Table of Contents

```
SkidPad =

                Car_CFL_rx: [1x1 struct]
                Car_CFL_ry: [1x1 struct]
                Car_CFL_rz: [1x1 struct]
                Car_CFL_tx: [1x1 struct]
                Car_CFL_ty: [1x1 struct]
                Car_CFL_tz: [1x1 struct]
                Car_CFR_rx: [1x1 struct]
                Car_CFR_ry: [1x1 struct]
                Car_CFR_rz: [1x1 struct]
                Car_CFR_tx: [1x1 struct]
                Car_CFR_ty: [1x1 struct]
                Car_CFR_tz: [1x1 struct]
                Car_CRL_rx: [1x1 struct]
                Car_CRL_ry: [1x1 struct]
                Car_CRL_rz: [1x1 struct]
                Car_CRL_tx: [1x1 struct]
                Car_CRL_ty: [1x1 struct]
                Car_CRL_tz: [1x1 struct]
                Car_CRR_rx: [1x1 struct]
                Car_CRR_ry: [1x1 struct]
                Car_CRR_rz: [1x1 struct]
                Car_CRR_tx: [1x1 struct]
                Car_CRR_ty: [1x1 struct]
                Car_CRR_tz: [1x1 struct]
              Car_Distance: [1x1 struct]
                Car_Fr1_rx: [1x1 struct]
                Car_Fr1_ry: [1x1 struct]
                Car_Fr1_rz: [1x1 struct]
                Car_Fr1_tx: [1x1 struct]
                Car_Fr1_ty: [1x1 struct]
                Car_Fr1_tz: [1x1 struct]
                  Car_FxFL: [1x1 struct]
                  Car_FxFR: [1x1 struct]
                  Car_FxRL: [1x1 struct]
                  Car_FxRR: [1x1 struct]
                  Car_FyFL: [1x1 struct]
                  Car_FyFR: [1x1 struct]
```

```
              Car_FyRL: [1x1 struct]
              Car_FyRR: [1x1 struct]
              Car_FzFL: [1x1 struct]
              Car_FzFR: [1x1 struct]
              Car_FzRL: [1x1 struct]
              Car_FzRR: [1x1 struct]
           Car_Gen_ax_1: [1x1 struct]
           Car_Gen_ay_1: [1x1 struct]
           Car_Gen_vx_1: [1x1 struct]
         Car_LongSlipFL: [1x1 struct]
         Car_LongSlipFR: [1x1 struct]
         Car_LongSlipRL: [1x1 struct]
         Car_LongSlipRR: [1x1 struct]
              Car_Pitch: [1x1 struct]
               Car_Roll: [1x1 struct]
      Car_SideSlipAngle: [1x1 struct]
         Car_TrqAlignFL: [1x1 struct]
         Car_TrqAlignFR: [1x1 struct]
         Car_TrqAlignRL: [1x1 struct]
         Car_TrqAlignRR: [1x1 struct]
         Car_TrqOvertFL: [1x1 struct]
         Car_TrqOvertFR: [1x1 struct]
         Car_TrqOvertRL: [1x1 struct]
         Car_TrqOvertRR: [1x1 struct]
          Car_TrqRollFL: [1x1 struct]
          Car_TrqRollFR: [1x1 struct]
          Car_TrqRollRL: [1x1 struct]
          Car_TrqRollRR: [1x1 struct]
            Car_WFL_rot: [1x1 struct]
            Car_WFR_rot: [1x1 struct]
            Car_WRL_rot: [1x1 struct]
            Car_WRR_rot: [1x1 struct]
                Car_Yaw: [1x1 struct]
            Car_YawRate: [1x1 struct]
                 Car_ax: [1x1 struct]
                 Car_ay: [1x1 struct]
                 Car_az: [1x1 struct]
          Car_muRoadFL: [1x1 struct]
          Car_muRoadFR: [1x1 struct]
          Car_muRoadRL: [1x1 struct]
          Car_muRoadRR: [1x1 struct]
                 Car_tx: [1x1 struct]
                 Car_ty: [1x1 struct]
                  Car_v: [1x1 struct]
                Car_vFL: [1x1 struct]
                Car_vFR: [1x1 struct]
                Car_vRL: [1x1 struct]
                Car_vRR: [1x1 struct]
               DM_Brake: [1x1 struct]
              DM_Clutch: [1x1 struct]
                 DM_Gas: [1x1 struct]
              DM_GearNo: [1x1 struct]
             DM_ManDist: [1x1 struct]
               DM_ManNo: [1x1 struct]
```

```
              DM_Steer_Ang: [1x1 struct]
              DM_Steer_Trq: [1x1 struct]
       DM_TriggerPoint_Dist: [1x1 struct]
         DM_TriggerPoint_Id: [1x1 struct]
       DM_TriggerPoint_Time: [1x1 struct]
             PT_Engine_rotv: [1x1 struct]
                PT_WFL_rotv: [1x1 struct]
                PT_WFR_rotv: [1x1 struct]
                PT_WRL_rotv: [1x1 struct]
                PT_WRR_rotv: [1x1 struct]
        PwrD_Tire_CambDeflFL: [1x1 struct]
        PwrD_Tire_CambDeflFR: [1x1 struct]
         PwrD_Tire_LatSlipFL: [1x1 struct]
         PwrD_Tire_LatSlipFR: [1x1 struct]
        PwrD_Tire_LongSlipFL: [1x1 struct]
        PwrD_Tire_LongSlipFR: [1x1 struct]
      PwrD_Tire_RollResistFL: [1x1 struct]
      PwrD_Tire_RollResistFR: [1x1 struct]
         PwrD_Tire_ToeSlipFL: [1x1 struct]
         PwrD_Tire_ToeSlipFR: [1x1 struct]
          PwrD_Tire_TotalFL: [1x1 struct]
          PwrD_Tire_TotalFR: [1x1 struct]
                  PwrL_Aero: [1x1 struct]
                 PwrL_Brake: [1x1 struct]
                    PwrL_PT: [1x1 struct]
                  PwrL_Tire: [1x1 struct]
                 PwrL_Total: [1x1 struct]
                  PwrS_Aero: [1x1 struct]
                 PwrS_Brake: [1x1 struct]
                    PwrS_PT: [1x1 struct]
                  PwrS_Tire: [1x1 struct]
                 PwrS_Total: [1x1 struct]
               Steer_WhlAng: [1x1 struct]
                       Time: [1x1 struct]
              Vhcl_Distance: [1x1 struct]
           Vhcl_Engine_rotv: [1x1 struct]
                 Vhcl_FL_Fx: [1x1 struct]
                 Vhcl_FL_Fy: [1x1 struct]
                 Vhcl_FL_Fz: [1x1 struct]
           Vhcl_FL_LongSlip: [1x1 struct]
           Vhcl_FL_SideSlip: [1x1 struct]
           Vhcl_FL_Trq_B2WC: [1x1 struct]
          Vhcl_FL_Trq_Brake: [1x1 struct]
          Vhcl_FL_Trq_DL2WC: [1x1 struct]
            Vhcl_FL_Trq_T2W: [1x1 struct]
      Vhcl_FL_Trq_WhlBearing: [1x1 struct]
                Vhcl_FL_rot: [1x1 struct]
               Vhcl_FL_rotv: [1x1 struct]
                 Vhcl_FL_rx: [1x1 struct]
                 Vhcl_FL_ry: [1x1 struct]
                 Vhcl_FL_rz: [1x1 struct]
                 Vhcl_FL_tx: [1x1 struct]
                 Vhcl_FL_ty: [1x1 struct]
                 Vhcl_FL_tz: [1x1 struct]
```
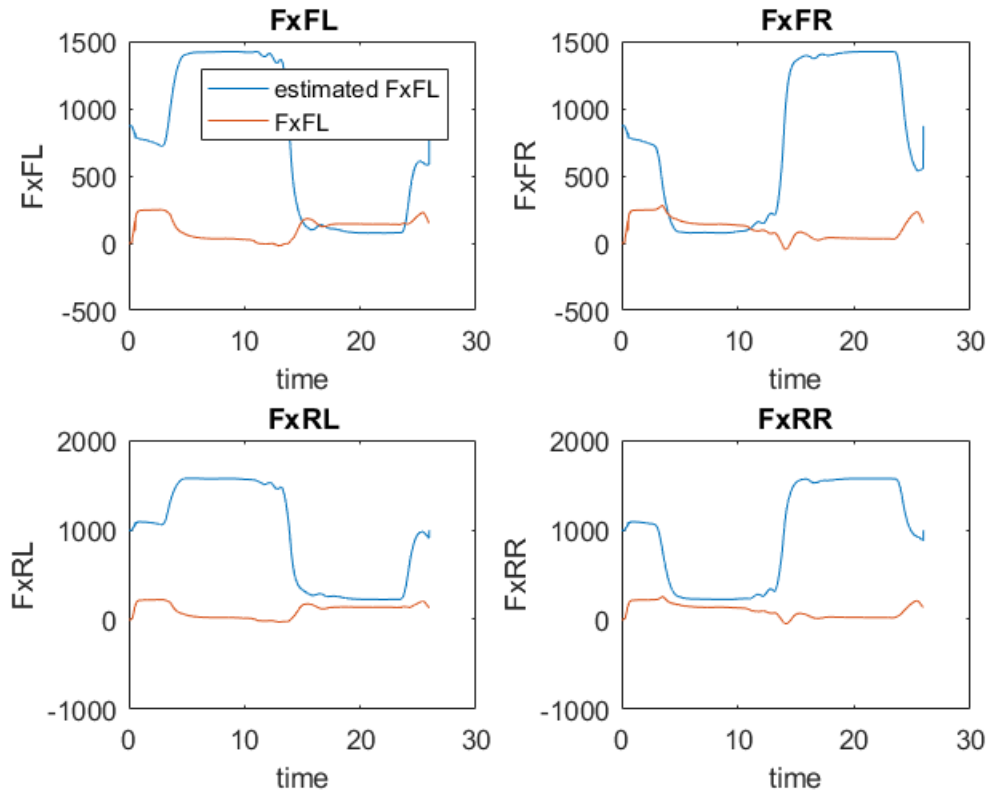
```
            Vhcl_FL_vBelt: [1x1 struct]
              Vhcl_FR_Fx: [1x1 struct]
              Vhcl_FR_Fy: [1x1 struct]
              Vhcl_FR_Fz: [1x1 struct]
        Vhcl_FR_LongSlip: [1x1 struct]
        Vhcl_FR_SideSlip: [1x1 struct]
        Vhcl_FR_Trq_B2WC: [1x1 struct]
       Vhcl_FR_Trq_Brake: [1x1 struct]
       Vhcl_FR_Trq_DL2WC: [1x1 struct]
         Vhcl_FR_Trq_T2W: [1x1 struct]
  Vhcl_FR_Trq_WhlBearing: [1x1 struct]
             Vhcl_FR_rot: [1x1 struct]
            Vhcl_FR_rotv: [1x1 struct]
              Vhcl_FR_rx: [1x1 struct]
              Vhcl_FR_ry: [1x1 struct]
              Vhcl_FR_rz: [1x1 struct]
              Vhcl_FR_tx: [1x1 struct]
              Vhcl_FR_ty: [1x1 struct]
              Vhcl_FR_tz: [1x1 struct]
          Vhcl_FR_vBelt: [1x1 struct]
             Vhcl_Fr1_x: [1x1 struct]
             Vhcl_Fr1_y: [1x1 struct]
             Vhcl_Fr1_z: [1x1 struct]
           Vhcl_Fr1B_rx: [1x1 struct]
           Vhcl_Fr1B_ry: [1x1 struct]
            Vhcl_GearNo: [1x1 struct]
           Vhcl_Hitch_x: [1x1 struct]
           Vhcl_Hitch_y: [1x1 struct]
           Vhcl_Hitch_z: [1x1 struct]
          Vhcl_Ignition: [1x1 struct]
    Vhcl_OperationError: [1x1 struct]
    Vhcl_OperationState: [1x1 struct]
             Vhcl_Pitch: [1x1 struct]
          Vhcl_PitchAcc: [1x1 struct]
          Vhcl_PitchVel: [1x1 struct]
      Vhcl_PoI_GCS_Elev: [1x1 struct]
       Vhcl_PoI_GCS_Lat: [1x1 struct]
      Vhcl_PoI_GCS_Long: [1x1 struct]
             Vhcl_PoI_ax: [1x1 struct]
           Vhcl_PoI_ax_1: [1x1 struct]
             Vhcl_PoI_ay: [1x1 struct]
           Vhcl_PoI_ay_1: [1x1 struct]
             Vhcl_PoI_az: [1x1 struct]
           Vhcl_PoI_az_1: [1x1 struct]
             Vhcl_PoI_vx: [1x1 struct]
           Vhcl_PoI_vx_1: [1x1 struct]
             Vhcl_PoI_vy: [1x1 struct]
           Vhcl_PoI_vy_1: [1x1 struct]
             Vhcl_PoI_vz: [1x1 struct]
           Vhcl_PoI_vz_1: [1x1 struct]
              Vhcl_PoI_x: [1x1 struct]
              Vhcl_PoI_y: [1x1 struct]
              Vhcl_PoI_z: [1x1 struct]
              Vhcl_RL_Fx: [1x1 struct]
```
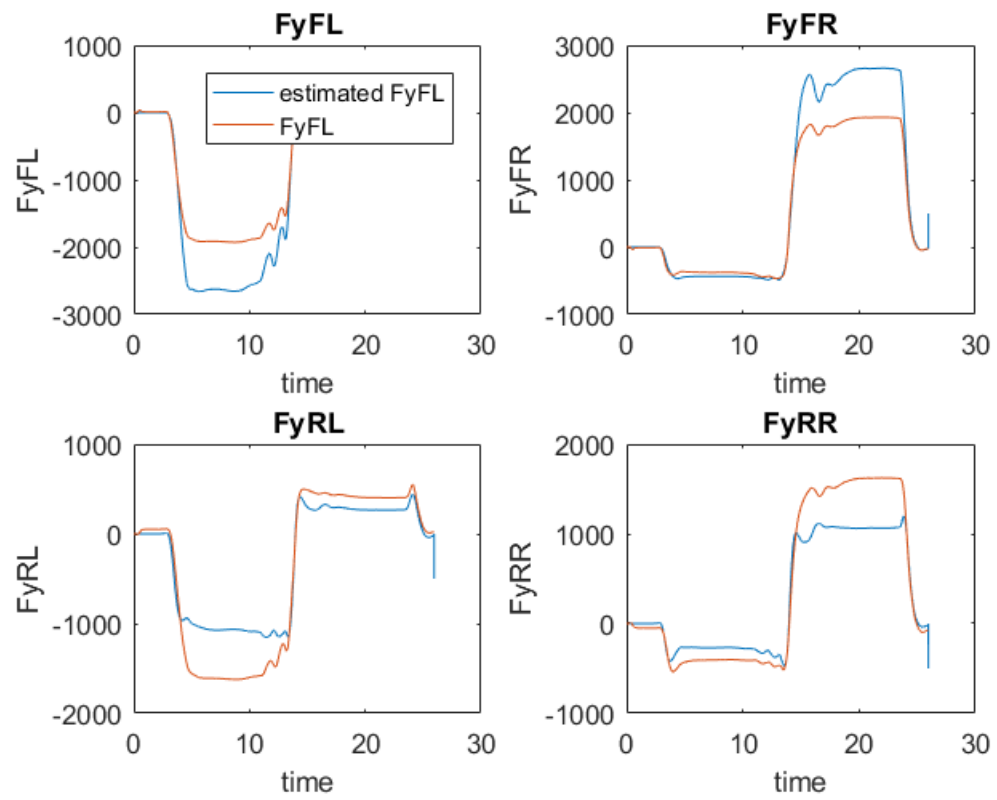
```
            Vhcl_RL_FxTwin: [1x1 struct]
                Vhcl_RL_Fy: [1x1 struct]
            Vhcl_RL_FyTwin: [1x1 struct]
                Vhcl_RL_Fz: [1x1 struct]
            Vhcl_RL_FzTwin: [1x1 struct]
          Vhcl_RL_LongSlip: [1x1 struct]
          Vhcl_RL_SideSlip: [1x1 struct]
          Vhcl_RL_Trq_B2WC: [1x1 struct]
         Vhcl_RL_Trq_Brake: [1x1 struct]
         Vhcl_RL_Trq_DL2WC: [1x1 struct]
           Vhcl_RL_Trq_T2W: [1x1 struct]
     Vhcl_RL_Trq_WhlBearing: [1x1 struct]
               Vhcl_RL_rot: [1x1 struct]
              Vhcl_RL_rotv: [1x1 struct]
                Vhcl_RL_rx: [1x1 struct]
                Vhcl_RL_ry: [1x1 struct]
                Vhcl_RL_rz: [1x1 struct]
                Vhcl_RL_tx: [1x1 struct]
                Vhcl_RL_ty: [1x1 struct]
                Vhcl_RL_tz: [1x1 struct]
             Vhcl_RL_vBelt: [1x1 struct]
                Vhcl_RR_Fx: [1x1 struct]
            Vhcl_RR_FxTwin: [1x1 struct]
                Vhcl_RR_Fy: [1x1 struct]
            Vhcl_RR_FyTwin: [1x1 struct]
                Vhcl_RR_Fz: [1x1 struct]
            Vhcl_RR_FzTwin: [1x1 struct]
          Vhcl_RR_LongSlip: [1x1 struct]
          Vhcl_RR_SideSlip: [1x1 struct]
          Vhcl_RR_Trq_B2WC: [1x1 struct]
         Vhcl_RR_Trq_Brake: [1x1 struct]
         Vhcl_RR_Trq_DL2WC: [1x1 struct]
           Vhcl_RR_Trq_T2W: [1x1 struct]
     Vhcl_RR_Trq_WhlBearing: [1x1 struct]
               Vhcl_RR_rot: [1x1 struct]
              Vhcl_RR_rotv: [1x1 struct]
                Vhcl_RR_rx: [1x1 struct]
                Vhcl_RR_ry: [1x1 struct]
                Vhcl_RR_rz: [1x1 struct]
                Vhcl_RR_tx: [1x1 struct]
                Vhcl_RR_ty: [1x1 struct]
                Vhcl_RR_tz: [1x1 struct]
             Vhcl_RR_vBelt: [1x1 struct]
                 Vhcl_Roll: [1x1 struct]
              Vhcl_RollAcc: [1x1 struct]
              Vhcl_RollVel: [1x1 struct]
            Vhcl_Steer_Acc: [1x1 struct]
            Vhcl_Steer_Ang: [1x1 struct]
            Vhcl_Steer_Trq: [1x1 struct]
            Vhcl_Steer_Vel: [1x1 struct]
              Vhcl_Wind_vx: [1x1 struct]
              Vhcl_Wind_vy: [1x1 struct]
              Vhcl_Wind_vz: [1x1 struct]
                  Vhcl_Yaw: [1x1 struct]
```

```
        Vhcl_YawAcc: [1x1 struct]
       Vhcl_YawRate: [1x1 struct]
         Vhcl_sRoad: [1x1 struct]
     Vhcl_sRoadAero: [1x1 struct]
         Vhcl_tRoad: [1x1 struct]
             Vhcl_v: [1x1 struct]
```
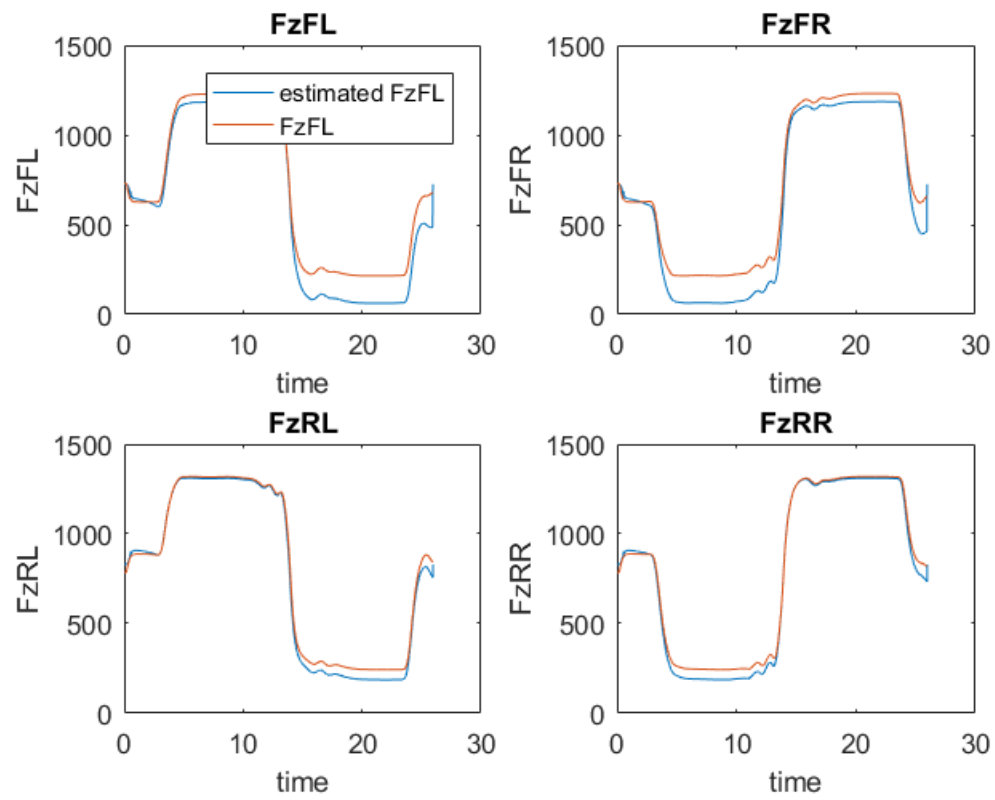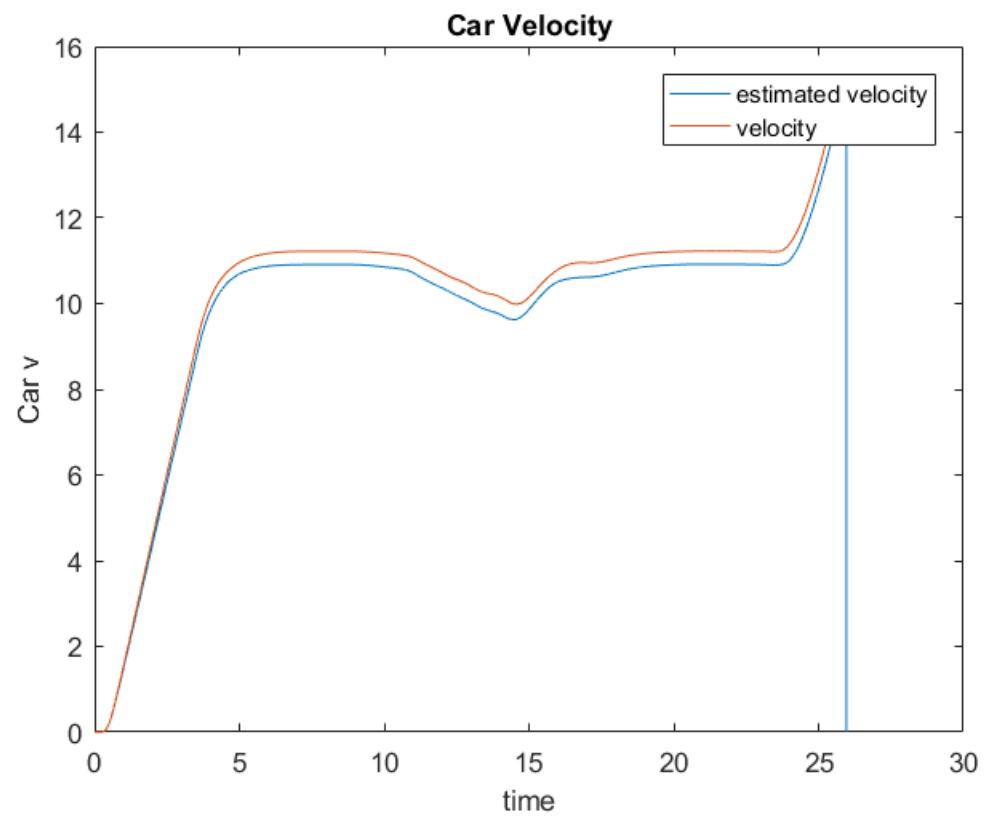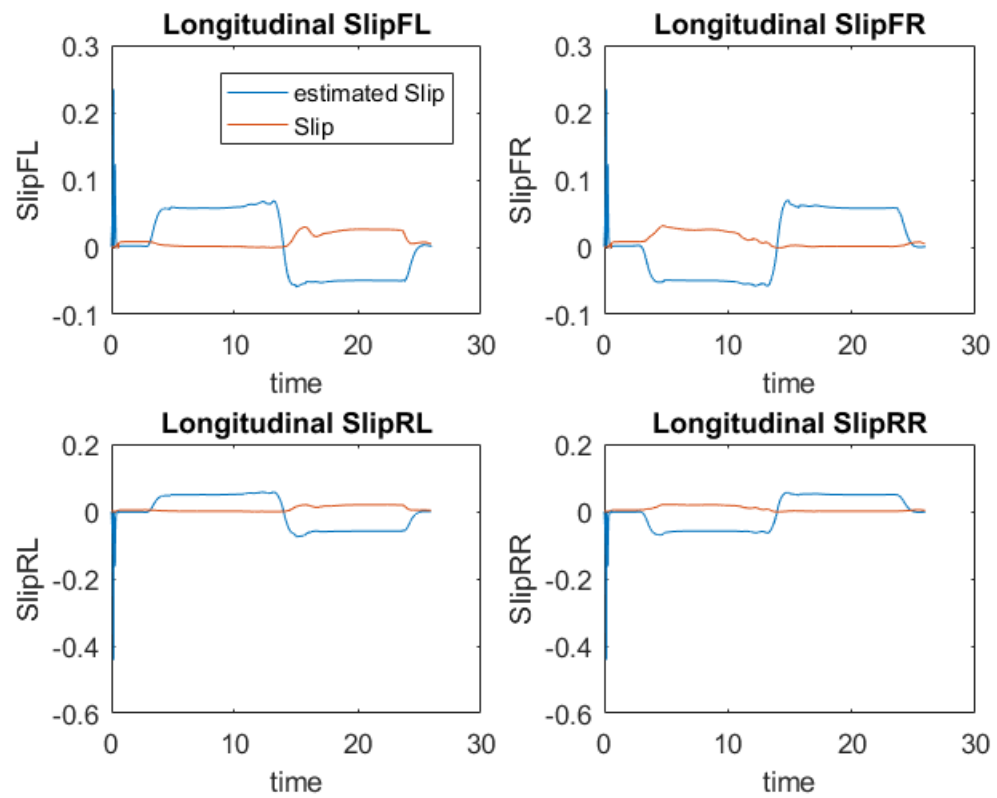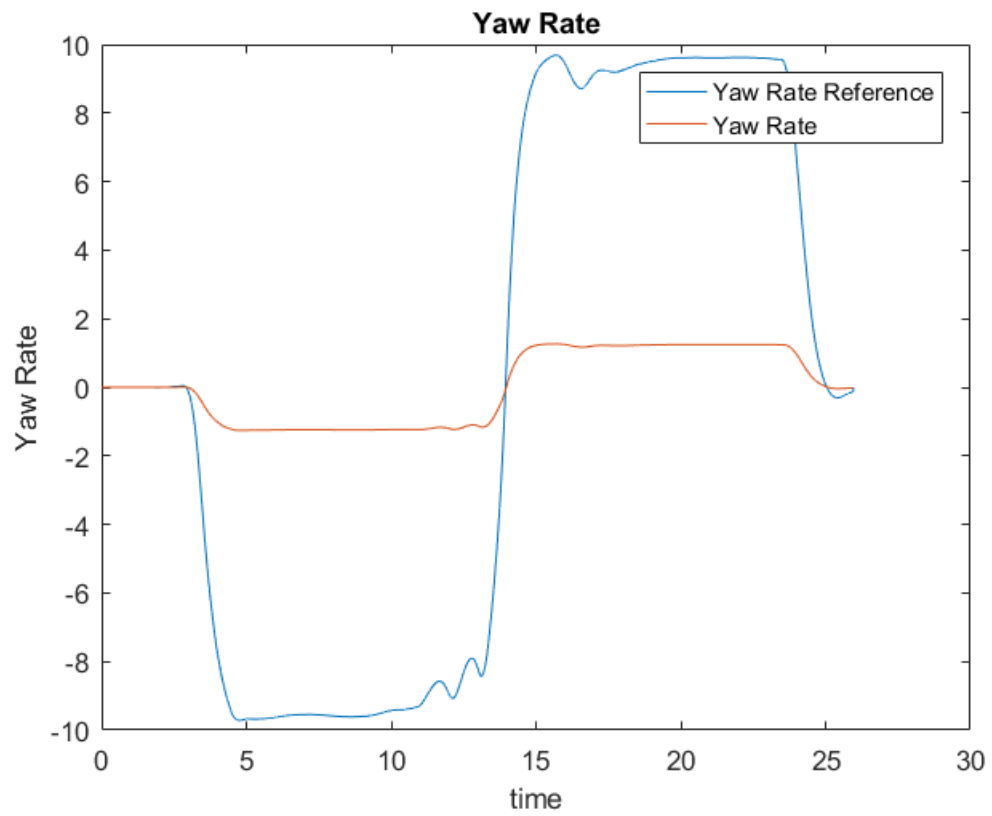
Fx plot

Fy plot

Fz plot

Velocity plot

Longitudinal Slip plot

Yaw Rate

Published with MATLAB® R2016a