Matlab Rocket Sim Processes

Design Equations:

* Regression rate equation paraffin/N2O
  + = Mass flux of oxidizer
* Calculation of mass flux of oxidizer depending on port diameter and mass flow rate
  + = Current port diameter of grain
  + = Mass flow rate of oxidizer
* Calculation of mass flow rate of burning fuel
  + = Density of fuel
  + = Length of rocket grain
* Calculation of O/F ratio (use 1st when calculating altitude. Use 2nd when calculating fuel grain length)
  + = total mass of oxidizer used
  + = total mass of fuel used
* Calculation of length of fuel grain
  + = Final port diameter
  + = Initial port diameter
* Calculation of thrust at anytime
  + = Characteristic velocity
  + = Thrust coefficient
  + = Combustion efficiency
  + = Nozzle efficiency (I think)