

Fig. 23 Lawnmower pattern; with wind and noise; Control: 8.1, Table 8;  $K_P = 0.2$ ,  $K_{Pr} = 0.05$ ,  $K_D = 2$ ,  $K_{Dr} = 0$ ,  $K_{Dr\alpha} = 2$ ,  $K_{D\alpha} = 0.4$ ,  $K_{P\alpha} = 0.1$ ; (a) Quadrotor system performance, (b) Control performance, (c) Quadrotor trajectories.