



LD Benchmark

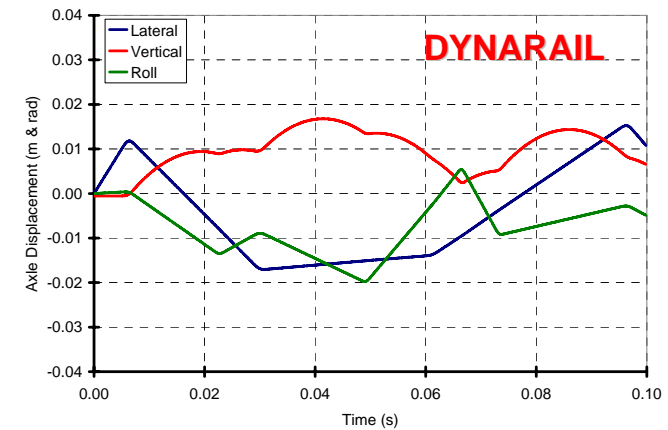
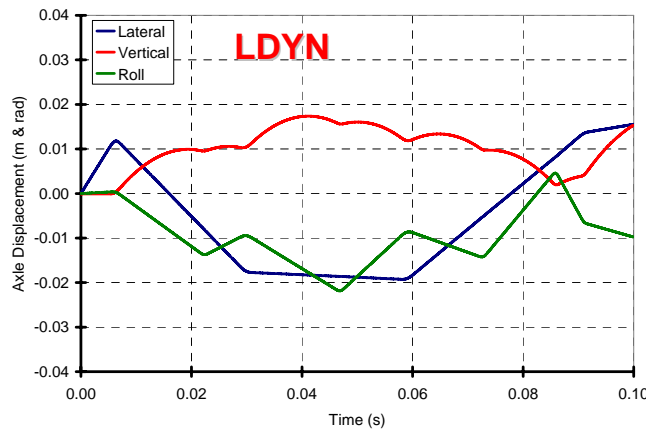
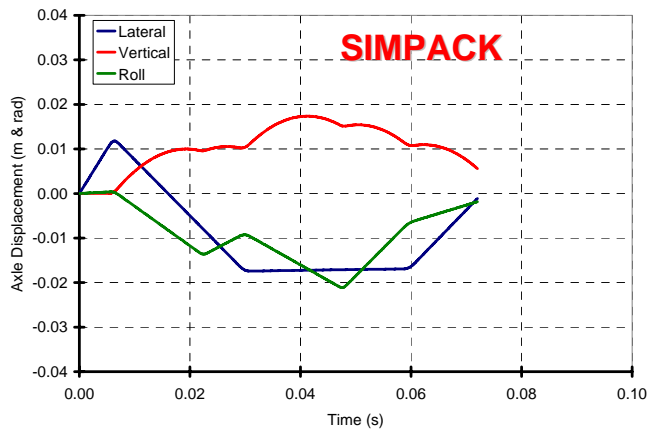
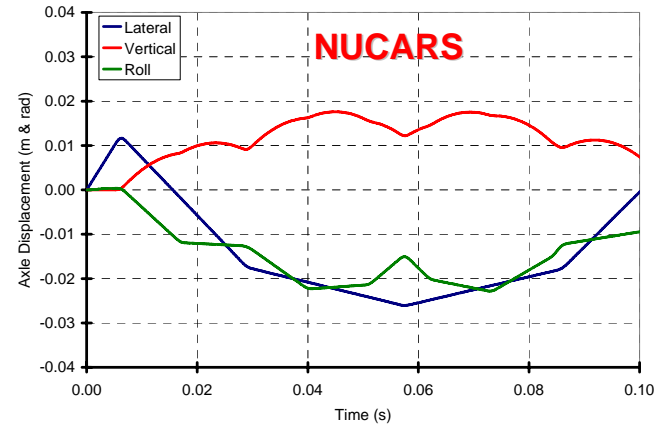
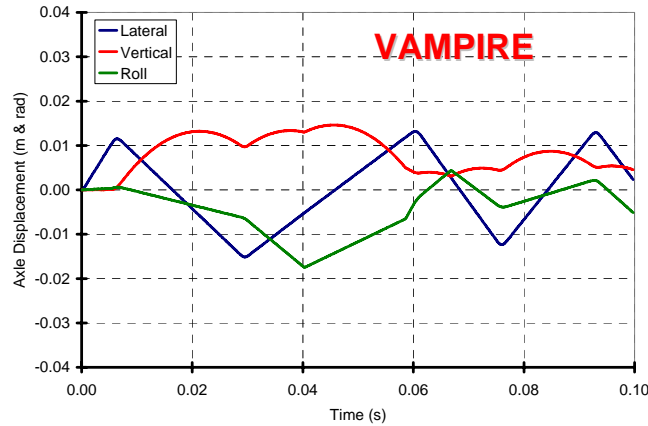
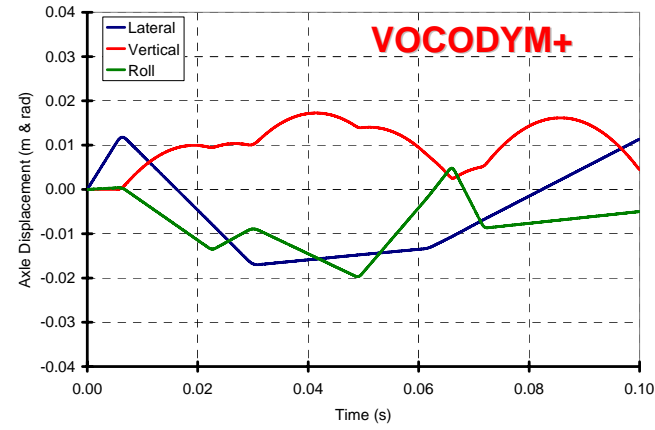
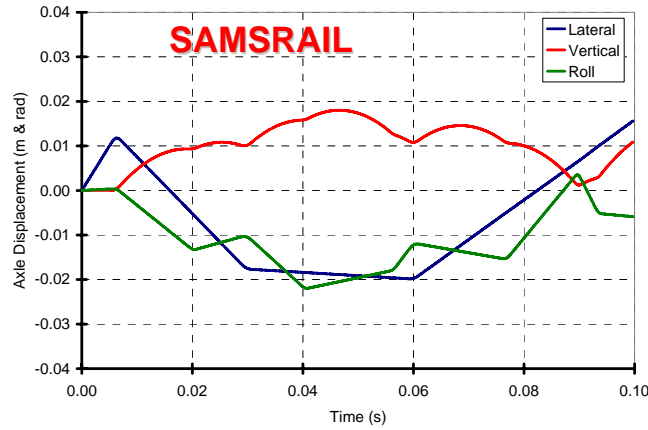
Case 1, Exercise 4 Actual Wheel and Rail Profile

1 m/s Forward Velocity

2 m/s Initial Lateral Velocity

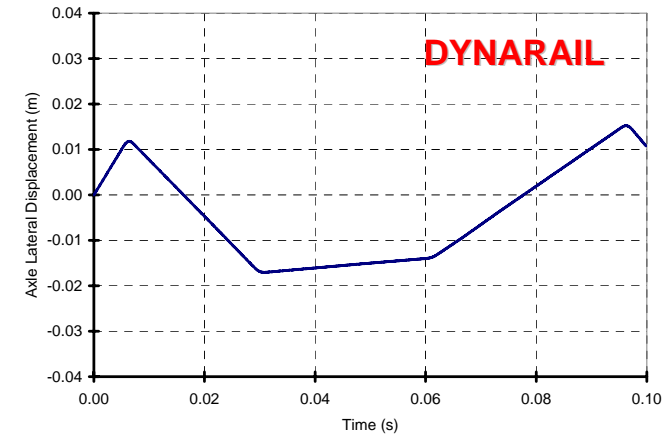
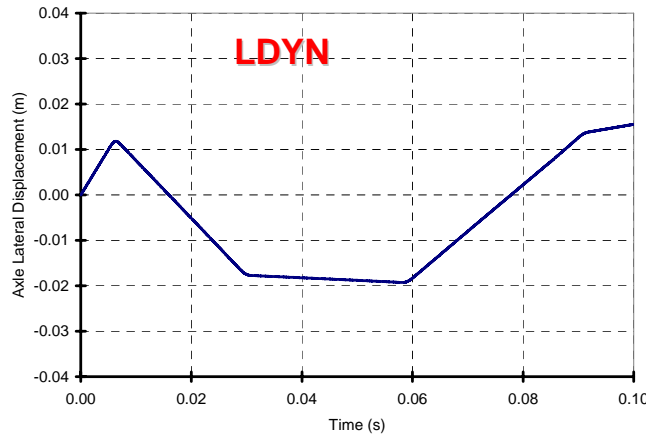
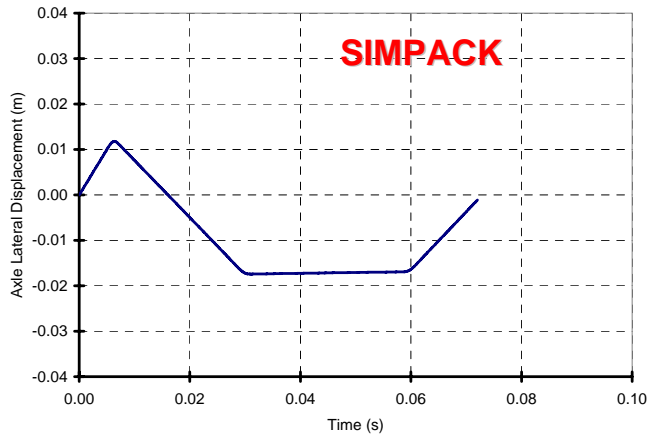
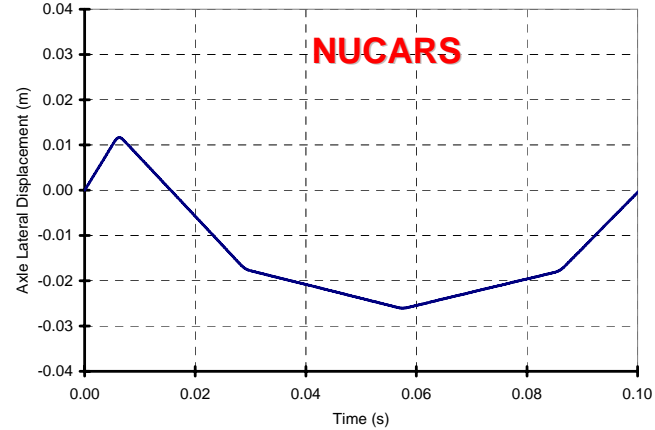
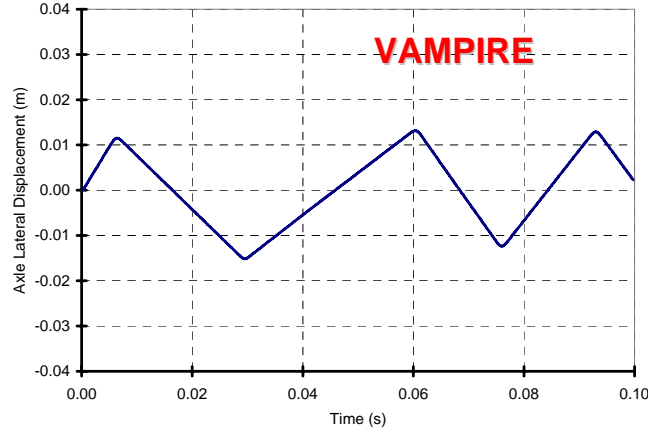
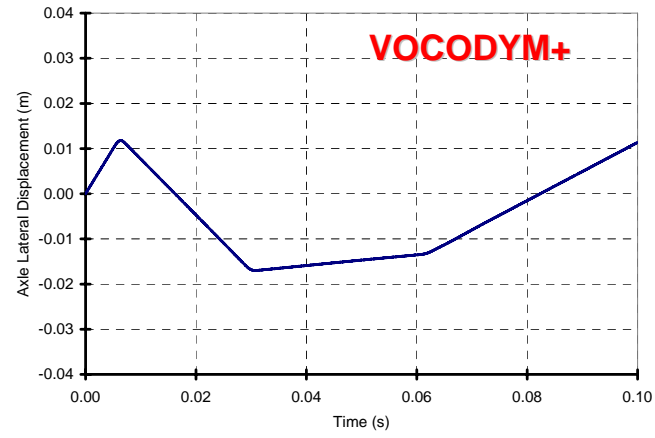
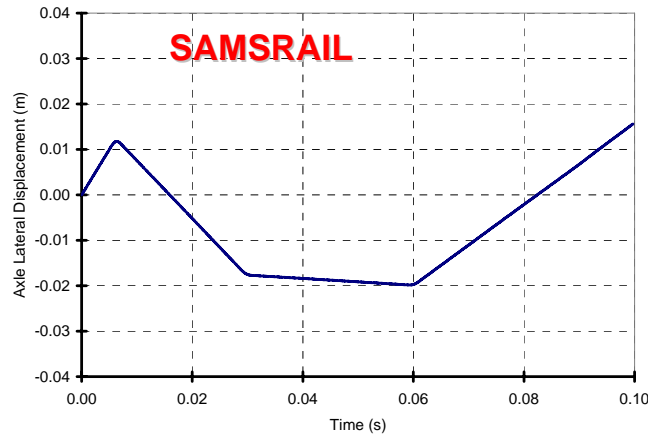


Wheelset Displacement



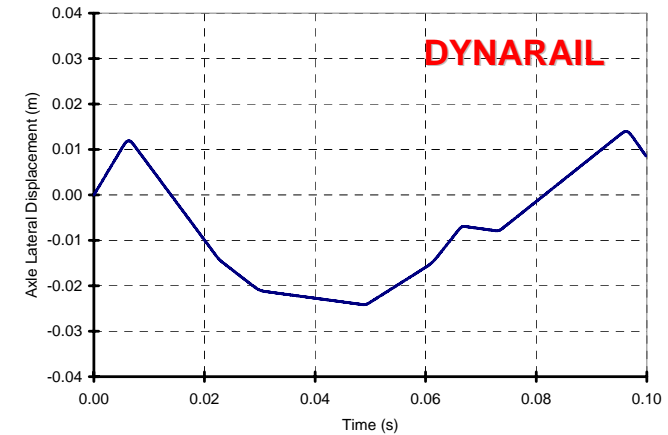
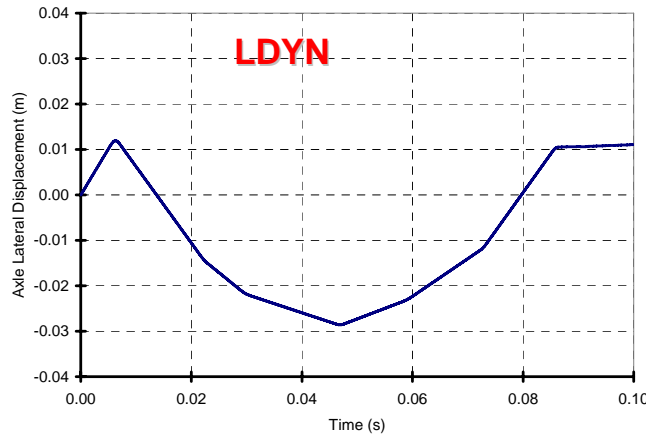
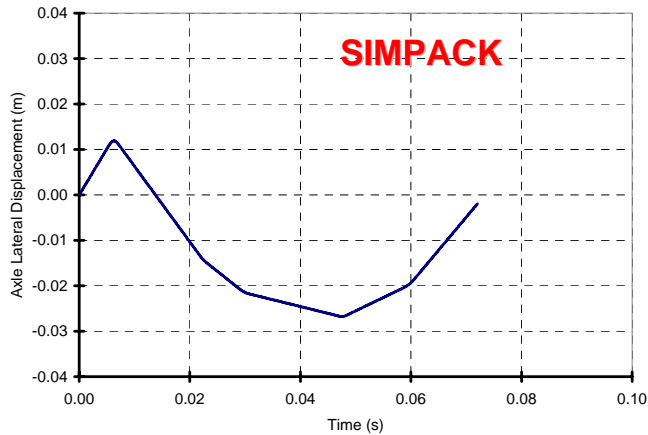
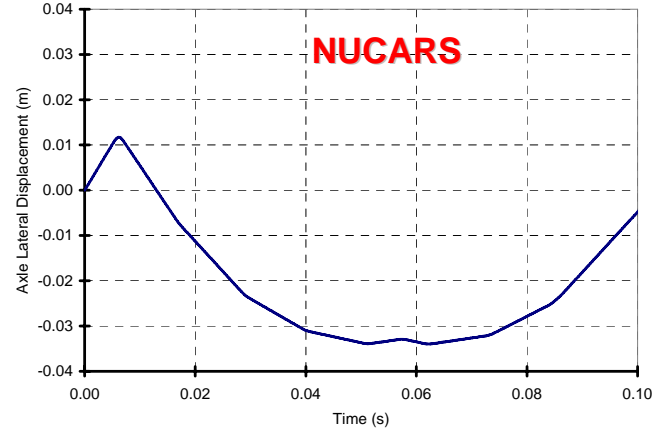
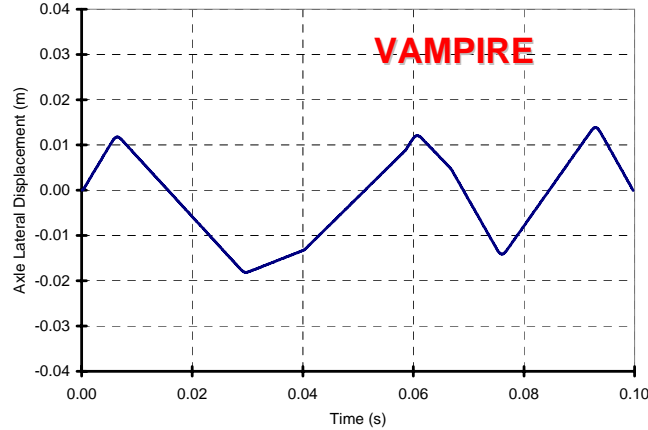
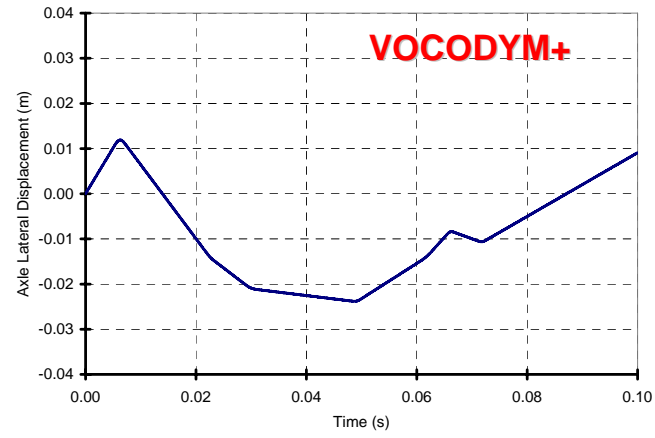
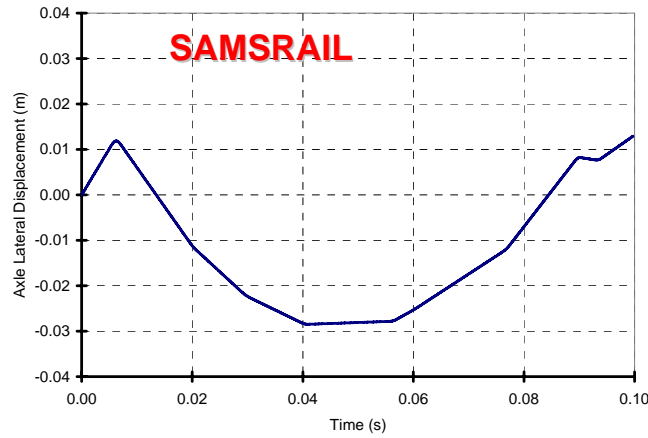


Wheelset Lateral Displacement at Axle CG



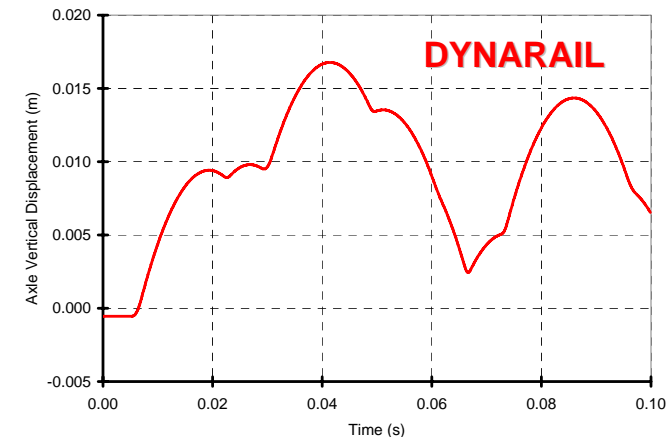
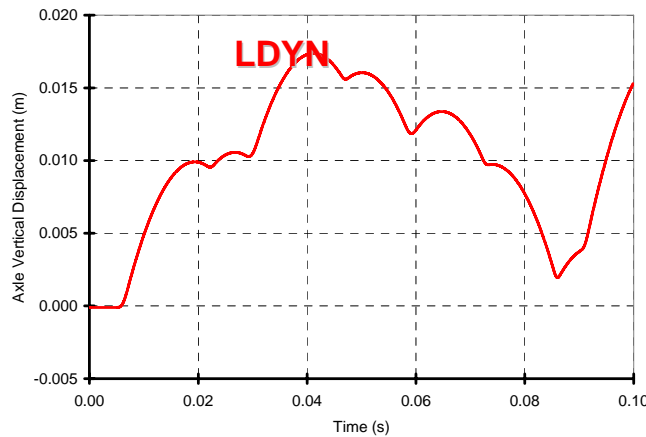
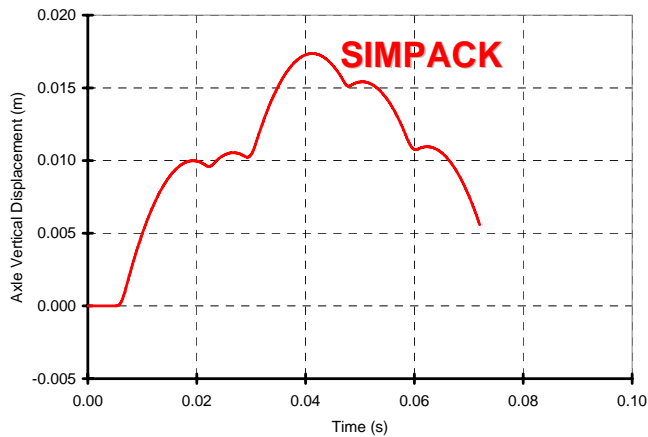
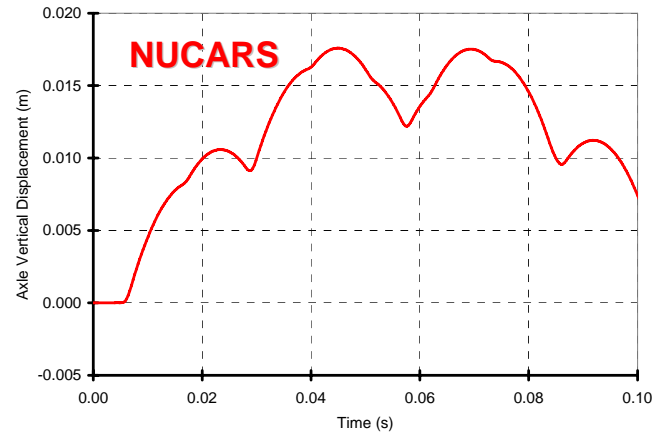
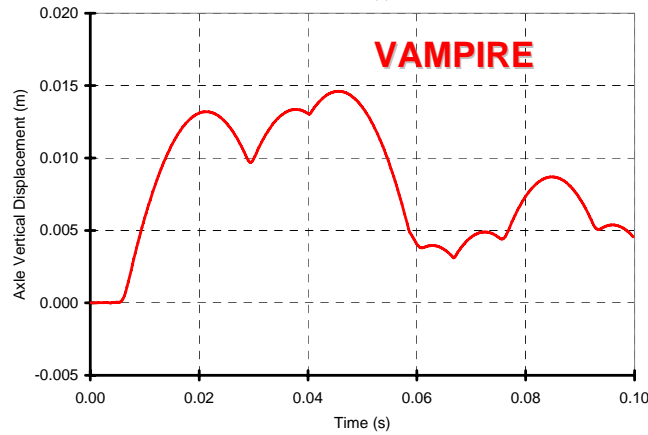
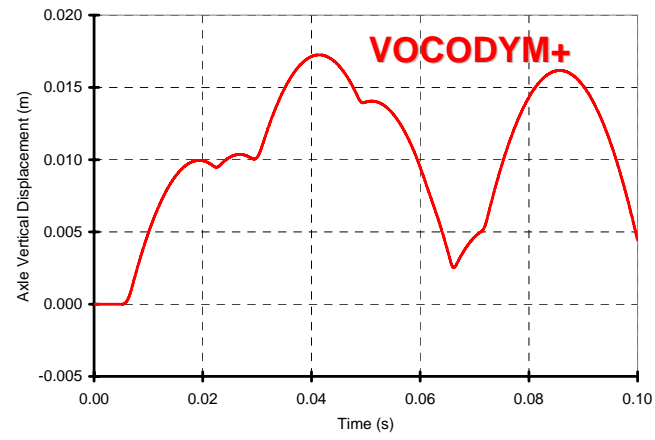
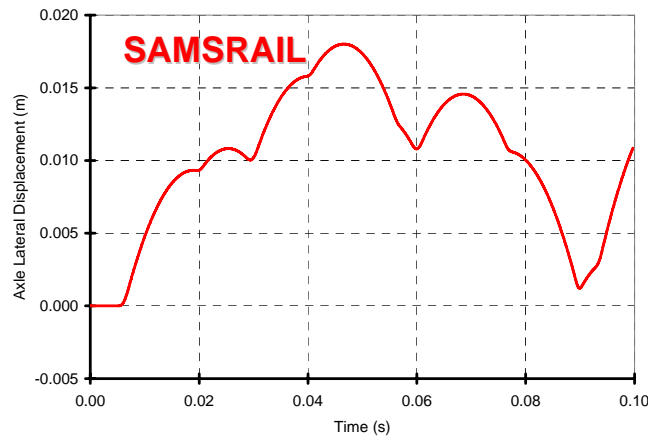


Wheelset Lateral Displacement at Rail Height



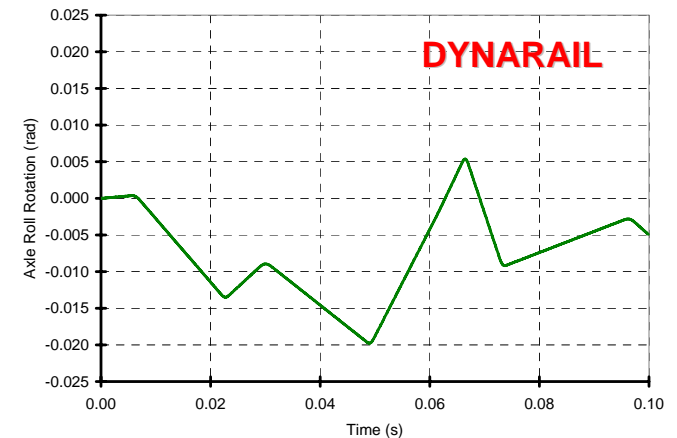
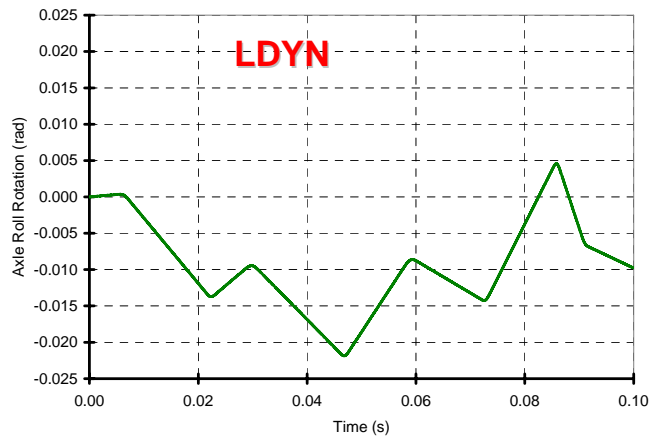
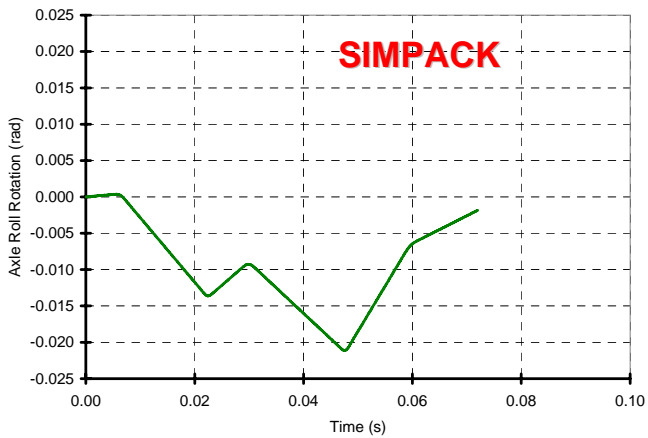
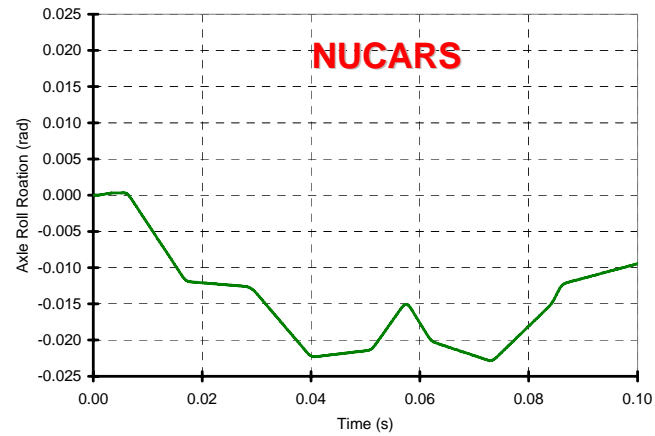
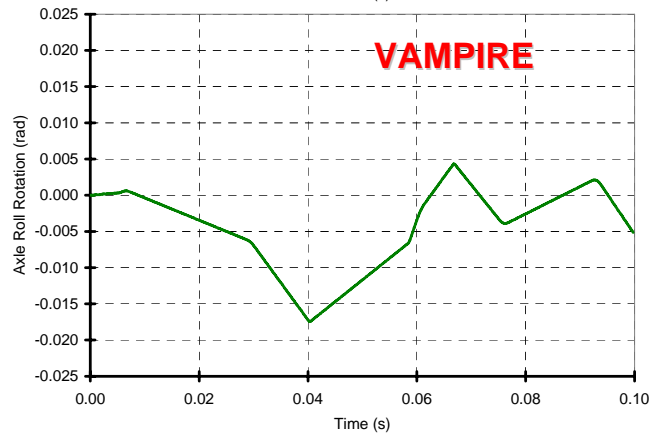
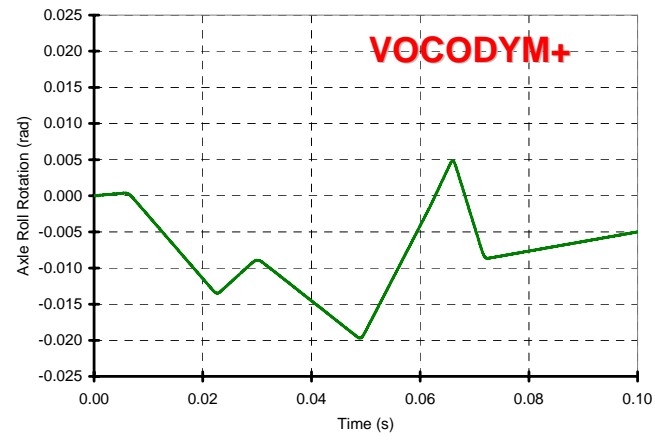
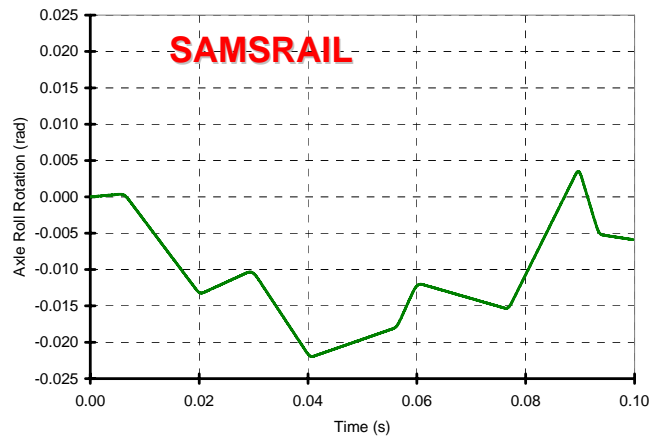


Wheelset Vertical Displacement



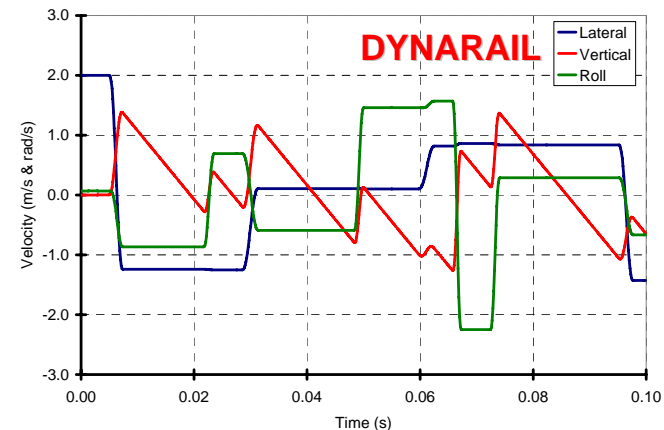
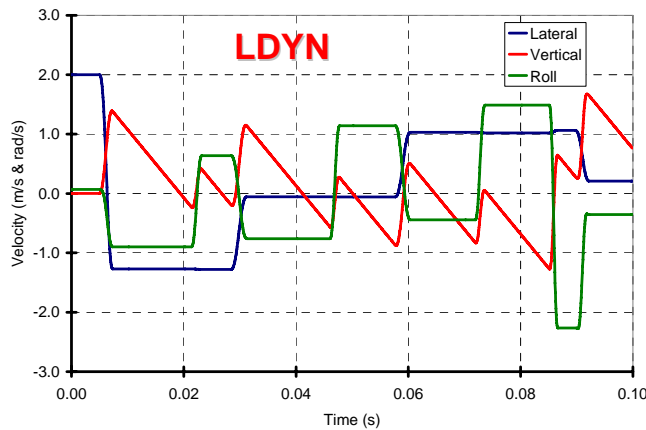
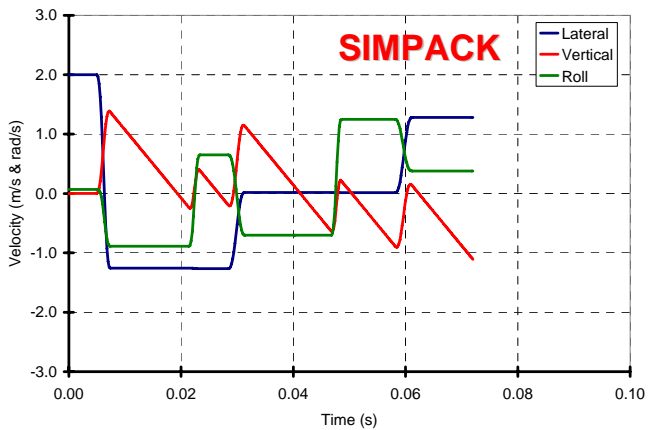
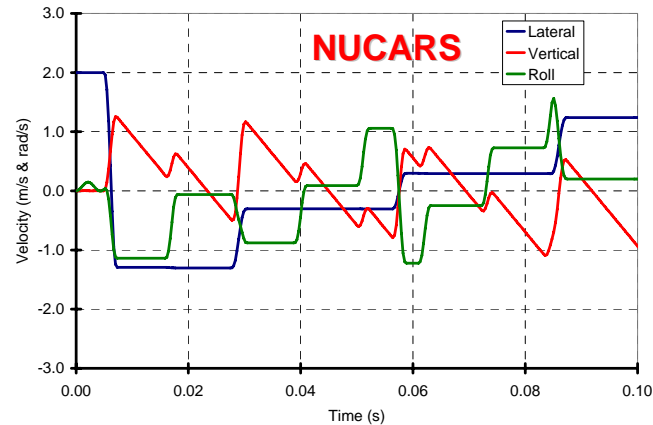
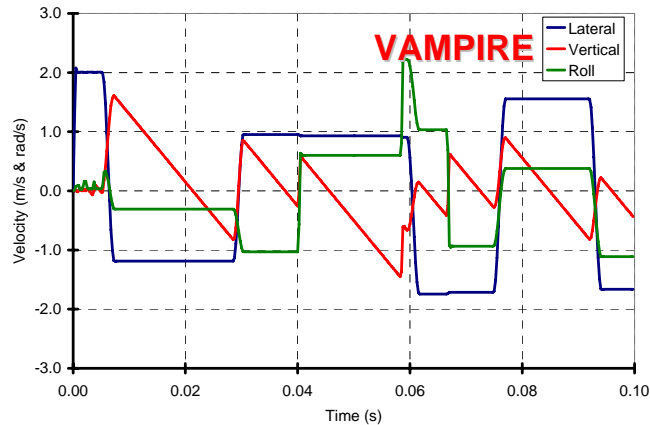
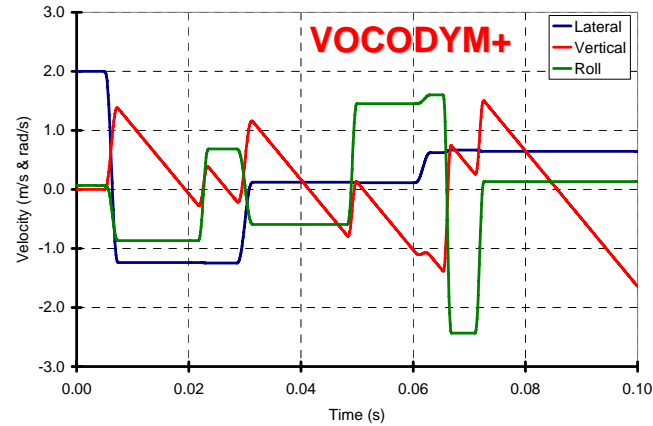
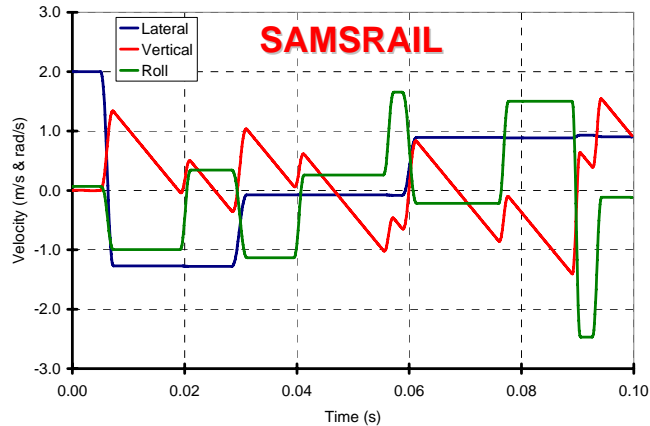


Wheelset Roll Rotation



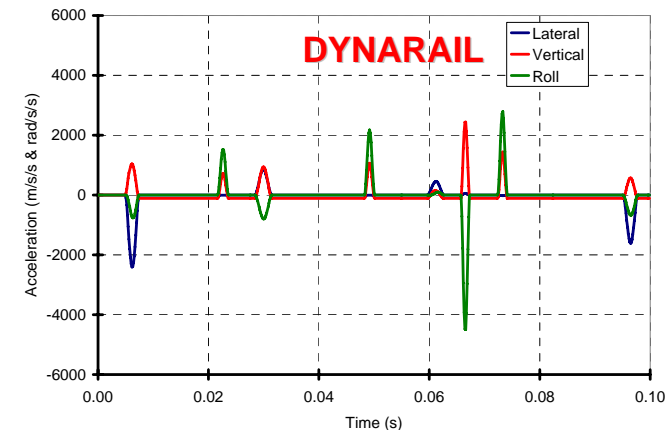
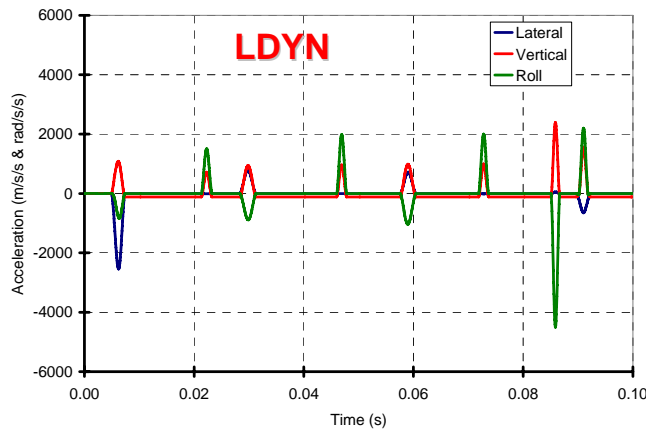
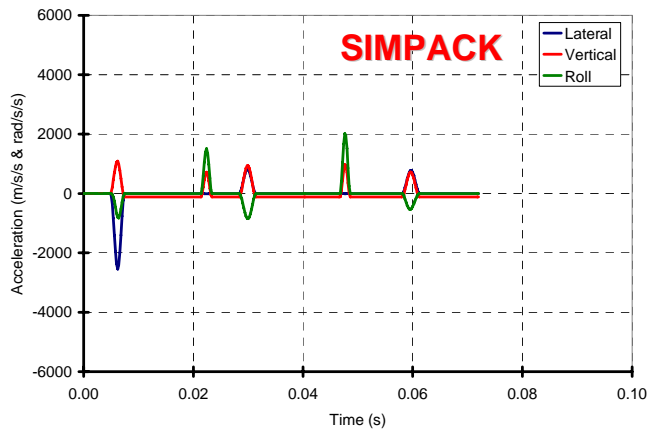
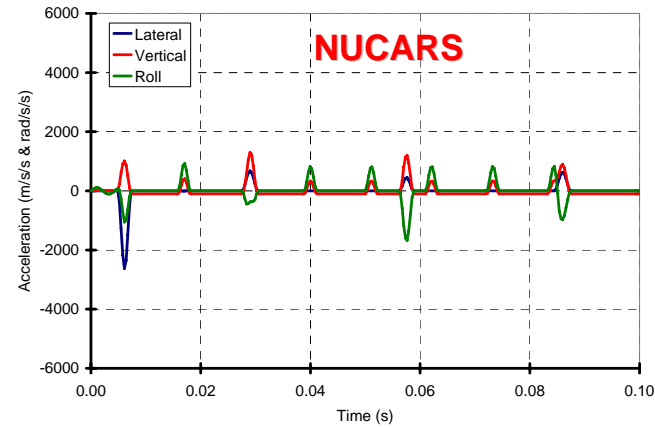
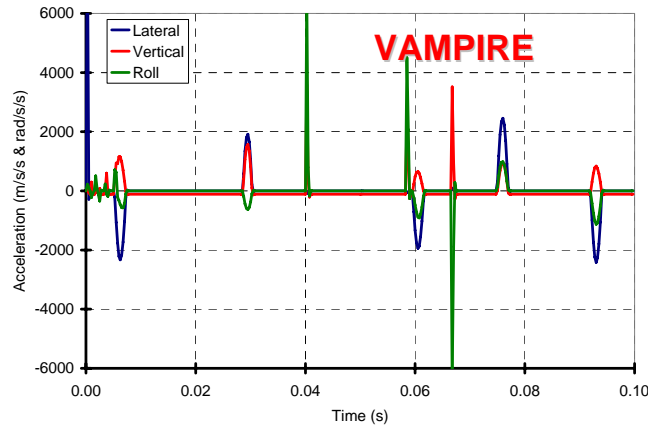
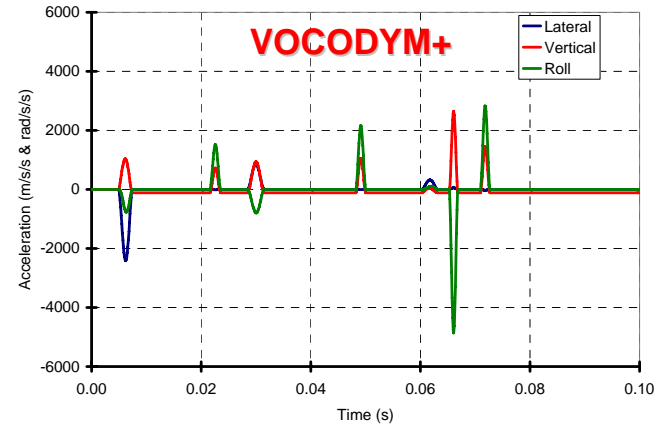
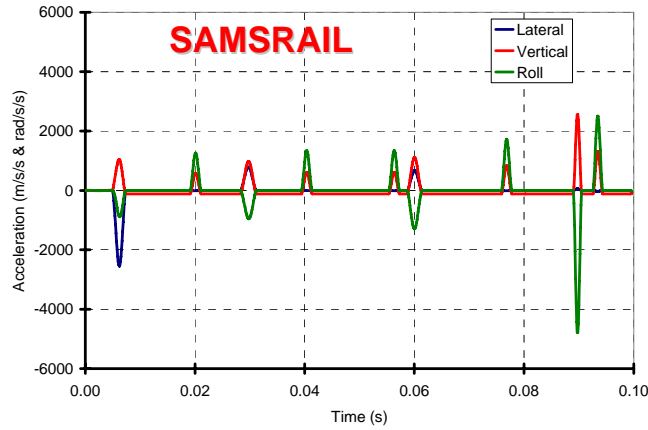


Wheelset Velocity



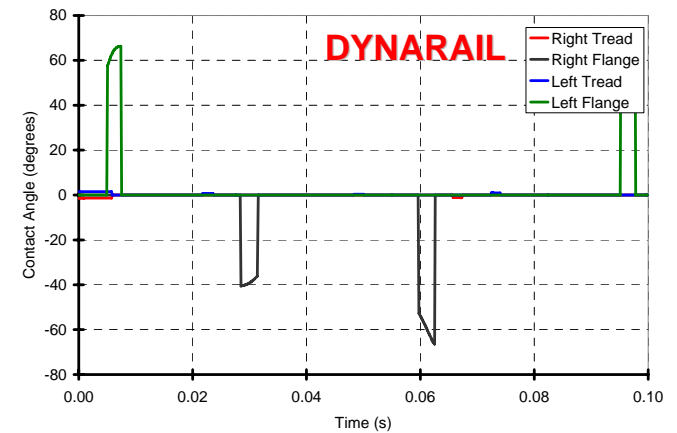
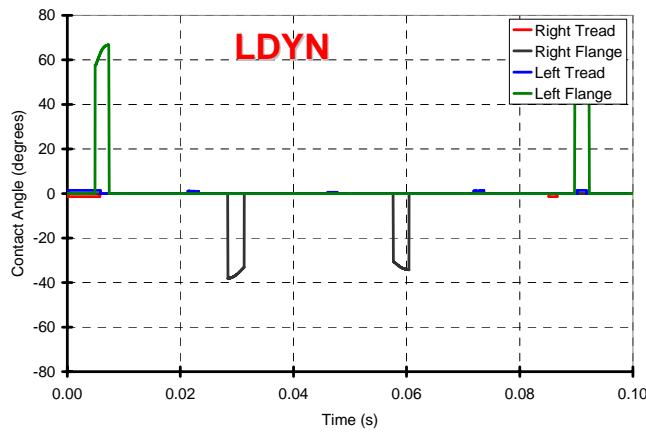
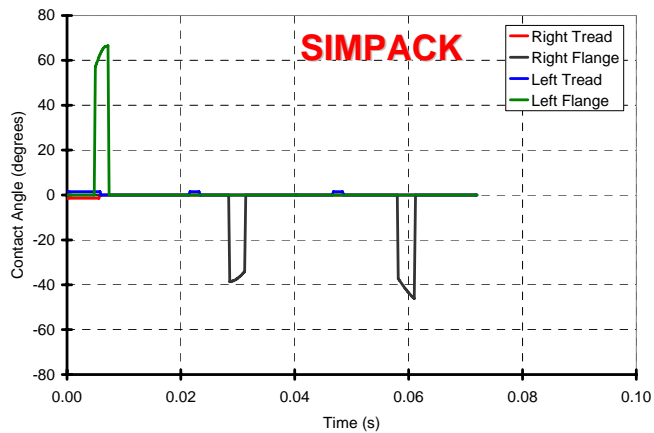
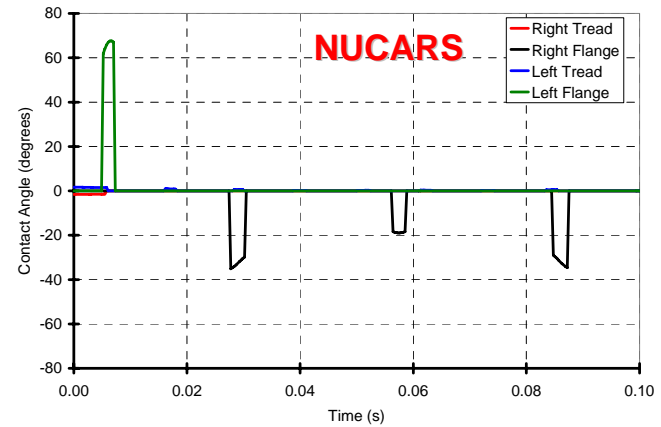
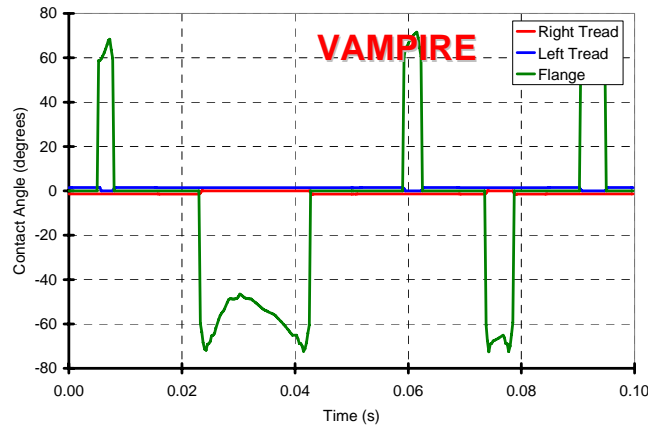
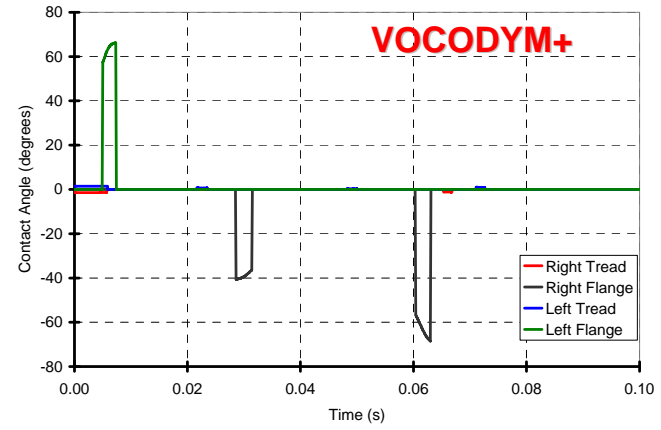
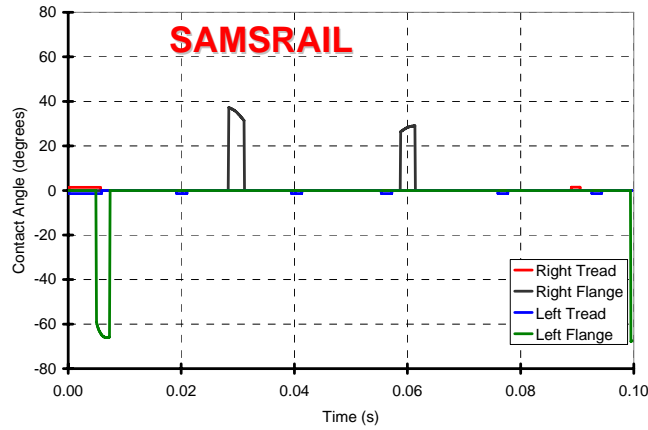


Wheelset Acceleration



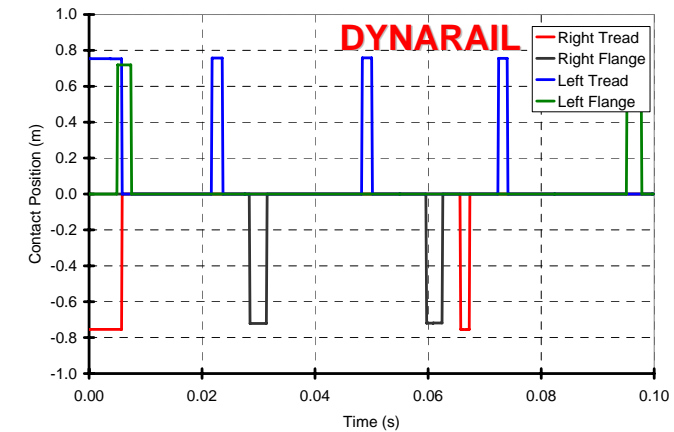
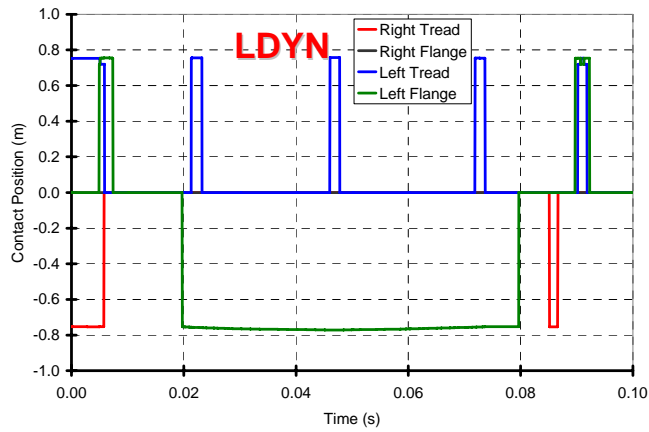
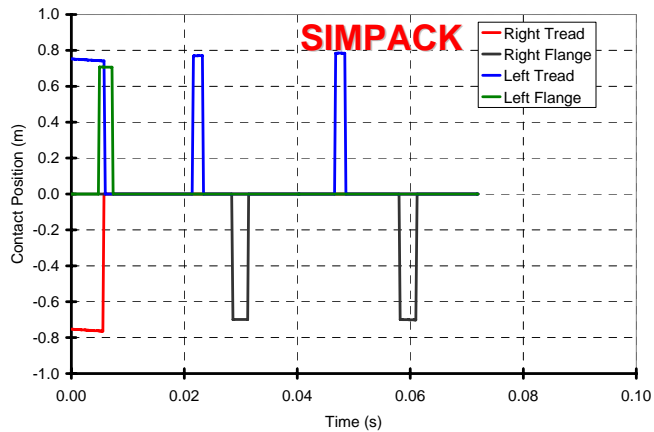
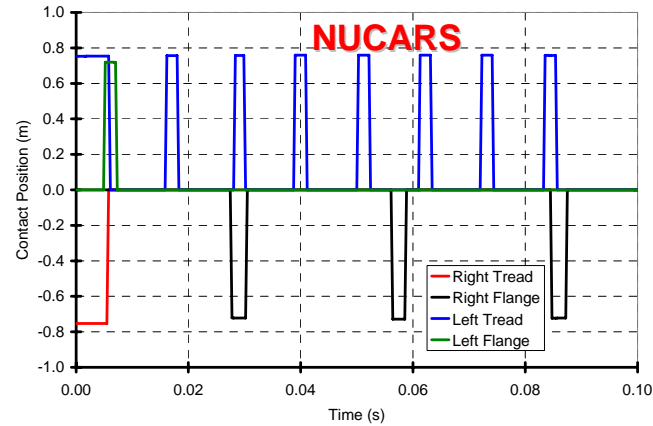
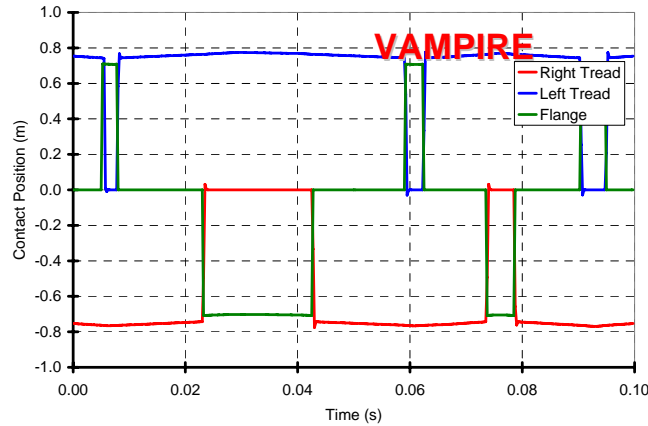
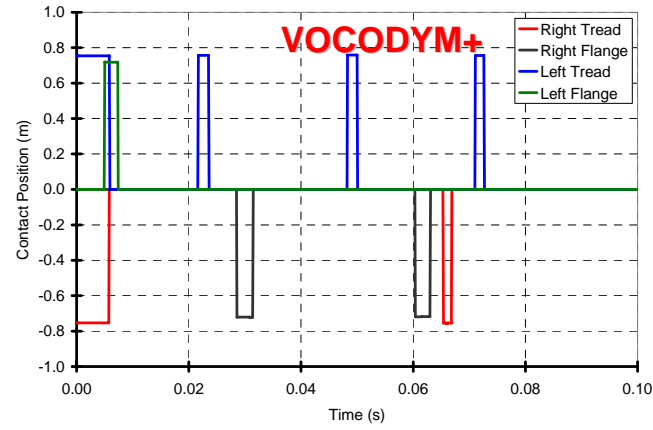
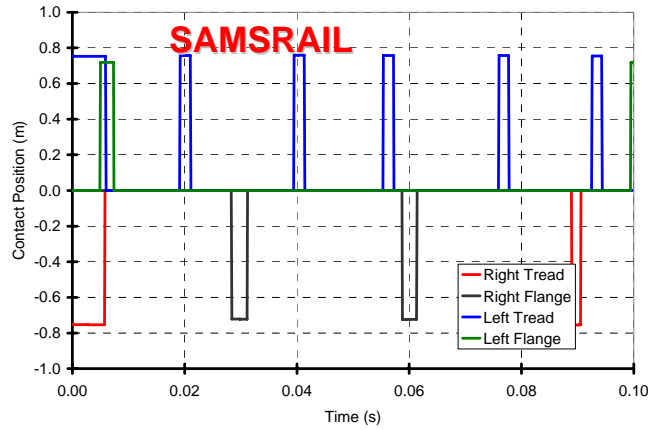


Contact Angle



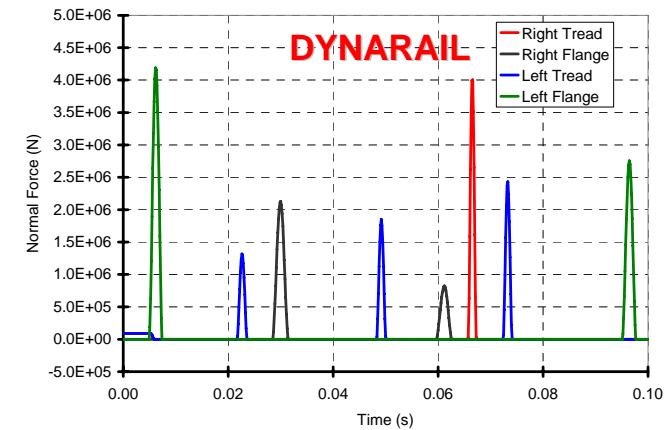
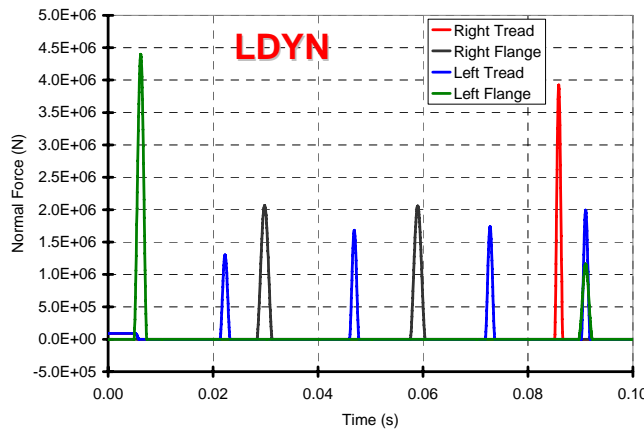
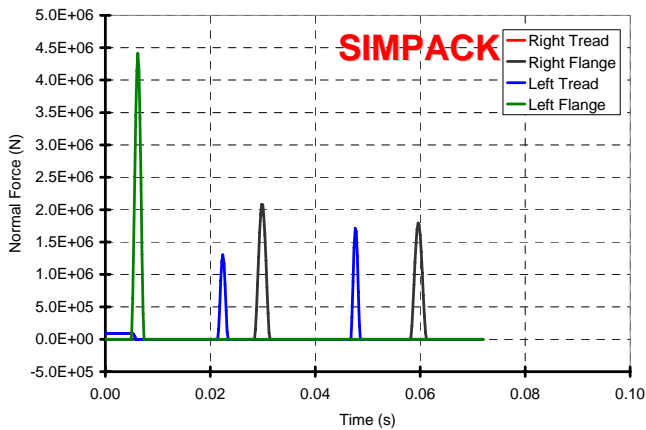
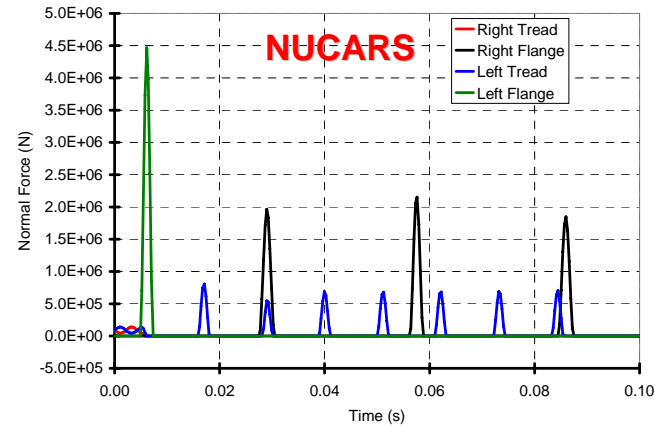
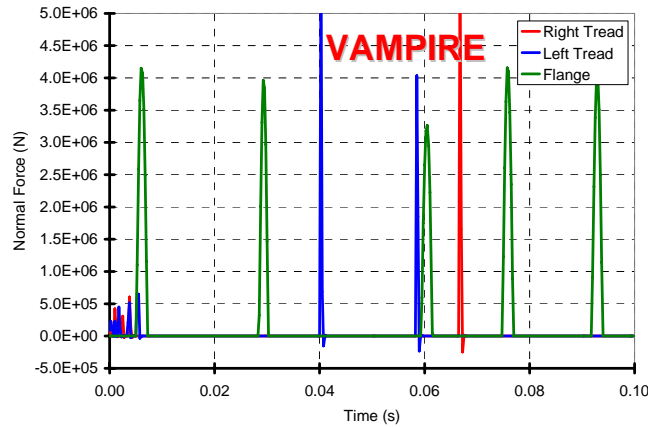
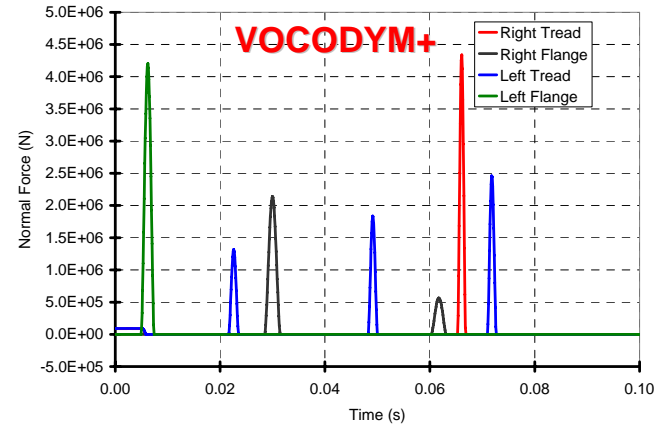
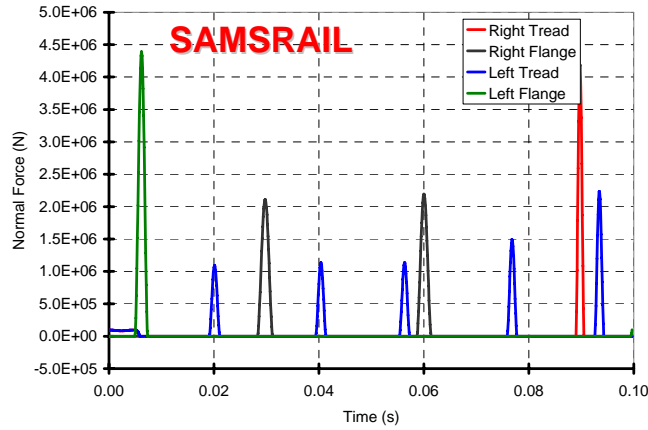


Contact Position





Normal Force





Energy Balance

