

The file `StudyArea.csv` contains wildfire data from 1980 to 2016 for the states California, Oregon, Washington, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, and New Mexico. There are about 400k fires and for each one the dates, location, and other relevant data is included.

In this example we analyze the data from this file to know what states have had most large fires and if the number and size of the fires has been increasing over the years. Use *R* and libraries from `tidyverse` to complete the following

1. Read and clean the dataset
2. Subset the data by selecting the columns `FIRENAME`, `CAUSE`, `YEAR`, `STATE`, `TOTALACRES`.
3. Find the number of fires in each state. What states have had the most?
4. How many fires exceed 25000 acres in California?
5. How many fires exceed 1000 acres during 2016? during 2010-2012? in the last 3 years?
6. When does the largest fire occur in Arizona?
7. Show all fires exceeding 25000 acres during 2016, sorted by size.
8. Use column `STARTDATE` to create a new column for the day of the year the fire started.
9. Use column `YEAR` to create a new column for the decade when the fire started.
10. Construct a barchart to show how the average size of fires has changed over decades.