



THE UNIVERSITY OF
CHICAGO

Department of Statistics

MASTER'S THESIS PRESENTATION

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Statistical Analysis of the United States' Summer Temperatures

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Jones 304, 5747 S. Ellis Avenue

ABSTRACT

In this paper, we discuss the method of modeling the simulated temperature data. We first introduce our methods of stationarizing the raw data. Then we explain how to use the artificial neuron network estimate the conditional mean function of the normalized data and the visualization of the function. We then reduced the model to model and evaluate the loss of the reduction. We also introduce the long-range dependence into our model, build the model, compare their performances on the normalized data and the raw data. Finally, we talk about the lengths of the predictability of different models.

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