Analytical vs numerical solution \dot{x} - analytical [m/s]x direction 0 $\dot{x} - numerical [m/s]$ -0.5 $\ddot{x} - analytical \left[m/s^2 \right]$ $\ddot{x} - numerical \left[m/s^2 \right]$ 5 10 15 time [s] y direction 5: 1 0 1 0 1 $\dot{y} - analytical$ [m/s] $\dot{y} - numerical [m/s]$ $\ddot{y} - analytical \left[m/s^2 \right]$ \ddot{y} - numerical $[m/s^{2}]$ 5 10 15 time [s] \dot{z} - analytical [m/s]0.1 \dot{z} - numerical [m/s]

Gripper coordinates

