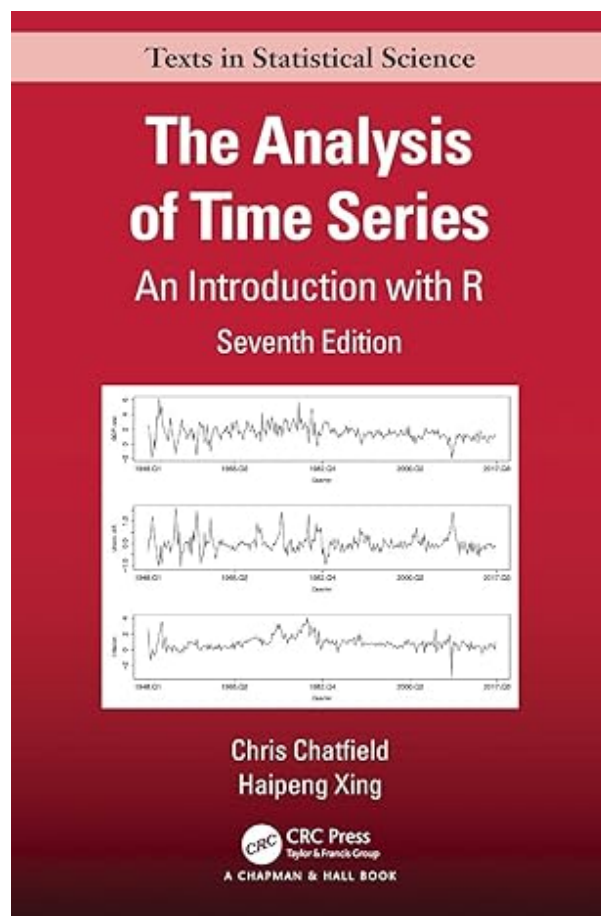# Notes for The Analysis of Time Series Seventh Edition by Chris Chatfield & Haipeng Xin

Gallant Tsao

August 5, 2025

Contents

1 Introduction

1.1 Some Representative Time Series

We begin with some examples of the sort of time series that arise in practice.

2   Basic Descriptive Techniques

3 Some Linear Time Series Models

4 Fitting Time Series Models in the Time Domain

5   Forecasting

6   Stationary Processes in the Frequency Domain

7 Spectral Analysis

8 Bivariate Processes

9 Linear Systems

10 State-Space Models and the Kalman Filter

11 Non-Linear Models

12   Volatility Models

13 Multivariate Time Series Modeling

14 Some More Advanced Topics