

Catcher Framing Write Up

The first part of this project included preparing data and feature engineering. I had to define the strike zone limits and create a positive and negative indicator to see the catchers' impact on pitches that were framed as strike or balls. I next had to scale and optimize the model. I had to rescale the predictors for stability which also helped with convergence. I then set specific control parameters to assist the mixed effects model process. The next part includes the mixed effects model and its construction. I had to develop a mixed effects logistic regression model using CATCHER_ID as a random effect to predict the probability of a called strike. This helped with both fixed and random effects. Moving on to the evaluation of expected and actual called strikes, I calculated expected_called_strikes from strike probabilities and totaled by catcher and year to give me a calculated called_strikes_added. Finally, the results and output were rounded and formatted as shown in the prompt.



