SUPPLEMENTARY FILE

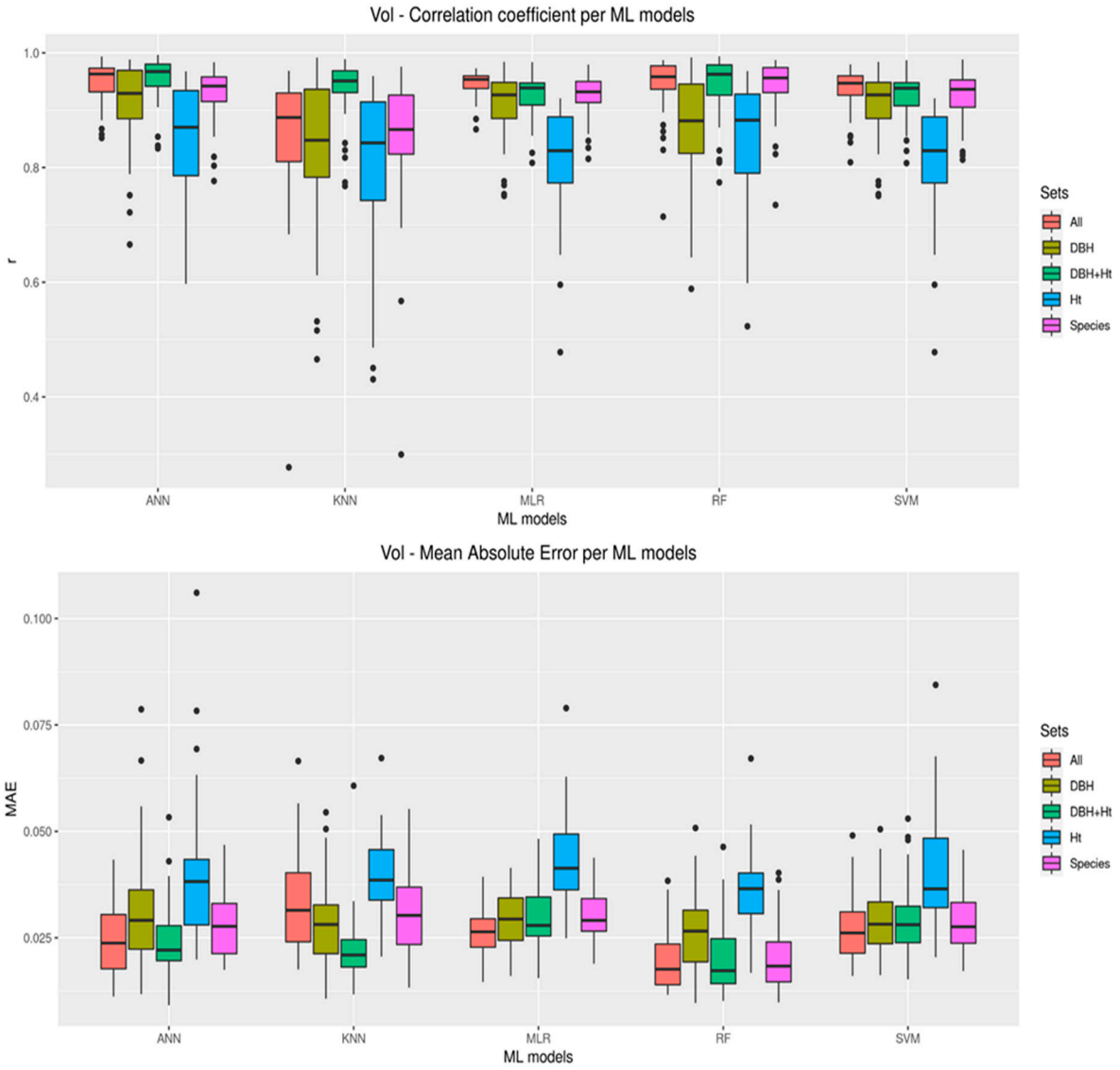


Figure S1. Boxplot for Pearson correlation coefficient (r) and Mean Absolute Error (MAE) between estimated and observed values for the tree volume obtained with different machine learning models: Artificial Neural Network (ANN), K-Nearest Neighbour (KNN), Multiple Linear Regression (MLR), Random Forest (RF) and Support Vector Machine (SVM).

Accessing the best model for wood tree prediction

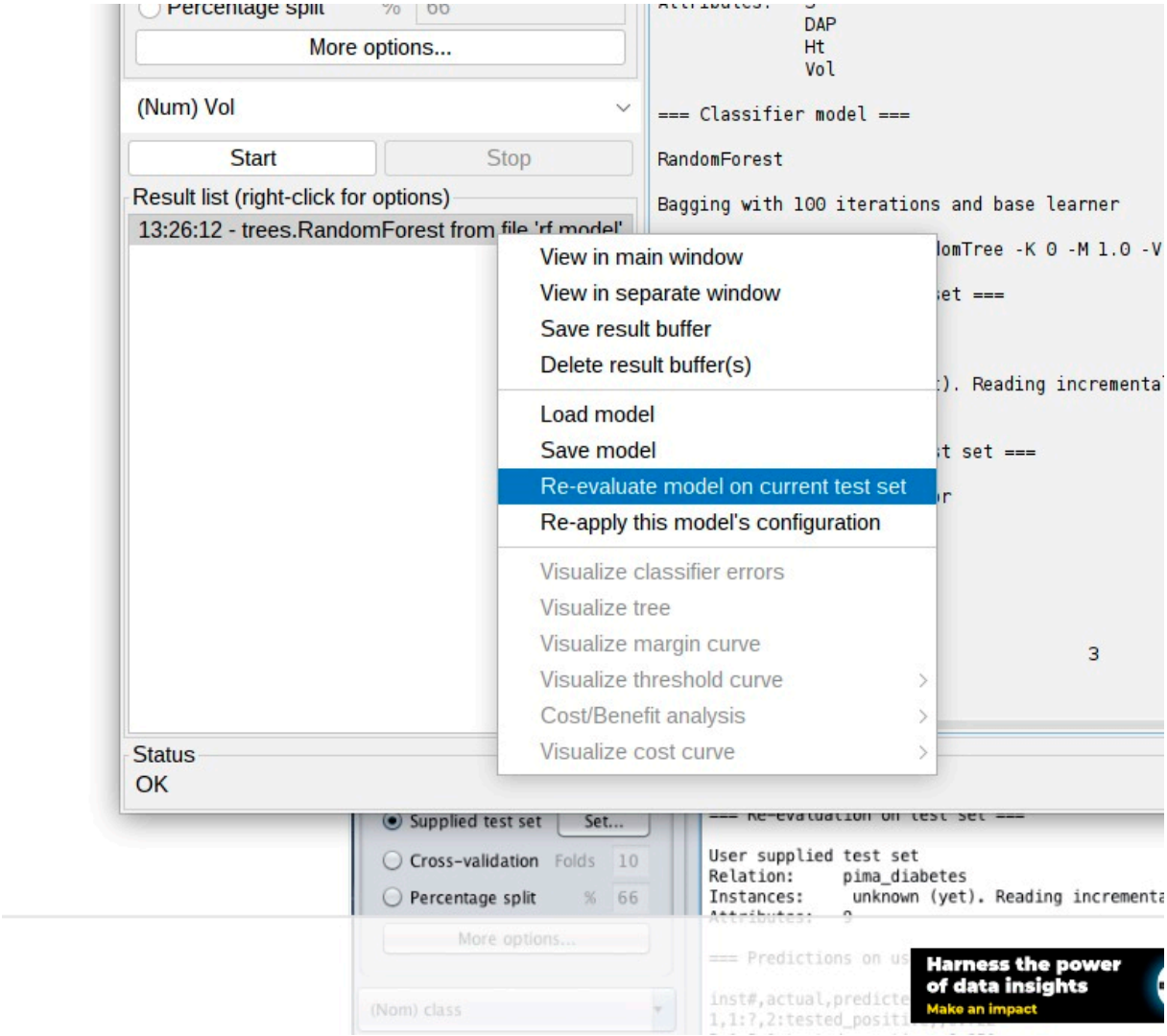
In Weka explorer it is necessary to load the .arff file containing the values of DBH and HT. Wood volume values are unknown and should be indicated with "?", similar to the image below.

```
=== Predictions on test set ===

inst#,actual,predicted,error
1,0,?,?
2,0,?,?
3,0,?,?
```

Open the Classify tab and click and select Supplied Test Set from the Test Options option. Then right -click on the blank part of Result List. Among the options, click Load Model and choose the file available from the link: **https://drive.google.com/drive/folders/11YDwz2Z5hiNdbGtEt7Y3_SyiIjqnJXbO?usp=sharing**.

Right -click on the model loaded with Result List and choose the option "Re-evaluate model on current test set" as the image below:



After that, the volume of wood will be generated by the available model.

```
inst#,actual,predicted,error
1,0,0.049,0.049
2,0,0.075,0.075
3,0,0.084,0.084
```