

Rocket Peak Altitude Prediction

The following pages are designed to offer a template for calculating the peak altitude of your rocket.

The calculations were taken from this page, and translated into a series of spreadsheet functions.

This can also be used to test different design parameters for a potential rocket build.

Rocket Body Radius (m) = 0.02
 Rocket Body Cross sectional area (m) = 0.00125663706

Fill in the boxes below to have a peak altitude for your rocket be calculated.

Motor Average Thrust(N) =	2.66	this is determined from the thrust curve data	
Rocket Mass(kg) =	0.05	this is a variable, depending on how massive you want your rocket to be	1000
Rocket Body Cross Sectional Area(m ²) =	0.0013	$A = \pi r^2$; again depending on how big you want your rocket to be	9.803921569
Burntime(s) =	3.6	determined from the thrust curve also	
Motor Mass (kg) =	0.08	These values are assumed	
Motor Dry Mass (kg) =	0.055	The dry mass is a motor without fuel	
Rocket Peak Altitude Prediction =	125.0861048	meters	
	410.3874961	feet	