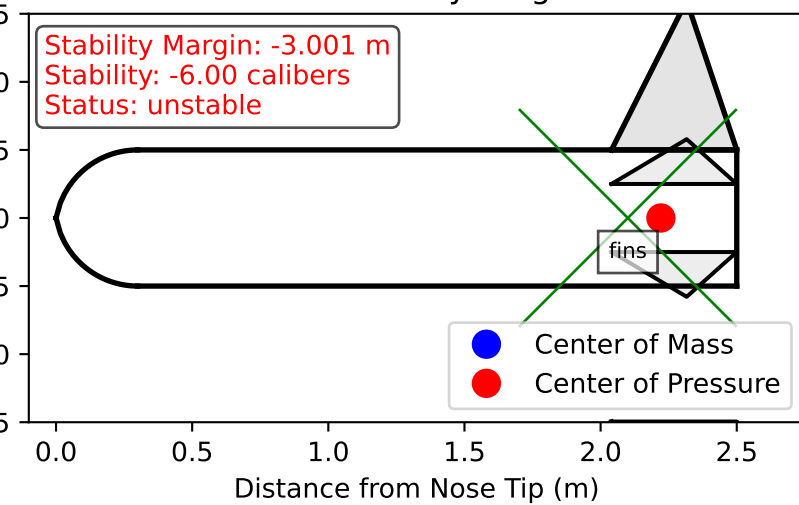


Rocket Stability Diagram



3.001 m
-6.00 cal

nozzle

INITIAL CONDITIONS AND PARAMETERS

STABILITY SIMULATION

Generated: 2023-11-13 15:41:05

STABILITY ANALYSIS PARAMETERS

Flight Stage Analyzed: apogee
Min Caliber Stability: 1.5
Max Caliber Stability: 4.0
Show Component CGs: True
Show Stability Margin: True

ROCKET CONFIGURATION

Rocket Length: 2.5 m
Rocket Diameter: 0.5 m
Nose Cone Length: 0.3 m
Nose Cone Shape: ogive

COMPONENT MASSES AND CG POSITIONS

Component	Mass (kg)	CG Position (m)
nose cone	10.230	0.450
fuselage_oxi	55.330	4.500
propellant	244.080	3.000
helium_tank	43.500	1.400
fuselage_shell	60.250	4.000
combustion_chamber	12.830	5.500
nozzle	7.993	7.349

FLIGHT CONDITIONS FOR APOGEE STAGE

Mach Number: 0.5
Propellant Load: 0%