Open-loop MPC predictions (tracking $v_x, v_y, v_z = 3$ m/s, $\gamma = 35°$)
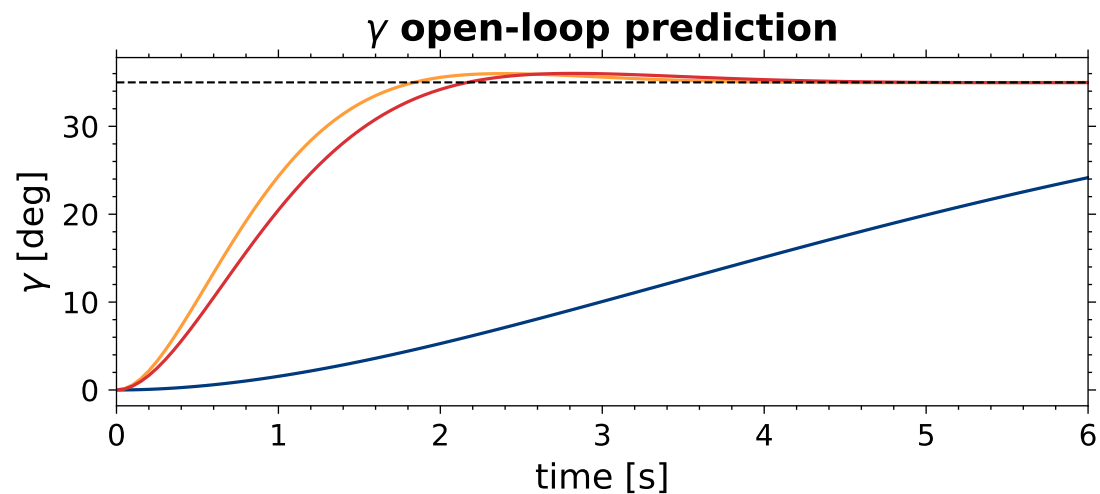
v_x **open-loop prediction**

v_y **open-loop prediction**

v_z **open-loop prediction**

γ **open-loop prediction**
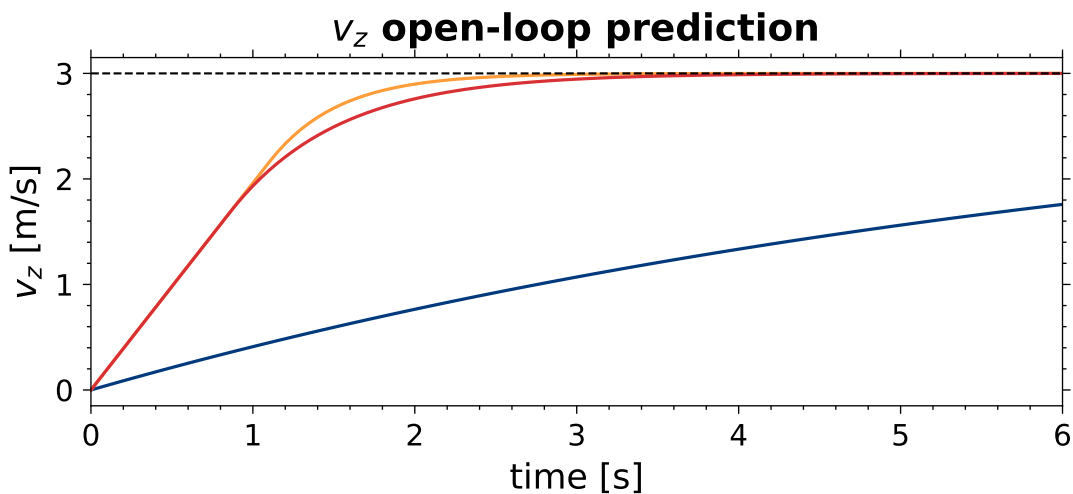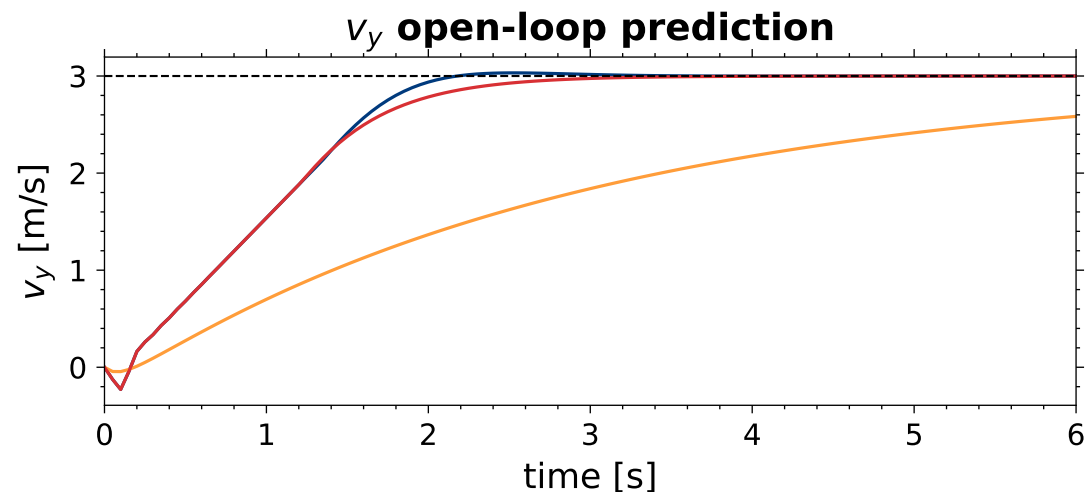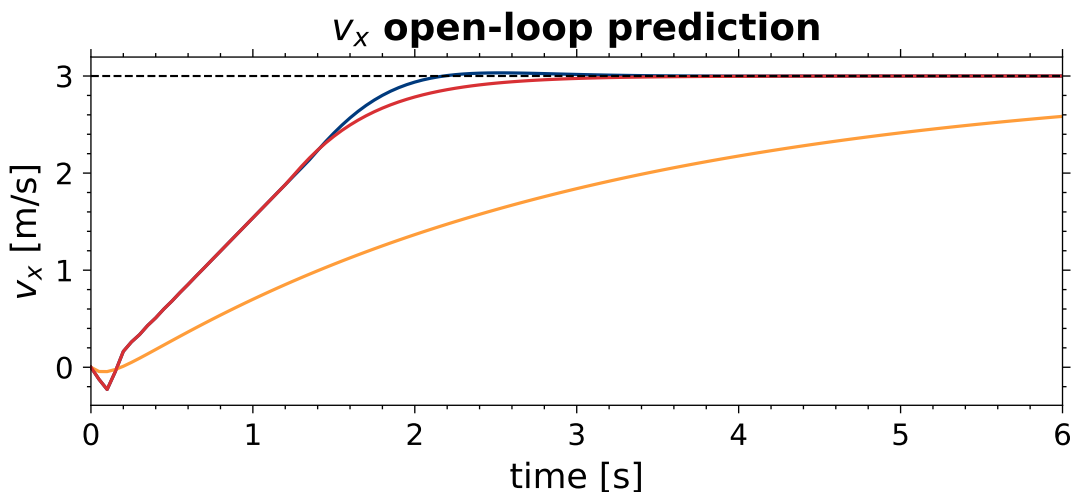
$H = 6.0$ s, $N = 120$

—— Identity $Q = I, R = I$ —— Heuristic $Q_{ii} = 1/x_{i,\max}^2$, $R_{ii} = 1/u_{i,\max}^2$ —— Final tuned