

$m_{1_1} = 200.0, m_{2_1} = 0.2, m_{1_2} = 2.0, m_{2_2} = 0.2, L_{1_1} = 1.0, L_{2_1} = 1.0, L_{1_2} = 1.0, L_{2_2} = 1.0$
 $\theta_{1_1} = \pi/5, \omega_{1_1} = 0.35, \theta_{2_1} = 0.0, \omega_{2_1} = 0.0, \theta_{1_2} = \pi/10, \omega_{1_2} = 0.15, \theta_{2_2} = 0.0, \omega_{2_2} = 0.0$
 $K = 0.3, \sigma_T = 0.001$

