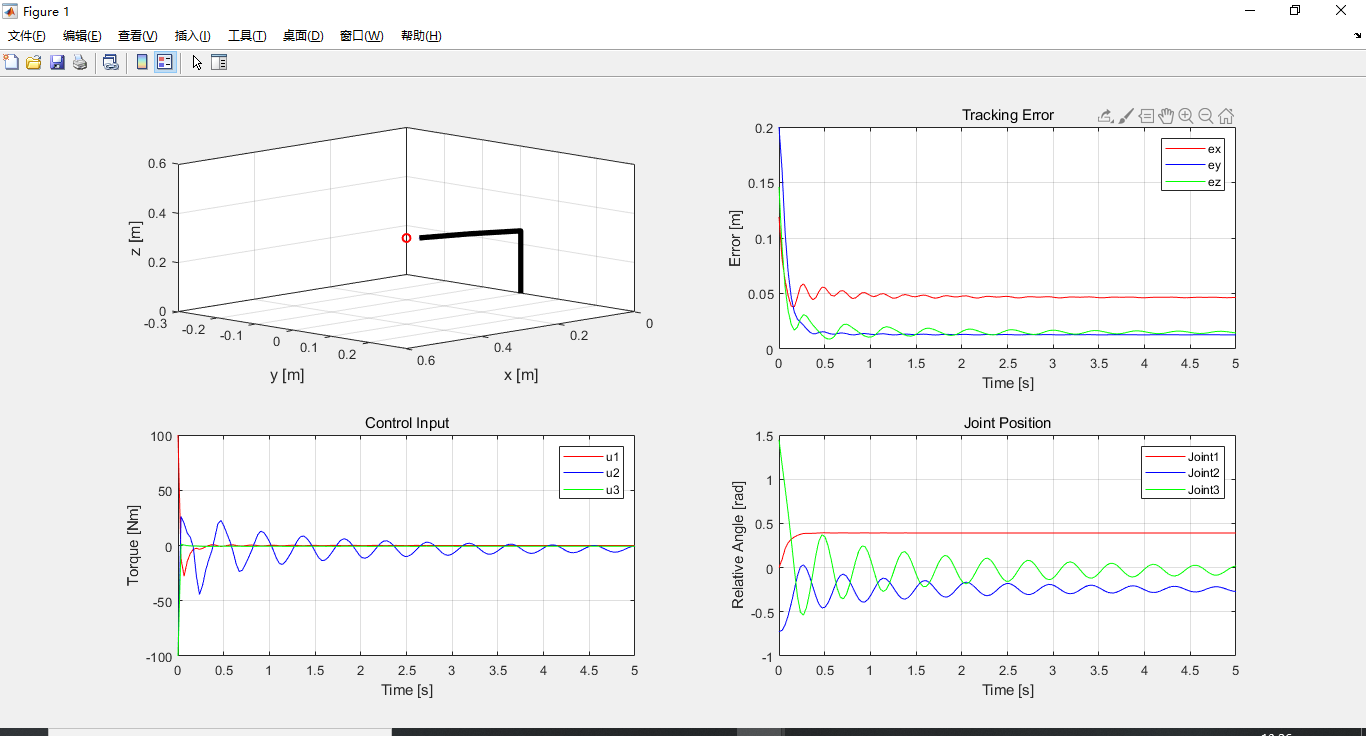
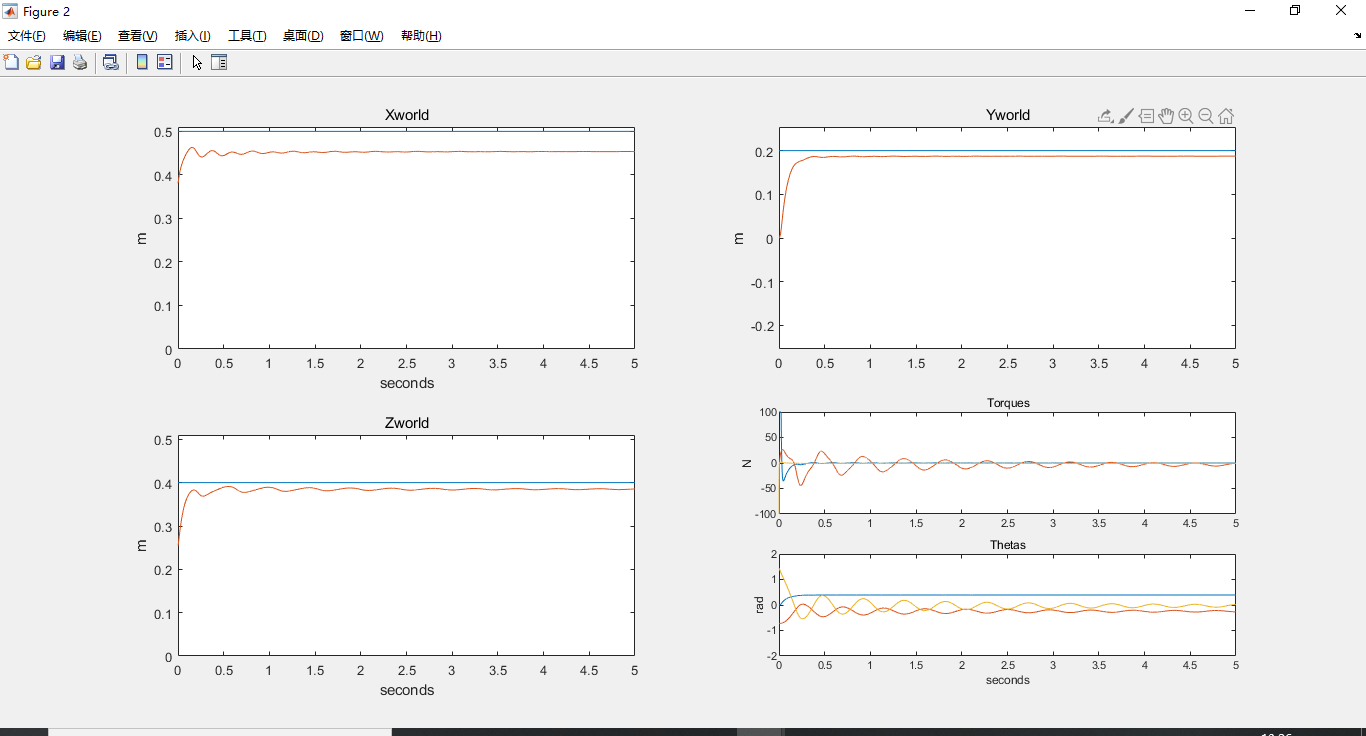
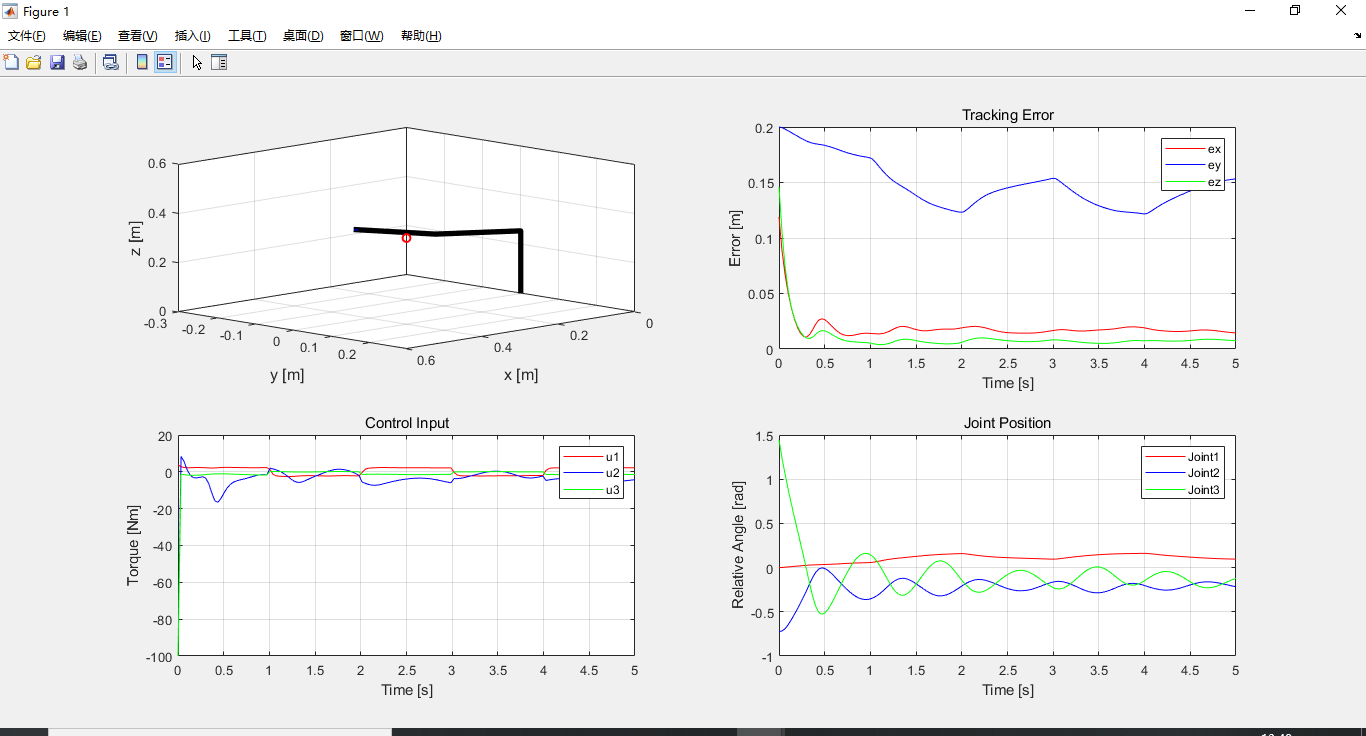
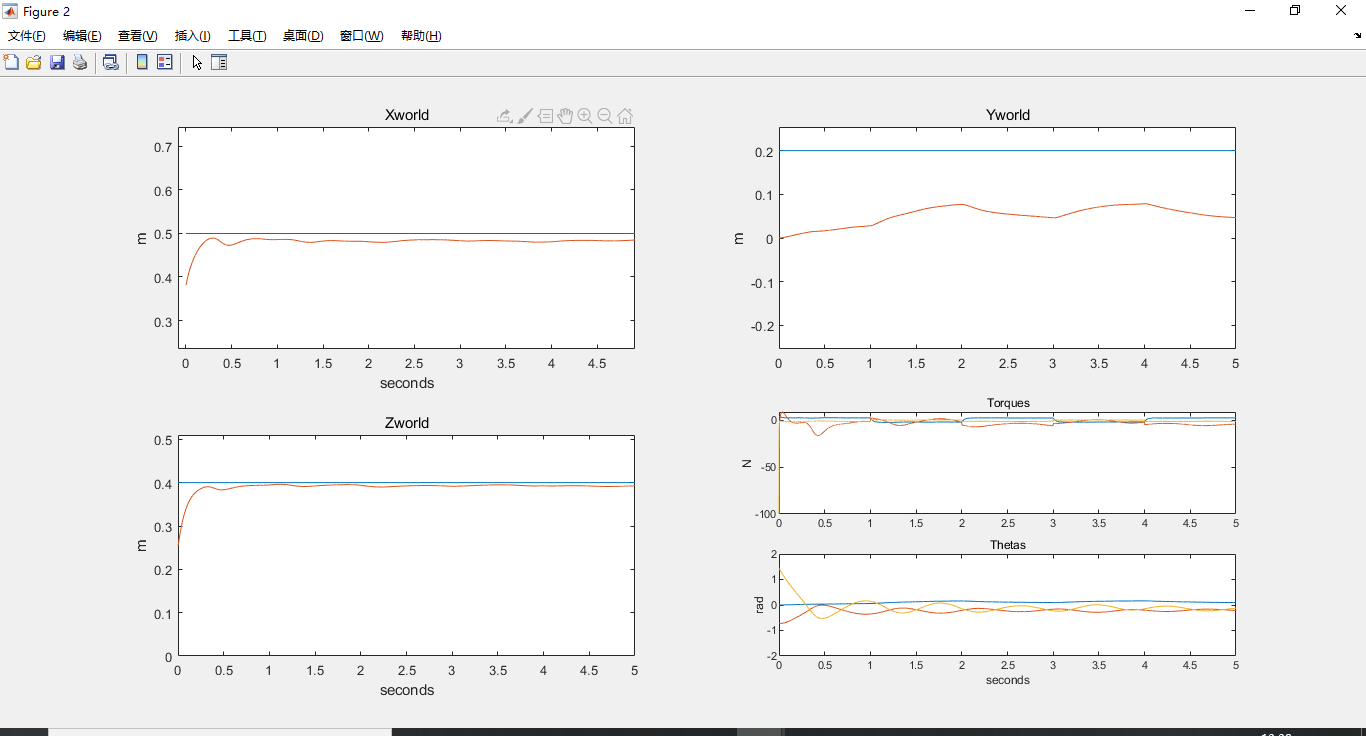
Jiaming

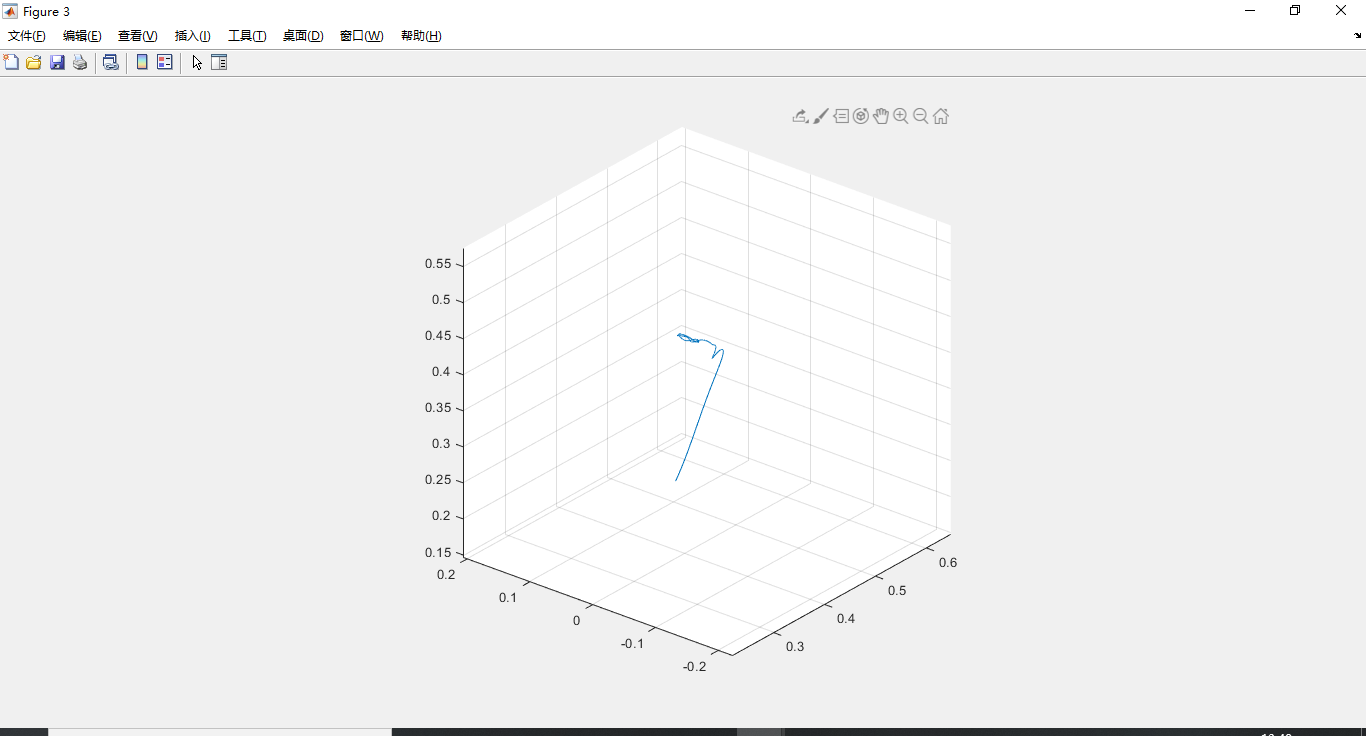
1. Task state PD control



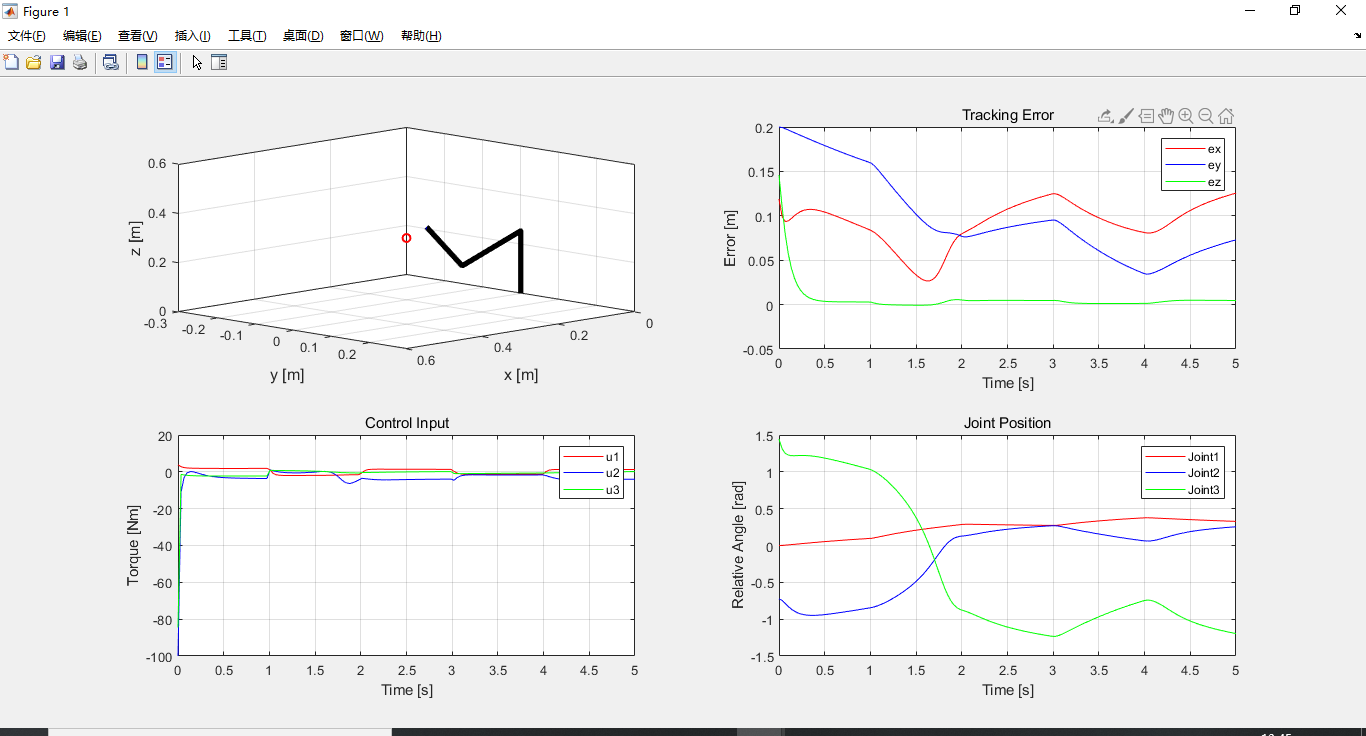


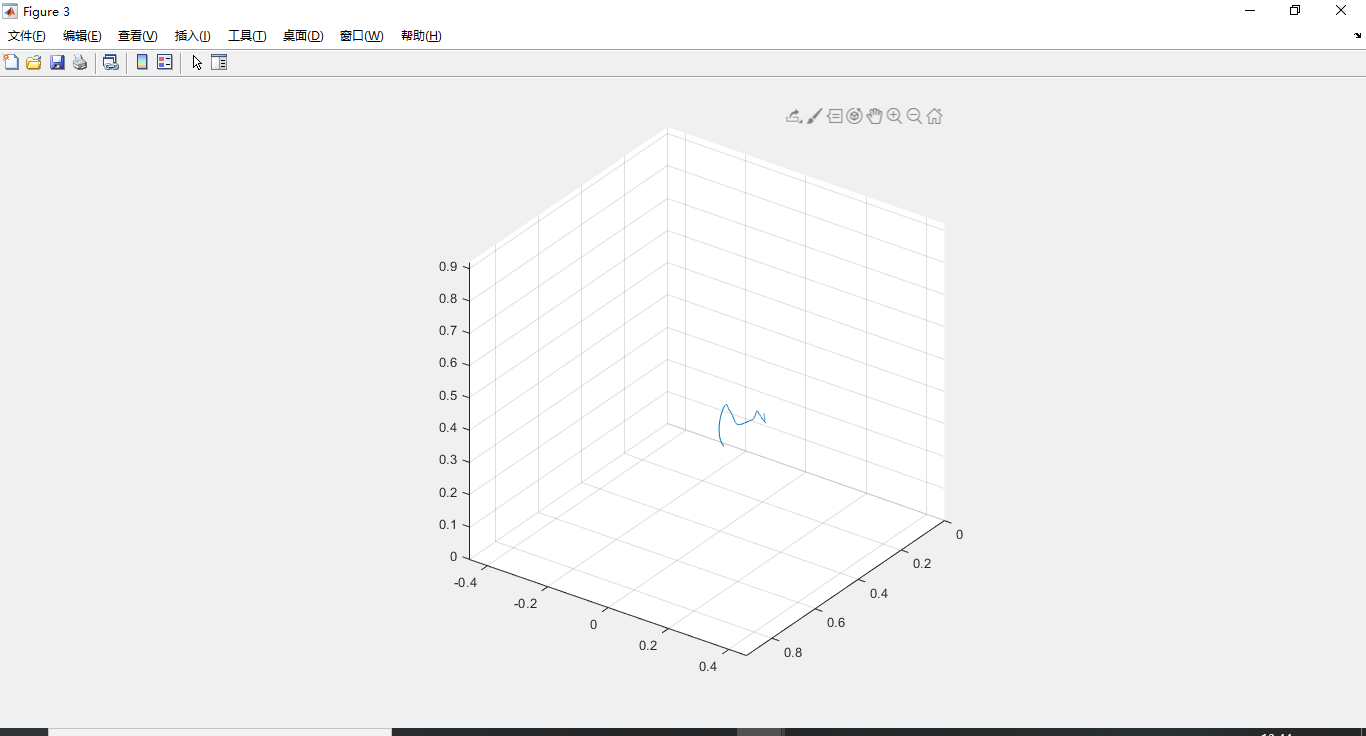
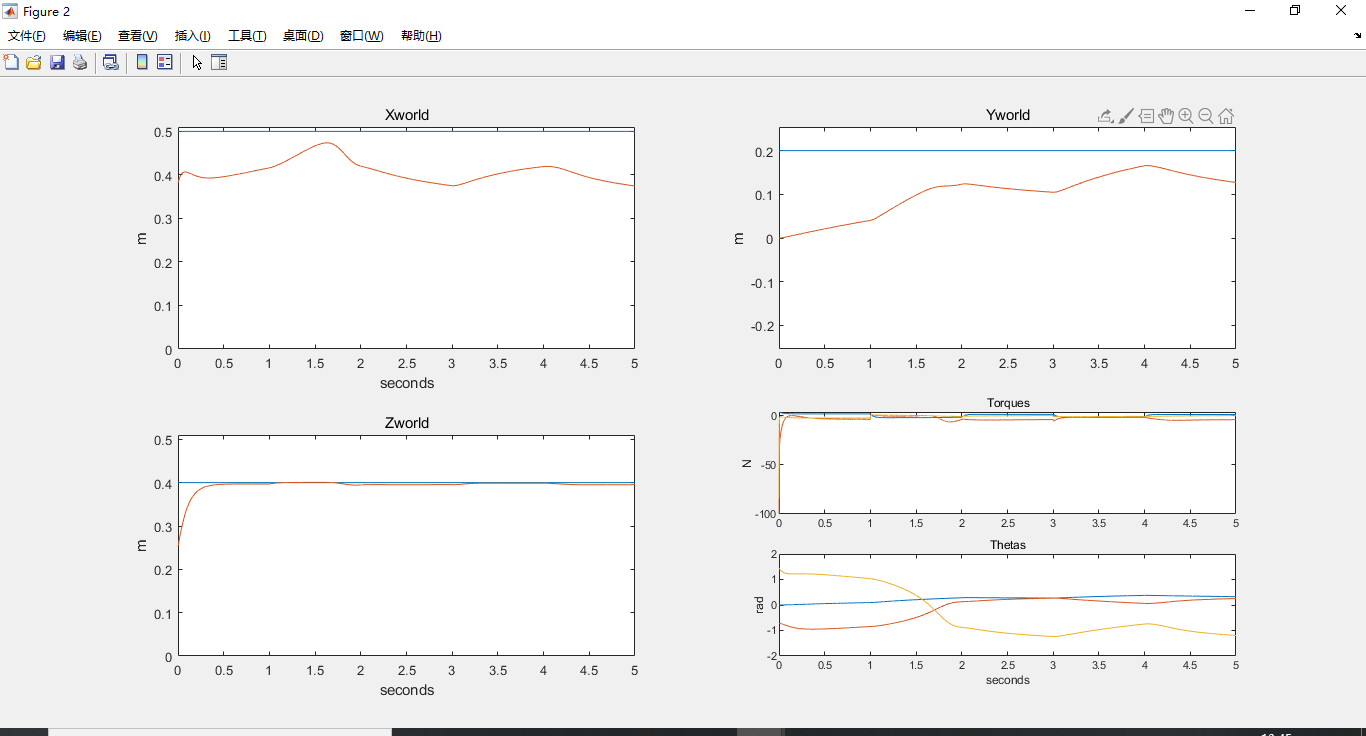
1. Task Space Impedance control
   1. weaken Y
   2. 



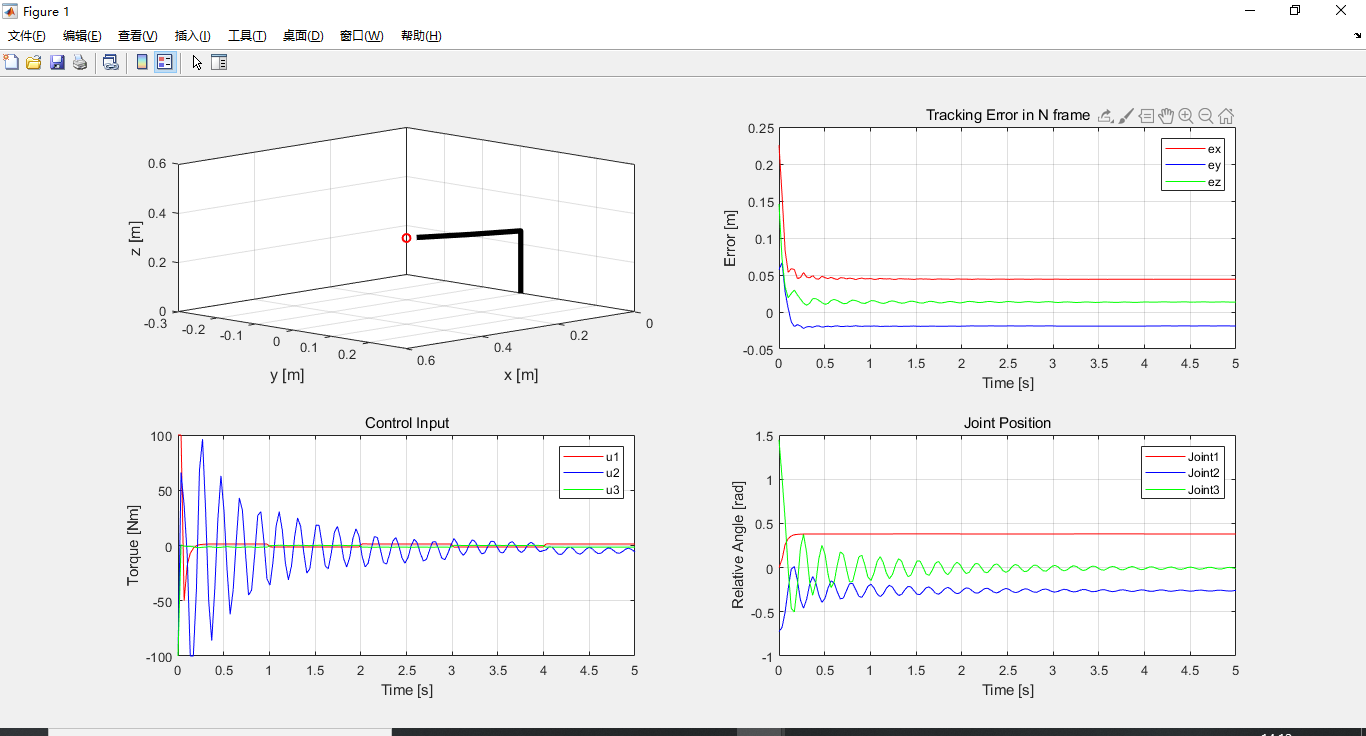


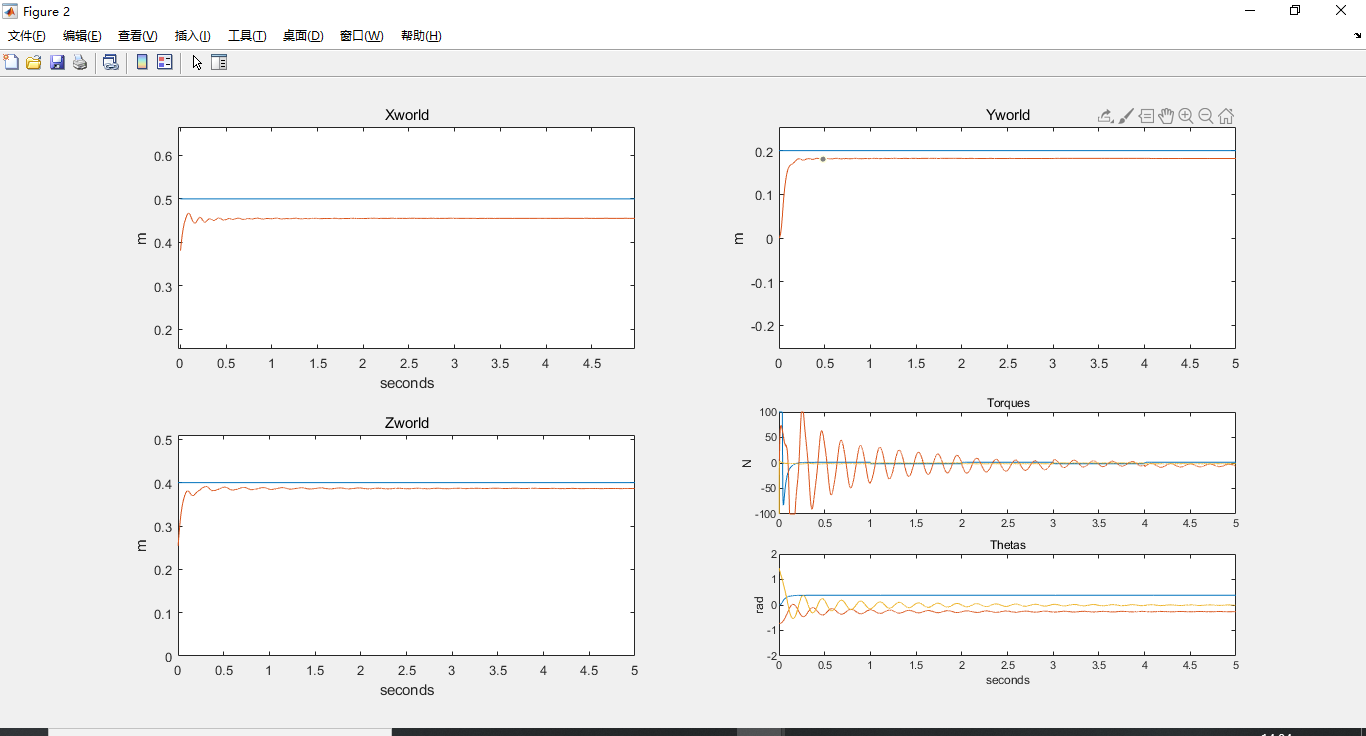
* 1. weaken XY

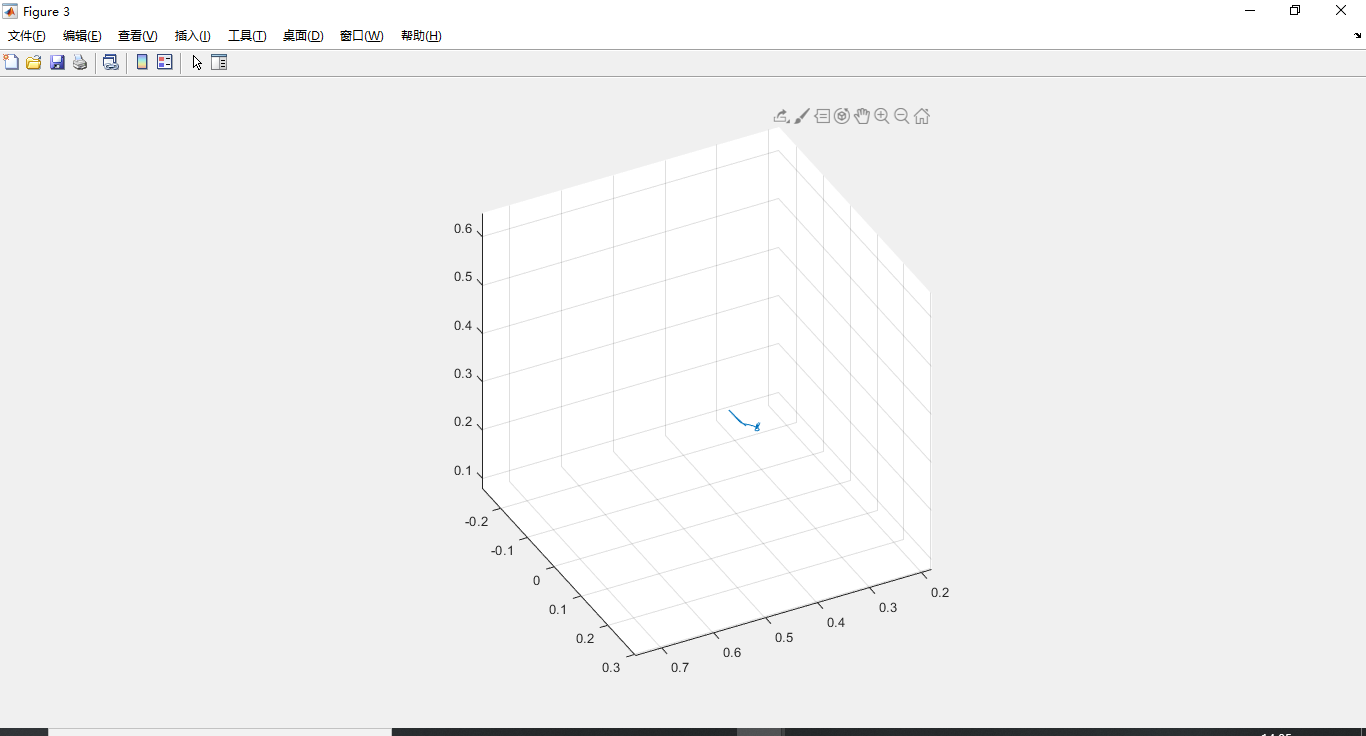




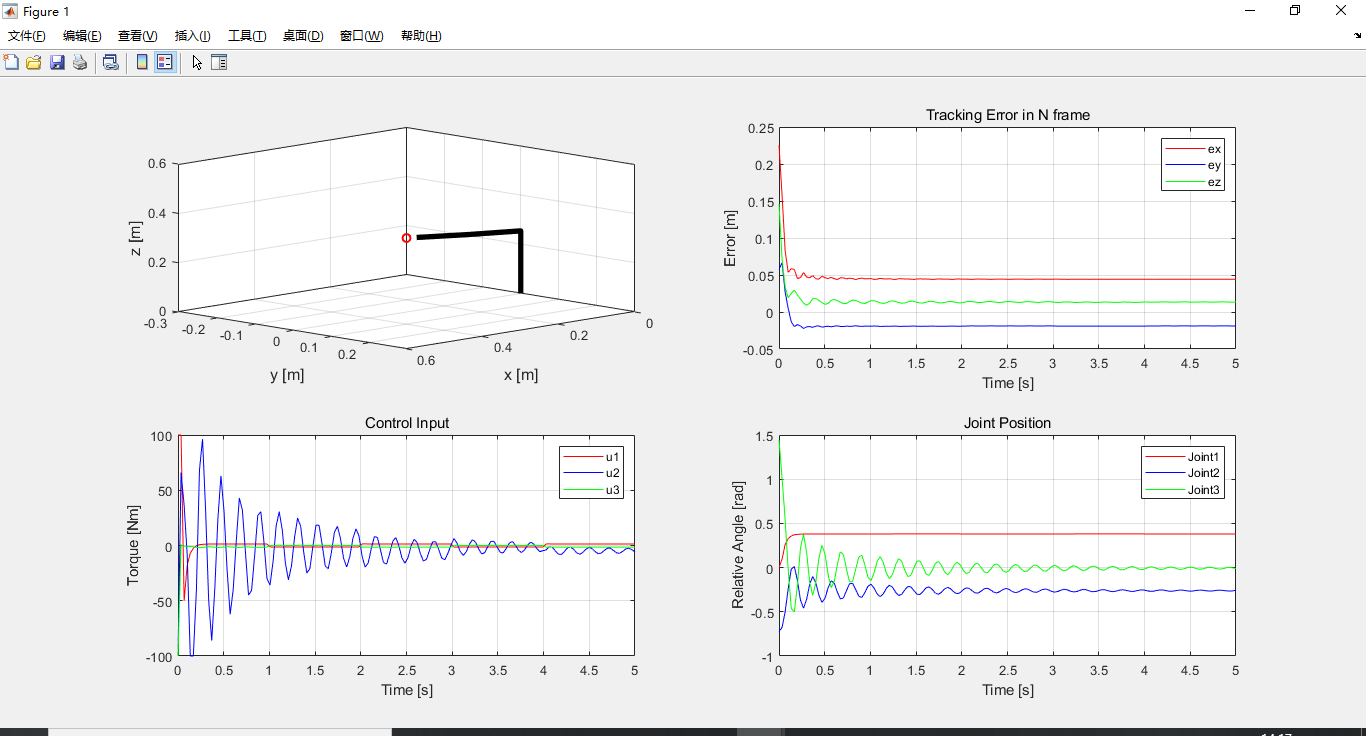
1. Task Space Impedance control with Rotation
   1. Rotate about world Z-axis for pi/3 to get Frame N, and weaken N frame Y-axis.

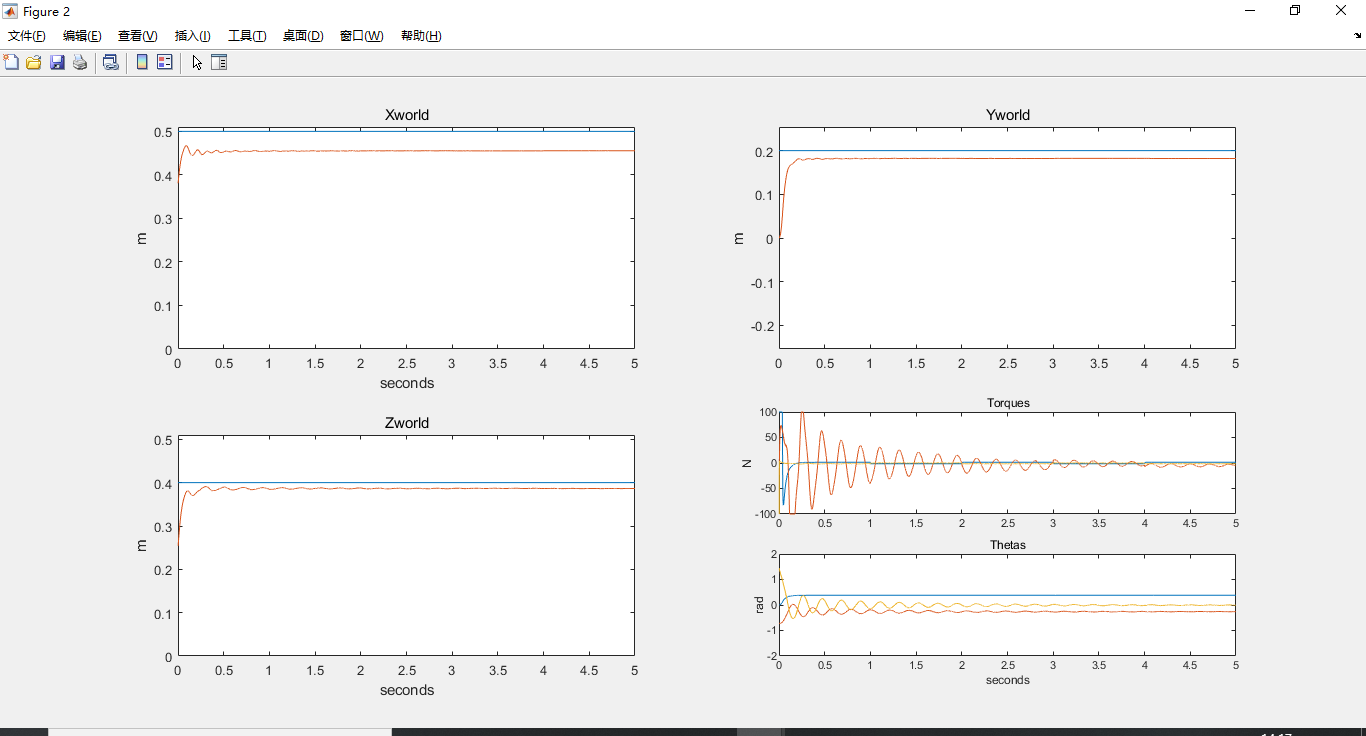




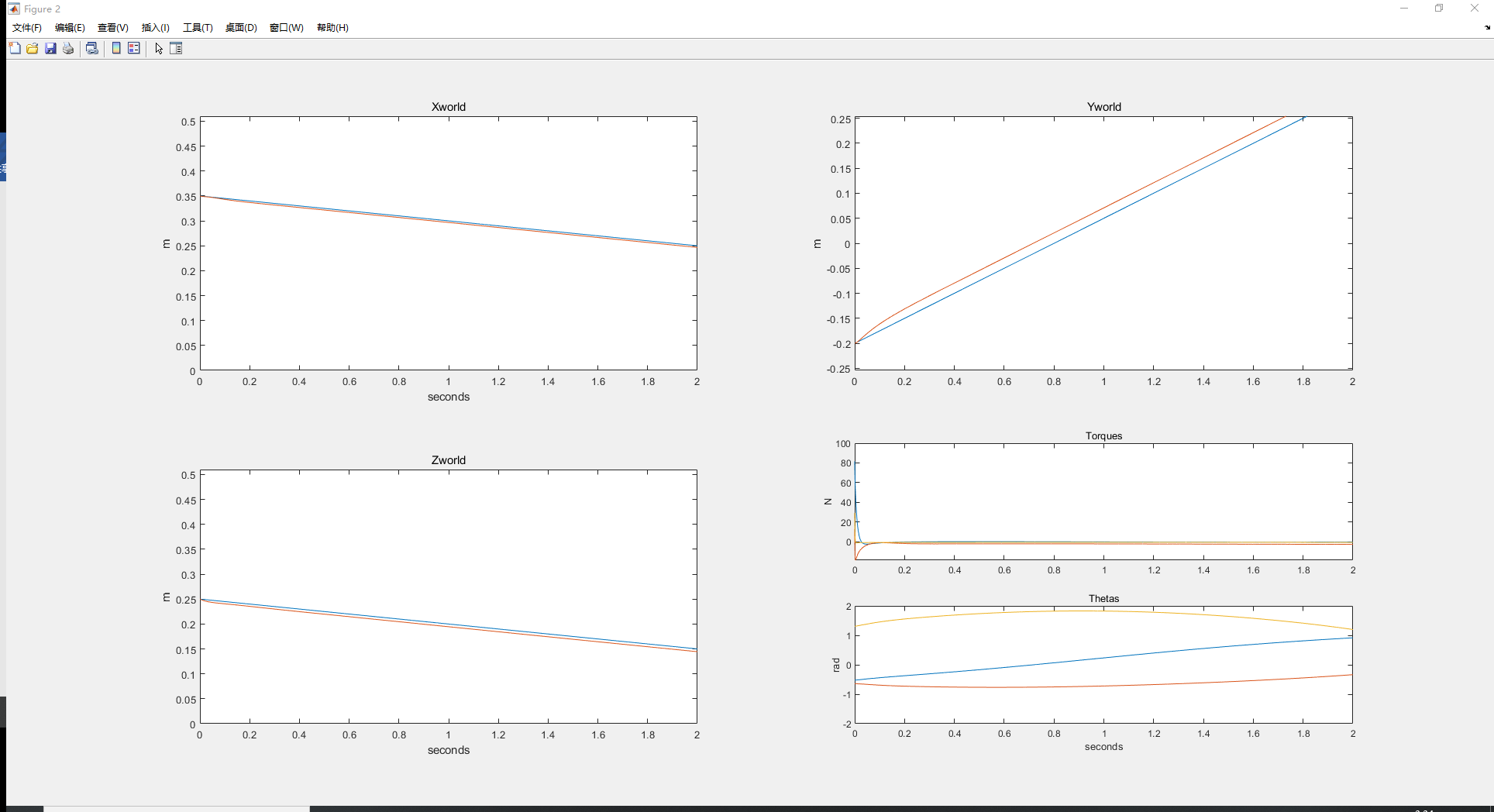


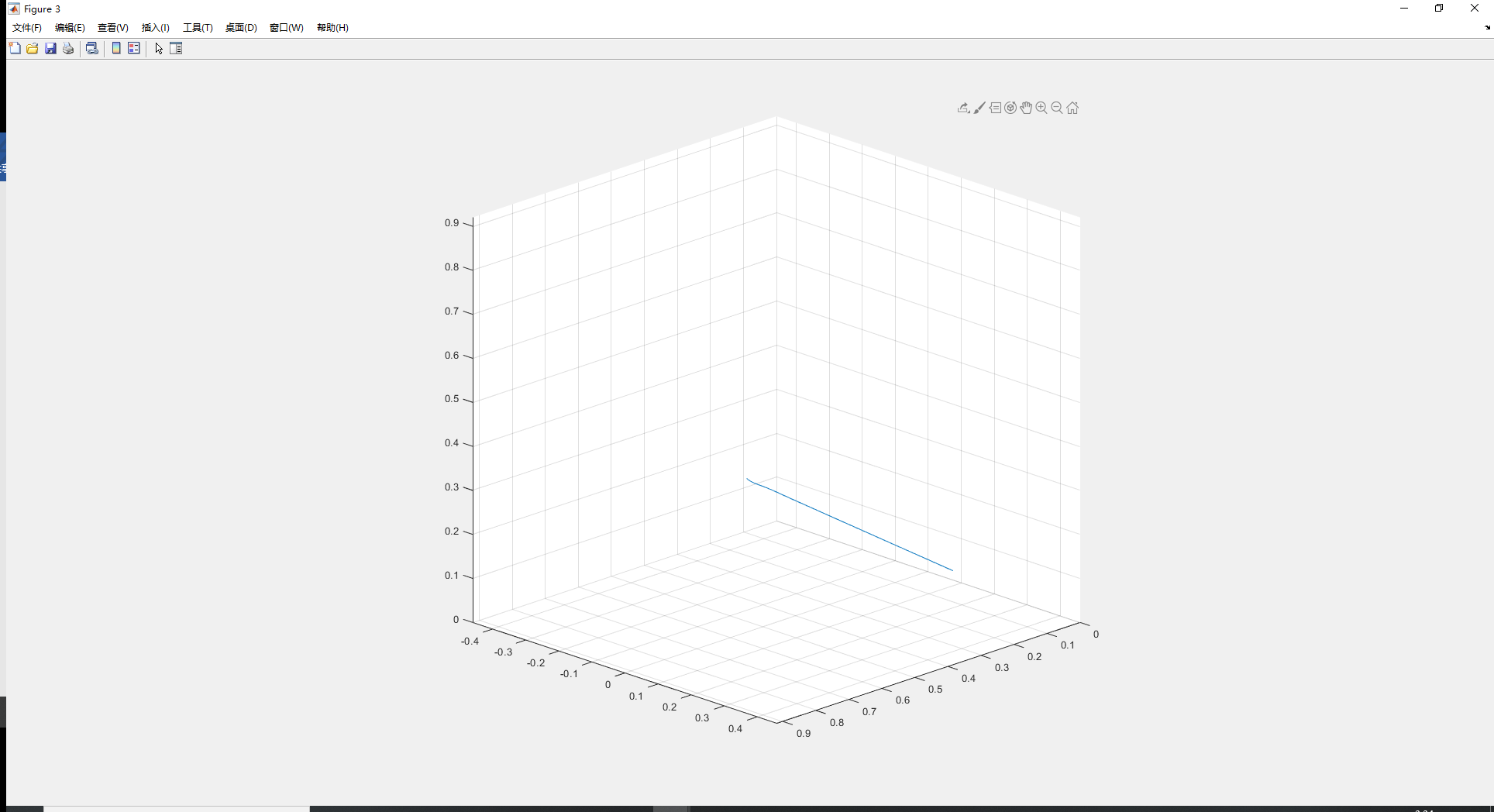
* 1. Rotate the world X-axis by pi/6 and then the Y-axis by pi/3, and weaken N frame Z-axis.



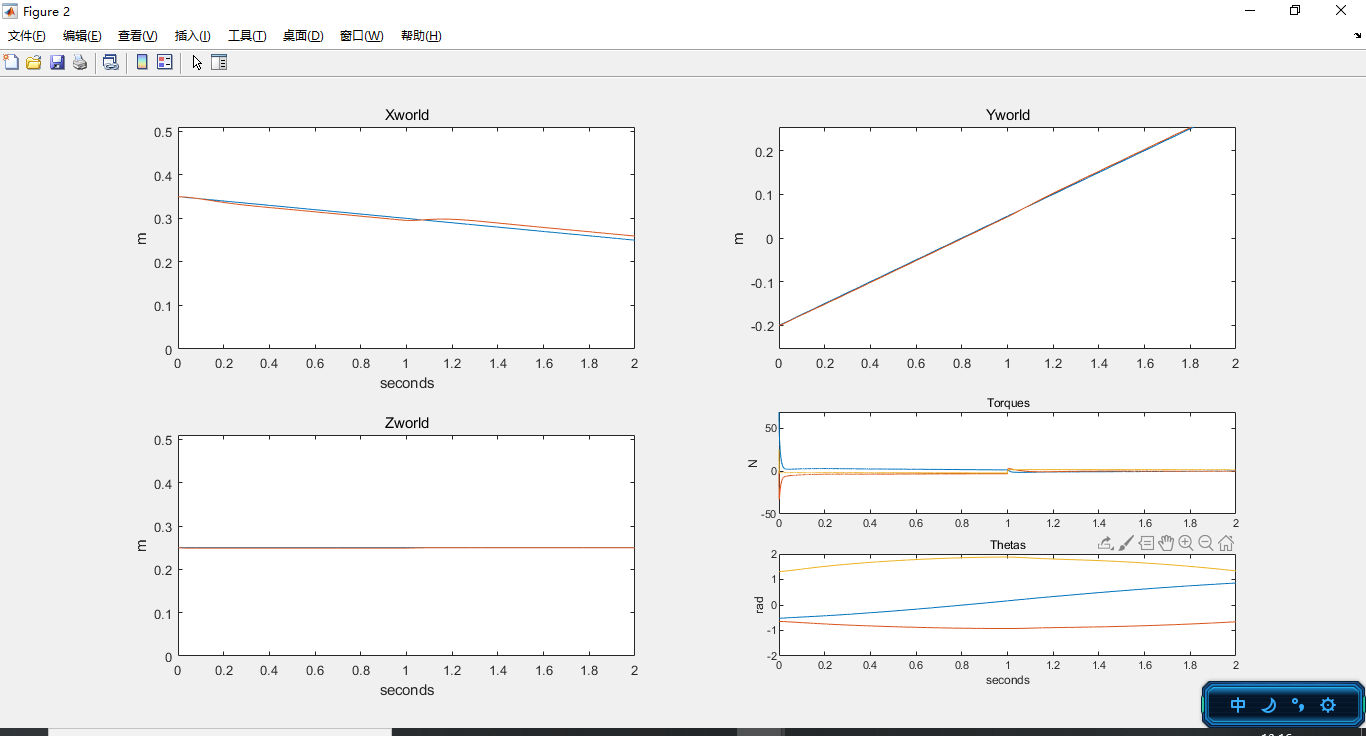


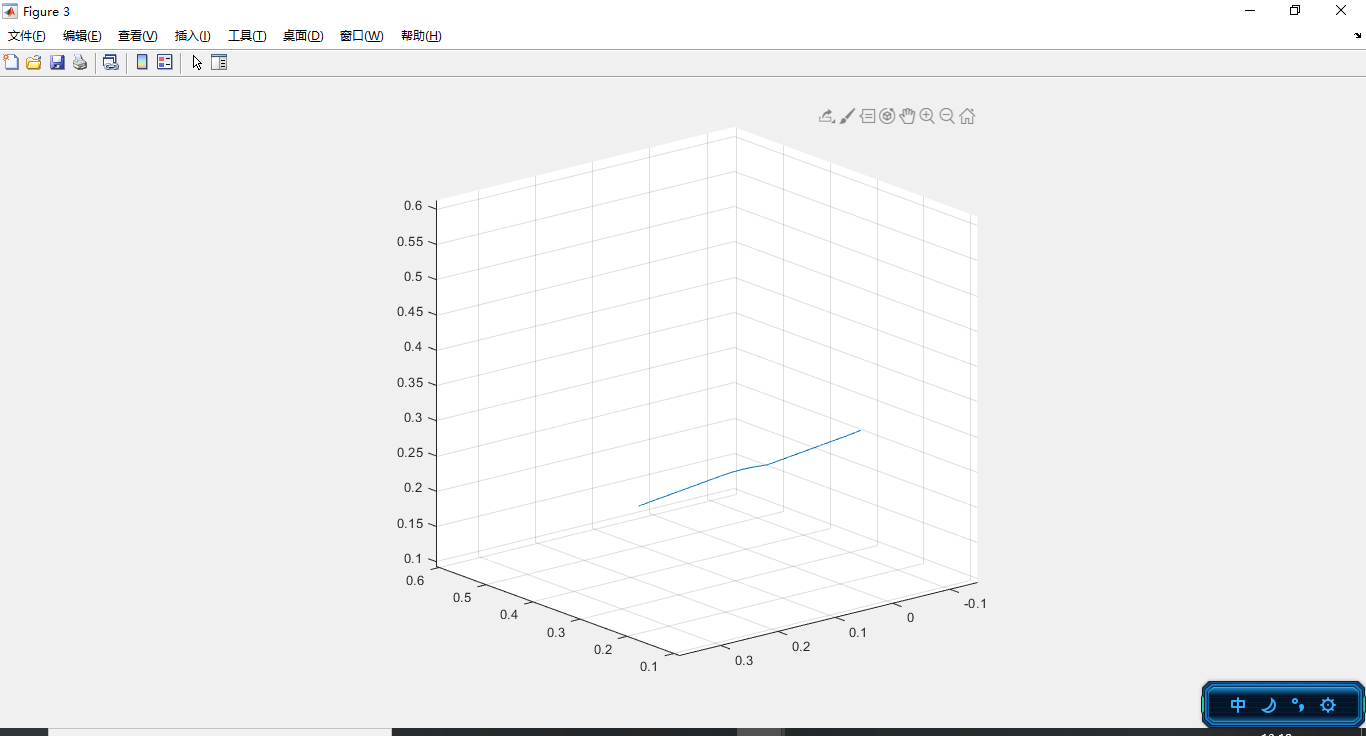
1. Straight Line Following





1. Straight Line Following with Rotation, weaken Y





Discussion: it seems that most of the response has some state error. And if we can imply the I-control, the response will be better.