

Plot File "cheat sheat"

Cexit (m/sec) Divide by g0 to get
units of seconds

$$I_{sp} = \frac{c^* \cdot C_F}{g_0} \rightarrow c^* = \frac{I_{sp} \cdot g_0}{C_F}$$

If you define an exit A/A* .. If not then columns repeat at "chamber, throat, chamber, throat, etc.")

	#	p	t	h	g	s	m	cp	gam	mach	aeat	cf	ivac	isp	o/f
Chamber		6.8947E+00	1.2701E+03	-9.9923E+01	-5.3466E+04	4.2017E+01	4.0318E+00	8.1802E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
Throat		3.6984E+00	1.0829E+03	-1.6085E+03	-4.7107E+04	4.2017E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
Exit		5.3320E-02	3.3991E+02	-7.2513E+03	-2.1533E+04	4.2017E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
Chamber		1.3789E+01	1.2701E+03	-9.9922E+01	-5.1651E+04	4.0588E+01	4.0318E+00	8.1801E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
Throat		7.3967E+00	1.0829E+03	-1.6085E+03	-4.5559E+04	4.0588E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
Exit		1.0664E-01	3.3991E+02	-7.2513E+03	-2.1047E+04	4.0588E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
		2.0684E+01	1.2701E+03	-9.9923E+01	-5.0589E+04	3.9752E+01	4.0318E+00	8.1801E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
		1.1095E+01	1.0829E+03	-1.6085E+03	-4.4654E+04	3.9752E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
		1.5996E-01	3.3991E+02	-7.2513E+03	-2.0763E+04	3.9752E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
		2.7579E+01	1.2701E+03	-9.9923E+01	-4.9835E+04	3.9158E+01	4.0318E+00	8.1801E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
		1.4793E+01	1.0829E+03	-1.6085E+03	-4.4011E+04	3.9158E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
		2.1328E-01	3.3991E+02	-7.2513E+03	-2.0561E+04	3.9158E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
		3.4474E+01	1.2701E+03	-9.9923E+01	-4.9251E+04	3.8698E+01	4.0318E+00	8.1801E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
		1.8492E+01	1.0829E+03	-1.6085E+03	-4.3513E+04	3.8698E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
		2.6660E-01	3.3991E+02	-7.2513E+03	-2.0405E+04	3.8698E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
		4.1368E+01	1.2701E+03	-9.9923E+01	-4.8773E+04	3.8322E+01	4.0318E+00	8.1800E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
		2.2190E+01	1.0829E+03	-1.6085E+03	-4.3106E+04	3.8322E+01	4.0318E+00	7.9355E+00	1.3511E+00	1.0000E+00	1.0000E+00	7.2475E-01	3.0226E+03	1.7370E+03	1.0000E+00
		3.1992E-01	3.3991E+02	-7.2513E+03	-2.0277E+04	3.8322E+01	4.0318E+00	7.3547E+00	1.3897E+00	3.8318E+00	1.0000E+01	1.5780E+00	3.9672E+03	3.7819E+03	1.0000E+00
		6.8947E+00	1.2701E+03	-9.9923E+01	-5.3466E+04	4.2017E+01	4.0318E+00	8.1802E+00	1.3371E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0000E+00
		3.7861E+00	1.8121E+03	-1.6649E+03	-6.0866E+04	3.2669E+01	6.0471E+00	6.3061E+00	1.2797E+00	1.0000E+00	1.0000E+00	7.0274E-01	3.1810E+03	1.7857E+03	2.0000E+00
		6.0722E-02	6.5829E+02	-8.2485E+03	-2.9755E+04	3.2669E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6430E+00	1.0000E+01	1.5916E+00	4.2680E+03	4.0442E+03	2.0000E+00
Chamber		1.3789E+01	2.0609E+03	-7.0636E+01	-6.5433E+04	3.1716E+01	6.0459E+00	6.5868E+00	1.2663E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0000E+00
Throat		7.5708E+00	1.8123E+03	-1.6659E+03	-5.9145E+04	3.1716E+01	6.0473E+00	6.2896E+00	1.2804E+00	1.0000E+00	1.0000E+00	7.0297E-01	3.1812E+03	1.7862E+03	2.0000E+00
Exit		1.2144E-01	6.5824E+02	-8.2487E+03	-2.9126E+04	3.1716E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6432E+00	1.0000E+01	1.5917E+00	4.2680E+03	4.0443E+03	2.0000E+00
		2.0684E+01	2.0615E+03	-7.0636E+01	-6.4304E+04	3.1158E+01	6.0462E+00	6.5607E+00	1.2672E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0000E+00
		1.1355E+01	1.8124E+03	-1.6663E+03	-5.8137E+04	3.1158E+01	6.0473E+00	6.2823E+00	1.2807E+00	1.0000E+00	1.0000E+00	7.0308E-01	3.1813E+03	1.7864E+03	2.0000E+00
		1.8215E-01	6.5822E+02	-8.2489E+03	-2.8758E+04	3.1158E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6433E+00	1.0000E+01	1.5917E+00	4.2681E+03	4.0443E+03	2.0000E+00
		2.7579E+01	2.0619E+03	-7.0636E+01	-6.3500E+04	3.0763E+01	6.0464E+00	6.5451E+00	1.2677E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0000E+00
		1.5140E+01	1.8124E+03	-1.6665E+03	-5.7422E+04	3.0763E+01	6.0474E+00	6.2779E+00	1.2809E+00	1.0000E+00	1.0000E+00	7.0314E-01	3.1814E+03	1.7866E+03	2.0000E+00
		2.4287E-01	6.5820E+02	-8.2489E+03	-2.8497E+04	3.0763E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6434E+00	1.0000E+01	1.5917E+00	4.2681E+03	4.0443E+03	2.0000E+00
		3.4474E+01	2.0621E+03	-7.0636E+01	-6.2875E+04	3.0456E+01	6.0465E+00	6.5344E+00	1.2681E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0000E+00
		1.8924E+01	1.8125E+03	-1.6667E+03	-5.6867E+04	3.0456E+01	6.0474E+00	6.2749E+00	1.2810E+00	1.0000E+00	1.0000E+00	7.0318E-01	3.1814E+03	1.7867E+03	2.0000E+00
		3.0358E-01	6.5820E+02	-8.2490E+03	-2.8295E+04	3.0456E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6434E+00	1.0000E+01	1.5918E+00	4.2681E+03	4.0443E+03	2.0000E+00
		4.1368E+01	2.0623E+03	-7.0636E+01	-6.2364E+04	3.0205E+01	6.0466E+00	6.5265E+00	1.2684E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0000E+00
		2.2708E+01	1.8125E+03	-1.6668E+03	-5.6413E+04	3.0205E+01	6.0474E+00	6.2727E+00	1.2811E+00	1.0000E+00	1.0000E+00	7.0322E-01	3.1814E+03	1.7867E+03	2.0000E+00
		3.6429E-01	6.5819E+02	-8.2490E+03	-2.8130E+04	3.0205E+01	6.0476E+00	5.1761E+00	1.3617E+00	3.6434E+00	1.0000E+01	1.5918E+00	4.2681E+03	4.0443E+03	2.0000E+00

Pressures
(Bars)

O/F Ratios