
Flight System Comparison

```
clear, clc, close all
load('results_Tjet')
load('results_Tjet_ab')
load('results_Tfan')
load('results_ram')
load('results_scram')
load('results_rocket')
load('dpc')

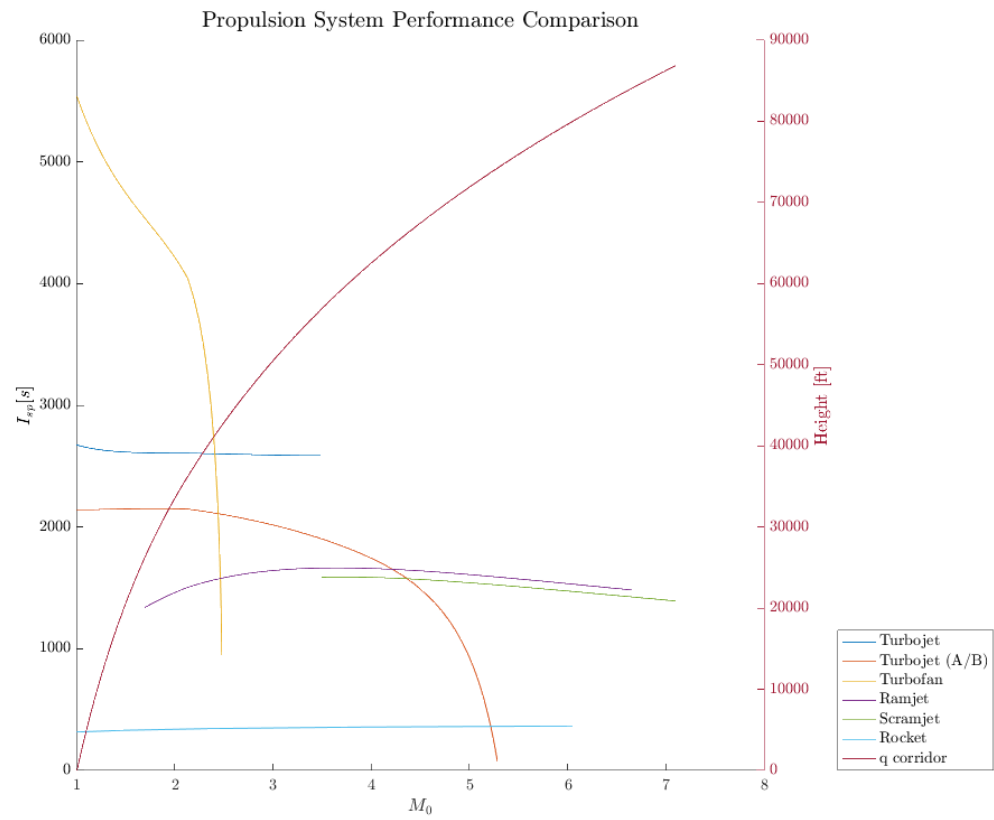
imax = max(M0_scram) <= M0_dpc;
imax = find(imax,1);

f = figure; hold on;
set(f, 'Position', [50,50,1000,800])
plot(tjet_M0,tjet_Isp)
plot(tjet_ab_M0,tjet_ab_Isp)
plot(tfan_M0,tfan_Isp)
plot(M0_ram,Isp_ram)
plot(M0_scram,Isp_scram)
plot(M0_rocket,Isp_rocket)
yyaxis right
plot(M0_dpc(1:imax),Hvector_dpc(1:imax))

yyaxis left
ax = gca;

FontSize1 = 16;
FontSize2 = 14;
FontSize3 = 20;
ax.FontSize = FontSize2;
set(ax, 'TickLabelInterpreter', 'Latex')
legend('Turbojet', 'Turbojet (A/B)', 'Turbofan', 'Ramjet', 'Scramjet', 'Rocket', 'q corridor', ...
       'FontSize', FontSize2, 'Interpreter', 'Latex', 'Location', 'SoutheastOutside')
xlabel('$M_0$', 'Interpreter', 'Latex', 'FontSize', FontSize1)
ylabel('$I_{sp}$ [s]', 'Interpreter', 'Latex', 'FontSize', FontSize1)
yyaxis right
ylabel('Height [ft]', 'Interpreter', 'Latex', 'FontSize', FontSize1)
ax.YAxis(2).Exponent = 0;
title('Propulsion System Performance Comparison', 'Interpreter', 'Latex', 'FontSize', FontSize3)

saveas(f, 'Isp Graph.png')
```



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