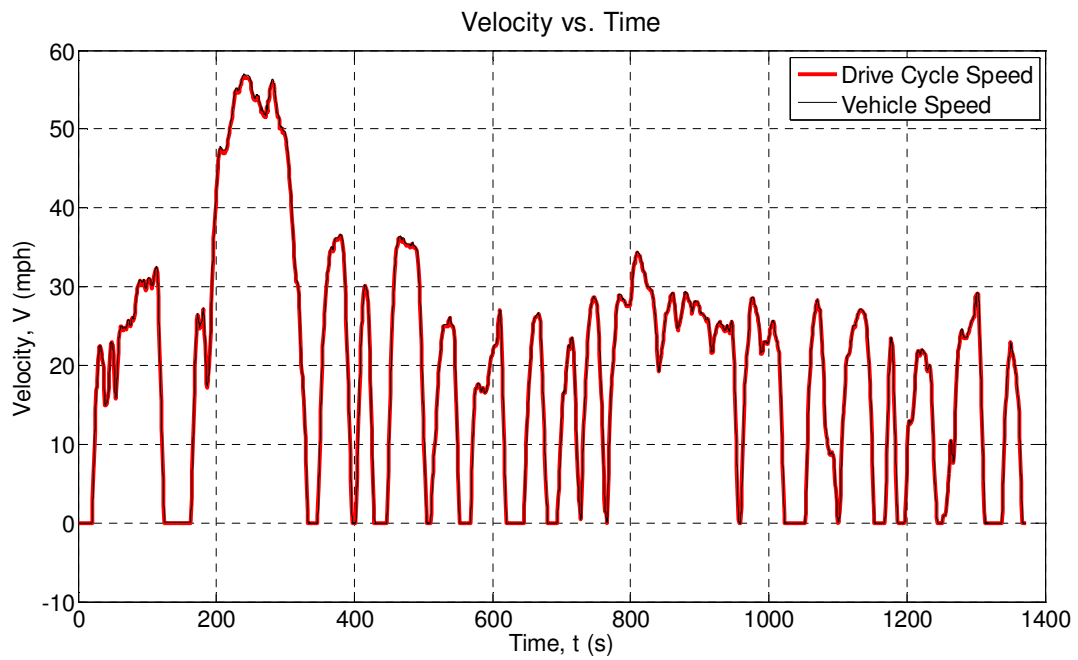
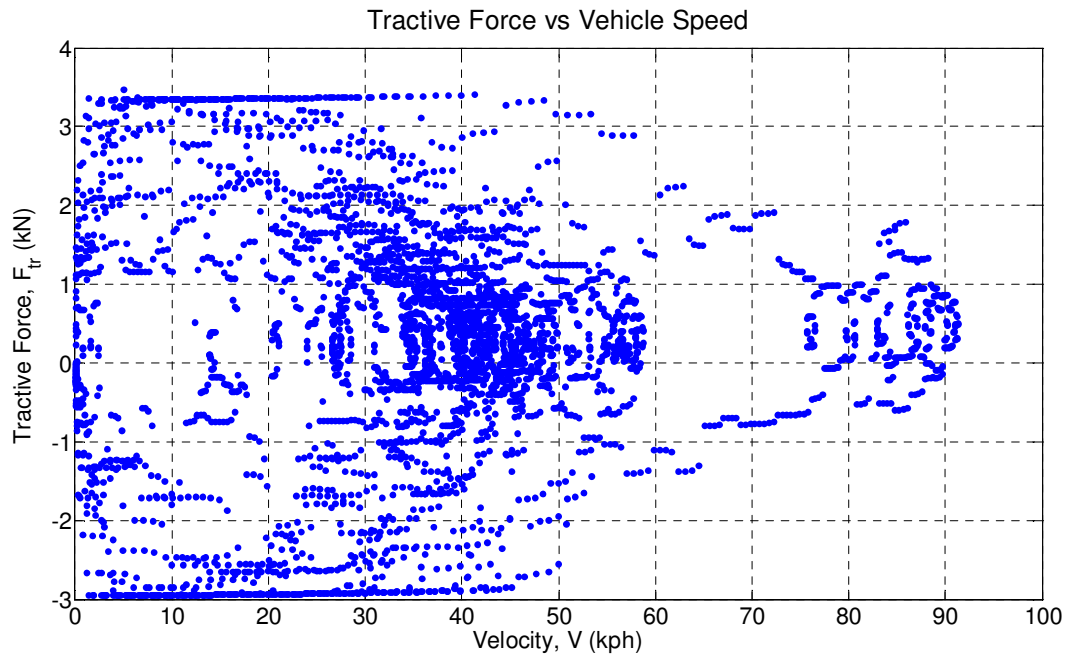
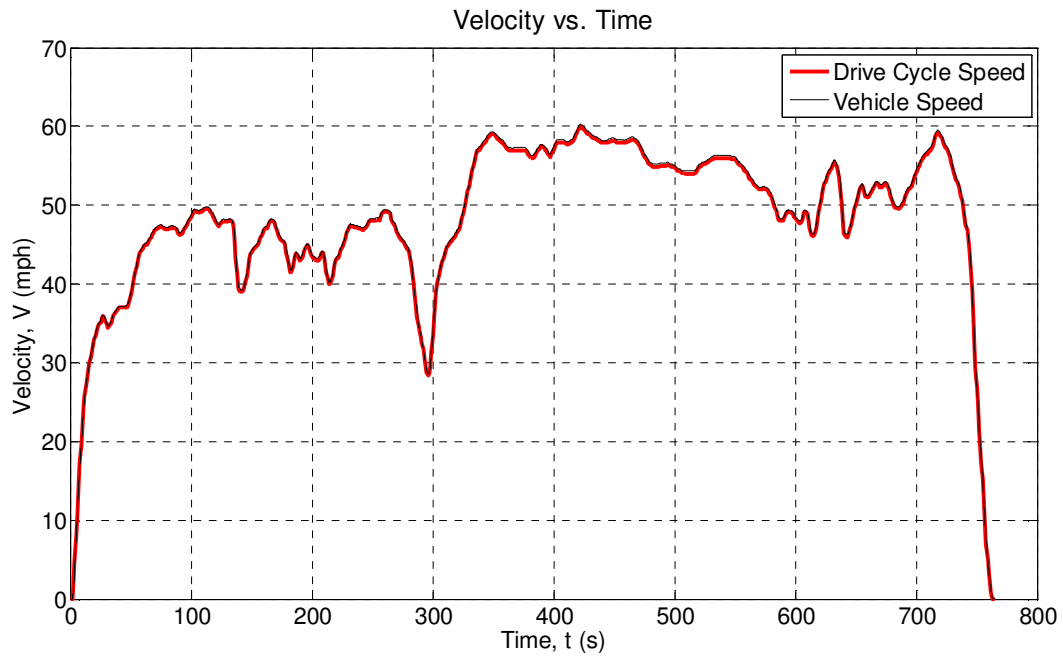
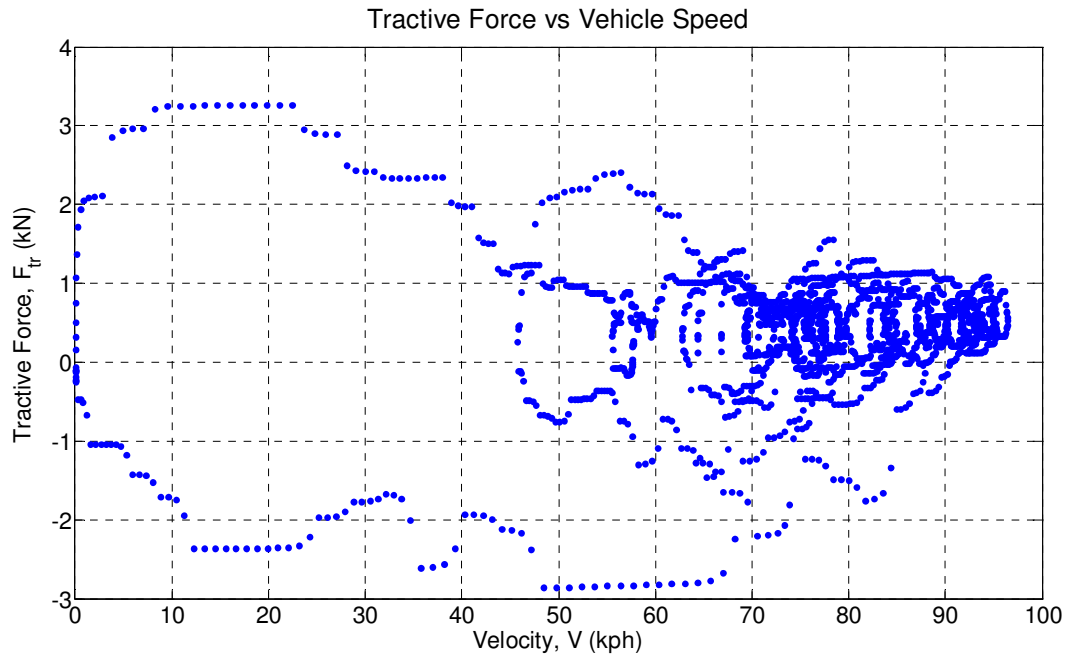


MDBCP – Driver-Glider Solutions

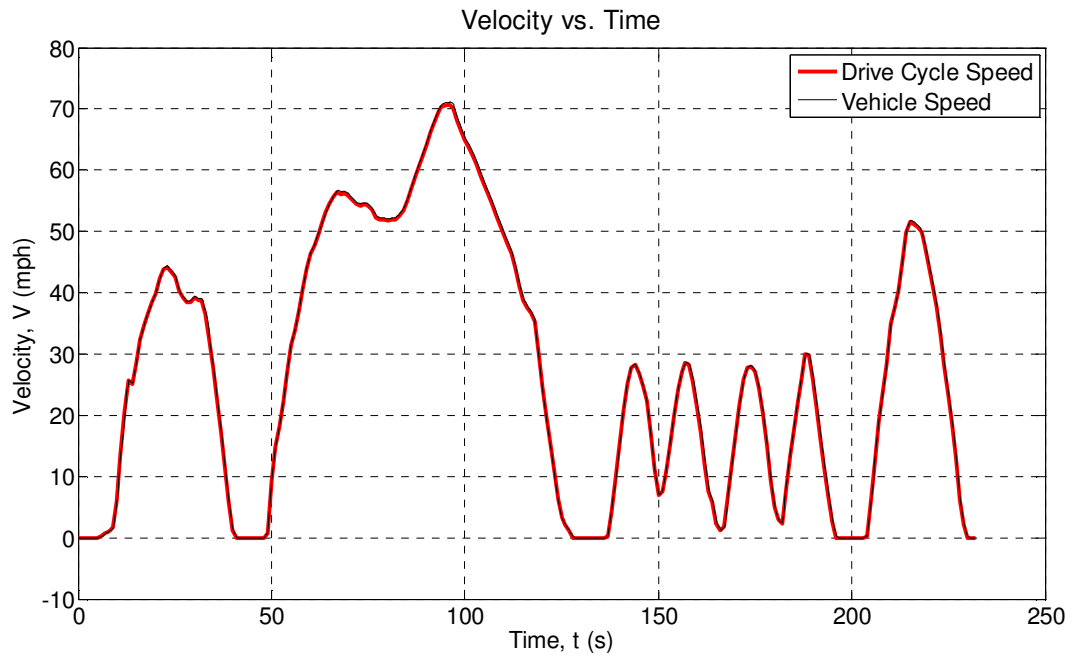
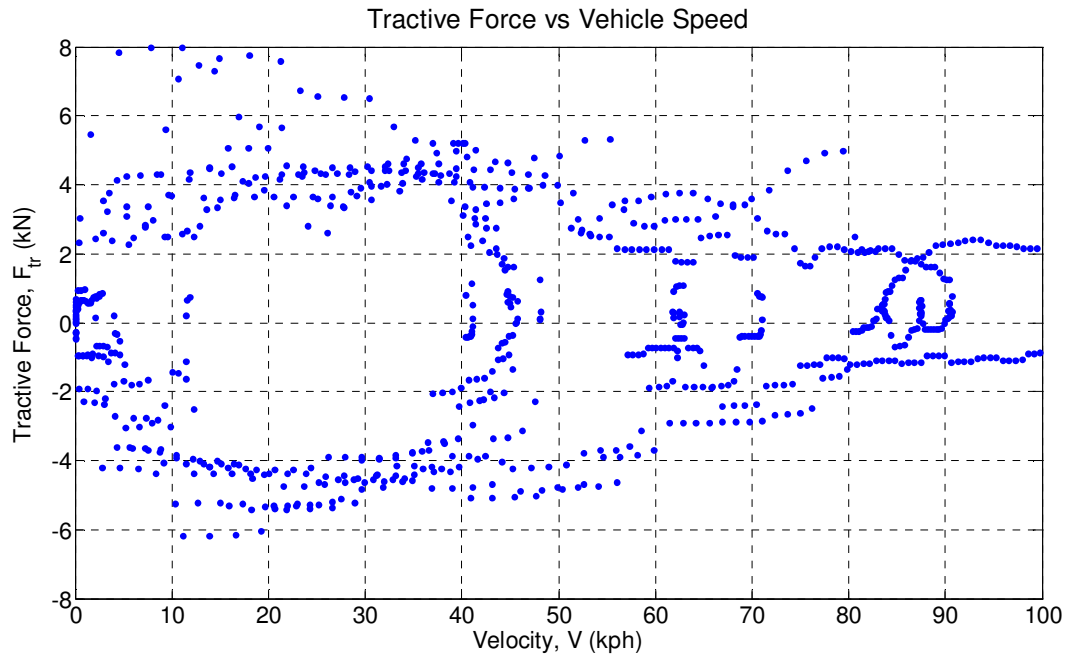
UDDS Cycle:



HwFET Cycle:

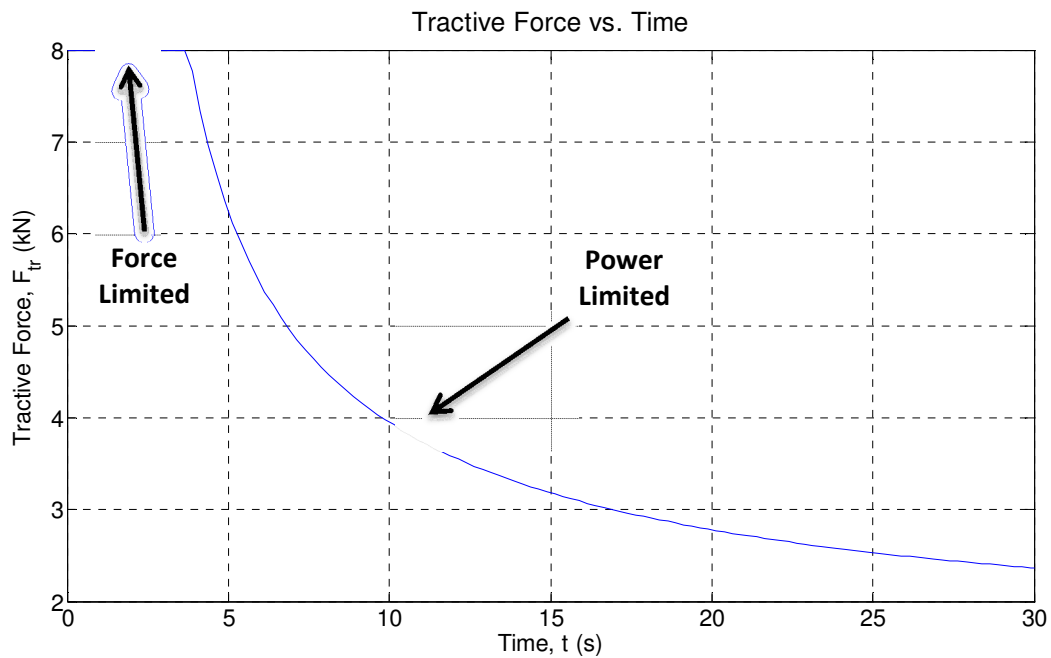


US06 Cycle:



Essay Question:

Acceleration Test:



In the graph you can see where the force is limiting the vehicle ($t = 0-4$ seconds), and at higher speeds it can be seen that the power limitation takes over ($t = 4-30$ seconds).

Braking Test:

If the driver performs correctly the vehicle should quickly attempt to go to a zero velocity, however with a PID driver that outputs tractive force, the driver cannot accurately depict what happens when you press the brake pedal. If integrator wind-up is present, the tractive force will remain negative and drive the vehicle backwards, which is incorrect. To correct this, set the integrator gain (K_i) to zero. A zero integral gain would mean the driver would “let off” the brake pedal before coming to a complete stop, depending on how large the proportional gain is.