Our team is Yukie and Jess. Welcome to our presentation “How Much Do We Know About Meteorite Landings On Earth?” Before we go into our data research and findings, we wanted to make sure that everyone knew what meteorites are, to put our data into a better context.

If you’ve ever gone outside on a dark, clear night and seen light shooting across the sky, you’ve seen a meteor entering the earth’s atmosphere. Meteors are found in the trails of materials that a comet leaves behind as it travels through space. Often times, the earth’s path through space passes through these trails of debris.

Most of the time, these pieces are small enough, or made up of materials that burn up or evaporate when they enter Earth’s atmosphere. But sometimes, those pieces of debris make it through the atmosphere, all the way to Earth’s surface. This is a meteorite.

Now that we’ve introduced you to meteorites, we’ll move into the data. In our project to explore meteorite landings, we used data from Nasa, Data.Gov and the NYT API.

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In Question 7, we were asking if there was any pattern in meteorite landings in the Northern vs Southern Hemispheres. We looked at the data over all, and got this result: The southern hemisphere had about 75% of the meteorite landings overall, while the northern hemisphere had about 25%. When we broke it down by century, there wasn’t as much of a clear pattern.

We also decided to look at meteor size in the northern vs. southern hemispheres, and found that the average mass of meteors was much higher in the Northern hemisphere as compared to the southern hemisphere.

Now we will move to our research into New York Times articles.

We searched the New York Times “Article Search” API using the keyword “meteorite.” We found 11 articles, ranging from 2003 to 2020.

Using a For Loop, we looped through the JSON information and pulled out Abstract, Headline, Lead Paragraph, Publication Date and URL. With this data, we formed a dataframe, which allowed us to skim through the information about each article more easily.

After locating each article using the URL, we found two articles that had some interesting information or relevance to our research into meteorites.

The first article, titled gave some information about the potential for the meteorites that actually hit the earth to be much older than we think, due to the fact that the earth’s movement through a comet’s path is usually NOT the most recent sighting of that comet.

The second article, discussed the resale value of meteorites that have been found. This article discussed meteorite values being in a range from $5 to hundreds of thousands of dollars, depending on the size and condition. Some are even valued for their aesthetic value, as seen in the lower left photo.