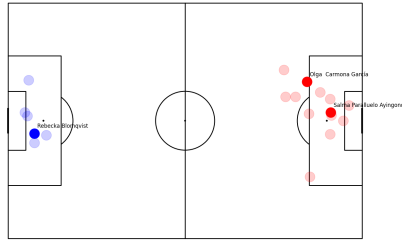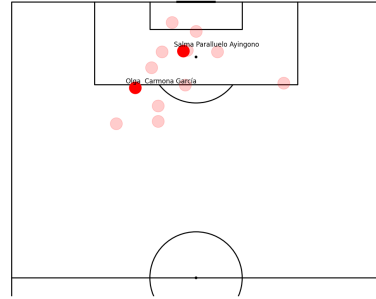# Assignment 1

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September 2024

I am focusing on the 2023 Women's World Cup to evaluate **Zecira Musovic**, the goalkeeper for Sweden's women's team. The code for Assignment 1 can be found at this GitHub repository.

(a) 2023 Women's World Cup - August 15, 2023 Spain vs. Sweden

(b) 2023 Women's World Cup - August 15, 2023 Spain shots against Sweden

Figure 1: Spain vs. Sweden. This figure illustrates the shot locations for Spain (red circles) and Sweden (blue circles) in a match. Opaque circles indicate successful goals, while transparent ones show unsuccessful attempts.

Table 1: Expected Goals and Actual Scores

Team	xG (Expected Goal)	Actual Score
South Africa Women's	1.036705	1
Italy Women's	0.682405	0
United States Women's	6.815847	0
Japan Women's	1.738305	1
Spain Women's	1.375955	2
Australia Women's	0.744337	0

According to the data in Figure 1 and Table 1, the expected goal (xG) for the Spanish team was 1.375955, but the Spanish team actually scored 2 goals in

the match. This means that Spain exceeded expectations and may also indicate that goalkeeper Zecria Musovic faced higher quality shots in that game but failed to block all of them.
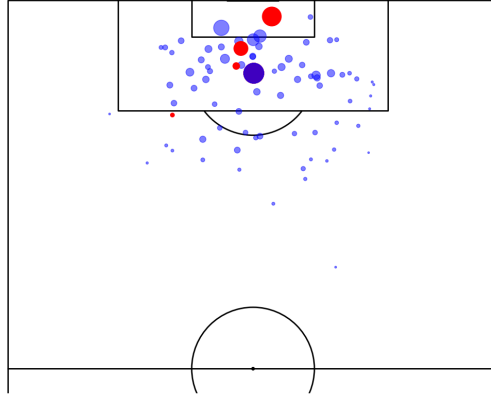

Figure 2: Sweden Goalkeeper Defense Map : This figure shows in detail the location and effectiveness of the defense of all the shots taken by Zecira Musovic during the World Cup. In the graph, the blue circles represent successfully defended shots and the red circles represent shots that were defended incorrectly. In addition, the size of the circle reflects the expected goal value (xG) of the shot in question; the larger the circle, the higher the expected goal probability of the shot.

Table 2: Comparison of Goalkeeper Performances

Goalkeeper	xG per Match	Actual Goals per Match (Average)
Zecira Musovic	2.07	0.67
Spain Women's Goalkeeper	0.55	0.86
Italy Women's Goalkeeper	1.53	2.67
Japan Women's Goalkeeper	0.70	0.60

The analysis of shot-stopping by Zecira Musovic in the 2023 Women's World Cup showcases her exceptional goalkeeping skills. She effectively stopped several shots with high expected goal (xG) values, demonstrating remarkable reflexes and judgment, surpassing conventional expectations. Data indicates that Zecira Musovic had an average xG of 2.07 per match, yet her actual goals conceded averaged only 0.67 per match, underscoring her impressive performance under pressure. Compared to goalkeepers from Spain, Italy, and Japan, Zecira Musovic had significantly higher xG but notably fewer actual goals conceded, further attesting to her outstanding performance in the tournament.