

## Selected results of Recursive Partitioning Tree

### Confusion Matrix and Statistics

```

predictions
  0    1
0 56736 1108
1  4701 7944
    
```

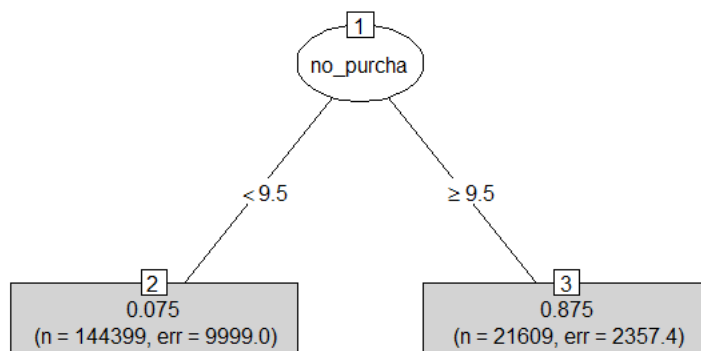
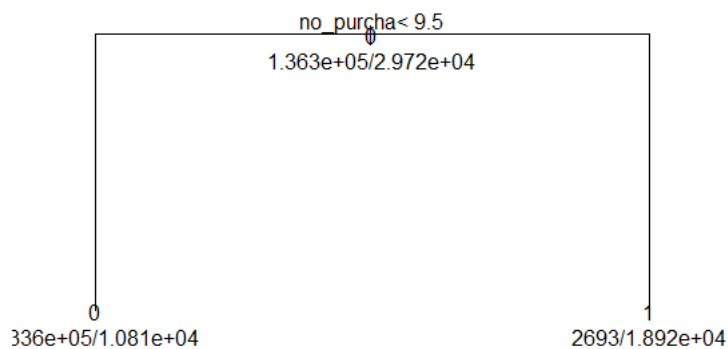
```

          Accuracy : 0.9176
          95% CI   : (0.9155, 0.9196)
    No Information Rate : 0.8716
    P-Value [Acc > NIR] : < 2.2e-16

          Kappa : 0.6851
  McNemar's Test P-Value : < 2.2e-16

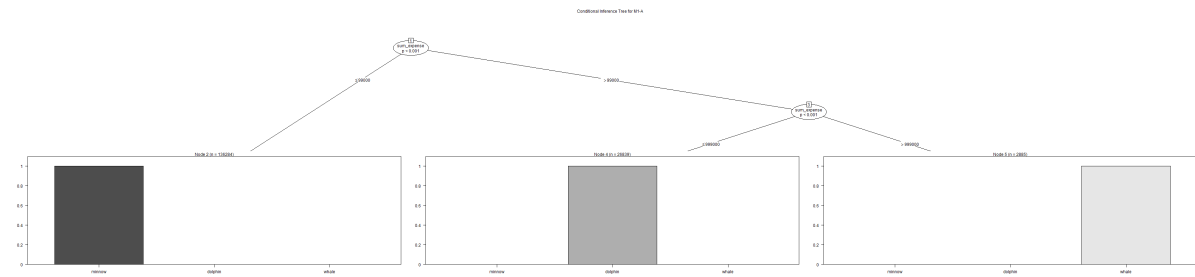
    Sensitivity : 0.9235
    Specificity : 0.8776
    Pos Pred Value : 0.9808
    Neg Pred Value : 0.6282
    Prevalence : 0.8716
    Detection Rate : 0.8049
    Detection Prevalence : 0.8206
    Balanced Accuracy : 0.9005

    'Positive' Class : 0
    
```

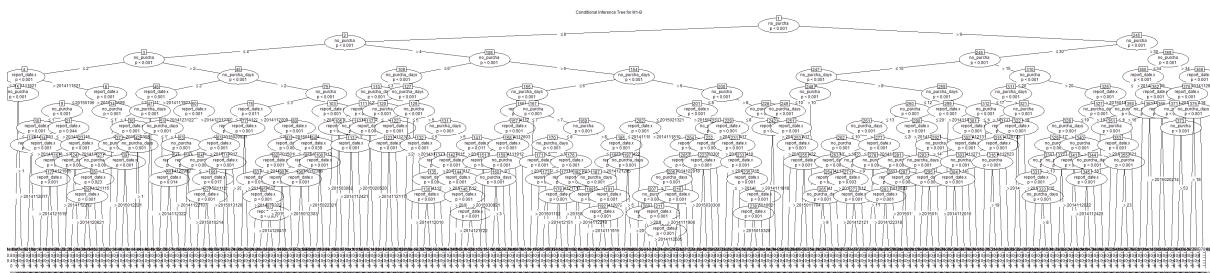


## Selected Conditional Inference Tree (final\_hero3)

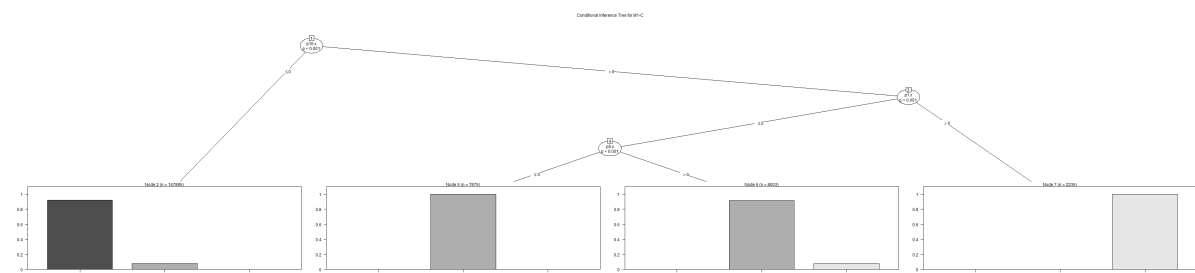
Model A



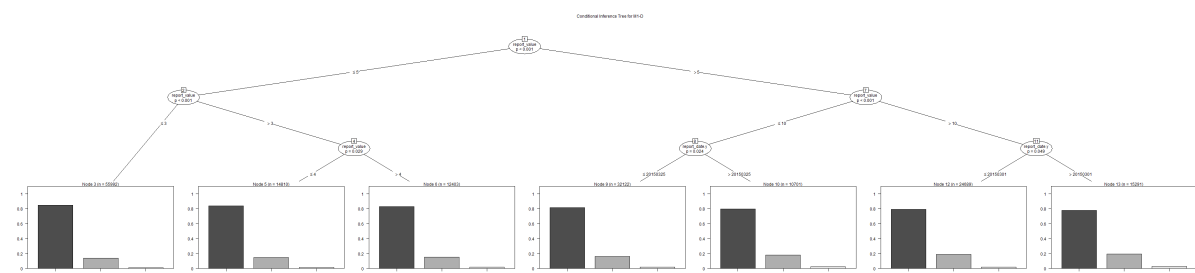
Model B (This model is not good, since too many attributes and difficult to identify dolphin users).



Model C



Model D



## Logit for M1B

ROC Curve

```
[,1]  
sensitivity 0.5504979  
specificity 0.5243389  
cutoff      0.1726638
```

