RR Target Simulation Model Design

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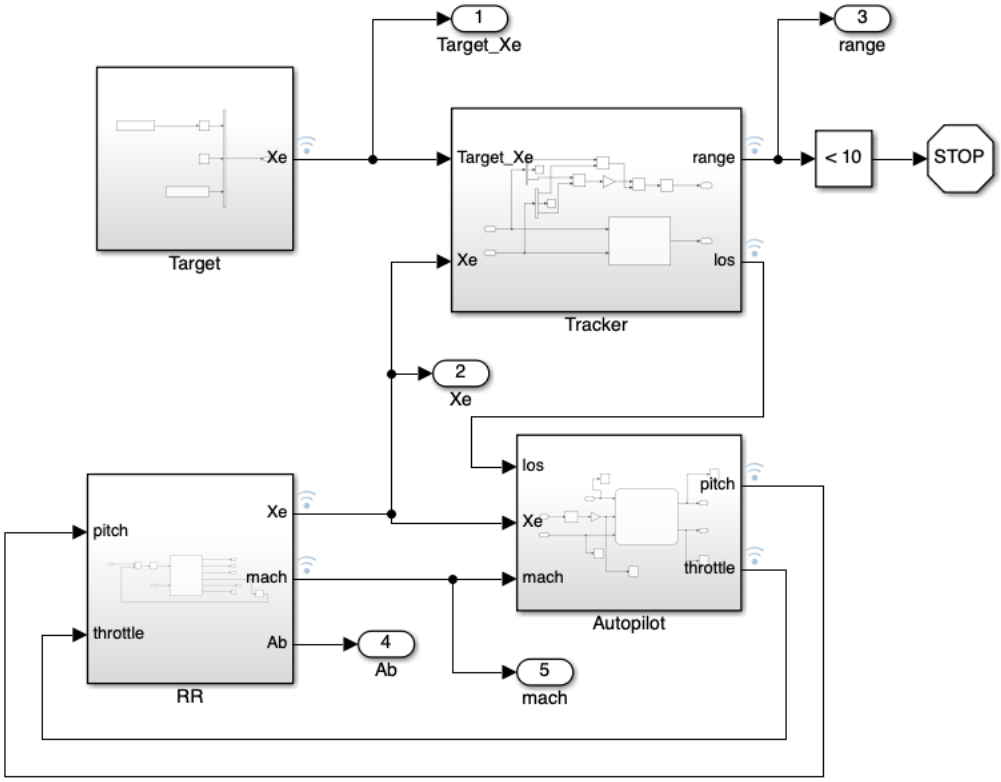
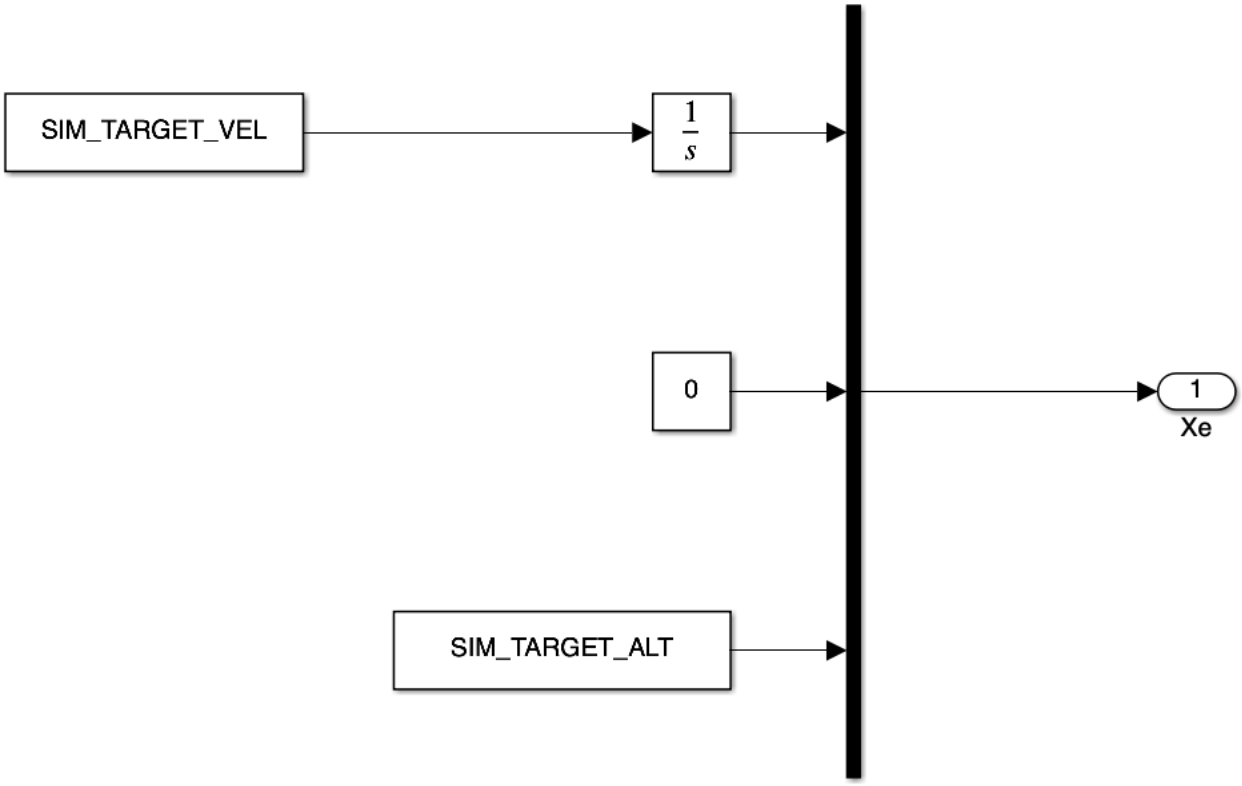
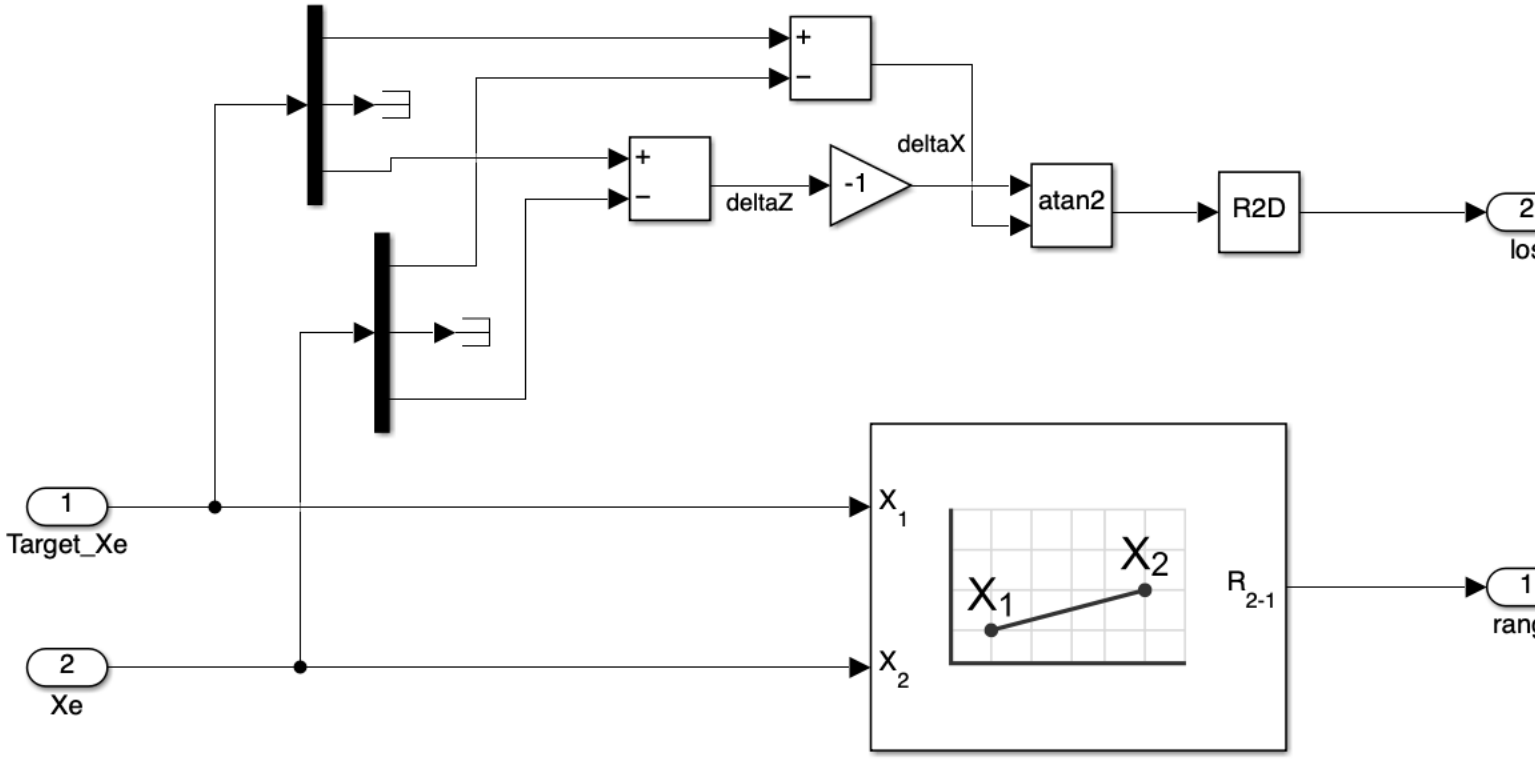
Top Level



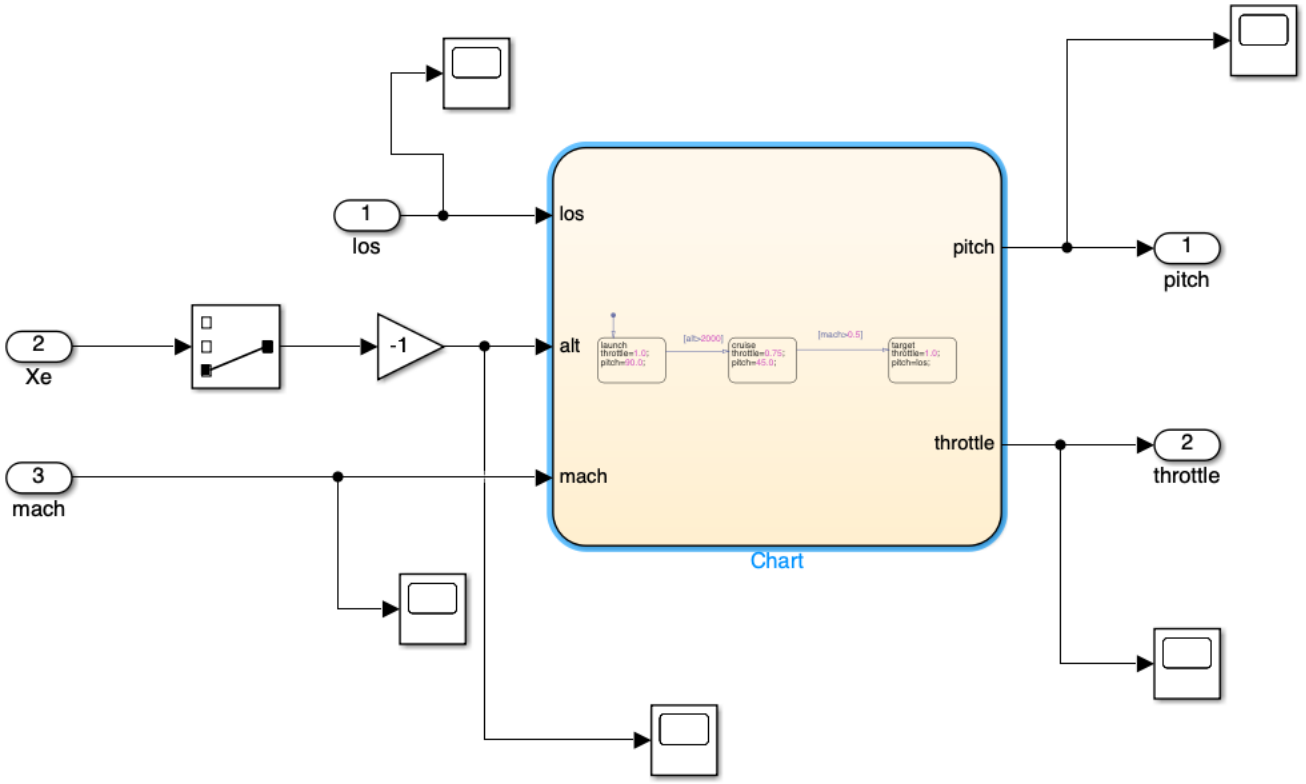
Target



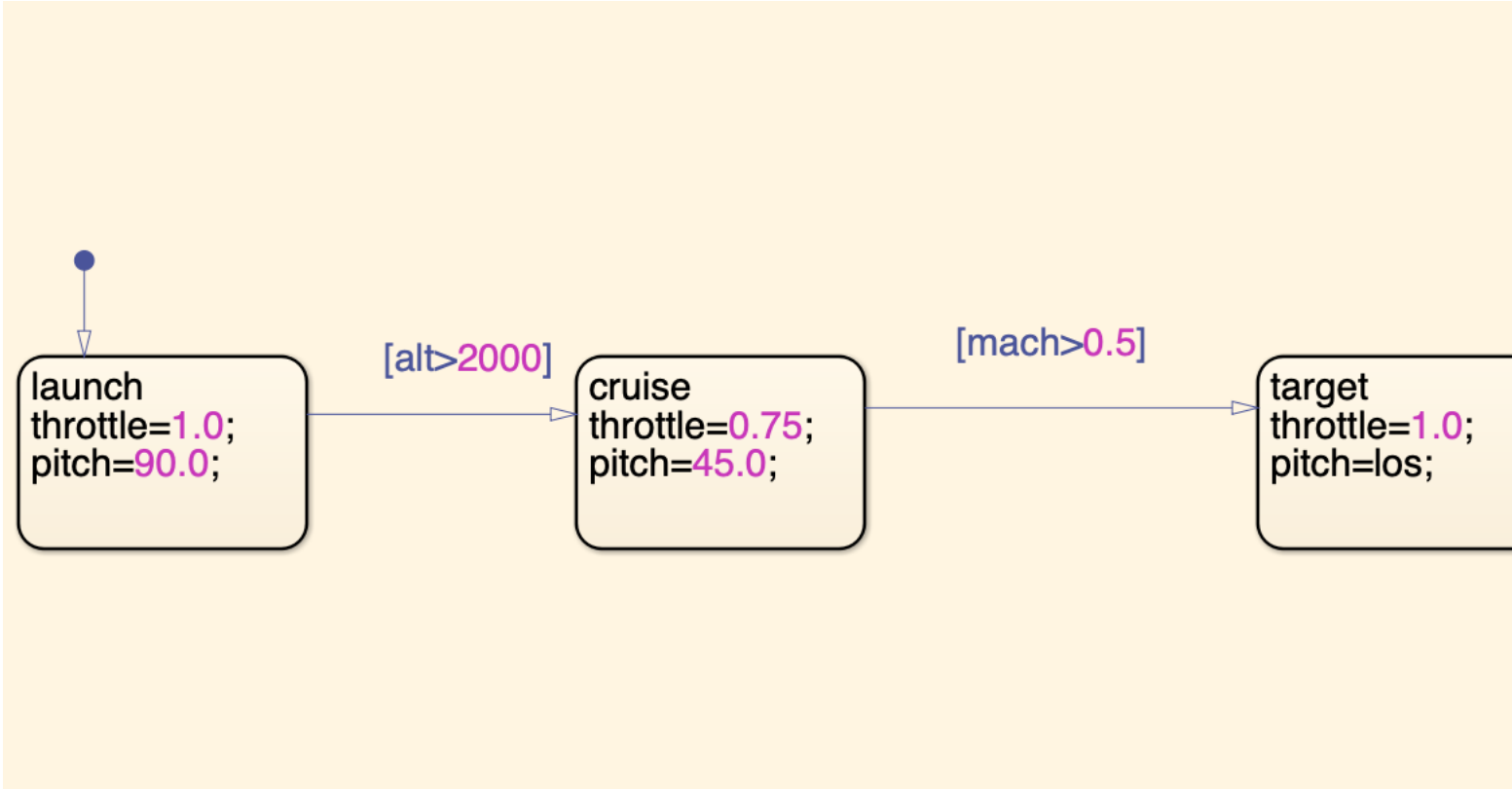
Tracker



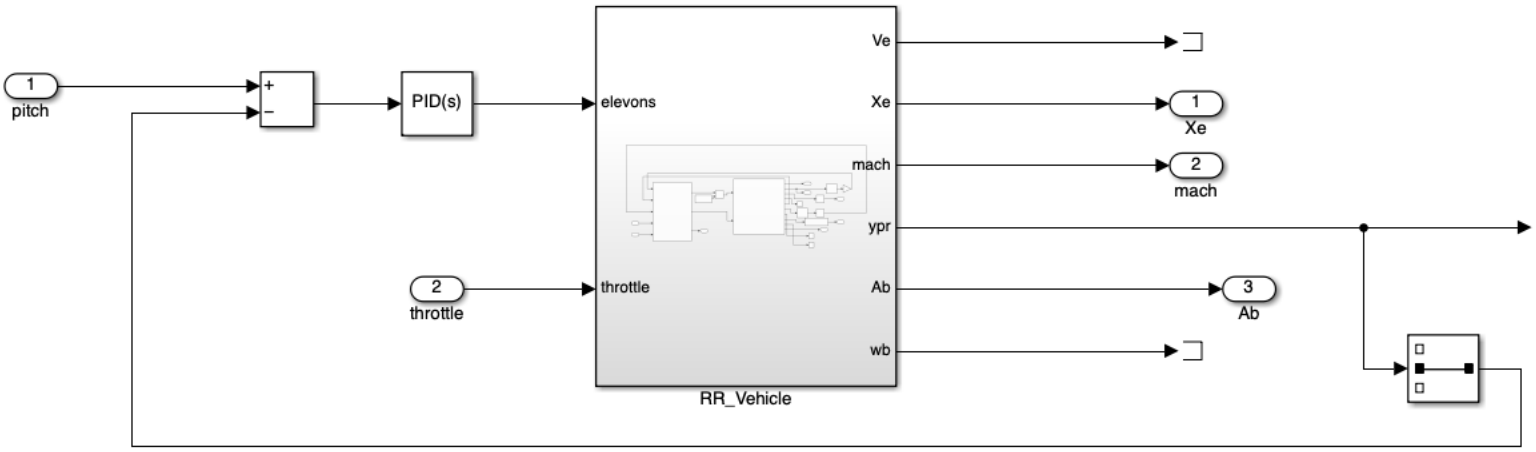
Autopilot



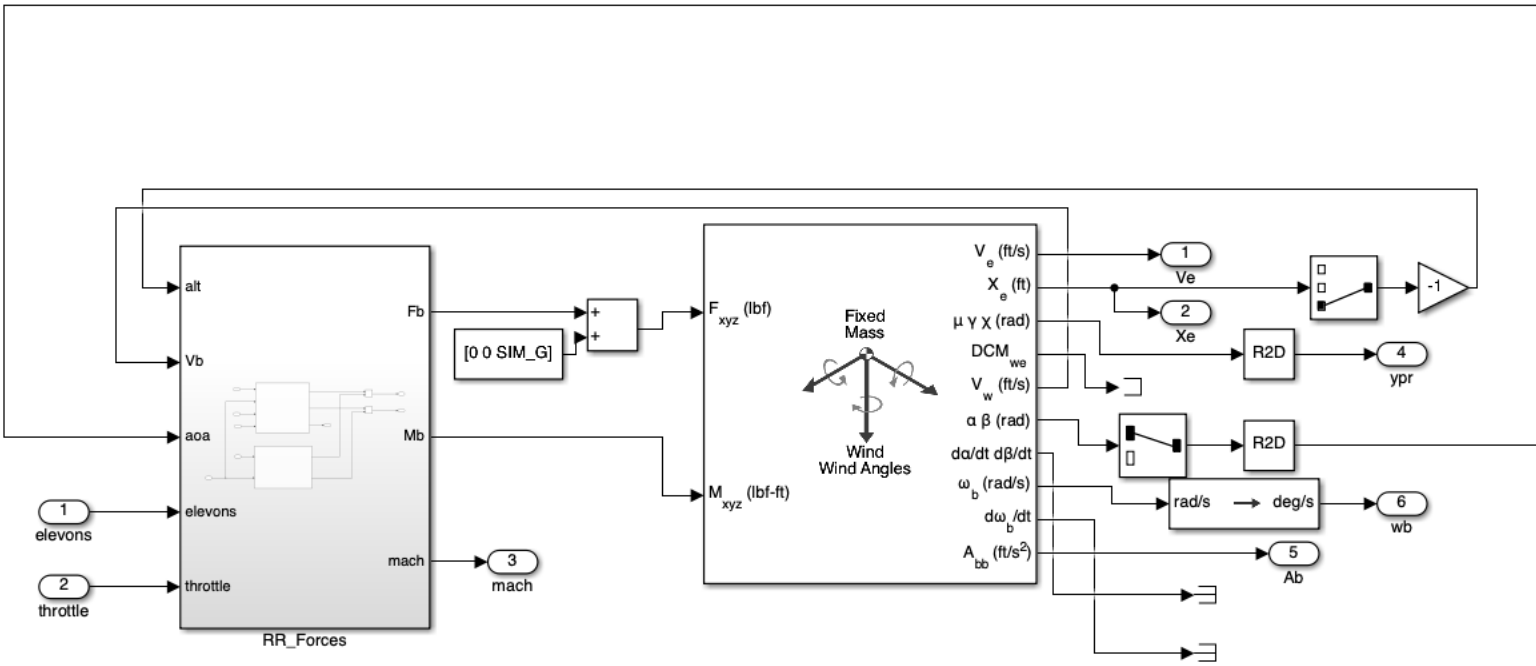
Autopilot State Machine



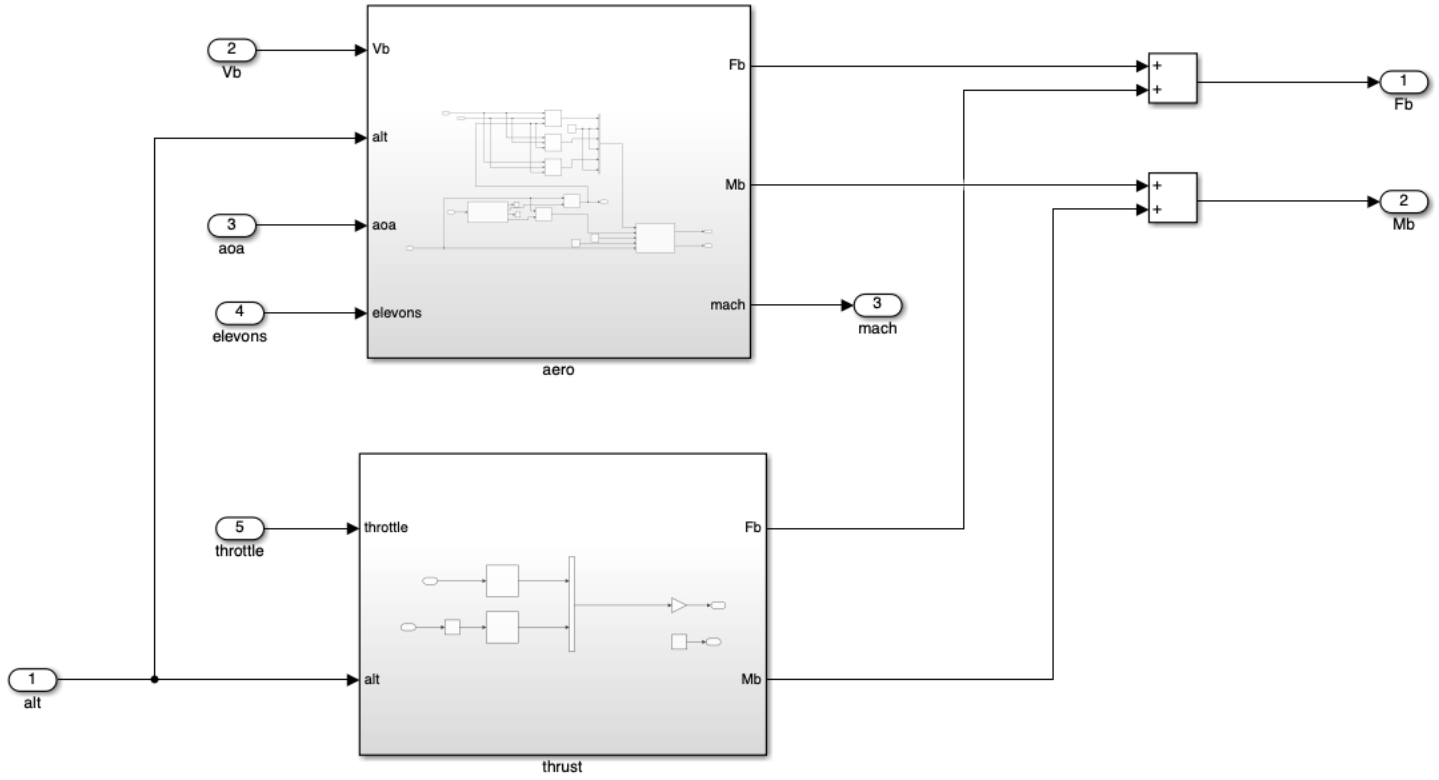
RR



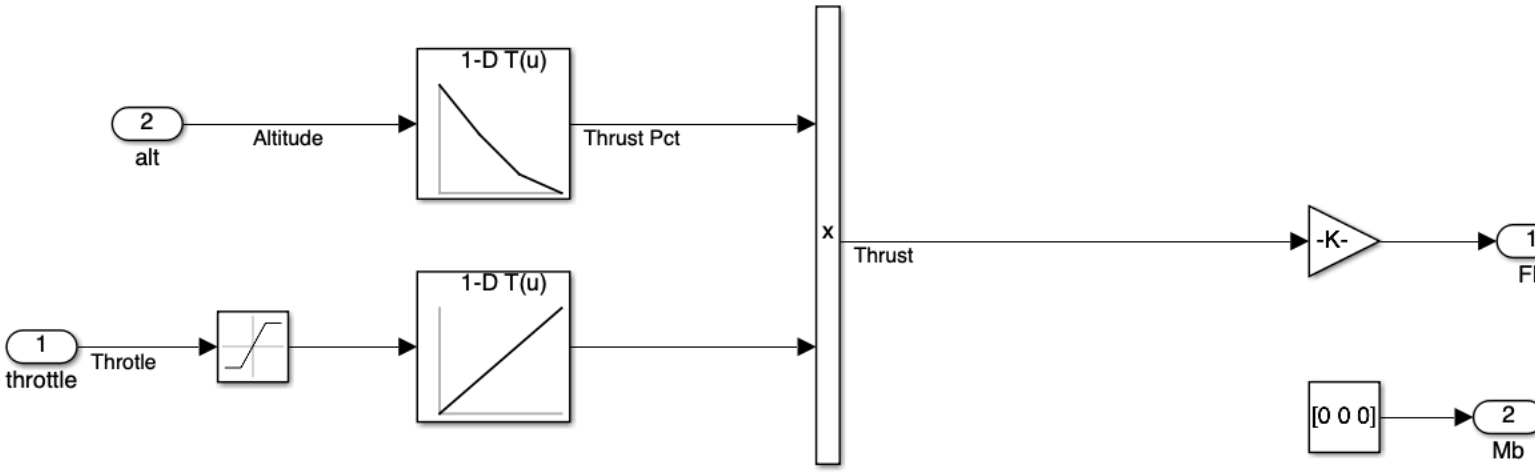
RR 6DOF



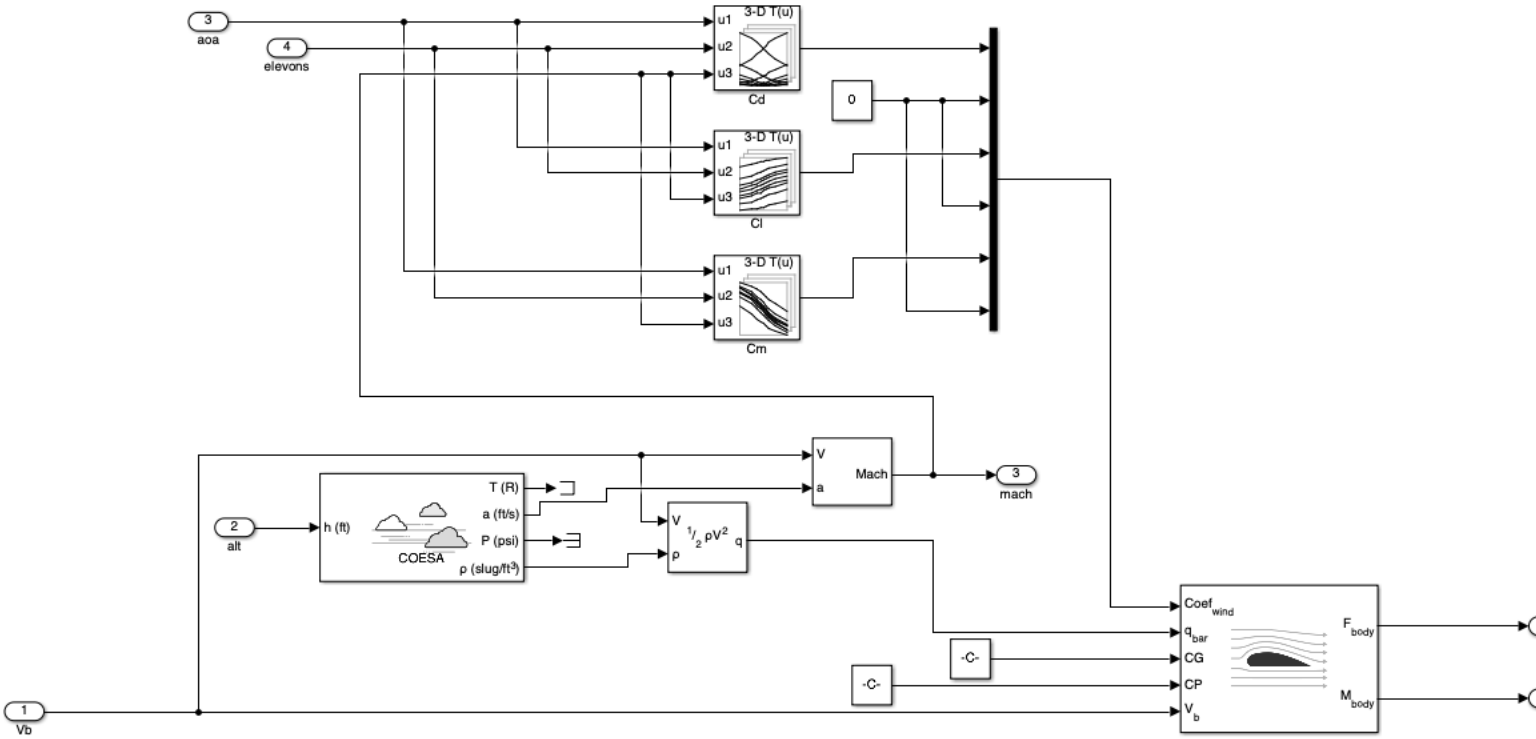
RR Forces



RR Thrust



RR Aero


3
aoa
4
elevons
3-D T(u)
u1
u2
u3
Cd
3-D T(u)
Cl
3-D T(u)
Cm
0
V
a
Mach
3
mach
2
alt
h (ft)
T (R)
a (ft/s)
P (psi)
ρ (slug/ft³)
COESA
V
ρ
½ ρV²
q
1
Vb
-C-
-C-
Coef wind
q bar
CG
CP
V b
F body
M body