

R^2 and P values for qual vs race pos:

Overall correlation: $R^2 = 0.491$, p-value = 0.00000

R^2 and P values for driverform and teamstrength vs race pos:

DriverForm → Finishing Pos: $R^2 = 0.360$, p = 0.00000

TeamStrength → Finishing Pos: $R^2 = 0.210$, p = 0.00044

Graph Analysis:

HTML Files include all 24 graphs for all races in order. Includes a hover feature as well to see the driver/team and extra details depending on the graph. Also includes a baseline line that shows perfect prediction where points above and below underperformance or overperformance respectively.

A) Qualifying Position vs. Finishing Position

Baseline line:

- If Qualifying position perfectly predicts performance, the highest qualifying driver finishes P1, next P2, next P3, etc

Deviations mean:

- Above the line → underperformed** (potentially good qualifying but dropped places in the race causing them to finish worse than expected i.e. qualified 1 but finished 4)
- Below the line → overperformed** (potentially not as good qualifying, but gained places in the race causing them to finish better than expected, i.e. qualified 4 but finished 1)

B) Driver Form vs Finishing Position: average points from previous 3 races

Baseline line:

- If DriverForm perfectly predicts performance, the highest form driver finishes P1, next P2, next P3

So deviations mean:

- **Above the line** → **underperformed** (high form but finished *worse* than expected, i.e. higher position number)
- **Below the line** → **overperformed** (low form but finished *better* than expected, i.e. lower position number).

C) **Team Strength vs Finishing Position**: rolling average team points from season so far

Baseline line:

- a) If TeamStrength predicts race results perfectly, the strongest team finishes P1, next strongest P2, etc

Deviations mean:

- **Above the line** → **underperformance** (team strong but finished poorly)
- **Below the line** → **overperformance** (team weak but finished better than expected)