Specifically, a right-click on the figure and under Characteristics to choose Settling Time. Then repeat for Rise Time[3].

4. Simulation Results

The simulations are carried out in MATLAB environment and the results obtained areshown in Fig.5, Fig.6 andFig.7

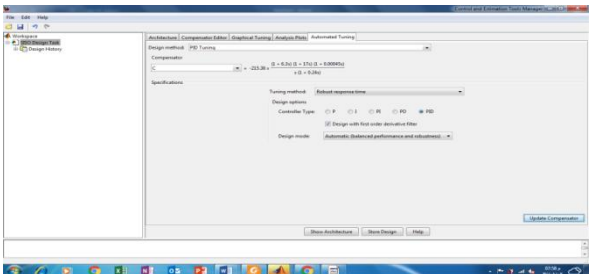

Figure 5: Control and estimation tool manager of the transfer function

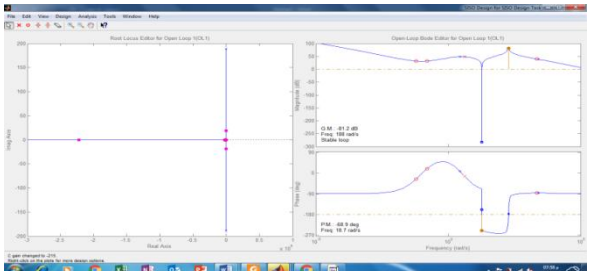

Figure 6: SISO design for the transfer function

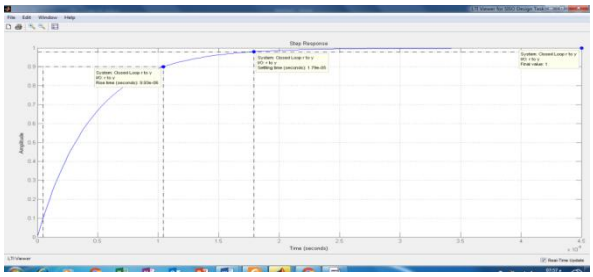

Figure 7: Closed-loop step response of the transfer function

5. Conclusions

The dynamical behavior of the missile two-loop autopilotis accomplished. It's shown that with selected compensator the parameters of the transfer function completely satisfy the design requirements. It can be statedthat it was completely eliminated and the overshoot value of 9.08, while settling time value around 1.79e-05 s and rise time value of 9.93e-06 s for transfer function.

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