Start the Sim at these initial conditions and no Wind and you should get an aircraft that is flying upward at a constant speed, no changes in attitude, and zero body rates.

p\_E\_E\_BE\_0 = []

v\_B\_B\_BE\_0 =

att\_E\_E\_BN\_0 (quaternion) =

om\_B\_B\_BE\_0 = [0 0 0]

gravity: 9.81 m/s^2

F\_ext: From Aero

M\_ext\_B: From Aero