## **ABSTRACT**

Monthly surface temperature data in Sri Lanka are considered in this study and are being used in the analysis.

One aim of the study is to see whether there is a relationship between El Nino and the surface temperature in Sri Lanka.

The next is how El Ninos affect the surface temperature in Sri Lanka.

Analysis is performed with 25 years monthly temperature data in 12 meteorological stations in Sri Lanka.

The contents of the chapters are summarized as follows.

Chapter 1 presents a General Introduction about El Nino.

Chapter 2 deals with the temperature in Sri Lanka.

Chapter 3 is devoted to present methodology I.

Chapter 4 presents the theory of the Time Series that is used in the study.

In Chapter 5 methodology II presents and the surface temperature data is analyzed.

Chapter 6 deals with the Results and Conclusions of the study.

It is shown that the annual average surface temperature in Sri Lanka increases during El Nino years.

Chapter 5 methodology ii supplies more information about the monthly average surface temperature. Monthly average surface temperature increases from July to December and decreases from January to June.