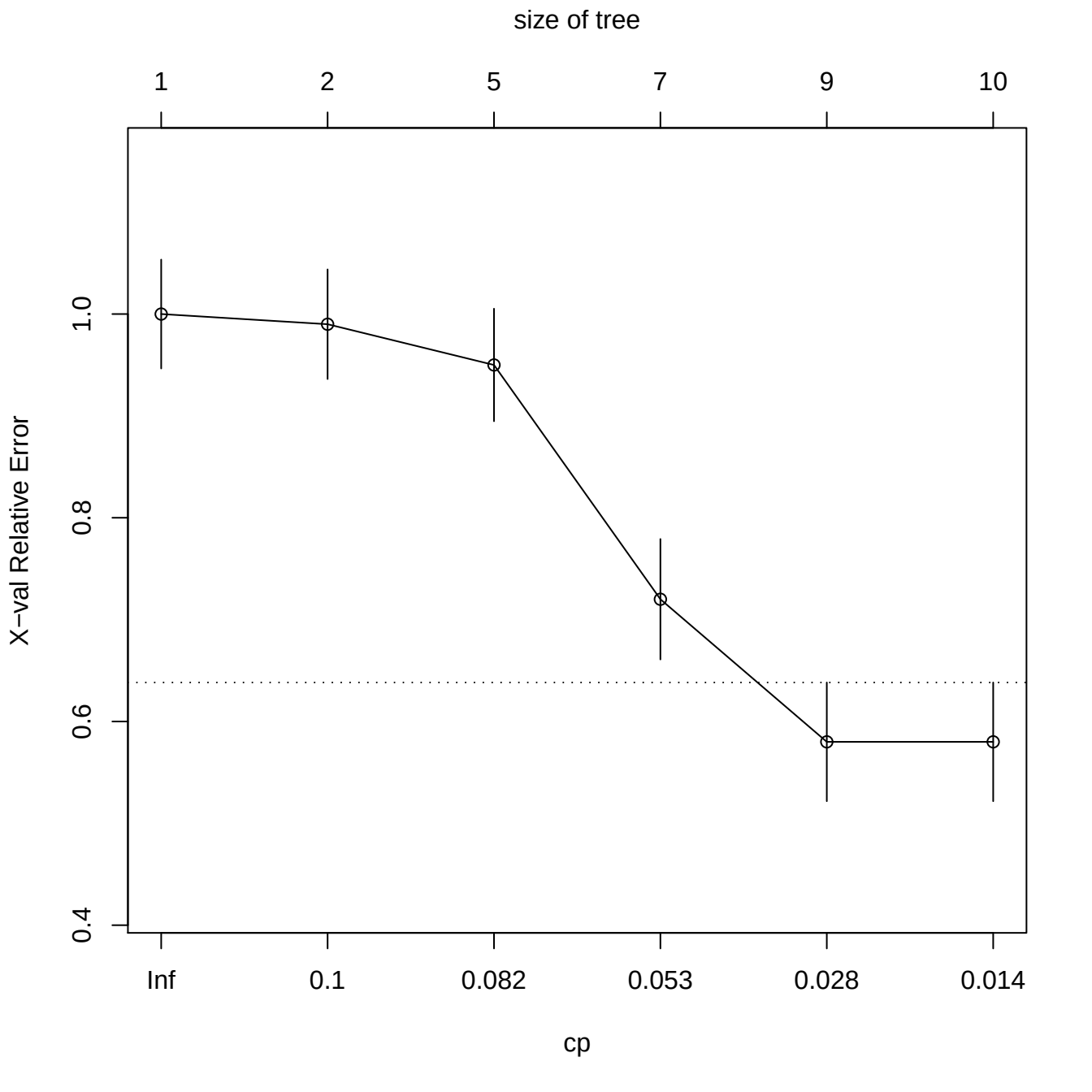

PC1
PC2
PC3
PC4
PC5
−3
−1
1
2
−1.0
0.0
1.0
10
−10
−30
2
1
−1
−3
2
1
0
−1
−2
1.0
0.0
−1.0
0.5
0.0
−0.5
−30
−10
10
−2
−1
0
1
2
−0.5
0.0
0.5

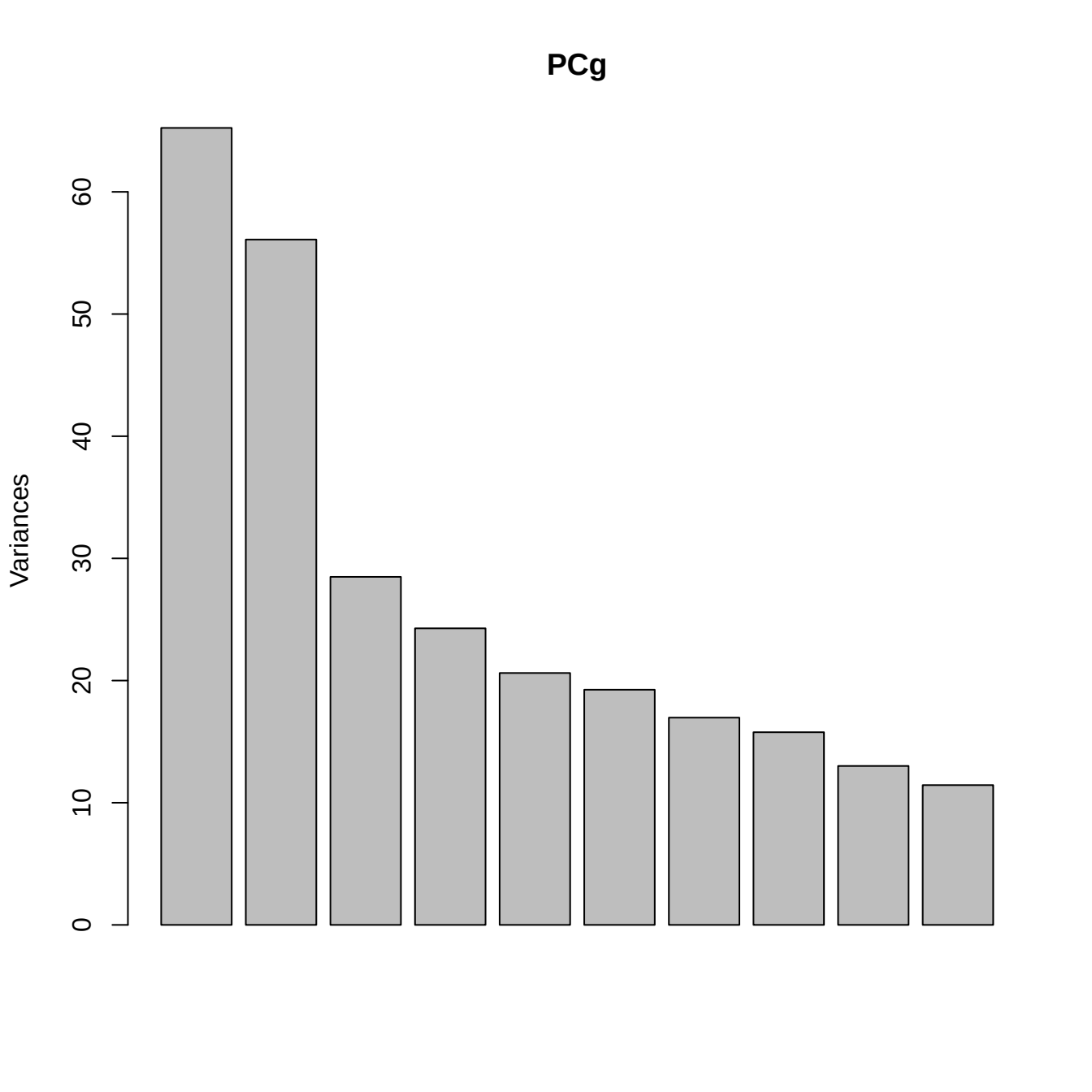

PC2
PC3
CW
RW
CL
FL
BD

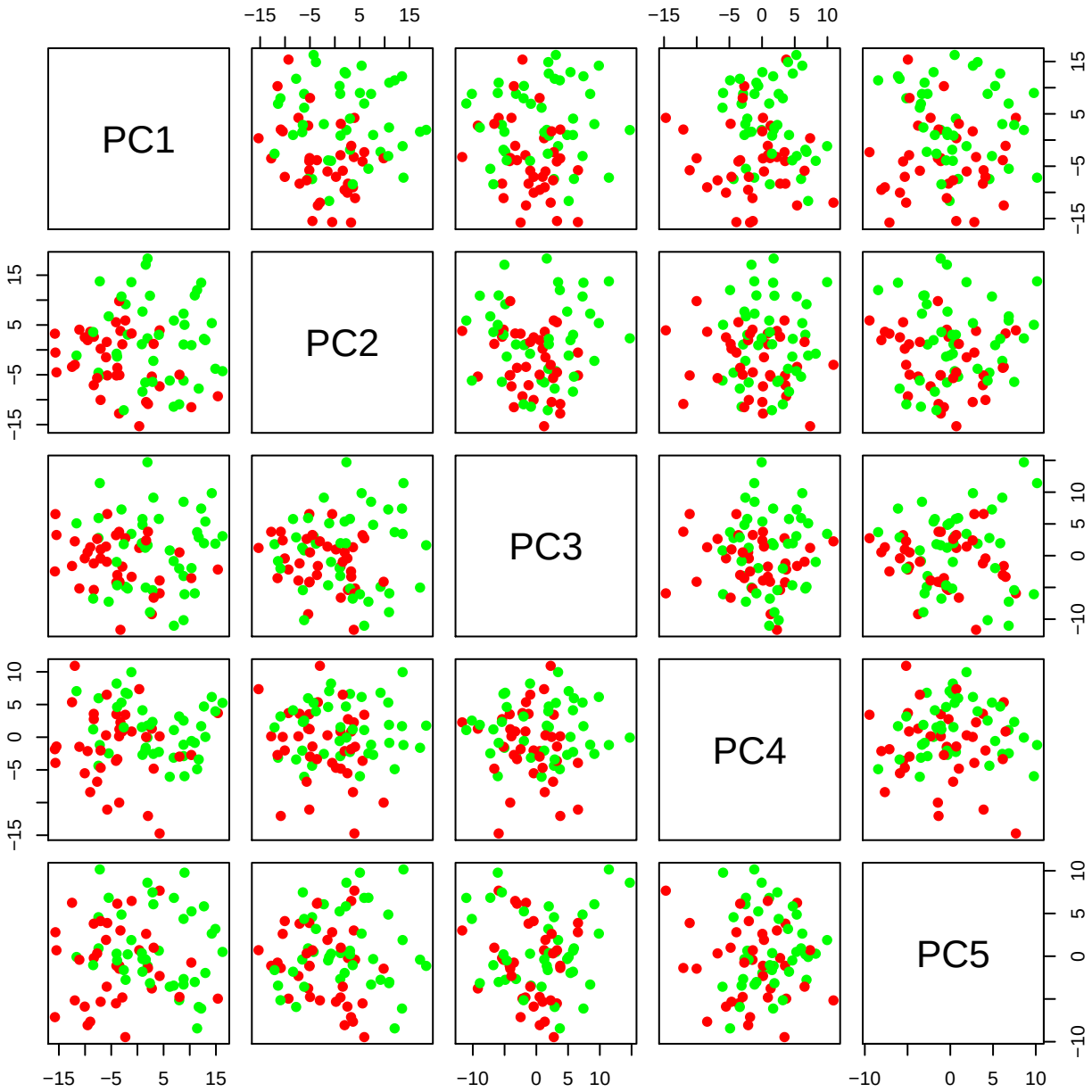

CW
CL
FL
BD
RW

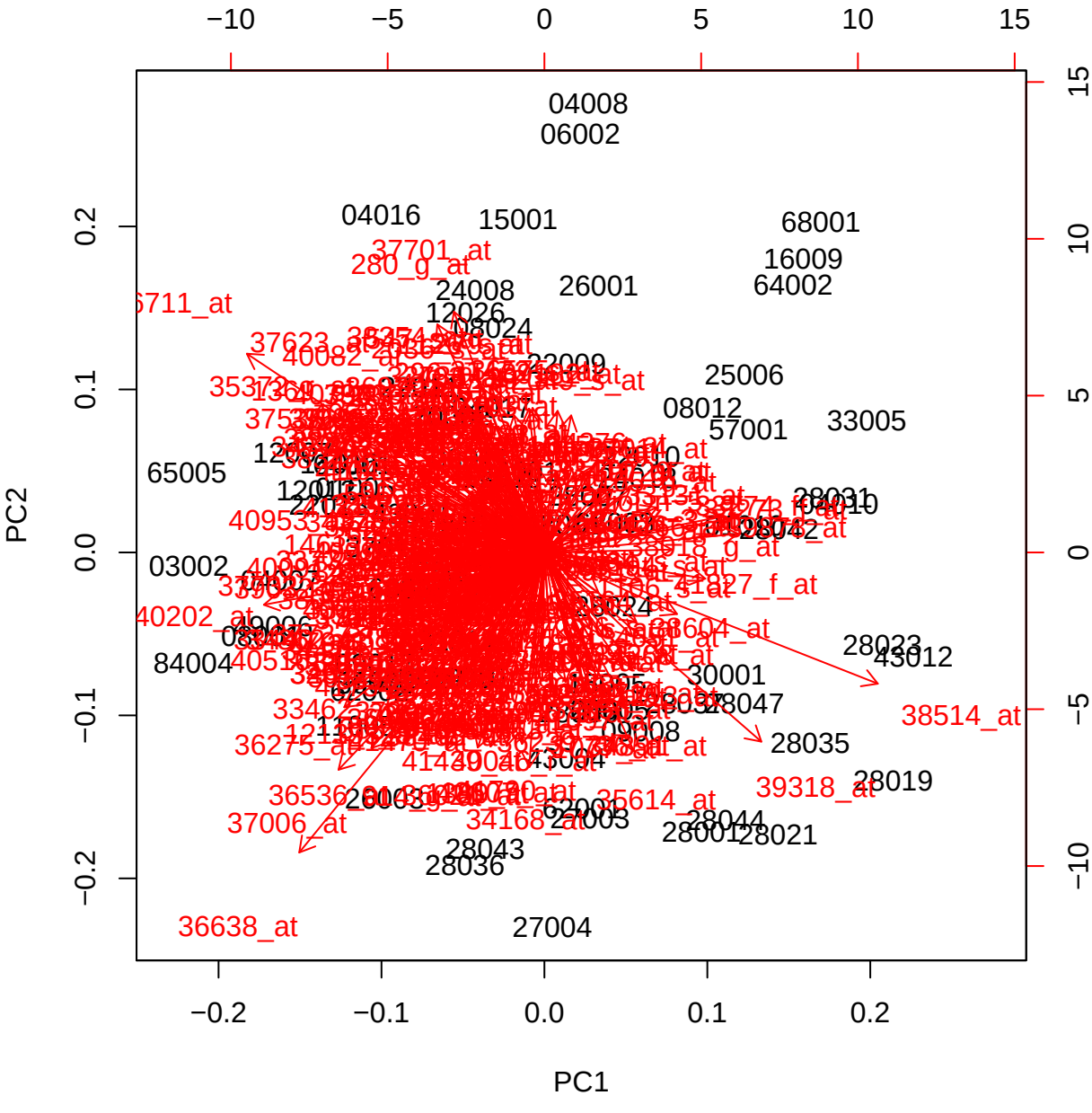

Silhouette plot of (x = tr, dist = dist(X))
n = 200
2 clusters C_j
j : n_j | $ave_{i \in Cj}$ s_i
1 : 105 | 0.52
2 : 95 | 0.57
0.0
0.2
0.4
0.6
0.8
1.0
Silhouette width s_i
Average silhouette width : 0.55


RW< 15.9
CW< 40.6
O:F
RW>=12.9
BD< 16.95
FL< 15.65
BD< 12
B:M
O:M
B:F
O:F
RW>=11.3
O:M
CL< 26.3
B:F
BD< 9.15
B:M
B:F
B:M

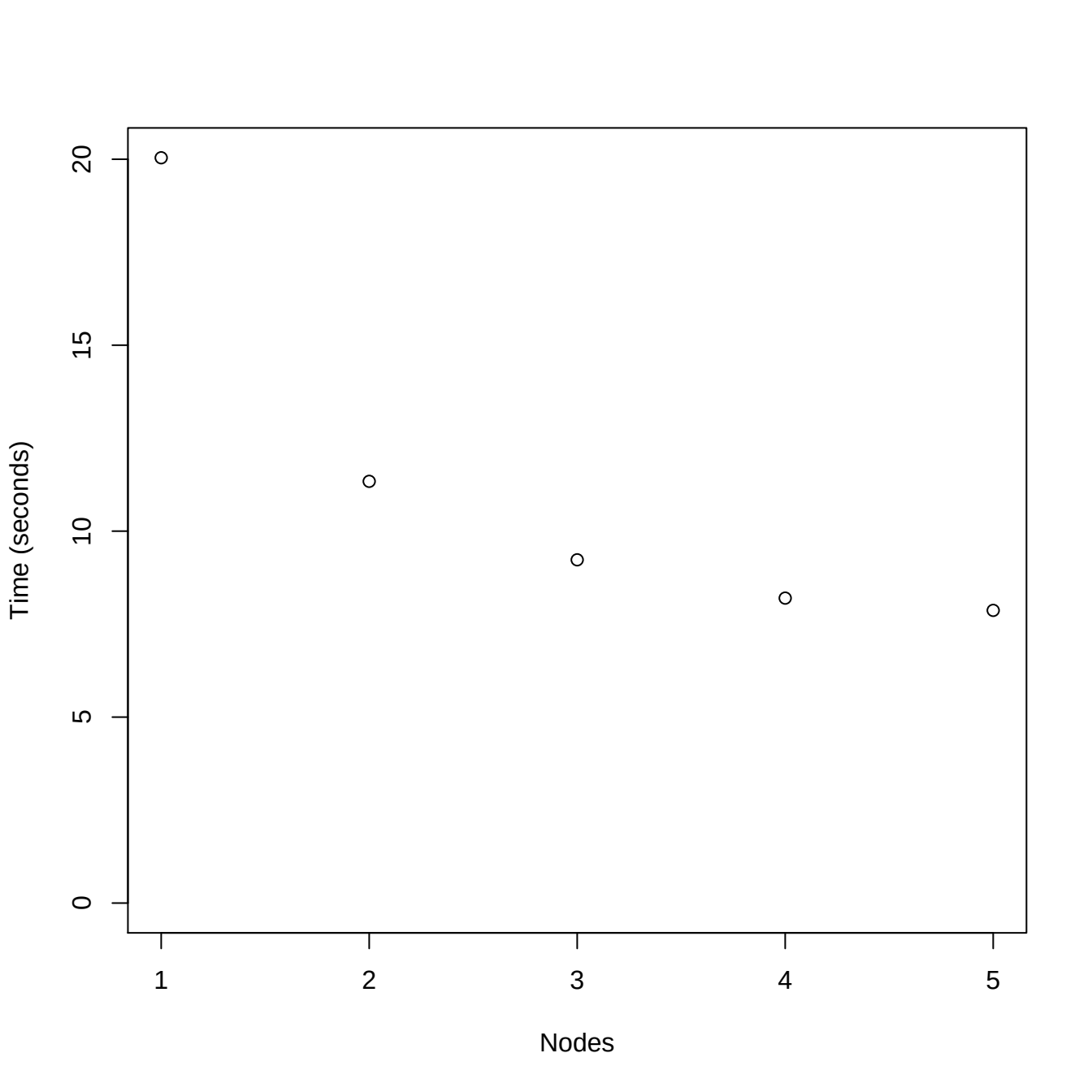

size of tree
1
2
5
7
9
10
X−val Relative Error
1.0
0.8
0.6
0.4
Inf
0.1
0.082
0.053
0.028
0.014
cp


PCg
Variances
0
10
20
30
40
50
60


PC1
PC2
PC3
PC4
PC5
−15 −5 5 15
−15 −5 0 5 10
−10 0 5 10



PC1
PC2
−10
−5
0
5
10
15
−0.2
−0.1
0.0
0.1
0.2
04008
06002
04016
15001
68001
16009
64002
37701_at
280_g_at
24008
26001
12026
08024
25006
08012
57001
33005
65005
03002
40202_at
84004
28023
43012
30001
28047
38514_at
28035
28019
39318_at
35614_at
34168_at
28044
28021
28043
28036
36638_at
27004
37006_at
36275_at


Time (seconds)
0
5
10
15
20
1
2
3
4
5
Nodes