

Higher the P component the quicker the settling time of the oscillations from the CTE.

Higher the d component the more the oscillations dampen.

While higher the I component, the more lower the settling time of the system.

The final parameters were not chosen by me. The twiddle algorithm settles on the following parameters for speed (0.195,0.01,10) while for throttle (0.295,0.01,10).