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# Surface Sampling on Titan

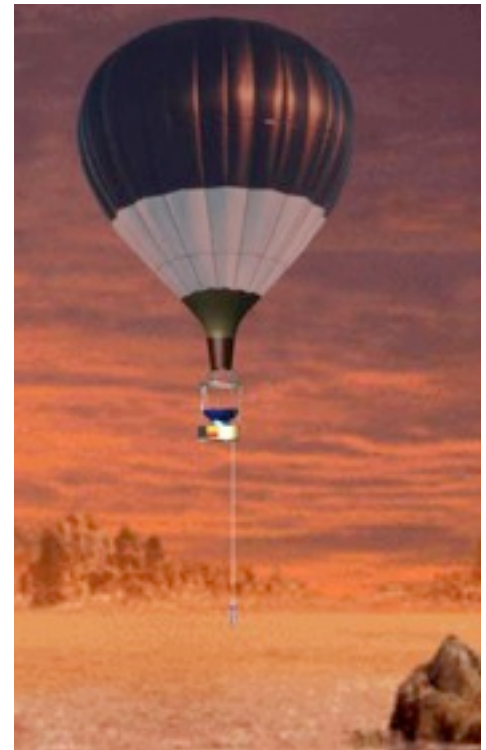
# The Problem

- Sample Titan surface from Montgolfiere balloon
  - Get down to zoom
  - 1<sup>st</sup> accomplish primary objectives



# Solutions

- Tether management system
  - Feasibility
  - Sampling capability (mobility, time)
- One-time-use solutions
  - Darts
    - Feasibility



# Goals

- Develop simplified balloon model based on Titan nominal winds
- Evaluate solutions
  - Tether management
    - Time needed
    - Dispensing limitations
  - Dart-like
    - Mass & power requirements
    - Communication issues
- Axel
  - Develop sampling system
  - Possible implementation on Titan

