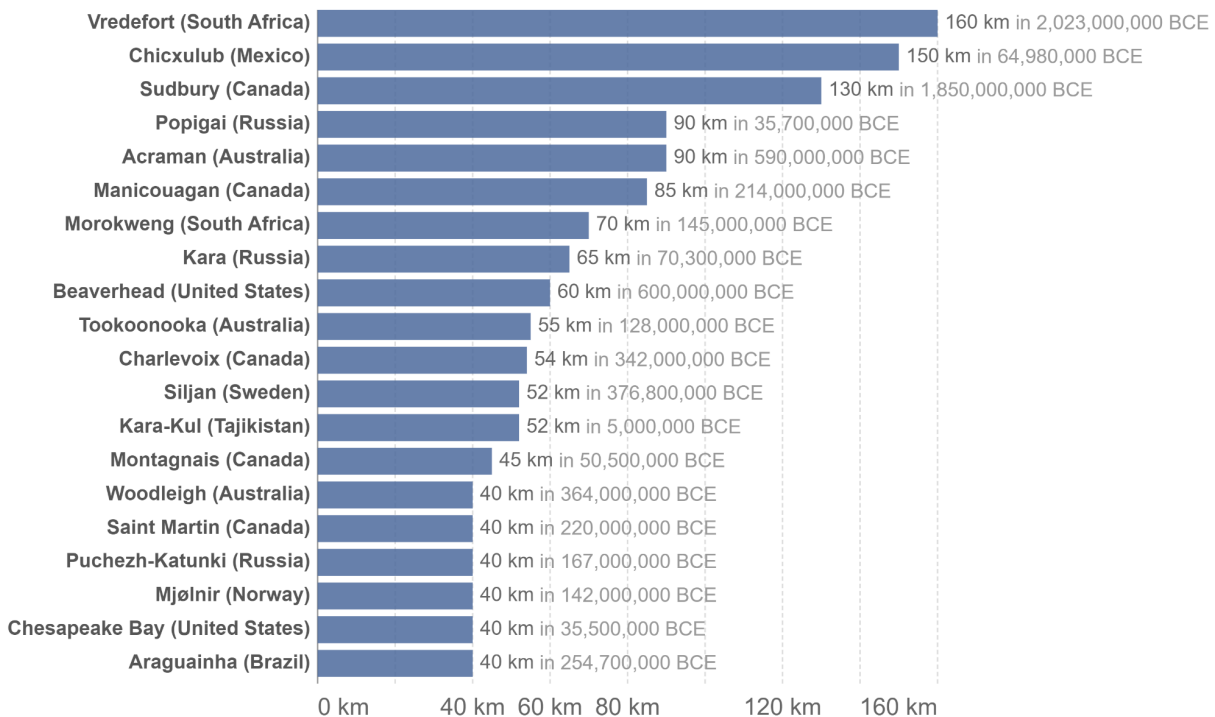


My GitHub username is shafere, and the materials for this project can be found at this repo: <https://github.com/shafere/cs215project5> .

Original image:

## Largest confirmed impact craters on Earth by diameter

Our World  
in Data



Source: Earth Impact Database (2022)

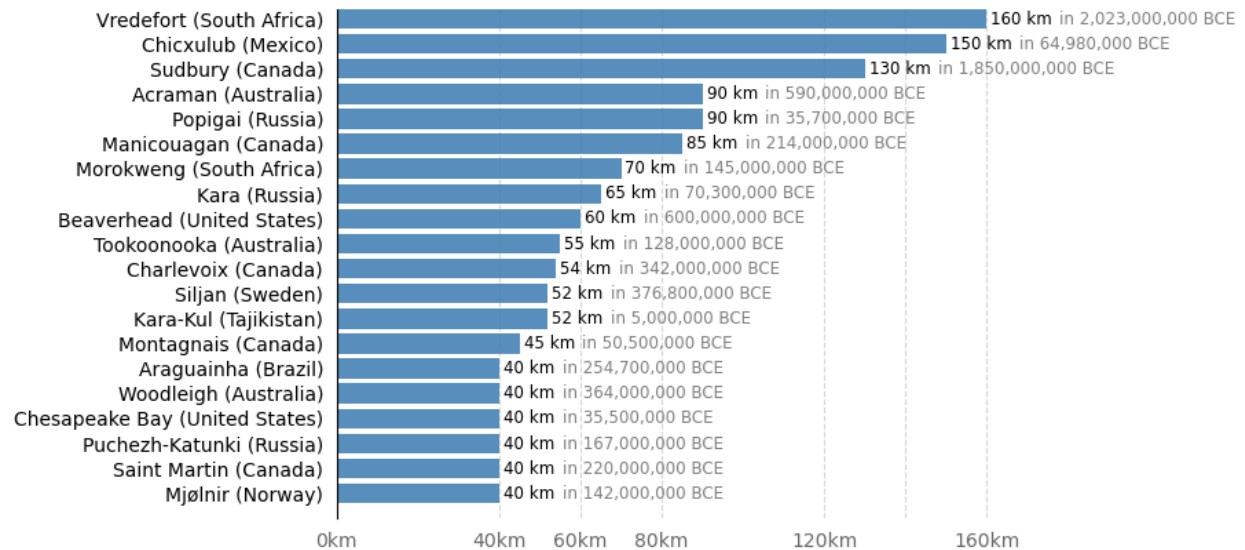
OurWorldInData.org/space-exploration-satellites • CC BY

This visualization is showing some of the largest craters from asteroid impacts that have been discovered on Earth, and can be found here: <https://ourworldindata.org/grapher/largest-impact-craters>. I picked this chart because I've always been interested in things related to space, and the sheer size of some of these craters caught my eye. The chart itself is fairly simple, we can see that it is a horizontal bar chart where the y-axis holds the location of the crater, the x-axis is the size of the crater diameter, and there are data labels on each bar showing the estimated time of the impact that caused the crater.

## My recreations:

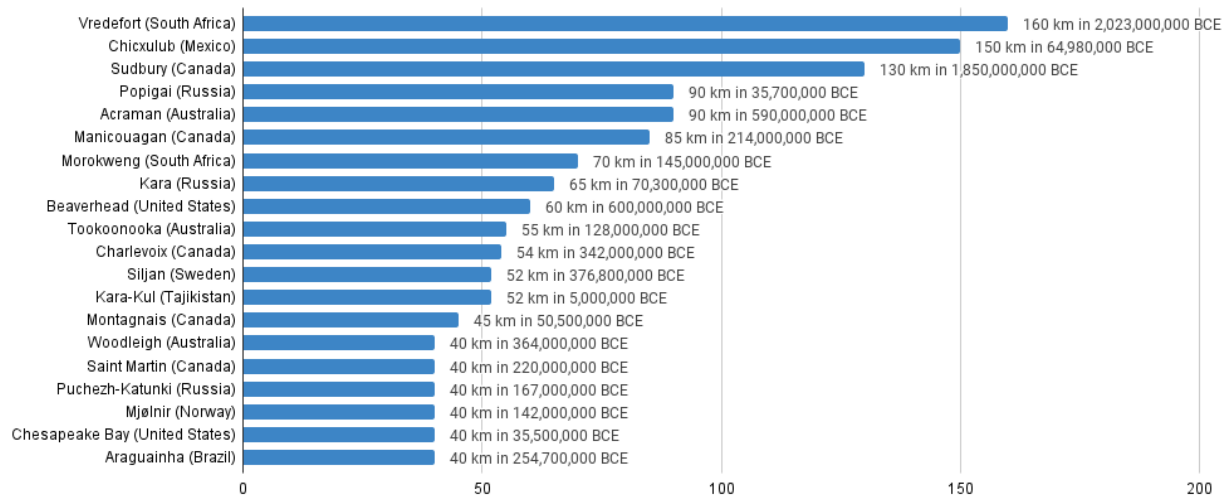
## Matplotlib:

### Largest confirmed impact craters on Earth by diameter



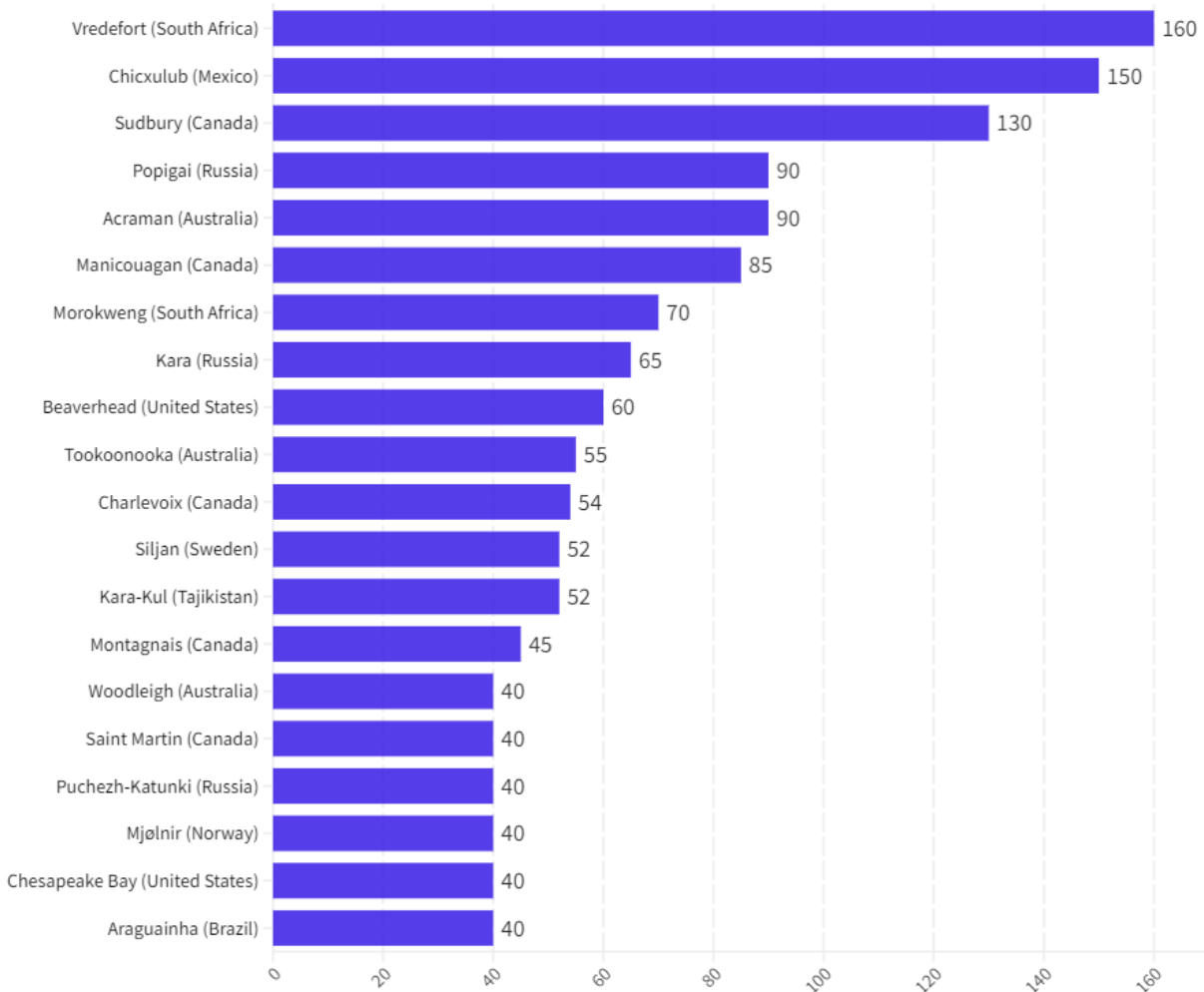
## Google Sheets:

### Largest confirmed impact craters on Earth by diameter



## Flourish:

Largest confirmed impact craters on Earth by diameter



## Reflection:

After recreating the charts in the three different platforms, I definitely think that Matplotlib was my favorite to use. I'd say that this method is by far the most customizable, as you are given control over pretty much every detail you can think of, although it can at times be difficult to figure out how to change something you want. The easiest platform to work with was probably Flourish, as I got a chart that somewhat resembled the reference image almost immediately after importing the data file. However, I found that it was quite difficult to customize the chart to get what I wanted in Flourish, and I wasn't able to figure out how to add the year of the impact to the data labels. Flourish is also the tool that I had the least amount of experience with, so it's possible that with more knowledge the tool would be much better to work with. Google sheets seemed to provide a decent middleground between being easy to work with and still quite customizable. I think matplotlib would probably be the best tool for analysis, as you're already in the Python environment. Flourish would probably be the worst tool for analysis, as there's not much you can do with the raw data after you import it. However, I could see Flourish being the

best tool for communication, as after you create a chart it's very easy to publish it on their platform.

**Personal Data:**

I requested data from youtube on videos watched and liked, and have already received it.