

# CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

**Project Number** 

S0805

Name(s)

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## **Project Title**

# Using a Weather Balloon Apparatus to Monitor Variables in Space

### **Objectives/Goals**

#### Abstract

Our objective was to send a weather balloon into space to make observations of key variables that determine how temperature and light change as you increase altitude.

### **Methods/Materials**

In total we launched 52 weather balloons over the course of 2 school years. All balloons were launched at the same launch site (area) and at a consistent time. All balloons collected data that showed us distance, weather patterns (wind direction, humidity), equilibrium, temperature and light intensity.

#### Results

The 2 hypotheses that were validated were:

Hypothesis #1 As the weather balloon rises in altitude, there will be a decrease in external temperature.

Hypothesis #4 As the weather balloon rises in altitude, there will be a change in direct light.

#### **Conclusions/Discussion**

Our conclusion is that as you increase altitude variables in space change. Our distinct conclusions are that as you increase altitude you decrease in external temperature and increase direct light.

### **Summary Statement**

Our project was to send weather balloons into the upper stratosphere to collect scientific data on distinct weather variables.

### **Help Received**

We would like to thank are teachers, Jim Snyder, and Mr. Bagnell for all their wonderful help and support for without them none of this would have been possible.