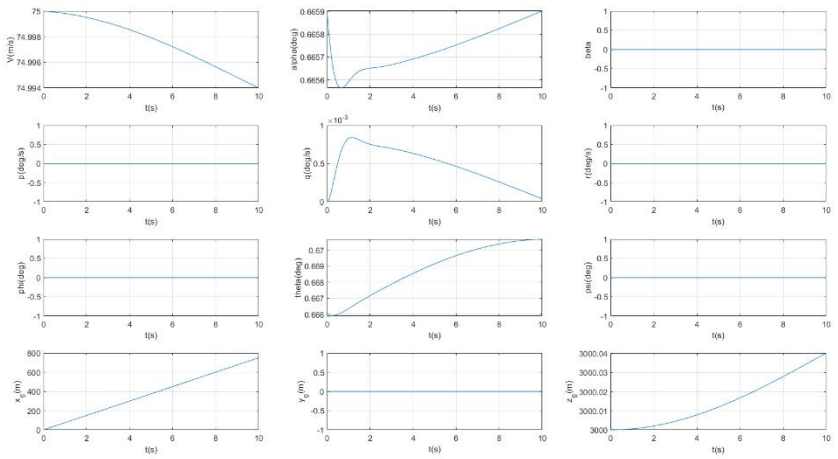
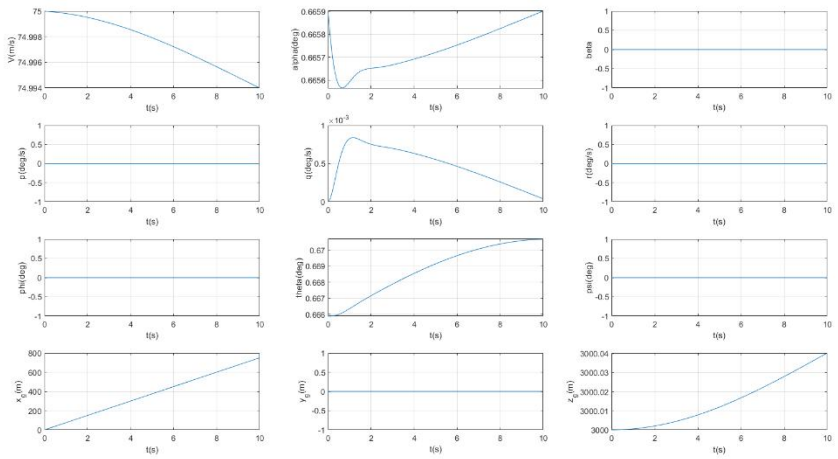
附加题： 不同仿真步长下的仿真结果是否有区别。

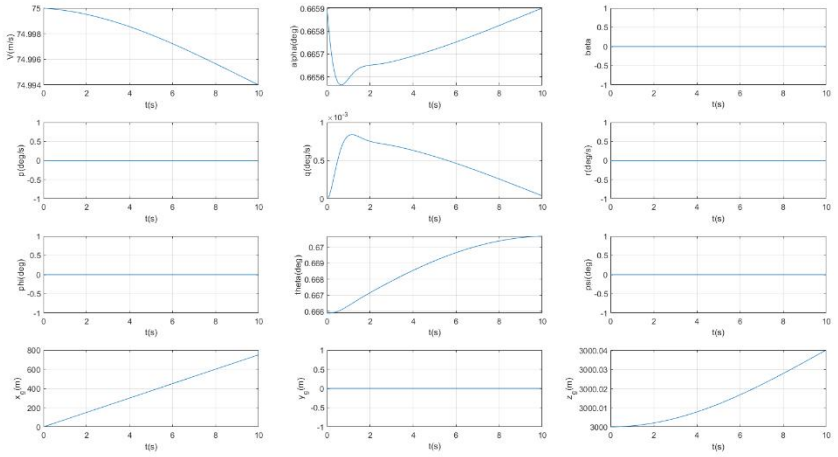
（1）基础状态



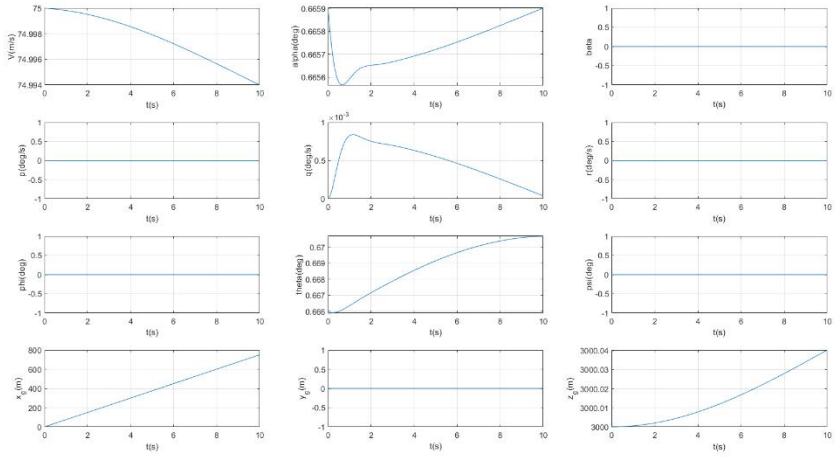
0.01s



0.02s

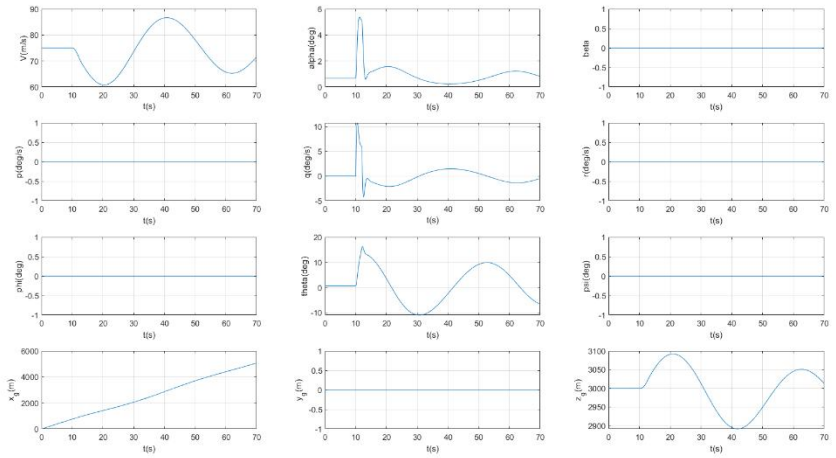


0.05s

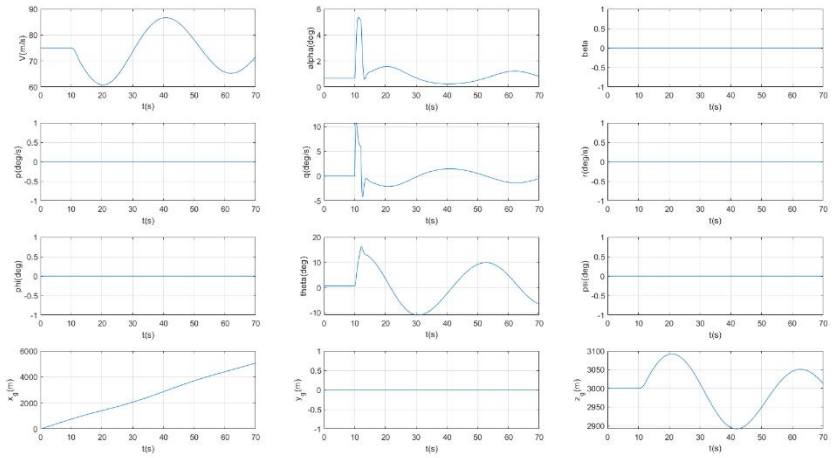


0.10s

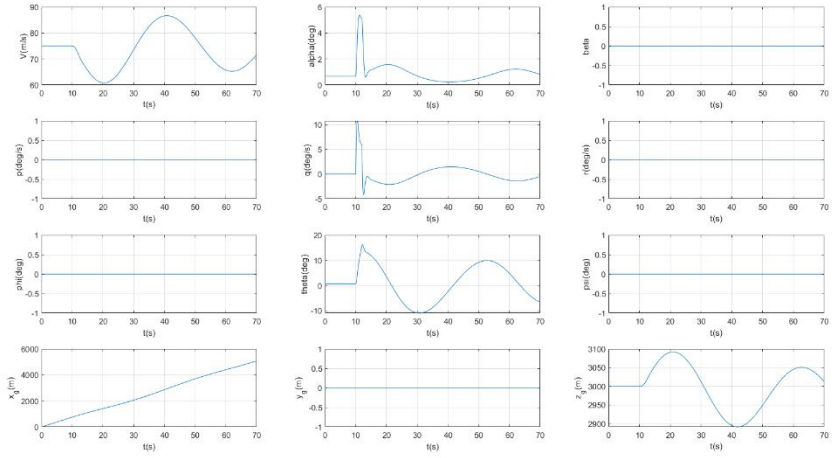
（2）升降舵相对基准状态上偏 5 度,并保持 2 秒,然后回到基准舵偏角，仿真时长 60s



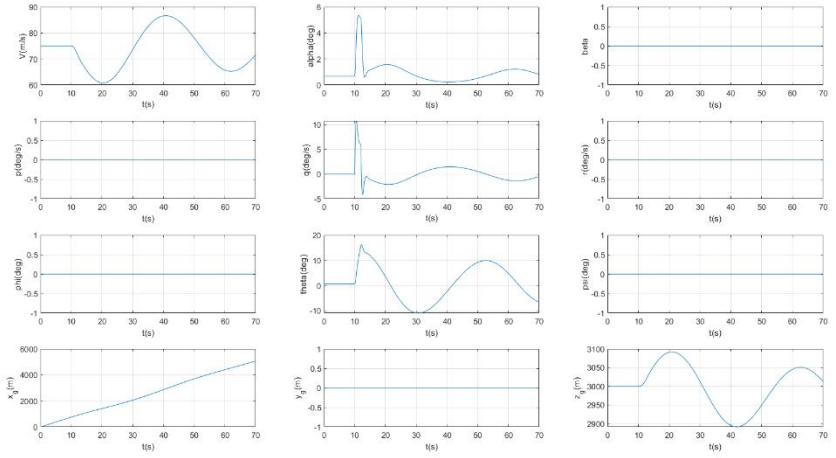
0.01s



0.02s

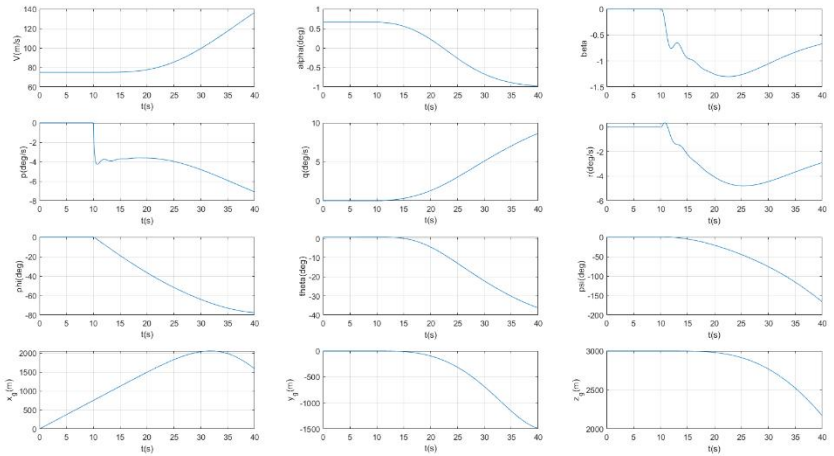


0.05s

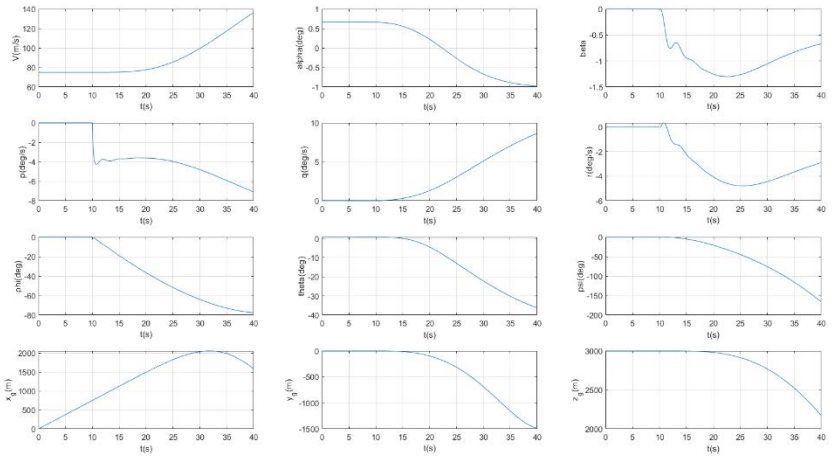


0.10s

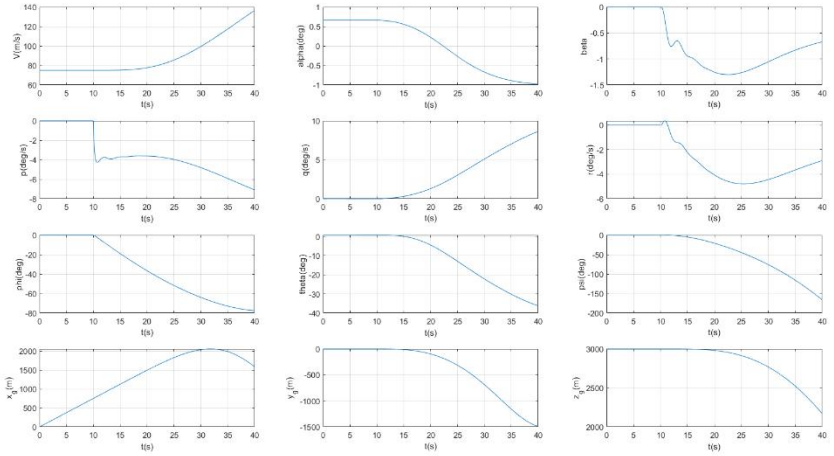
（3）副翼相对基准状态偏转正 2 度，仿真时长 30s



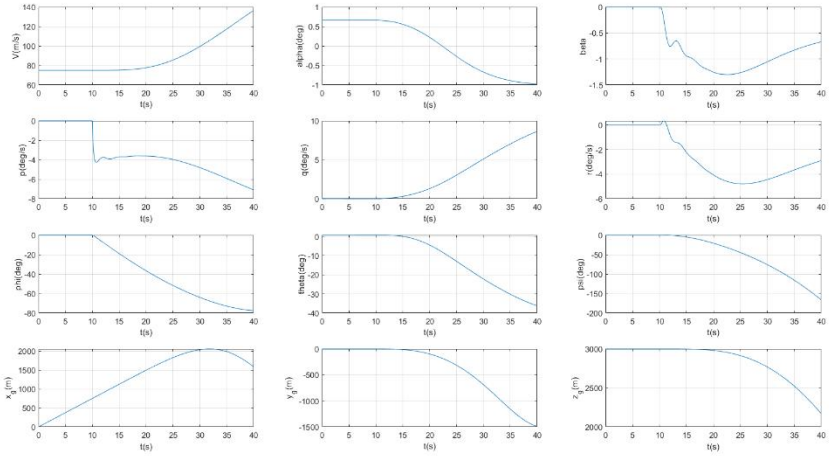
0.01s



0.02s

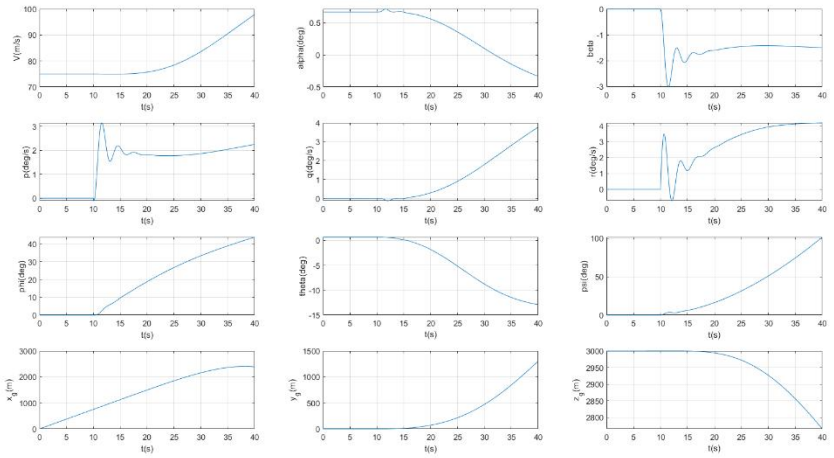


0.05s

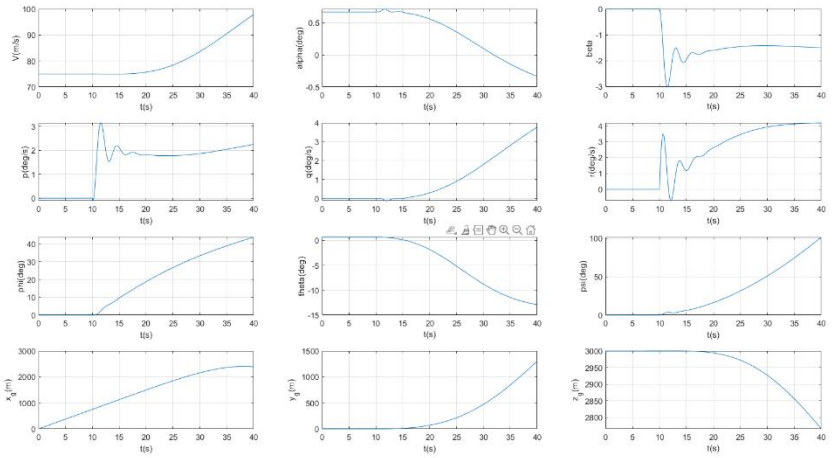


0.10s

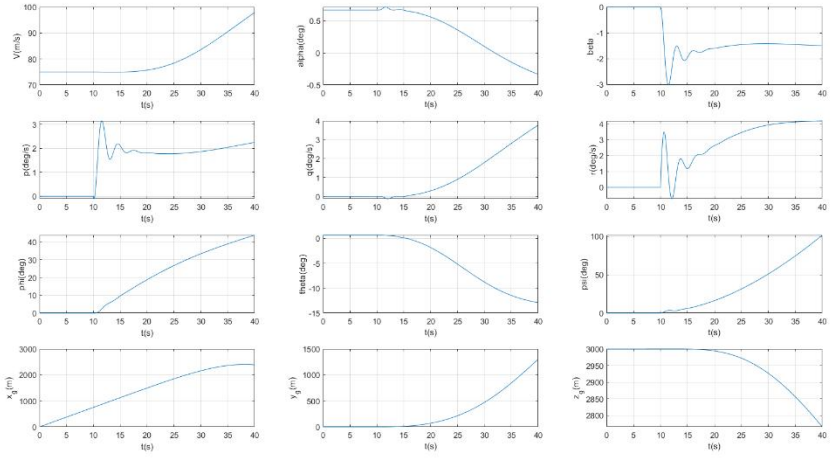
（4）方向舵相对基准状态偏转负 2 度，仿真时长 30s



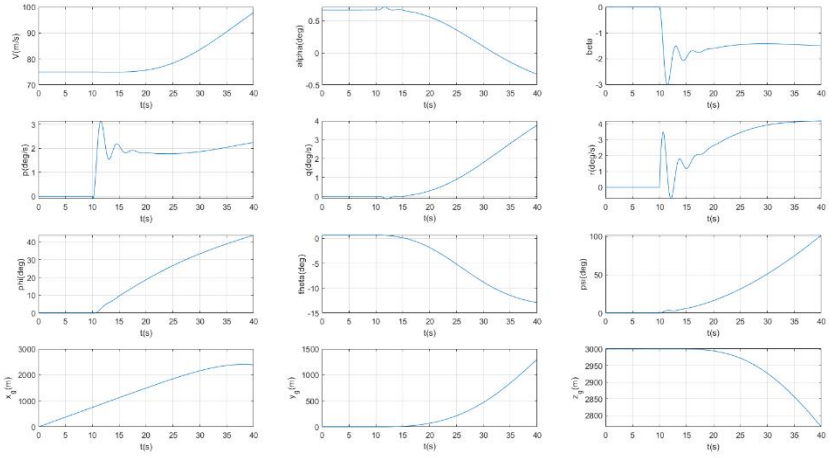
0.01s



0.02s

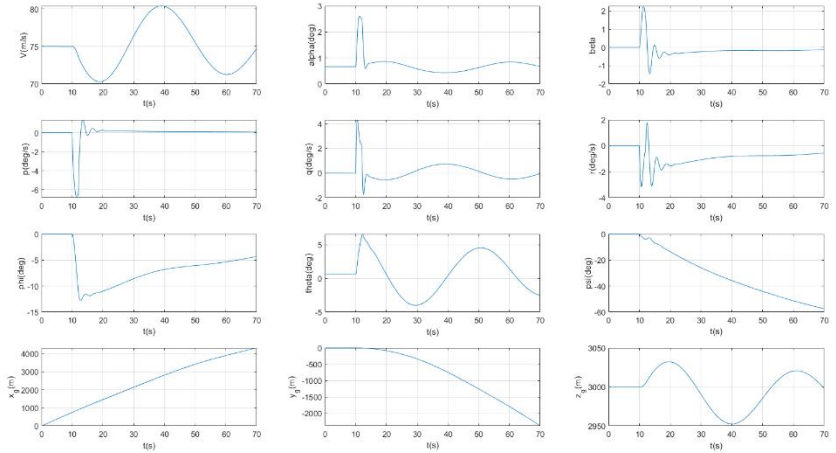


0.05s

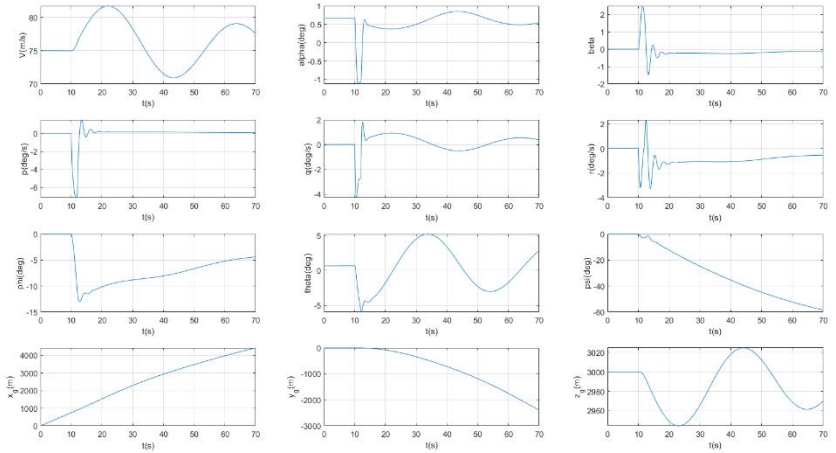


0.10s

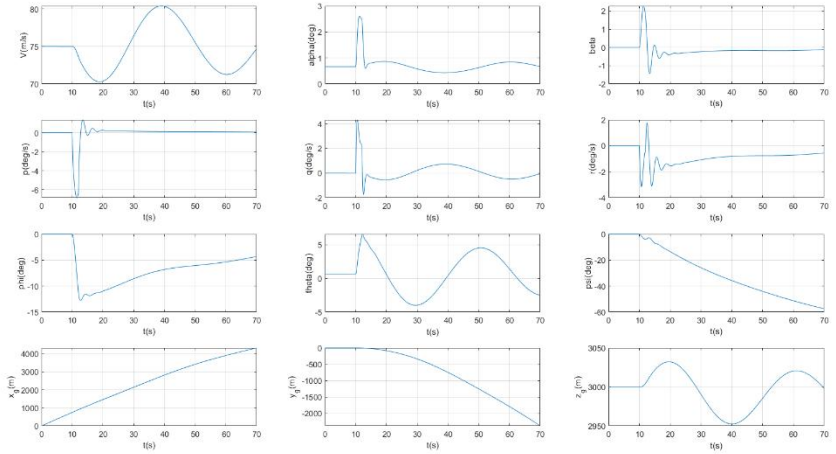
（5）升降舵、副翼及方向舵相对基准状态同时偏转正 2 度，并保持 2 秒，然后都回到基准偏角，仿真时长 60s



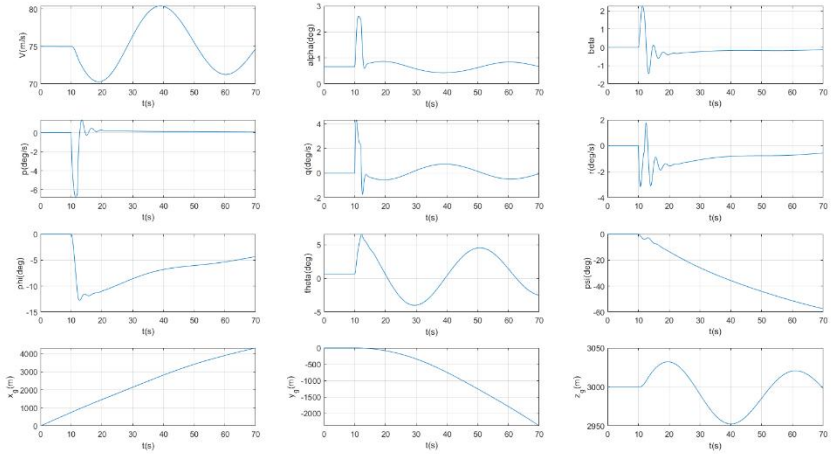
0.01s



0.02s



0.05s



0.10s

从程序上看，仿真步长越大，生成数据点越少，程序运行越快；从仿真结果来看，四个步长仿真结果形状相似，步长越小，曲线越光滑。