VIDEO NOTES

I'm running it through twiddle to show adjusted coefficient values. I have it set up to reset automatically if the car gets a certain distance from the center line so if you see a few early restarts, that is why.

When discussing the low value for the P coefficient, I mention that the derivative impact helps steer but cancels itself out. What I mean in more details is that as it gets further from the center of the track, the derivative impact will slow the rate at which it is getting away from the center. If the car starts getting closer to the center of the track, however; it will steer the car away from the center. It ends up finding a balance where the CTE isn't increasing but that could be off the track. The impact from the P term is what actually brings it back.

I use off track for two different purposes on the video. One to literally mean the car is going off the track and another to mean its getting further from the center of the track. When talking about restarts it's the former and when talking about steering it's the later.