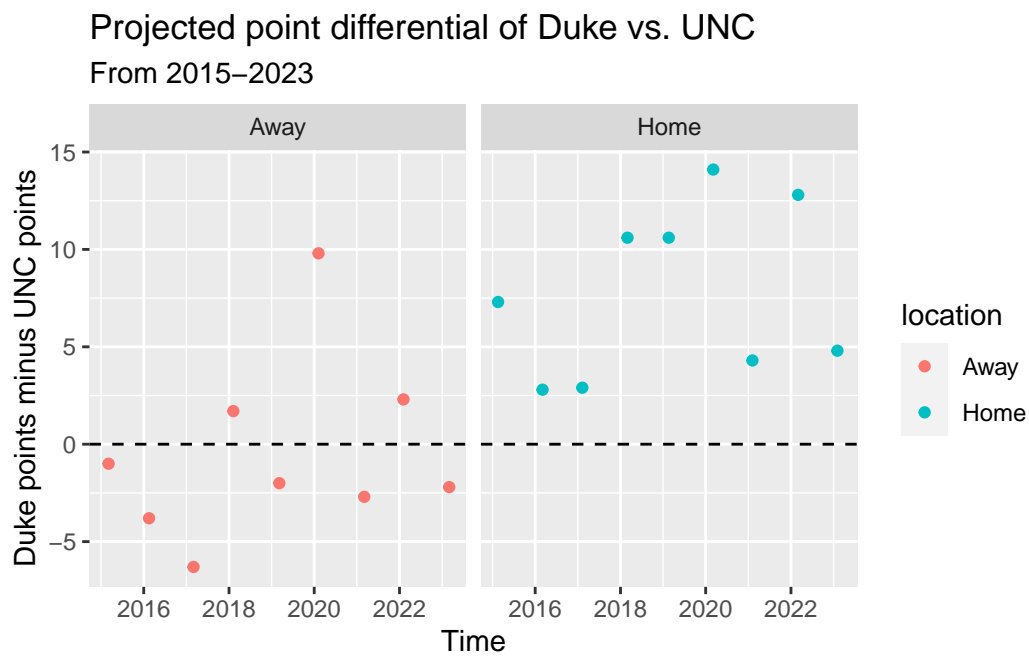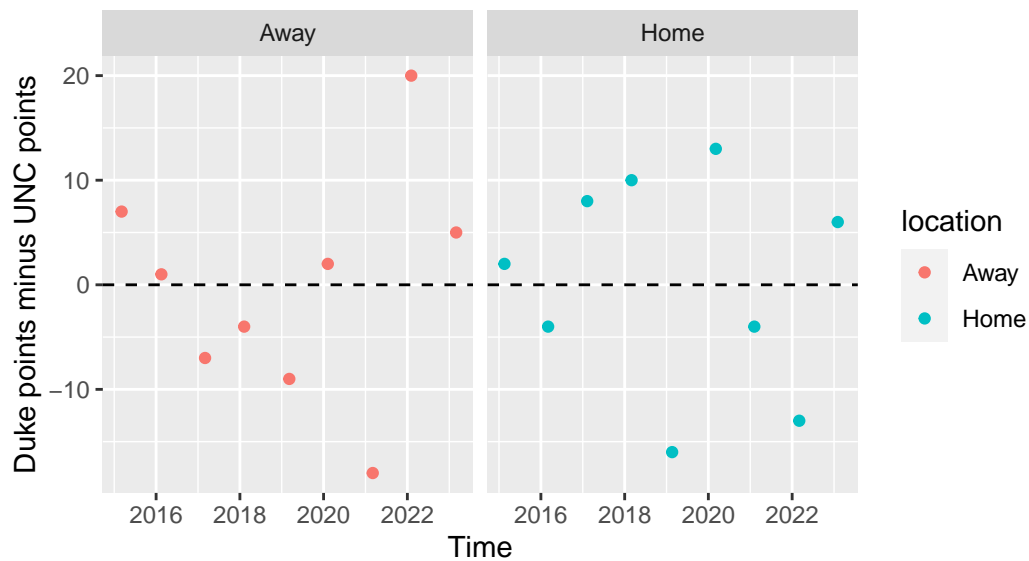# Predicting Duke vs. UNC Feb. 3, 2023 using modeling

Dom Fenoglio, The Duke Chronicle

Projected point differential of Duke vs. UNC
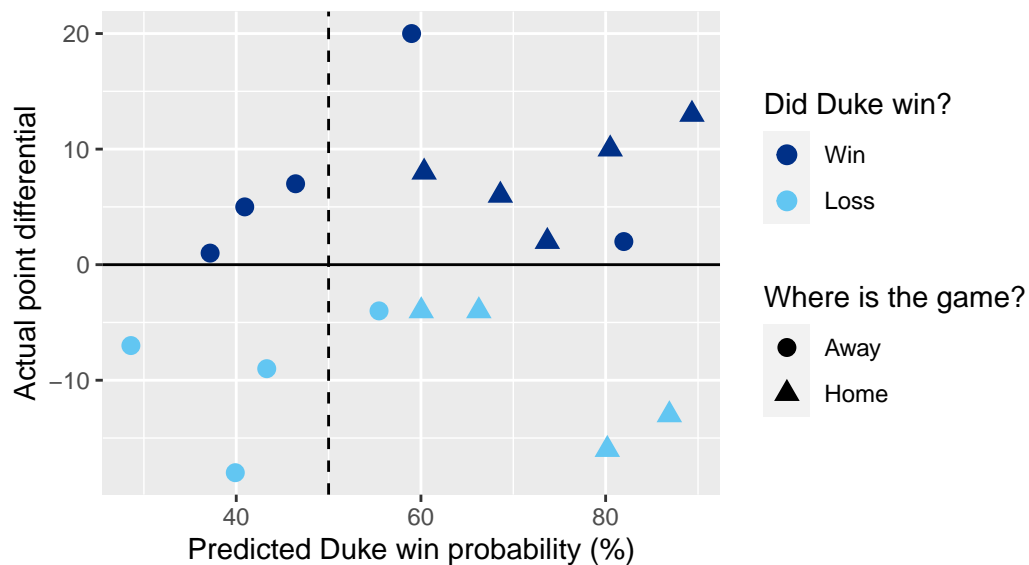From 2015–2023

Actual point differential of Duke vs. UNC
From 2015–2023

Duke vs. UNC games predicted by Torvik formula
Games from 2015–2023


```
Warning in confusionMatrix.default(data = filtered_predictions$bin_win, :
Levels are not in the same order for reference and data. Refactoring data to
match.
```

```
Confusion Matrix and Statistics

          Reference
Prediction 0 1
         0 3 3
         1 5 7

               Accuracy : 0.5556
                 95% CI : (0.3076, 0.7847)
    No Information Rate : 0.5556
    P-Value [Acc > NIR] : 0.5966

                  Kappa : 0.0769

 Mcnemar's Test P-Value : 0.7237

            Sensitivity : 0.7000
            Specificity : 0.3750
         Pos Pred Value : 0.5833
         Neg Pred Value : 0.5000
             Prevalence : 0.5556
         Detection Rate : 0.3889
   Detection Prevalence : 0.6667
      Balanced Accuracy : 0.5375

       'Positive' Class : 1
```
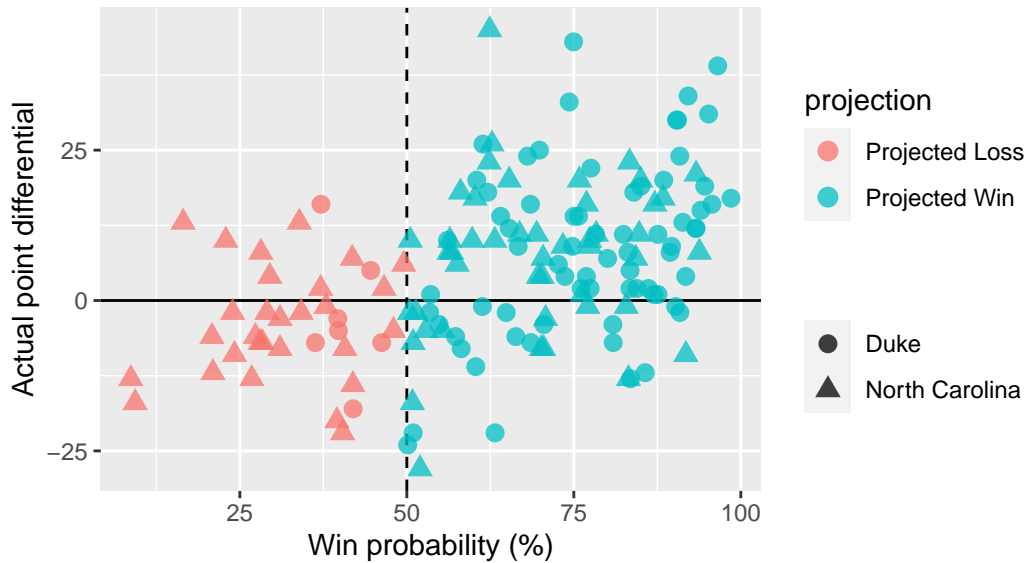
Duke and UNC's ACC wins and losses from 2020–23
Comparing projected win probability to actual point difference


```
Warning in confusionMatrix.default(data = conf_mat_data_combo$projection_bin, :
Levels are not in the same order for reference and data. Refactoring data to
match.


Confusion Matrix and Statistics

          Reference
Prediction  0  1
         0 25 11
         1 33 85

               Accuracy : 0.7143
                 95% CI : (0.636, 0.7841)
    No Information Rate : 0.6234
    P-Value [Acc > NIR] : 0.011316

                  Kappa : 0.3421

 Mcnemar's Test P-Value : 0.001546

            Sensitivity : 0.8854
            Specificity : 0.4310
```

```
           Pos Pred Value : 0.7203
           Neg Pred Value : 0.6944
               Prevalence : 0.6234
           Detection Rate : 0.5519
     Detection Prevalence : 0.7662
        Balanced Accuracy : 0.6582

         'Positive' Class : 1
```