**US Wildfires due to Lightning**

Group 26

1. **Introduction**

Wildfires are unplanned fires and lightening has always played an outsized role in causing wildfires in the USA. In the span of 2011 to 2020, there were an average of 62,805 wildfires annually and an average of 7.5million acres impacted annually. Analysis on this wildfire data can help us illustrate past U.S. wildfire activity and visualize further for hidden insights.

1. **Data Description**

This dataset contains 15 columns and 278k rows. The columns in the dataset provides information on the occurrence of the wildfire, its geographical location, cause of occurrence, time taken to extinguish the fire and fire size recorded from the year 2004 to 2015.

Table

Description automatically generated

1. **Proposed Analysis**

With the use of the dataset having raw data of wildfires in the USA occurring between 2004 - 2015 that had lightning as the main cause, we aim to analyze and perform predictions and thus gain hidden insights on wildfires across the United States of America. The analysis would include various parameters of the wildfire and help observe the trend of its geographical occurrence.

1. **Analysis Methods**
2. **Milestones**

Data Cleaning – Removing redundant and null values, converting categorical to numerical values.

1. **References**

[1] Facts + Statistics: Wildfires <https://www.iii.org/fact-statistic/facts-statistics-wildfires>

[2] Lightning could spark more California fires as world warms <https://calmatters.org/environment/2021/09/california-fires-lightning/>

[3] Wildfire Statistics <https://sgp.fas.org/crs/misc/IF10244.pdf>