

- Topic
  - a. UFO Sightings
- Rationale
  - a. Fun
  - b. We thought that the map on <https://nuforc.org/> should have layers or toggles or other filters for the more curious users to find patterns.
    - Question: Do any patterns change when filters are applied to markers? Do any patterns remain the same when filters are applied to markers?
  - c. It is a solid source meeting all requirements.
- Dataset: CSV from Kaggle
  - a. Example of Metadata from Oct., 2024

**NUFORC Reports for Month 202410**

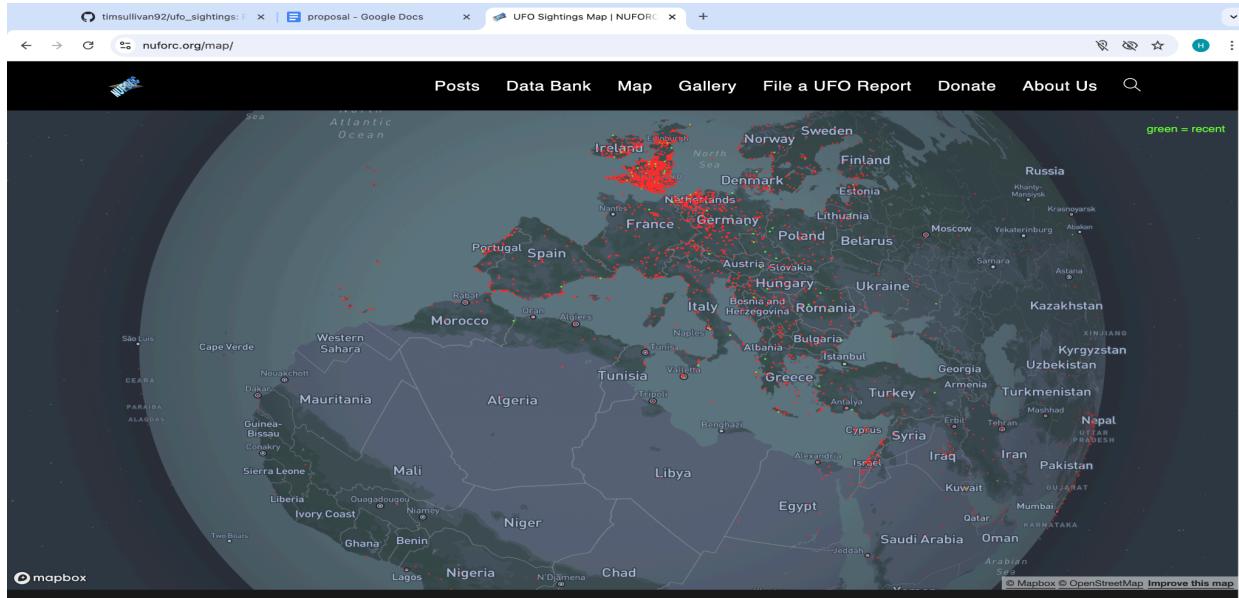
Search:

LINK	OCCURRED	CITY	STATE	COUNTRY	SHAPE	SUMMARY	REPORTED	MEDIA	EXPLANATION
<a href="#">Open</a>	10/14/2024 23:04	Bixby	OK	USA	Light	Extremely high lights in a triangular formation	10/14/2024		
<a href="#">Open</a>	10/14/2024 19:14	Georgetown	TX	USA	Cigar	Noticed the trail in the sky so got my phone out and zoomed in and took the photo.	10/14/2024	Y	Aircraft
<a href="#">Open</a>	10/14/2024 14:50	Pittsburg	KS	USA	Changing	White flashing circle (?)	10/14/2024	Y	Balloon
<a href="#">Open</a>	10/13/2024 21:33	Broken Arrow	OK	USA	Triangle	Faint white line, in the shape of a wide V, silent, flying from north to south at approximately 5k feet	10/13/2024		
<a href="#">Open</a>	10/13/2024 23:58	Alva	FL	USA	Light	Very slowly moved across the sky for about 5 seconds, stopped for 20, slowly got dim, then abruptly flew away and disappeared.	10/13/2024		
<a href="#">Open</a>	10/13/2024 20:45	Laurel	MD	USA	Light	White circular orb/sights in sky	10/13/2024	Y	Aircraft
<a href="#">Open</a>	10/13/2024 17:53	Batumı	Adjara	Georgia	Oval	One object, metallic colour, was moving slowly above the sea, far in the sky, above the planes and clouds.	10/13/2024	Y	Searchlight
<a href="#">Open</a>	10/12/2024 13:30	Urbana	IL	USA	Rectangle	It was hovering then shot up and disappeared.	10/12/2024		
<a href="#">Open</a>	10/11/2024 22:35	Lödö	Województwo Śląskie	Poland	Other	The object in the shape of a V moving slowly above the building.	10/12/2024		
<a href="#">Open</a>	10/11/2024 20:00	Norwalk	CT	USA	Orb	Two orbs of light at a fixed distance apart, too far to be a plane's wing tips - descending/gliding away from any airport into a valley	10/12/2024		
<a href="#">Open</a>	10/11/2024 19:30	Thorndon	England	United Kingdom	Formation	Formation very fast.	10/12/2024		
<a href="#">Open</a>	10/11/2024 19:15	Vilonia	Arkansas	United States	Orb	This has showed up 3 nights in a row along with a flash of light in another area.	10/14/2024		

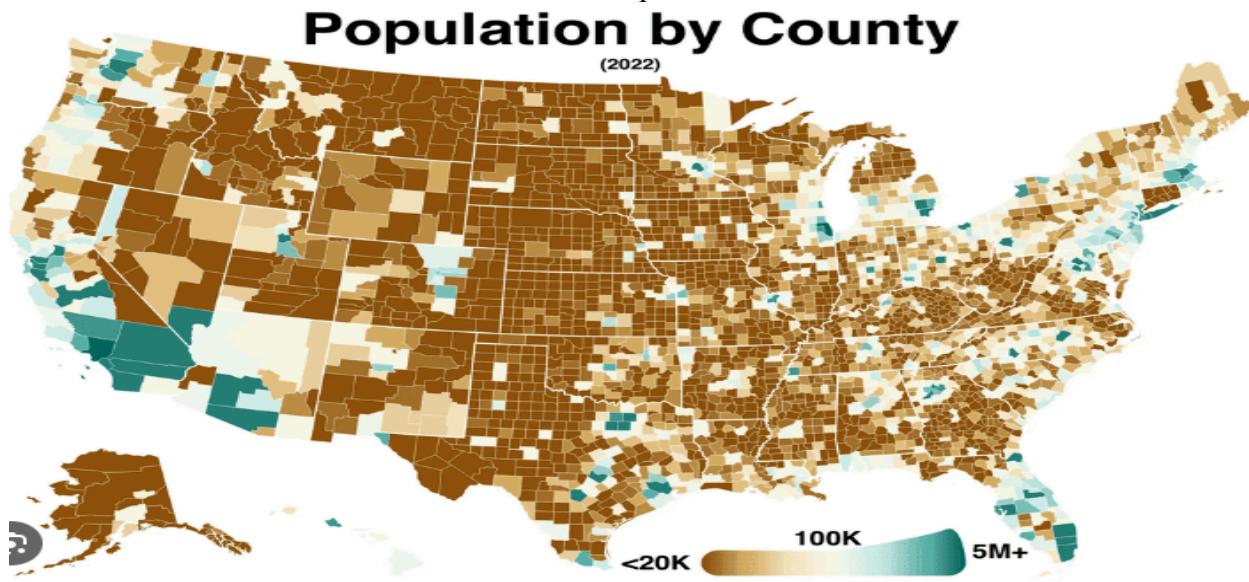
(Source: <https://nuforc.org/subndx/?id=e202410> from Tim)

- Inspiration/Sketches:

1. Our inspiration is <https://nuforc.org/map/> (which uses OpenStreetMap and is zoomed out, enough to see the entire globe). Users can interact with it by zooming in, clicking on markers to see popups with brief descriptions and links to further details; but more curious users are unable to find any patterns since there are no filters for the markers.

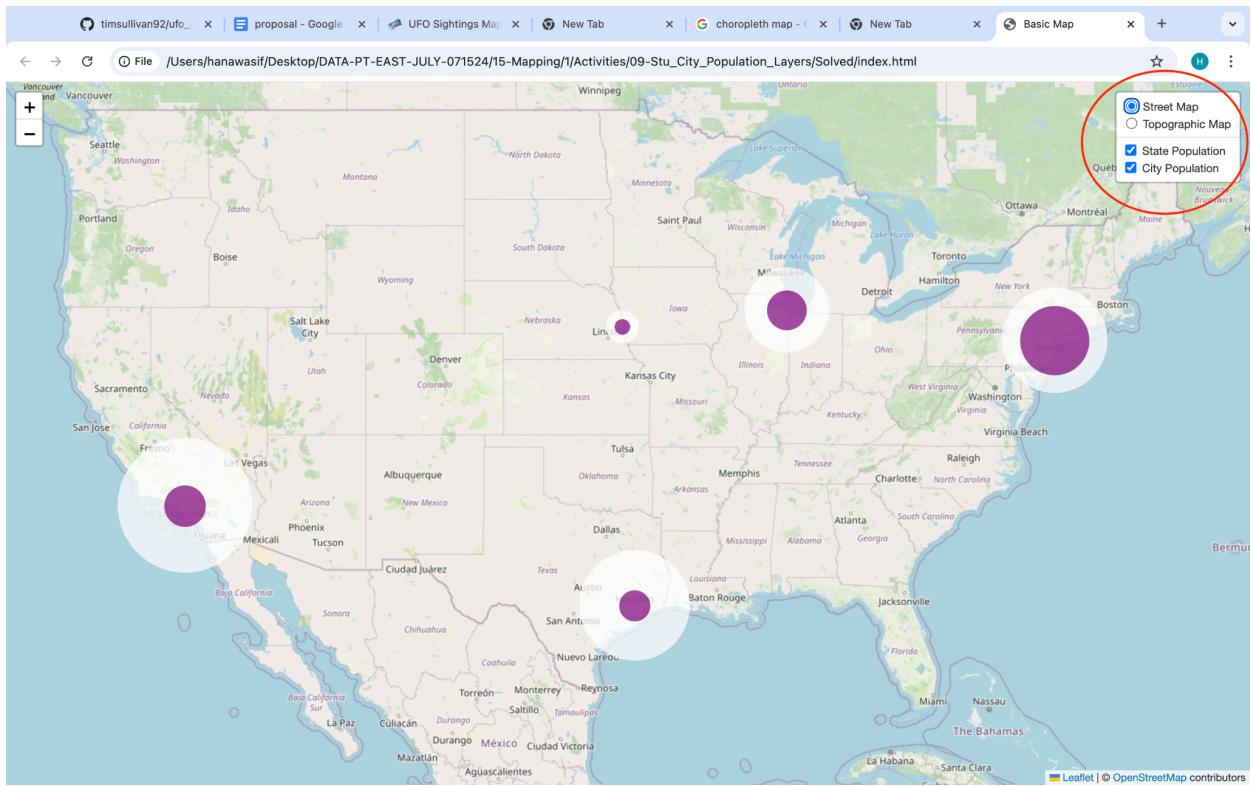


- To safeguard against scope creep, we'll focus our sketch on UFO sightings in the U.S., only. It makes sense, too, since most reports before 1995 were received through the U.S.'s mail. We may have views of the map as (1) a heatmap to emphasize how frequency of reports vary across regions or (2) a choropleth to show the same thing by county.
  - Choropleth: Our current dataset is divided by city, so we will need to find a dataset which can be our cross-reference for which cities belong to which county. In our ERD, our current dataset will be the child, and our cross-reference will be the parent.



Source: <https://nuforc.org/subndx/?id=e202410> from Tim)

3. We are thinking about including our 3 views of our final visualization in 3 layers or toggles or other filters.



(Source: Module #15's 1<sup>st</sup> Day's 9<sup>th</sup> Activity)

- Link to Repository
  - [https://github.com/timsullivan92/ufo\\_sightings](https://github.com/timsullivan92/ufo_sightings)
- Tasks in Chronological Order
  - Tim
    - GitHub
  - Cameron
    - Finding datasets for (1) civilians' sightings and (2) data from military
  - Instructor
    - Finding cross-reference for counties
  - Hana
    - Submitting proposal
    - Cleaning civilians' sightings with pandas
  - Rebekah
    - Cleaning data from military with MongoDB
    - Storing data in database
    - ERD for datasets and cross-reference for counties
  - Tim
    - HTML and CSS
    - Map for the U.S. with layers
  - Jordan
    - Heatmap
  - Hana and Rebekah
    - Merging civilians' sightings with cross-reference for counties
    - Certain coordinates were cleaned from civilians' sightings due to .dropna(), so Rebekah will make calls to an API for their counties.
    - Choropleth
  - Cameron
    - Map of the world or map for data from military
    - Edit README with (1) an overview of the project and its purpose, (2) references for the data source(s), and (3) references for any code used that is not your own.
  - Tim
    - Edit README with instructions on how to use and interact with the project.
  - Hana
    - Edit README with at least one paragraph summarizing efforts for ethical considerations made in the project.