# PROJECT 2 PROPOSAL

### **GROUP 3:**

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## Dataset 1: California Wildfire Incidents (2013-2020)

Source: https://www.kaggle.com/datasets/ananthu017/california-wildfire-incidents-20132020/data

Important Columns: Incident Name, Start Date, End Date, County, Acres Burned, Latitude, Longitude.

**Size:** This dataset contains many records, reflecting the frequency of wildfire incidents in California from 2013 to 2020: 1636 rows × 40 columns.

**General Purpose:** The purpose of collecting this data is to track and analyze wildfire incidents in California over the specified period. It provides information about the location, duration, and impact (in terms of acres burned) of each wildfire incident.

#### Visualization Plan:

**Dot Plot:** Each wildfire incident will be represented as a dot on a map of California, with the size of the dot indicating the acres burned. This visualization will provide insights into the spatial distribution and severity of wildfires across different counties in California over the years.

**Density Plot:** Using the geographical coordinates, a density plot will be created to visualize areas with higher concentrations of wildfire incidents. This will help identify regions that are particularly prone to wildfires.

## **Dataset 2: Earthquake Dataset**

Source: https://www.kaggle.com/datasets/warcoder/earthquake-dataset

Important Columns: Date, Time, Latitude, Longitude, Depth, Magnitude, Location Description.

**Size:** This data set contains many records, reflecting the frequency of earthquake events worldwide: 1000 rows × 19 columns.

**General Purpose:** The purpose of collecting this data is to monitor and study earthquake events occurring globally. It provides information about the timing, location, depth, and magnitude of each earthquake event.

### **Visualization Plan:**

**Dot Plot:** Each earthquake event will be represented as a dot on a world map, with the size or color of the dot indicating the magnitude of the earthquake. This visualization will provide an overview of the distribution of earthquakes across different regions of the world.

**Density Plot:** Using the geographical coordinates, a density plot will be created to visualize regions with higher seismic activity. Areas with more densely clustered dots will indicate regions that experienced more earthquakes or earthquakes with higher magnitudes.