# Imperial College London

CMEE Week03

Imperial College London

Department of Biology

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# Is Florida Getting Warmer?

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**Abstract**

Your abstract goes here

**Acknowledgements**

Thanks mum!

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# Chapter 1

# Introduction

Is Florida getting warmer? The answer must most likely be 'yes' in reality, based on common knowledge. How do we get the answer? We need to do a hypothesis testing. H1 (alternative hypothesis) is what we want to get the conclusion, H0 (the null hypothesis) is the opposite. Therefore, the H1 is 'Florida is getting warmer', and H0 is 'Florida is not getting warmer'.

[sh93]

## 1.1 Objectives

## 1.2 Challenges

## 1.3 Contributions

# Chapter 2

# Results

## 2.1 Correlation Coefficient Formula

$$r = \frac{\sum_{i=1}^{n}(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \bar{x})^2}\sqrt{\sum_{i=1}^{n}(y_i - \bar{y})^2}} \tag{2.1}$$

## 2.2 Correlation Coefficient Result

Correlation coefficient between years and temperature, is 0.5331784.

## 2.3 Histogram

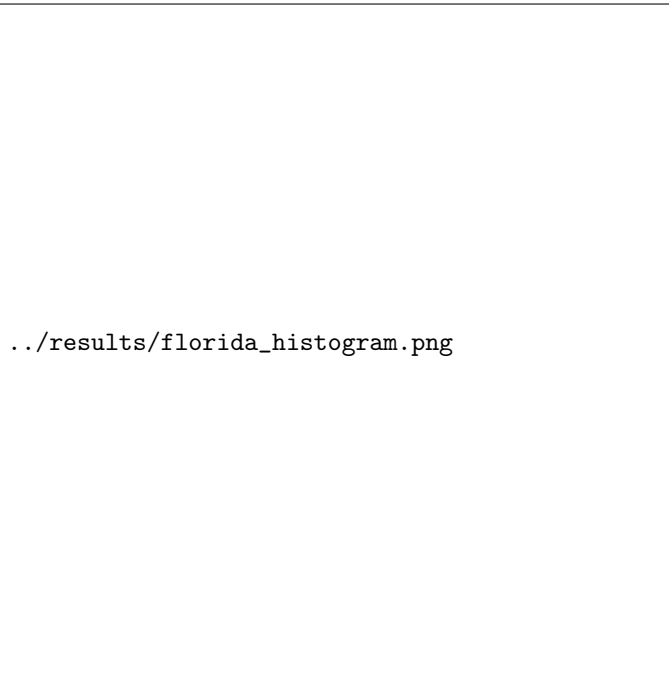(Needs later when the plot can be seen in VSCode Ubuntu computer. )



../results/florida_histogram.png

Figure 2.1: Observed Correlation Compared With Random Permutations.

# Chapter 3

# Interpretation

## 3.1   Correlation Coefficient

Don't know yet

# Chapter 4

# Background

where is this

# Chapter 5

# PROJECT X

# Chapter 6

# Evaluation

# Chapter 7

# Conclusion

# Appendix A

# First Appendix

# Bibliography

[sh93]  sample https://github.com/joobaloo/CMEEcoursework/blob/master/week3/code/florida$_w riteup.tex.TheComp$ $342--351, 1993.$