

IST719-M401  
Work-in-Progress Report  
Topic: Women's Pro Cycling  
John Fields  
23 Feb 2020



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## Project Overview

### Datasets

- Union Cycliste Internationale (UCI) Pro Road Cycling Dataset from kaggle.com that was compiled from [www.uci.org/road/teams](http://www.uci.org/road/teams). This dataset has demographic and team information for professional road cyclists from 2005 to 2019 and contains 47,442 observations of 14 variables. Dataset score:  $(14 * 4) * (47,442/100) = 26,568$
- Tokyo Olympics Women's Road Race data from veloviewer.com. This dataset has geographic information on the upcoming race on July 26, 2020 and contains 118 observations of 17 variables. Dataset Score:  $(17*4)*(118/100)= 80$

### Background and Compelling Story

- Cycling was invented in 1817 by German, Baron Karl von Drais, and the first cycling race was held in Paris in 1868.<sup>i</sup>
- The bicycle also played a role in women's rights in the 1890's as it allowed transportation independence and fashion freedom.<sup>ii</sup> During this same time, women also started to compete in cycling races but still faced many of the same issues that exist today in this male dominated sport.<sup>iii</sup>
- Elite women's cycling acts as a catalyst to inspire even greater mass participation, and get many more people using bikes as part of their everyday life.<sup>iv</sup>
- Some journalists predict that women's professional cycling is the next "breakout" sport like tennis or soccer and the next major event for a global audience is the Tokyo Olympics 2020 road race.<sup>v</sup>
- Pay equity is a concern and more data is needed to better understand how to resolve this issue.

## Audience

- The audience for this report is the estimated 47.5 million people in the US who are cyclists/bike riders (and the millions or possibly billions around the world).<sup>vi</sup>

## Questions to Answer

- Is women's professional cycling growing as a sport?
- What do the demographics look like for female pro cyclists?
- What is the next major cycling event and why would I want to watch it?

## Design Guidelines

- Poster Size = 24" x 36"
- Orientation = portrait
- Font = Merriweather
- Color Scheme - based on colors you would typically see in an outdoor cycling road race<sup>vii</sup>



- Gray = 140,123,133
- Light Blue = 160,190,217
- Yellow = 242,203,5
- Gold = 242,184,7
- Black = 38,35,33

## Design Questions

1. Should a background color be used instead of white?
2. Would the map be more interesting if it was a world map? Should the states or countries be color coded by the number of races or miles/km of bike trails?
3. Ideas for another plot type for the "# of Pros 2005-2019"?

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<sup>i</sup> <https://blog.bricsys.com/history-first-bicycle/> and [https://en.wikipedia.org/wiki/Cycle\\_sport](https://en.wikipedia.org/wiki/Cycle_sport)

<sup>ii</sup> <https://www.theatlantic.com/technology/archive/2014/06/the-technology-craze-of-the-1890s-that-forever-changed-womens-rights/373535/>

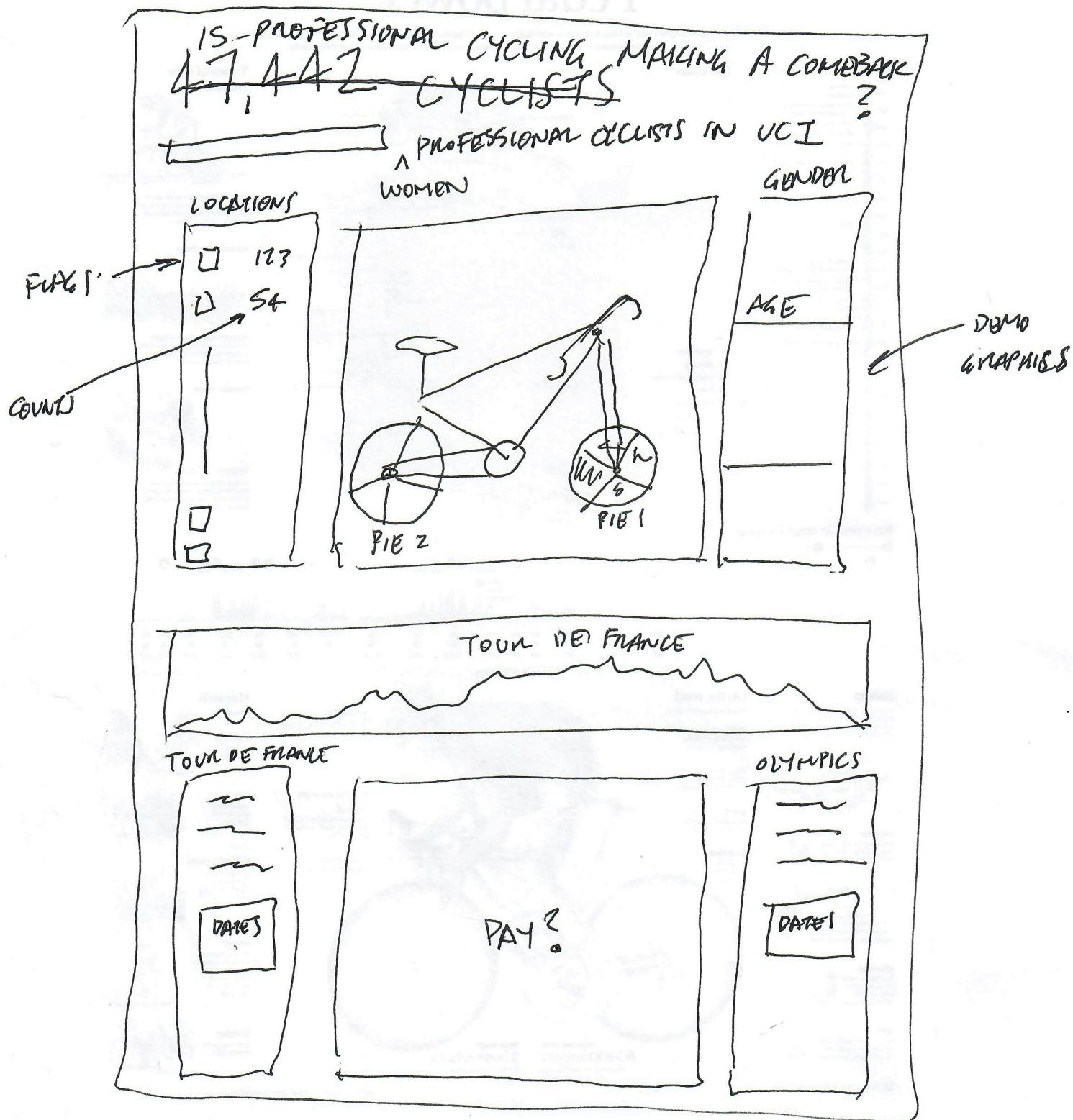
<sup>iii</sup> <https://www.cyclingnews.com/features/the-pioneers-of-womens-cycling/>

<sup>iv</sup> <https://www.uci.org>

<sup>v</sup> [https://www.velonews.com/2019/12/commentary/the-outer-line-the-best-has-yet-to-come-for-womens-pro-cycling\\_502995](https://www.velonews.com/2019/12/commentary/the-outer-line-the-best-has-yet-to-come-for-womens-pro-cycling_502995)

<sup>vi</sup> <https://www.statista.com/topics/1686/cycling/>

3.5.29



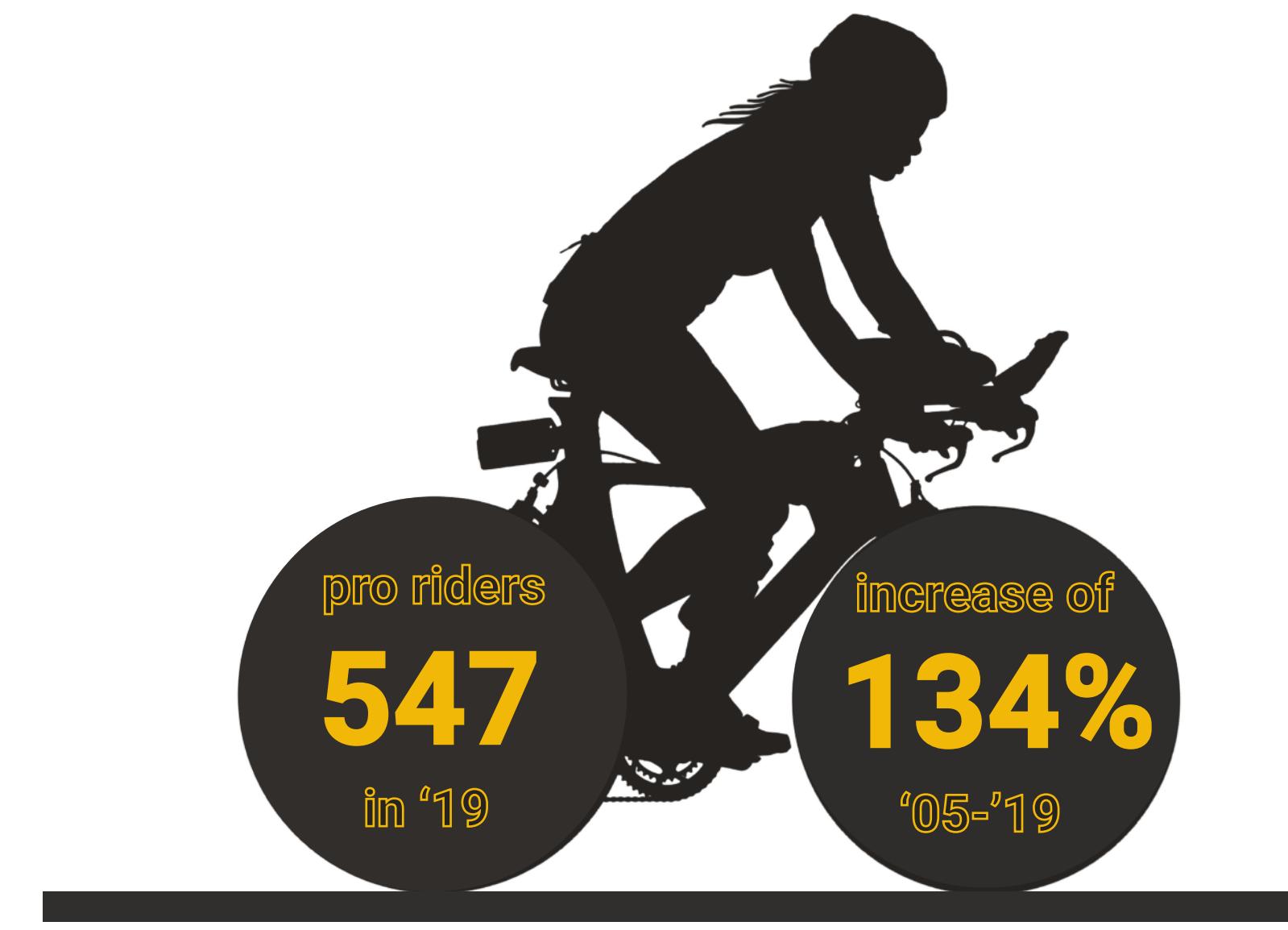
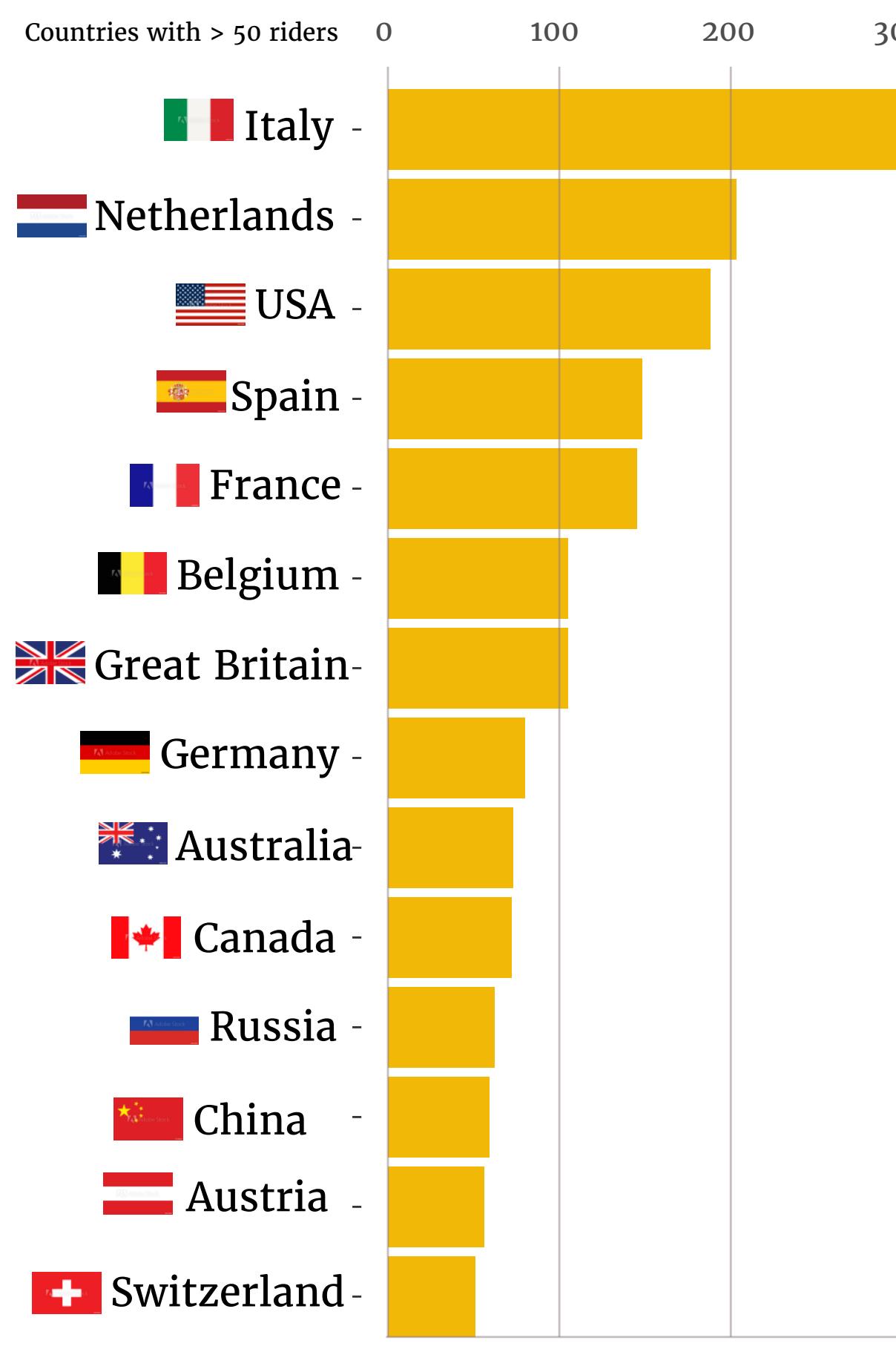
COLOR → YELLOW - GRAY, BLACK

FONT → MONTIWETHERL, ROBOTO

# WOMEN'S pro cycling

Elite women's cycling acts as a catalyst to inspire even greater mass participation, and get many more people using bikes as part of their everyday lives.

## Female Pro Cyclists in 2019



Cycling was invented in 1817 by German, Baron Karl von Drais, and the first cycling race was held in Paris in 1868.<sup>i</sup>

The bicycle played a role in women's rights in the 1890's as it allowed transportation independence and fashion freedom.<sup>ii</sup> During this same time, women also started to compete in cycling races.<sup>iii</sup>

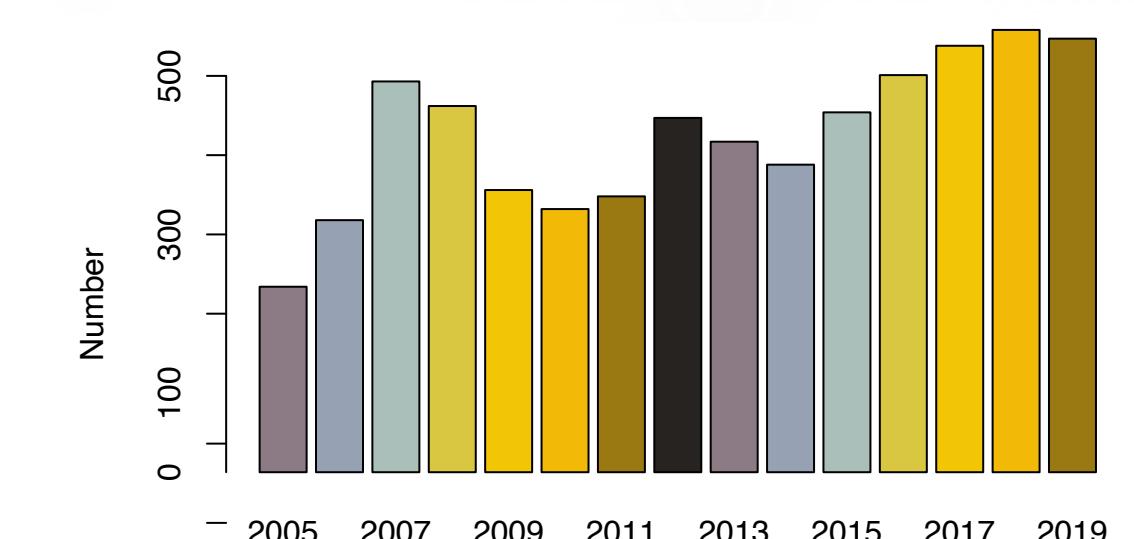
## 2020 World Team Jerseys



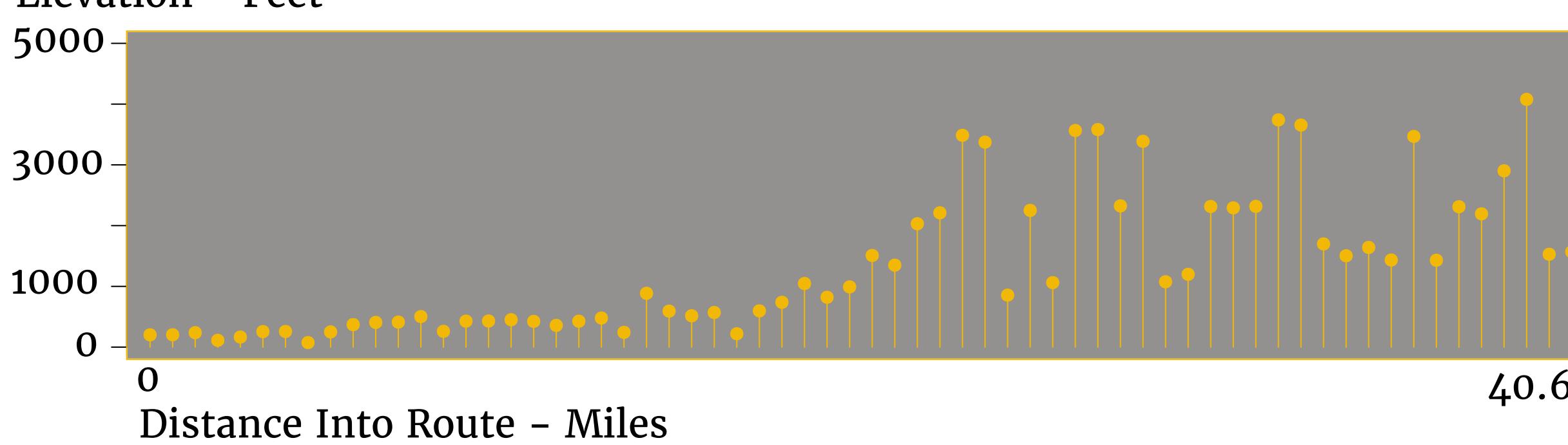
### Most years as pro

ZHAO, MARKUS, LIMA, JEOLAND, WANG, RYAN, HALL, LIVOS, LIU, WILD, DRUYTS, BASTIANELLI, BECKER, BAAK, HUANG, FAIRLIN, GUDERZO, MENG

## # of Pros 2005–2019



## Elevation – Feet



## Tokyo Olympics 2020 – Women's Road Race Route

Source: veloviewer.com

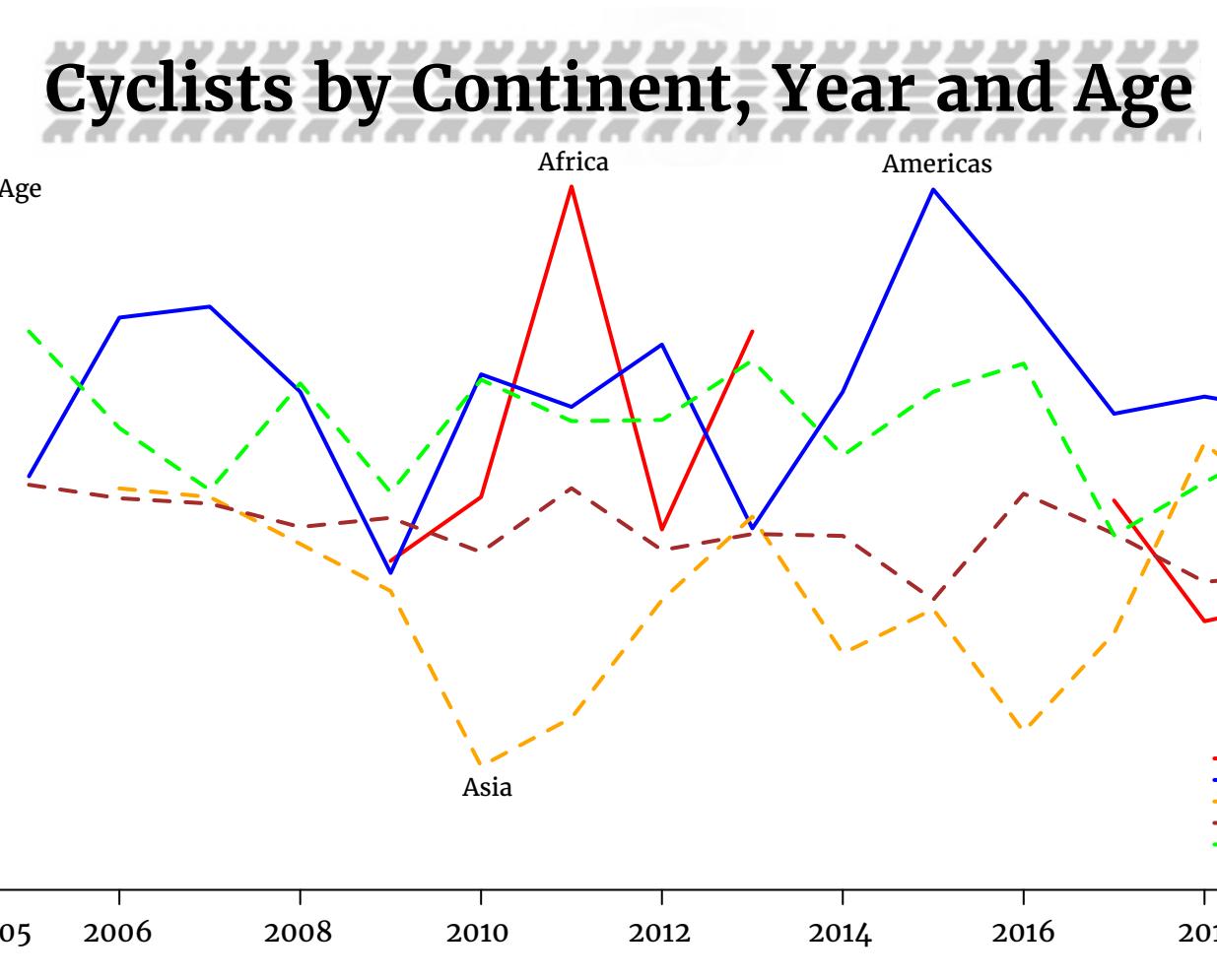
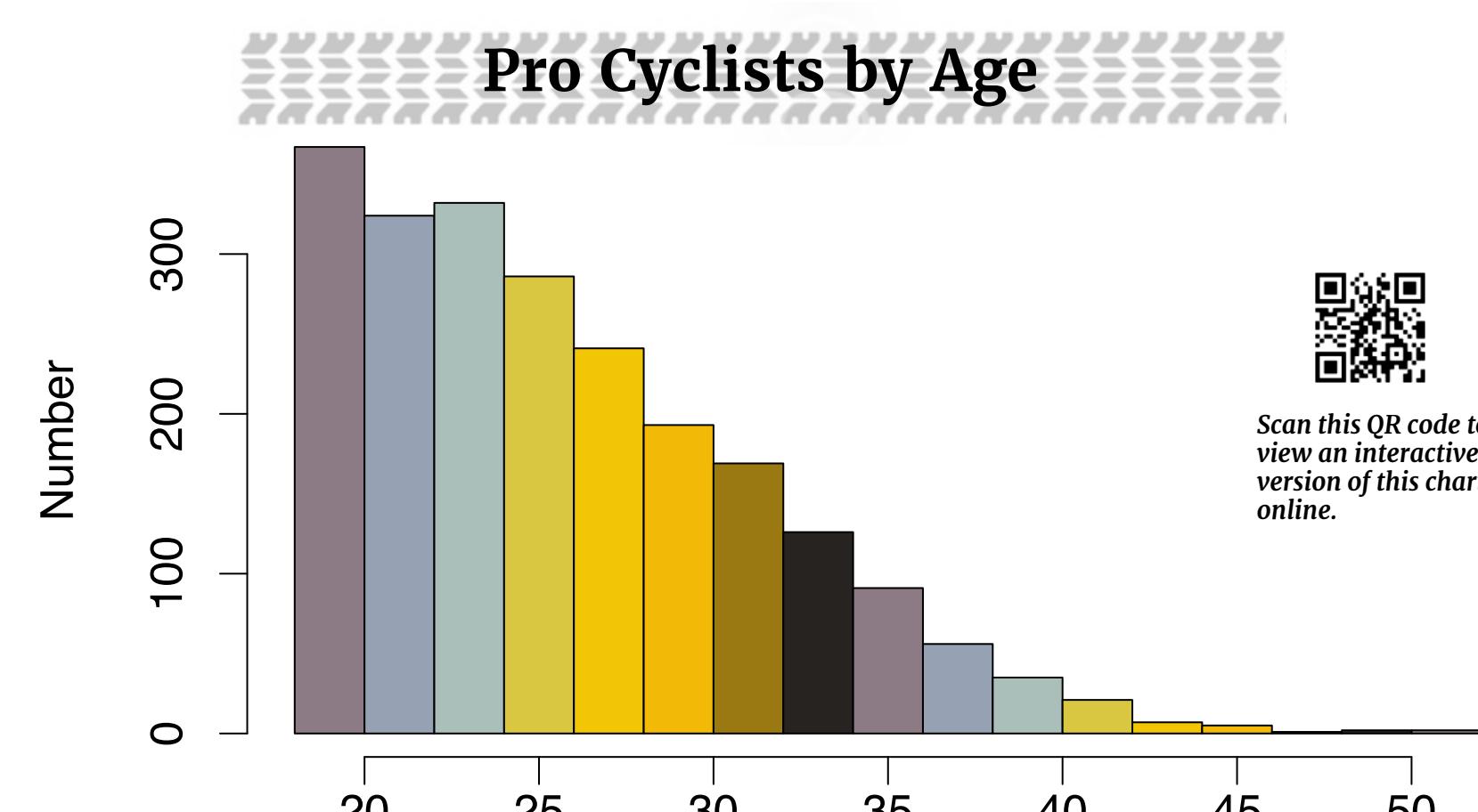
## QUESTIONS

- Is women's professional cycling growing as a sport?
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## DATASET

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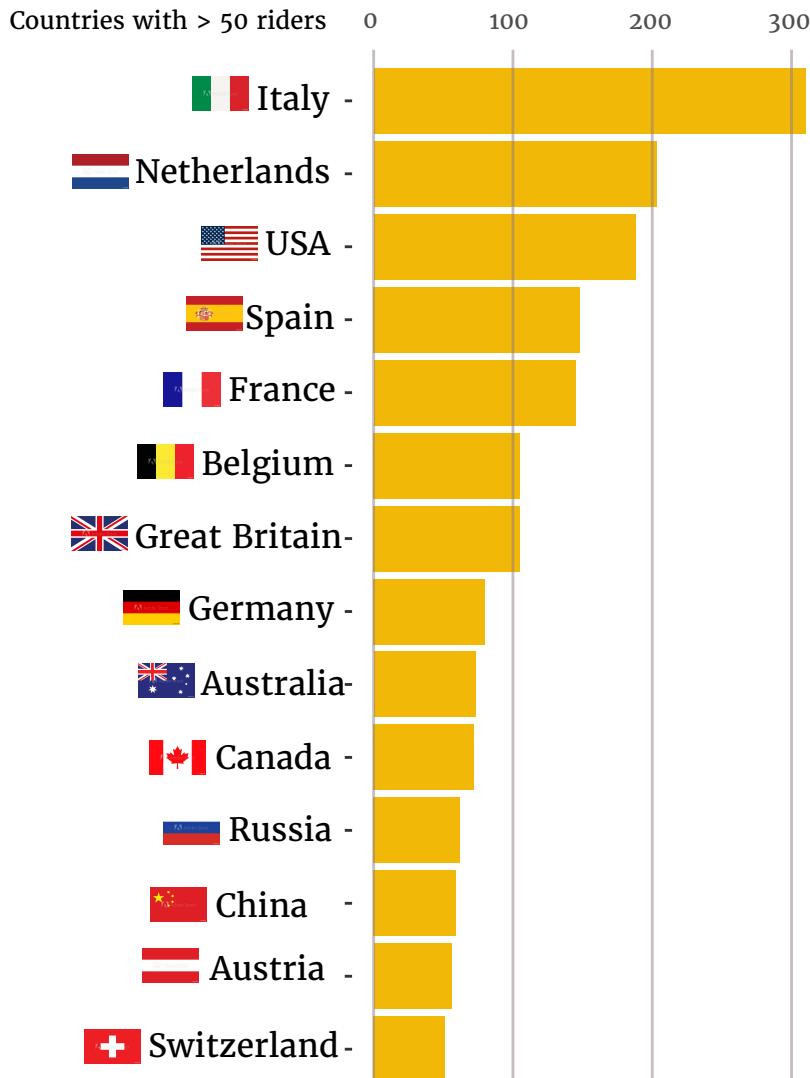
## OPPORTUNITIES

- Some journalists predict that women's professional cycling is the next "break-out" sport like tennis or soccer.<sup>iv</sup>
- The next major event for a global audience is the Tokyo Olympics road race on July 26, 2020.
- Pay equity is a concern and more data is needed to better understand how to resolve this issue.<sup>iv</sup>

## SOURCES

- https://blog.bricsys.com/history-first-bicycle/ and https://en.wikipedia.org/wiki/Cycle\_sport
- https://www.theatlantic.com/technology/archive/2014/06/the-technology-craze-of-the-1890s-that-forever-changed-womens-rights/373535/
- https://www.cyclingnews.com/features/the-pioneers-of-womens-cycling/
- https://www.velonews.com/2019/12/commentary/the-out-er-line-the-best-has-yet-to-come-for-womens-pro-cycling\_502995

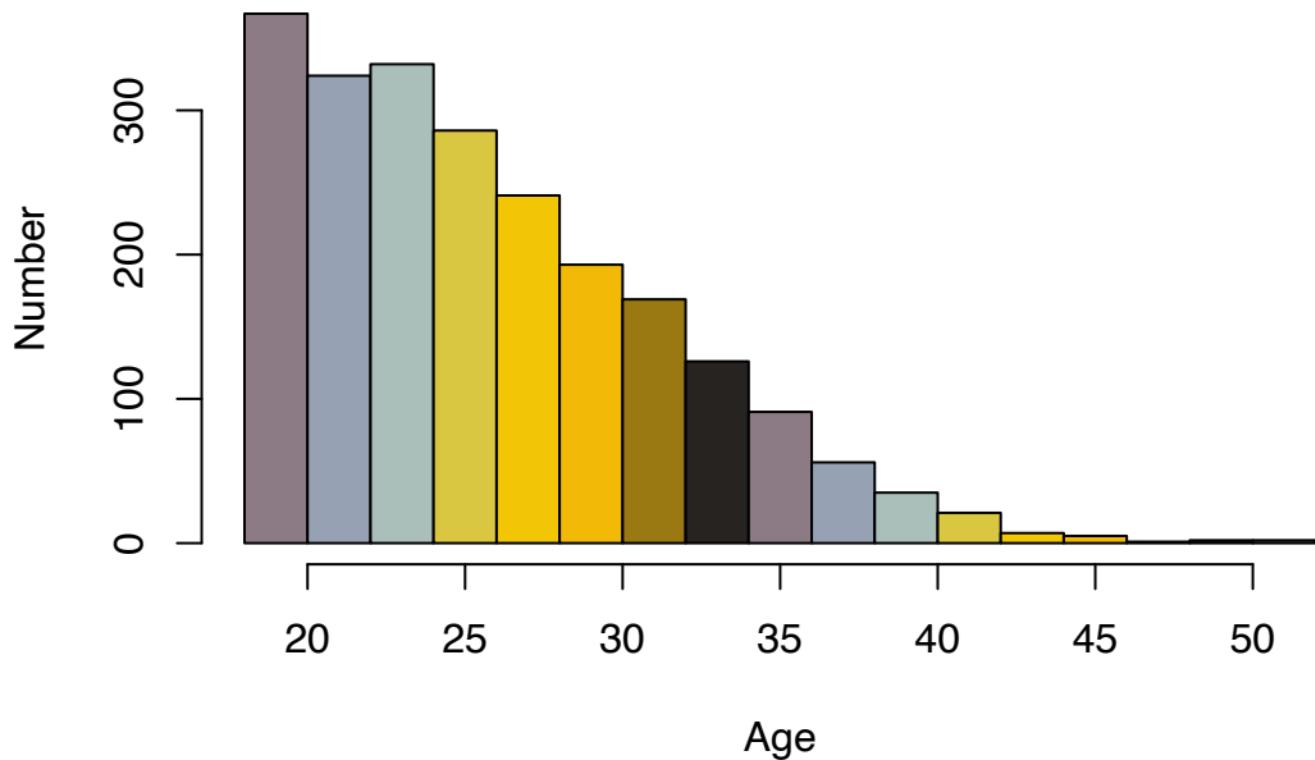
## Female Pro Cyclists in 2019



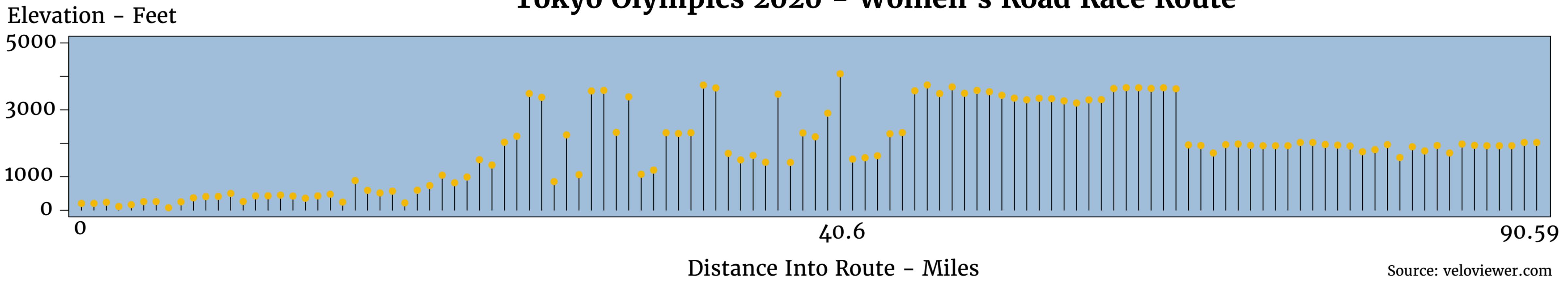
Source: uci.org | kaggle.com

ZHAO MARKUS  
LIMA JEOLAND  
WANG RYAN HALL  
LI VOS WILD  
DRUYTS  
BASTIANELLI  
BECKER BLAAK  
HUANG FAHLIN  
GUDERZO MENG

# Female Pro Cyclists by Age

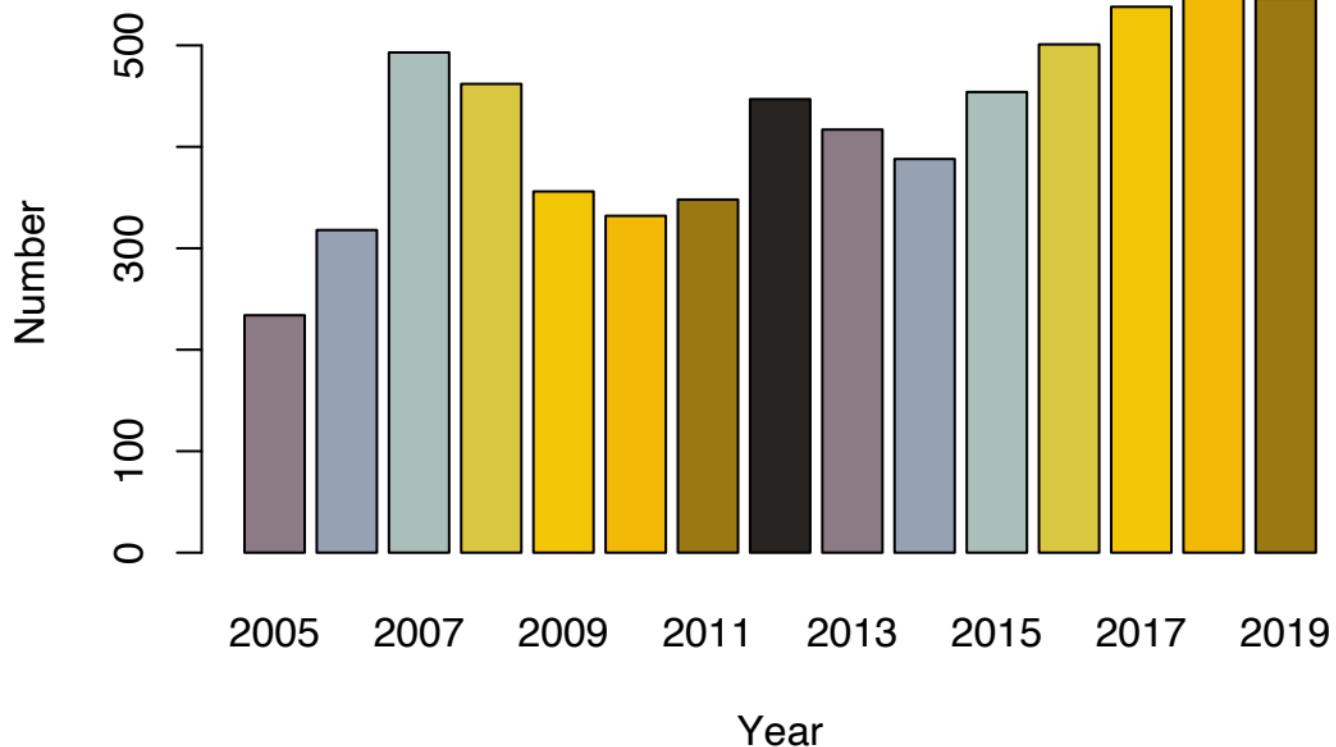


# Tokyo Olympics 2020 - Women's Road Race Route

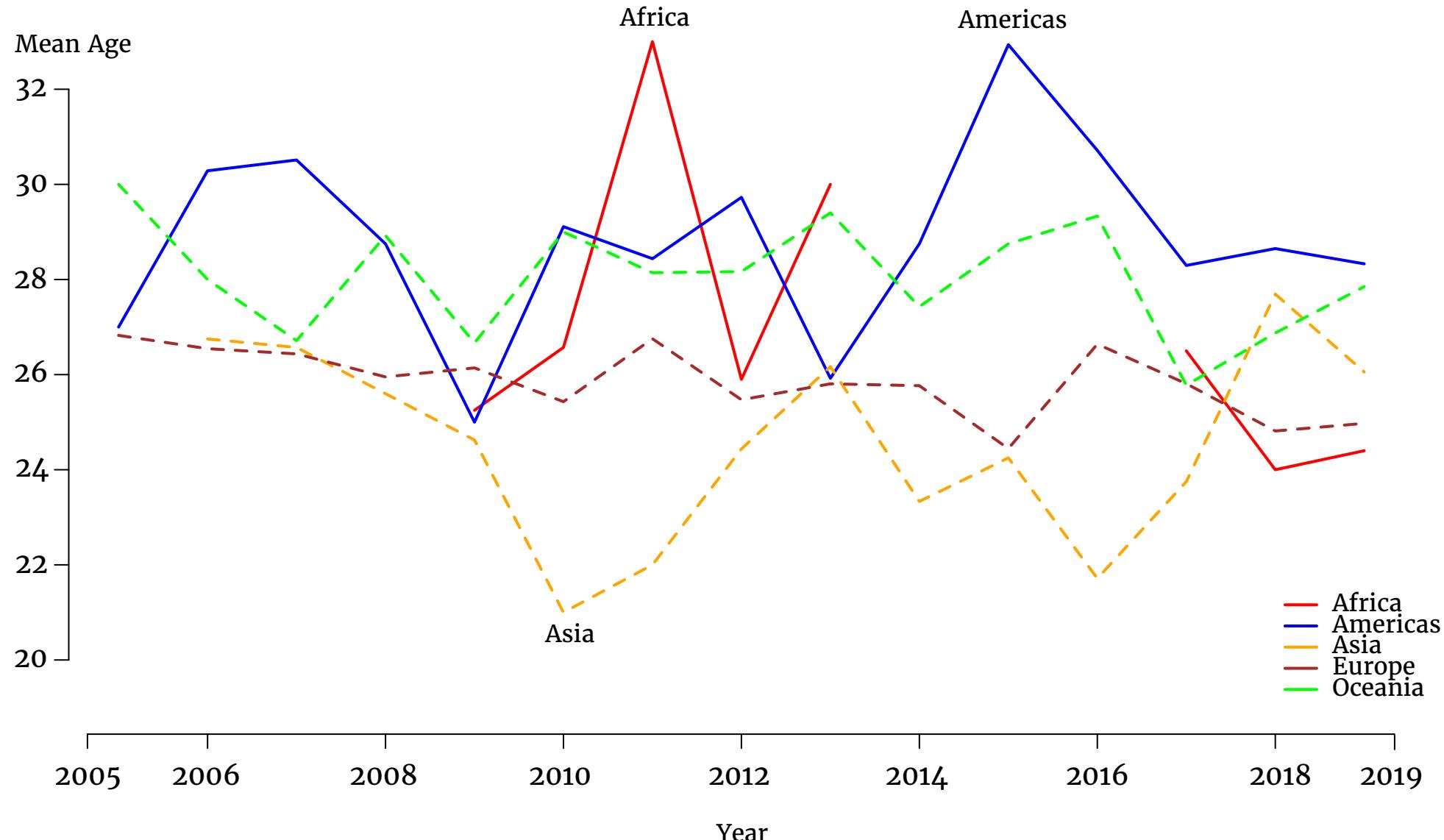


Source: veloviewer.com

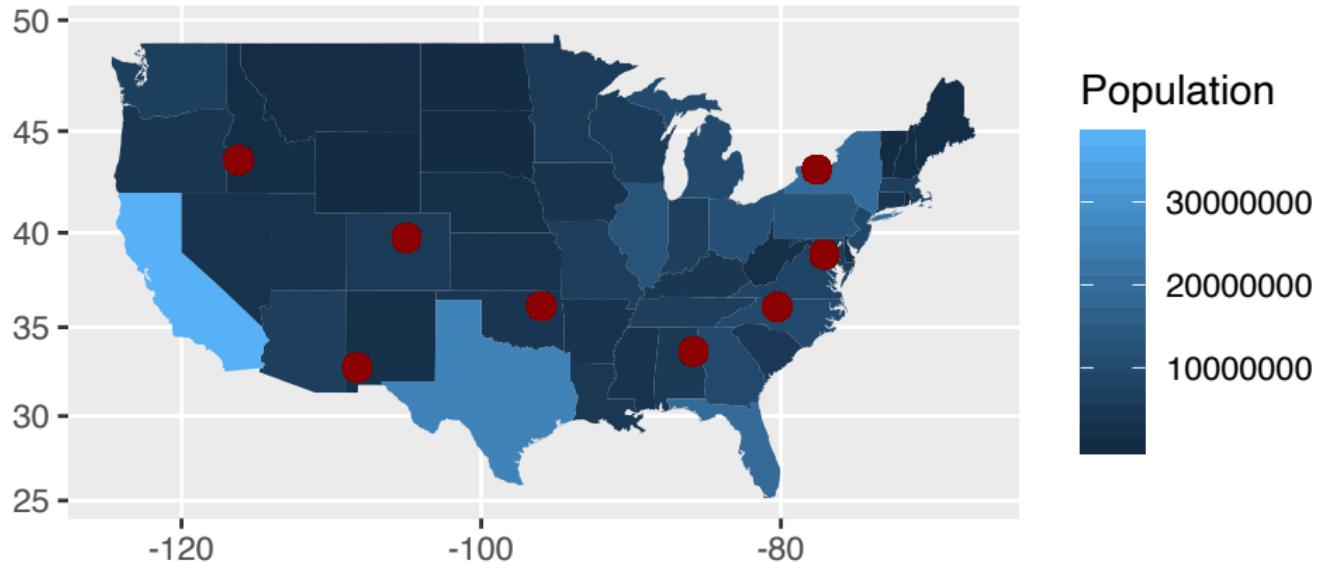
# Female Pro Cyclists 2005-2019



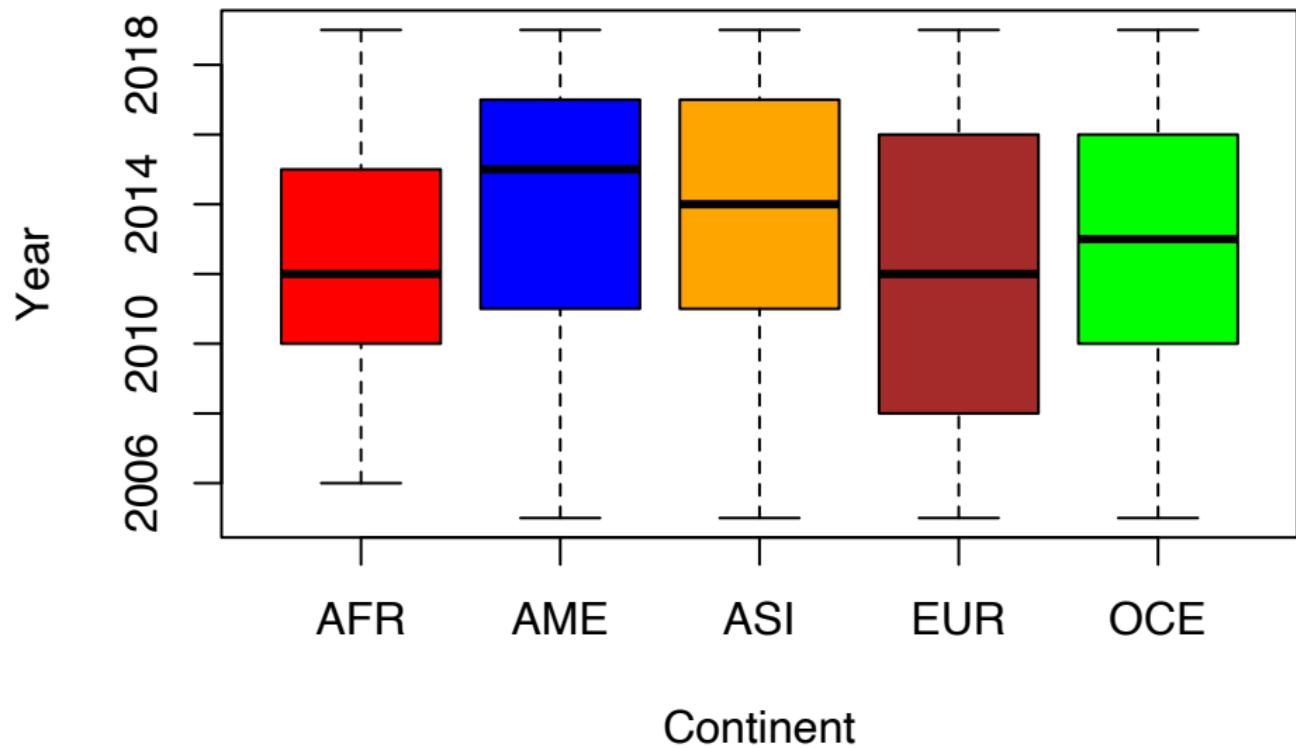
# Pro Cyclists by Continent, Year and Age



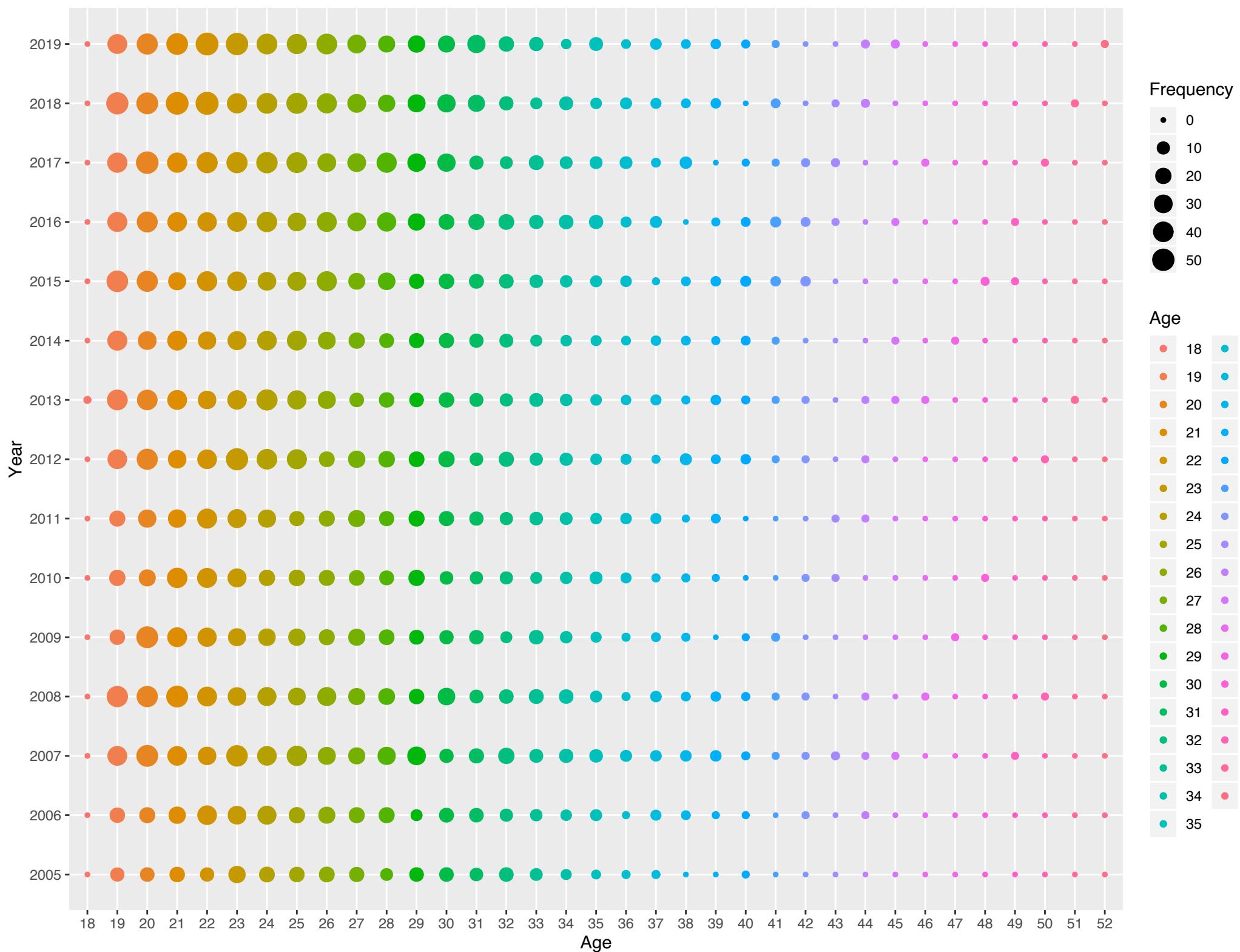
# US Races 2020



# Pro Cyclists by Continent and Year



# Female Professional Cyclists by Age and Year



ORICA - AIS T-MOBILE TEAM RELAX - GAM  
TEAM IDEA CCC POLSAT POLKOWICE BIGLA  
TEAM GLS  
KATUSHA ETIXX RELAX - GAM  
ISD - NERI TEAM KUOTA TEAM IDEA  
BIKE AID TEAM KUOTA TEAM GLS  
ONDA TEAM KUOTA TEAM IDEA  
EPM - UNE TEAM 3M TEAM GLS  
TEAM 3M TEAM KUOTA TEAM IDEA  
ATOM CIBEL SAVA ADRIA MOBIL GAUSS WSA  
CIBEL BE PINK TEAM KUOTA TEAM IDEA  
LOINTEK TEAM SKY TENAX  
#NAME? TEAM SKY PRATIES  
KAIKU ULAN FDJ.fr EPM MTN  
NFTO TEAM SKY BEPINK  
LIQUIGAS FDJ ASTANA GEOX-TMC  
AC SPARTA PRAHA TEAM SKY RSH  
LIQUIGAS FDJ ASTANA TEAM SKY  
EFAPEL CCC TEAM TEAM SKY  
UNE - EPM TEAM SKY  
DOHA TEAM RADENSKA TEAM MILRAM COLOMBIA  
LOBORIKA ELK HAUS RUSVELO IAM CYCLING  
SERVETTO FOOTON BANK BGZ MEDELLIN GW SHIMANO  
TEAM SLIPSTREAM AKUD ROSE WNT ROTOR PRO CYCLING TEAM  
WANTY - GROUPE GOBERT OMIDNIA MASHHAD TEAM