Datasheet:

Section B:

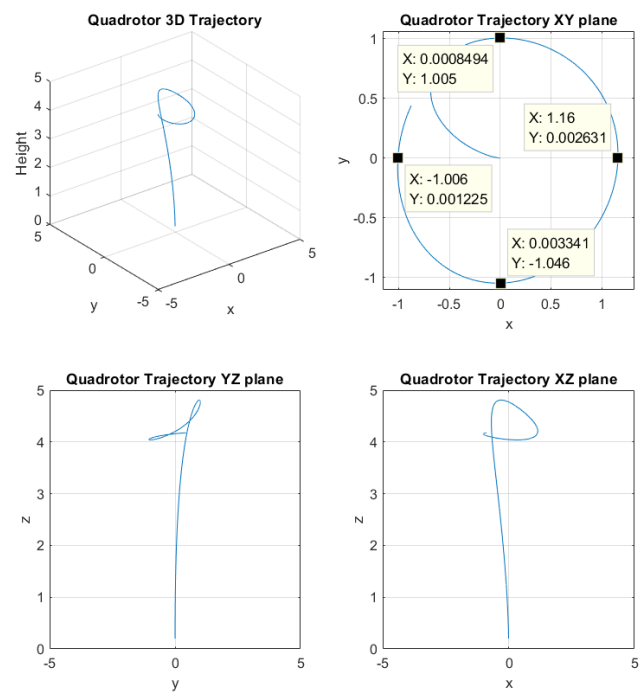
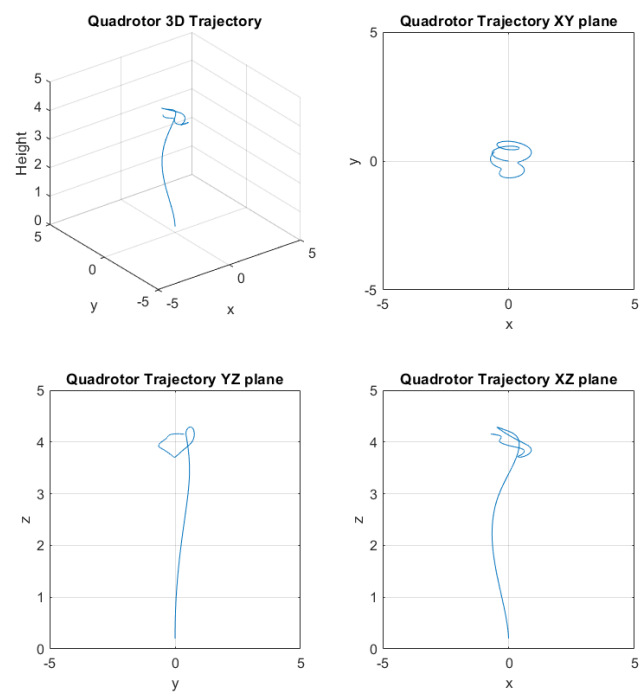Figure 1 Original Quadrotor model from Peter Croke's RVC book

Figure 2 Velocity controller: Kp = 0.5
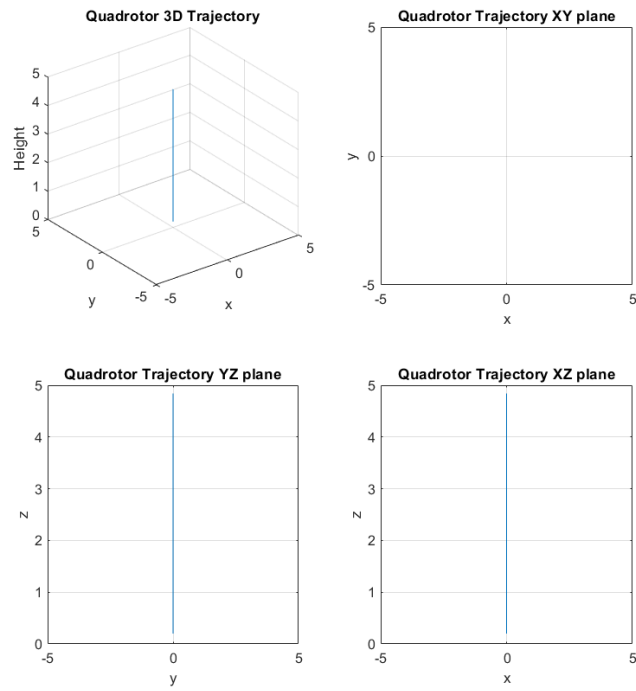

Figure 3 Velocity controller: Kp = 0
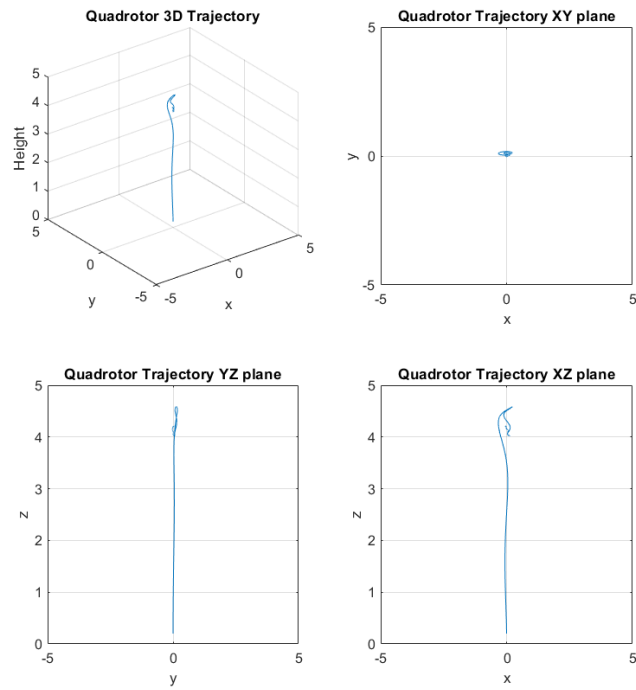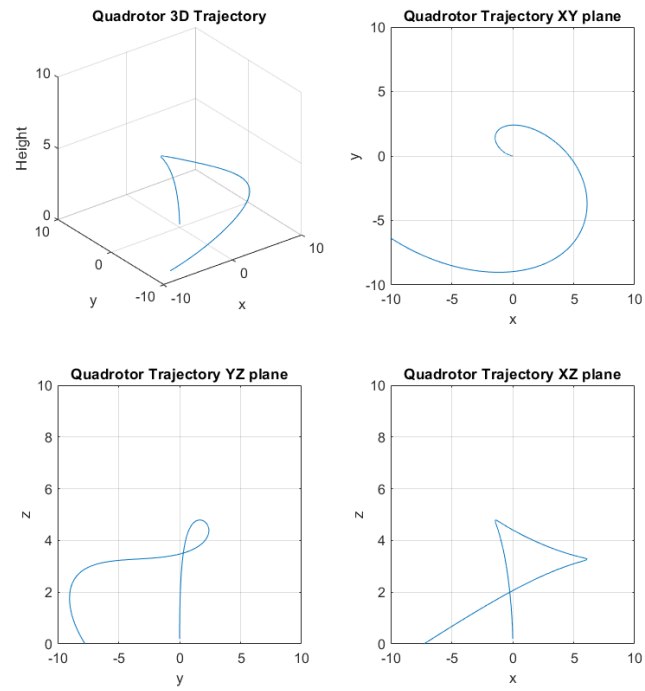

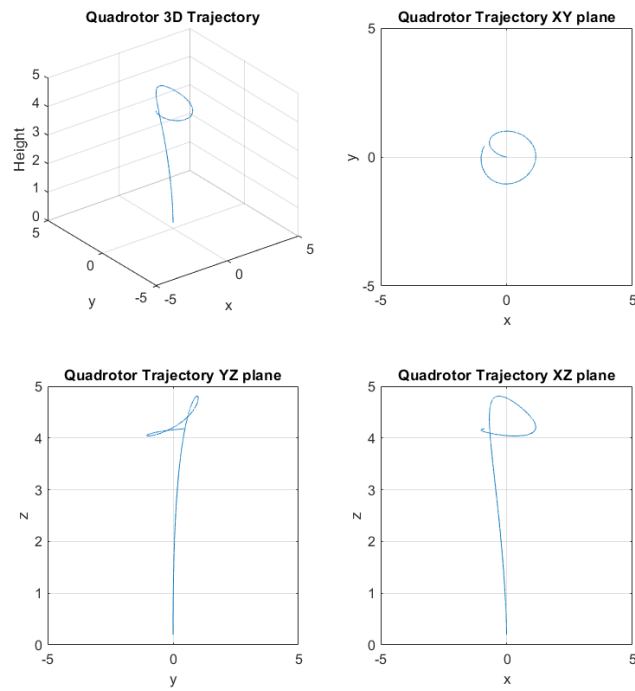Figure 4 Velocity controller: Kd = 20

Figure 5 Velocity controller: Kd = 0

Figure 6 Attitude controller: Kp = 1000
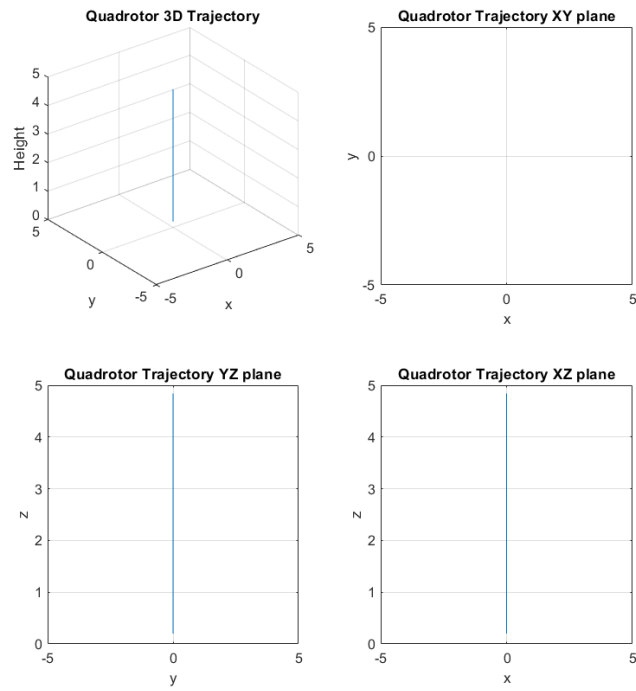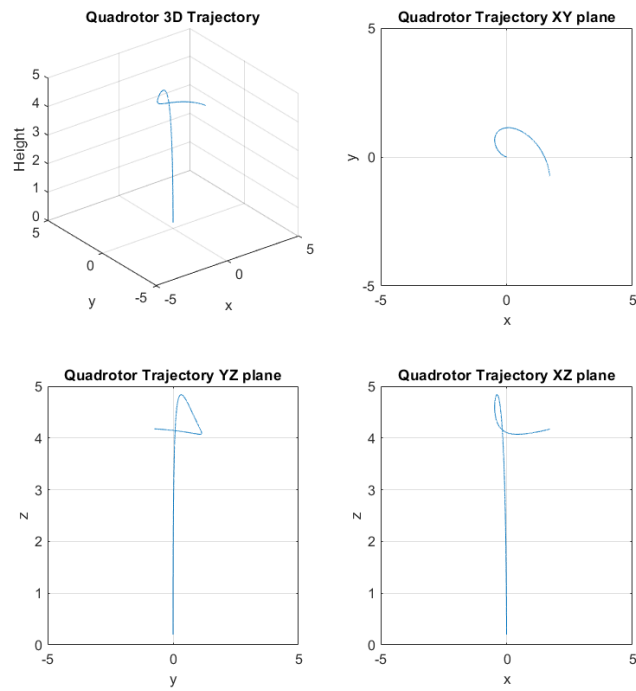
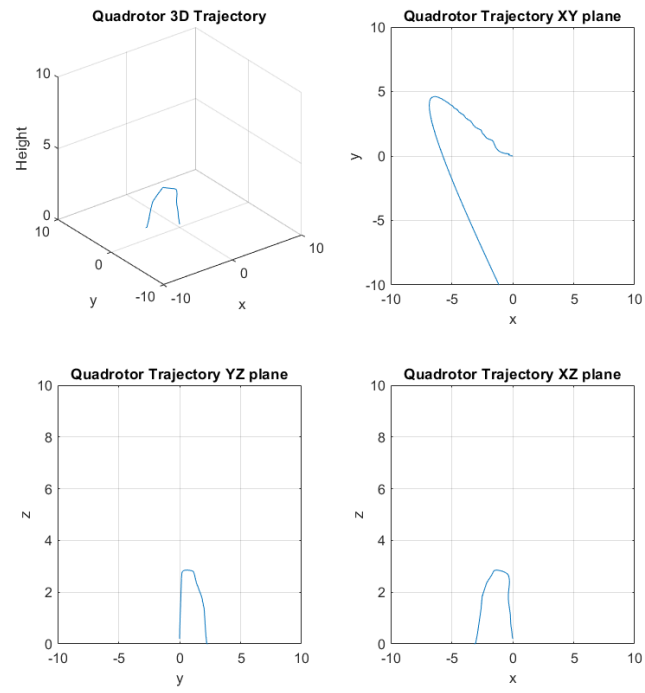Figure 7 Attitude controller: Kp = 0

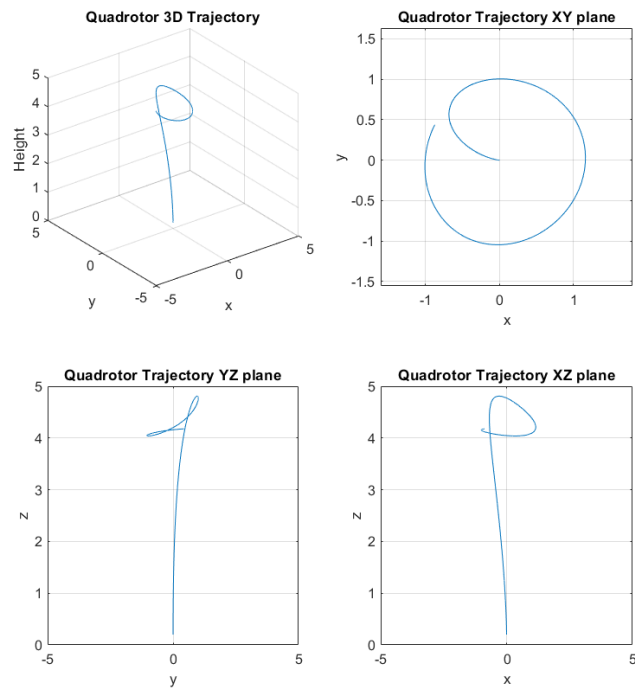Figure 8 Attitude controller: Kd = 10

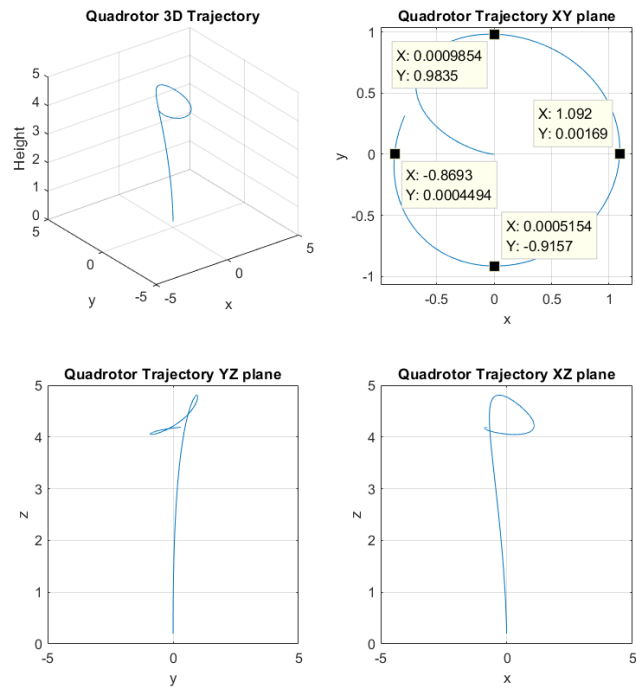Figure 9 Attitude controller: Kd = 0

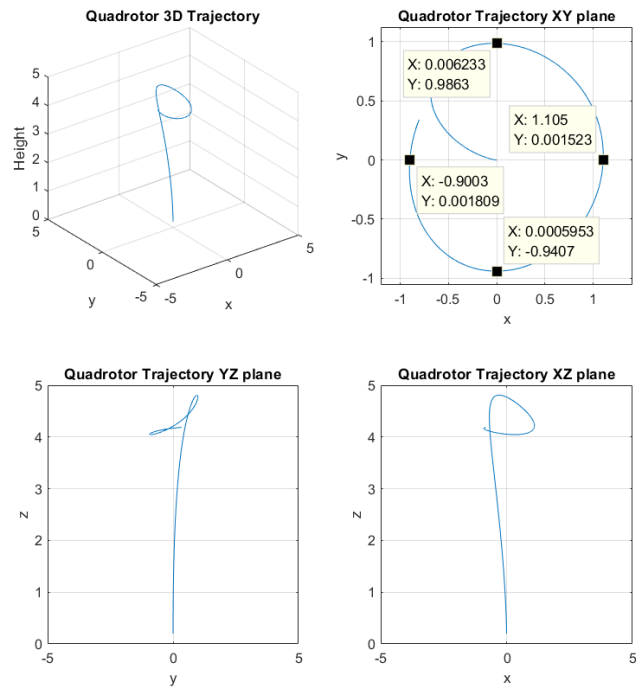Figure 10 Yaw controller: Kp = 200

Figure 11 Yaw controller: Kp = 0

Figure 12 Yaw controller: Kd = 20
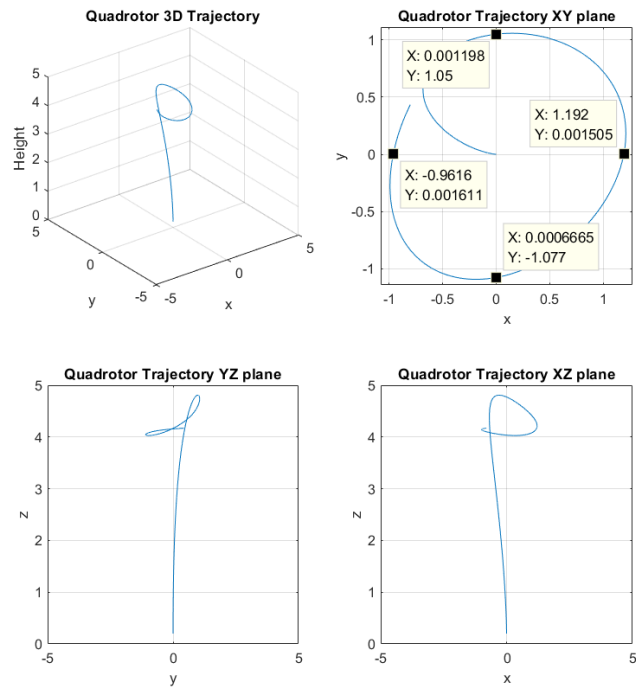
Figure 13 Yaw controller: Kd = 0

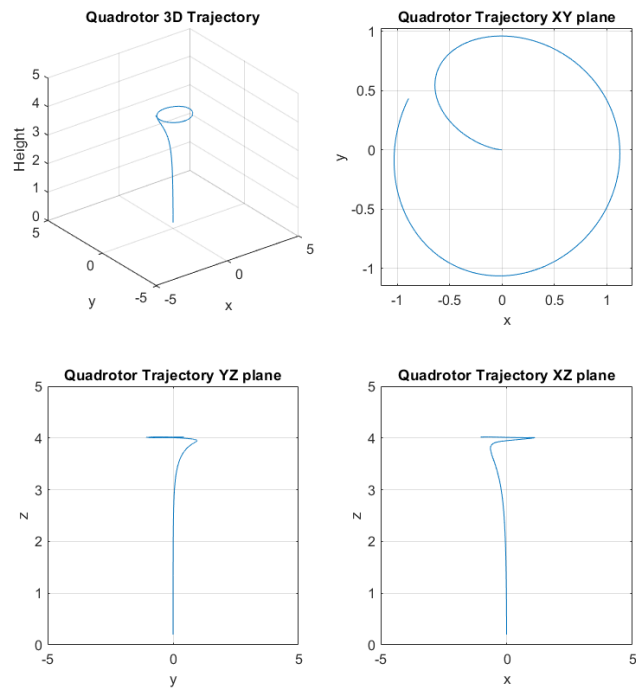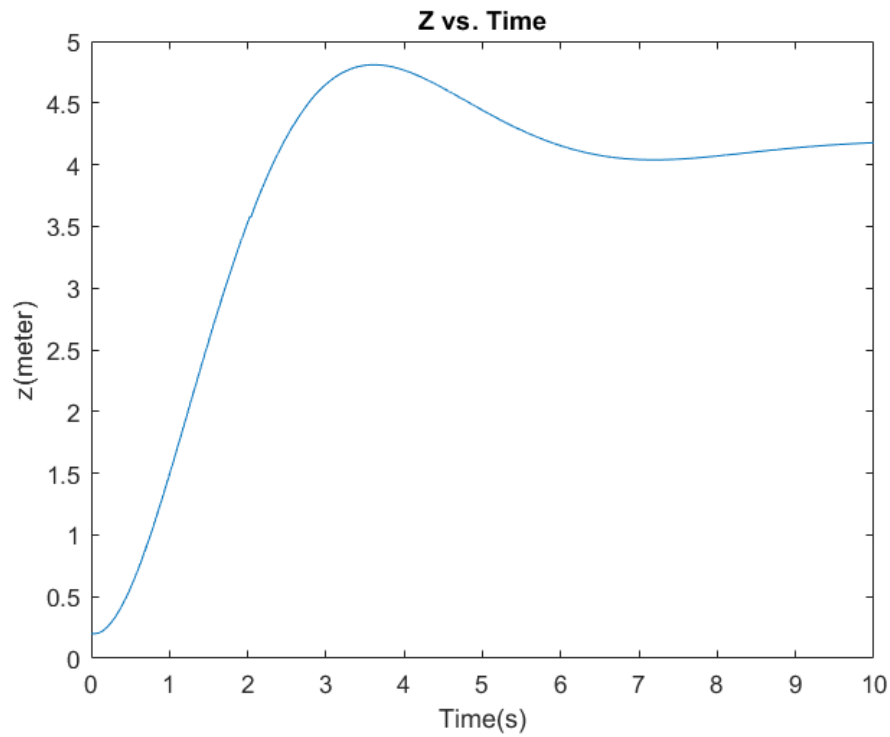

Figure 14 Height controller: Kp =40

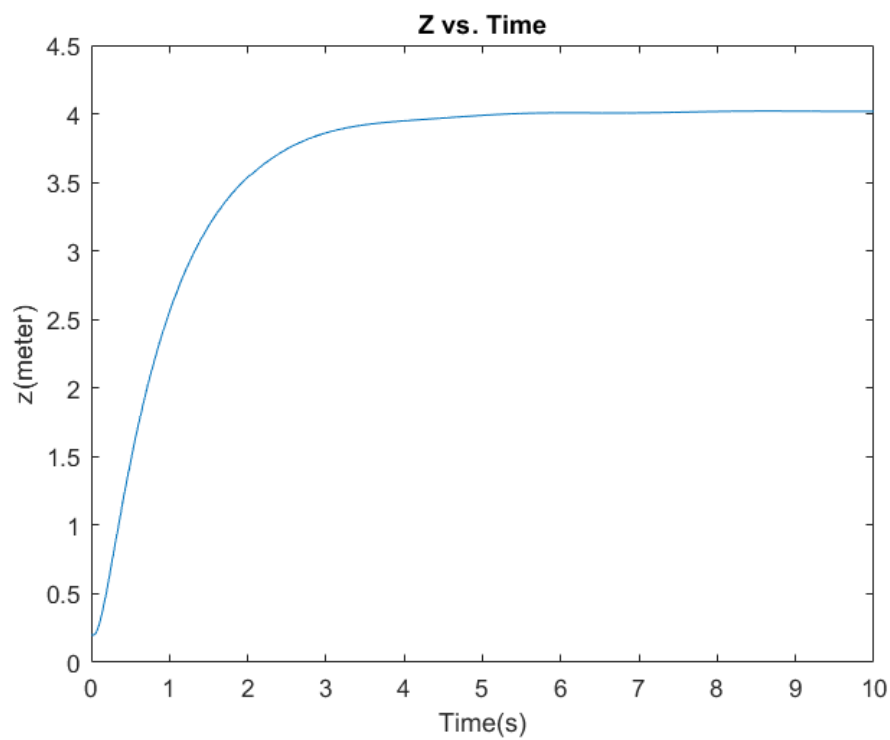Figure 15 Height controller: Height change vs Time Comparison of the Original controller

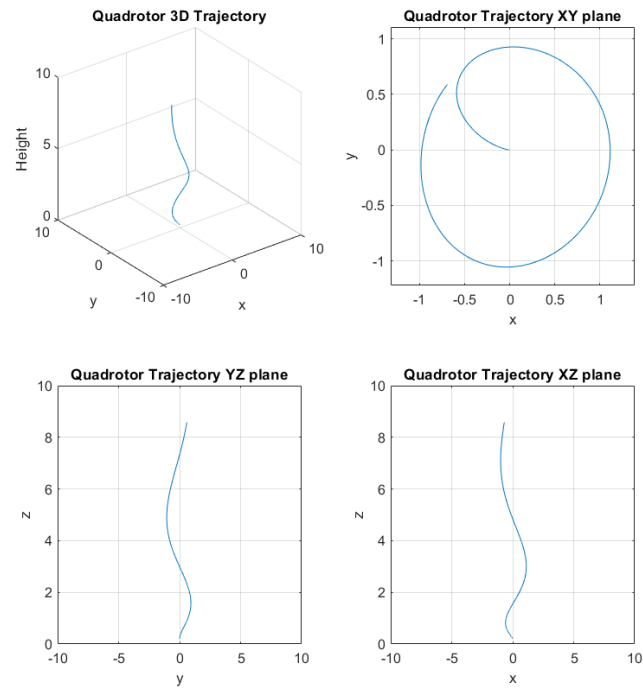Figure 16 Height controller: Height change vs Time comparison of the modified height controller Kp =
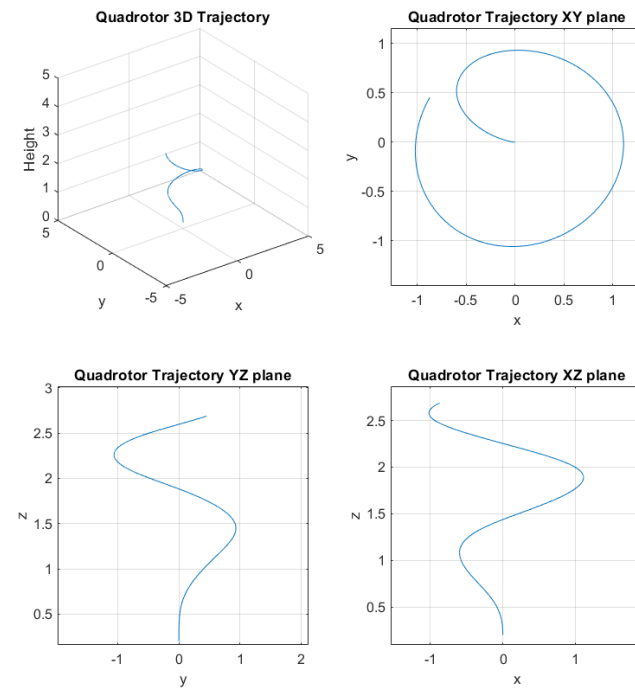
40

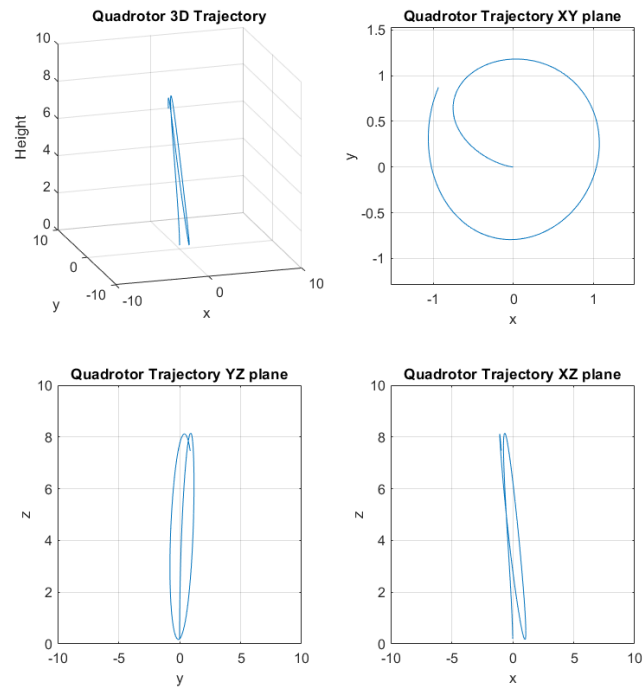Figure 17 Height controller: Kp =0

Figure 18 Height controller: Kd =10

Figure 19 Height controller: Kd =0
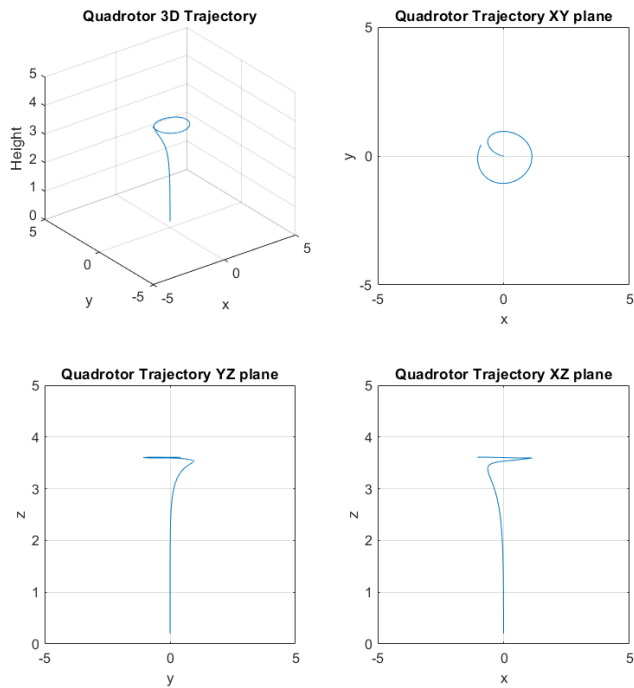
Section C

Figure 20 Height controller without gravity feedforward, Kp=100
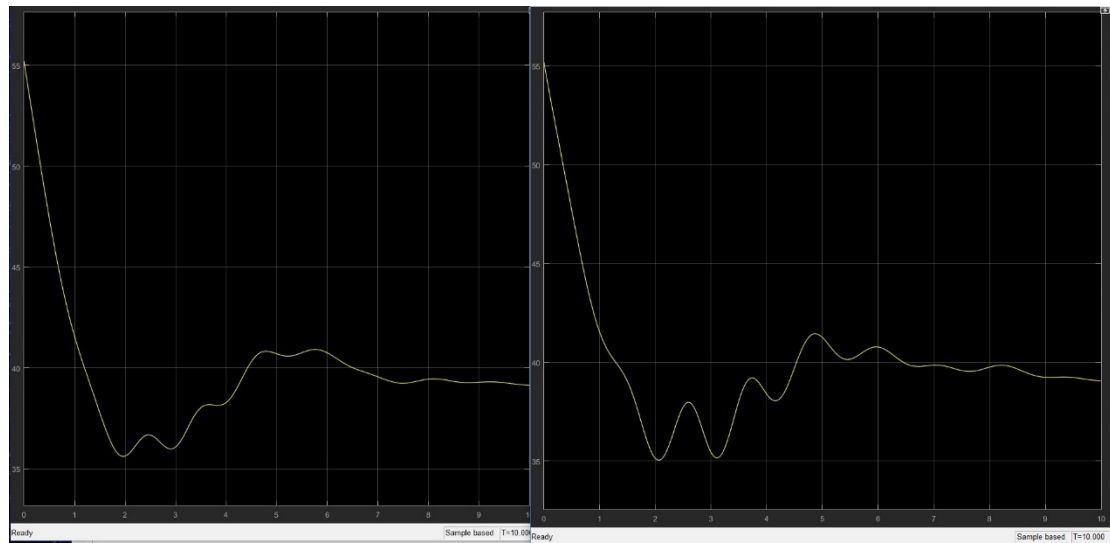
Section D

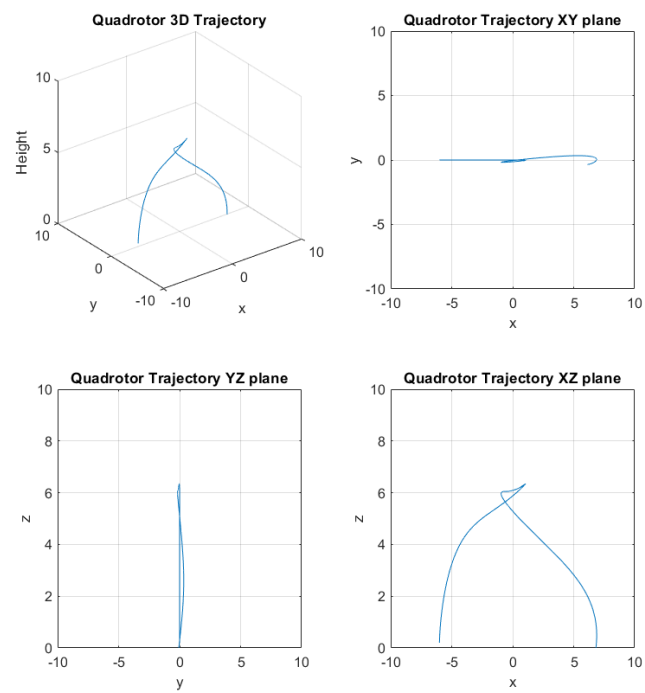Figure 21 Thrust comparison without/with Compensation

Section F&G

Figure 22 Ballistic motion and smooth landing simulation