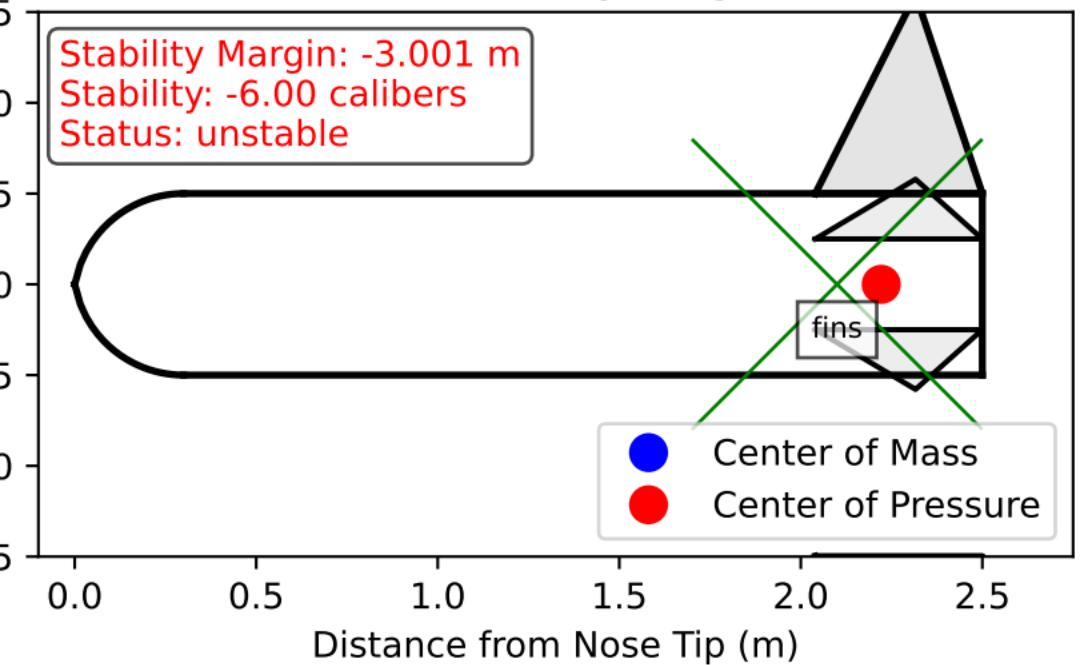


Rocket Stability Diagram



3.001 m
-6.00 cal

nozzle

INITIAL CONDITIONS AND PARAMETERS

STABILITY SIMULATION

Generated: 2023-11-13 00:26:58

STABILITY ANALYSIS PARAMETERS

```
=====
STABILITY ANALYSIS PARAMETERS
=====
Flight Stage Analyzed:      burnout
Min Caliber Stability:     1.5
Max Caliber Stability:     4.0
Show Component CGs:        True
Show Stability Margin:     True
```

ROCKET CONFIGURATION

```
=====
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 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 BURNOUT STAGE

```
=====
FLIGHT CONDITIONS FOR BURNOUT STAGE
=====
Mach Number:          2.0
Propellant Load:      0%
```