# California Wildfires Dashboard - Project Overview

Project Repository: https://github.com/MThorpester/California-Wildfires.git

It certainly seems that California wildfires have become ***larger, more frequent and more destructive*** in recent years…..but have they really? That is the central question that this project seeks to answer.

We will do this by providing a dashboard to explore the recent history of wildfires in California alongside drought trends.

# Datasets

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| Source | Link | Description |
| Kaggle | <https://www.kaggle.com/ananthu017/california-wildfire-incidents-20132020> | Fire incidents from 2013-2019 (scraped from <https://www.fire.ca.gov/incidents/> ). |
| NADM | <https://droughtmonitor.unl.edu/Data/DataTables.aspx> | % of CA in drought from 2000-present. |

# Key Metrics

### Wildfire Incident Metrics

Several different metrics will be displayed by this dashboard, but the key metrics that will help answer our primary question are:

* Are they getting larger? Average Acreage Burned per incident per year
* Are they becoming more frequent? # of Wildfires per Year
* Are they becoming more destructive? # of Structures Destroyed or Damaged

### Drought Metrics

The key metric for exploring the potential relationship between drought conditions and wildfire activity will be the % of California experiencing various levels of drought conditions each year.

# Key Visualizations

### Wildfire Incidents Map

This visualization is the heart of the dashboard. It provides a map view of CA, with a county border layer. User can select a year (or see all years) to see that year’s fires on the map. The map uses Marker Clusters so that clusters of fires can be explored.

### Annual Wildfire Analysis

This visualization provides an interactive bar chart where the user can select a county (or all CA) and see the number of wildfires per year alongside the number of acres burned per year and potentially other variables of interest (% of CA in drought). It also includes interesting stats for the area selected.

### Drought Trends

This visualization provides a stacked bar chart of drought levels by year.

Inspiring Visualizations







