**Project Proposal**

**● A brief articulation of your chosen topic and rationale**

* We are looking at historical data for forest fires in the United States to show how they have changed over time with regards to several factors including size and frequency.

**● What questions will we ask of the data?**

1. How has the frequency of forest fires in the U.S. changed overtime? Are there specific periods with noticeable increases or decreases in fire occurrences.
2. Is there any correlation between temperature, rainfall, and fire frequency or acres burned?
3. Have acres burned increased over time? Has fire frequency or duration increased over time? Or all of the above?
4. Are certain regions of the U.S. more prone to fires than others? How have fire-prone areas changed over time?

● **A link to your dataset(s) and a screenshot of the metadata, if it exists.**

(metadata)

<https://www.arcgis.com/sharing/rest/content/items/6059c1a4dca749d393e33ee5f8a0cbaf/info/metadata/metadata.xml?format=iso19139>

(license)

[Deed - CC0 1.0 Universal - Creative Commons](https://creativecommons.org/publicdomain/zero/1.0/)

(JSON Data - link - still in amendment to make shareable in url)

[https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW\_FireOccurrenceAndPerimeter\_01/MapServer/9/query?where=1%3D1&outFields=\*&outSR=4326&f=json](https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_FireOccurrenceAndPerimeter_01/MapServer/9/query?where=1%3D1&outFields=*&outSR=4326&f=json)

● **Three or four screenshots of relevant, “inspiring” visualizations that show your creative ideas**

**(visualization track only)**

* A leaflet map that has several layers
* A line graph showing fire frequency over time
* Data showing Temperature/Drought/Fire over time (TBD how this will come together)

● **A sketch of the final design:**

From Daniel’s note:

1. Convert pandas dataframe to CSV in python
2. Import to pgAdmin4 and load into SQL to create a database.
3. Then use sqlalchemy and flask to create web application in python language.

● **A link to the primary GitHub repository where you’ll be housing your work**

* **Roles:**