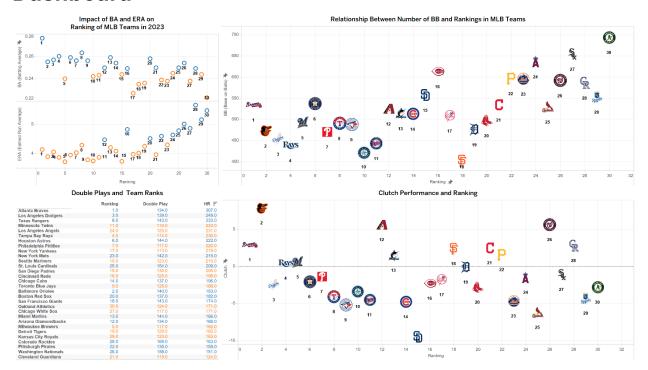
### **Dashboard**



I really like both playing and watching baseball. I've seen Korea and Japan professional baseball leagues often, but now I'm interested in MLB because there are several Korean players in MLB. My dashboard is about whether MLB teams' detailed indicators reflect their team rankings well. The MLB League is divided into two different leagues, and each league is divided into three divisions, which for the convenience of analysis were viewed as one league and ranked teams in order of winning percentage. So, I used 2023 season data for my dashboard.

First of all, BA and ERA are the most basic and common indicators, so I wanted to see the correlation between these indicators and the ranking. To see this relationship, I used a scatter plot to easily check the trend line and linearity. I differed both BA and ERA in the colors of the dots above and below the standard based on the average.

And I included the number of double plays, the ranking, and the number of home runs in the team's season to see the correlation between the number of double plays and the ranking of the teams. If the ranking of the teams is not related to the number of double plays, I wanted to see if the number of home runs affected the ranking.

And I wanted to see if the number of walks teams have in the season affects their rankings. So, I used BB and Ranking, and I used the scatter plot to get a good look at the trend line. And for each point, I wanted to add a little interest to the dashboard by adding the team's logo instead of different colors or the team's name.

And finally, I wanted to see if the attack efficiency in the clutch situation affects the ranking, so I used the clutch index and ranking and showed it through the scatter plot.

# **Questions & Answer**

1. How does MLB Teams' Batting Average and ERA connect on their ranks?

When viewed from the graph, it appears that ranking and BA, and ranking and ERA are both relationships that have linearity. The first-place team, the Atlanta Braves, had an overwhelmingly high batting average, while the last-place team, the Oakland Athletics, had the lowest batting average. In terms of ERA, the Braves were probably able to top the list even though their ERA was a little better than the league average. The Athletics even had the second-highest ERA. It is not surprising that they won last place last season. From this, the team batting average and the team ERA seem to reflect the teams' rankings relatively well.

# 2. Will the number of double plays influence the teams' rankings? If not, would home runs have had an impact?

I thought a team with a higher winning percentage would have fewer double plays. But it wasn't. Three of the top four teams play more double plays than average. But three of the bottom four teams have below-average double plays. I think it's probably because the top teams get on base enough to get many double plays. And even if there are double plays, I think the top teams can increase their ranking through a lot of home runs. And maybe, the bottom teams couldn't get on base enough to get many double plays.

#### 3. Will the Number of BBs affect the MLB Teams' ranking?

When I watch baseball, I feel like my team won't win the game if our team gives too many walks. When I look at the trend line in this graph, this relationship seems to be linear. Even if Braves pitchers gave above-average walks, they probably scored a lot of points because their batters have a high batting average. But Oakland had the highest number of BBs along with the highest ERA.

4. Is there a relationship between performance in a clutch situation and rankings?

I think scoring points in situations where they can score is important to maintain a high ranking. But the graph doesn't show that the relationship is that strong. Perhaps this also has the effect of home runs. Baltimore has an average number of double-plays and does not have many home runs, but they are really good in clutch situations. So, I think they could have come in second place. In the case of the

Dodgers, their clutching ability is similar to that of Oakland. But I think they covered that up through a lot of home runs like the Braves.

## **Used Data Source**

- 1. <a href="https://www.baseball-reference.com/leagues/majors/2023-standings.shtml">https://www.baseball-reference.com/leagues/majors/2023-standings.shtml</a>
- 2. <a href="https://www.baseball-reference.com/leagues/majors/2023-standard-fielding.shtml">https://www.baseball-reference.com/leagues/majors/2023-standard-fielding.shtml</a>
- 3. <a href="https://www.baseball-reference.com/leagues/majors/2023-standard-batting.shtml">https://www.baseball-reference.com/leagues/majors/2023-standard-batting.shtml</a>
- 4. <a href="https://www.baseball-reference.com/leagues/majors/2023-sabermetric-batting.shtml">https://www.baseball-reference.com/leagues/majors/2023-sabermetric-batting.shtml</a>
- 5. <a href="https://www.baseball-reference.com/leagues/majors/2023-standard-pitching.shtml">https://www.baseball-reference.com/leagues/majors/2023-standard-pitching.shtml</a>
- 6. <a href="https://www.baseball-reference.com/leagues/majors/2023-standard-pitching.shtml">https://www.baseball-reference.com/leagues/majors/2023-standard-pitching.shtml</a>