



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Cali Mendoza; David Tenney	Project Number S0804
Project Title Using an Upper-Stratosphere Data Collecting Systematic Apparatus to Monitor Atmospheric Phenomena	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Our objective was to send a USDCSA (Upper-Stratosphere Data Collecting Systematic Apparatus) to make observations of key variables that determine how temperature, light, wind, radiation, humidity, and UVB change as you increase in altitude.</p> <p>Methods/Materials In total we launched 54 balloons in the course of 3 year. All balloons were launched from the same launch site (area) and at a consistent time. All balloons collected data that informed us of the above stated key variables.</p> <p>Results The 4 hypotheses that were validated were:</p> <p>Hypothesis #1 As the weather balloon rises in altitude, there will be a decrease in temperature.</p> <p>Hypothesis #4 As the weather balloon rises in altitude, there will be a change in direct light.</p> <p>Hypothesis #5 As the weather balloon rises in altitude, there will be a change in wind speed.</p> <p>Hypothesis #6 During an annular solar eclipse, there will be a decrease in UVB light.</p> <p>Conclusions/Discussion Our conclusion is that as you increase in altitude variables in the upper atmosphere change in very distinct ways. Our distinct conclusions are that during an increase in altitude a decrease in external temperature, and UVB light is observed. Also, during an increase in altitude an increase in direct light and wind speed is observed.</p>	
Summary Statement Our project was to send weather balloons into the upper atmosphere to collect data on varied variables.	
Help Received We have received help and support from our teachers and the community.	