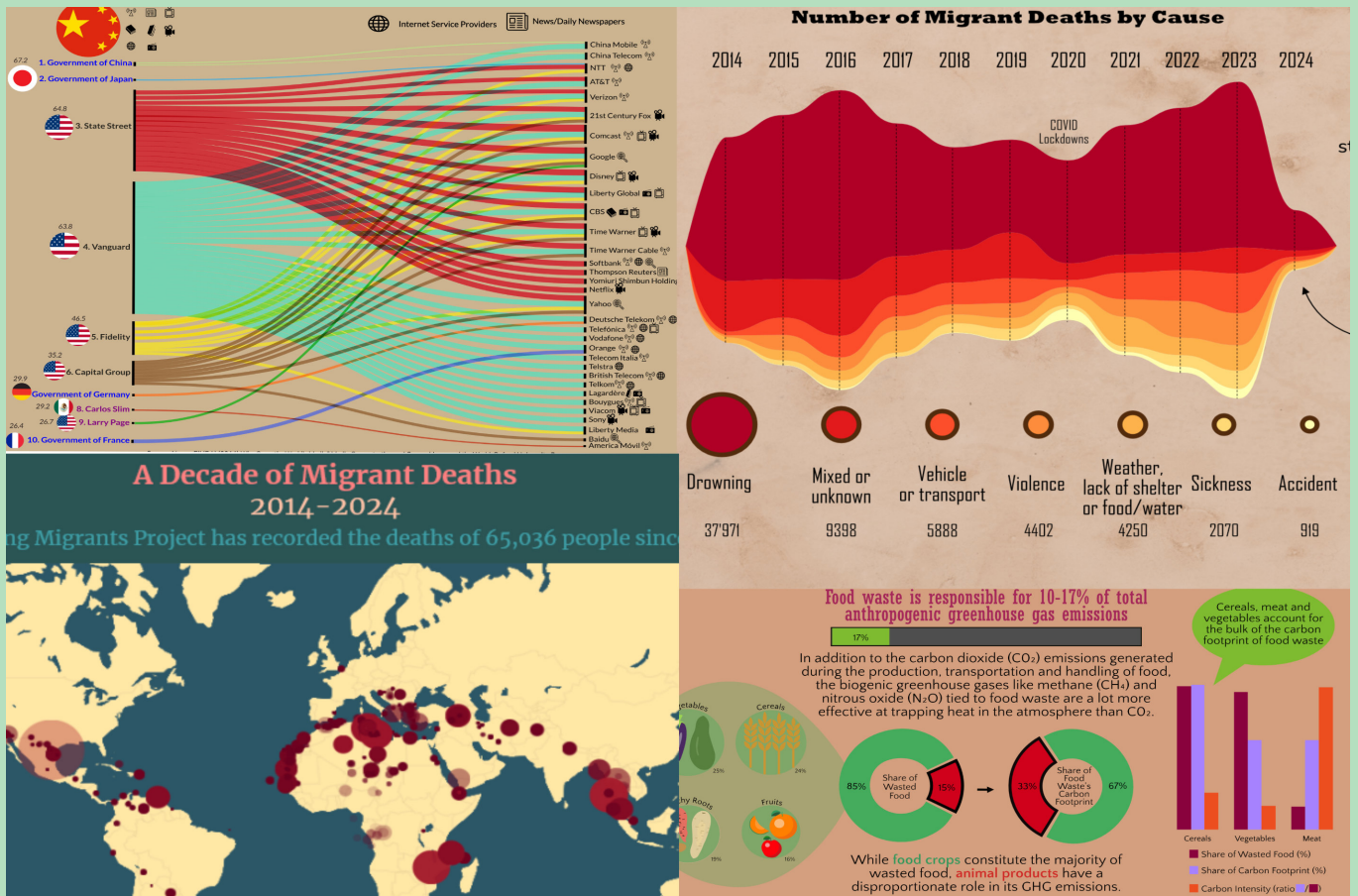


Ravenwood Studios

Visualisations & Infographies



Alexandre Bovey



alexandre-bovey.com

Bonjour, je m'appelle Alexandre Bovey



En tant que journaliste et spécialiste en datavisualisation/infographie, ma mission est de mettre en évidence les enjeux révélés grâce aux données, par le biais de visualisations et d'articles stimulants.

Ma passion est d'aider le public à comprendre les questions fondamentales de notre époque et à lutter contre les injustices et pour une société plus égalitaire.

Je vous invite à me [contacter](#) si vous êtes intéressé·e·s par les services suivants. Je suis prêt à prendre en charge l'ensemble du processus moi-même, de l'exploration des données à la visualisation, ou à vous aider pour des tâches plus spécifiques !

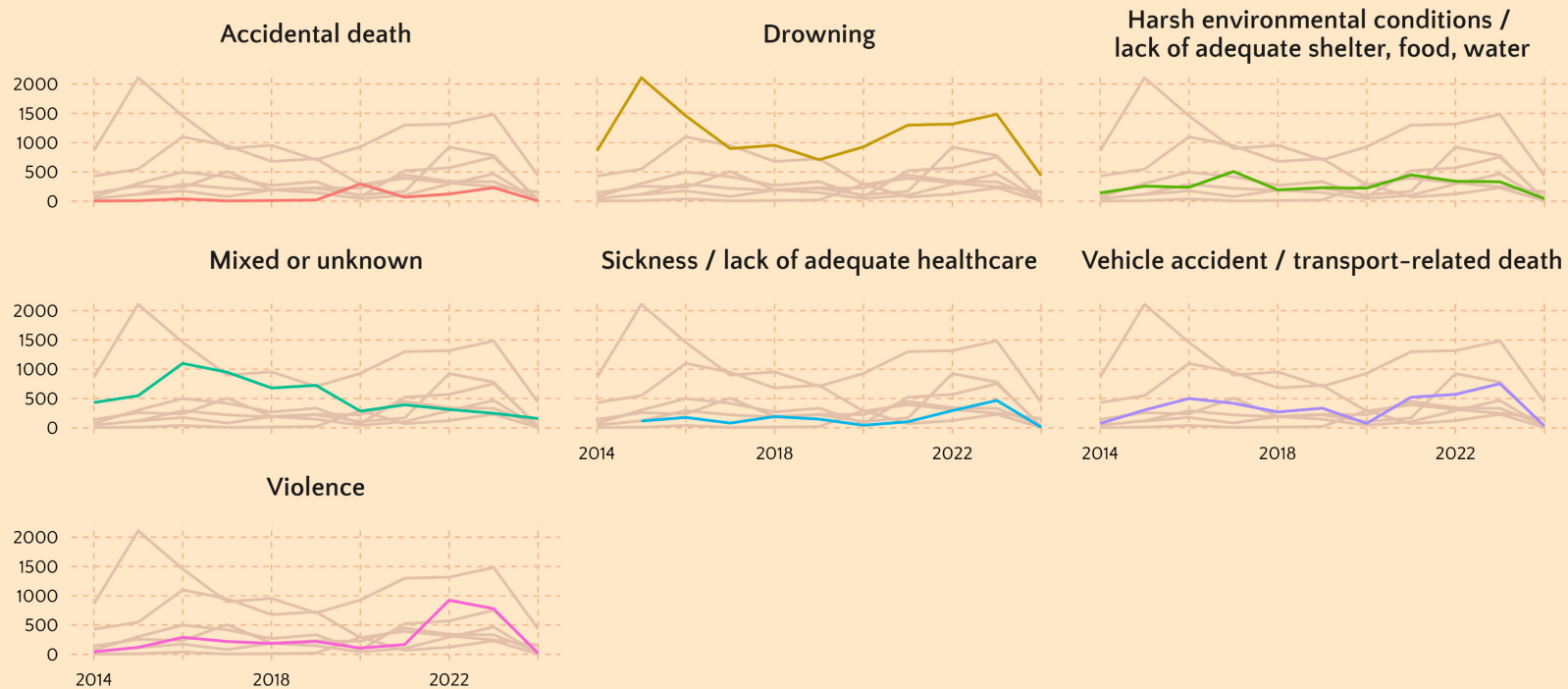
- ◆ Traitement et exploration des données
- ◆ Visualisation de données et infographies



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Datavisualisations

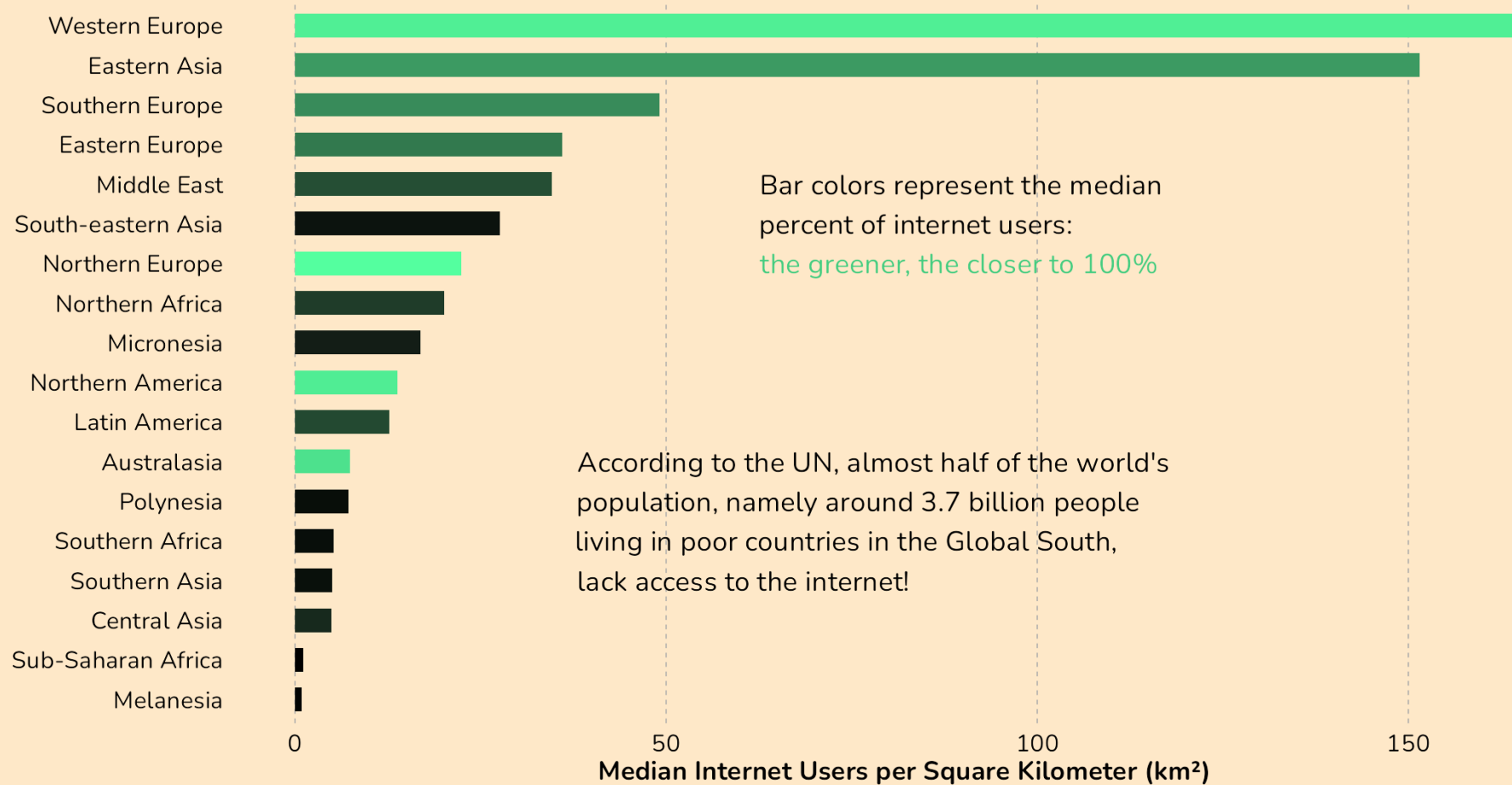
Number of Migrant Deaths by Cause since 2014



Visualization: Alexandre Bovey
Data: Missing Migrants Project, 2024



TidyTuesday 2024, #43: Internet Users by Country



Visualization: Alexandre Bovey

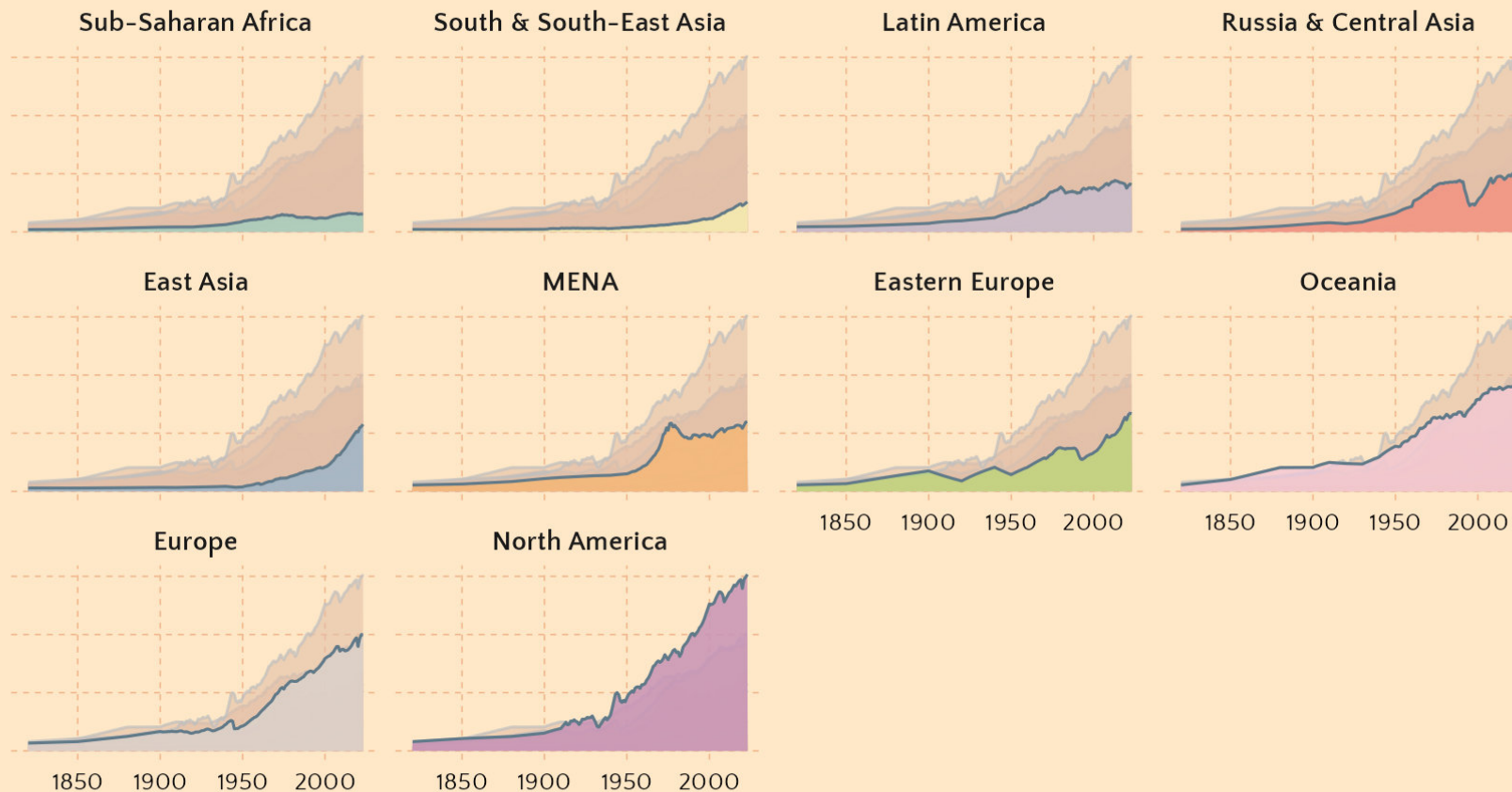
Data: CIA World Factbook, UN



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Average Income Per Adult from 1820 to 2023

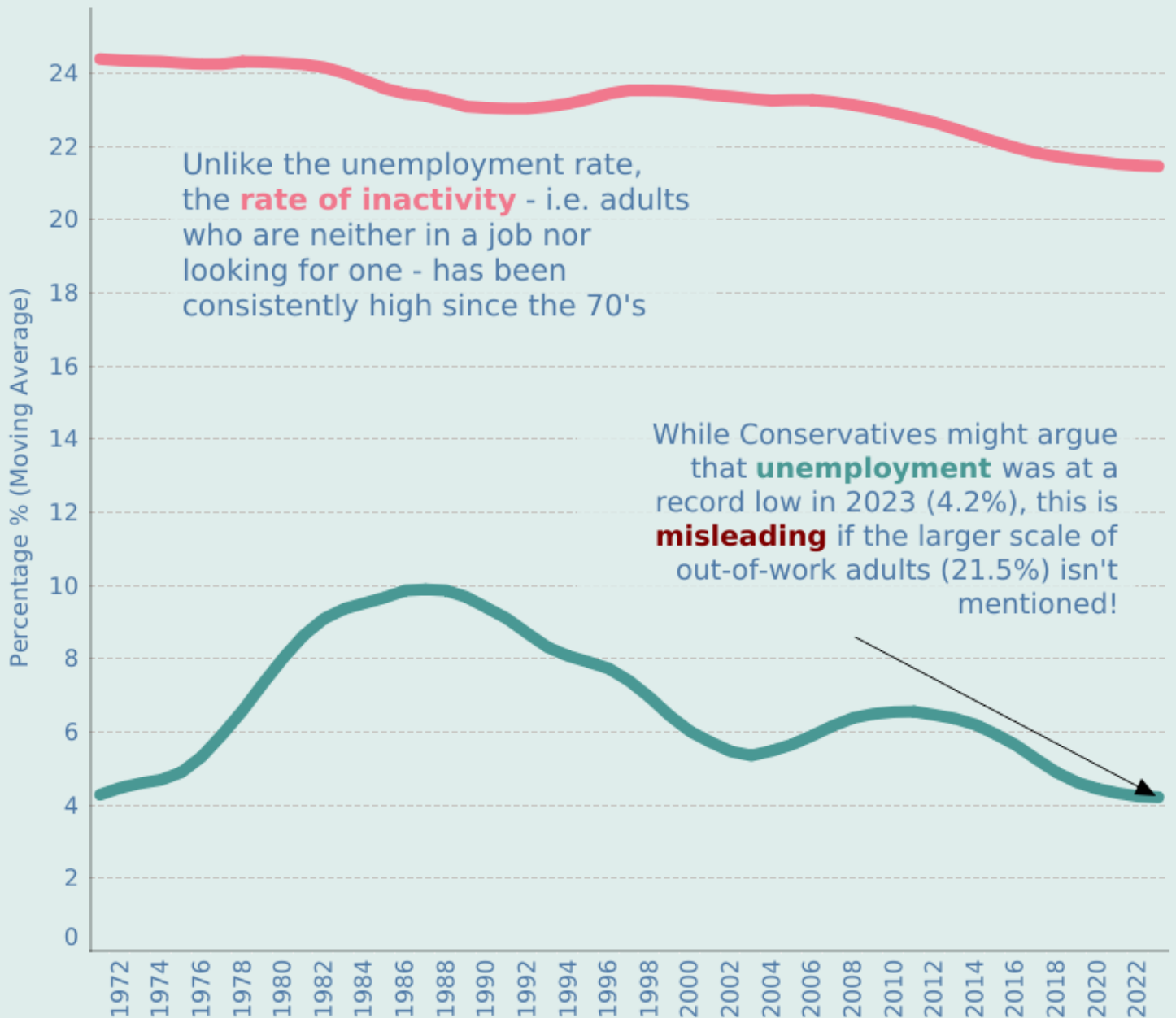
Euro € | ppp | constant (2023)



Data: World Inequality Database
Visualization: Alexandre Bovey



Unemployment Statistics in the UK: A Game of Shadows



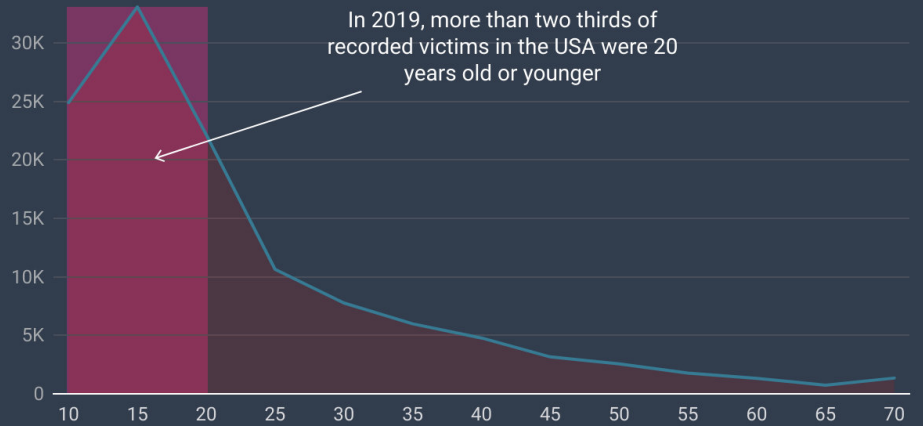
Source: ONS (12/03/2024)

Visualization: Alexandre Bovey



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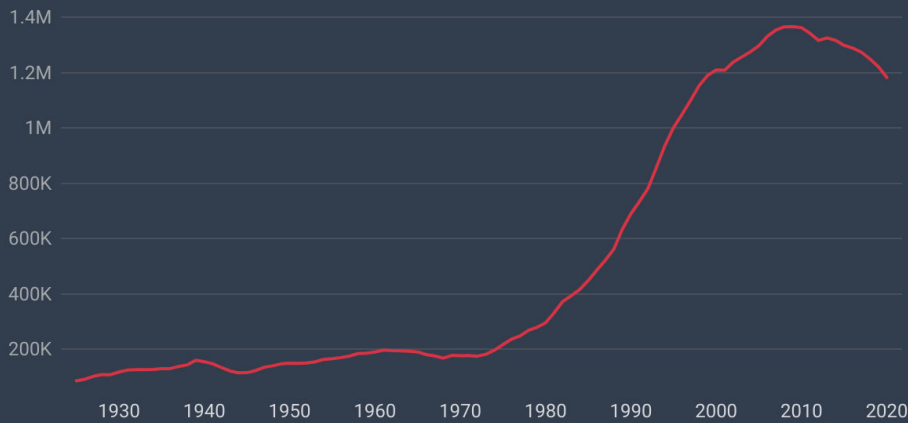
Children & Teens are the Primary Targets of Sexual Violence



Source: FBI's NIBRS (2019) • Created with Datawrapper

Growth of the U.S. Carceral Population Since 1925

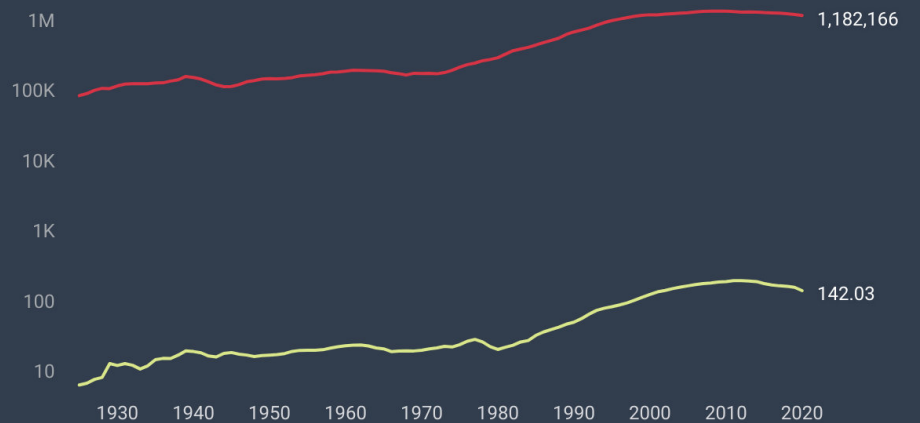
— Total population on a single day, in state prisons



Source: Prison Policy Institute • Created with Datawrapper

Growth of the U.S. Carceral Population Since 1925

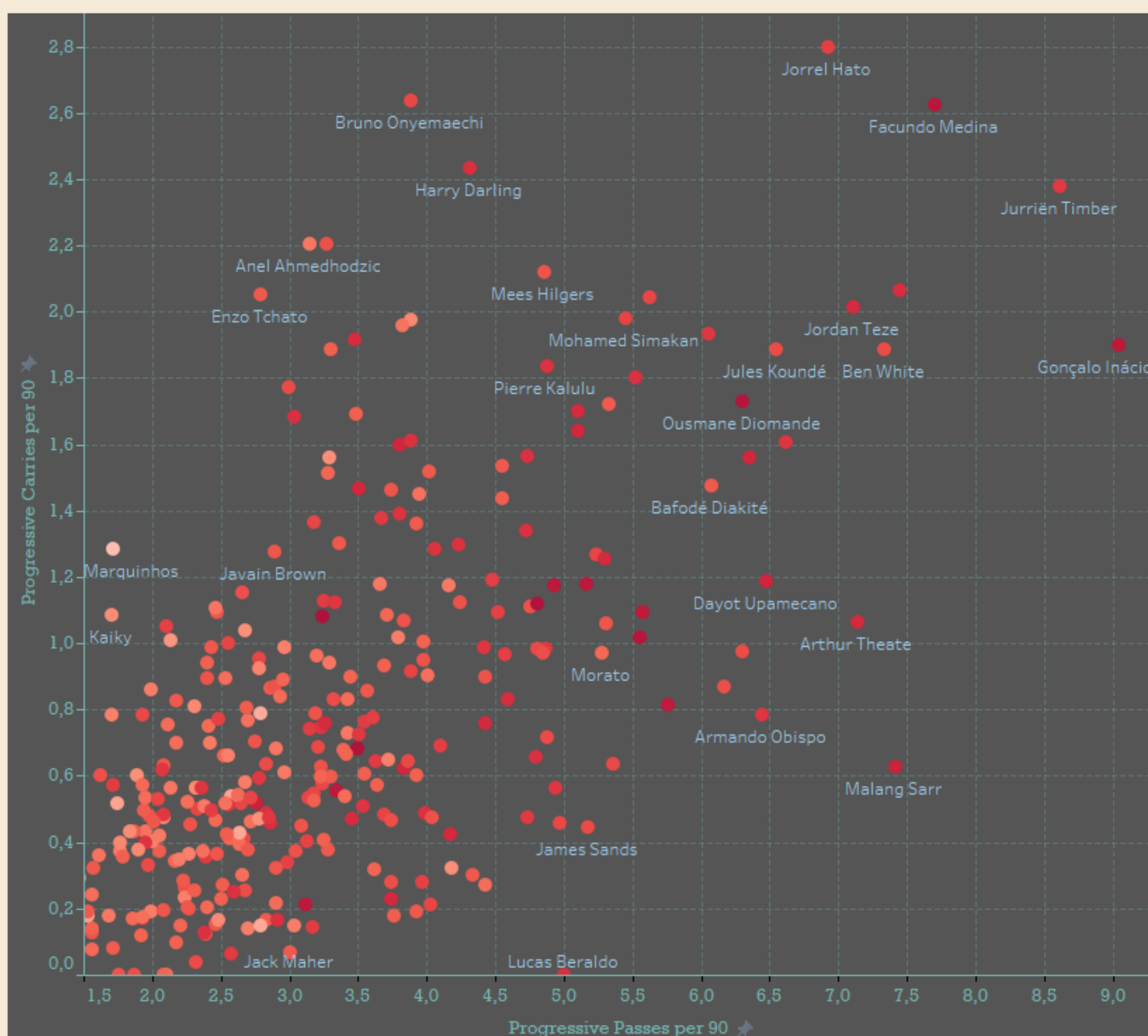
— State prisons — Federal prisons



Source: Prison Policy Institute • Created with Datawrapper



Last Season's Most Promising Ball-Playing Centre-Backs



Touch Centrality (%)

6,552 13,817

Touch Centrality measures how much a player contributes to his team's possession in terms of ball control.

The % is the proportion the player's touches per 90 represent within his team's total touches (per 90).

All players 25yo or younger, with at least 500min played, in 22/23.

Leagues:

First tier: England, France, Spain, Italy, Germany, Portugal, Netherlands, Brazil, USA, Mexico + England's second tier (Championship).

Data viz from @alraven3
Source: Statsbomb data collected via Fbref.com with code from @BeGriffis

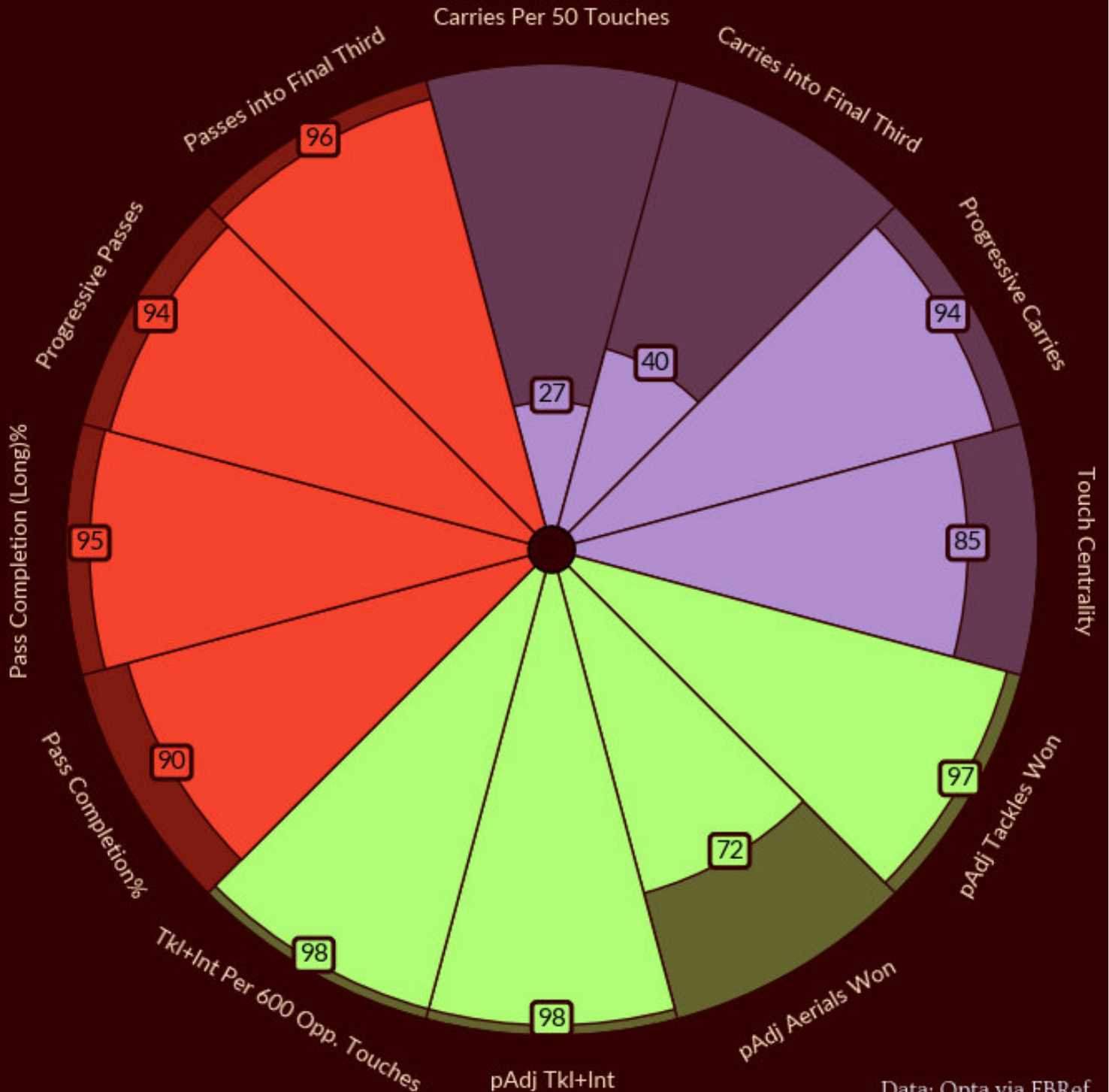


Florentino Luís

24yo | Benfica | 10.13 90s | 1.84m

Percentile Rank vs Midfielders | 2023/24 | Made by @alraven3

Defending Carrying/Ball Control Passing

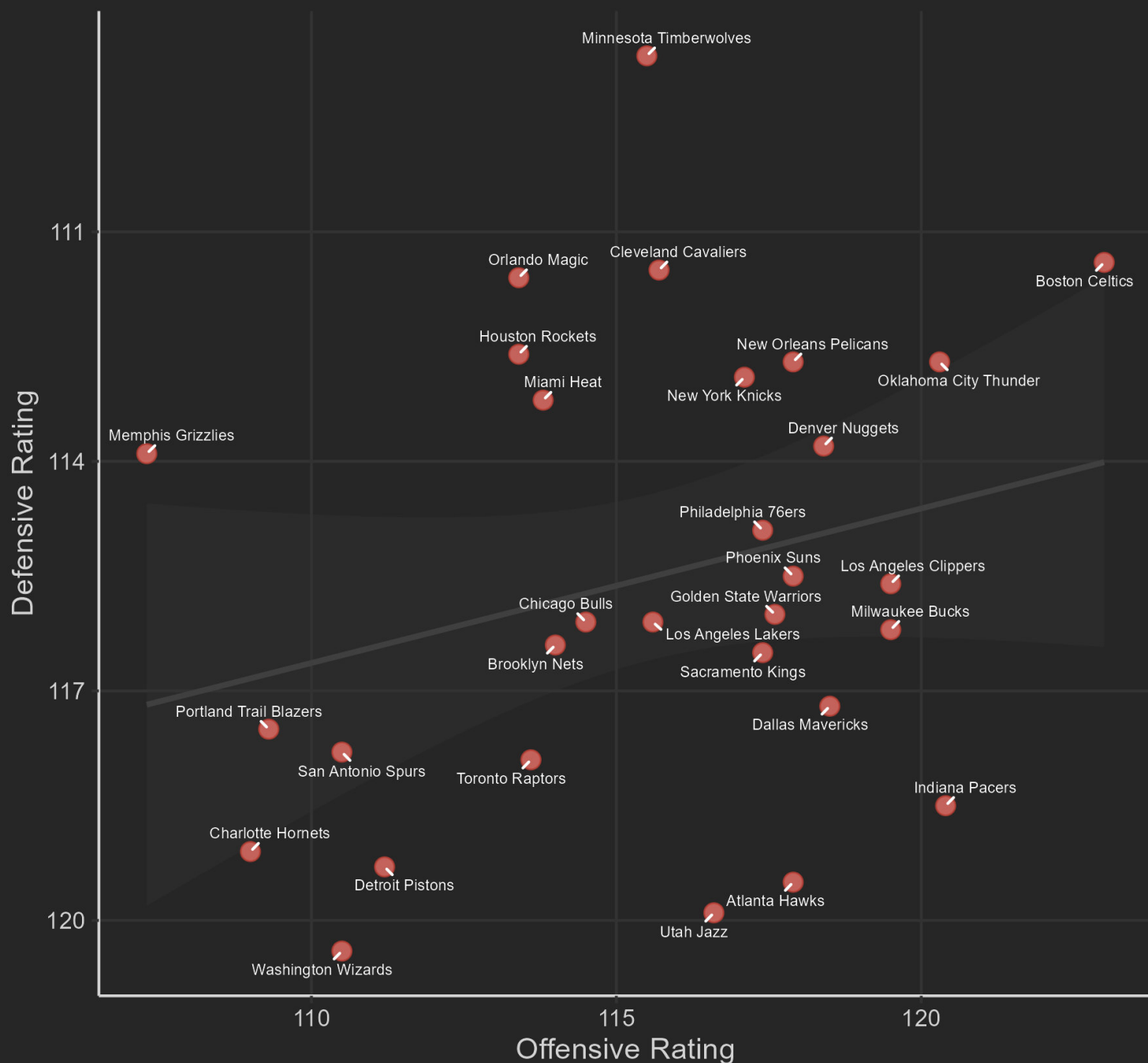


Data: Opta via FBRef
Own Percentiles based on Raw Data, for 16 'advanced' Leagues
All values per 90; Touch Centrality = Proportion of Player's Touches to His Team's Total Touches
Chart inspired by @Worville, made with Mplsoccer



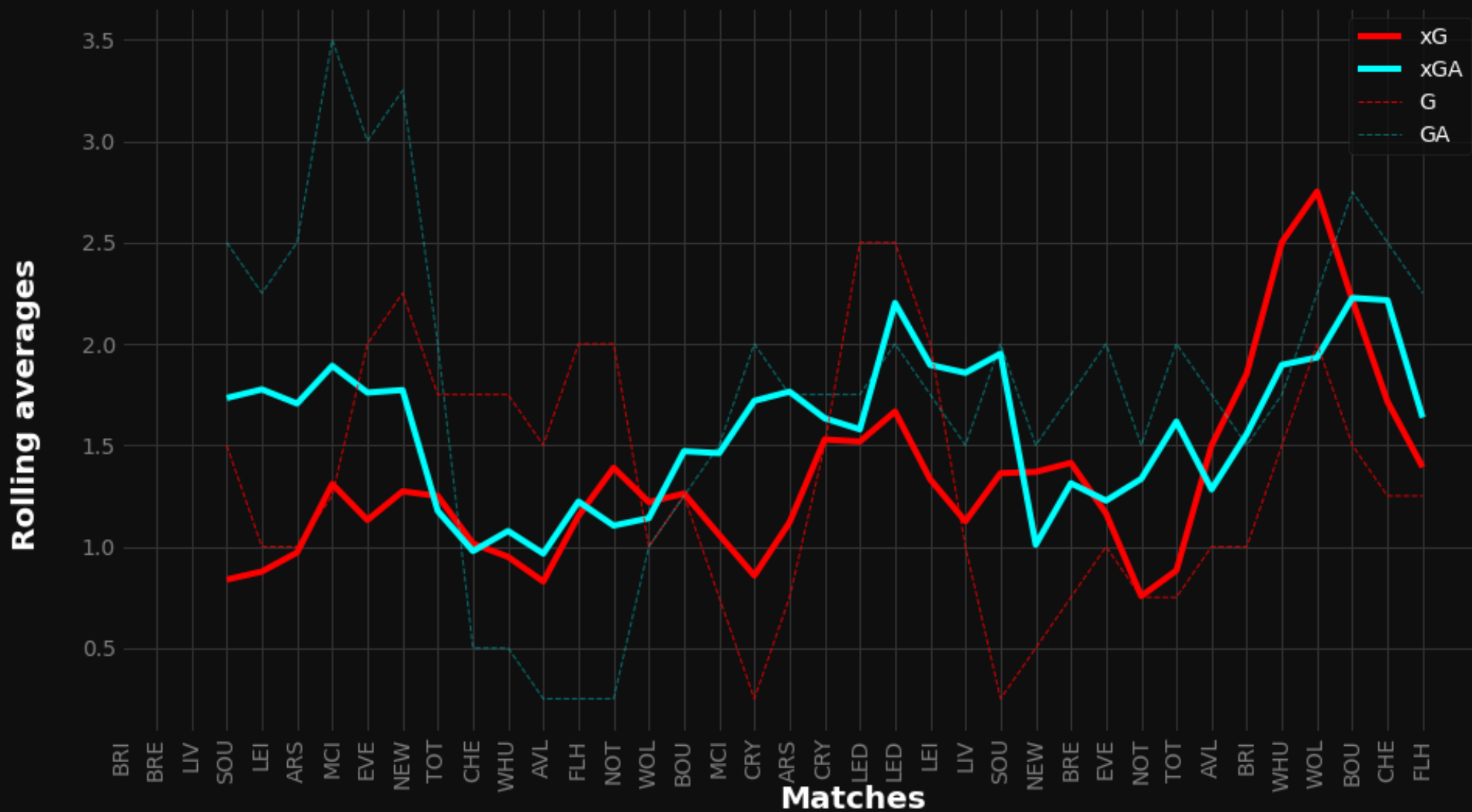
Offensive Rating of NBA Teams

2023-24 Regular Season



Man Utd 2022/23 season

Expected Goals Scored (xG) vs Expected Goals conceded (xG)



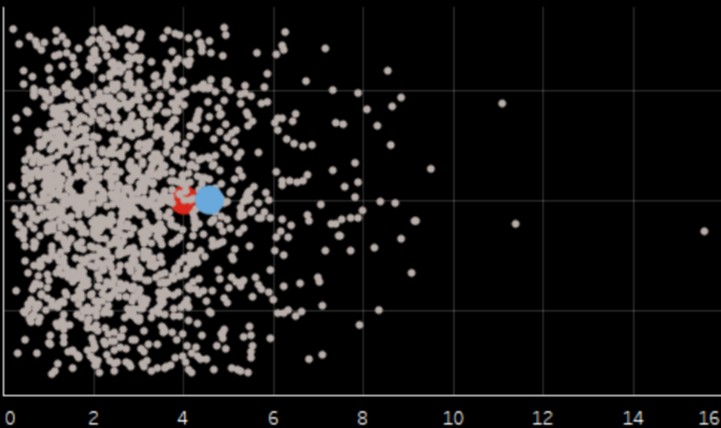
Dashboards

Des présentations avec plusieurs variables et graphiques, donnant un aperçu plus détaillé d'un sujet.

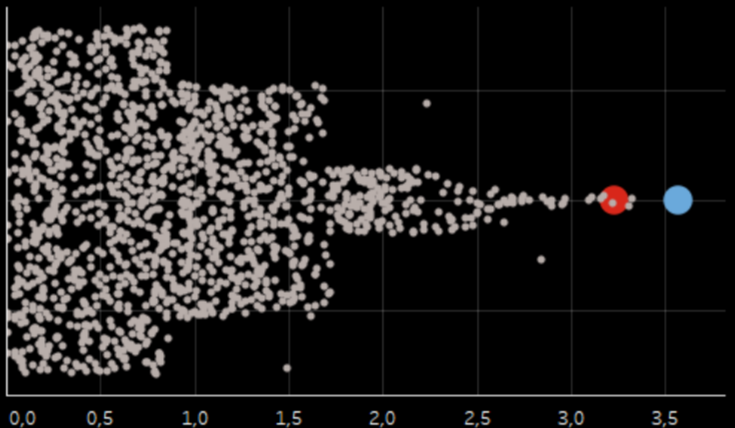
Comparaison de la performance de deux joueurs de football sur une saison

Kevin De Bruyne's and Bruno Fernandes's Passing in 22/23

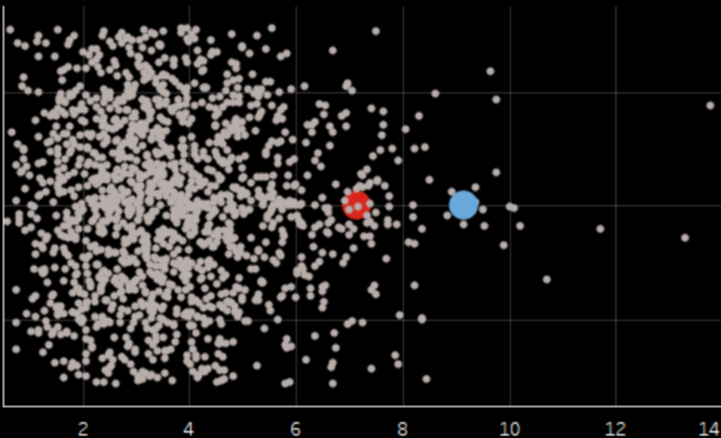
Passes into the Final Third



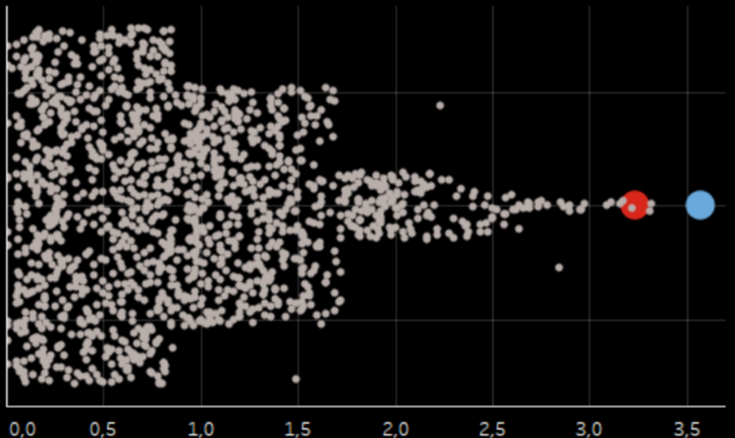
Passes into the Penalty Area



Progressive Passes



Key Passes



Data from Statsbomb via FBref
- All stats are per 90
- Only outfield players from Big 5 leagues with at least 10 90s played

Data viz by @alraven3



Rapports de match (football)

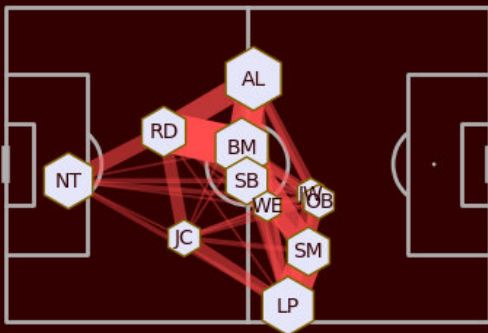
Newport County

1 - 1

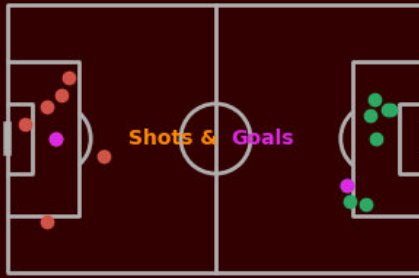
Barrow

League Two, September 16, 2023

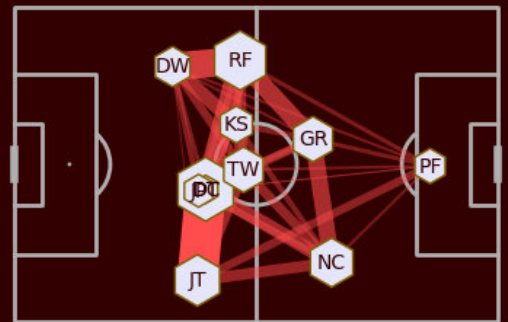
Home Pass Network



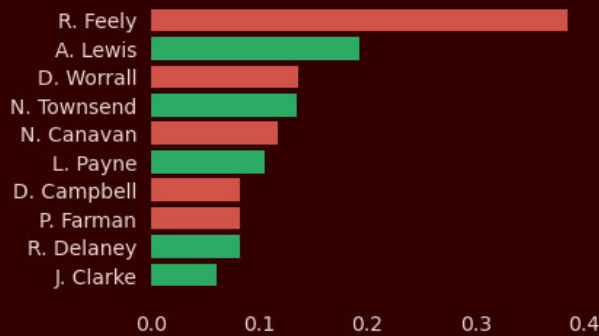
Shots & Goals



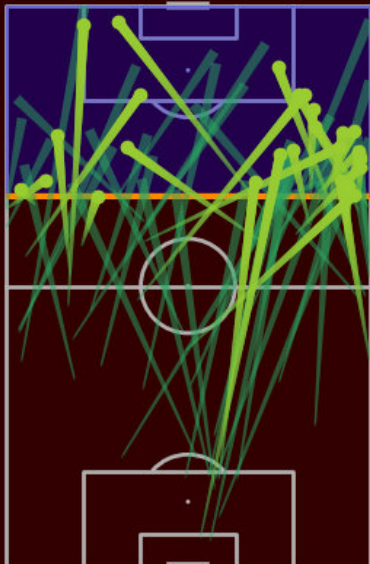
Away Pass Network



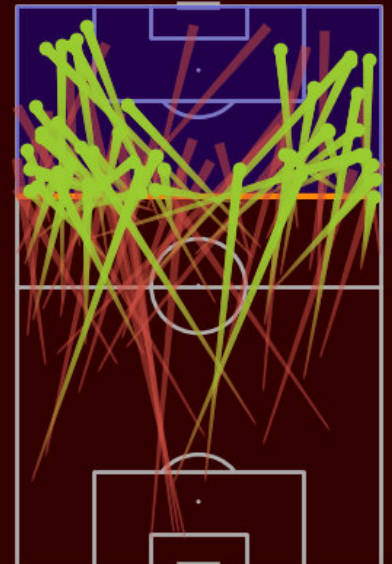
Top 10 Players: Passing xT



Home Passes into the Final 1/3

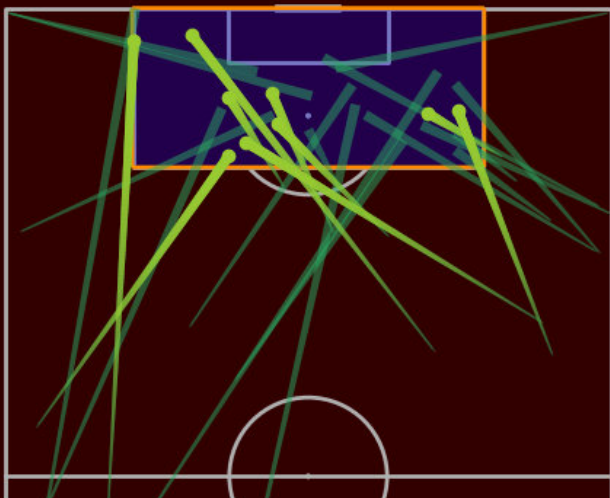


Away Passes into the Final 1/3



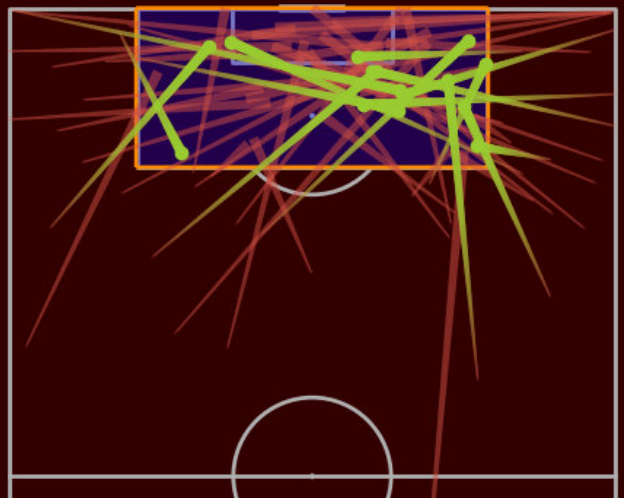
Box Entries	26	54
Big Chances	1	1
SOT	2	3
Possession	36.4%	63.6%
Field Tilt	40.0%	60.0%
PPDA	6.1	4.0

Home Passes into the Box



Away Passes into the Box

→ Completed Passes



@alraven3

Data via Opta



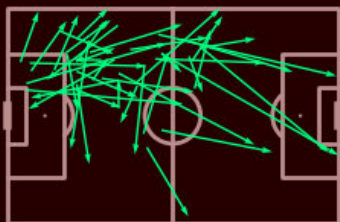
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Cartes de passes d'une équipe durant un match (football)

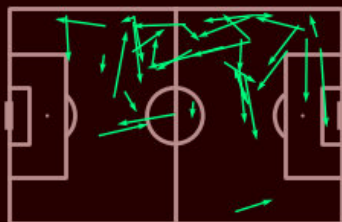
Lausanne-Sport's Passing against Servette

Swiss Super League, March 10, 2024

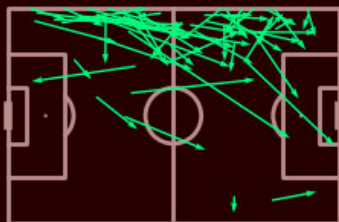
B. Dabanli



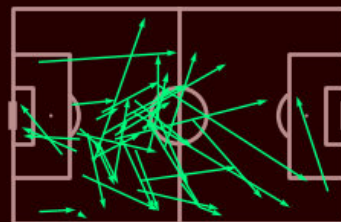
F. Diabaté



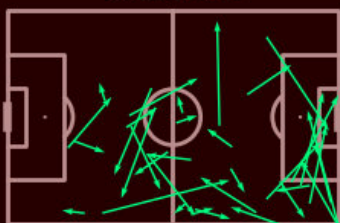
M. Poaty



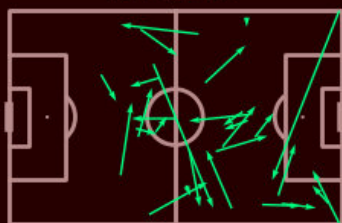
N. Dussenne



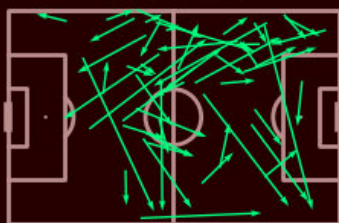
O. Custodio



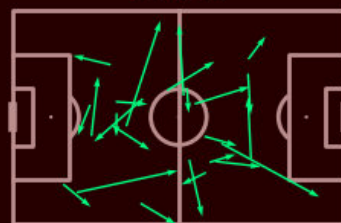
S. Pafundi



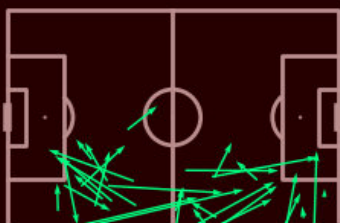
A. Bernede



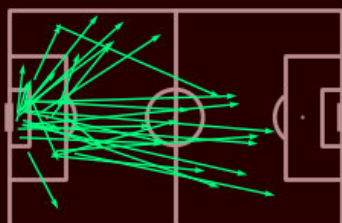
J. Roche



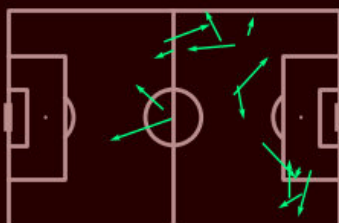
R. Giger



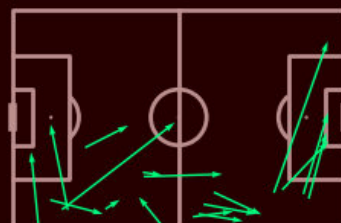
K. Letica



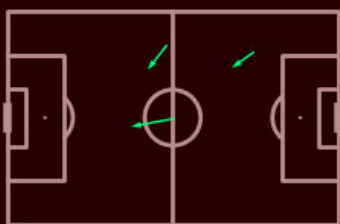
K. Sène



H. Loucif



B. Labeau



Data: Opta

Direction of Play →

@alraven3



Infographies

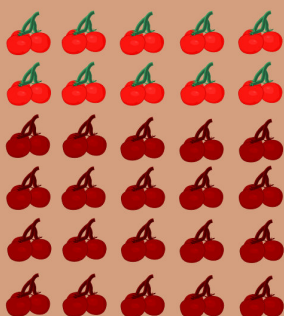
Représentation graphique contenant un mélange de visualisations, d'images et de texte.

Infographies sur le gaspillage alimentaire

Overview of Modern Food Waste

While at least 25'000 people die of hunger every day and close to a billion people are undernourished, frightening amounts of food get wasted, which in turn contributes to the global ecological crisis.

At least a third of total food is wasted every year across production, distribution and consumption



Over one billion tons of food get wasted, about a third of the mass of the Great Pyramid of Giza.



According to conservative estimates, the equivalent of one billion meals is being wasted by households every single day, which would be enough to give 1.3 daily meals to everyone impacted by hunger.

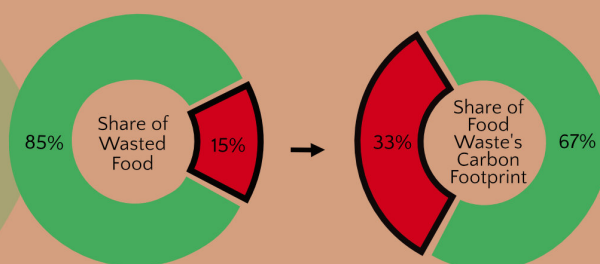
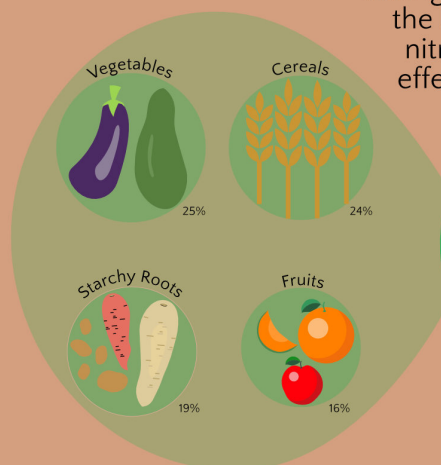


Food waste is responsible for 10-17% of total anthropogenic greenhouse gas emissions

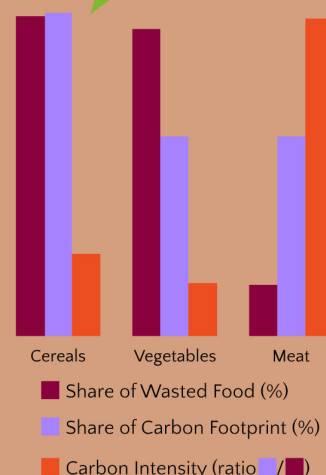


In addition to the carbon dioxide (CO₂) emissions generated during the production, transportation and handling of food, the biogenic greenhouse gases like methane (CH₄) and nitrous oxide (N₂O) tied to food waste are a lot more effective at trapping heat in the atmosphere than CO₂.

Cereals, meat and vegetables account for the bulk of the carbon footprint of food waste



While **food crops** constitute the majority of wasted food, **animal products** have a disproportionate role in its GHG emissions.



Sources: UNEP (2024), FAO (2013), Mbow *et al.* (2019), Zhu *et al.* (2023), Crippa *et al.* (2021), Klaura *et al.* (2019).

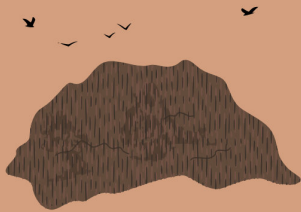
Visualization: Alexandre Bovey

(Première partie)



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Infographies sur le gaspillage alimentaire



The majority of food waste ends up in **landfills**, where it releases methane while degrading under anaerobic conditions. Methane emissions also come from ruminants' digestive process and some specific production methods (e.g. rice paddies).

Nitrous oxide emissions are mainly tied to synthetic fertilizers and manure management.

The production of all this wasted food has a huge **water footprint**, and contributes to **habitat and biodiversity loss**, whose primary driver is the conversion of natural ecosystems for agriculture.



Food waste takes up the equivalent of a third of the world's agricultural land



The volume of water used each year to produce food that is wasted is equivalent to three times the volume of Lake Geneva

Food waste is widespread across the world, not just in rich countries. There are some regional differences however: consumption-based losses are predominant in richer countries, whereas production-based losses are more widespread in poorer regions (e.g. Africa, South America).

Food waste includes an enormous sacrifice of animal lives: 18 billion - or nearly one in four - land animals who are raised to die in factory farming aren't eaten



The overwhelming majority of this waste - as well as premature deaths on the farm - are chicken, at a staggering 16.8 billions (93.6%).



Europe, North and South America, are responsible for 80% of global meat waste. Meanwhile, China and the USA account for a third of animal lives lost because of food waste, due to their large population sizes and diets. In contrast, despite its large population India consumes - and therefore wastes - a lot less meat.

Insufficient data and research

- The main type of comparative country-level data is about household waste, and even then there are gaps and issues with this coverage.
- Hence many stages of the food waste process are under-measured, such as manufacturing or transportation.

Sources: UNEP (2024), FAO (2013), Mbow *et al.* (2019), Zhu *et al.* (2023), Crippa *et al.* (2021), Klaura *et al.* (2019).

Visualization: Alexandre Bovey

(Deuxième partie)

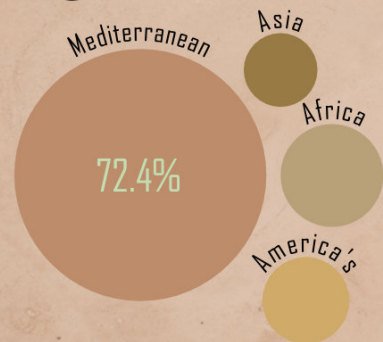


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Infographie sur les décès de migrants depuis 2014

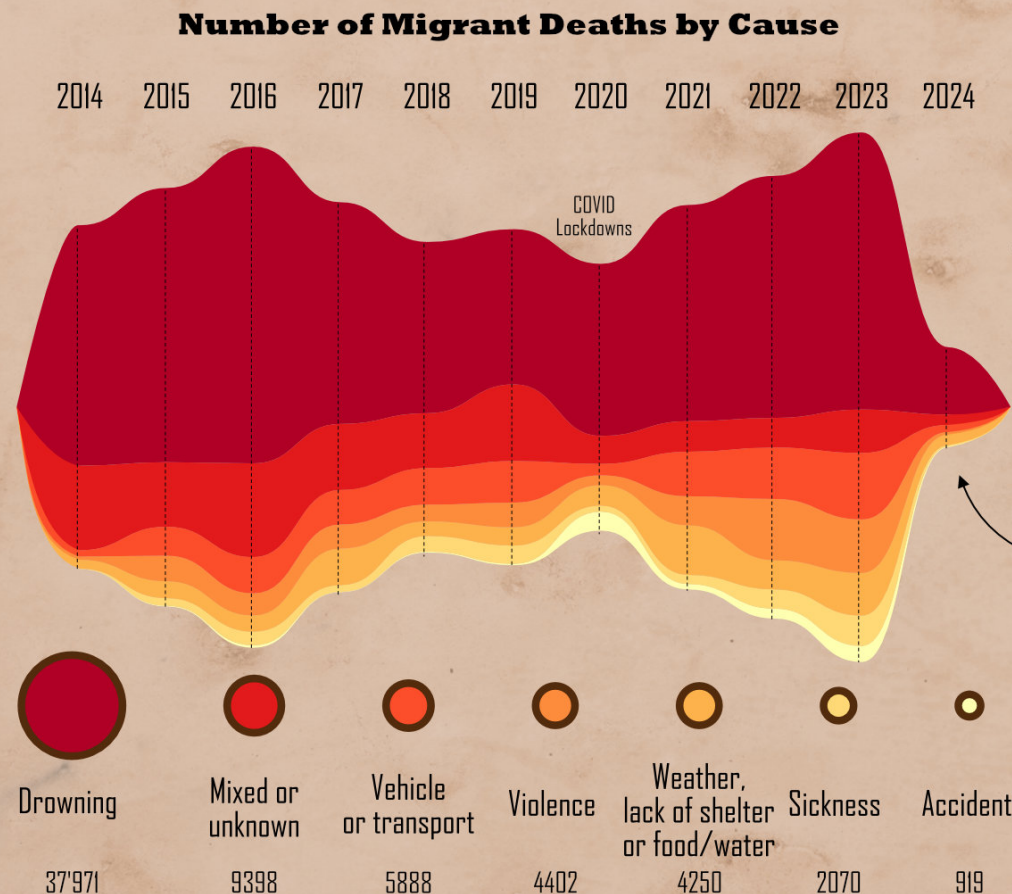
THE DEADLY CONSEQUENCES OF THE BORDER REGIME

Drowning Deaths By Region



Drowning is by far the largest cause of deaths - accounting for nearly two-thirds - and is concentrated in the Mediterranean. This is a direct result of Europe's policies in the past decade, intended to make migration routes as dangerous as possible.

Total Dead and Missing by Cause



The UN's conservative estimate is a total of over 65'000 deaths since 2014, which probably represents only the tip of the iceberg. Investigations from Lighthouse Reports and others have shown that the reality is even grimmer, but states and border authorities try to hide it.

Note: the data for 2024 is incomplete, it's unlikely there's actually been a major decrease!

Made by Alexandre Bovey
Date: June 5, 2024
Source: Missing Migrants Project (UN)

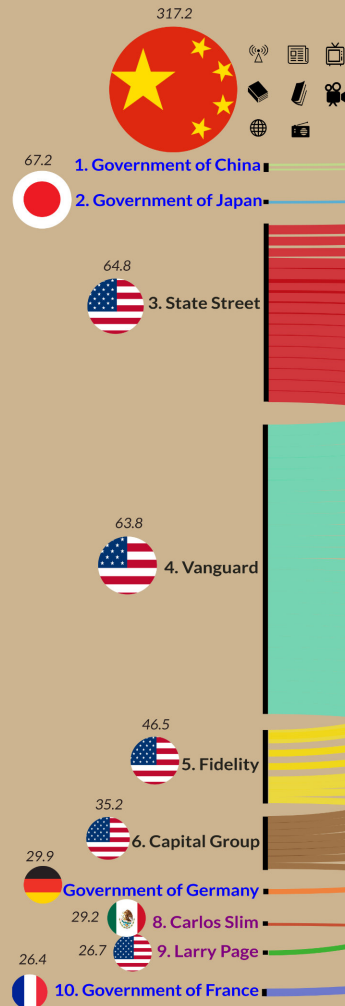


Infographie sur la concentration médiatique

Global Media Concentration

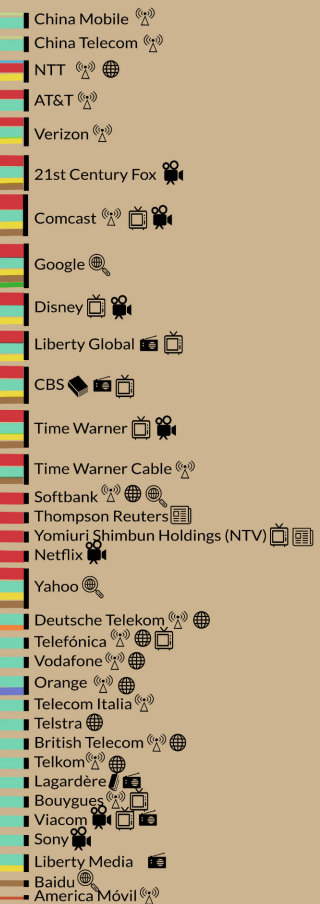
Top 10 Media Owners Worldwide - as of Sept. 2013
Value of Media Holdings (\$ Billions)

■ Governments ■ Individuals ■ Institutional Investors



Companies and the Industries they Dominate

Book Publishers Search Engines Magazines
Telecommunications Television Radio Film Studios/Distributors
Internet Service Providers News/Daily Newspapers



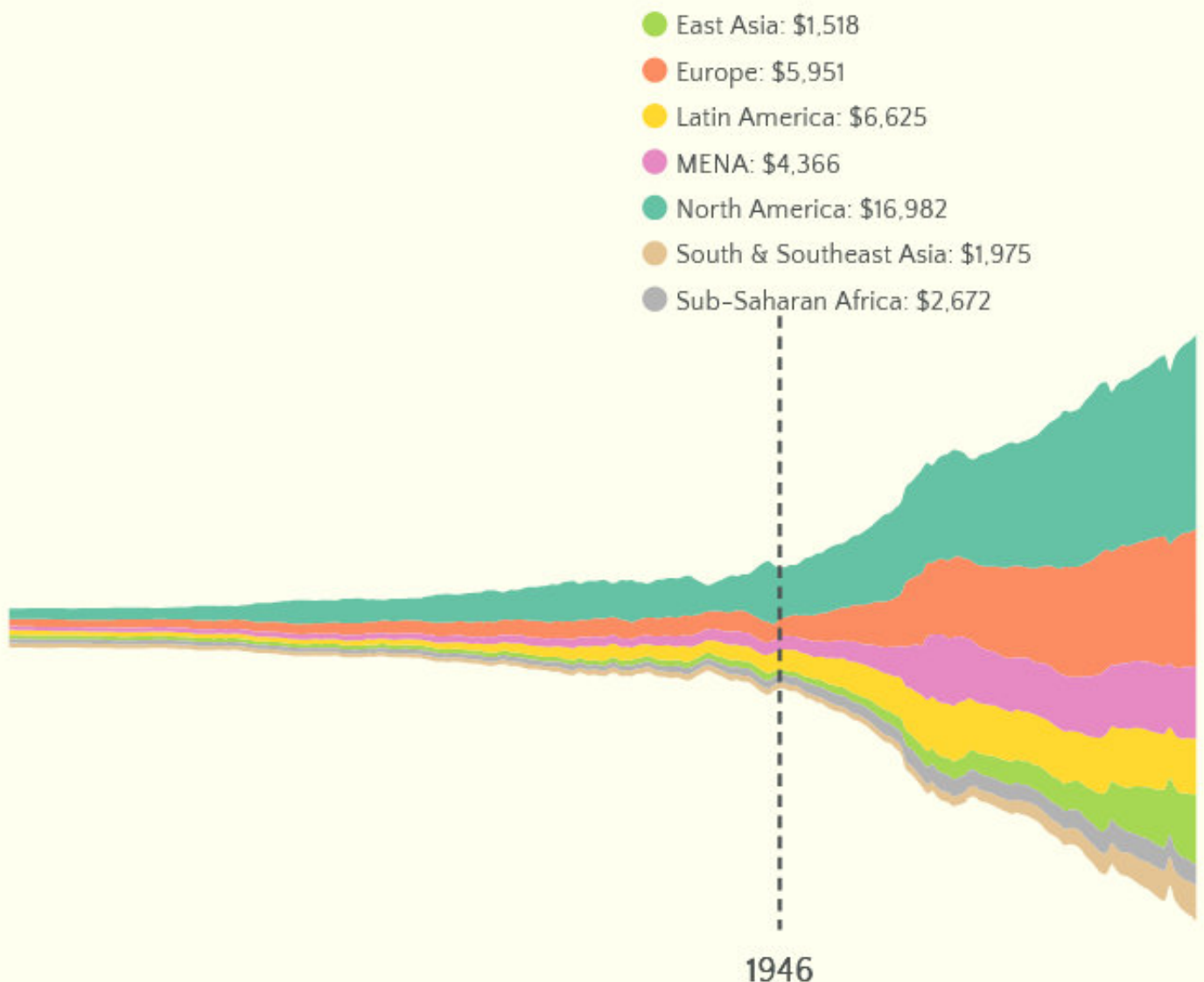
Source: Noam, Eli (Ed.) (2016) Who Owns the World's Media? Media Concentration and Ownership around the World, Oxford University Press.

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Visualisations interactives

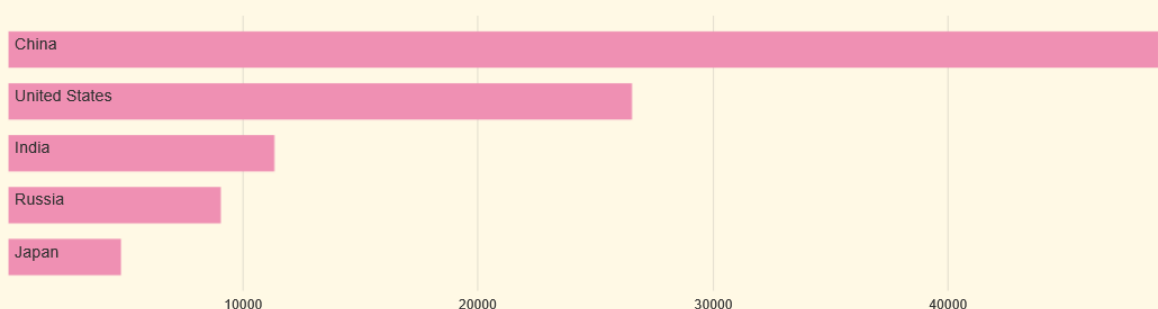
Je crée également des visualisations interactives grâce à Tableau, Flourish, Python, R and D3.js/React/Svelte.

En s'appuyant sur les données de la [World Inequality Database](#), j'ai créé cette page interactive contenant 13 graphiques réalisés avec D3.js et React. Voir [ici](#) pour la version en D3 et [ici](#) pour la version D3/React.

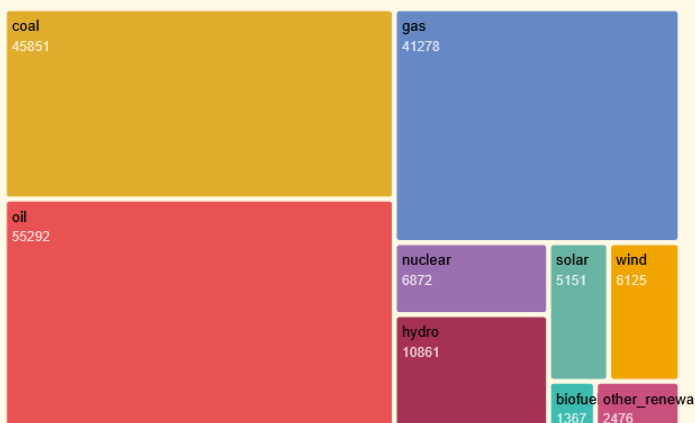


Ce [dashboard interactif](#) créé avec D3.js et React comprend trois graphiques sur la composition de la consommation d'énergie mondiale, avec notamment l'évolution de la consommation par source d'énergie depuis 1965.

Top 5 Countries by Energy Consumption (2024)

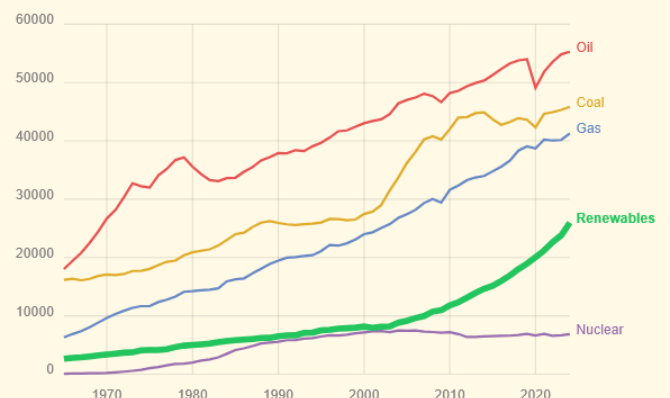


World Energy Mix (2024)



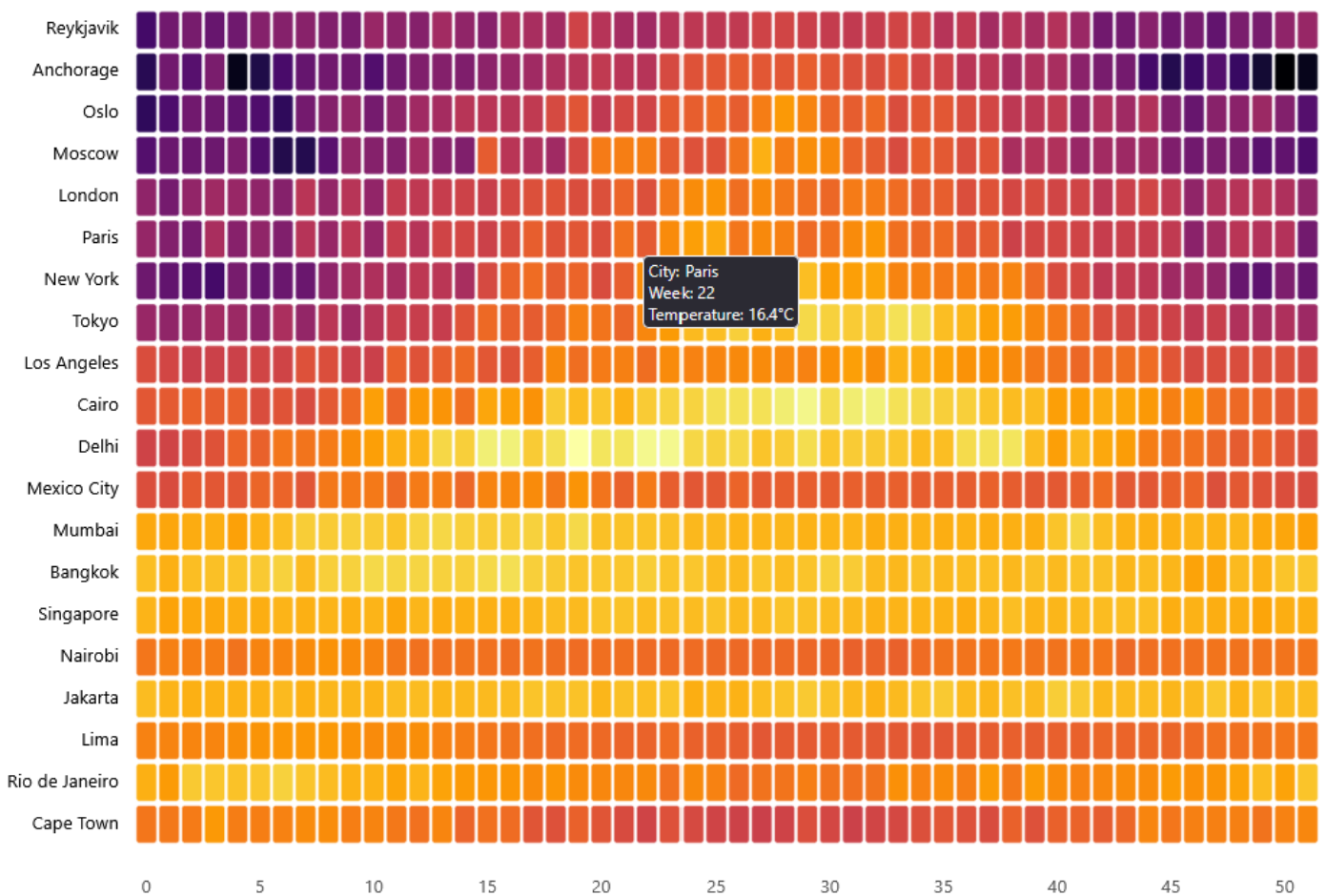
The Global Evolution of Energy Consumption (1965-2024)

Despite Some Progress, Renewables Remain Far Behind Fossil Fuels



Ce graphique est une [heatmap](#) des températures hebdomadaires dans des grandes villes à travers le monde, en 2025. Les données proviennent d'une API et l'utilisateur peut explorer les valeurs hebdomadaires avec sa souris.

Heatmap: Weekly Temperatures Across the World in 2025

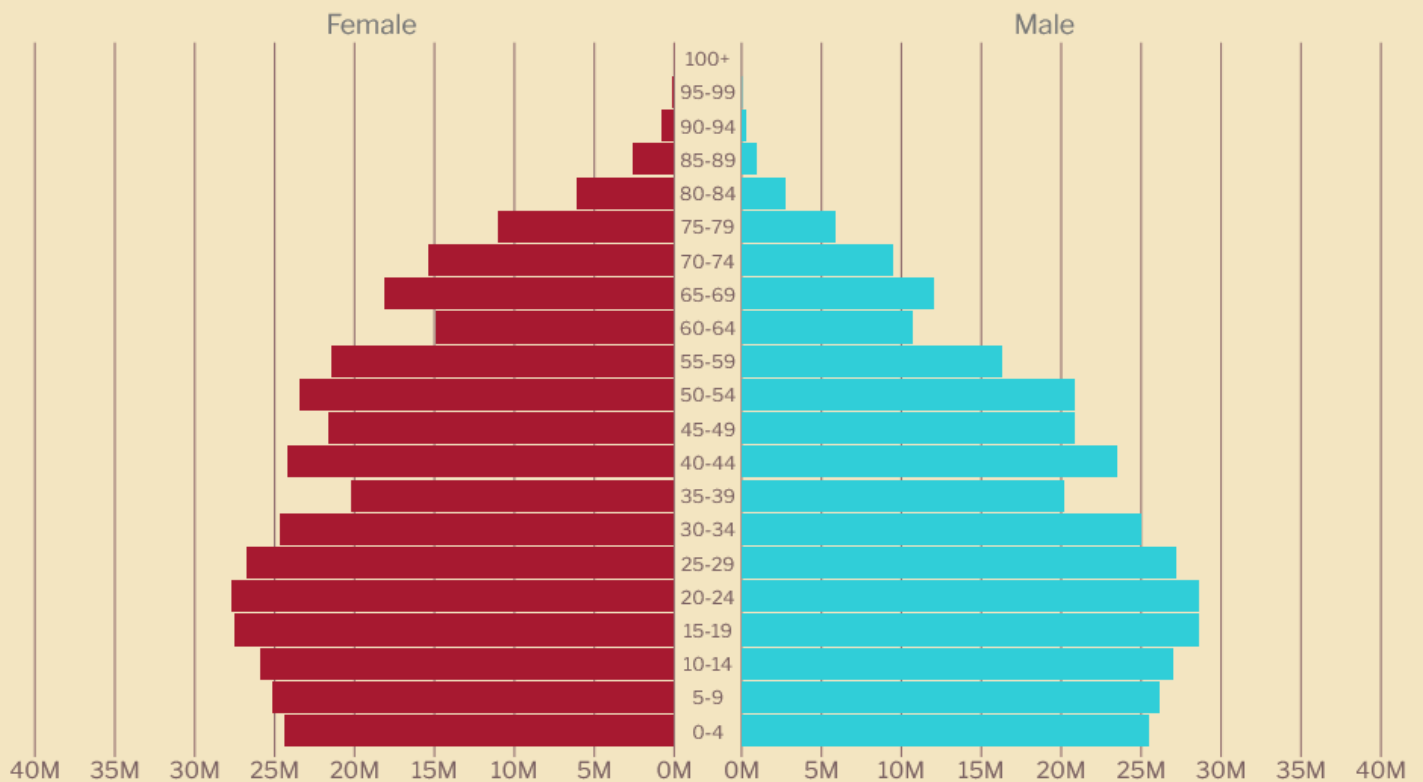


Data: [Open-Meteo API](#)



À partir des données démographiques de l'ONU, j'ai créé cette visualisation interactive montrant la distribution de la population par groupe d'âge et genre entre 1960 et 2020. Voir [ici](#) pour la version en D3 et [ici](#) pour la version D3/React.

Europe's Population by Age and Gender (1980)



1960

1980

2000

2020

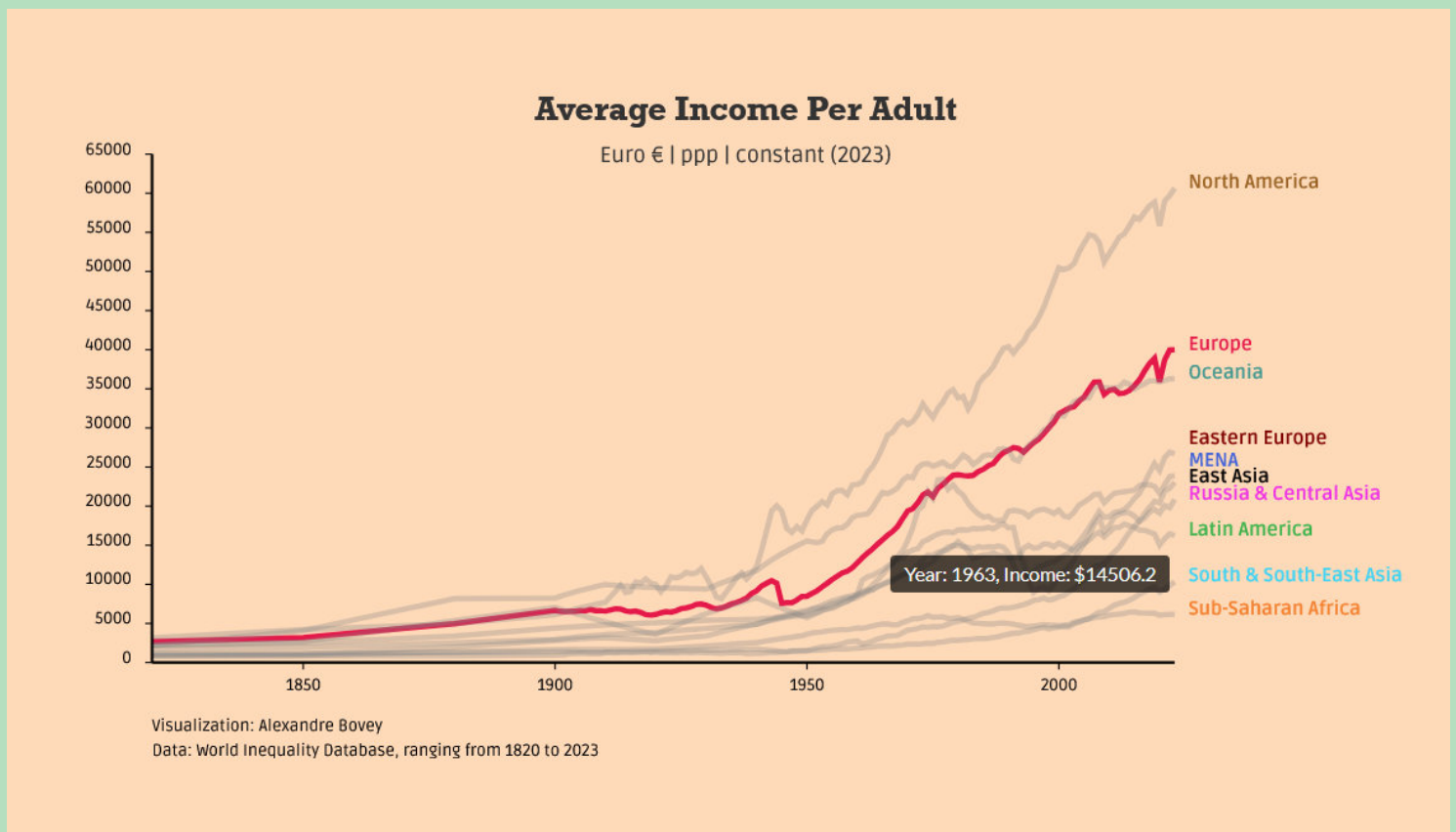
Europe



Data is from the UN's World Population Prospects 2024



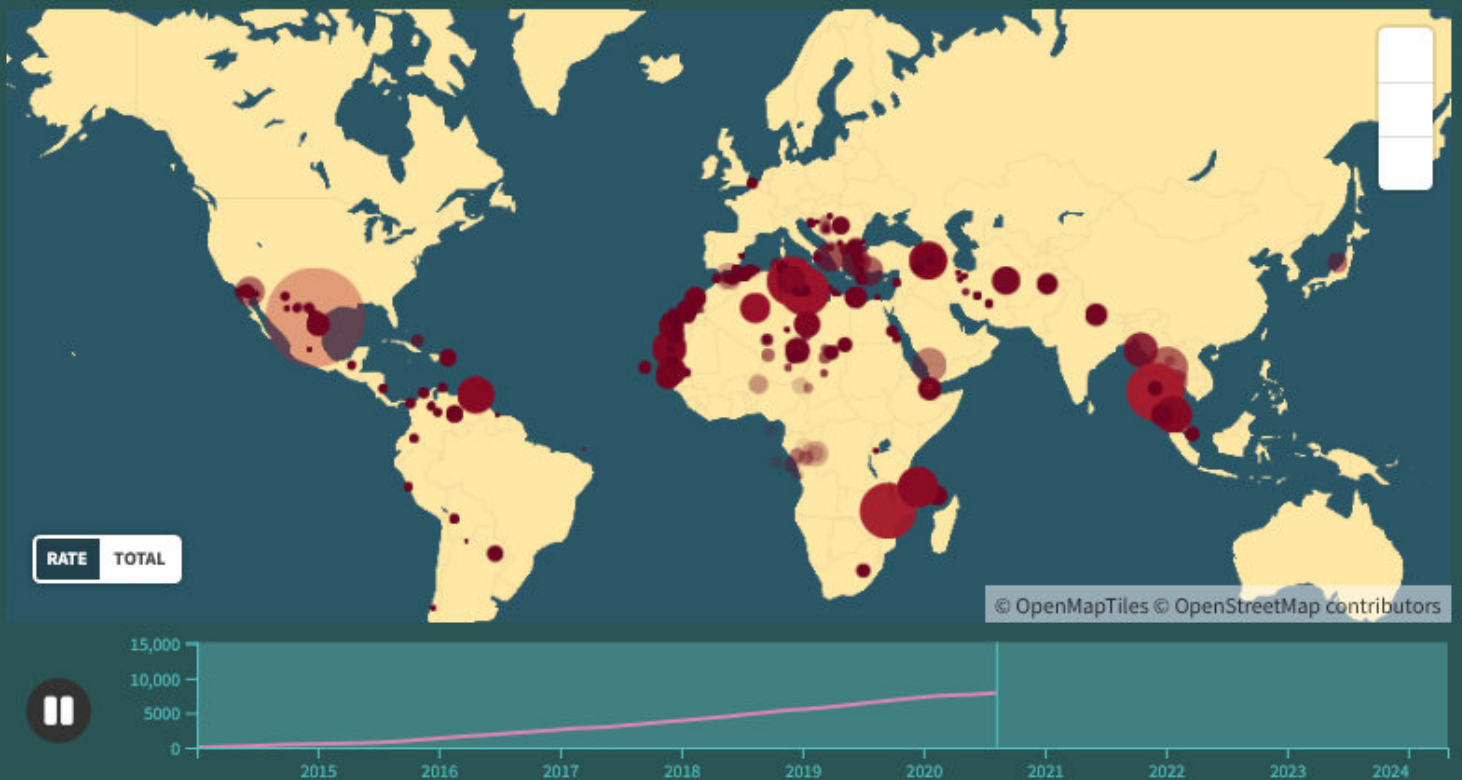
En s'appuyant sur les données de la [World Inequality Database](#), j'ai construit ce [graphique interactif](#) à l'aide de D3.js et Svelte. L'utilisateur peut explorer les lignes de revenus moyens pour chaque région: la ligne et les informations apparaissent lorsque la souris passe sur un point donné.



Cette [carte animée](#) permet à l'utilisateur d'examiner la répartition géographique des victimes sur une décennie, avec la possibilité de zoomer, de faire une pause et de choisir entre le taux et le total.

A Decade of Migrant Deaths 2014-2024

The Missing Migrants Project has recorded the deaths of 65,036 people since 2014.



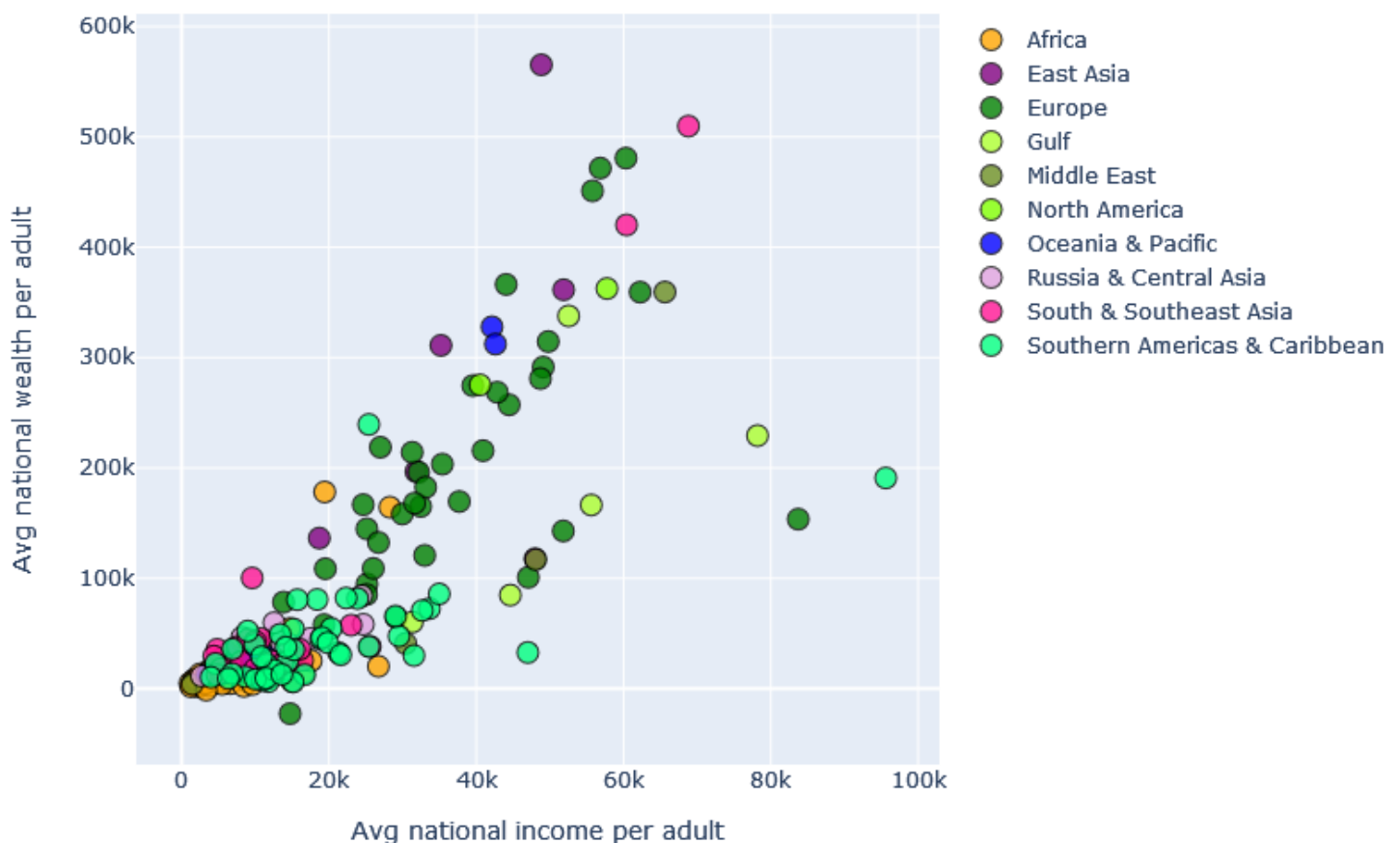
Source: [IOM's Missing Migrants Project](#)
Created by: Alexandre Bovey



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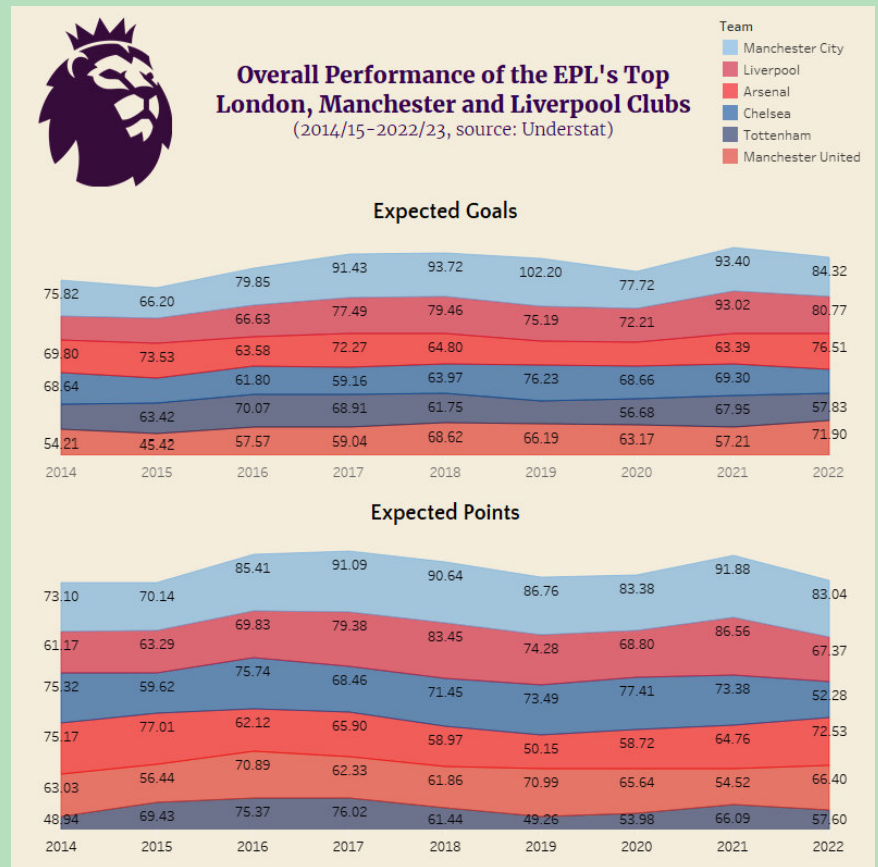
Établie à partir des données de la [World Inequality Database](#), cette page interactive (fichier HTML) - créée avec la bibliothèque Plotly de Python - permet à l'utilisateur d'explorer les différents groupes de pays (c'est-à-dire les régions) et leurs données respectives dans le nuage de points, d'effectuer des zooms avant et arrière pour certaines sections du graphique et de le télécharger en tant que fichier PNG.

International Wealth & Income Inequality in 2021

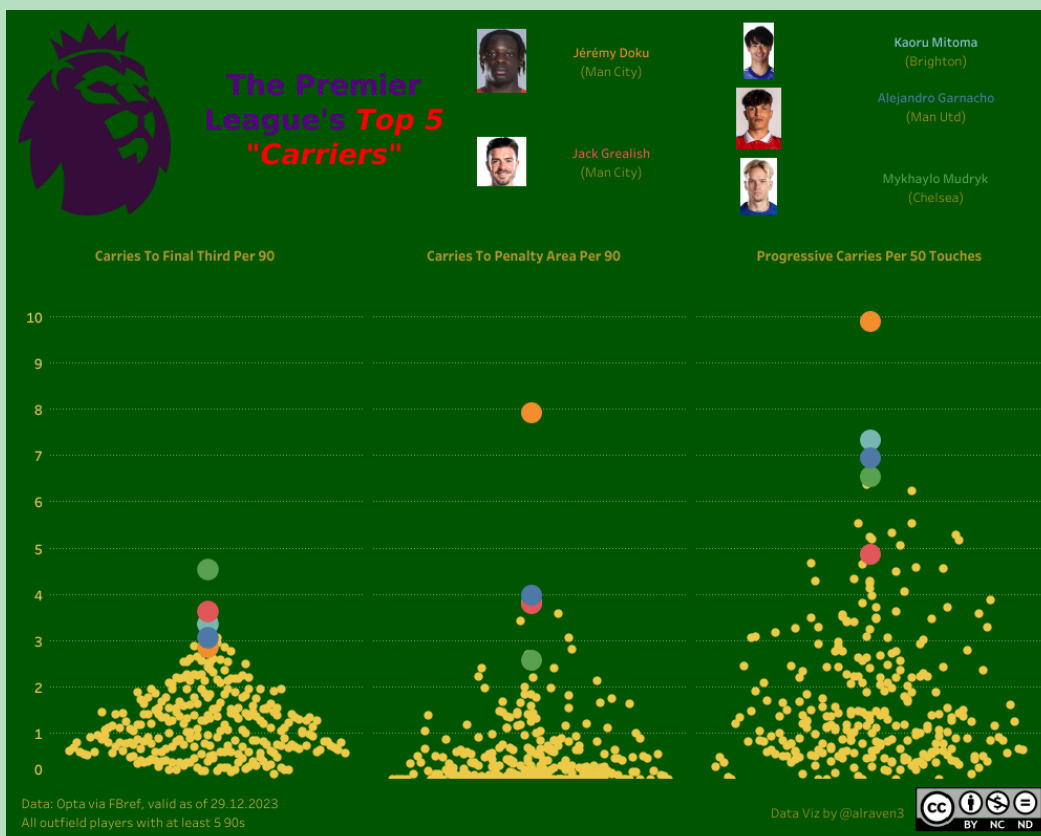


[Tableau Public](#) permet à l'utilisateur d'explorer les graphiques, ce qui rend la visualisation plus perspicace et plus transparente !

[À consulter ici!](#)



[À consulter ici!](#)

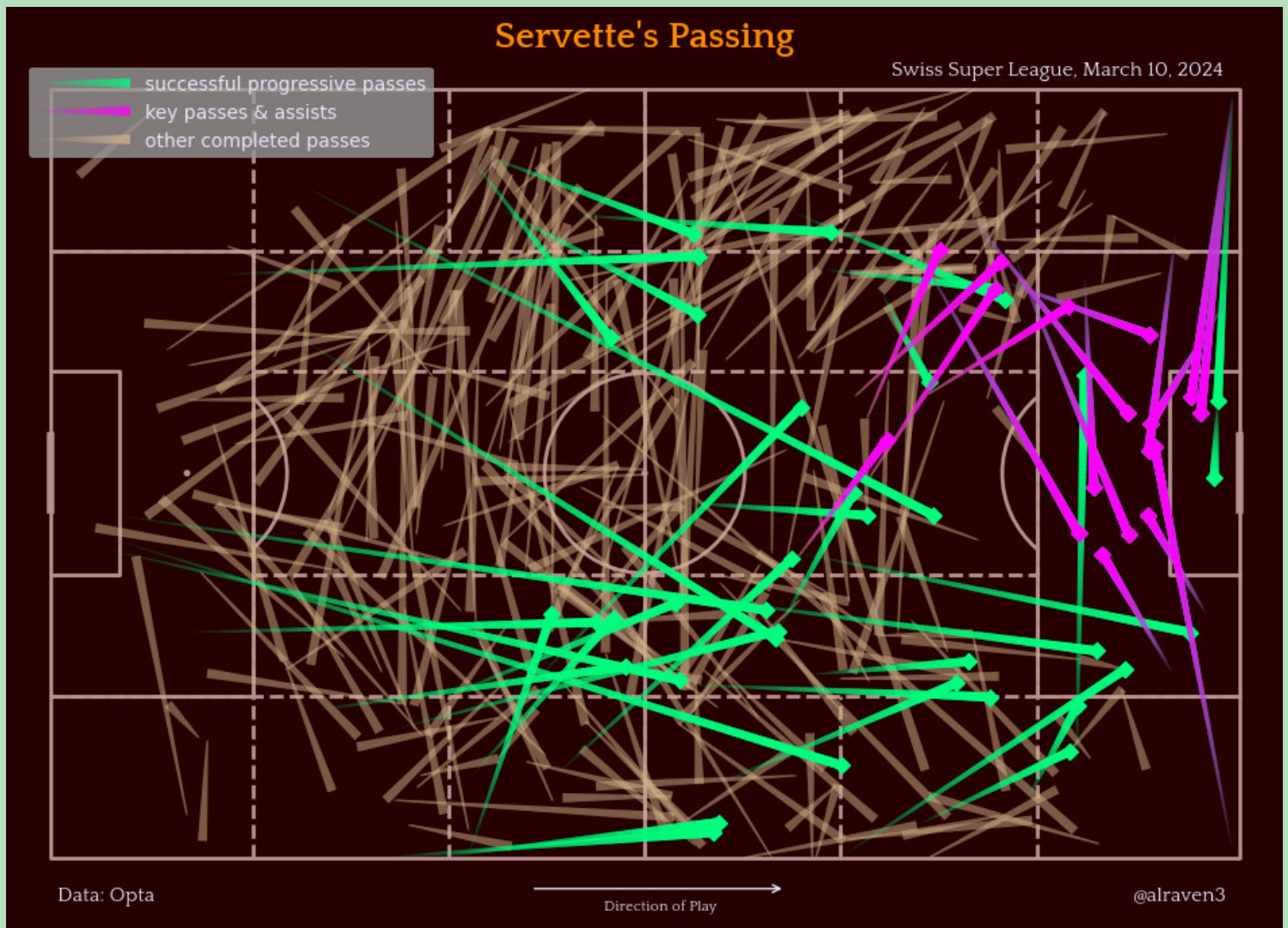


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Football

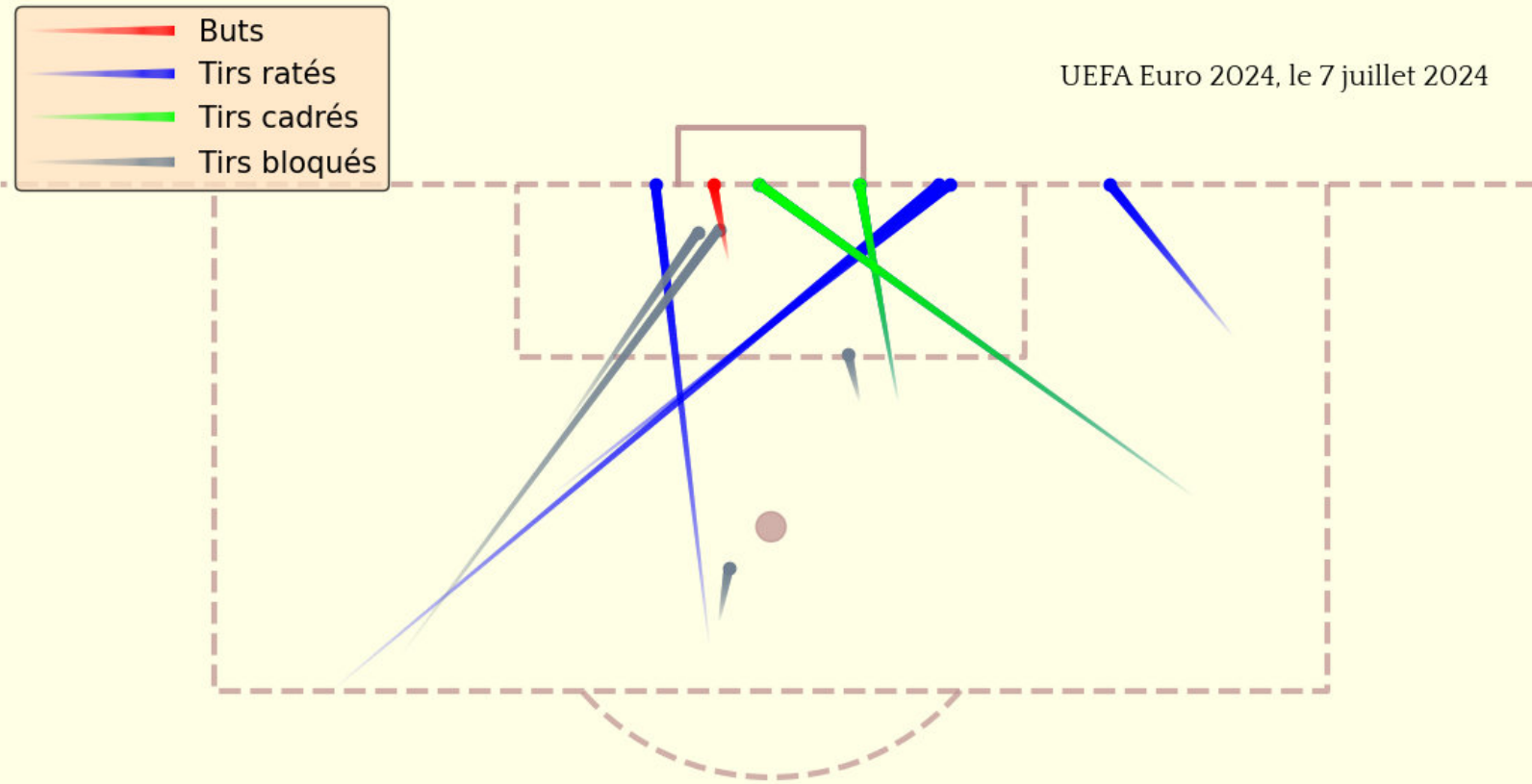
J'ai créé un ensemble complet de [codes Python](#) pour l'analyse du football, y compris les cartes de données événementielles (*event data*) suivantes qui visualisent les actions d'une équipe ou d'un joueur pendant un match. Ces cartes peuvent être utilisées pour l'analyse des performances et le scouting dans le football professionnel, ou dans le journalisme sportif.

Cartes: passes, tirs et actions progressives



Les tirs de la Suisse

UEFA Euro 2024, le 7 juillet 2024



Source: Opta

Visualisation: Alexandre Bovey

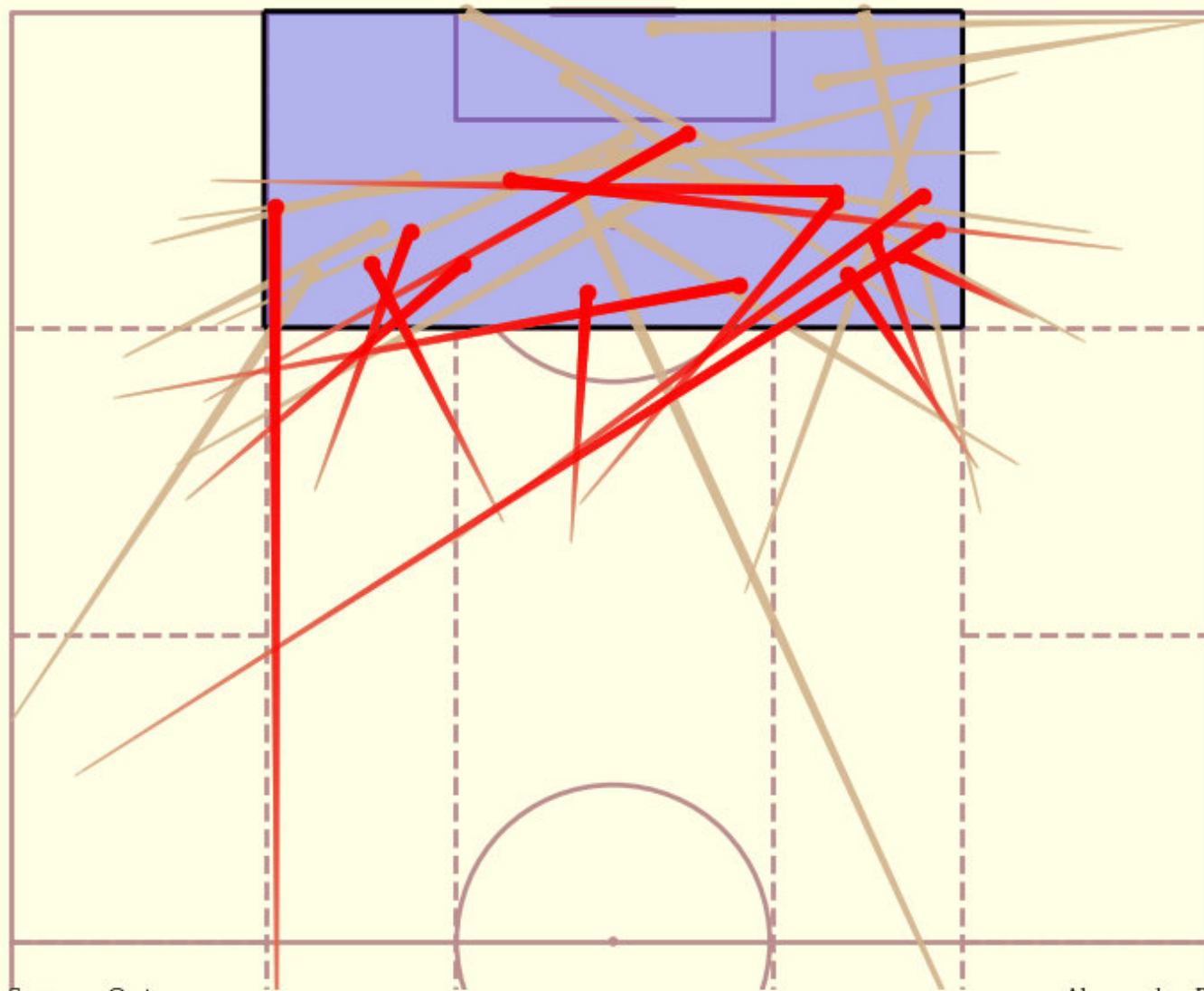


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Les passes dans la surface adverse: Suisse

Passes réussies
Autres passes

UEFA Euro 2024, le 7 juillet 2024



Source: Opta

Alexandre Bovey



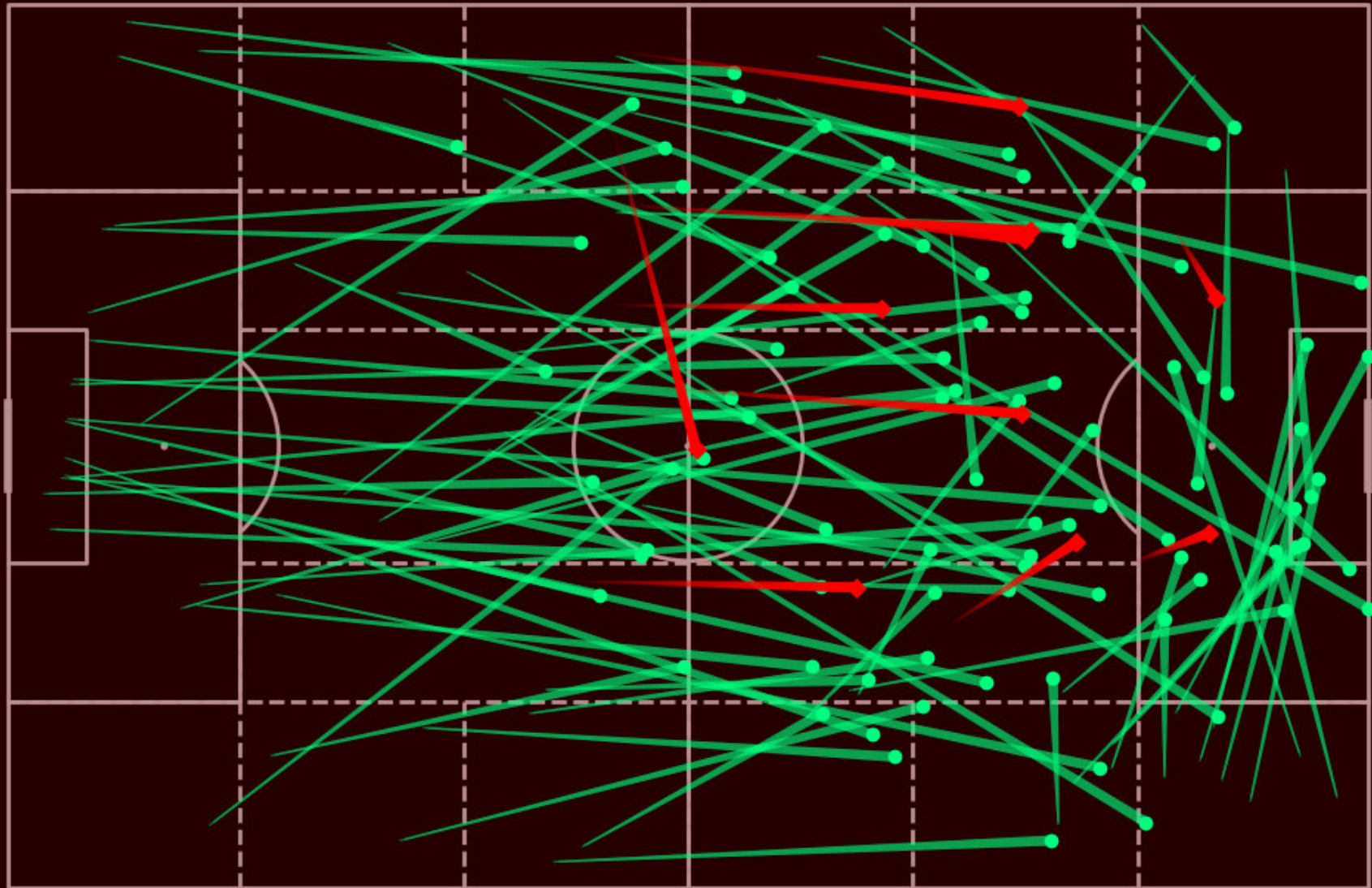
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Lausanne-Sport's Progressive Actions Map

progressive carries
progressive passes

FC Lausanne-Sport

Swiss Super League, March 10, 2024



Data: Opta

Direction of Play

@alraven3

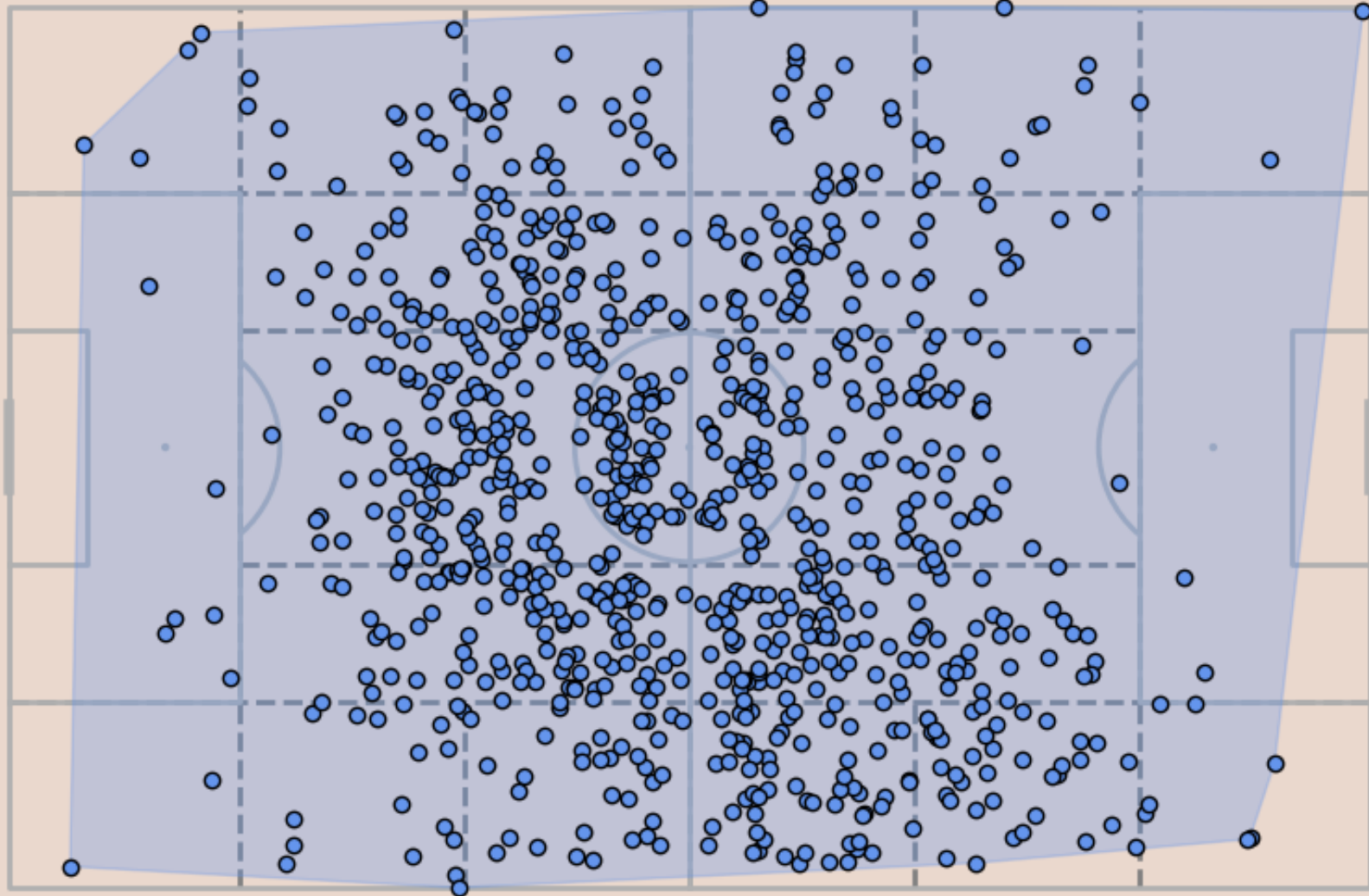


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Enveloppes convexes

Federico Redondo's Passing - Convex Hull

Argentinos Juniors - 21 appearances, 8 90's - Primera División, 2023



Data: Opta

@alraven3



Heatmaps

