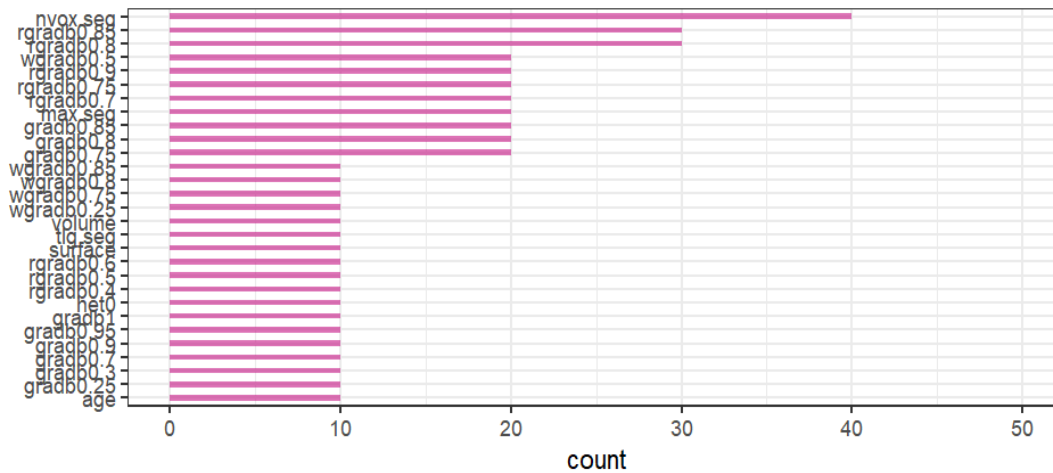


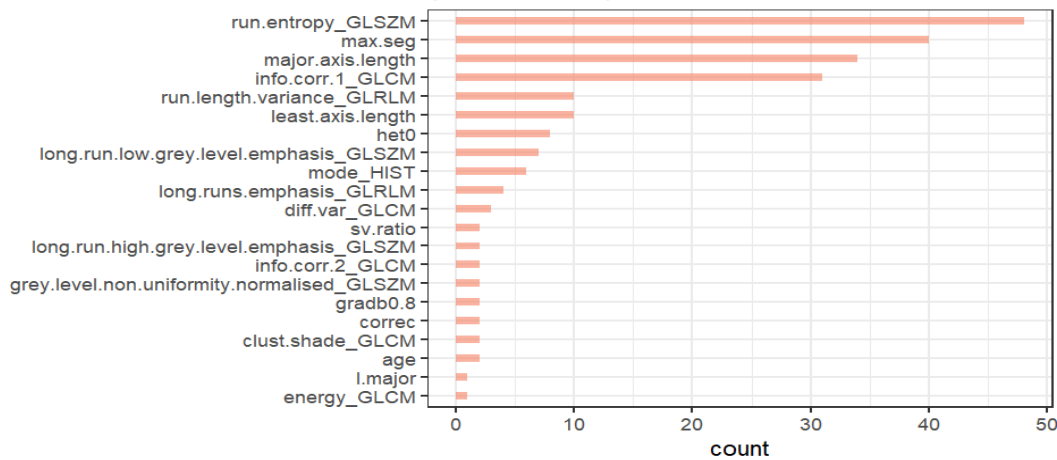
# Feature selection plot

## Stage 1 vs Stage 3 – No Pre Filter

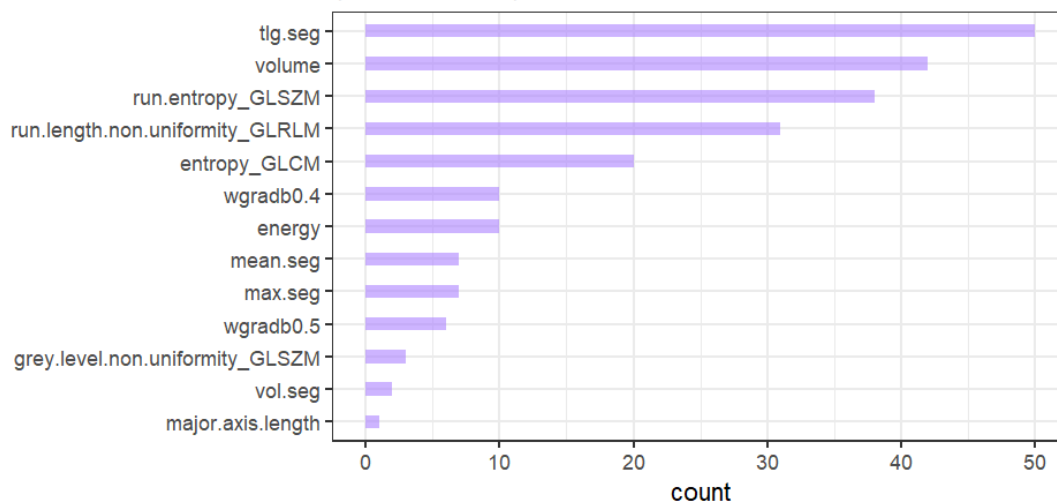
Feature stability plot - Backwd Step Wise -  
class 1 vs class 3 (No Pre-Filter)



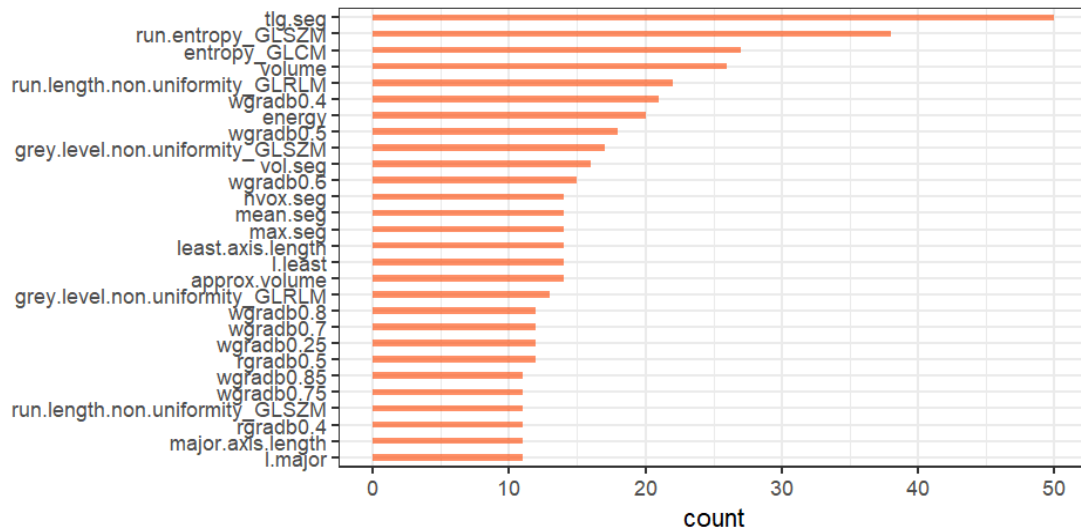
Feature stability plot - LASSO - class 1 vs class 3  
(No Pre-Filter)



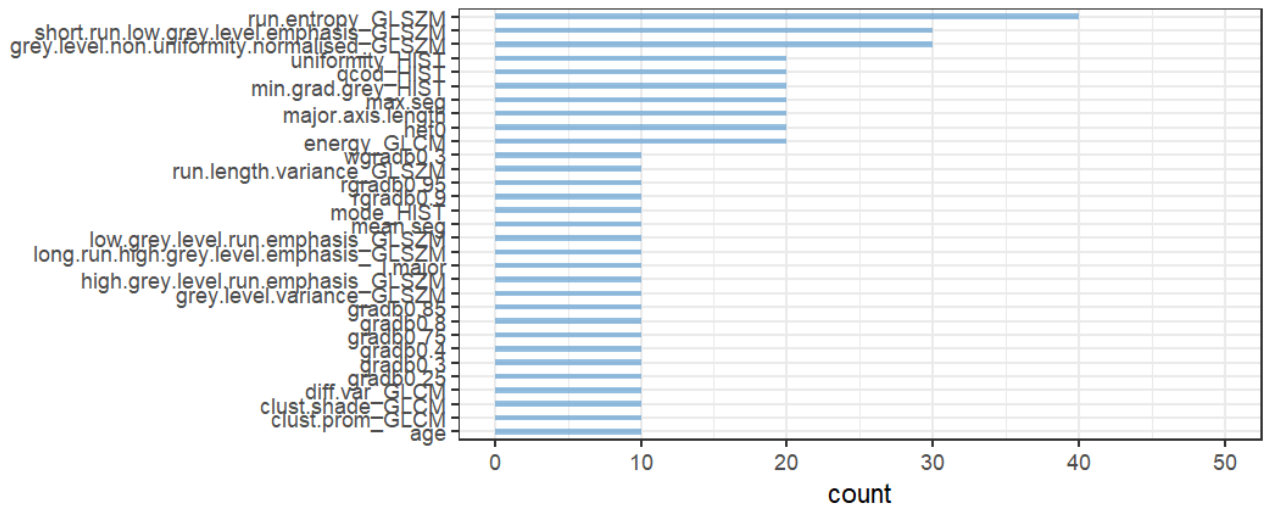
Feature stability plot - BORUTA - class1 vs class3  
(No Pre-Filter)



Feature stability plot - RFE - class1 vs class3  
(no Pre-Filter)

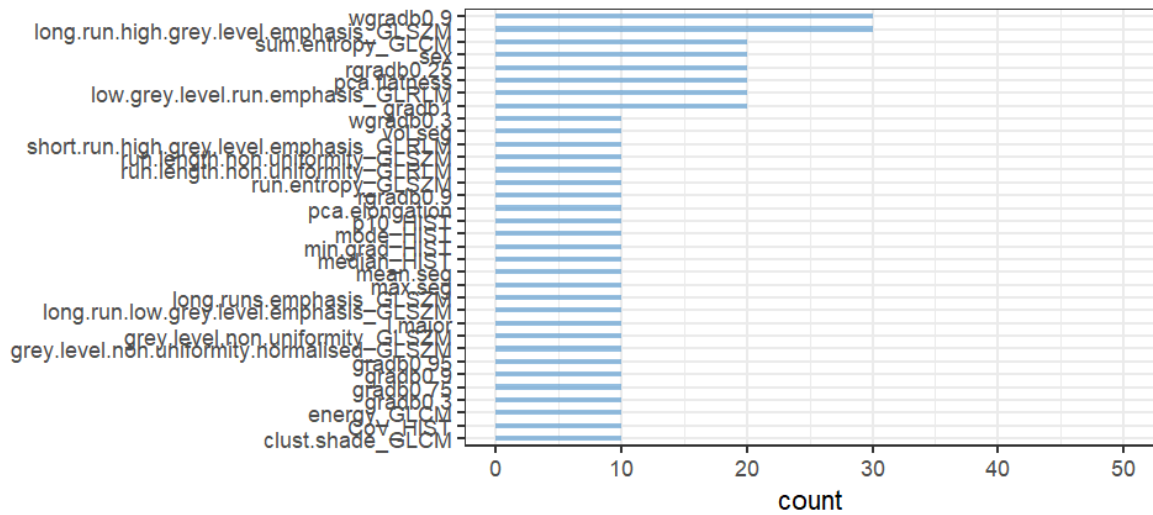


Feature stability plot - Forwd Step Wise -  
class 1 vs class 3 (No Pre-Filter)

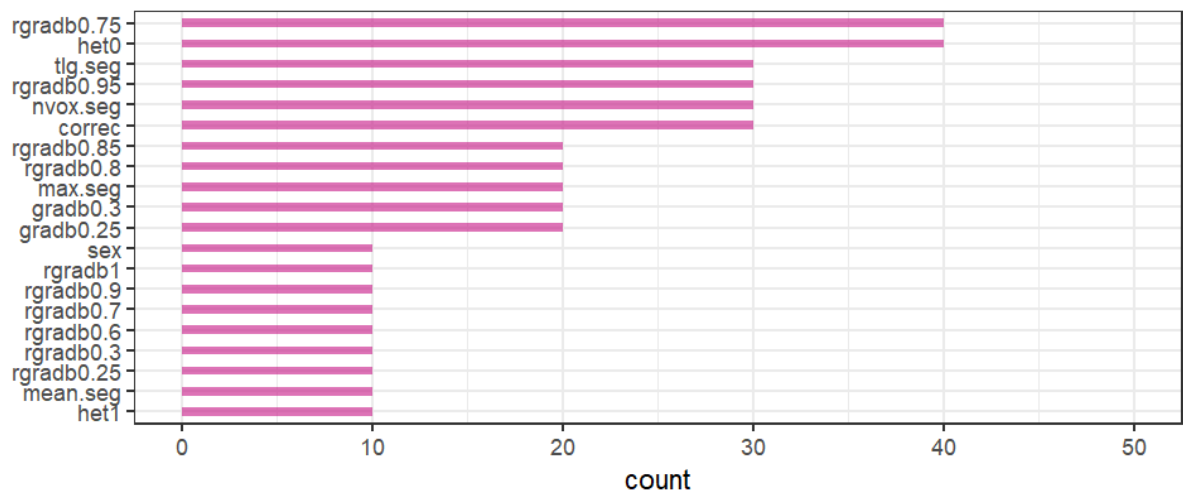


## Stage 2 vs Stage 4 No Pre Filter

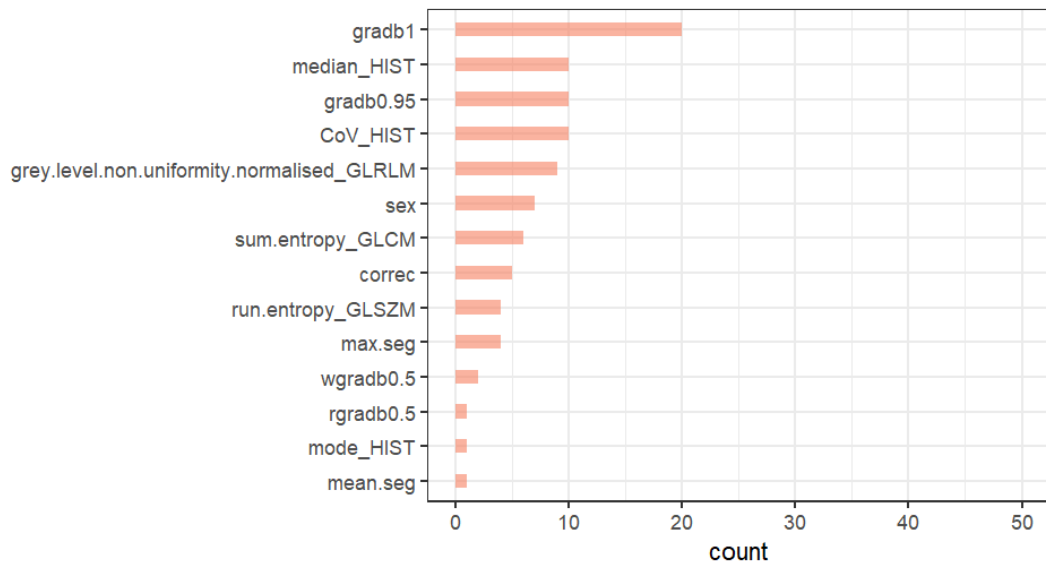
Feature stability plot - Forwd Step Wise -  
class 2 vs class 4 (No Pre-Filter)



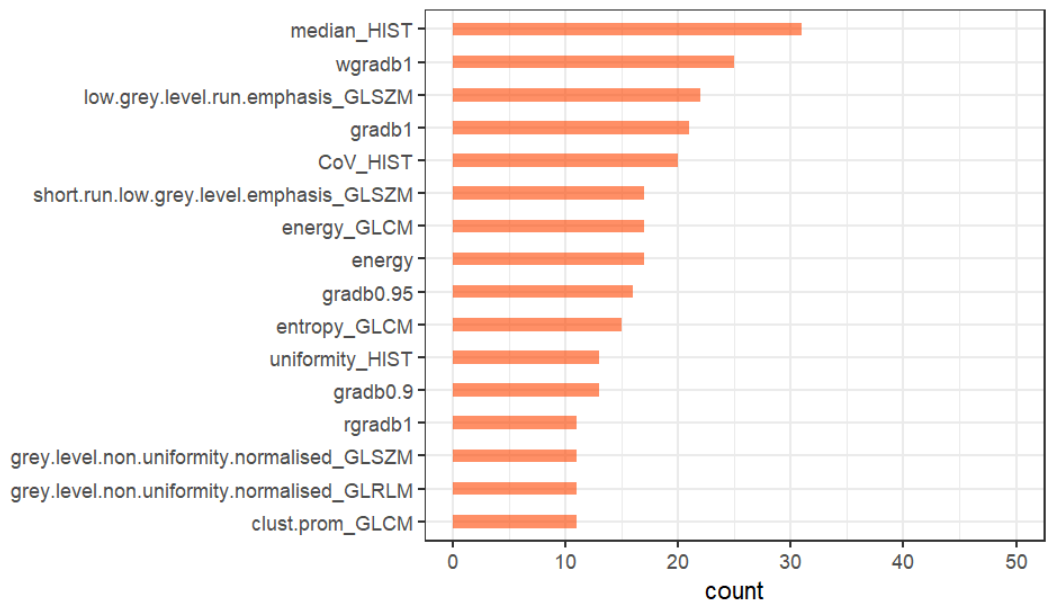
Feature stability plot - Backwd Step Wise -  
class 2 vs class 4 (No Pre-Filter)



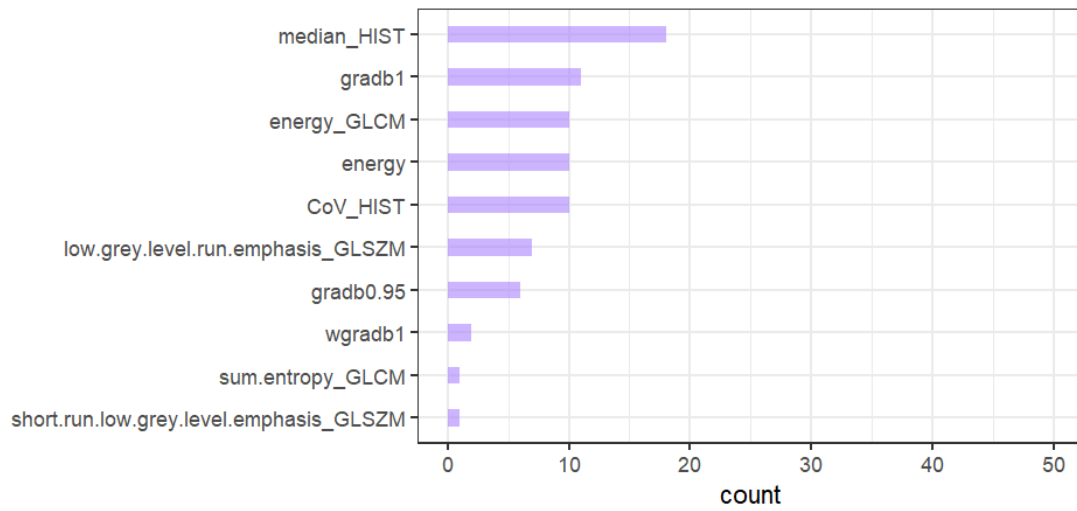
Feature stability plot - LASSO - class 2 vs class 4  
(No Pre-Filter)



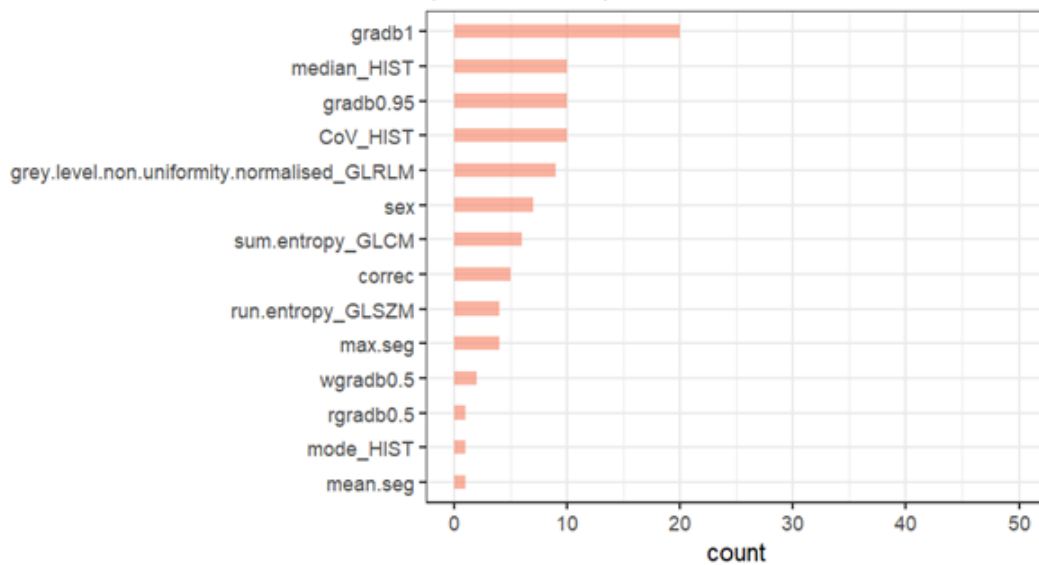
Feature stability plot - RFE - class 2 vs class 4  
(No Pre-Filter)



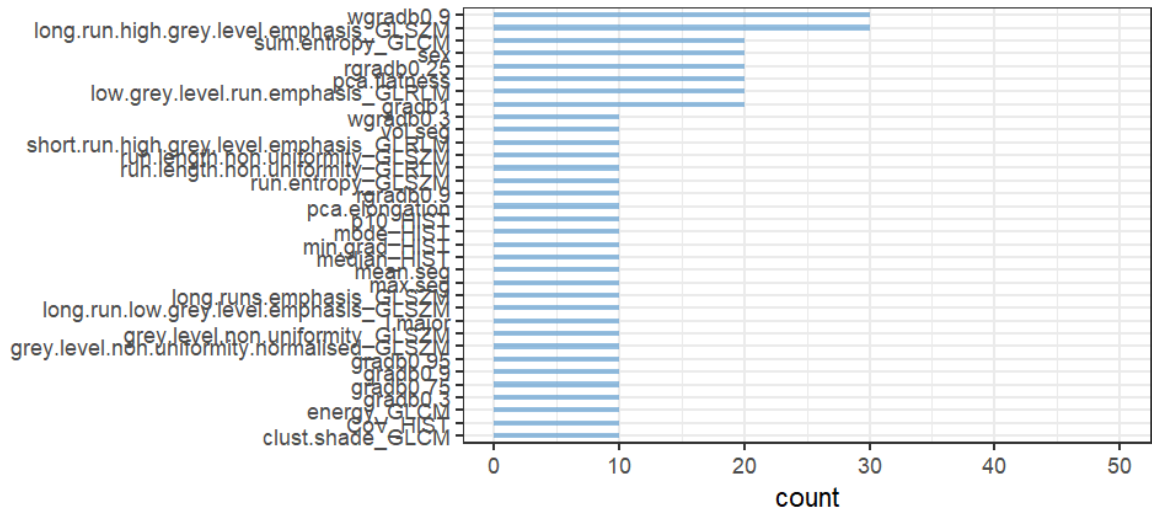
Feature stability plot - BORUTA - class2 vs class4  
(No Pre-Filter)



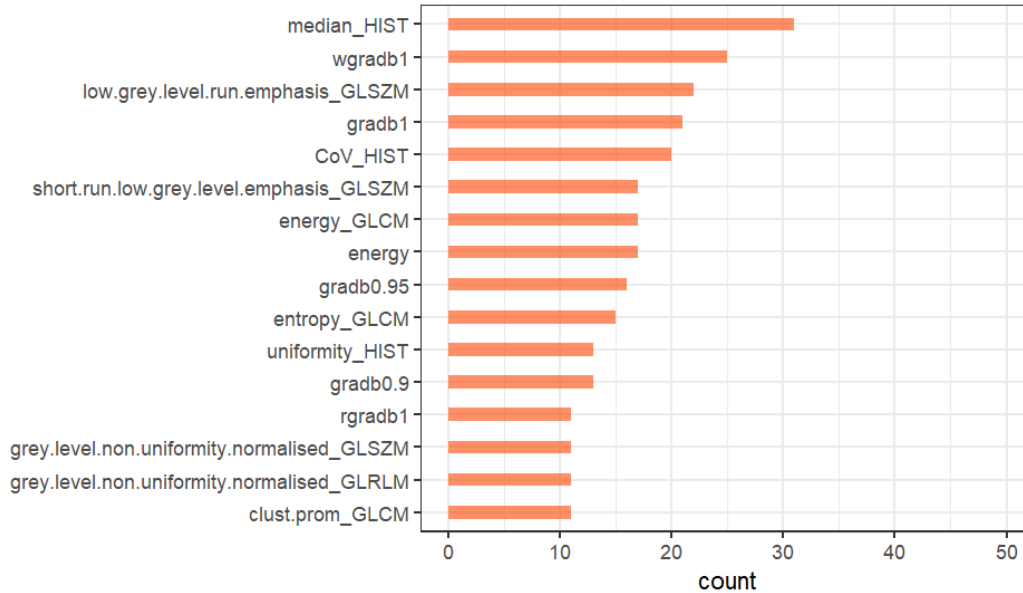
Feature stability plot - LASSO - class 2 vs class 4  
(No Pre-Filter)



Feature stability plot - Forwd Step Wise -  
class 2 vs class 4 (No Pre-Filter)

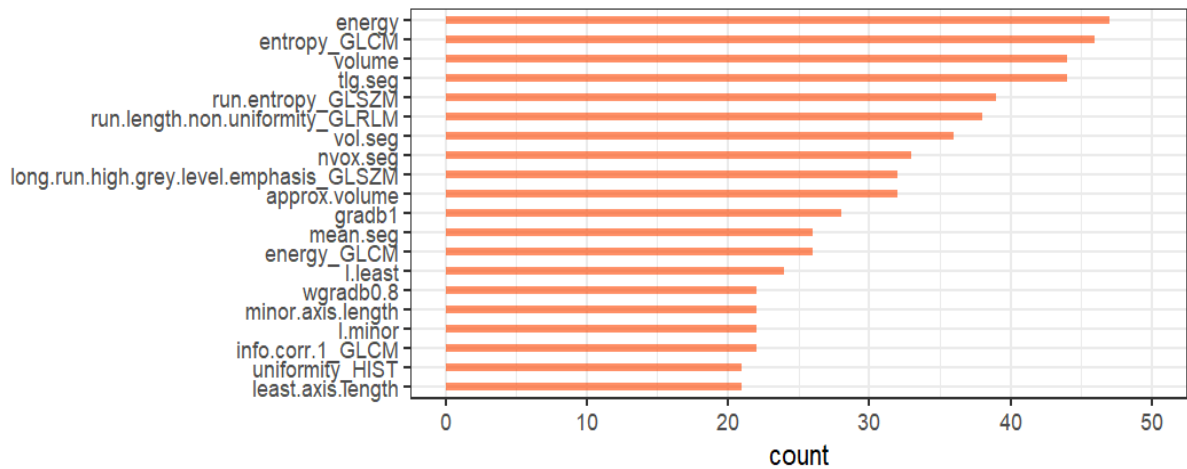


Feature stability plot - RFE - class 2 vs class 4  
(No Pre-Filter)

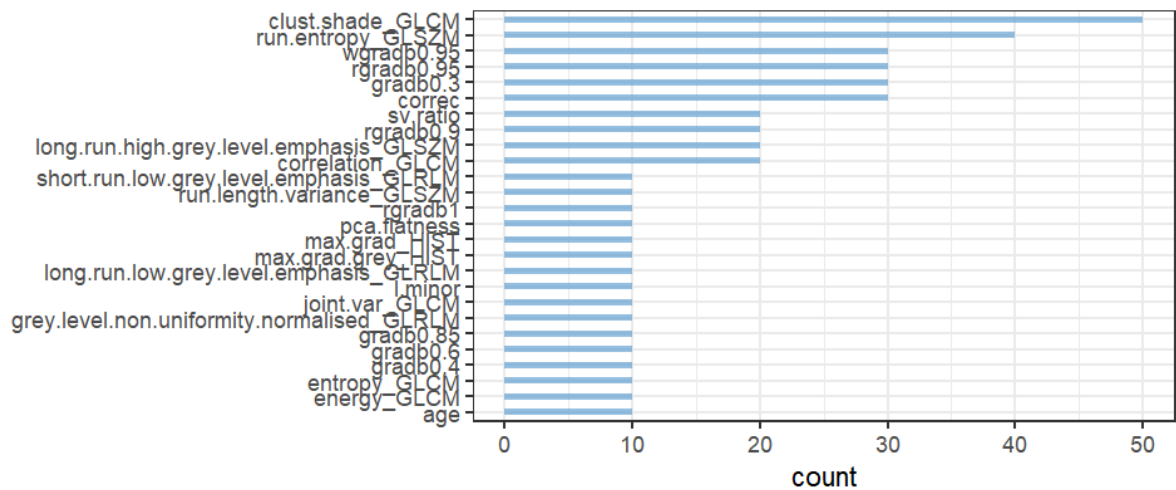


## Stage 1 vs Stage 4 – No Pre Filter

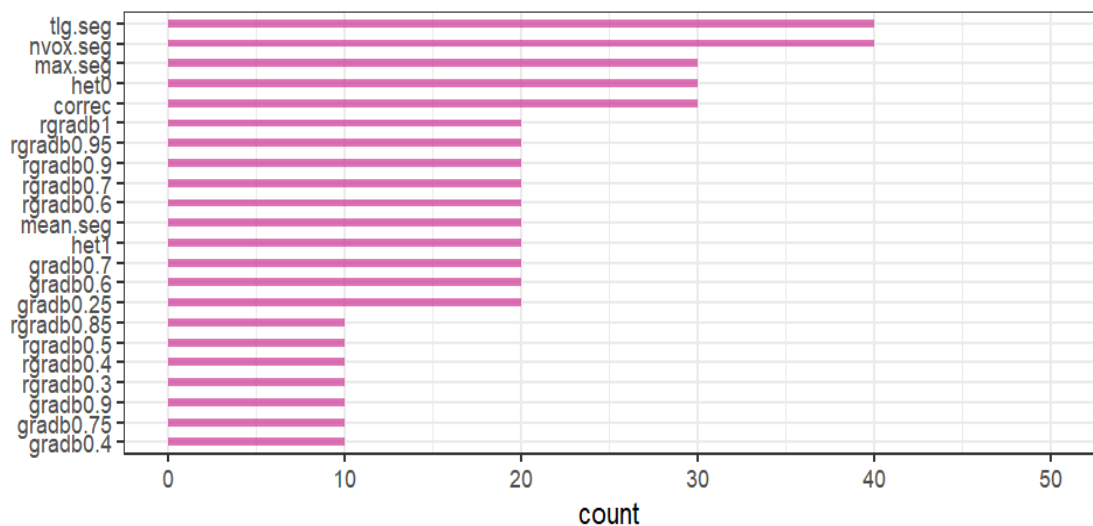
Feature stability plot - RFE - class 1 vs class 4  
(No Pre-Filter)



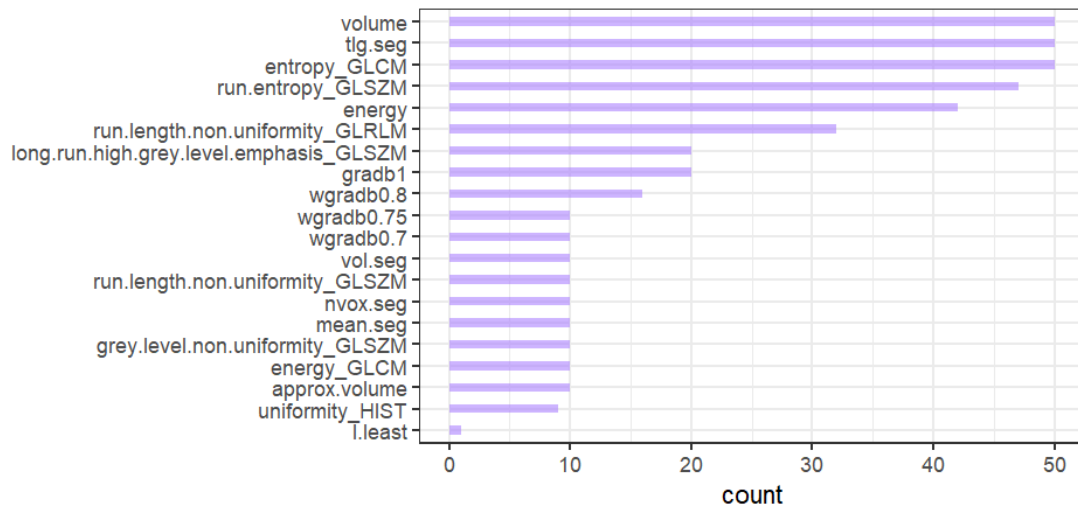
Feature stability plot - Forwd Step Wise -  
class 1 vs class 4 (No Pre-Filter)



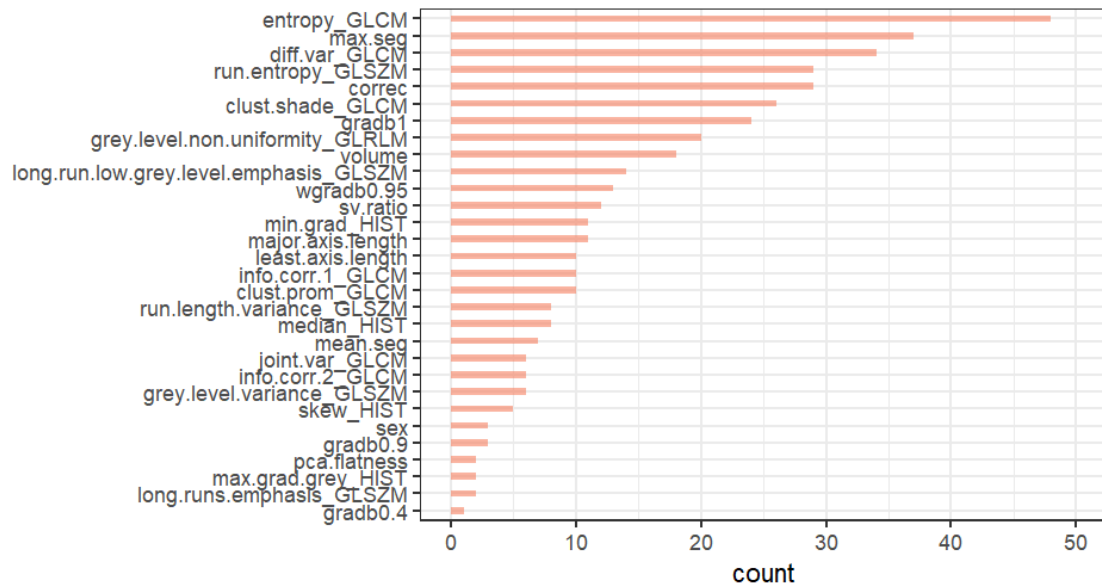
Feature stability plot - Backwd Step Wise -  
class 1 vs class 4 (No Pre-Filter)



Feature stability plot - BORUTA - class 1 vs class 4  
(No Pre-Filter)



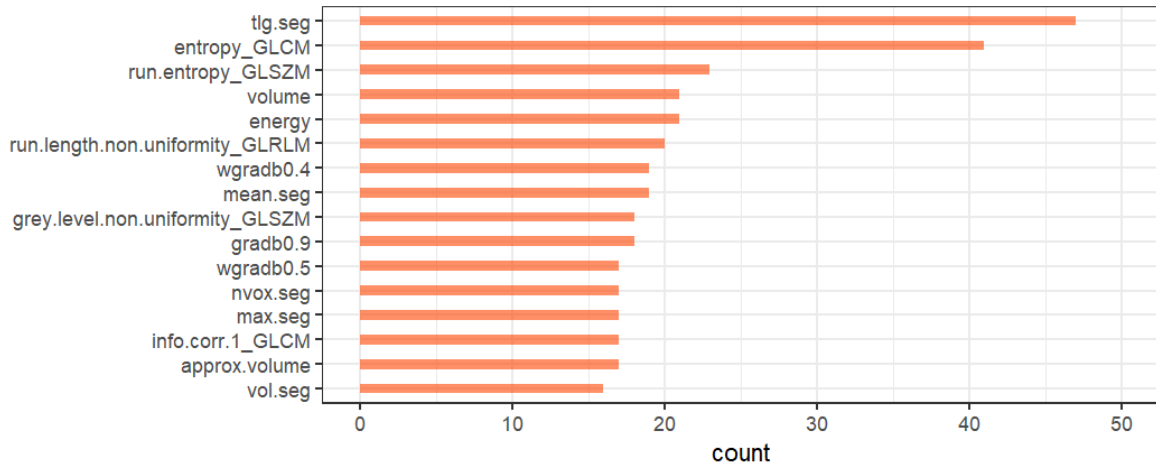
Feature stability plot - LASSO - class 1 vs class 4  
(No Pre-Filter)



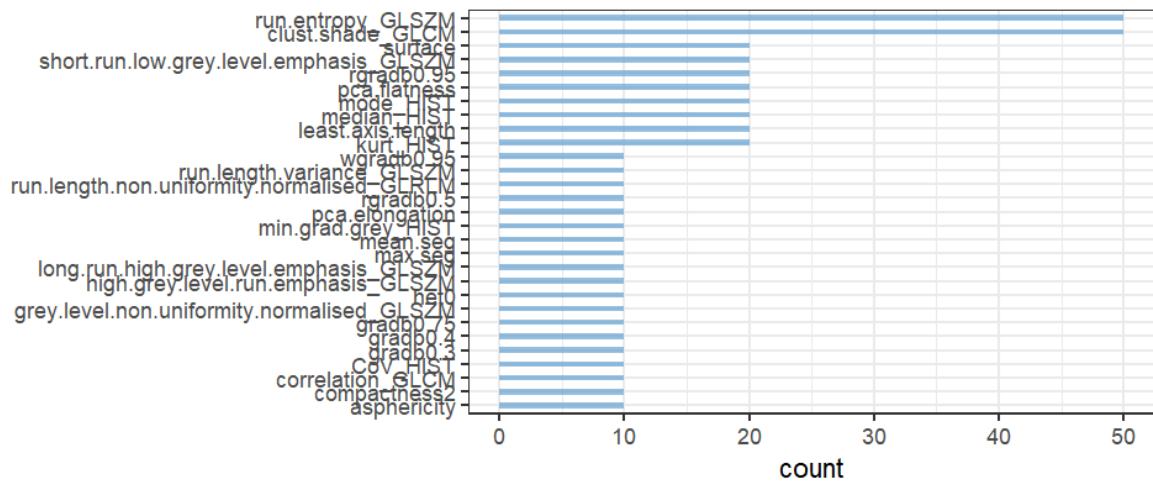


## Initial Stage vs Advanced Stage No Pre-Filter

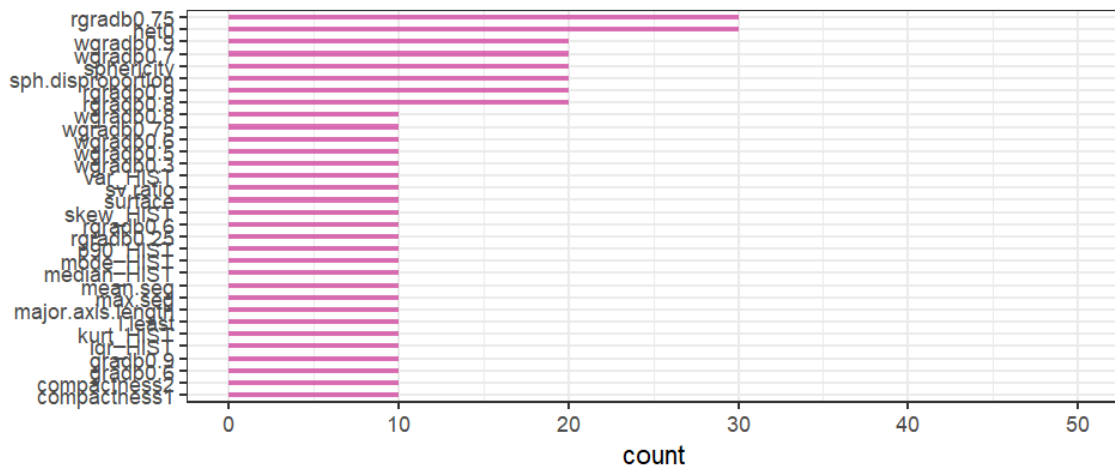
Feature stability plot - RFE -  
initial stage vs advanced stage (No Pre-Filter)



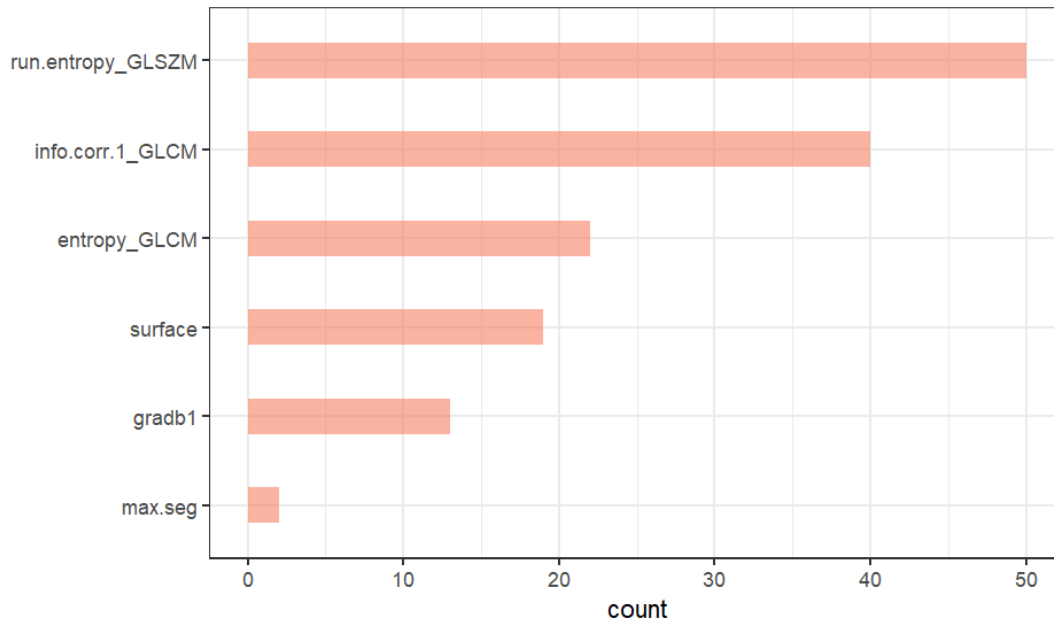
Feature stability plot - Forwd Step Wise -  
initial stage vs advanced stage (No Pre-Filter)



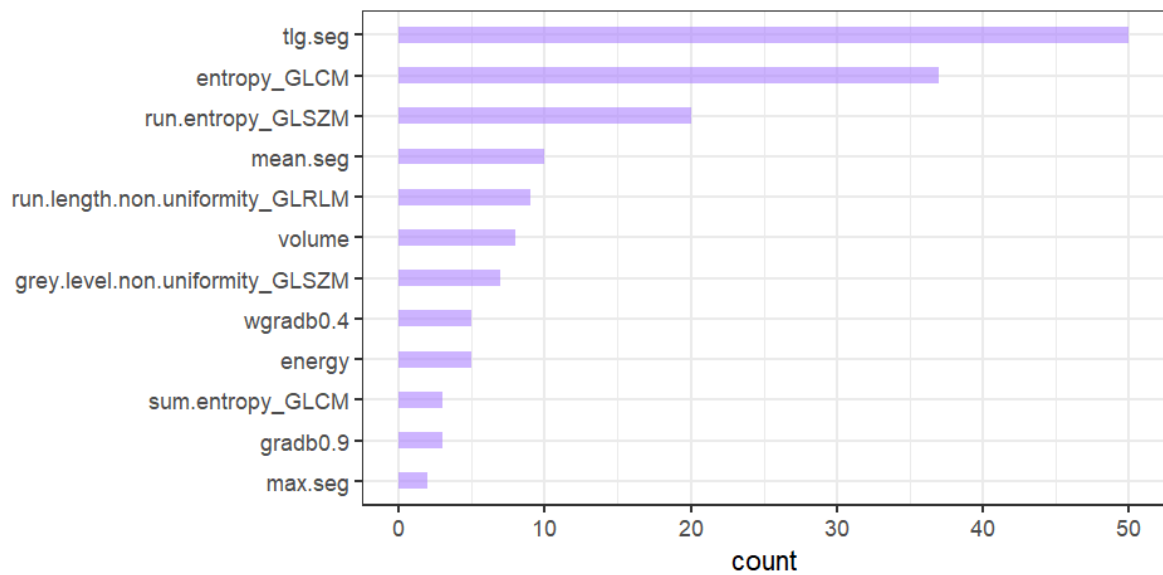
Feature stability plot - Backwd Step Wise -  
initial stage vs advanced stage (No Pre-Filter)



Feature stability plot - LASSO - initial stage vs advanced stage (Pre-Filter)

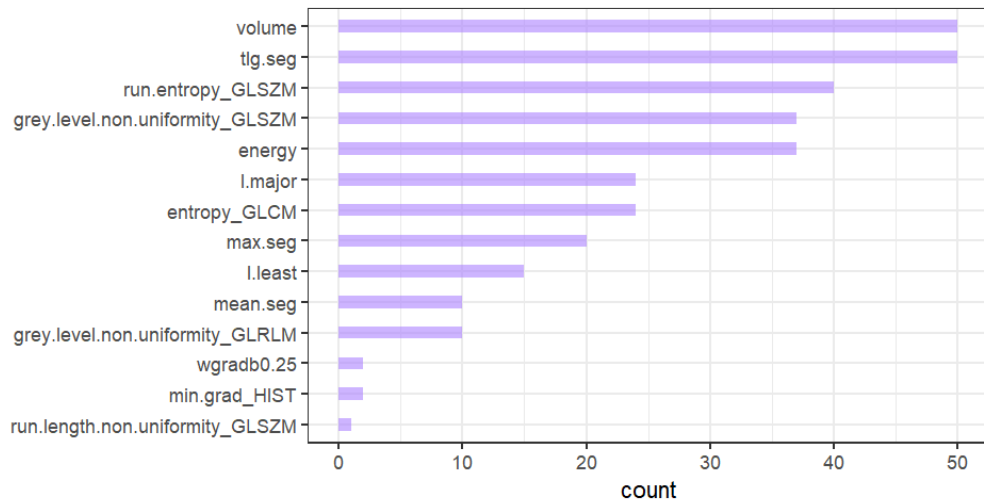


Feature stability plot - BORUTA - initial stage vs advanced stage (No Pre-Filter)

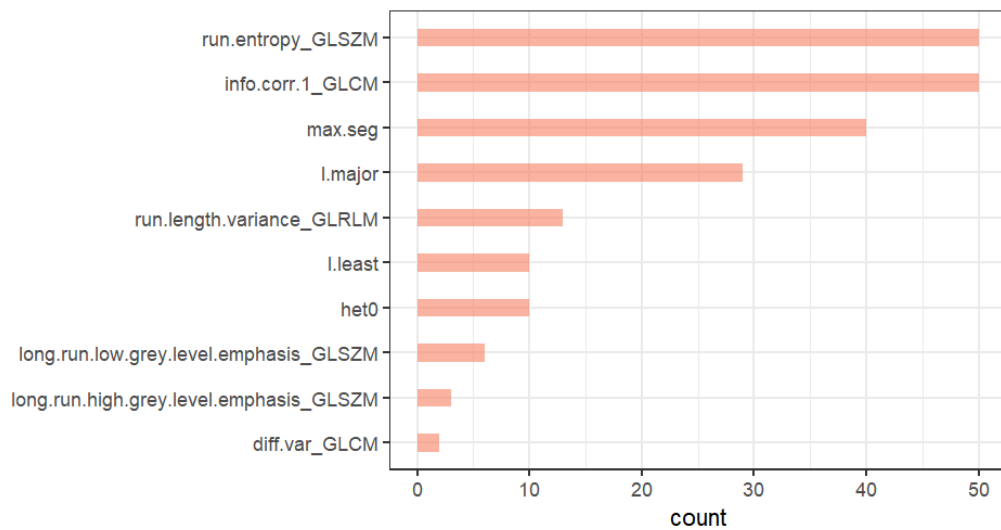


## Stage 1 vs Stage 3 – Pre Filter

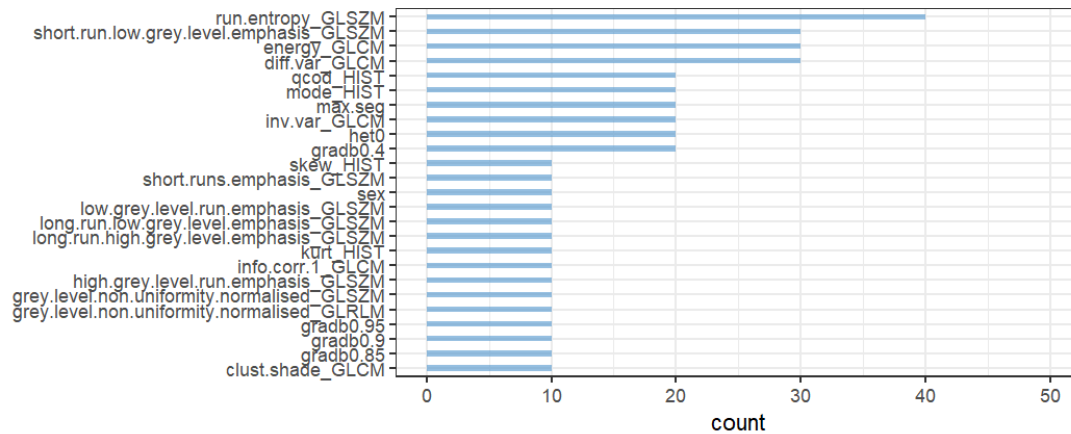
Feature stability plot - BORUTA - class1 vs class3  
(Pre-Filter)



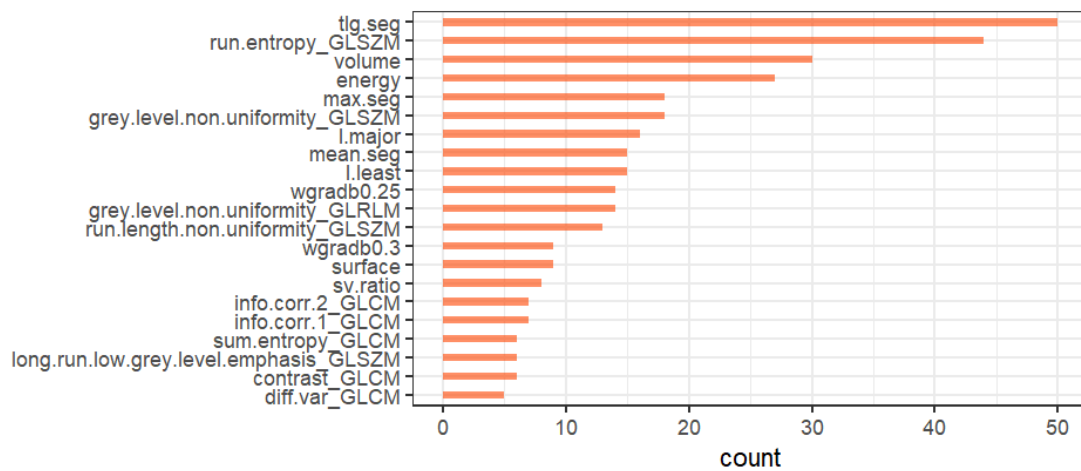
Feature stability plot - LASSO - class 1 vs class 3  
(Pre-Filter)



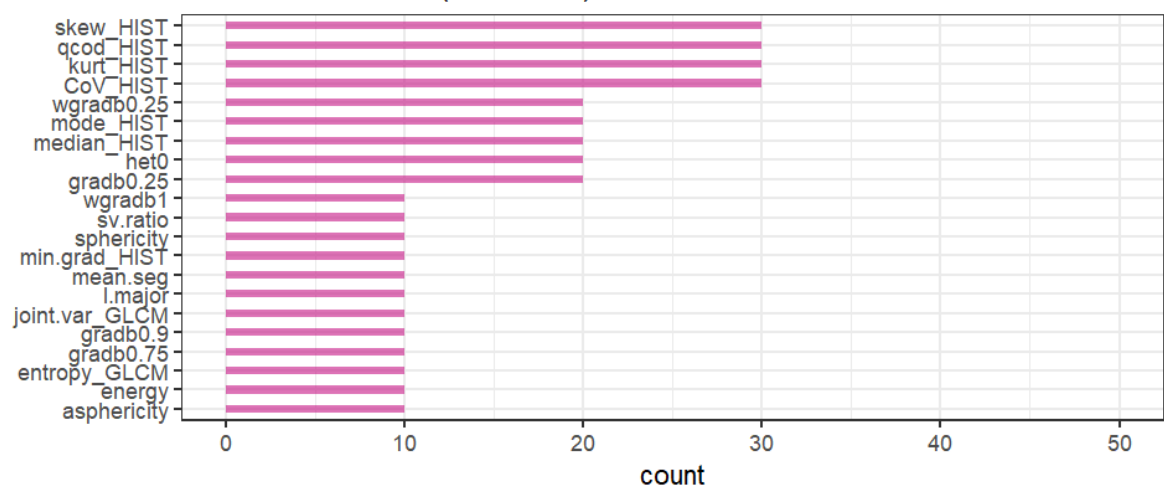
Feature stability plot - Forwd Step Wise -  
class 1 vs class 3 (Pre-Filter)



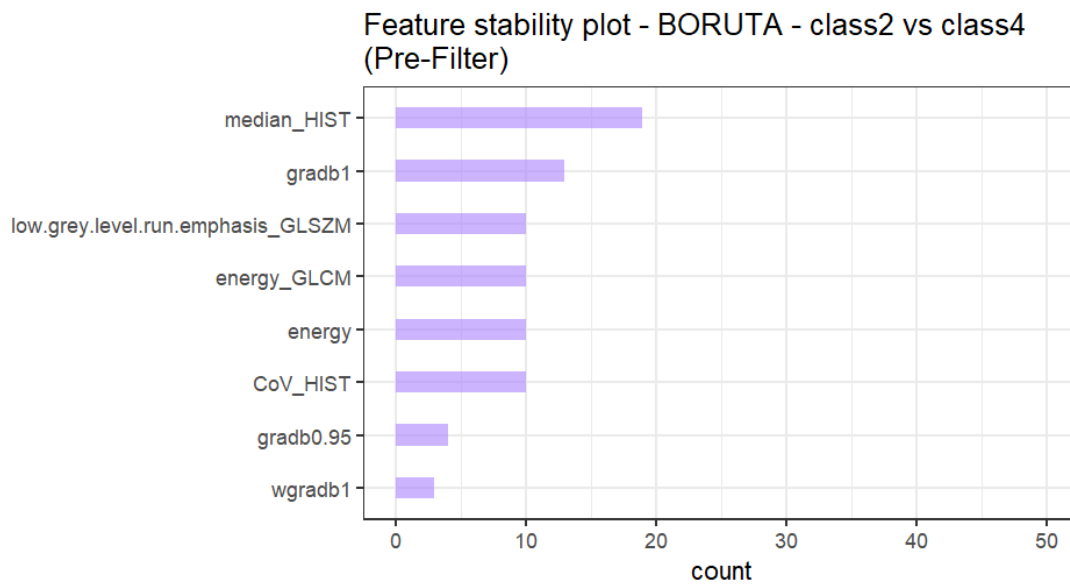
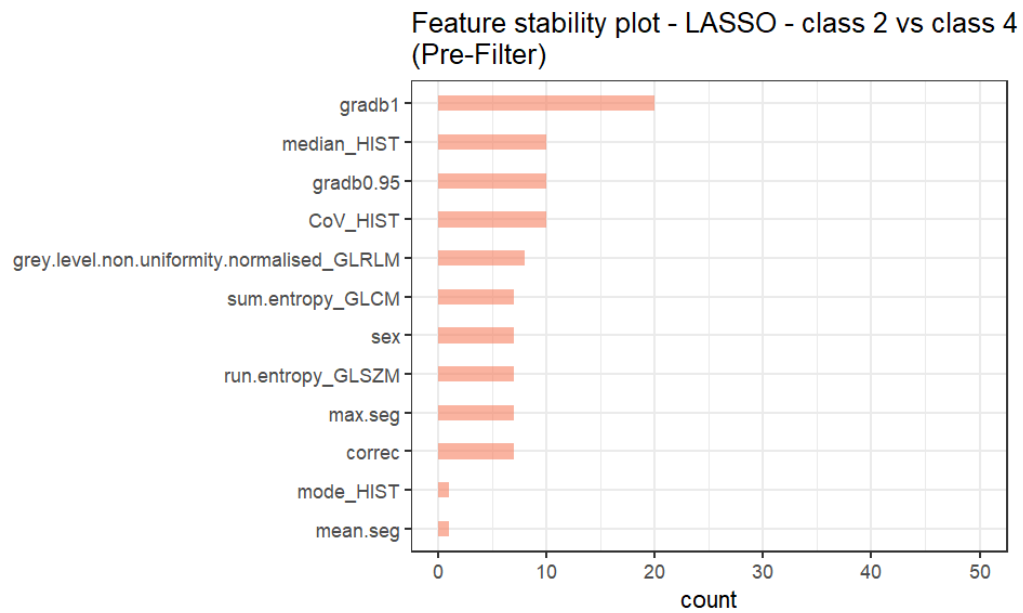
Feature stability plot - RFE - class1 vs class3  
(Pre-Filter)



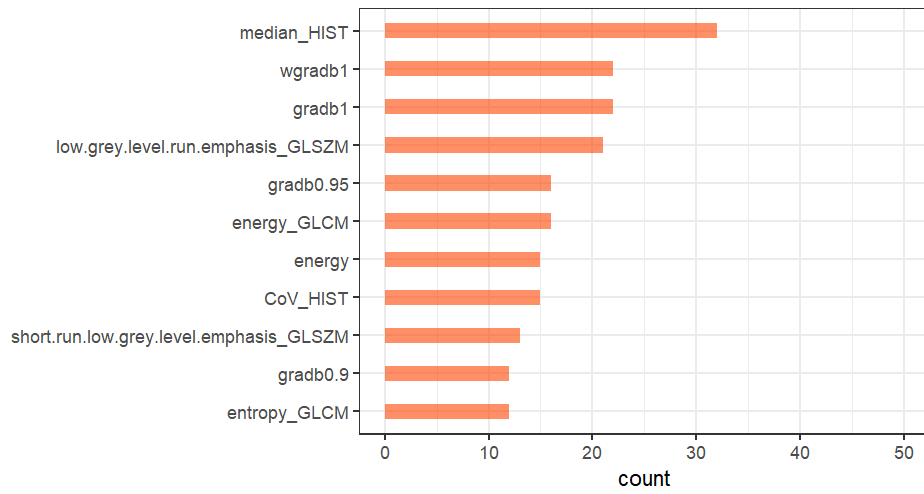
Feature stability plot - Backwd Step Wise -  
class 1 vs class 3 (Pre-Filter)



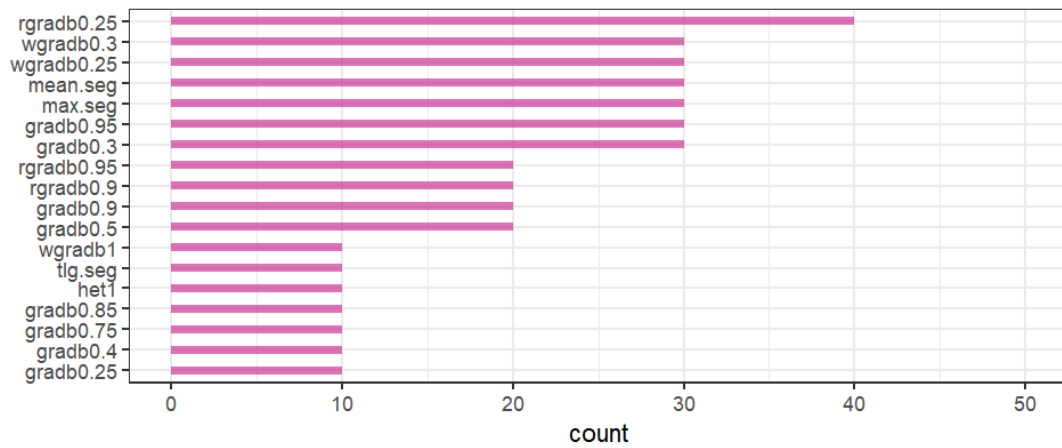
## Stage 2 vs Stage 4 – Pre Filter



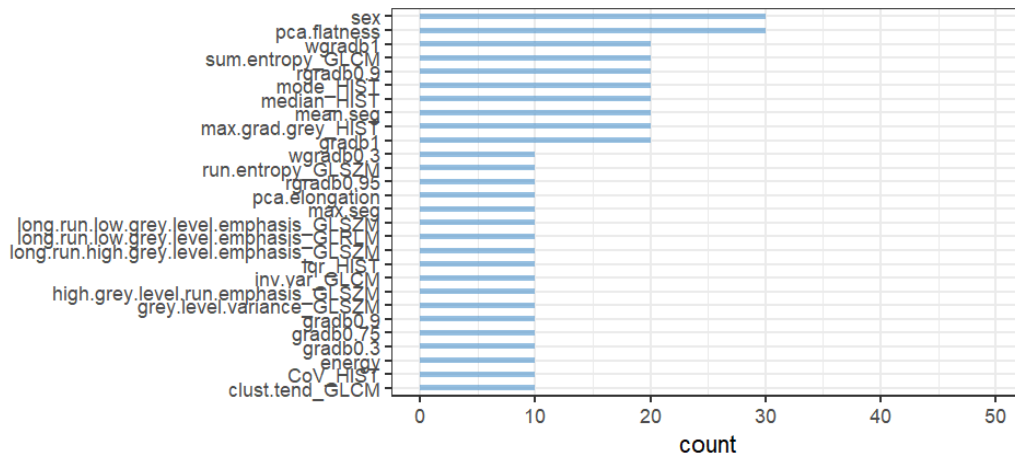
Feature stability plot - RFE - class 2 vs class 4  
(Pre-Filter)



Feature stability plot - Backwd Step Wise -  
class 2 vs class 4 (Pre-Filter)

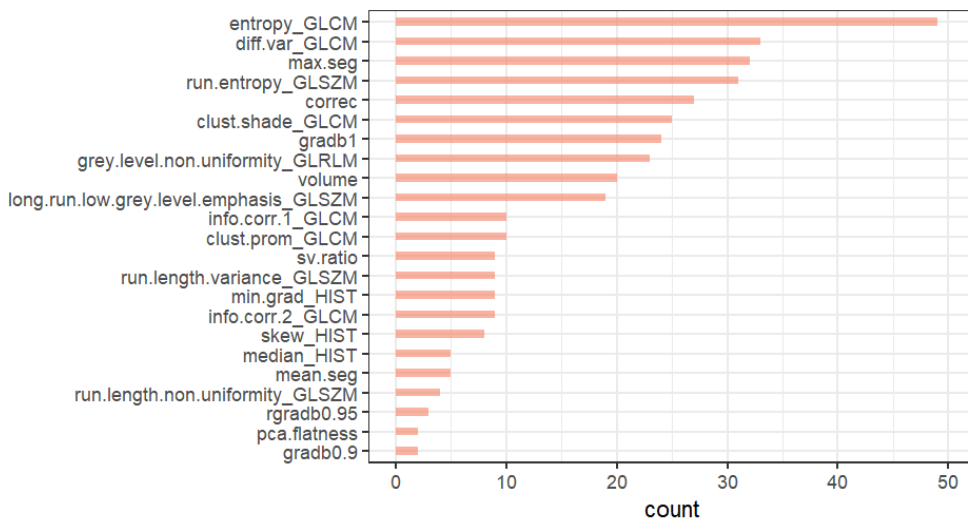


Feature stability plot - Forwd Step Wise -  
class 2 vs class 4 (Pre-Filter)

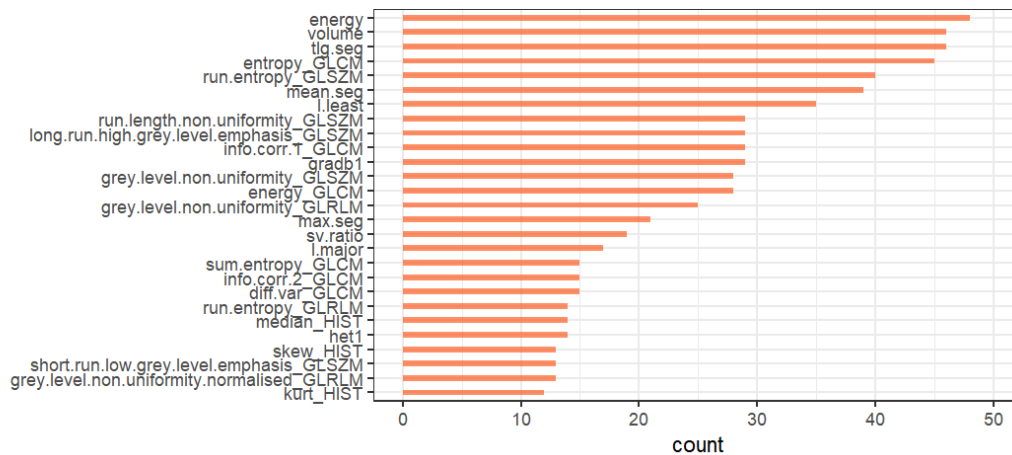


### Stage 1 vs Stage 4 Pre Filter

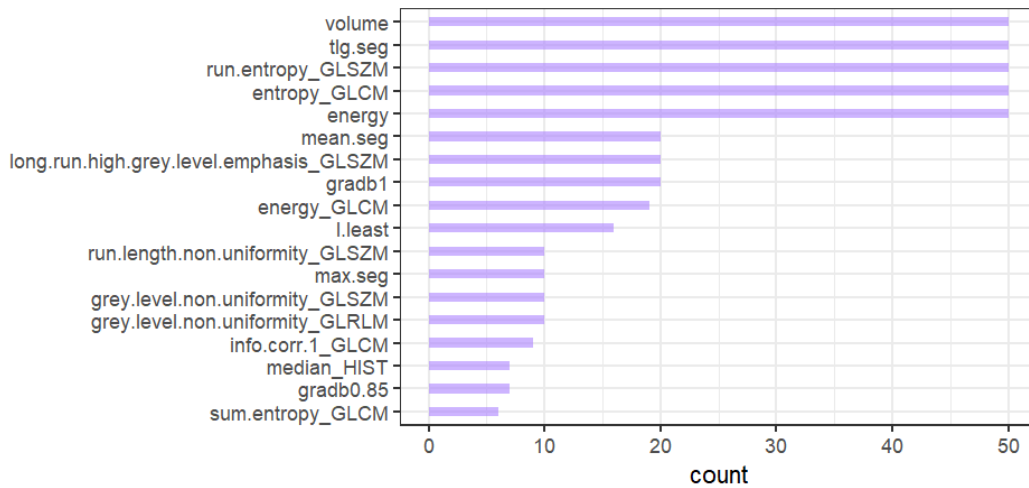
Feature stability plot - LASSO - class 1 vs class 4  
(Pre-Filter)



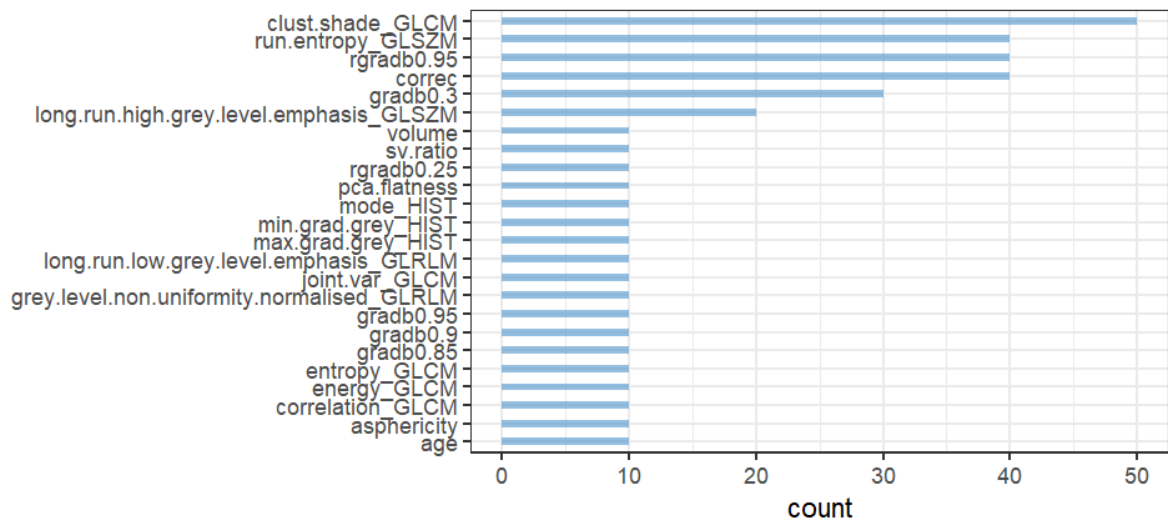
Feature stability plot - RFE - class 1 vs class 4  
(Pre-Filter)



Feature stability plot - BORUTA - class 1 vs class 4  
(Pre-Filter)

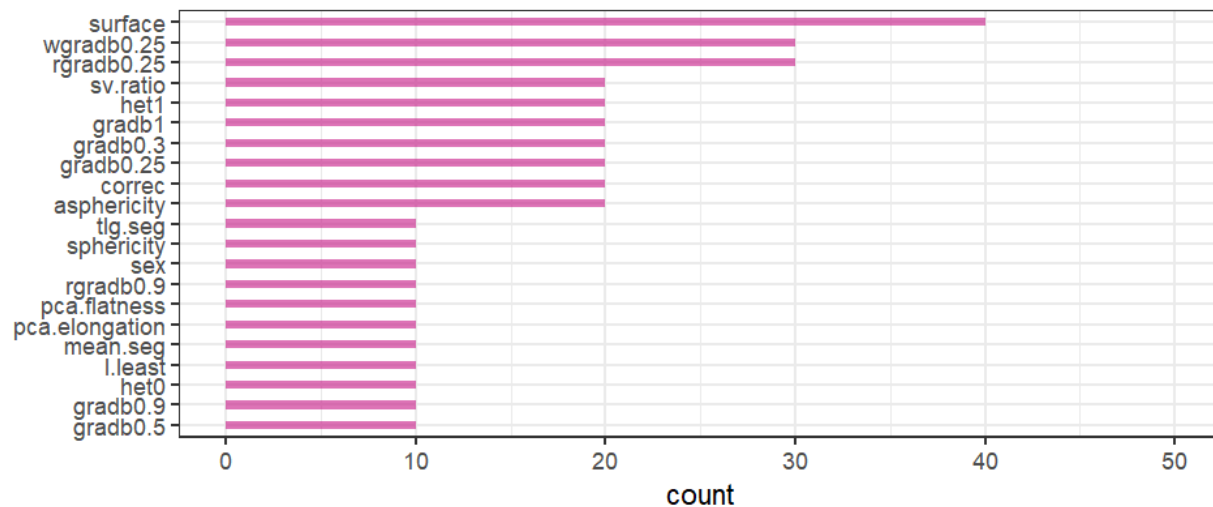


Feature stability plot - Forwd Step Wise -  
class 1 vs class 4 (Pre-Filter)



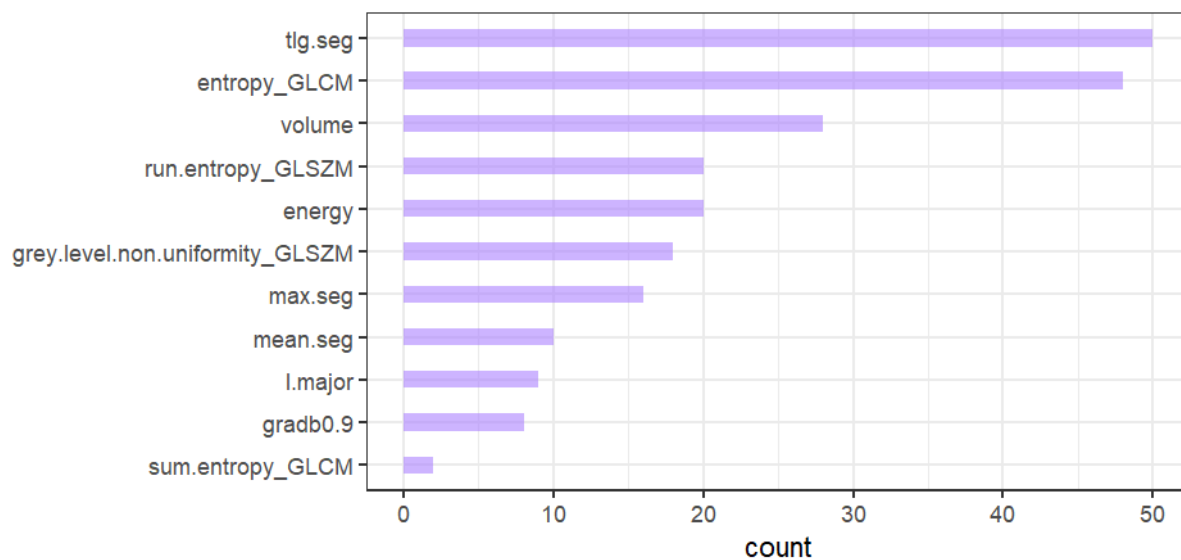


Feature stability plot - Backwd Step Wise -  
class 1 vs class 4 (Pre-Filter)

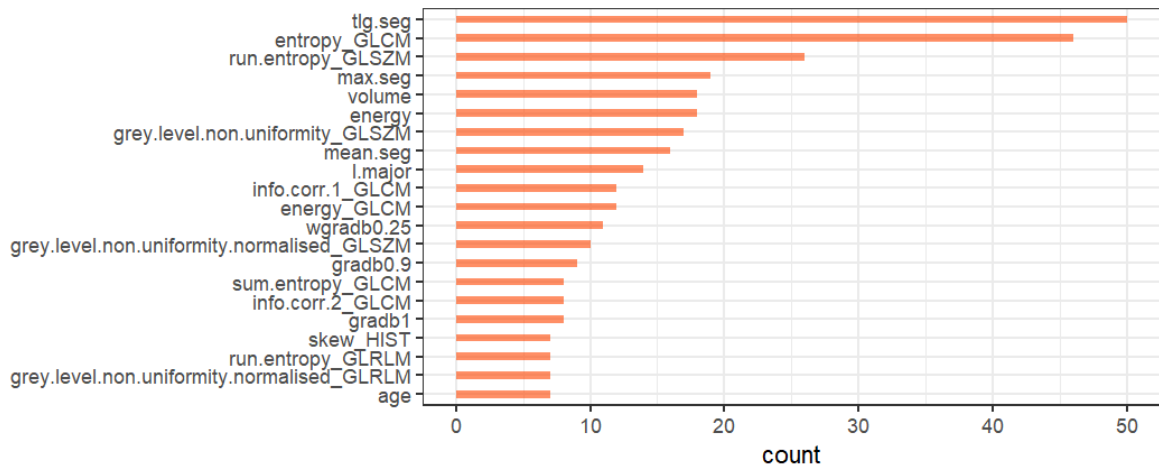


Initial Stage vs Advanced Stage – Pre Filter

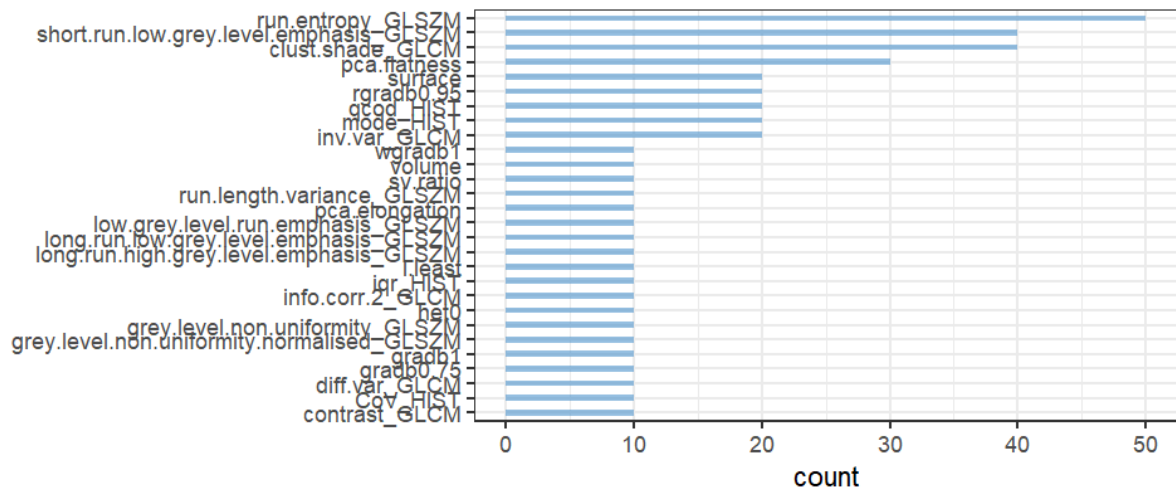
Feature stability plot - BORUTA -  
initial stage vs advanced stage (Pre-Filter)



Feature stability plot - RFE -  
initial stage vs advanced stage (Pre-Filter)



Feature stability plot - Forwd Step Wise -  
initial stage vs advanced stage (Pre-Filter)



Feature stability plot - Backwd Step Wise -  
initial stage vs advanced stage (Pre-Filter)

