



Hotfire 3.4

Propulsion Subteam - McGill Rocket Team

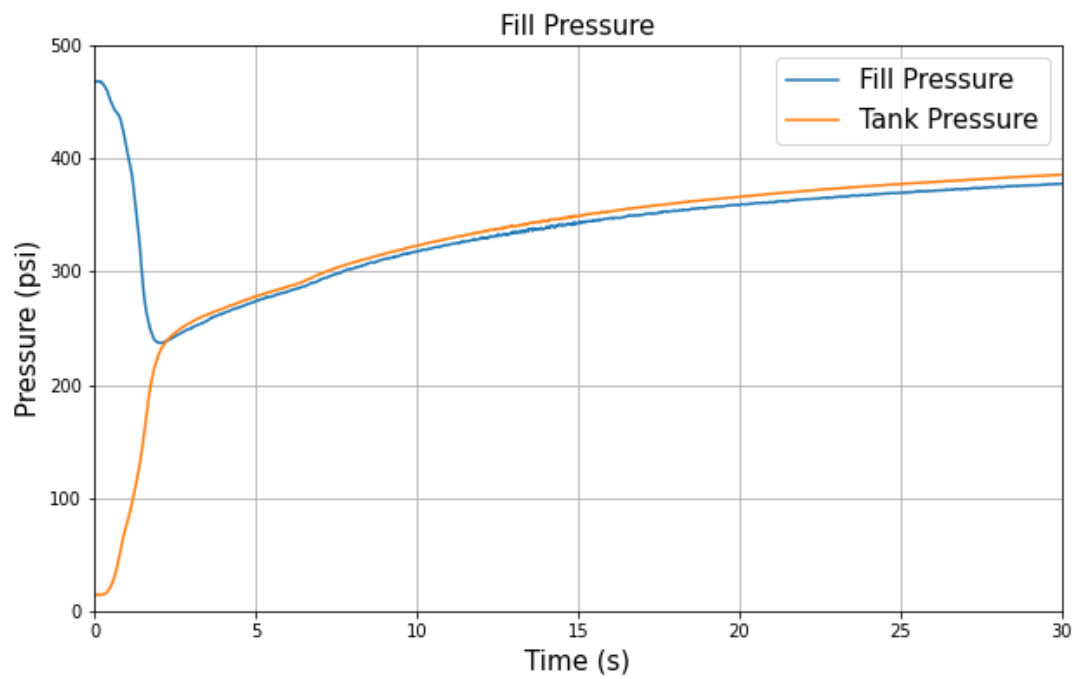
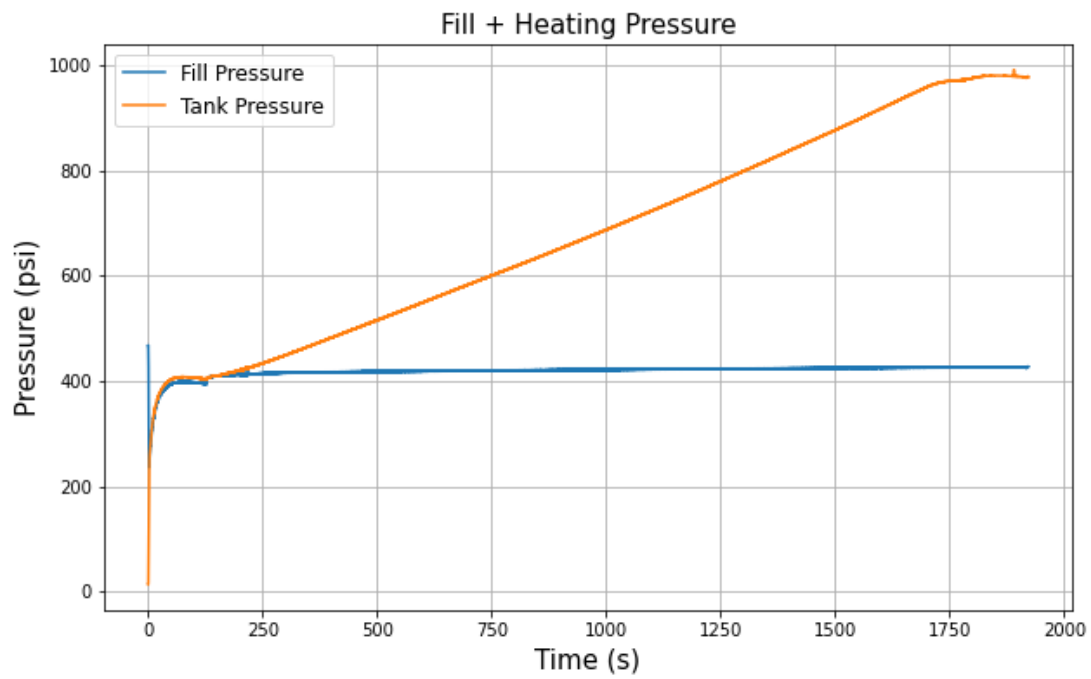
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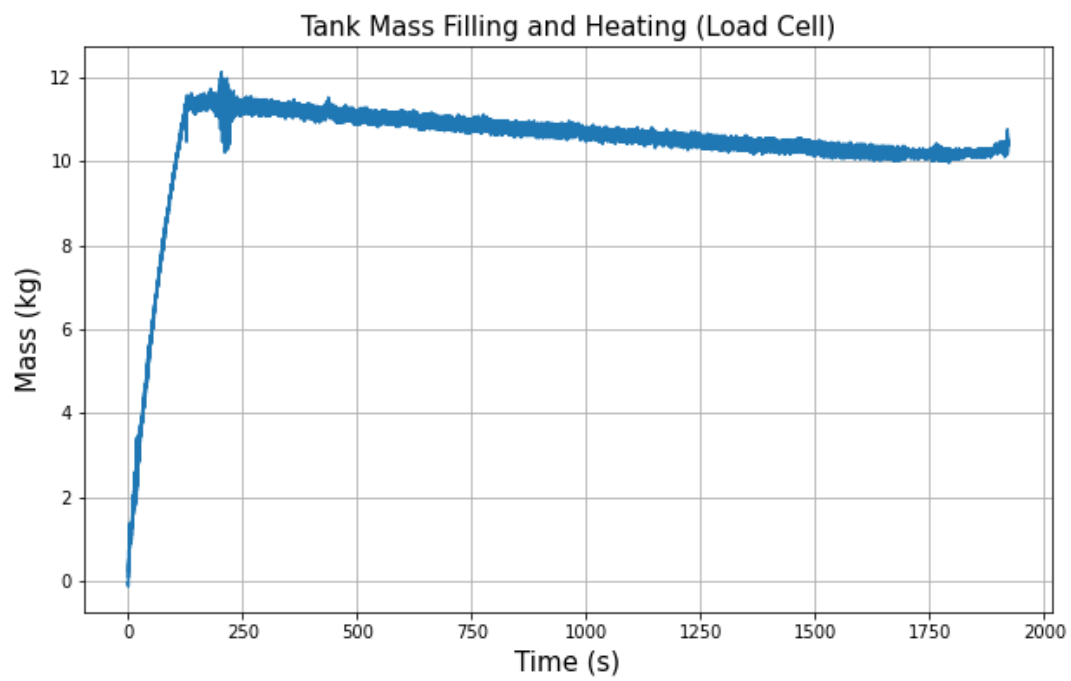
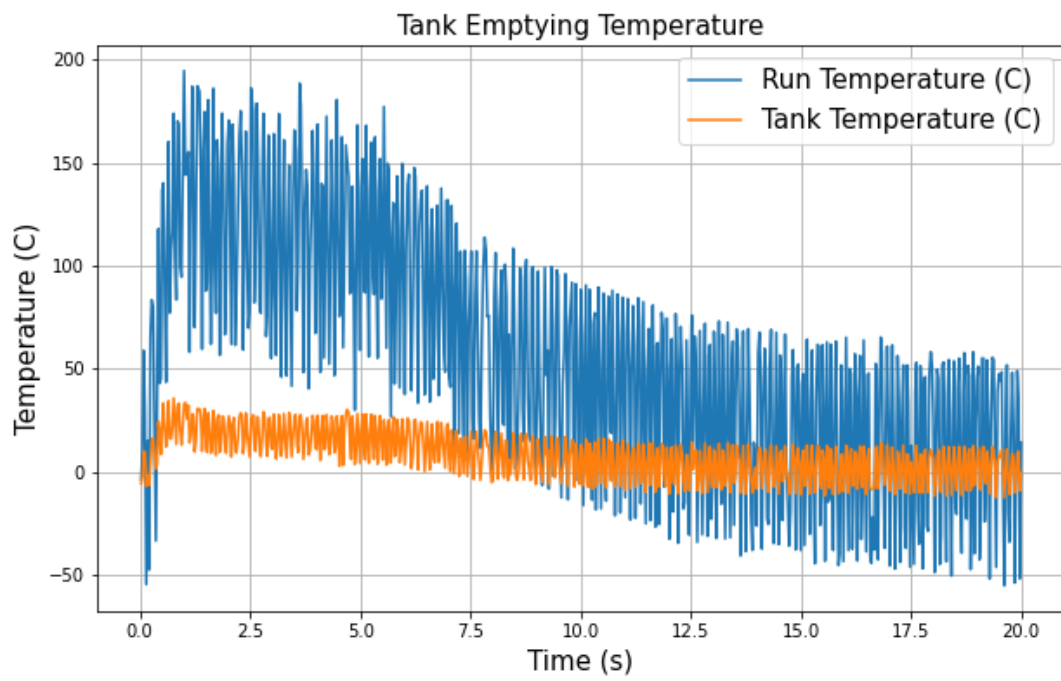
Abstract

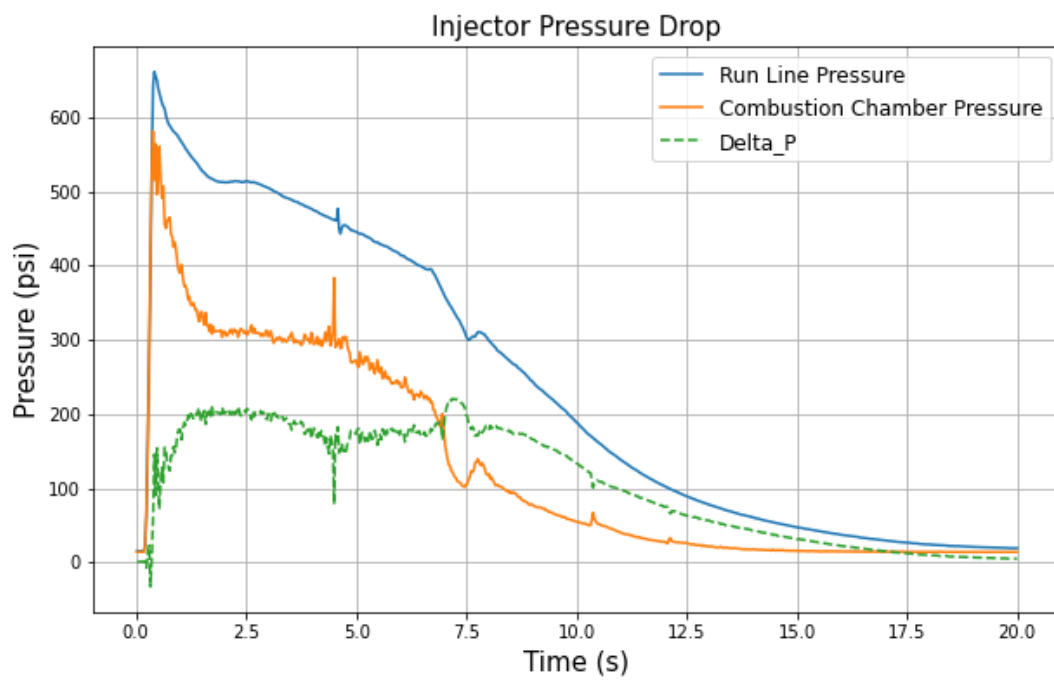
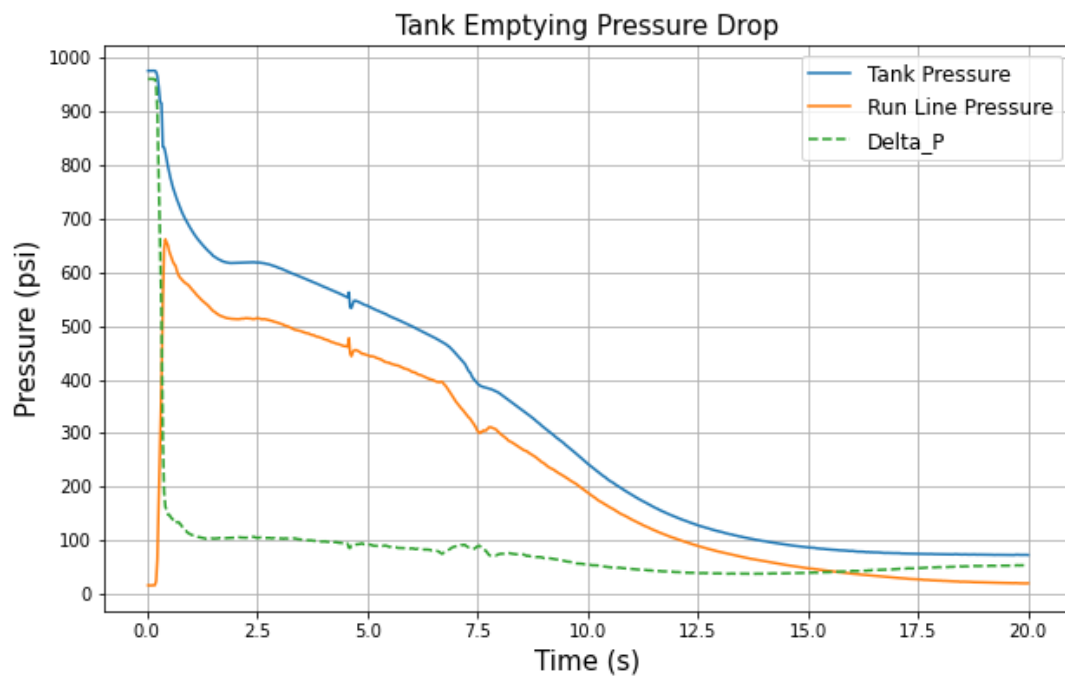
Table 1: Summary Results

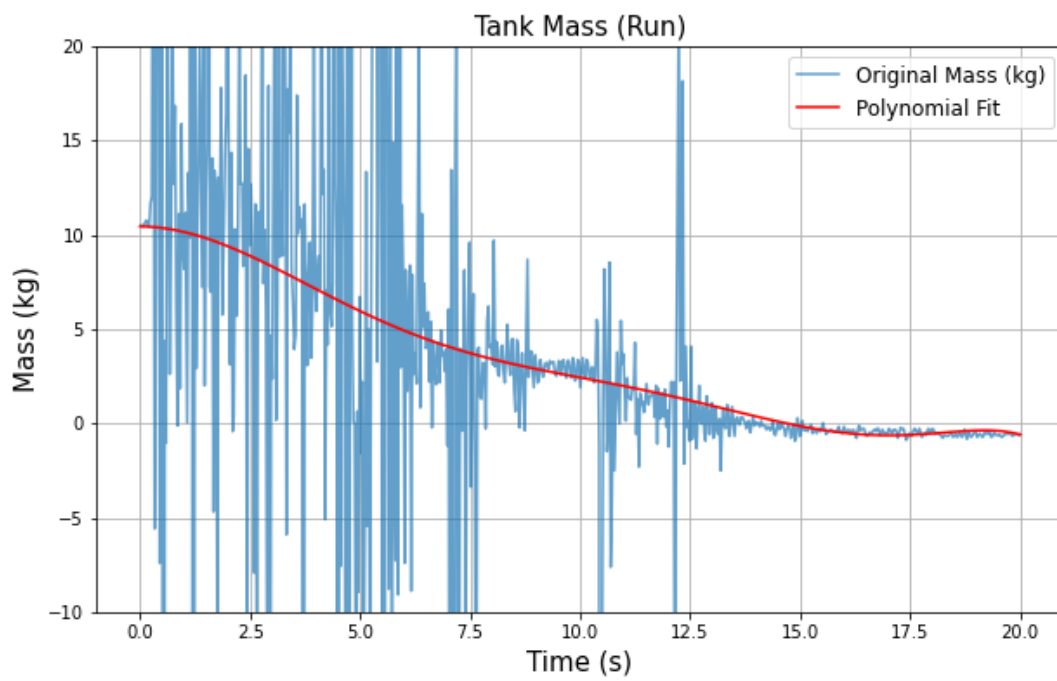
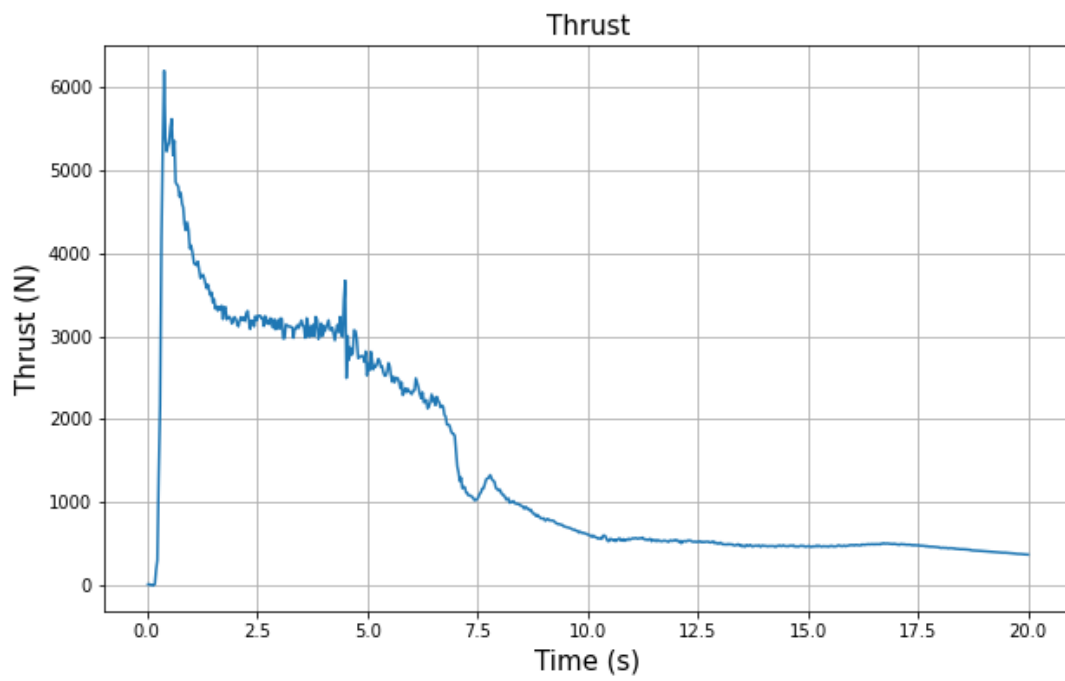
Variable	Value	Unit
Ambient Temperature	0	C
Run Tank Volume	15.3	L
Ullage Factor (Fill)	20	%
Fuel Mass	1.900	kg
Fill Time	1921.5	s
Peak Tank Pressure	977	psi
Peak Tank Temperature	35.7	C
Total Tank Mass (measured)	11.4	kg
Liquid Nitrous Mass (estimated)	11.28	kg
Gaseous Nitrous Mass (estimated)	0.12	kg
Peak Run Pressure	662	psi
Peak CC Pressure	582	psi
Injector Holes	22	
Injector Hole Diameter	2	mm
Peak Mass Flow Rate (estimated)	1.22	kg/s
Average Mass Flow Rate (estimated)	0.9	kg/s
Burn Time	19	s
Peak Thrust	6204	N
Total Impulse	28583	Ns
Specific Impulse	94.6	s

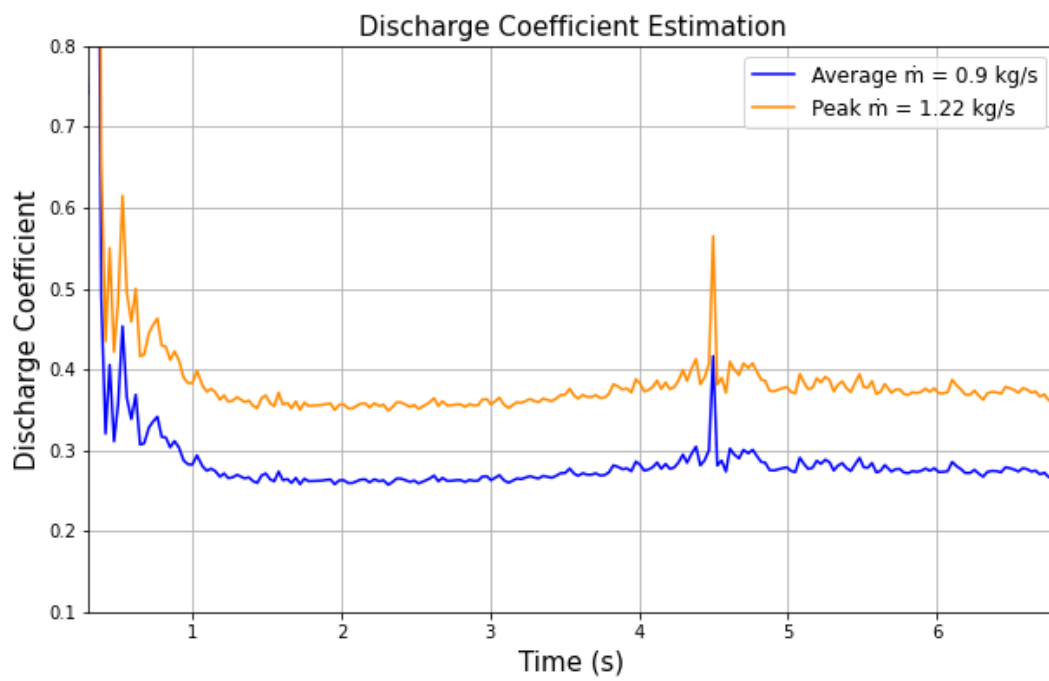
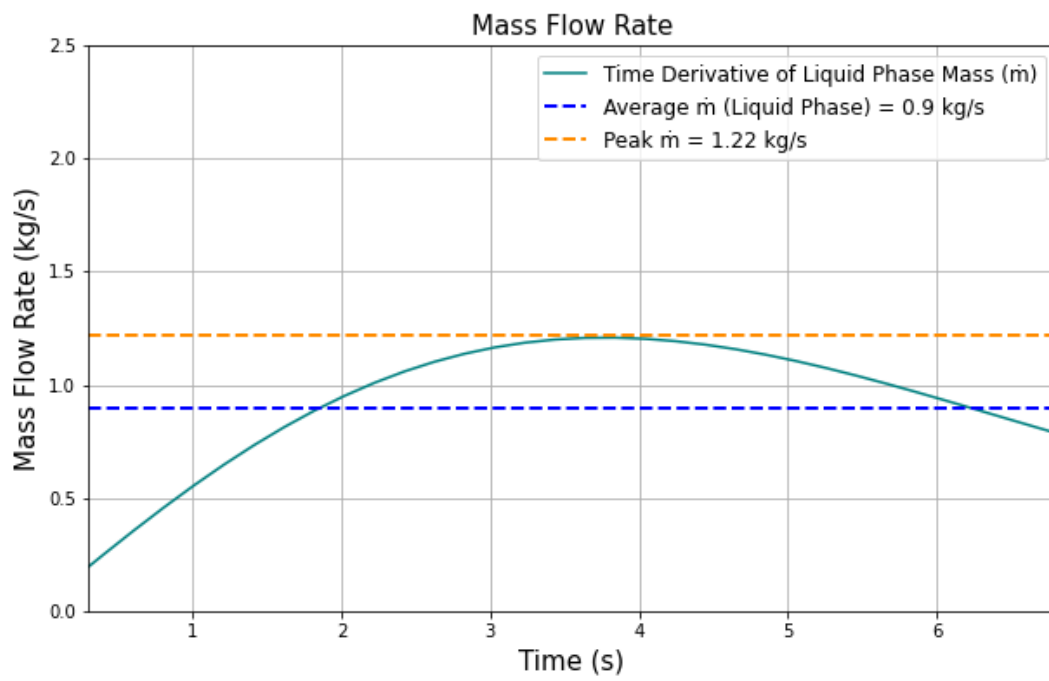
1 Plots

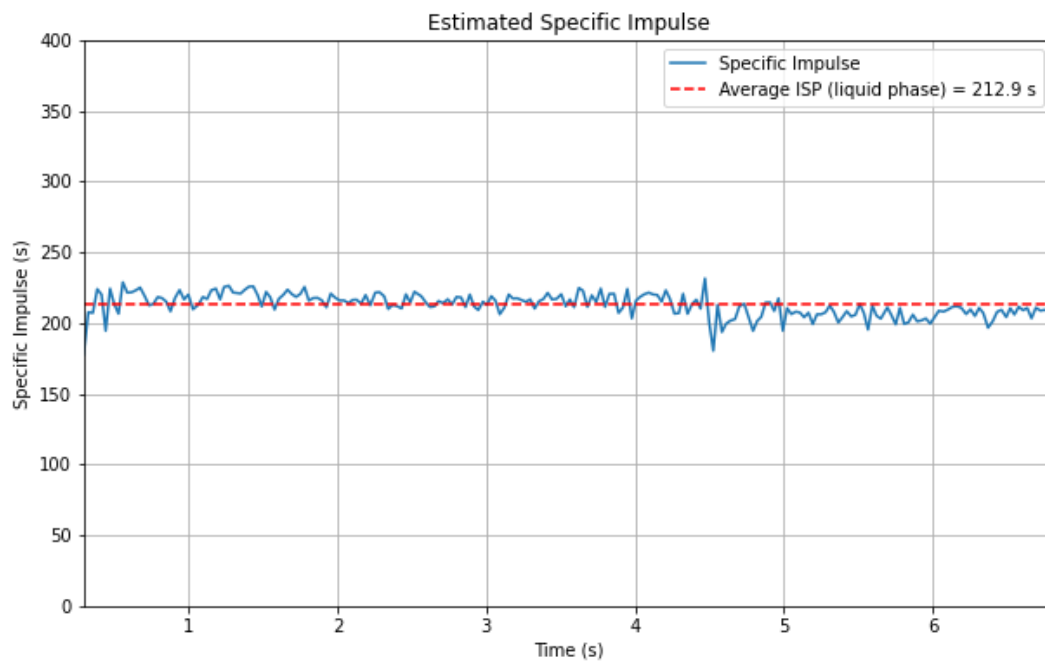
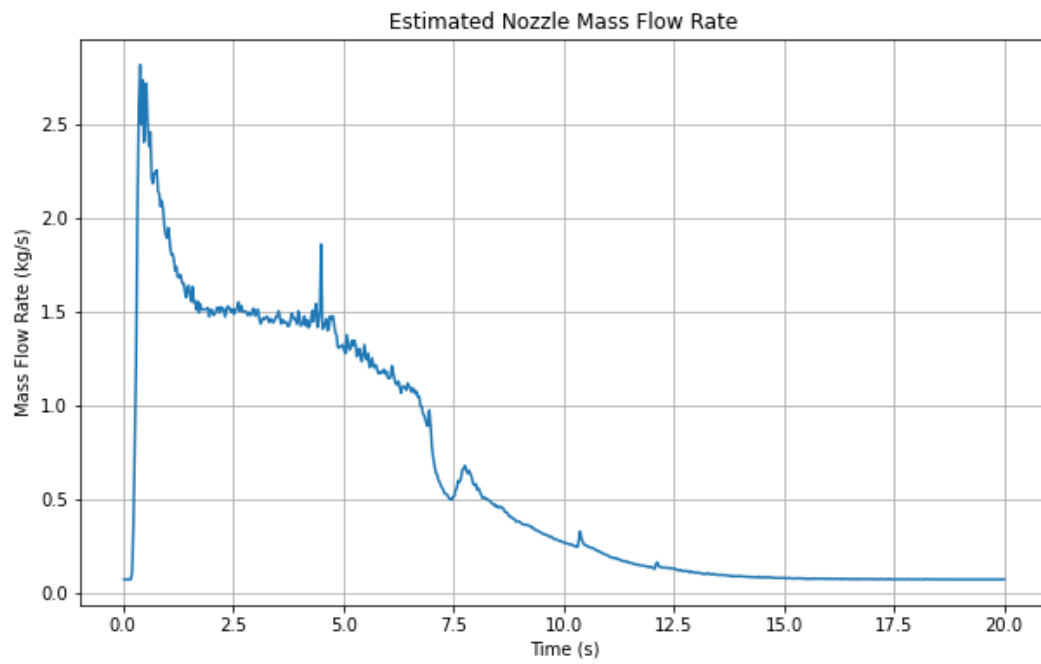












2 Issues Encountered

3 Conclusions

A Engine Disassembly Pictures