

Hurricane Data

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In light of recent events characterized by increasingly strong hurricanes and the widespread fear-mongering on the internet regarding “end-times,” I decided to do an analysis of hurricane data spanning the past 70 years. This investigation aims to show the truth behind actual changes that have occurred in hurricane patterns, intensity, and their impacts over time.

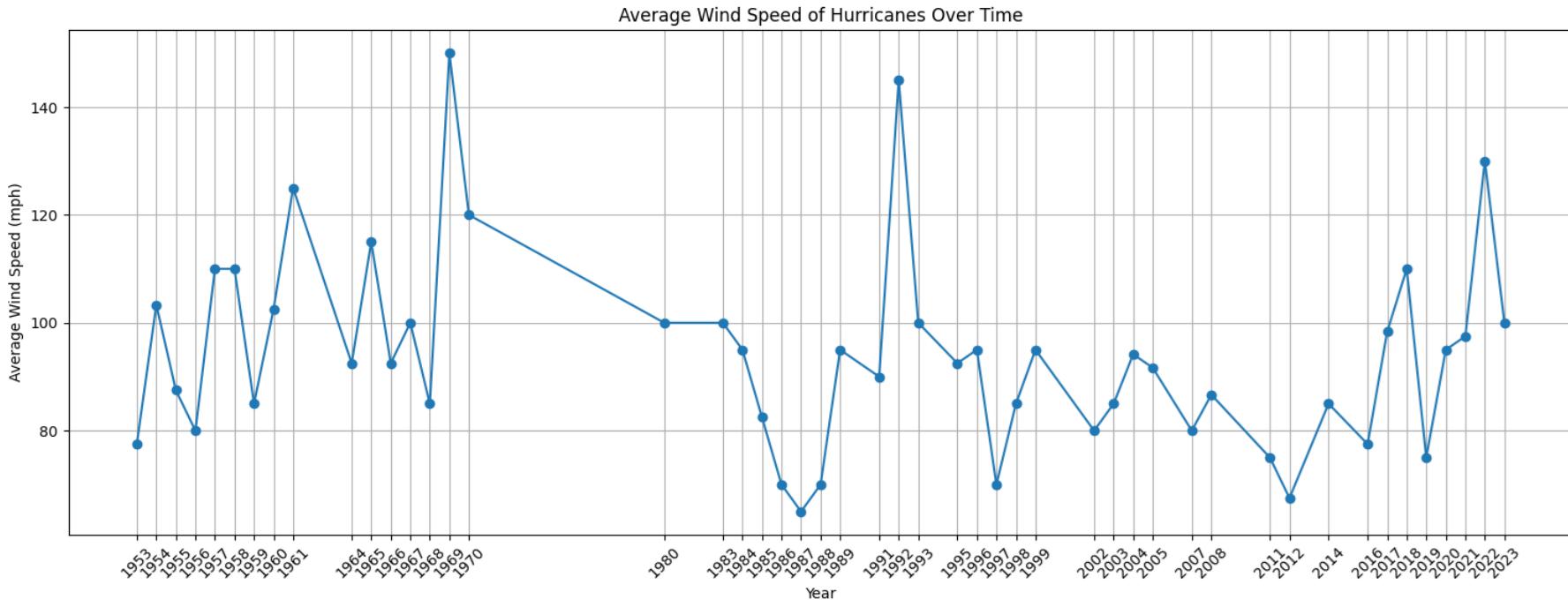
In this presentation, I will discuss three primary angles of analysis:

- **Average Wind Speed Over Time:**
 - **States Most Affected:**
 - **Hurricanes Distributed by Category Over Time:**
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(Disclaimer: There are other factors that come into play when analysing hurricanes that I will not go in to, such as climate change, and atmospheric pressure. This presentations main goal is not to disprove global warming rather, shed light on current hurricane events.)

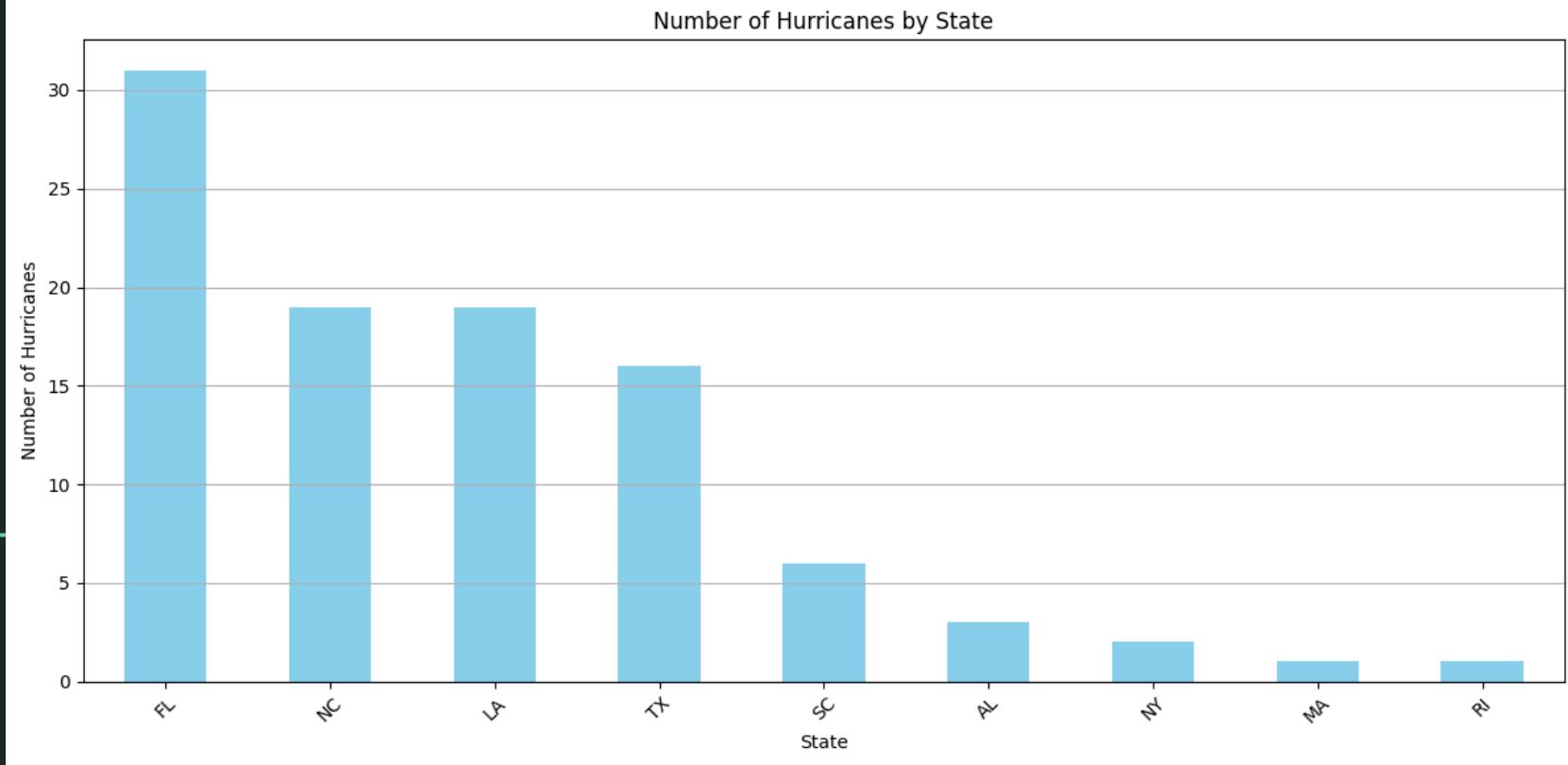
This section will examine how the average wind speeds of hurricanes have evolved from 1950 to 2023. By tracking this data, we can identify trends that may indicate whether hurricanes are becoming more intense or if their behavior is consistent with historical patterns. The main question i aim to answer with this angle, how much has wind speeds really changed?

Figure 1



Importance: From this Data, we can see that throughout time the average wind speeds have not changed much, the gap in the dates is because those years the wind speeds were not reported.

With this next graph, I will focus on which states have been most impacted by hurricanes over the decades. This analysis will highlight geographic areas that face the greatest risk from hurricanes. My graph shows how many hurricanes have DIRECTLY hit the states according to the data. A lot of people have been stipulating the end-times on social medias such as tik-tok. Arguments like "Florida has never seen this many hurricanes" and "Global warming is going to end us" are floating around. The main question I want to answer with this is, are the multiple hurricanes attacking Florida an anomaly?

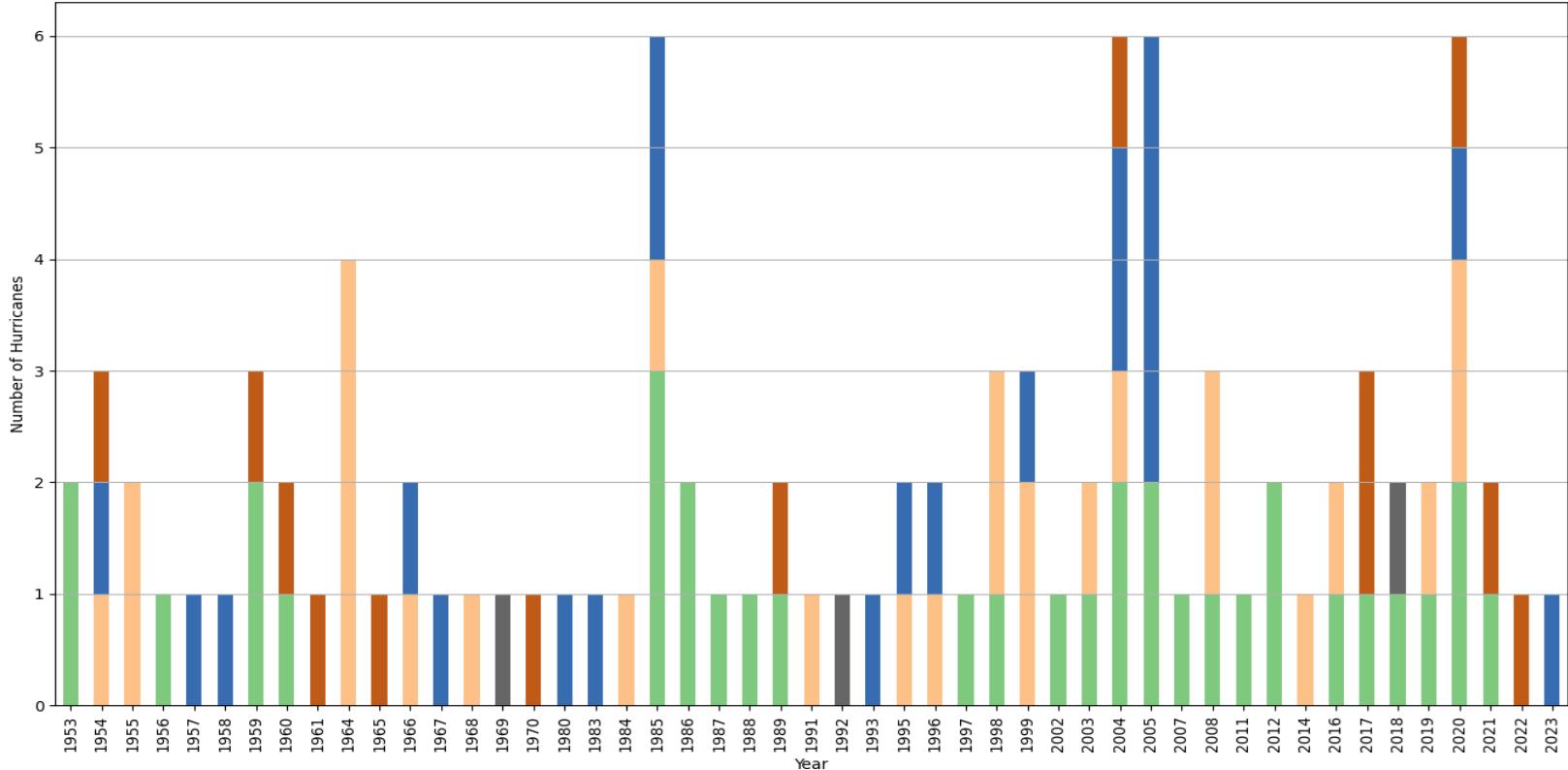


Importance: As you can see, Florida has always been a hotspot for hurricanes and in 2004 they even had 5 in the span of 6 weeks!

This part of the presentation will explore how the distribution of hurricane categories has shifted throughout the years. By examining the frequency of higher-category storms compared to lower-category ones, we can assess whether there is a trend toward more severe hurricanes in recent years.

(Disclaimer: As stated before, hurricane data must be looked at from various angles all of which are not covered in these slides.)

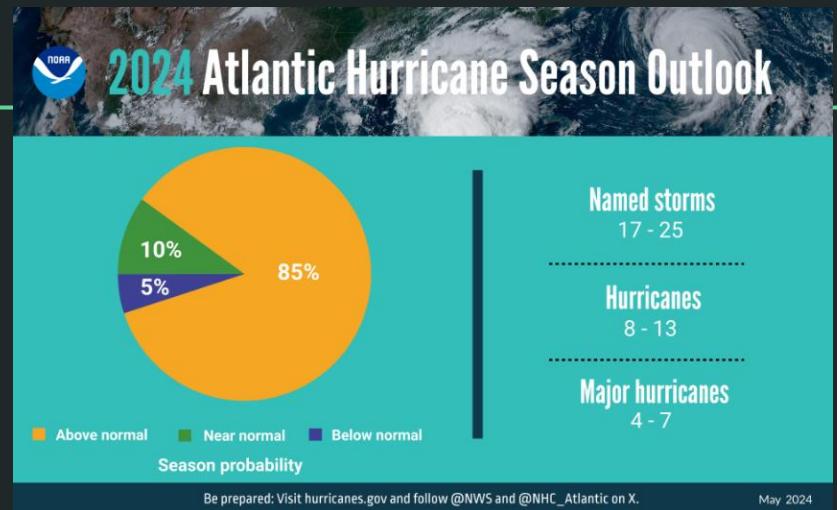
Number of Hurricanes by Category Over Time



Importance: From Simply looking at the graph, there is a clear increase in hurricane activity and category level.

Conclusion

In Conclusion, from the data we can see that the attacks on Florida aren't anything new. The wind speeds have also generally stayed consistent throughout time. What we should be worried about is the rapid change in strength and amount of hurricanes that has been growing throughout the year. Although the data cuts off at 2023, the 2024 season stays consistent with the data as we are amidst a "higher than normal" hurricane season expected to have at least 8 hurricanes.



Works Cited

“US Hurricane Landfalls.” *Atlantic Oceanographic and Meteorological Laboratories*, www.aoml.noaa.gov/hrd/hurdat/All_U.S._Hurricanes.html. Accessed 16 Oct. 2024.

“NOAA Predicts Above-Normal 2024 Atlantic Hurricane Season.” *National Oceanic and Atmospheric Administration*, www.noaa.gov/news-release/noaa-predicts-above-normal-2024-atlantic-hurricane-season. Accessed 16 Oct. 2024.
