

# Wildfire Risk in Orange County

## Project Objectives

- Use machine learning to predict the risk of wildfires in Orange County and surrounding areas.

## Variables

- Temperature
- Soil Moisture
- Humidity
- Dryness of plants: <https://www.drought.gov/topics/vegetation>

## Data Sources

### **Wildfire Risk**

- <https://firms.modaps.eosdis.nasa.gov/usfs/map/#d:24hrs:@-100.0,40.0,4.0z>
- <https://projects.caprado.org/california-fire-history/#7.32/40.515/-122.008/10.1>
- <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones>
- <https://wildfirerisk.org/explore/overview/06/06059/>
- <https://wfca.com/wildfire-articles/fire-prediction-technology/>

### **Temperature**

- <https://weatherspark.com/countries/US/CA>
- <https://www.currentresults.com/Weather/California/average-annual-city-temperatures.php>

### **Soil Moisture**

- <https://www.drought.gov/data-maps-tools/cpc-soil-moisture>
- [https://www.cpc.ncep.noaa.gov/products/Soilmst\\_Monitoring/US/Soilmst/Soilmst.shtml#](https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#)

### **Humidity**

- <https://www.usairnet.com/weather/maps/current/california/relative-humidity/>
- <https://www.currentresults.com/Weather/California/humidity-annual.php>

### **Plant Dryness**

- <https://www.drought.gov/topics/vegetation>

