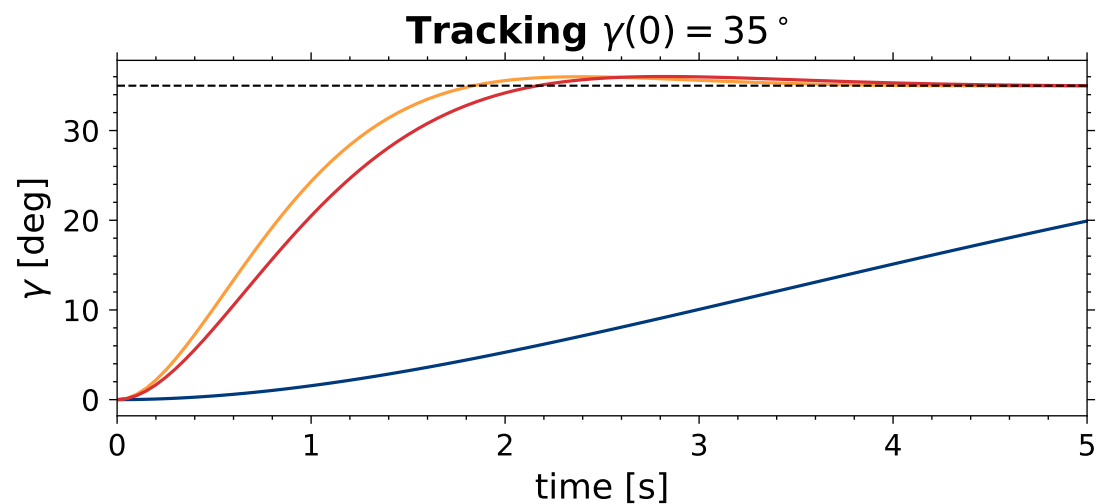
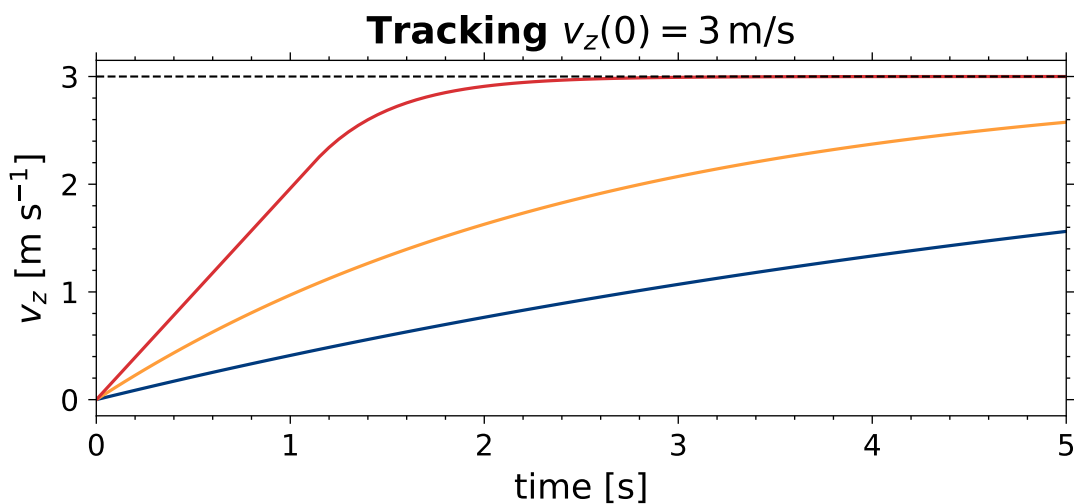
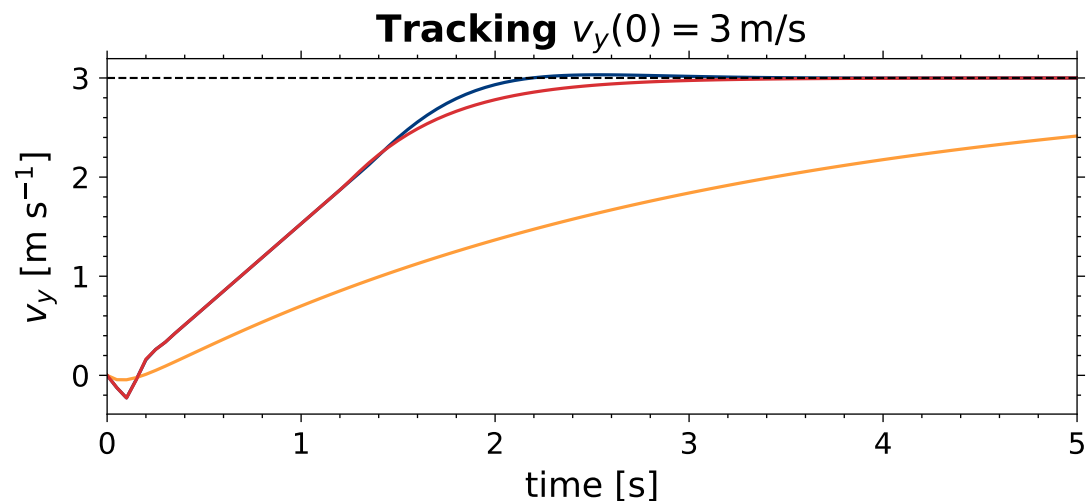
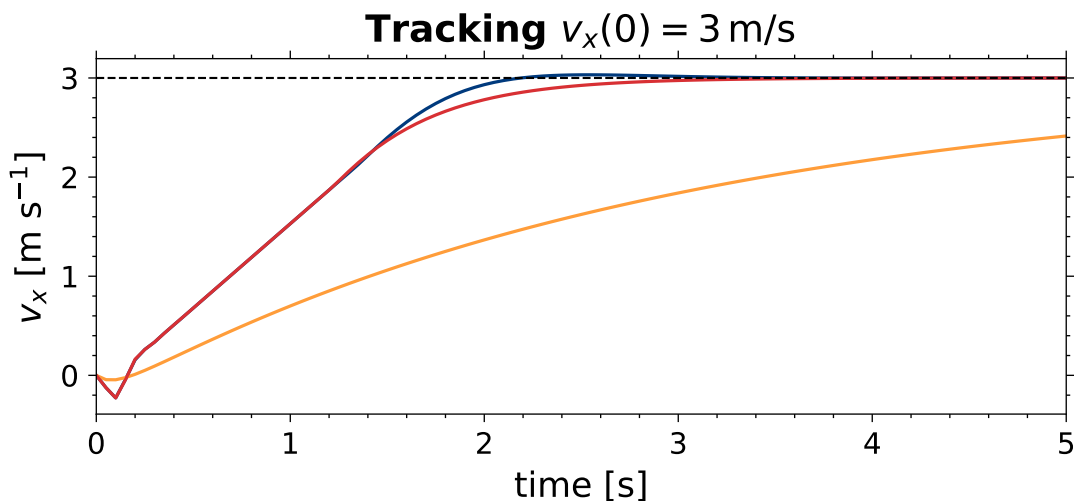


# Open-loop MPC predictions for velocity and roll subsystems



$H = 5.0 \text{ s}, N = 100$

— Identity  $Q = I, R = I$

— Heuristic  $Q_{ij} = 1/x_{i,\max}^2, R_{ij} = 1/u_{i,\max}^2$

— Final tuned