Looking at the total numbers for both pit stop by lap # and pit stop by tyre life, there is a clear right skew. Tyre life has a much more dramatic slope with a near uniform distribution up until lap 30. Does that tell us that tyre life is super important across the board and that all teams treat it relatively the same?

The pit stops in the first 5 laps are likely due to weather (changing from wet tyres to dry tyres) or repairing damages from accidents. For example one race, Japan, accounted for 27% of all pit stops made in the first 5 laps throughout the entire 2022 season due to the inclement weather.

Looking at the course-by-course comparison for pit stop by lap # and pit stop by tyre life, there appears to be some divergence dependent on the course.

* Austria (2022)
* Azerbaijan (2022)
* Spain (2019)
* Canada (2022)
* Great Britain (2019)
* Germany (2018, 2019)
* Hungary (2018, 2019, 2020, 2021, 2022)
* Belgium (2022)
* Russia (2021)
* Japan (2019)
* United States (2019, 2021)
* Brazil (2022)
* Abu Dhabi (2021, 2022)
* Turkey (2022)
* Netherlands (2022)
* Qatar (2021)
* Saudi Arabia (2021)

One consideration for divergence is the measurement is not necessarily one-to-one. Say a team wants to make a pit stop every 20 laps, then the tyre life would be at measurement of 3 on the tyre life scale at lap 20, meanwhile on the lap number scale, the measurement would be 1 at lap 20, 40, and 60.

Another consideration when it comes to pit stops that hasn’t been visualized is the hazardous flag situation. It is common to have pit stops when a yellow flag (or similar impacting flag) is occurring as that reduces the loss of time for pit stops. I have not found a way to incorporate the yellow flag as the dataset uses actual time rather than lap #.