Wanna See a UFO?

Team Members: Connor MacKenzie, Tom Sipe, Marisabel Matta-Hyams, Amy Wagar Cinch, Brian Bates

People want to see aliens! Other than a real-life visit, the next best option is to sight a UFO. Using the dataset on UFO sightings from the National UFO Reporting Center, we plan to do an analysis and gain insight into trends in UFO sightings from around the world. The data contains info on location, date/time, duration of the sighting, reported shape, and any comments from the observer.

Our analysis will help us determine the best way to get yourself right into a good old-fashioned UFO sighting with a story worthy of the front page news.

We have a variety of questions to look at and start our analysis, each of which have tie ins to other datasets, data cleaning, and other analysis techniques.

Does the population of city/state/country affect the rate of UFO sightings?

Using the UFO data and population from the US Census or other datasets, we plan to see if a higher population creates a higher rate of UFO sightings, or if a more sparsely populated area produces more UFO sightings.

Team Member: Tom

What are the most common shapes?

Cleaning up the shape data of our dataset to combine similar values, we can run an simple analysis to find what the most sighted shapes of UFO are.

Team Member: Julie

What dates/times produce more UFO sightings?

By grouping our data into specific date periods (months, seasons) and time periods (day vs. night, dusk vs. dawn, middle of the night, etc.), we can narrow down what the best dates/times to be looking up at the sky are.

Team Member: Marisabel

Are there any common themes in the descriptions of the UFO sightings?

The comments provided by the observers can be analyzed for complexity using a word count, average word length, and possibly other features to help find more probable encounters that are worthy of a story.

Team Member: Connor

The results of these different analyses can be combined to help us determine how best to take part in a UFO sighting, and help us prepare for the experience. We can use any proposed locations we are considering (like our hometowns) and figure out if they would have a high or low rate of UFO sightings, what kind of shapes to be on the lookout for and at what times; as well as how immersive the experience might be based on the analysis of the descriptions for similar areas.