

Data Parameters to find

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How to identify that the car is slipping based on car data?

Wheel speeds, if we can see that one tire is at a dramatically higher speed than the others we are slipping

Accelerometers

This allows us to realize that we have hit maximum traction and that slightly less than this speed is the ideal and the farthest we should be pushing the car

When the car is assembled we will need to put it on the scales to get the static weights for the tire which will help us find the COG

Will need to do tilt measurements

Ideally multiple angles to get best data for z location of COG

Pitot tube data for pressures and windspeed to help validate the aero

Calculate the frontal area of the car

Can check the pyrometer data manually at the end of a run

Steering wheel position sensor, gives us ICR data

With the factor of the gearing of the steering column this could also help us find the slip angle,