#

library(readxl) #

library(caret) #

library(randomForest) #

library(xgboost) #

library(writexl) #

#

trainData <- read\_excel("C:/Users/Liu/Desktop/15ta.xlsx")

testData <- read\_excel("C:/Users/Liu/Desktop/15te.xlsx")

#

set.seed(3)

#

str(trainData)

str(testData)

#

testData <- testData[ , colnames(trainData)]

#

controlD <- trainControl(method = "cv", number = 10, search = "grid")

#

xgbGrid <- expand.grid(nrounds = 38, #

max\_depth = 2, #

eta = 0.3, #

gamma = 0, #

colsample\_bytree = 1, #

min\_child\_weight = 1, #

subsample = 1, #

rate\_drop = 0.3, #

skip\_drop = 0.5) #

#

modelXGB <- train(AGB ~ ., data = trainData, method = 'xgbDART',

trControl = controlD, tuneGrid = xgbGrid,

verbose = FALSE)

#

print(modelXGB)