MAE 263F
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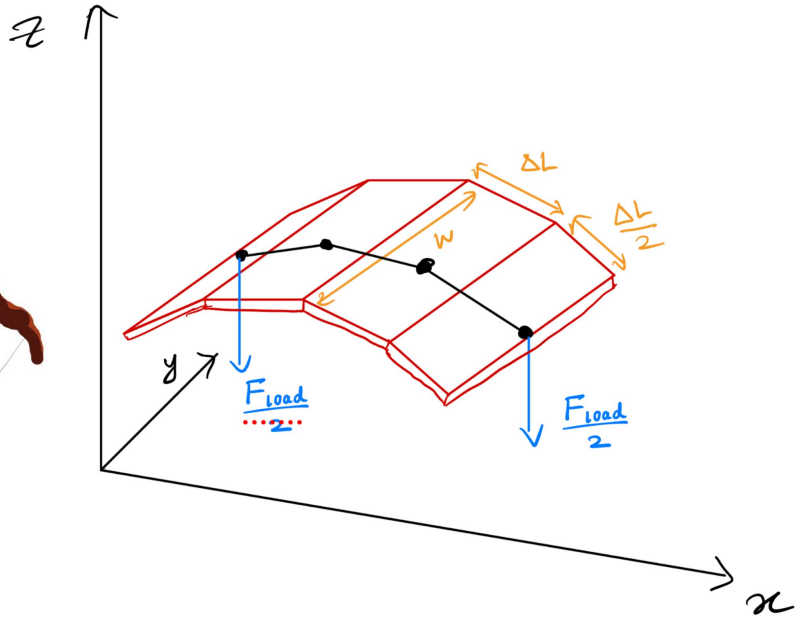
Flexible Structure of Parachutes in Flight

Simulation Implementation Progress: Hydrodynamics

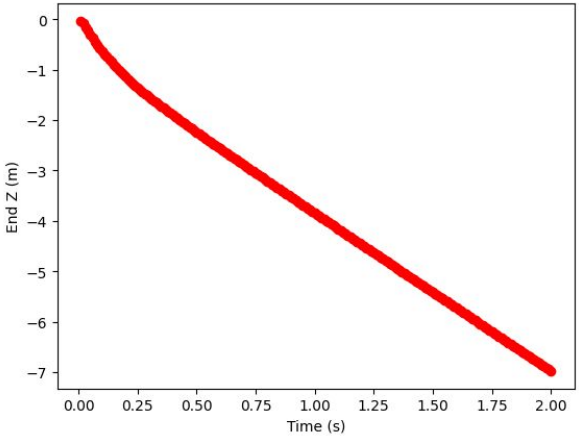
- High Reynolds Number Flow
- C_D = 1.75
- Length = 6 m
- Thickness = 0.003 m
- Width = 3 m
- Load applied at ends

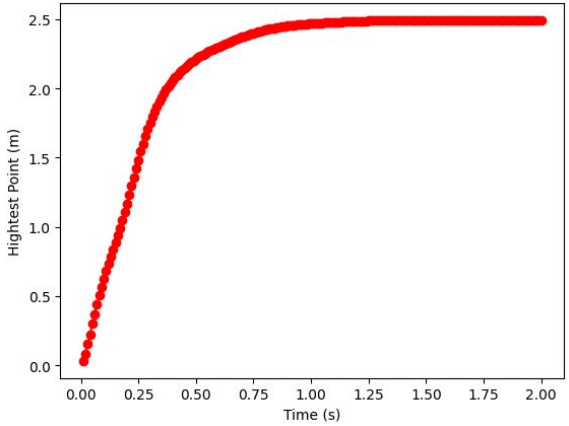


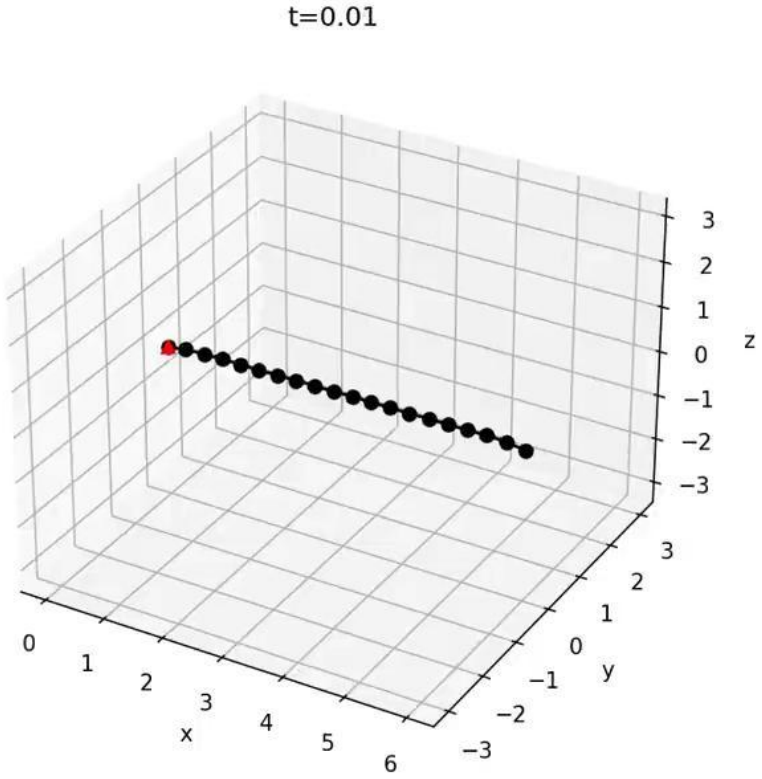
Even Load Distribution

Left = 100 N

Right = 100 N



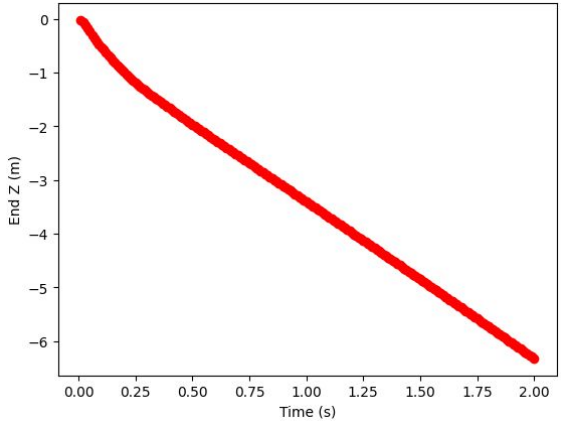


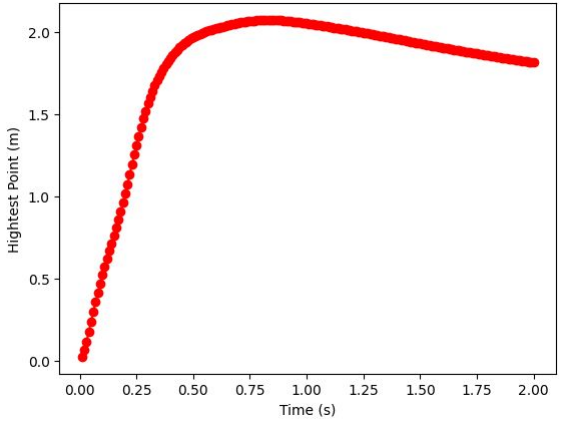


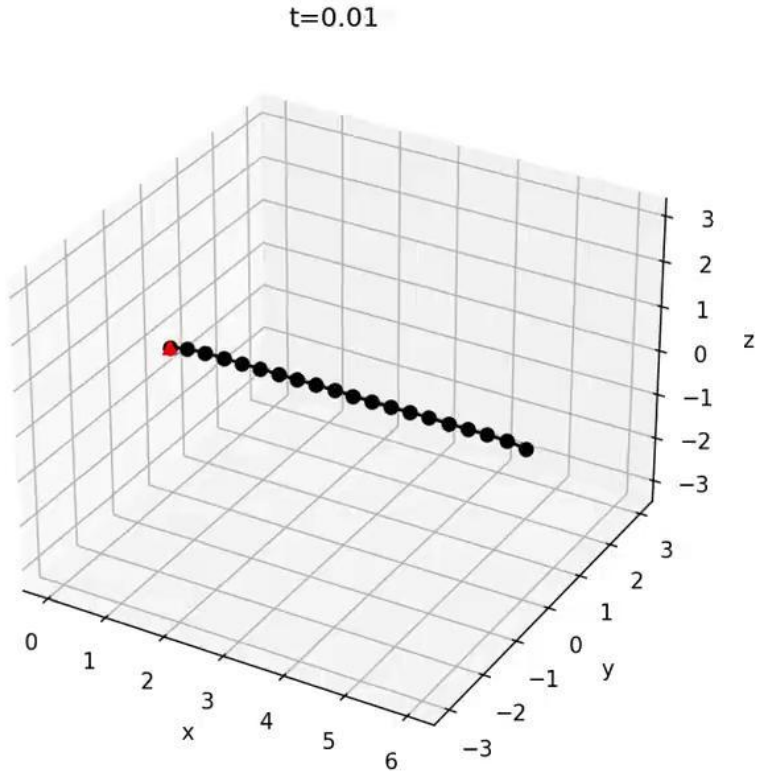
Uneven Load Distribution

Left = 125 N

Right = 75 N







Next Steps

1. Include more load points for a better parachute load representation
2. Load and geometry variable sweep
3. Add the parachute strings?
4. Start from more scrunched configuration?