Collin Hough 2023 Baseball Analytics Trainee Take Home Part 3

I would build my future rotation around Pitcher B. My decision is based off each players' existing arsenal and the statistics calculated for each players' pitch type in Part 2. The charts for this data can be found in "data/processed/part2/pitcher_{A/B}_stats.csv". Player A's arsenal primarily consists of a fastball, curveball, and slider whereas Player B's is made of those same three and a changeup. The deeper arsenal of Player B gives them potential for more diverse pitch sequencing than Player A. I believe this is important to consider because of the three pitches they both throw, Player B has a higher swing and miss rate on two out of the three. Even though Player A has a higher swing and miss rate with the pitch type each player throws the most, the fastball, I believe this gap can be closed by reducing Player B's fastball usage and increasing their slider usage. I specifically single out the slider because Player B currently uses it ~7.5% of the time but achieved a swing and miss rate of ~17.7% with it. While this may be the result of a small sample size, it is a pitch worth exploring more. Because of Player B's deeper arsenal and higher swing and miss rate with the same pitches, I would choose to build my future rotation around them.