Hurricane Summary

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Brainstorming and Data Gathering:

With the topic of Hurricanes already in mind, we focused our attention on brainstorming about different questions we can address for the project. In the beginning, we had few other questions in mind to answer, such as the effect of a hurricane season to the population of cities prone to storms. However, due to the lack of available data necessary to answer these questions, we had to go a different path to focus on the storm itself.

Gathering data for these questions became easier after narrowing down our scope to just the Atlantic Ocean from the last 15 years. We used the archives available in the National Hurricane Center (NHC) to gather all our data from. The website had also already separated their hurricane data into two databases, one for the Atlantic Ocean, and the other for the Pacific Ocean.

After pulling the data from the website, we translated it into a csv file through python, as well as added headings. Majority of the problem occurred when importing the data into a data frame. The first row, apart from the headings, only contained 4 column values, while the rest of the data has 20. To get around this error, we initially used the “skipinitialspace=True” code when first importing the file.

Data Cleanup:

When figuring out the nearest city, we had to use citipy. One problem is that we had to split the name and the number since citipy only takes coordinates from -90 to 90, and -180 to 180. We also had to change the longitude to negative. After modifying the columns to the right format, we were able to use citipy to figure out the nearest city.