Plan Overview

A Data Management Plan created using DMPTool-Stage

Title: Maximum Achievable Heights of Various Party Balloons in Various Weather Conditions

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Funder: National Science Foundation (nsf.gov)

Funding opportunity number: 000-0001

Template: NSF-AGS: Atmospheric and Geospace Sciences

Last modified: 02-18-2016

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Maximum Achievable Heights of Various Party Balloons in Various Weather Conditions

This project will work to generate reliable data for prediciting the maximum achievable altitude of widely available part baloons under various weather conditions. Expected data will include:

- type of baloon (rubber, latex, plastic, silicon)
- shape of baloon (round, orb, globe, animal, letters, numbers, etc.)
- gas used to fill baloon (helium, hydrogen)
- square volume of baloon (in cm3)
- global coordinates of release of baloon
- speed of acension of baloon (meters per second)
- maximum height reached of baloon
- maximum distance traveled of baloon
- and total time spent in flight of baloon.

Data will be captured with PI's logging all relevant ground data, and onboard sensors monitoring all flight data.

Data will be collected into .odt and .rtf formats to preserve openness but also available in a .xls format for those with access to spreadsheet programs. Files will have simple XML metadata descriptors for their online locations, so that finding the data will be easier.

Download of data will be freely avialable for everyone via GitHub. Other researchers will have the ability to upload their own data if they are conducting their own party baloon experiments and adhering to our strict standards. Any uploaded data will be reviewed by the principal PI.

Data will be archived on triple redundant backup SSD hardisks that will be launched into cryostasis in the upper atmosphere attached to a computer shaped party baloon.
