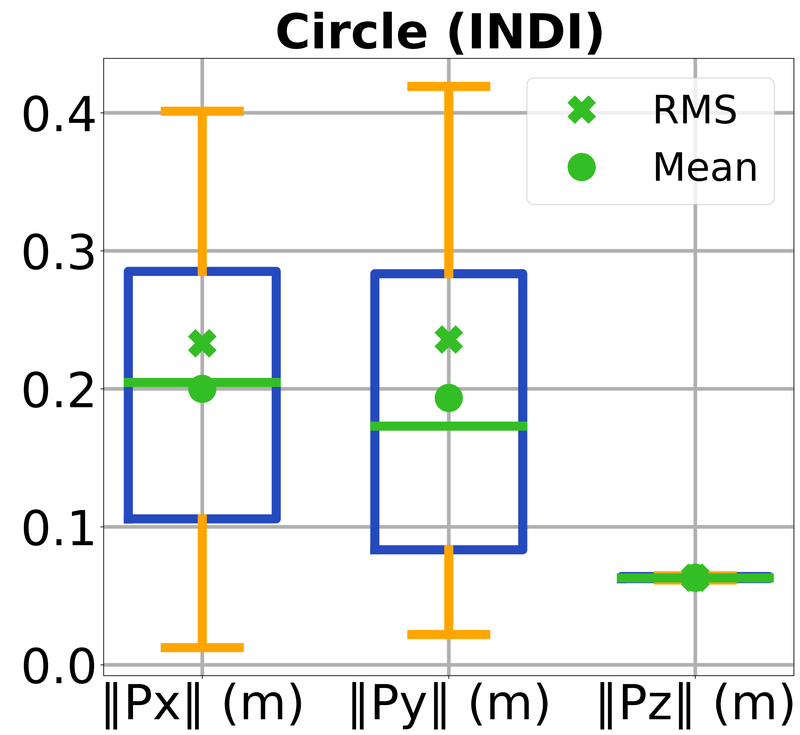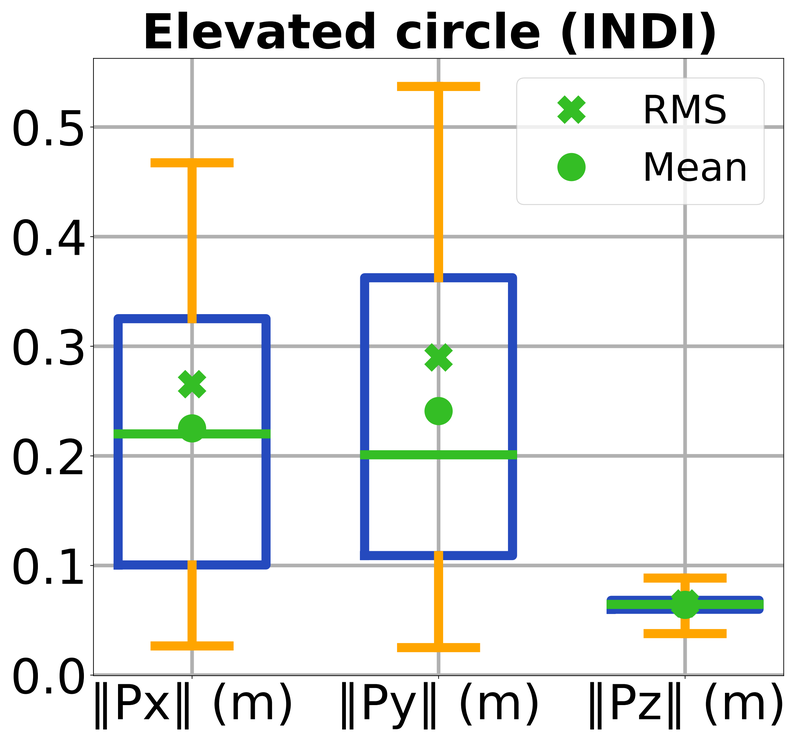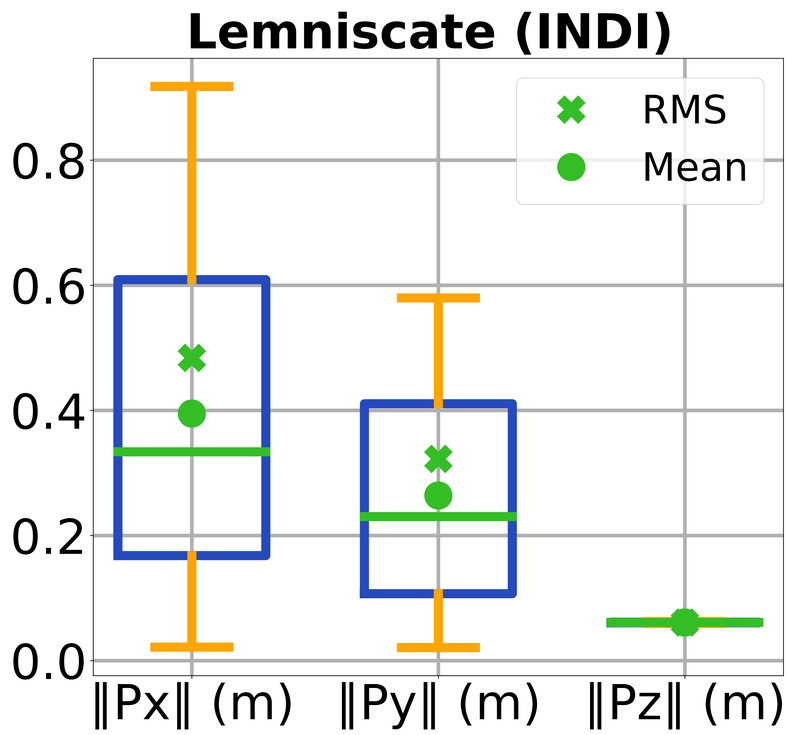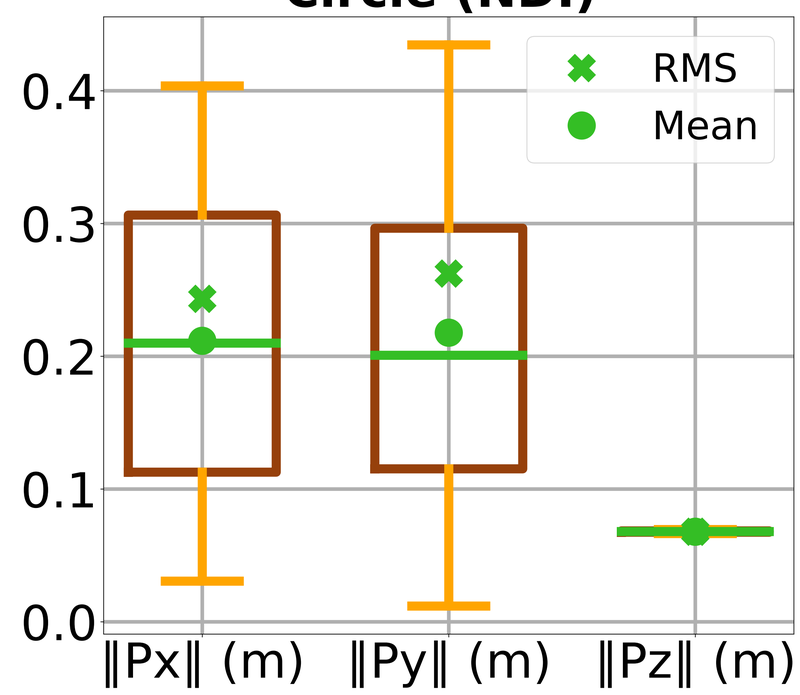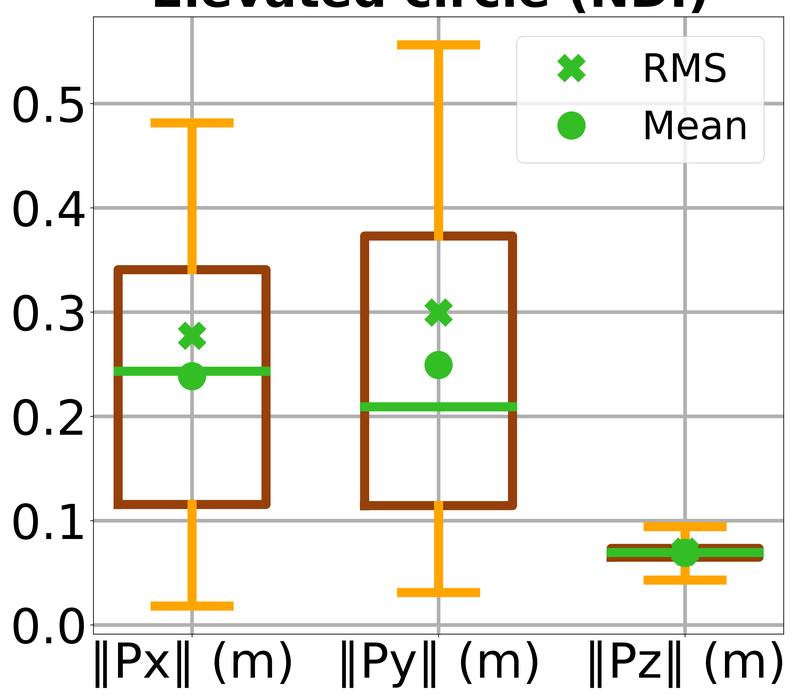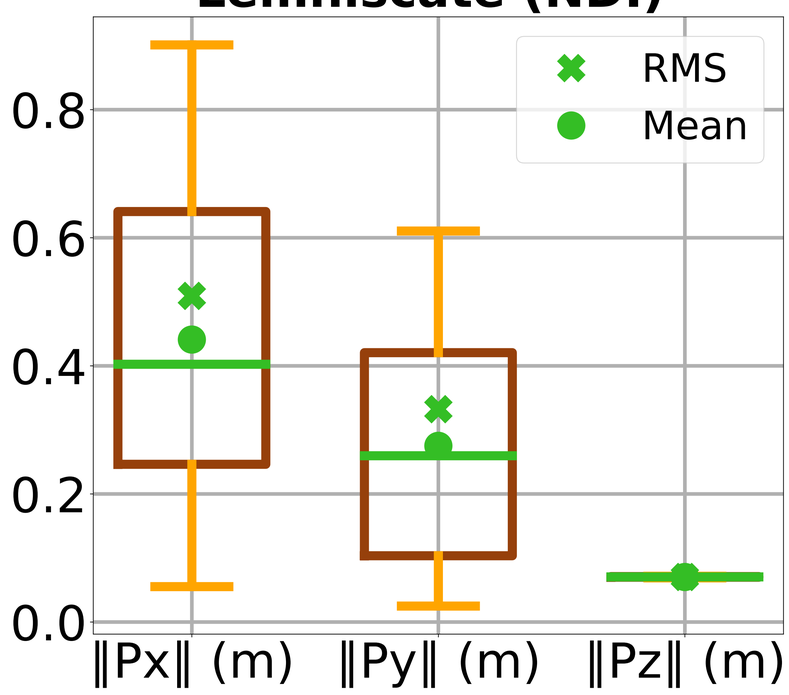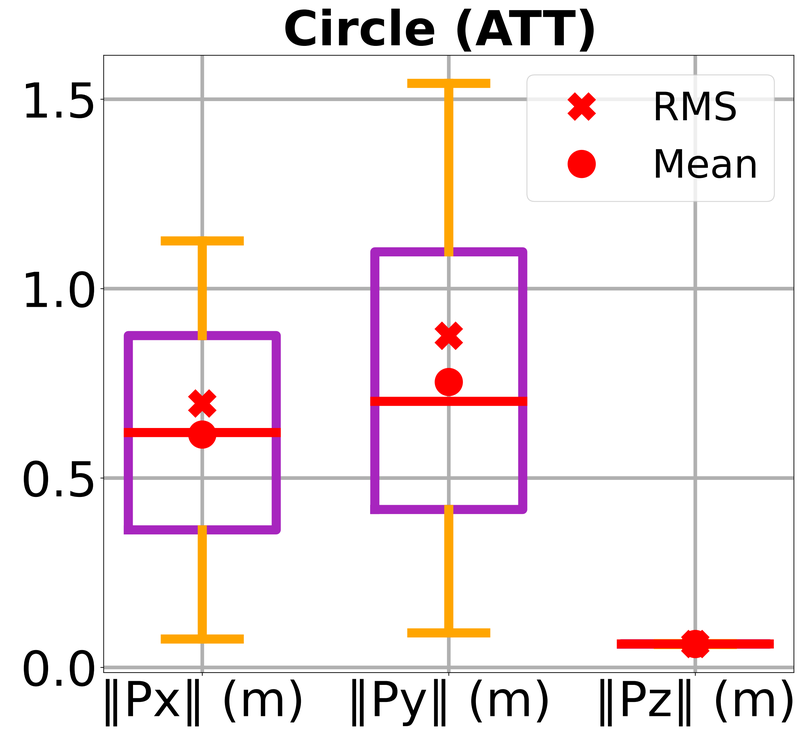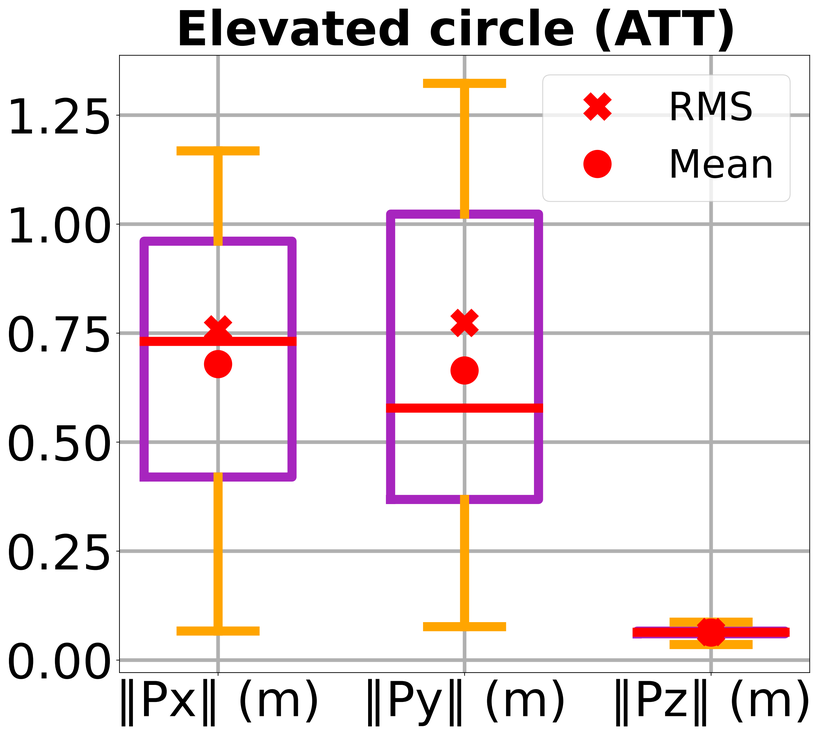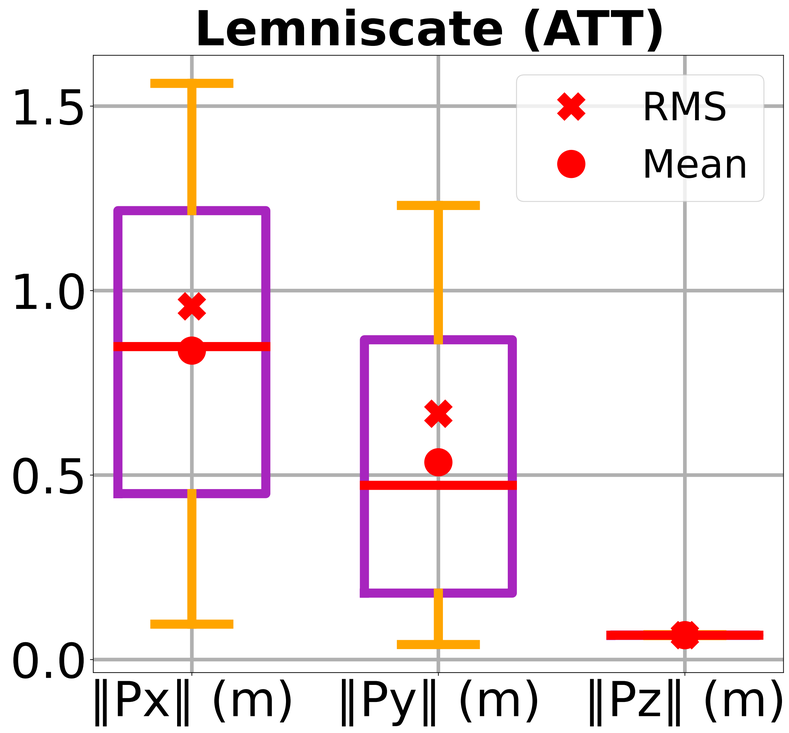Controller tracking performance using long-wing (L2 norm error(m))