**Drought in the West – SYTYCDS18 Student Project**

Recently, California has been subject to substantial drought, leading to increased risk of forest fires and additional need for agricultural water. The drought is so severe that even times of substantial precipitation does not change the drought forecasts (https://www.sfgate.com/bayarea/article/California-drought-monitor-map-dry-storms-12738517.php).

Drought is strongly related to climate change, yielding more extreme precipitation and increased temperature (https://www.edf.org/blog/2014/10/02/how-scientists-linked-california-drought-climate-change).

Looking at long-term data on the Palmer drought severity index (negative values are drier) (https://www.ncdc.noaa.gov/cag/statewide/time-series/4/pdsi/12/12/1895-2018), is there a strong indication that droughts are getting worse over time? Does California seem to be different from Washington?

At the same data site one can also find California and Washington annual precipitation. Does it show substantially less rain over time? Is it related to the drought index?

Prepare a powerpoint presentation that describes the background idea behind your project, the data and your ananlysis. What results did you find? Any caveats? What do you recommend for follow-up investigations?

Products: (1) Produce a press release for the results of your study, explain appropriate statistical detail. (2) Produce five facebook posts about the California drought problem given the results of your study. (3) Record a short NPR-type news story (2 minutes max) describing the results of your study with appropriate statistical detail.