# Colorado Science and Engineering Fair 

## 2023 <br> Individual Project Abstract Form

Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.

Title of Project: Colorado's Precipitation and the Effects on Traffic Accidents
Finalist's Name: Angelina Wan
School and City: Challenger Middle School, Colorado Springs
Sponsor's Name: Selina Webb
Category:Earth \& Environmental Sciences
Division: Junior (6th - 8th grades)
Abstract (250 words or less):
The weather in Colorado is characterized by heavy snowfall in the winter and a dry climate in the summer. The goal of this project is to investigate Colorado's precipitation and its effects on traffic accidents. Data on precipitation over the last 120 years were obtained from the National Oceanic and Atmospheric Administration (NOAA) website, and data on traffic accidents were obtained from the Colorado Department of Transportation (CDOT). It was found that Colorado's annual precipitation can be estimated as $18.0 \pm 7.03$ inches. Precipitation-related traffic accidents account for approximately $11 \%$ of all accidents. Precipitation has a high correlation with traffic accidents in general. Snow/ice, in particular, may cause four to five times more accidents than the same amount of rain. Holidays are another factor for more traffic accidents, especially when they coincide with snow days.

I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.

Finalist's Signature:
Date:

