

## Is Florida getting warmer?

The observed correlation coefficient between years and temperature(degree celsius) of Florida was 0.5331784 (Figure1).

After random sampling our temperature data by  $N=10000$  and recalculating the correlation coefficient, our observed correlation coefficient was not within the distribution of our random correlation coefficients (Figure2). This suggest that there is a statistically significant positive correlation between time and years ( $p=0$ ). As a result, the current trend suggest that Florida is getting warmer.

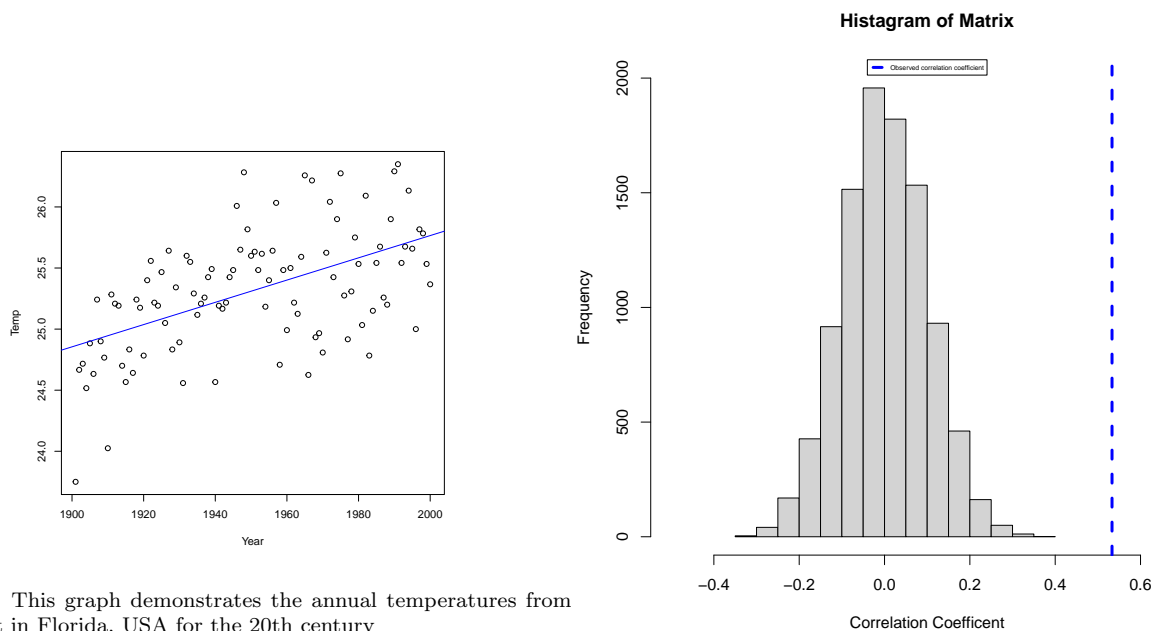


Figure 1: This graph demonstrates the annual temperatures from Key West in Florida, USA for the 20th century

Figure 2: The distribution of random correlation coefficient calculated from reshuffling the temperatures. The observed correlation coefficient is represented by the trendline.