



Pass Progression Insights

Using the Forward Passing Score and Statbomb's 360 Data to
acquire passing progression insights

April 2023

Introduction

Progression Insights

What Manchester City Women are doing with the ball when building up



Use four (4) zones on the pitch to discover passing effectiveness



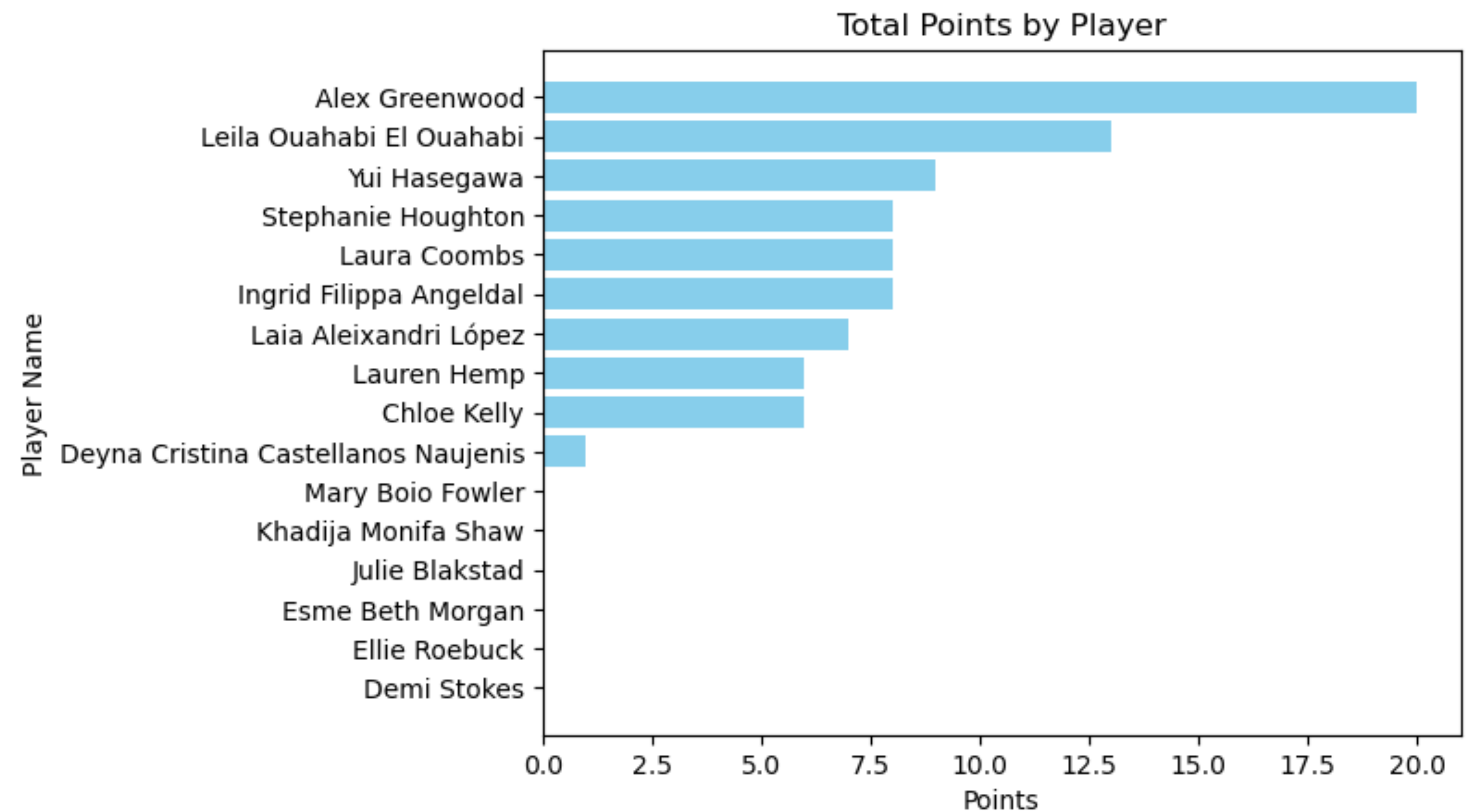
Identify the player with most effective passing on a points based system



Definitions

Forward Passing Point System

- The forward passing score is a point system utilized to see which player has the most impactful passing
- The score is calculated within four (4) zones of the pitch
- A points system is added to determine the most impactful passing.
- Finally, the data is visualized to provide a clearer understanding of the analysis.



Purpose

Progression Insights

- This project aims to analyze build an attack using the ball from different zones on the pitch, divided into four quarters.
- The analysis involves six steps, starting with exploratory data analysis, followed by data cleaning.
- The pitch is then divided into four quarters, each with their respective start and end zones.



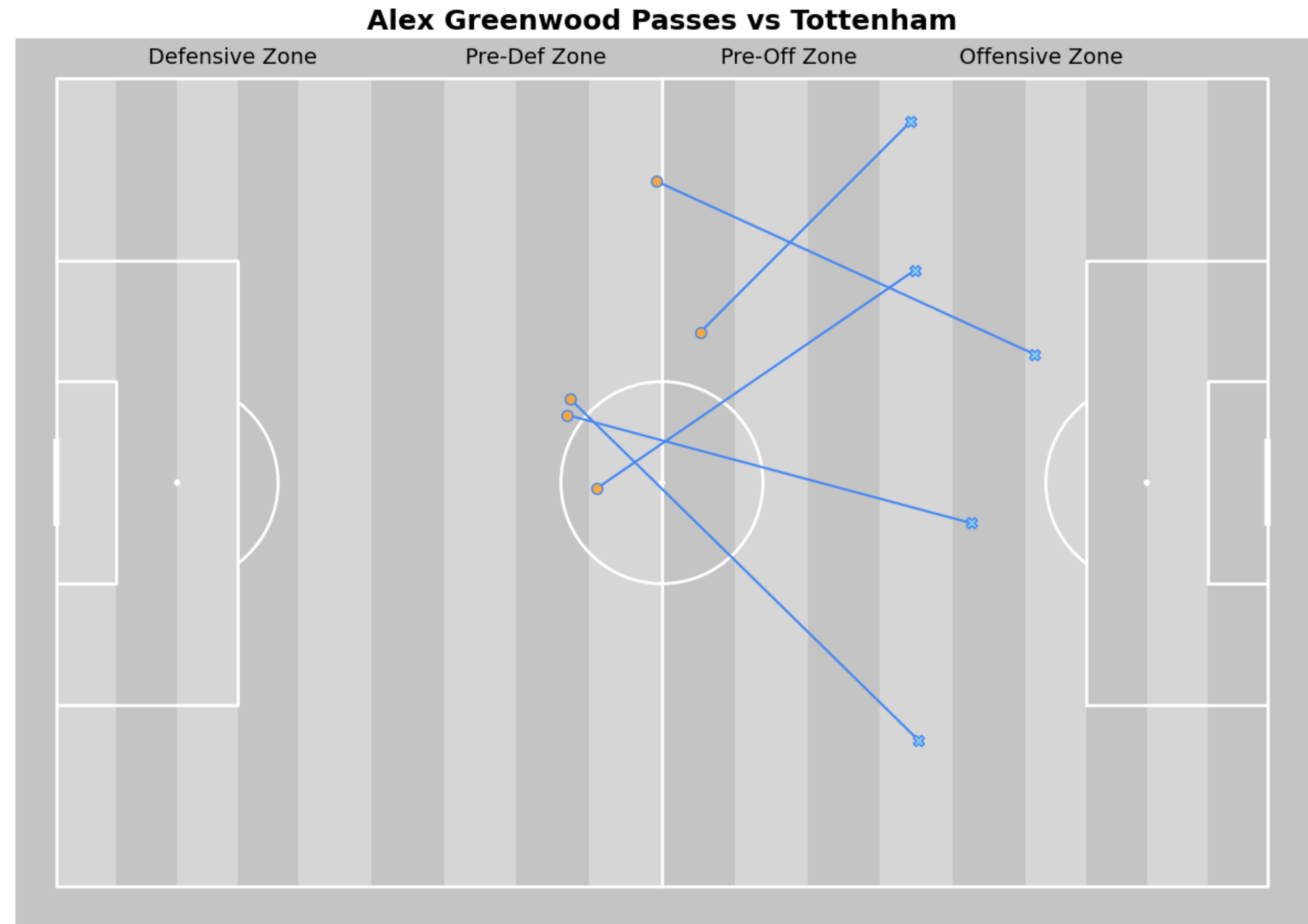
Solution Design

Submission Summary :

- Notebook : Progression Insights_City_Spurs.ipynb
- Video : <https://drive.google.com/file/d/1QnOQQuwWCUBlYBHtRM0VzoEGDu2QYvQ5u/view>
- GitHub : https://github.com/theanatron/City_Women_Hackathon

Repository Summary :

- README.md
- ManCity_Tottenham_events.csv
- ManCity_Tottenham_events.json
- Progression Insights_City_Spurs.ipynb
- Video_Analysis.mp4
- LICENSE



Application

Progression Insights

- A way we can use this is to see how well the players are adhering to attacking principles
- Through out project, you can create healthy competition amongst players whose role are to support the attack/build up
- Utilize video analysis to support findings and create season KPIs to improve build-up



[Click to play video](#)

Challenges

Progression Insights

- Due to RAM issues, we had difficulty creating and deploying an app form of this notebook
- We also had difficulty incorporating off the ball plotting due to time constraints
- Issues combining all matches since we could not merge them without a matchID
- We excluded carries due to time limitations



Next Steps

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- Proper deployment of tool to aggregate all matches
- Add a video link to the time stamps as “proof” of the insight
- Summary Scatter plot displaying the accumulation of the most pass attempts per 90
- Second action function
- Increase in zones from 96 to 192





Thank you!