

The Power of Storms

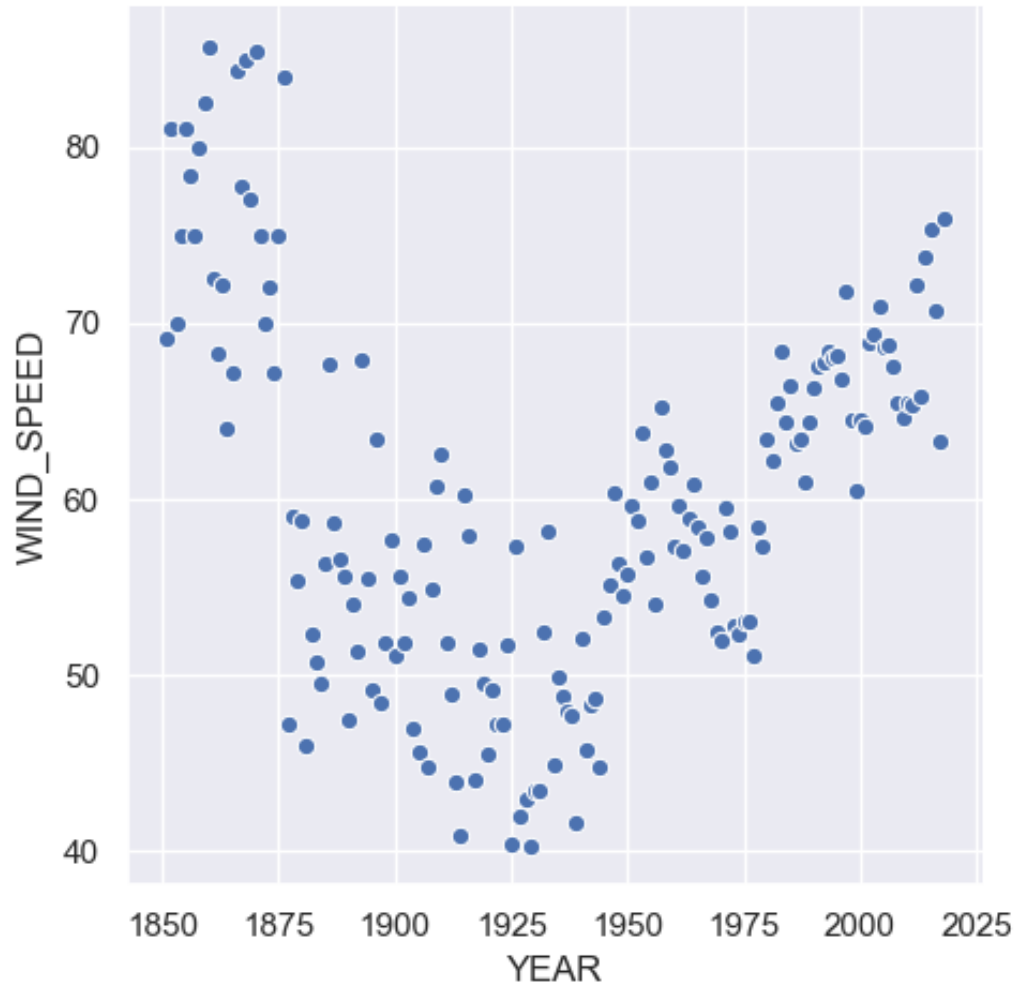
AUTHOR1

AUTHOR2

Background

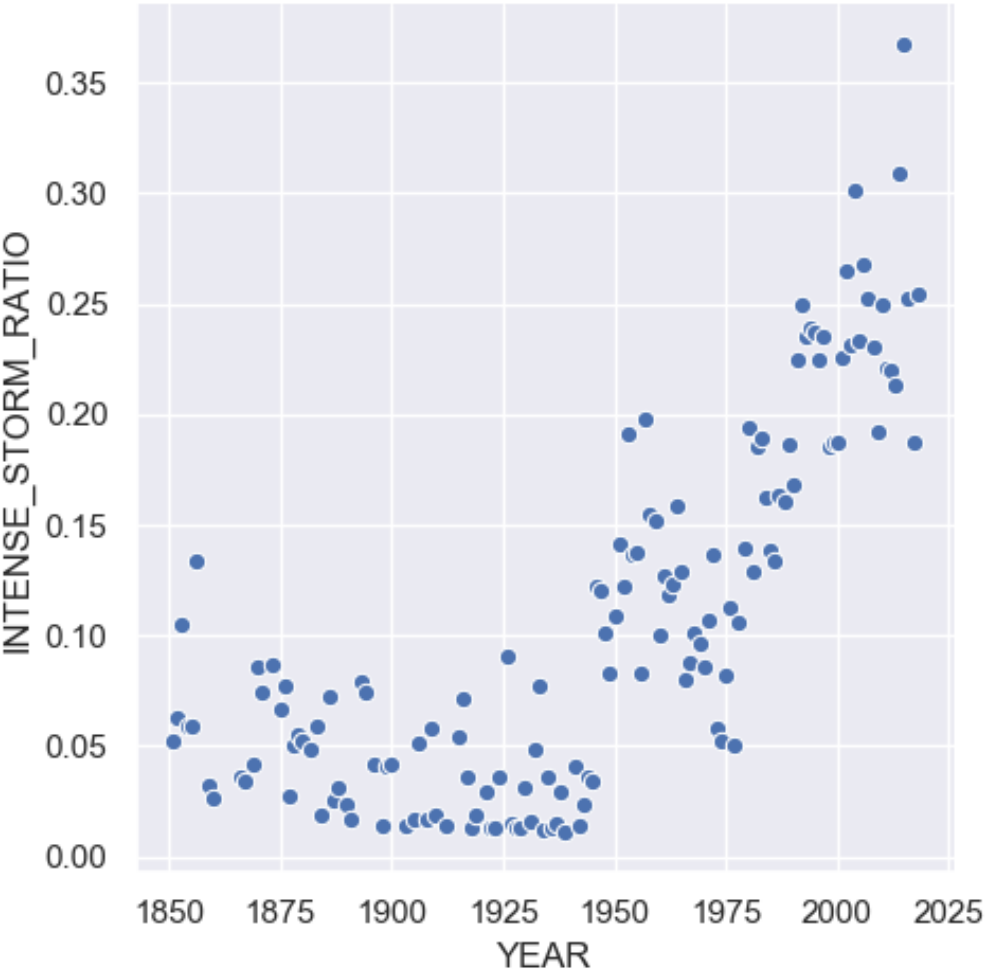
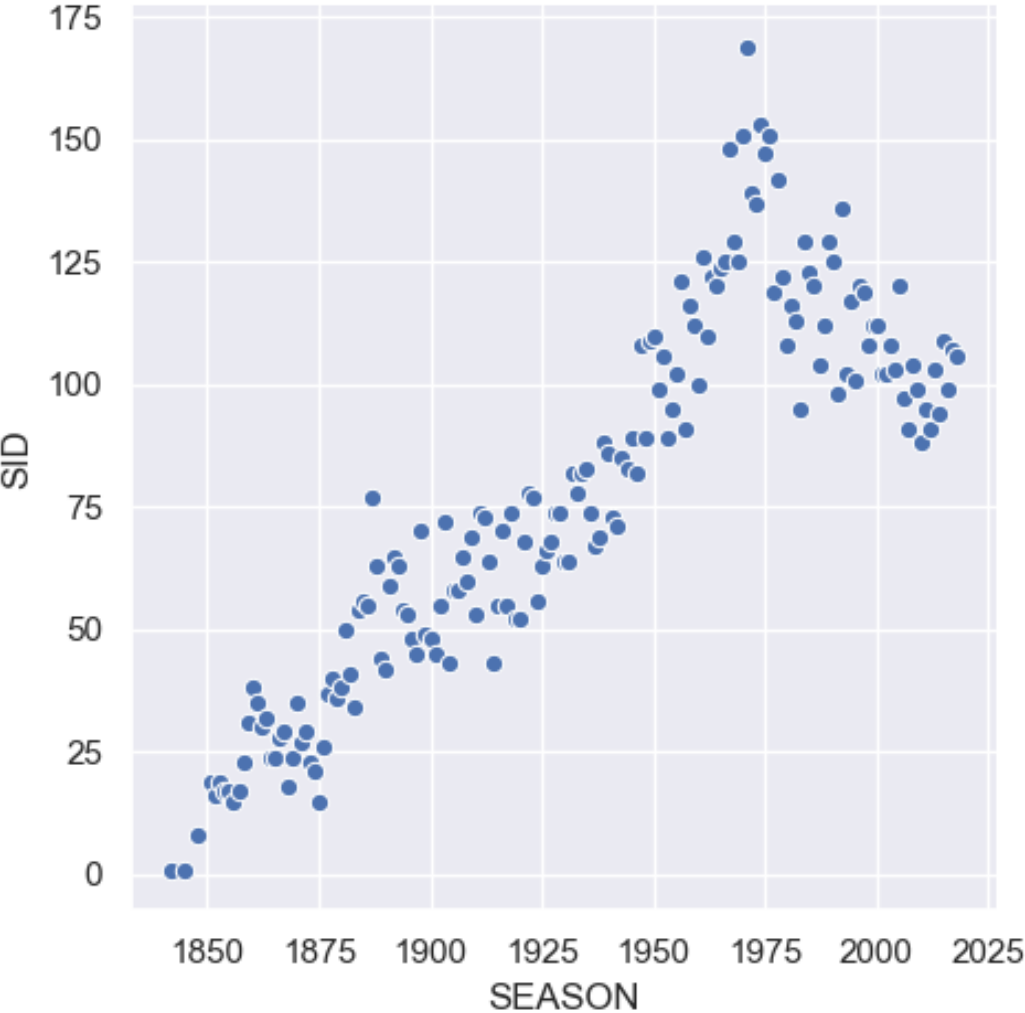
- ▶ We were interested in hurricanes and tropical storms
- ▶ Have they gotten more powerful over time?
- ▶ Have they become more frequent over time?
- ▶ Where are hurricanes the worst?
- ▶ Can we predict how bad a storm will be?

Results - Question 1

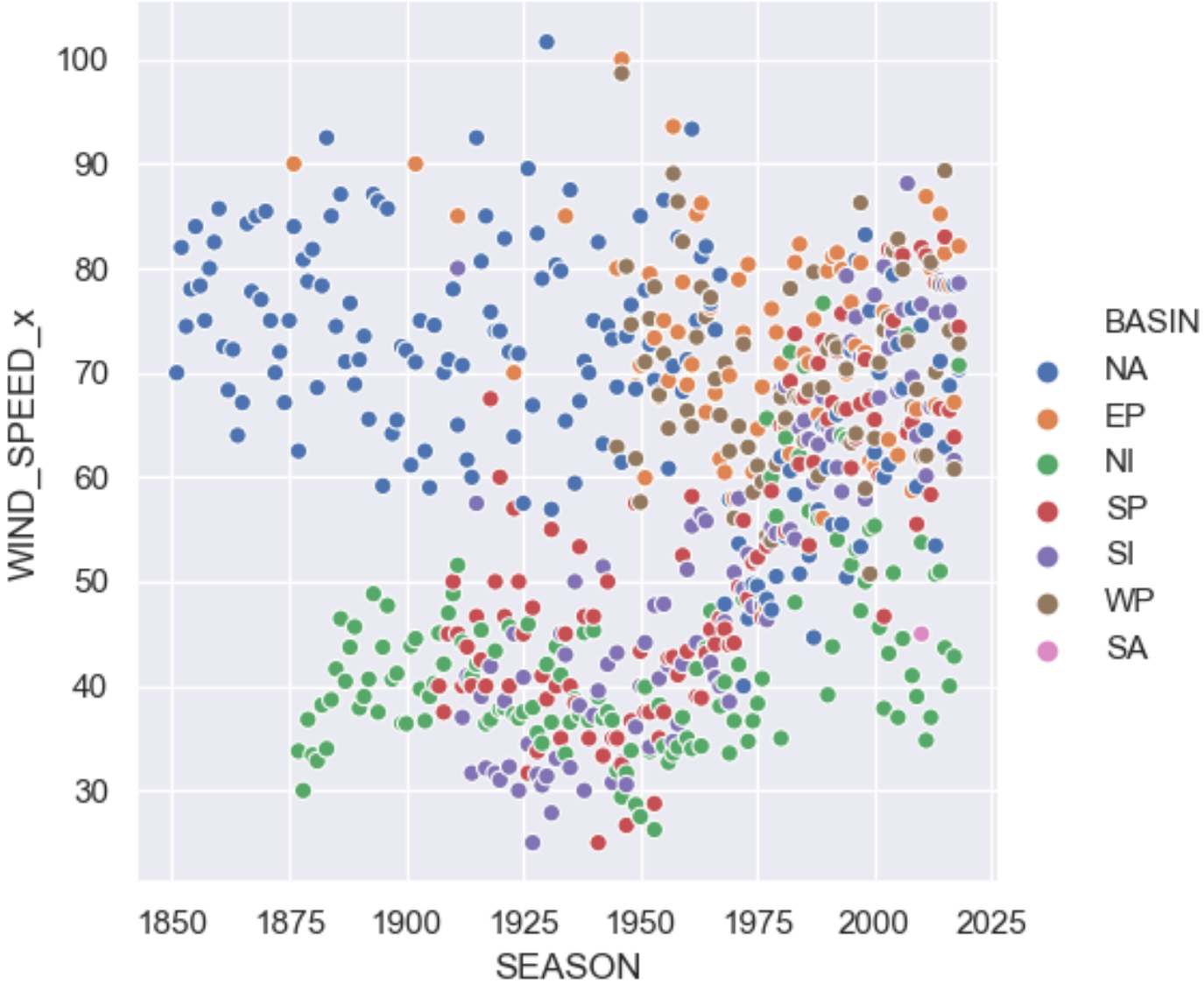


- ▶ We see a dramatic trend shift around 1950
- ▶ Since 1950 a steady rise in storm intensity
- ▶ Why do we see this sudden change in the data?

Research - Question 2



Results - Question 3



Results - Question 4

- ▶ For storms since 2000 that had at least two days worth of data, we trained a neural network to try to predict the highest storm category that would be reached
- ▶ Our model had two hidden layers with ten neurons each
- ▶ With our test set we reached an accuracy of around 38%
- ▶ This is significantly better than random guesses, but still not a good real world estimate