u_{OC} (M_block \rightarrow QC dynamics) — ON Torques & $\ddot{\mathsf{T}}_{\mathsf{cmd}}$ (ON) 0.04 2000 $\tau_{\rm x}$ [N m] 0.02 $\tau_{\rm v}$ [N m] 1000 $\tau_{_{Z}}$ [N m] T_{cmd} [N/s²] -0.02 -0.04 -1000 5 10 15 20 0 t [s] Gimbal acceleration commands (ON) 200 $\ddot{\eta}_{\rm cmd}$ [deg/s²] θ'_{gcmd} [deg/s²] 100 [deg/s²] -100 5 10 15 0 20

t [s]