

Hurricanes in the Atlantic Ocean - Alpha Release

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GitHub folder <https://github.com/olga-kondr/dv-project>

URL <https://olga-kondr.github.io/dv-project.html>

Overview

The main question that I have is what has been going on in the Atlantic Ocean for the past decades? I have worked with hurricane data before by building models that predict trajectories of hurricanes all over the world. In this project I would like to visualize trajectories in the Atlantic Ocean alongside analysis of weather conditions. I'm interested in this geographic area compared to the entire world as it is much closer to the US life.

Include the following in your alpha release report:

An overview of your project

Features from your proposal that have been completed

Upcoming immediate milestones

Roadblocks (if any) that you are running into

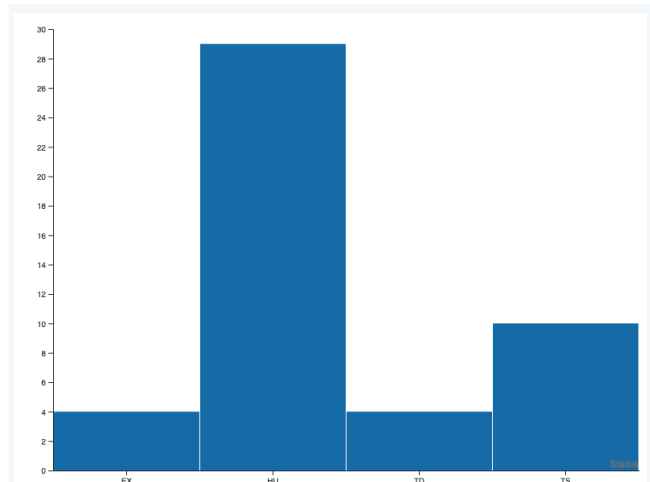
At this stage, you should have at least three static images/visualizations to include in your report. You do not need any interaction. At least two of the visualizations should be made in d3, others can be made using Tableau, DataWrapper, R (ggplot2), or Rawgraphs.

Post your report (in PDF format) on your project website and label it Alpha Release. Submit the link to your project website.

Completed Features

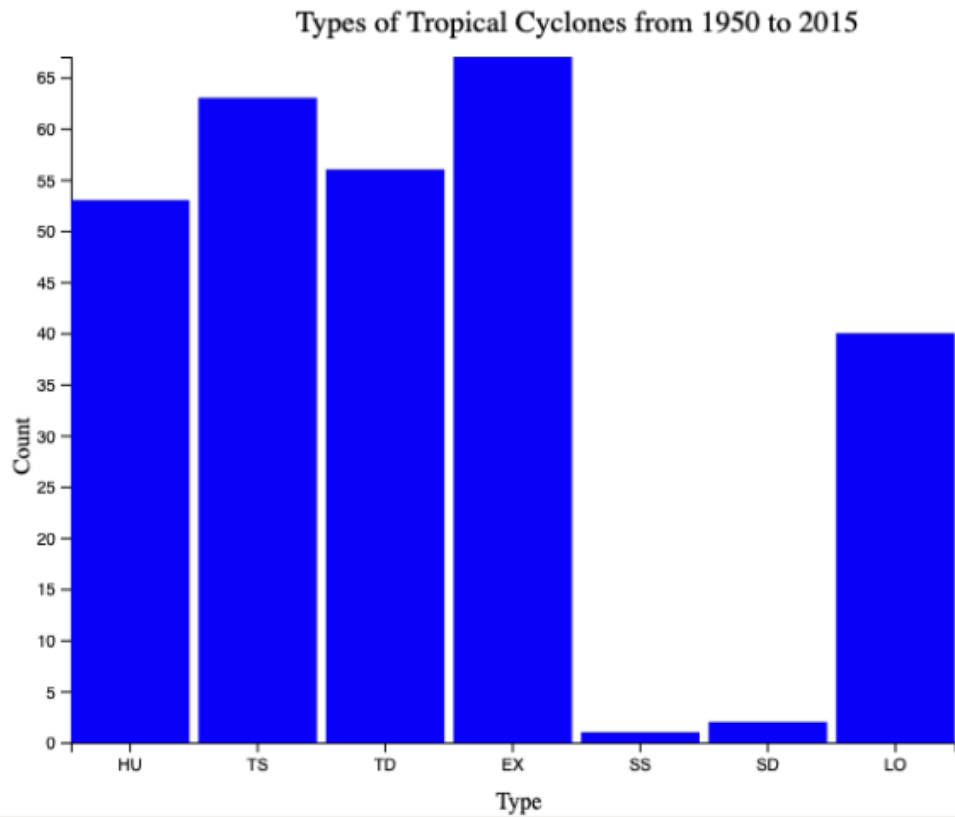
1.1 Combined Saffir–Simpson scale and Tropical Storm, Tropical Depression in a form of the one row heatmap with speed limits - instantiating the color schema connected to the wind speed. Simplified

1.3 Histogram of tropical cyclones per each year.

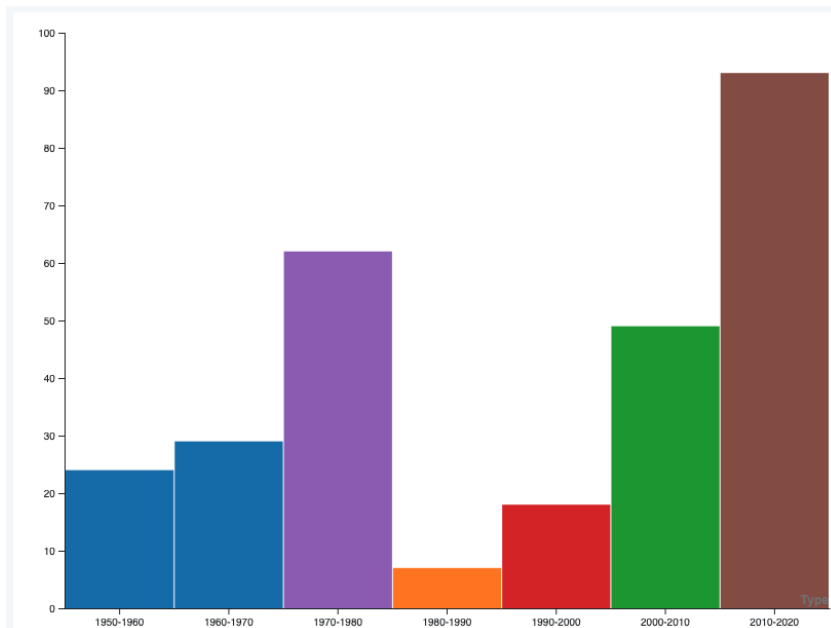


2.1 Types of tropical cyclones.

<https://vizhub.com/olga-kondr/97a4ef935883413093676bece089eae>



2.2 Tropical cyclones per 10 years.



Next Milestones

The most complicated part from the 'must have' list is 6.1 Tropical cyclones map plot. I am going to focus on it next. So far I'm going with the project schedule that is shown below.

Must-Have Features

List of points from Visualization Design:

1. 1.1 - Saffir–Simpson scale heatmap.
2. 1.3 - Histogram of tropical cyclones per year.
3. 2.1 - Types of tropical cyclones bar chart.
4. 2.2 - Tropical cyclones per every 10 years histogram.
5. 3.2 - Length of tropical cyclones by year box plot.
6. 4.2 - Max/min wind speed line chart.
7. 5.1 - Min pressure histogram.
8. 6.1 - Tropical cyclones map plot.

Optional Features

List of points from Visualization Design:

1. 1.2 - Tropical cyclones timeline.
2. 3.1 - Length of tropical cyclones histogram.
3. 4.1 - Wind speed strip chart.
4. 5.2 - Min pressure strip chart with violin for distribution.
5. 7.1 - Interactive map of trajectories with filtering and hovering over the hurricane.

Project Schedule

Deadline	Work	Status
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26/03/2022	New site setup, data analysis	Done
2/04/2022	Data analysis and data cleaning, 1.1, 1.3	Done
9/04/2022	2.1, 2.2, 4.1, 4.2	Partially Done
16/04/2022	5.1, 6.1	
23/04/2022	3.2, 3.1, 1.2	
30/04/2022	7.1	
7/05/2022	5.2, final presentation slides	
14/05/2022	Final presentation	