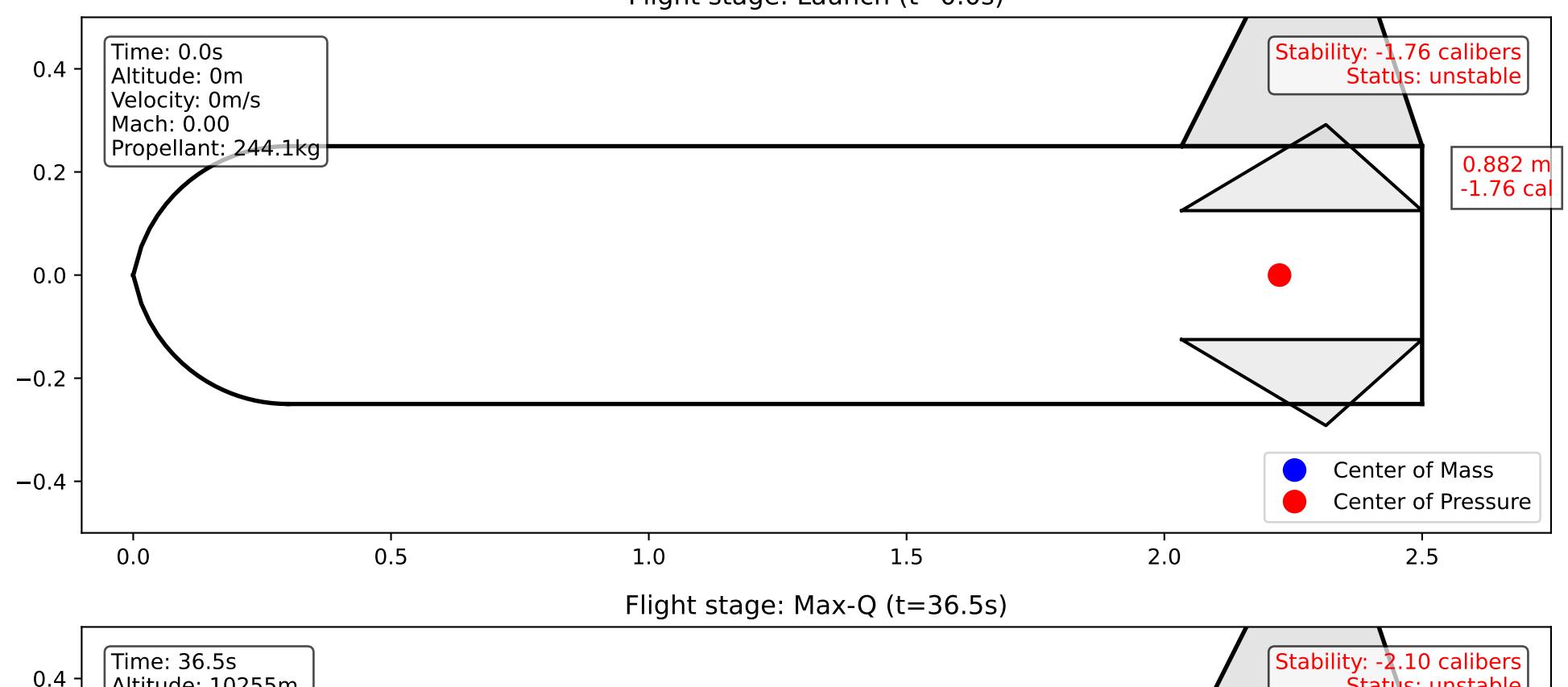
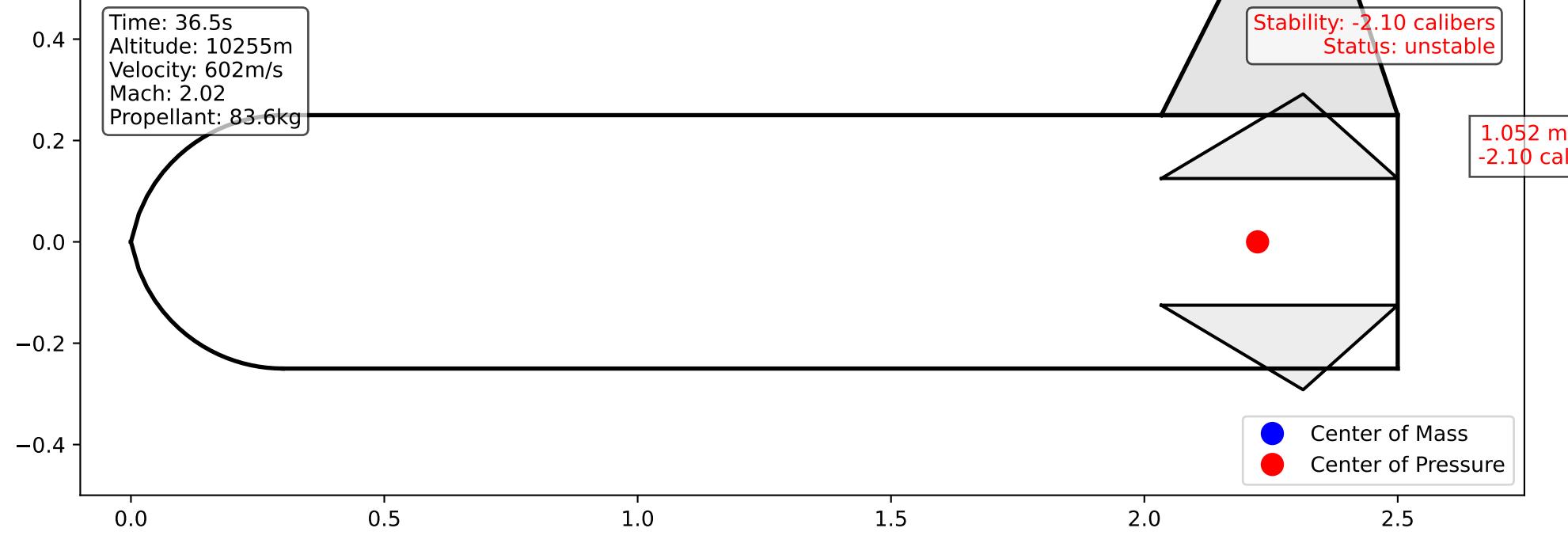


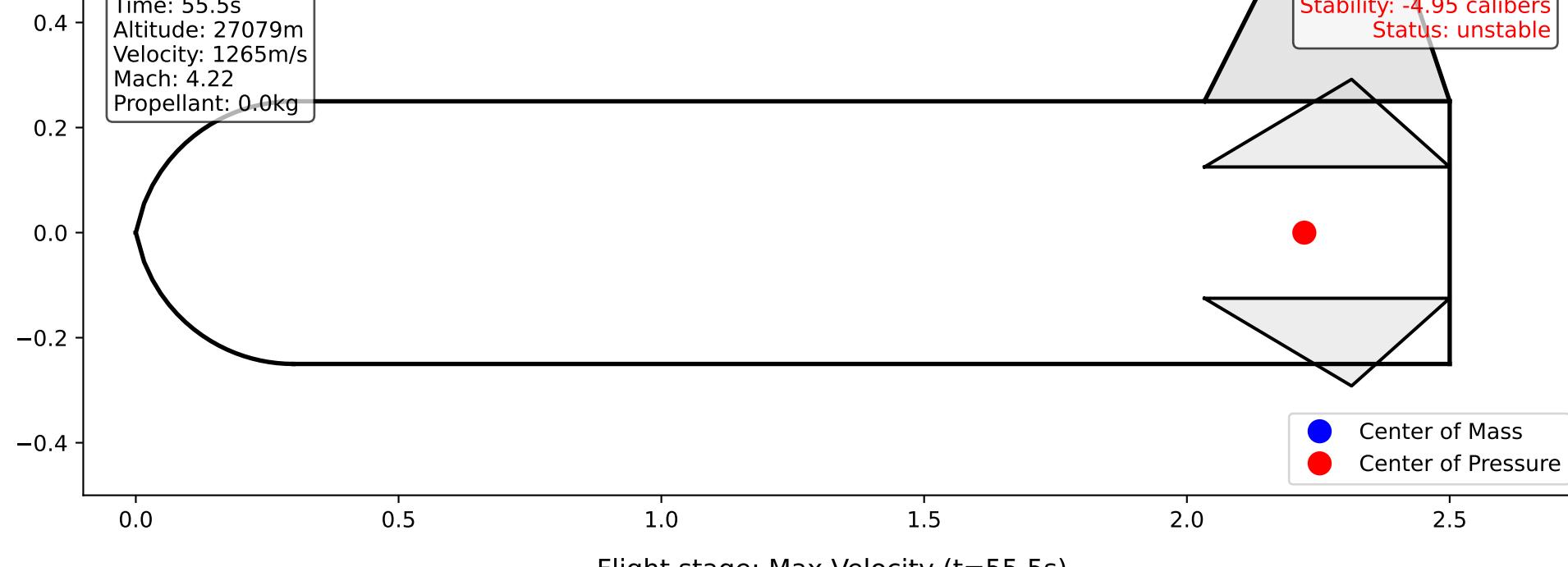
Flight stage: Launch (t=0.0s)



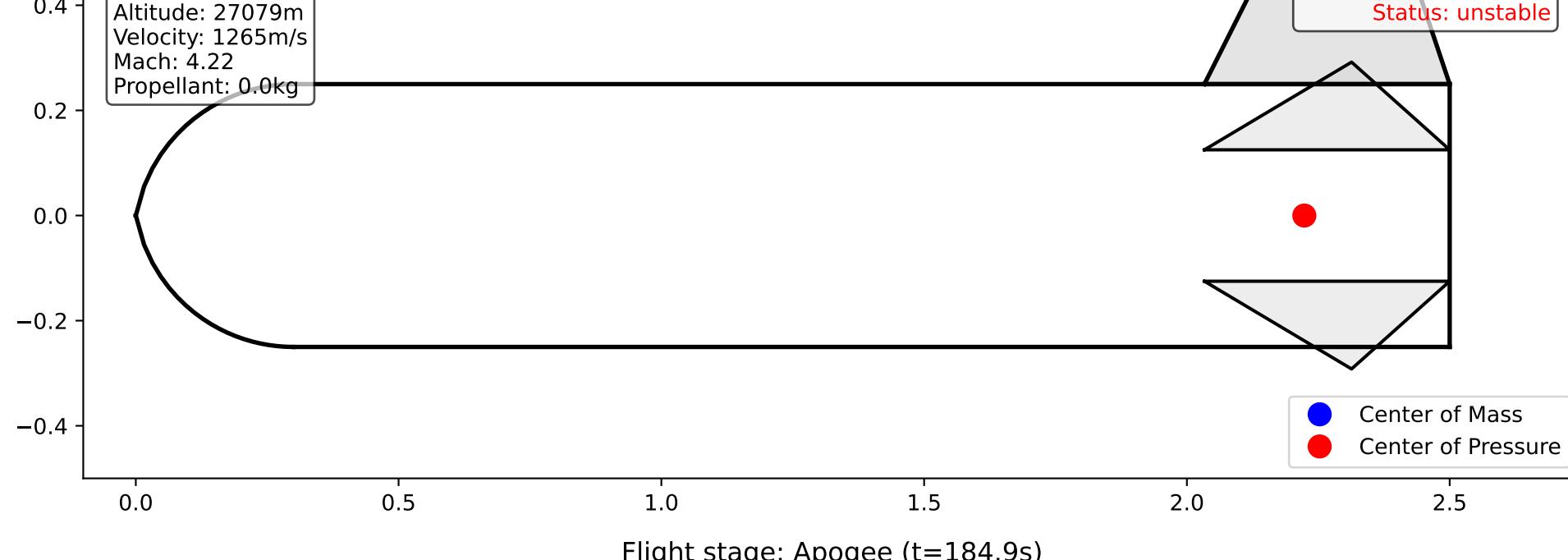
Flight stage: Max-Q (t=36.5s)



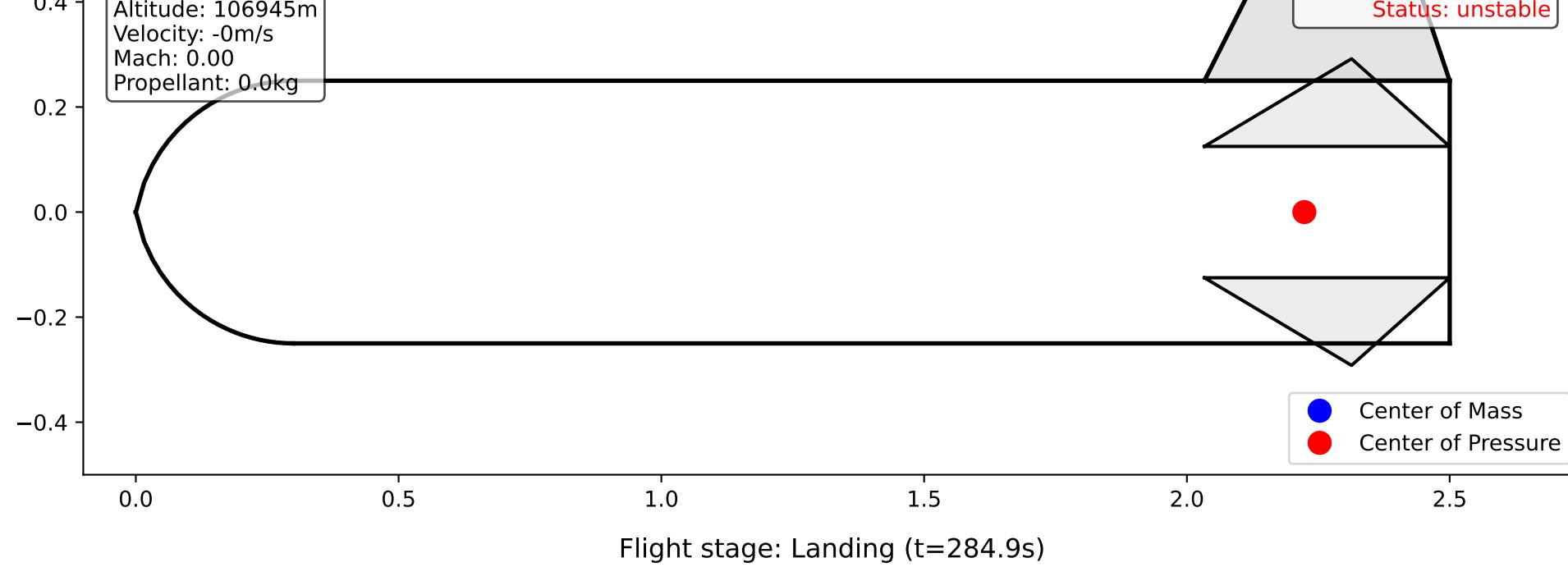
Flight stage: Burnout (t=55.5s)



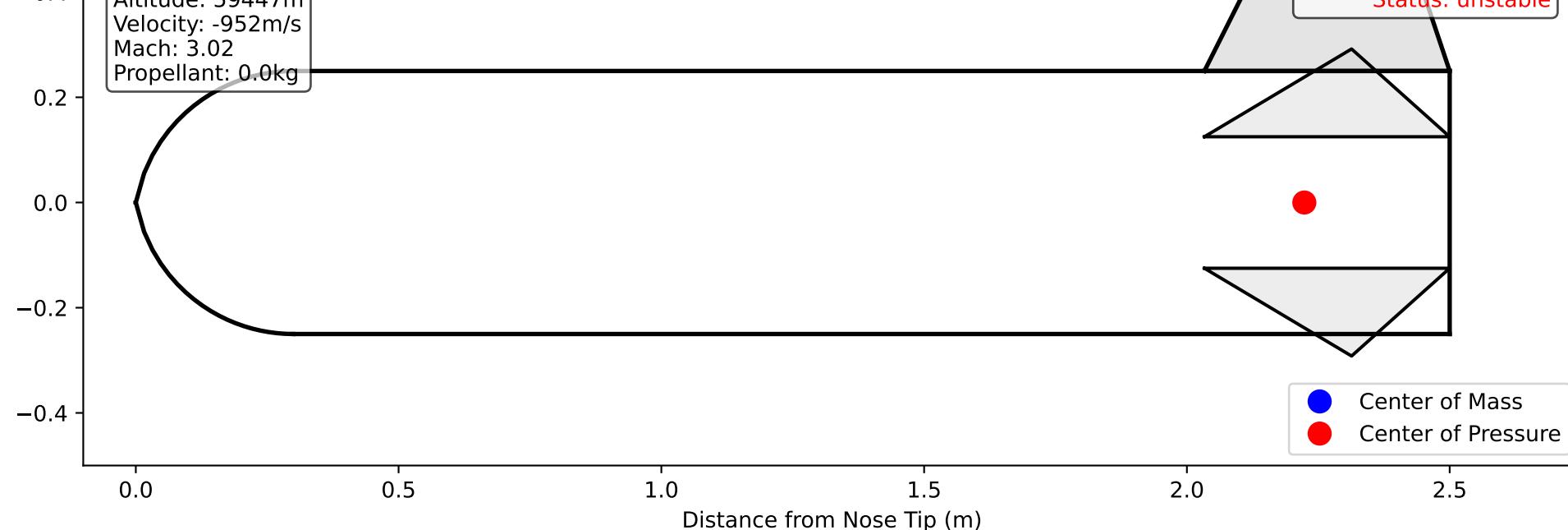
Flight stage: Max Velocity (t=55.5s)



Flight stage: Apogee (t=184.9s)



Flight stage: Landing (t=284.9s)



Distance from Nose Tip (m)

INITIAL CONDITIONS AND PARAMETERS

STABILITY SIMULATION

Generated: 2023-11-13 15:40:58

STABILITY ANALYSIS PARAMETERS

```
=====
STABILITY ANALYSIS PARAMETERS
=====
Flight Stage Analyzed:      all
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	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
fins (calculated)	8.162	2.100