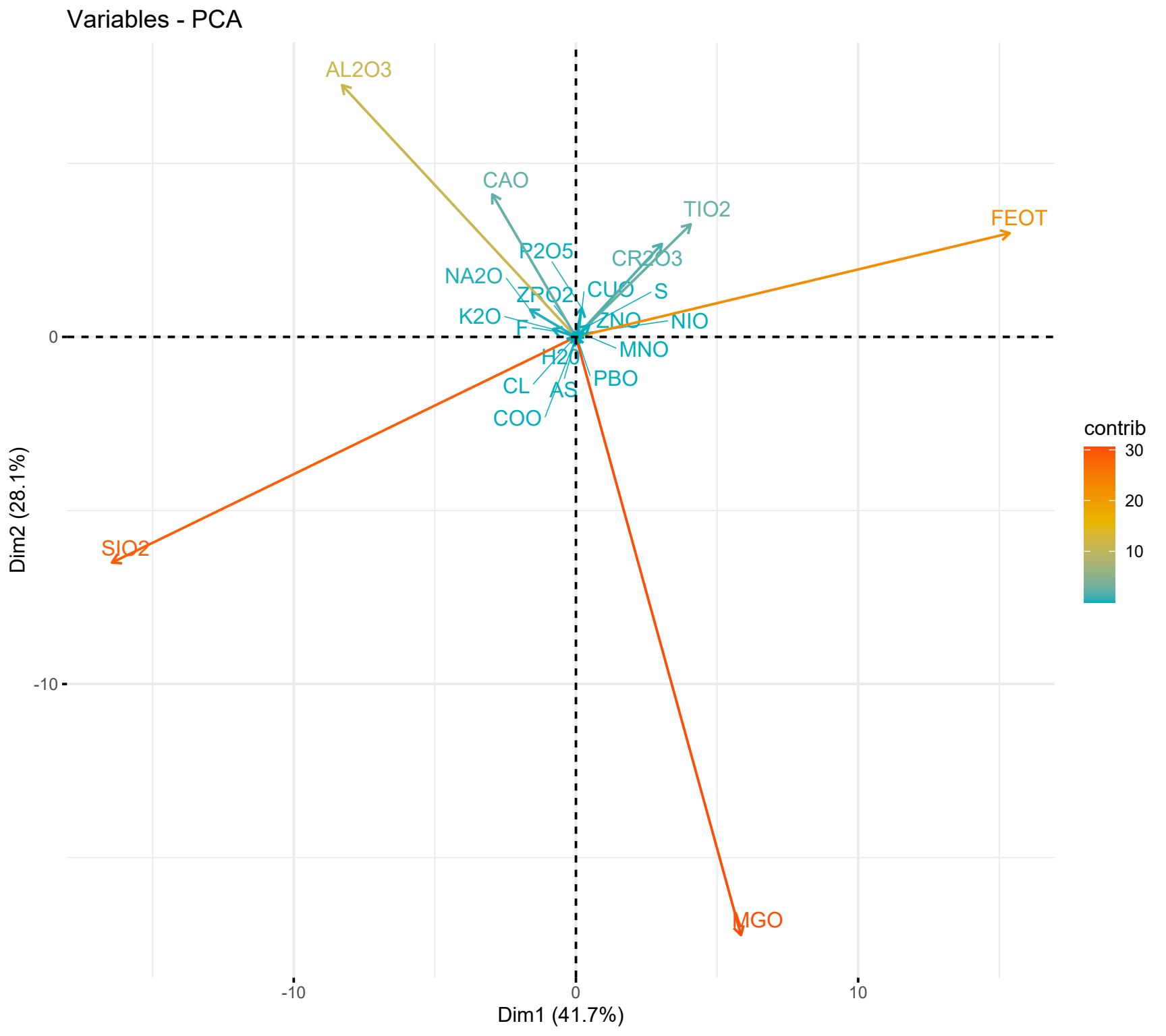
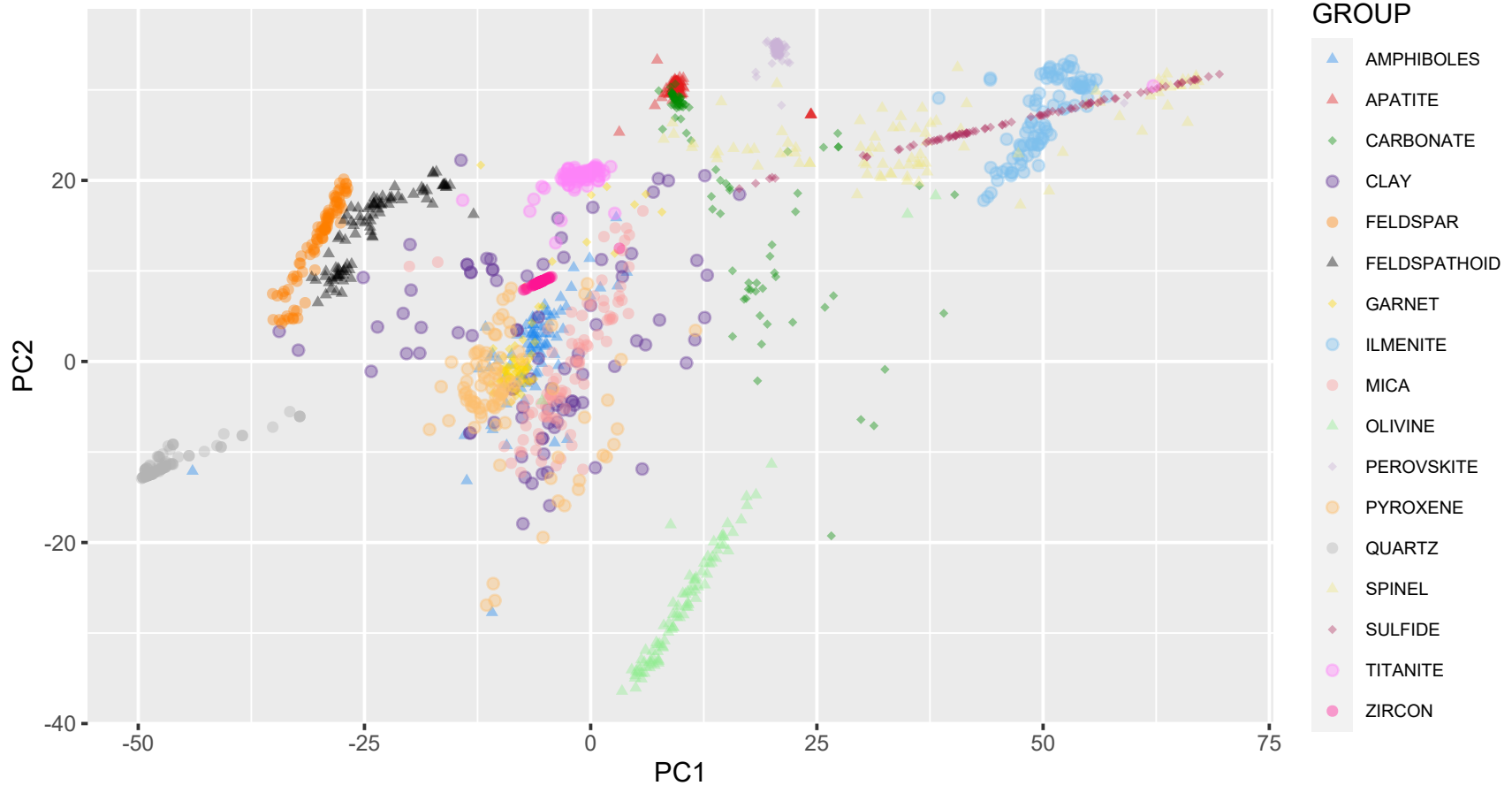
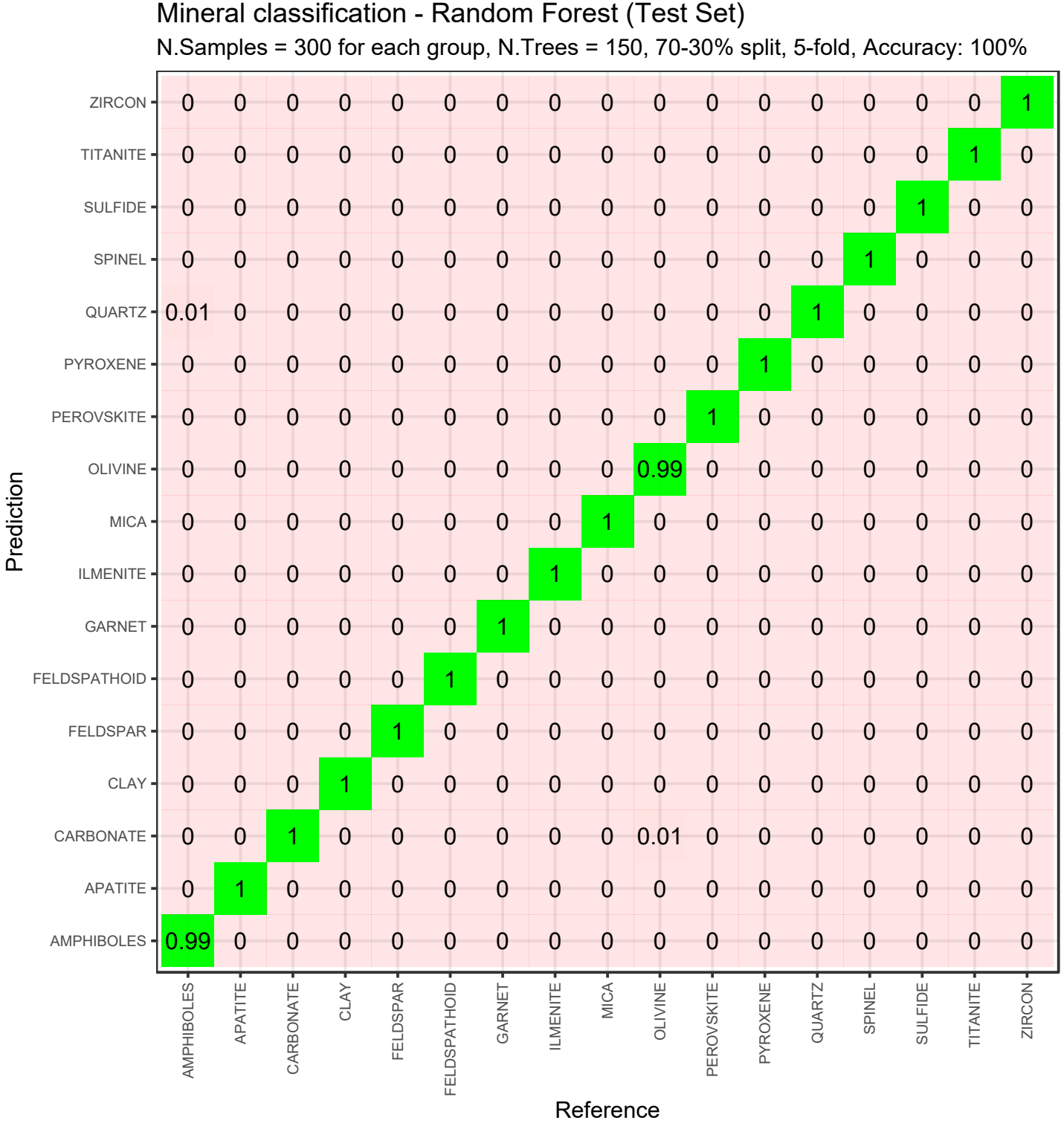

Variables - PCA
AL2O3
CAO
TIO2
FEOT
P2O5
CR2O3
NA2O
ZRO2
CUO
S
K2O
F
ZNO
NIO
MNO
H2O
PBO
CL
AS
COO
SIO2
MGO
contrib
30
20
10
0
-10
-10
0
10
Dim2 (28.1%)
Dim1 (41.7%)


GROUP
AMPHIBOLES
APATITE
CARBONATE
CLAY
FELDSPAR
FELDSPATHOID
GARNET
ILMENITE
MICA
OLIVINE
PEROVSKITE
PYROXENE
QUARTZ
SPINEL
SULFIDE
TITANITE
ZIRCON
PC2
20
0
-20
-40
PC1
-50
-25
0
25
50
75


Mineral classification - Random Forest (Test Set)
N.Samples = 300 for each group, N.Trees = 150, 70-30% split, 5-fold, Accuracy: 100%
Prediction
Reference
ZIRCON
TITANITE
SULFIDE
SPINEL
QUARTZ
PYROXENE
PEROVSKITE
OLIVINE
MICA
ILMENITE
GARNET
FELDSPATHOID
FELDSPAR
CLAY
CARBONATE
APATITE
AMPHIBOLES
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0
0.01 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0.99 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1 0 0 0 0 0 0 0.01 0 0 0 0 0 0 0
0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0.99 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AMPHIBOLES
APATITE
CARBONATE
CLAY
FELDSPAR
FELDSPATHOID
GARNET
ILMENITE
MICA
OLIVINE
PEROVSKITE
PYROXENE
QUARTZ
SPINEL
SULFIDE
TITANITE
ZIRCON