Covid Plots

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1   Introduction

Global Total =71,503,614 as at December 14, 2020
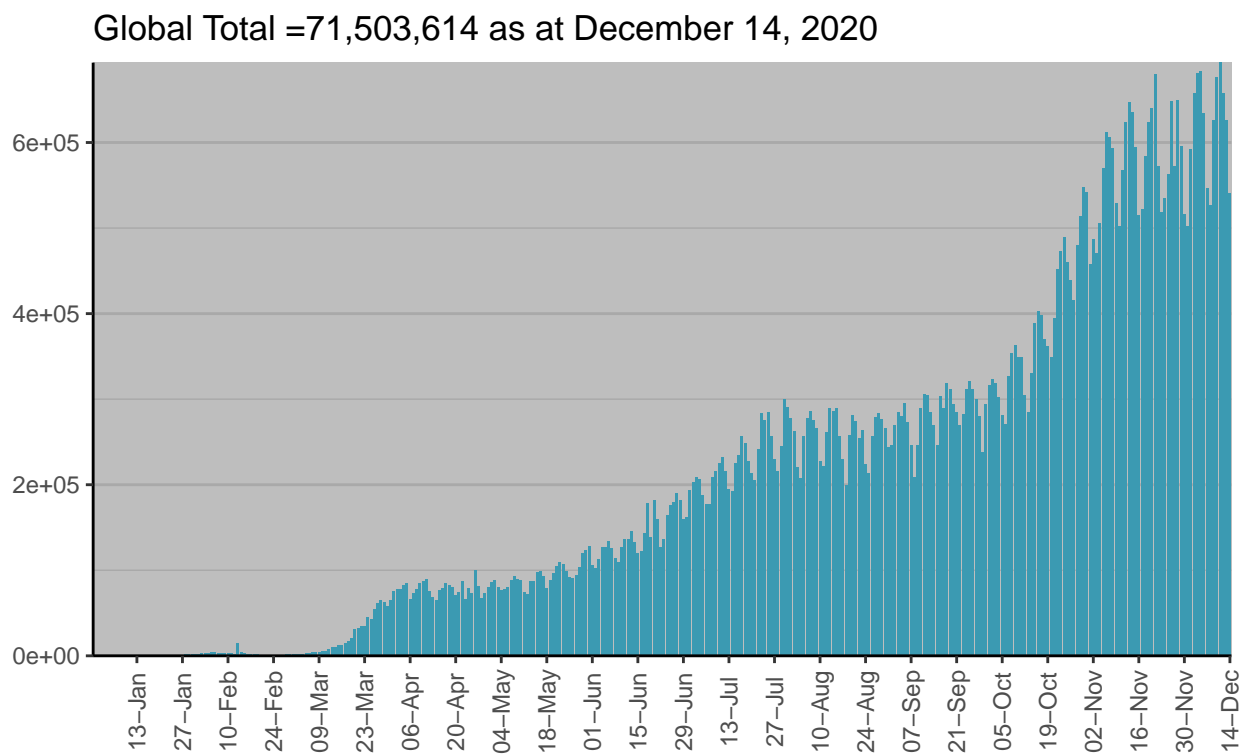

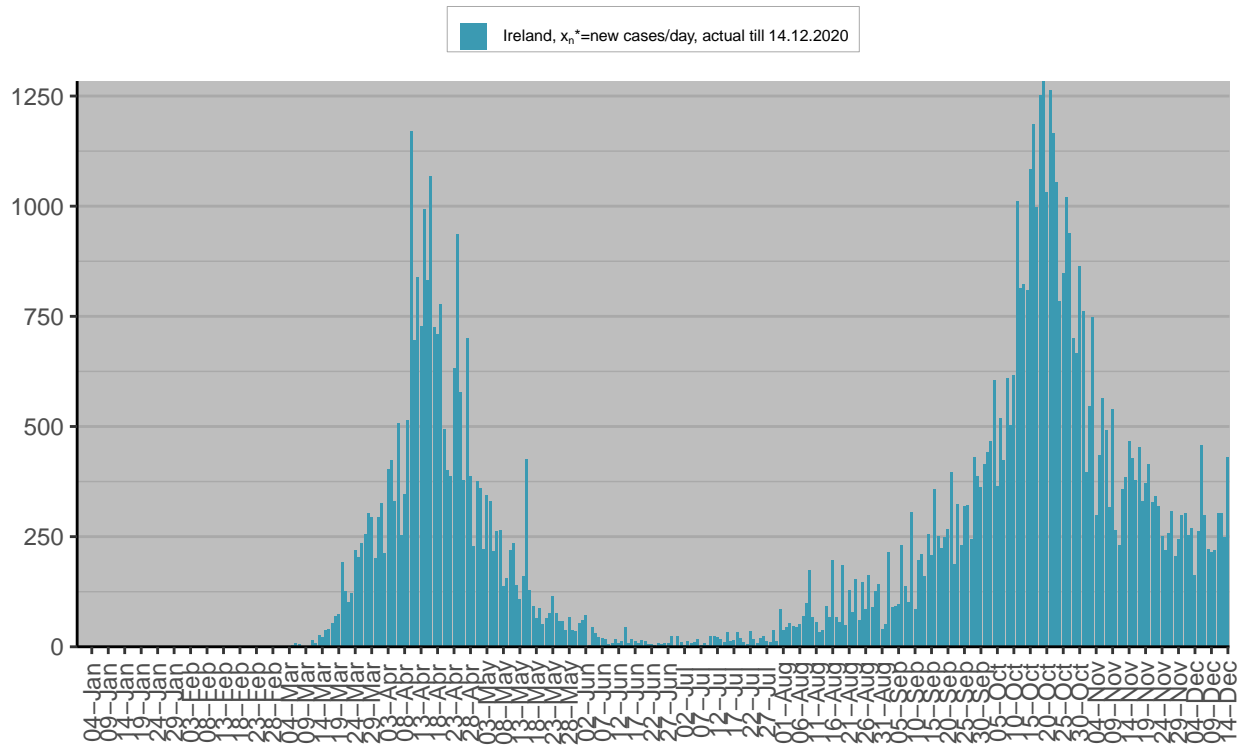Figure 1:   Daily cases Globally to date

Figure 2: x-diagram for Ireland: the numbers of actually registered daily cases
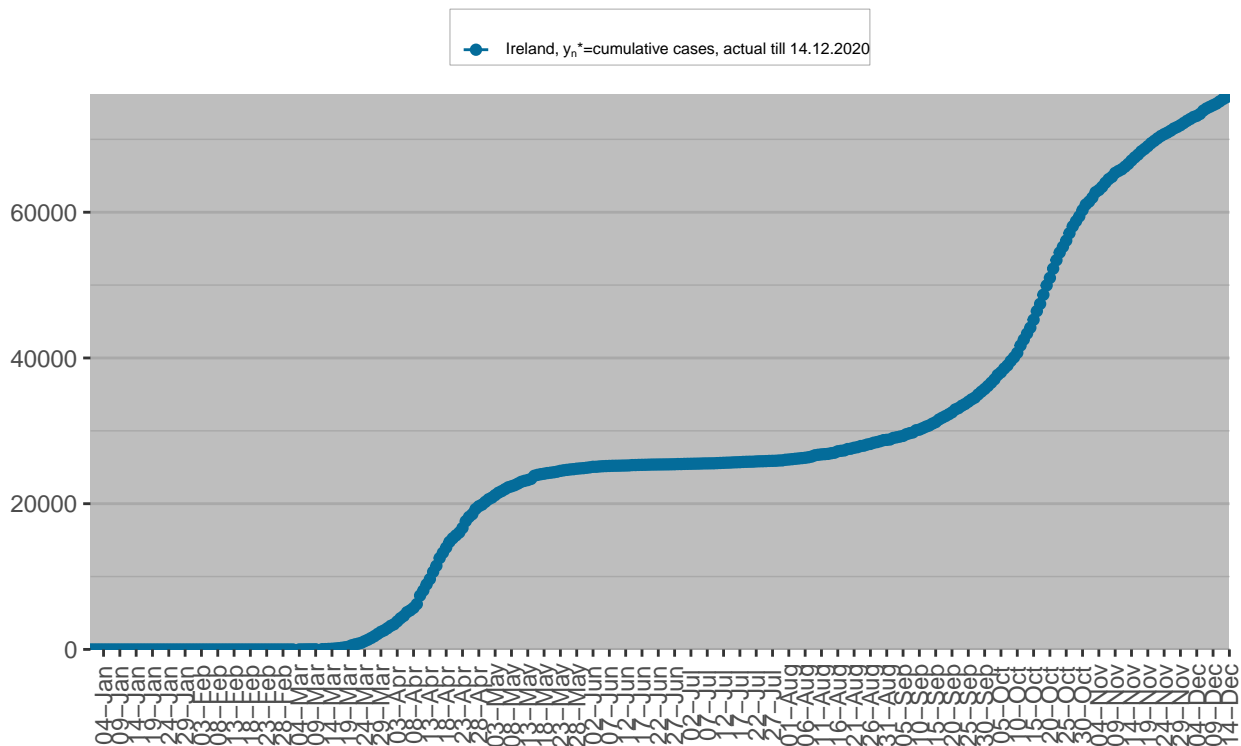

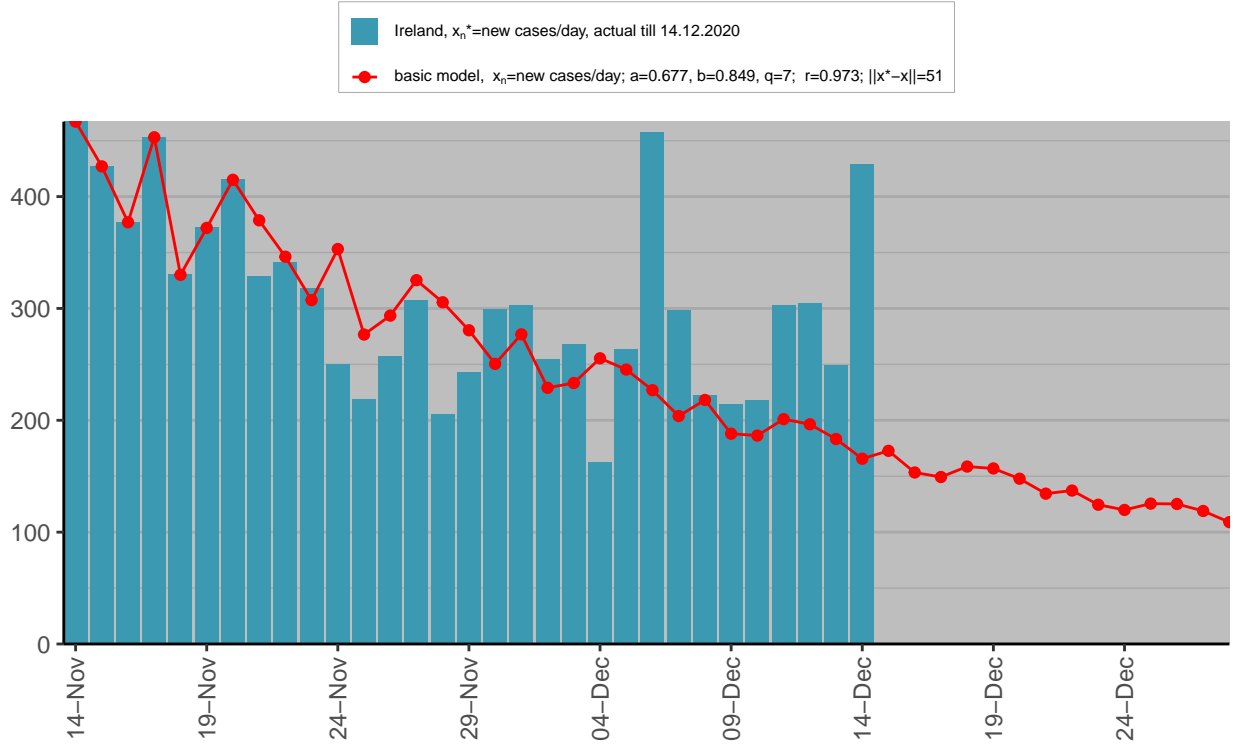Figure 3: x-diagram for Ireland: the numbers of actually registered daily cases

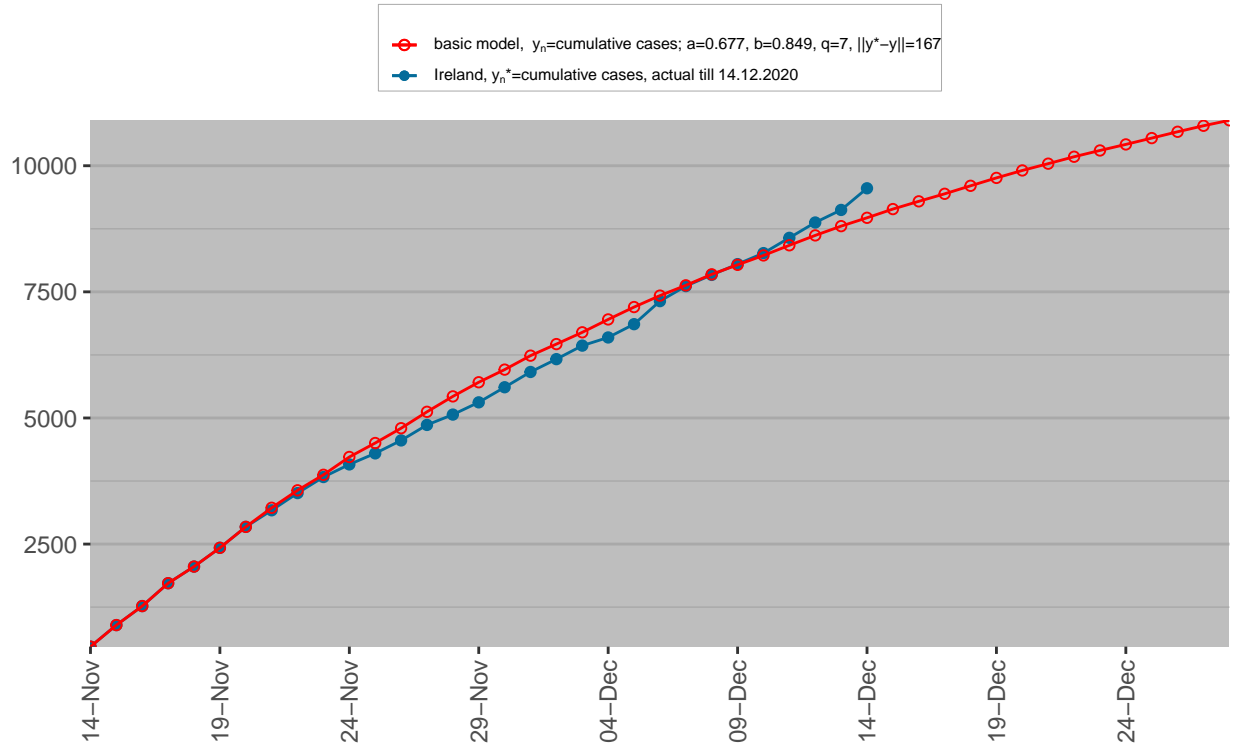Figure 4: Comparison of the basic model with the actual data, Ireland (x-diagram)

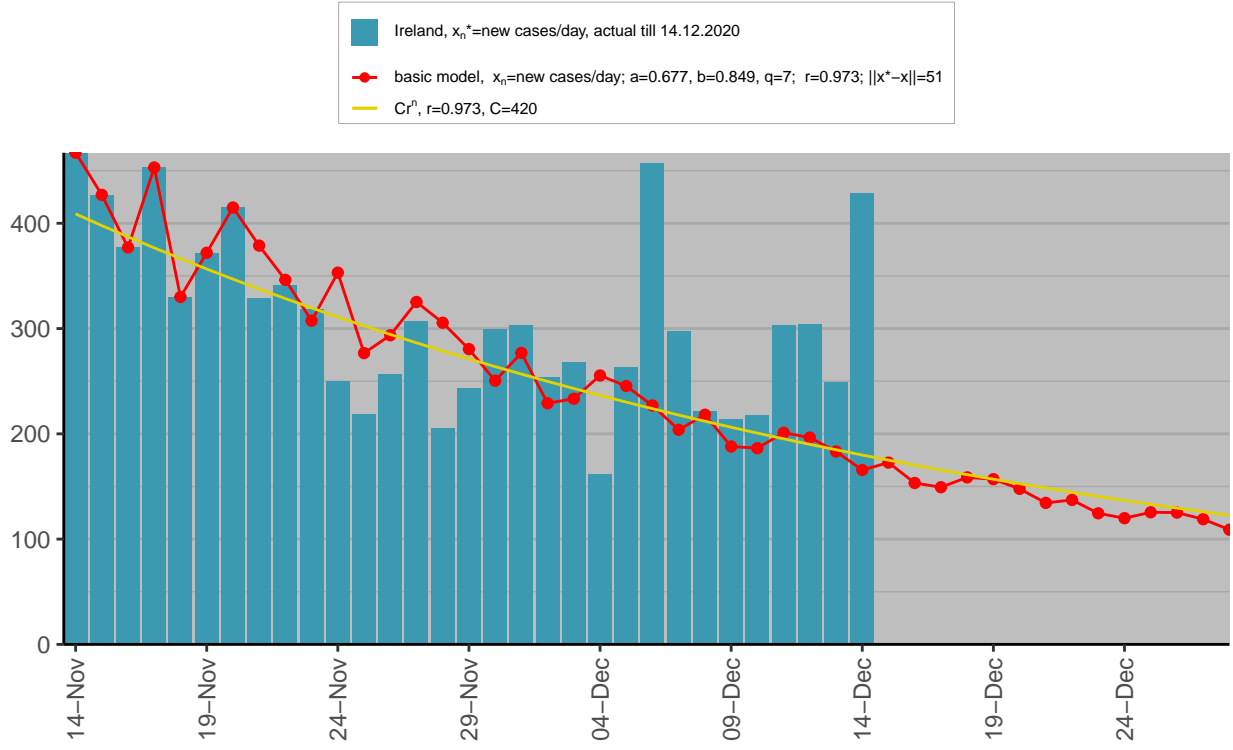Figure 5: Comparison of the basic model with the actual data, Ireland (x-diagram)

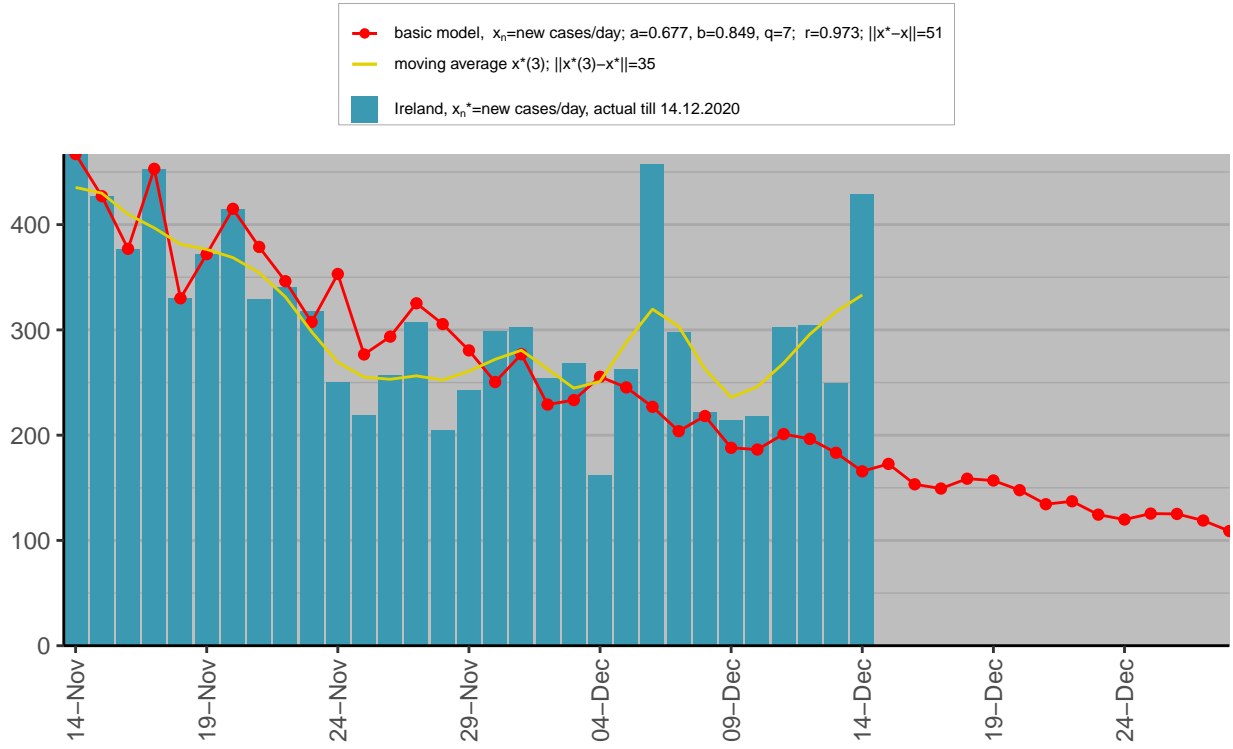Figure 6: Comparison of x_n^*, x_n and Cr^n, Ireland

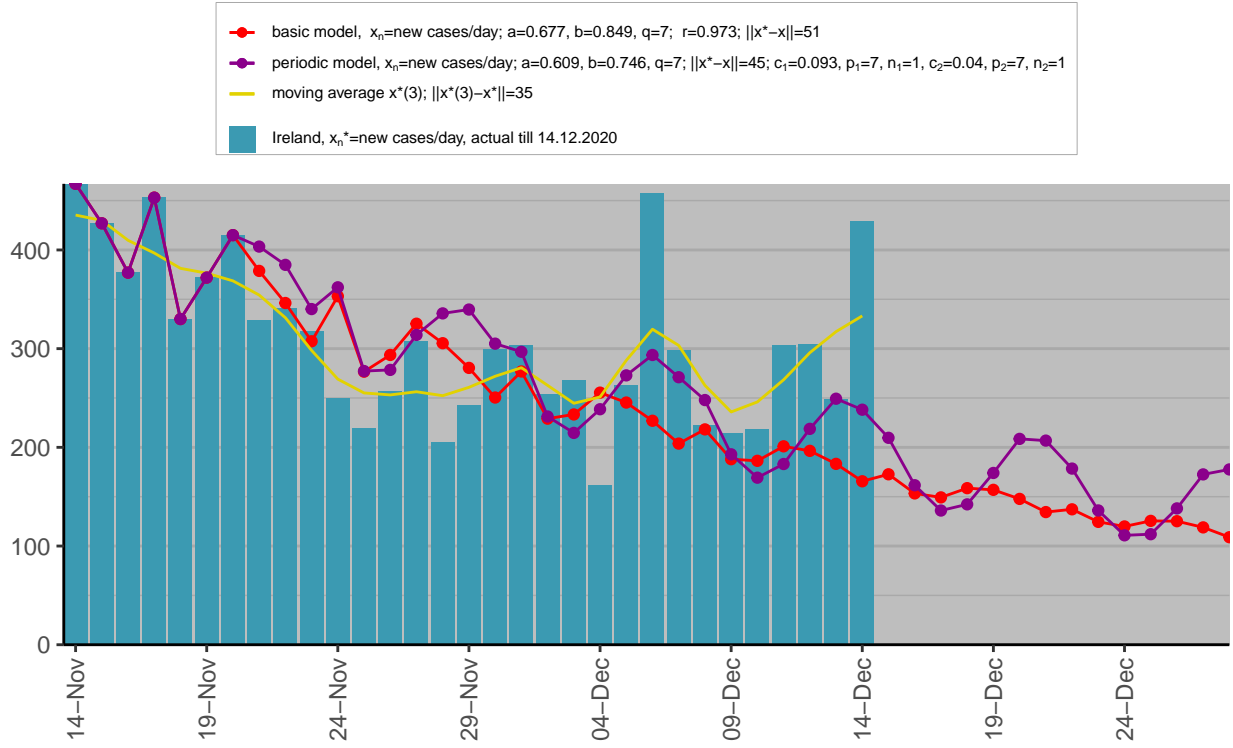Figure 7: Comparison of basic model with moving averages, Ireland

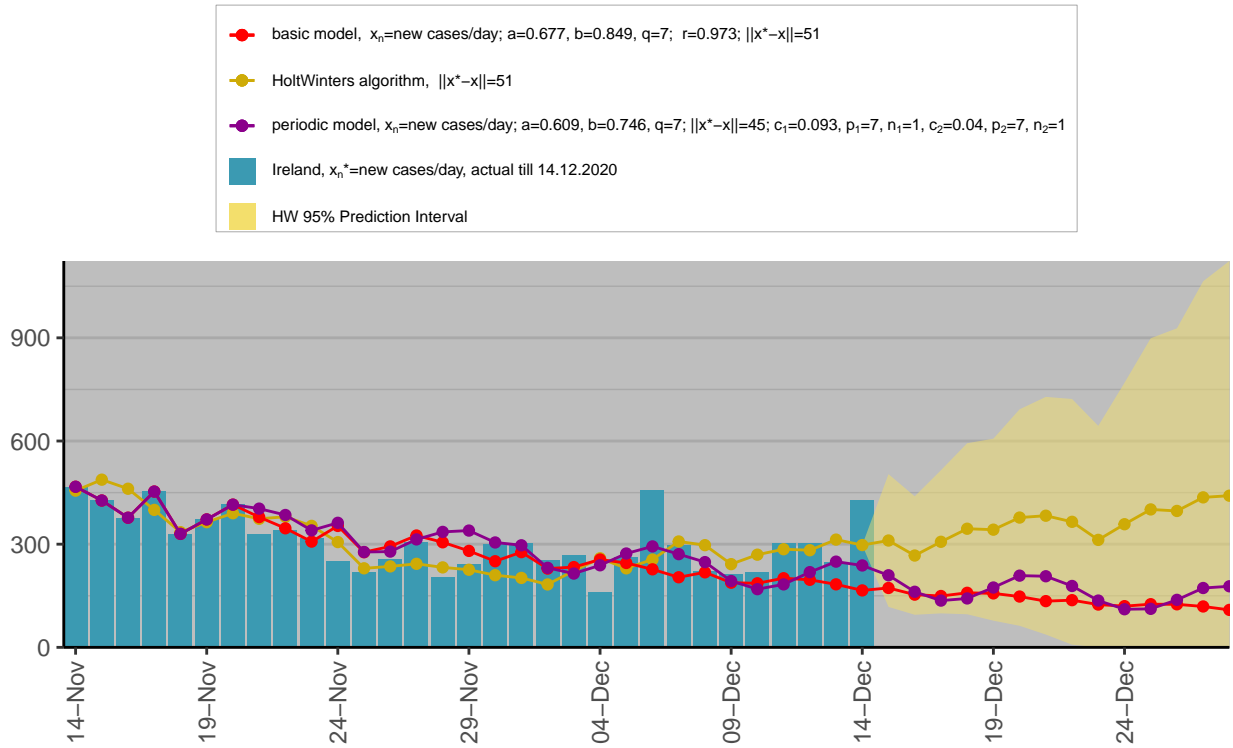Figure 8: Comparison of basic and periodic models with moving averages, Ireland

Figure 9: Comparison of basic and periodic models with HoltWinters model, Ireland
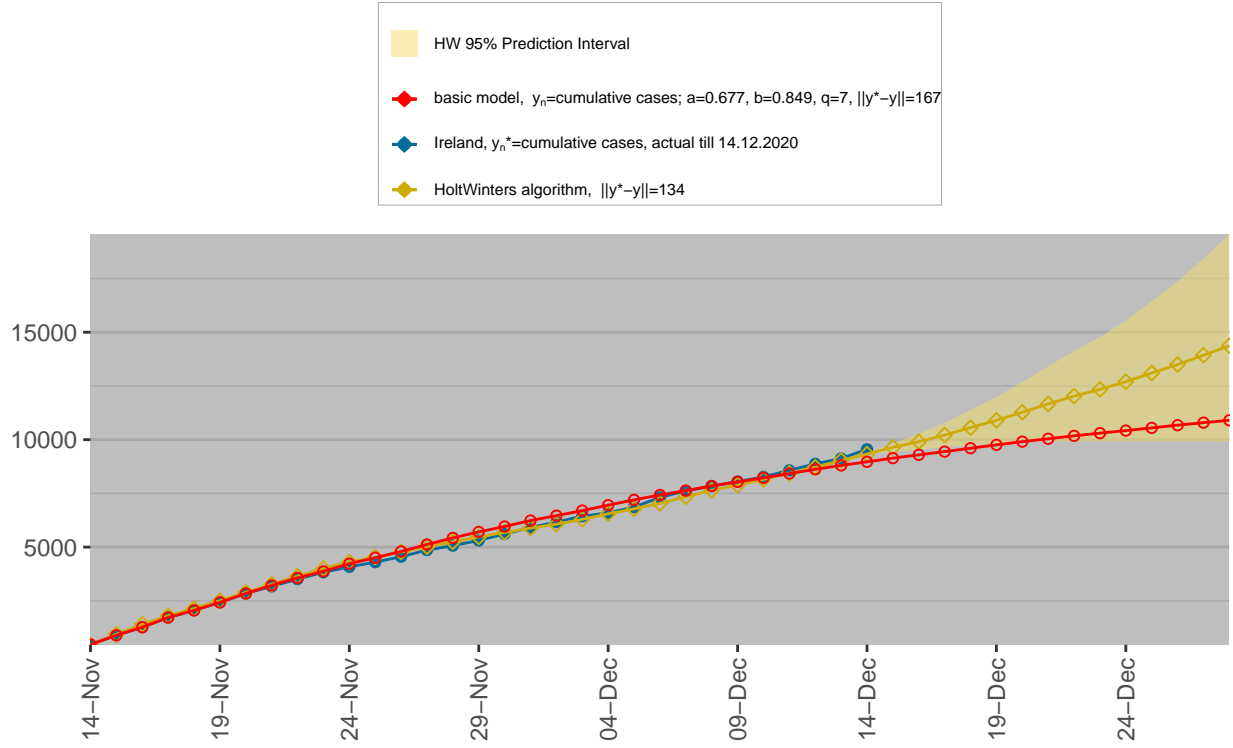
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Figure 10:   Comparison of Cumulative basic and periodic models with HoltWinters Prediction, Ireland
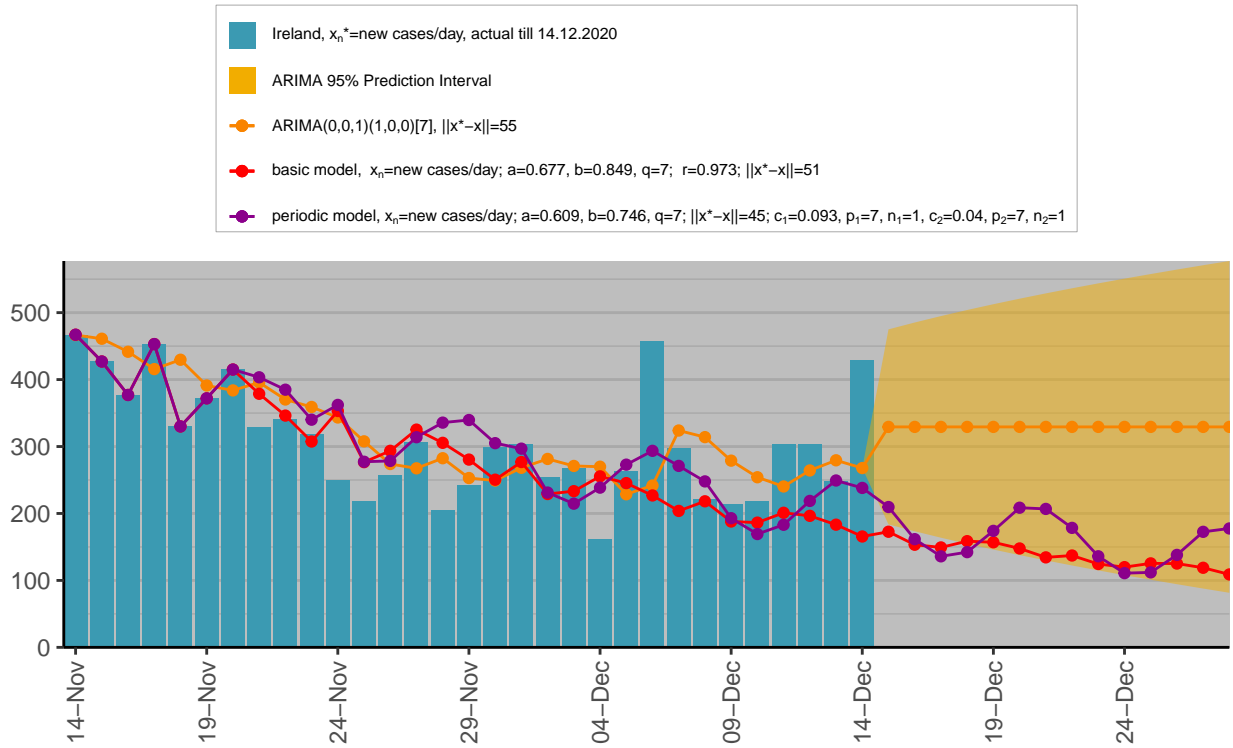
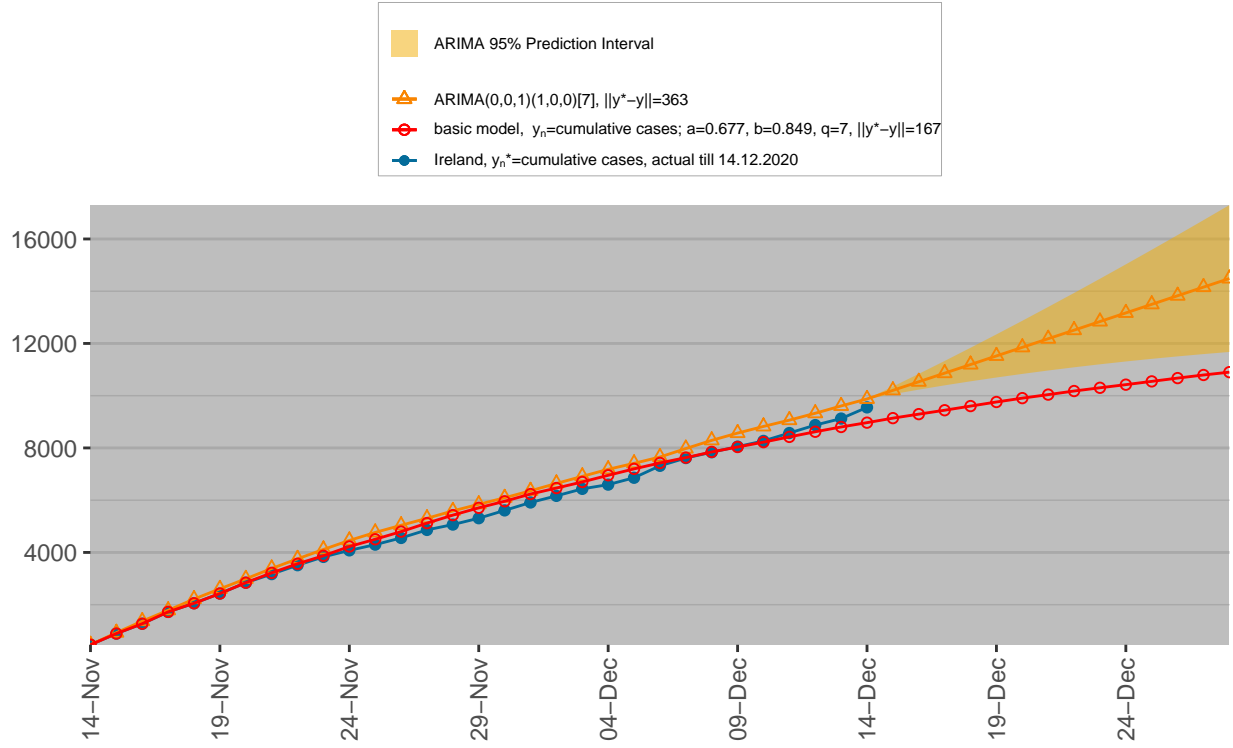Figure 11:   Comparison of basic and periodic models with ARIMA model, Ireland

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Figure 12: Comparison of Cumulative basic and periodic models with ARIMA model, Ireland
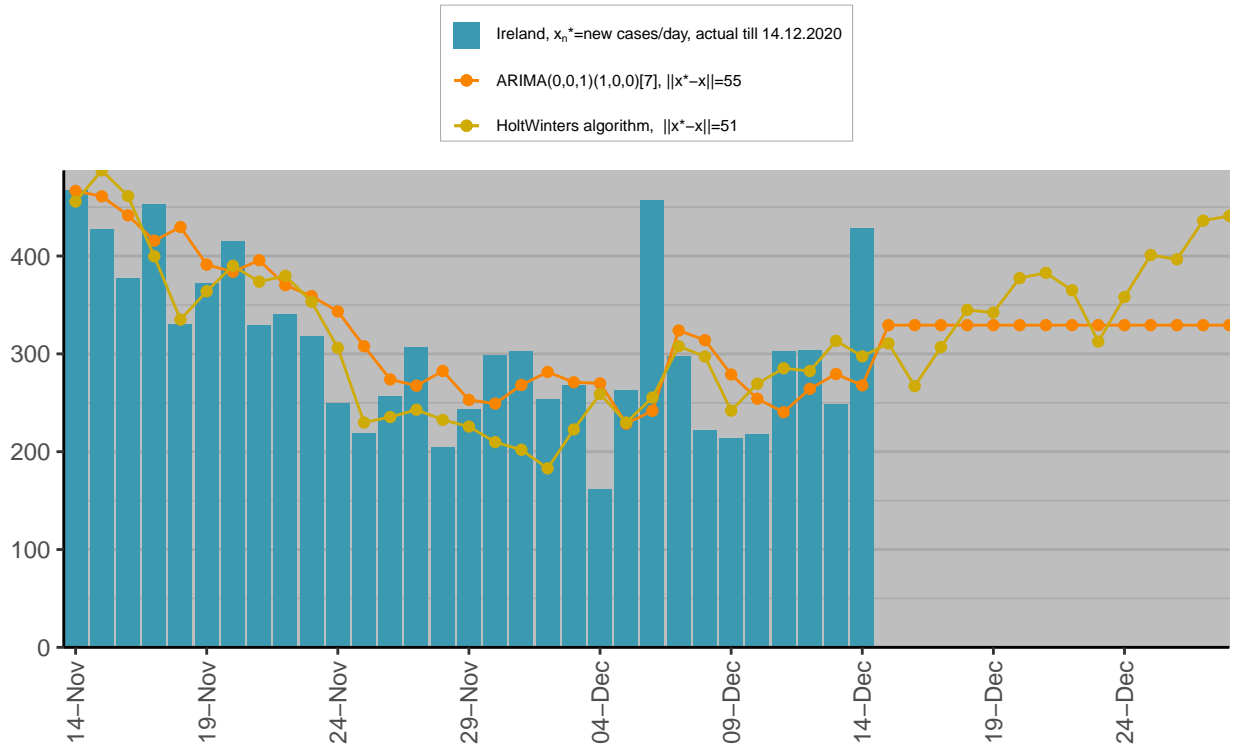

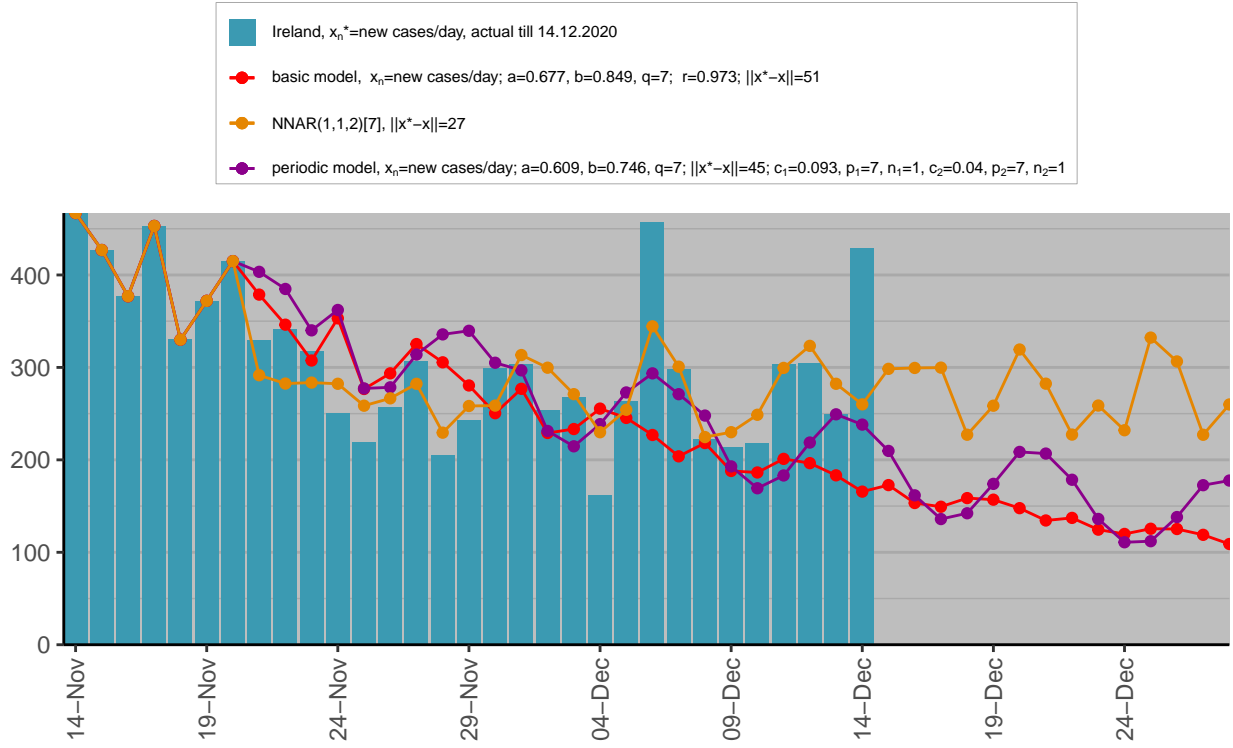Figure 13: Comparison of HoltWinters and ARIMA models, Ireland

Figure 14: Comparison of basic and periodic models with Neural Network model, Ireland
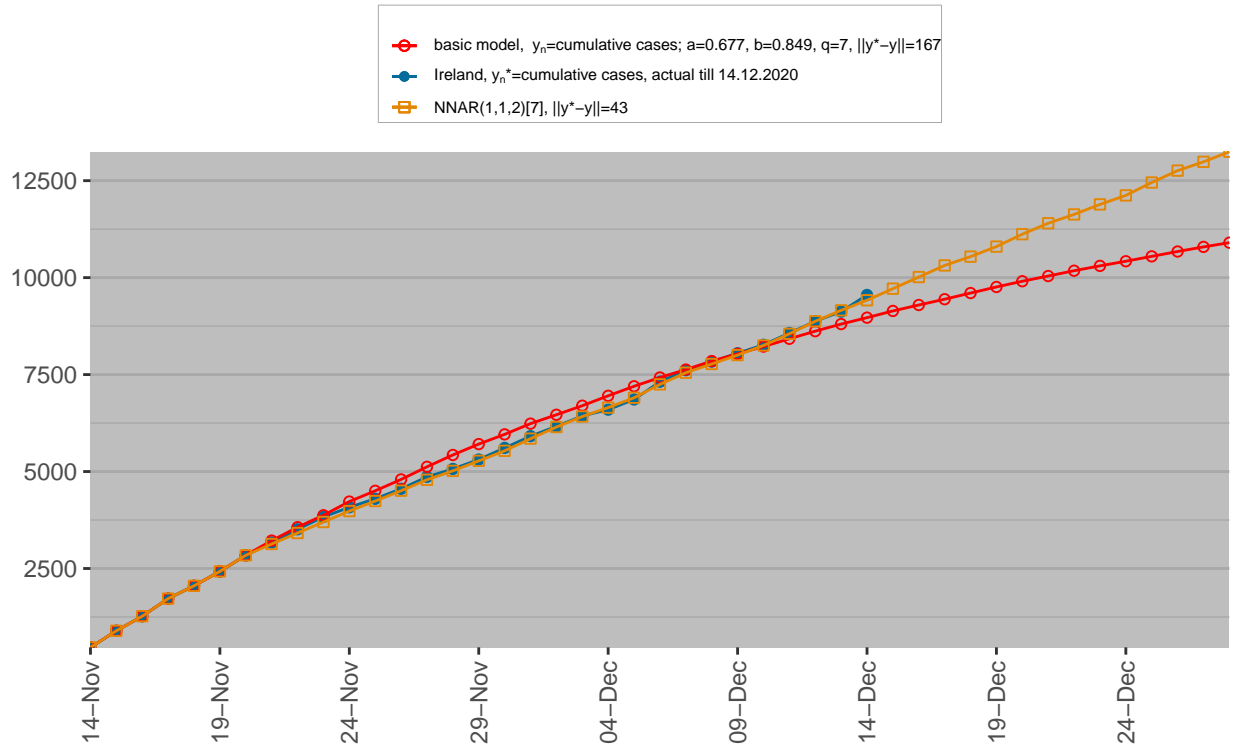

Figure 15: Comparison of Cumulative basic and periodic models with Neural Network model, Ireland
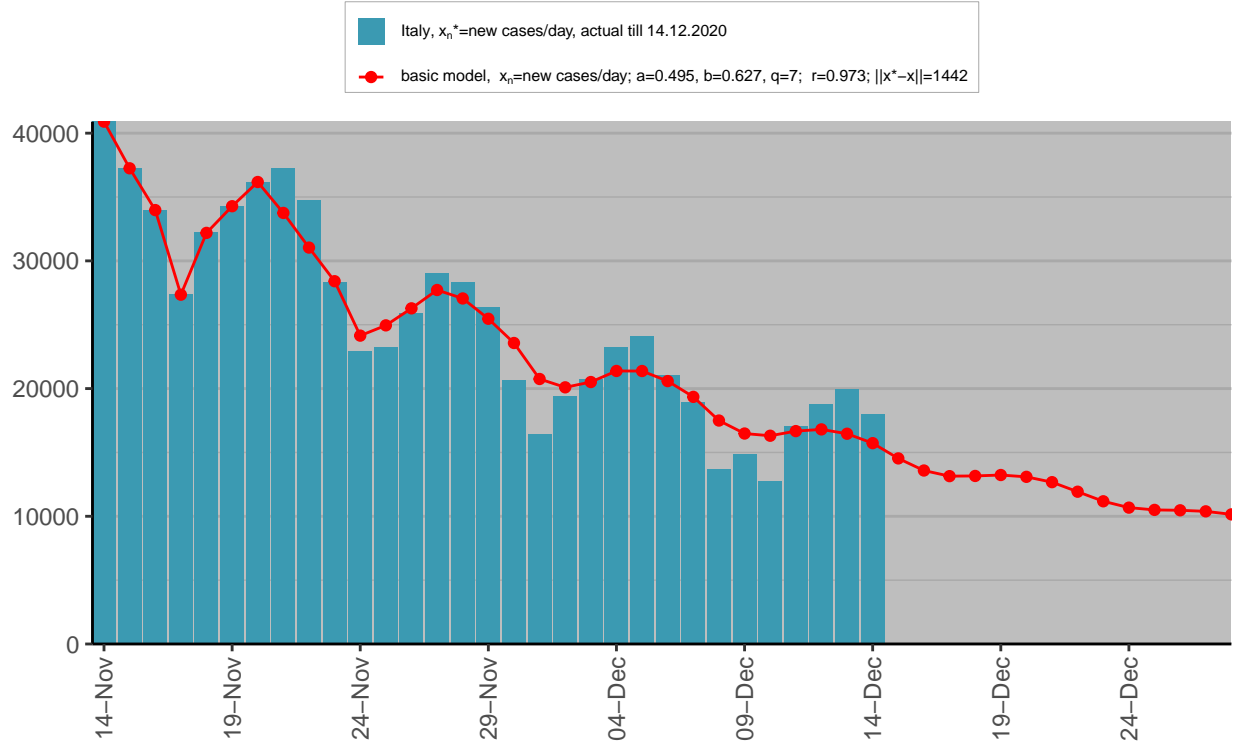
Figure 16: Comparison of the basic model with the actual data, Italy (x-diagram)
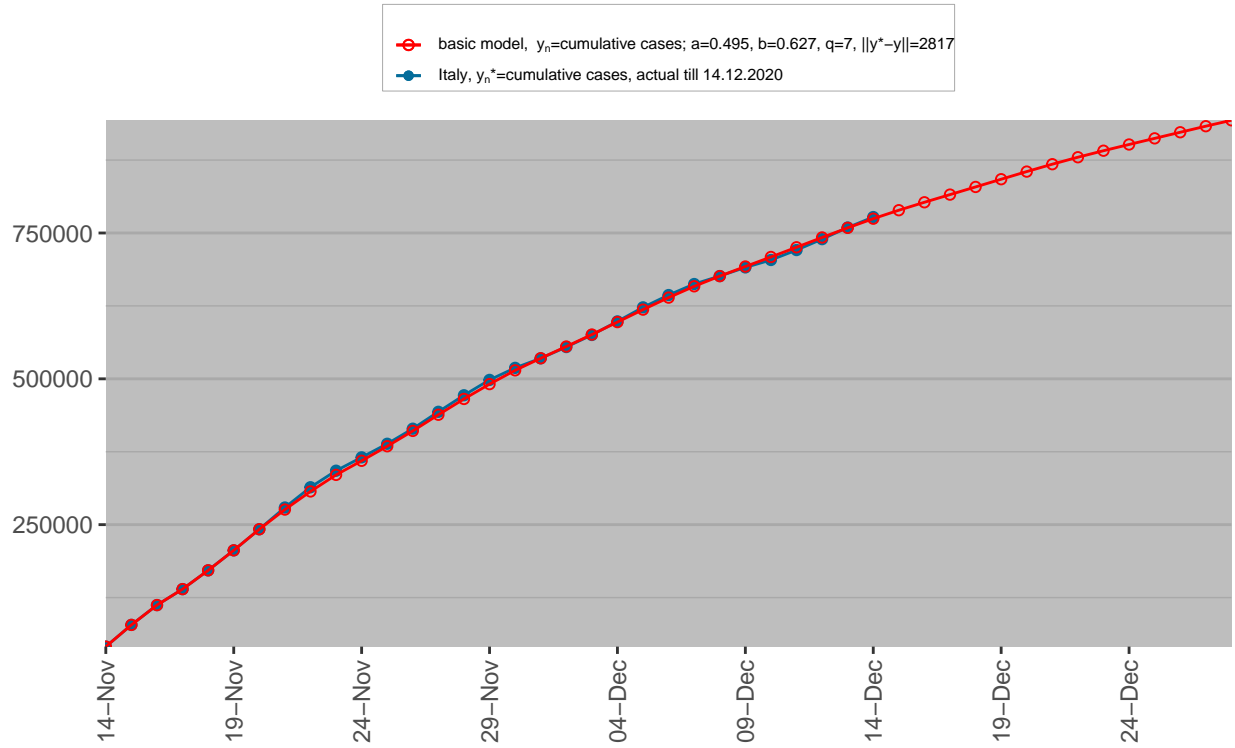

Figure 17: Comparison of the basic model with the actual data, Italy (x-diagram)
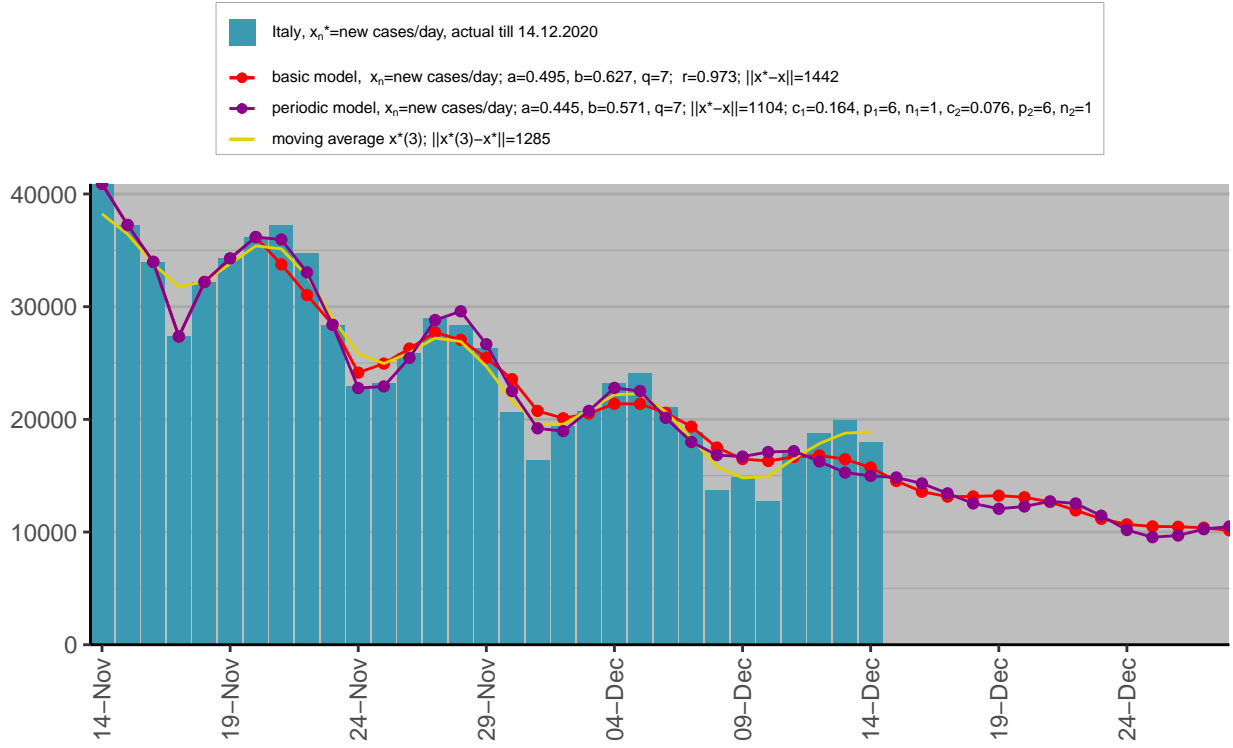
Figure 18: Comparison of basic and periodic models with moving averages, Italy
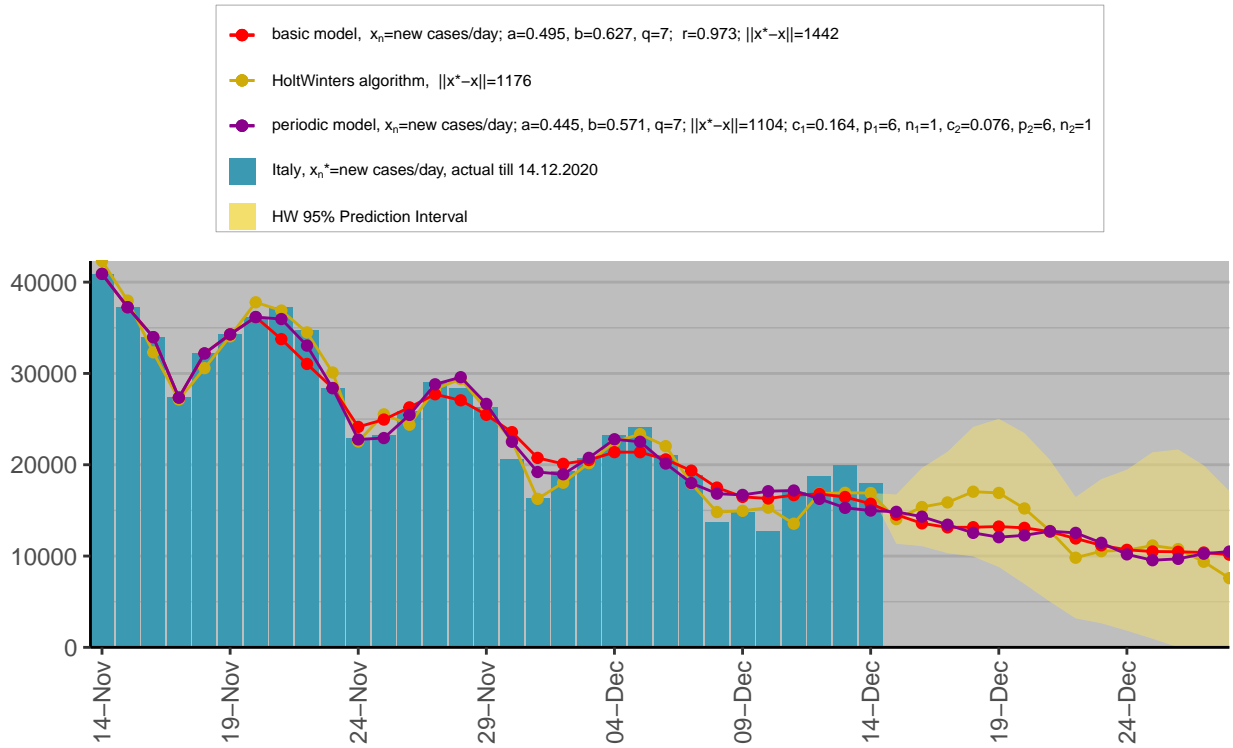

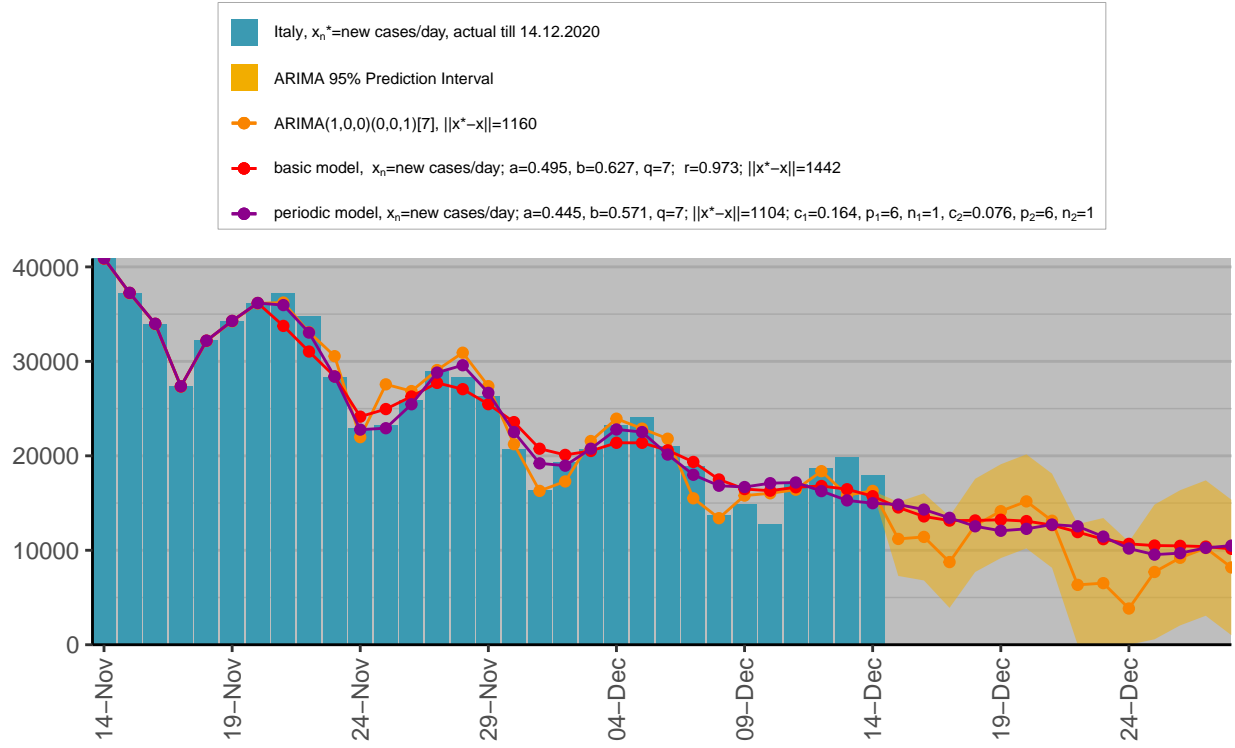Figure 19: Comparison of basic and periodic models with HoltWinters model, Italy

Figure 20: Comparison of basic and periodic models with ARIMA model, Italy
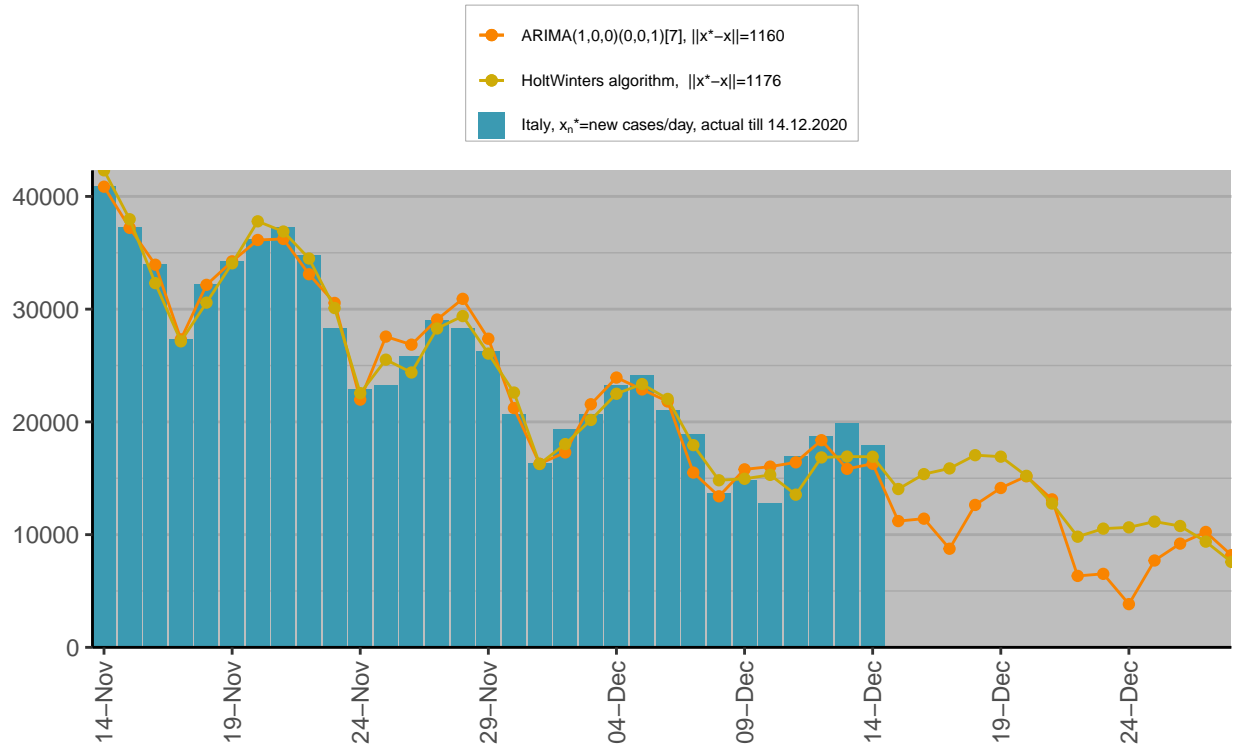

Figure 21: Comparison of HoltWinters and ARIMA models, Italy
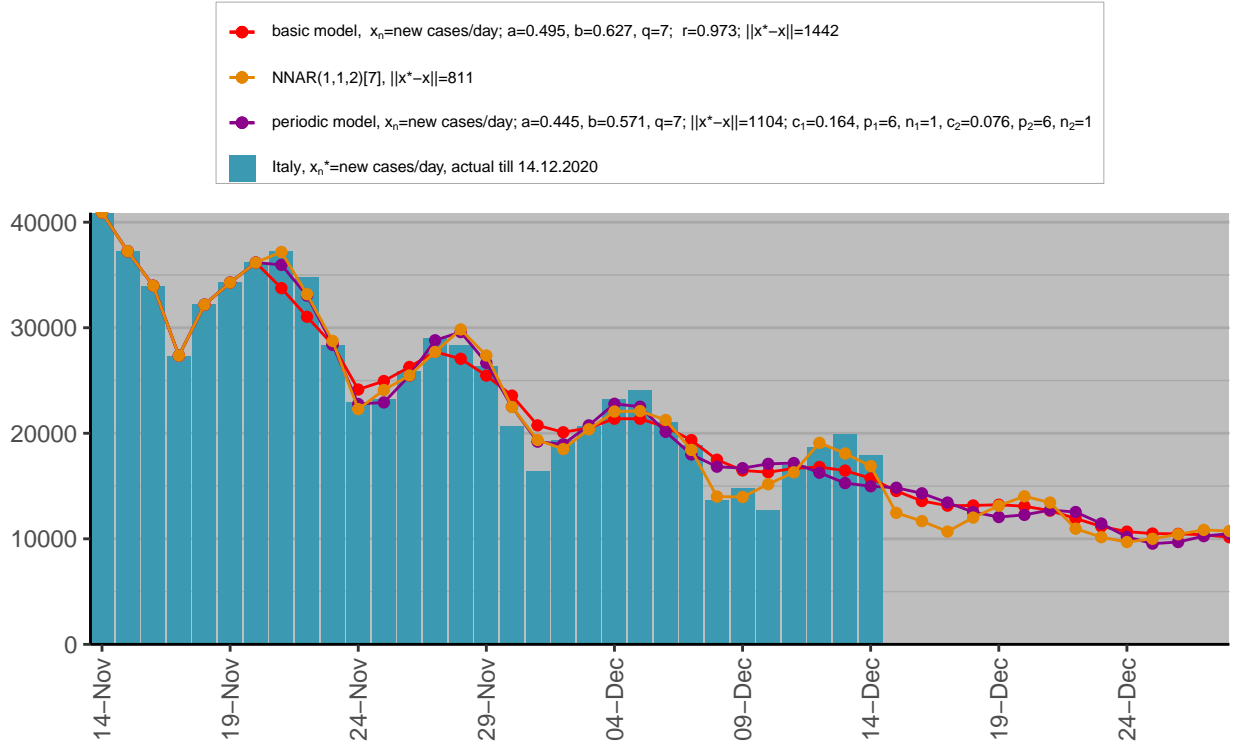
Figure 22: Comparison of basic and periodic models with Neural Network model, Italy
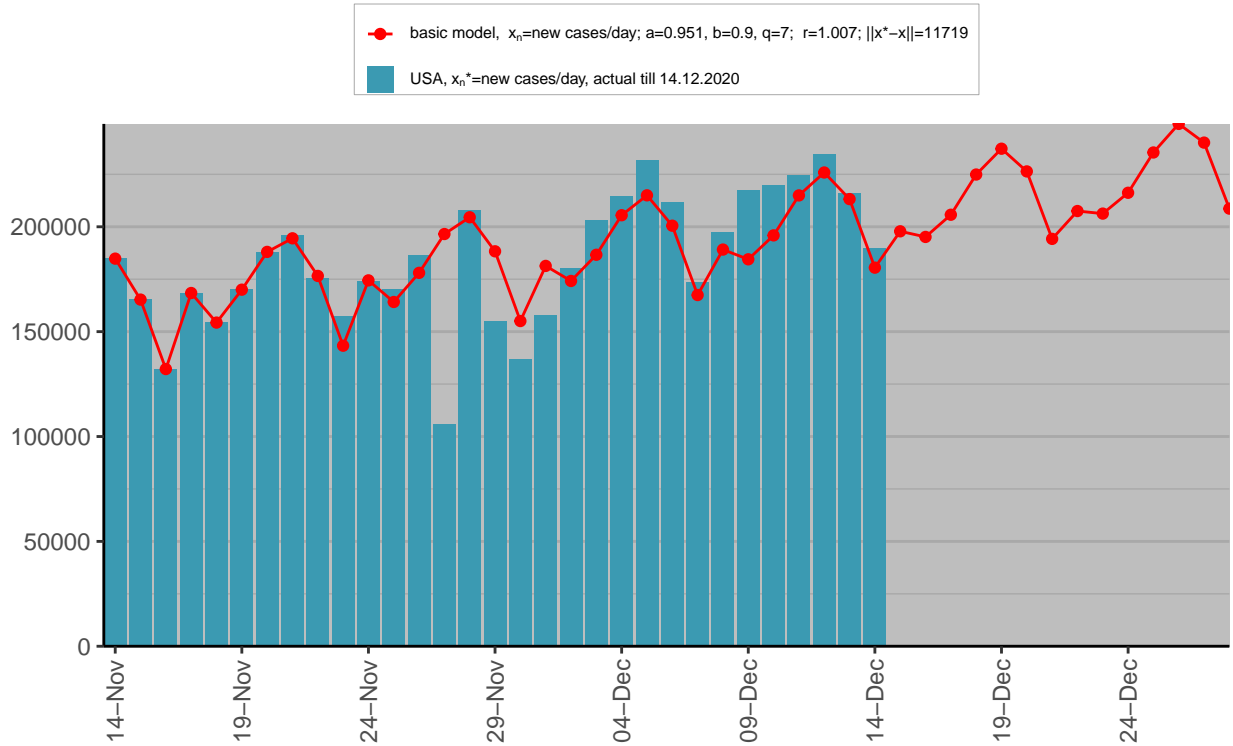

Figure 23: Comparison of the basic model with the actual data, USA (x-diagram)
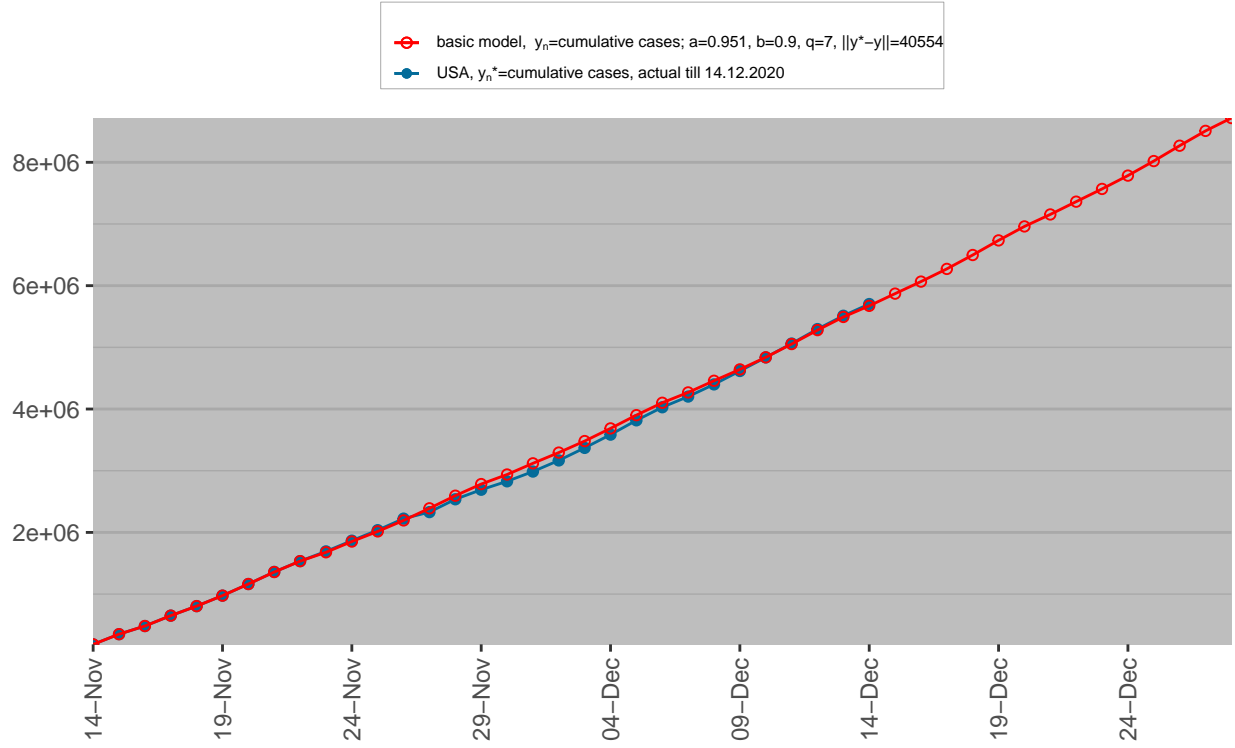
Figure 24: Comparison of the basic model with the actual data, USA (x-diagram)
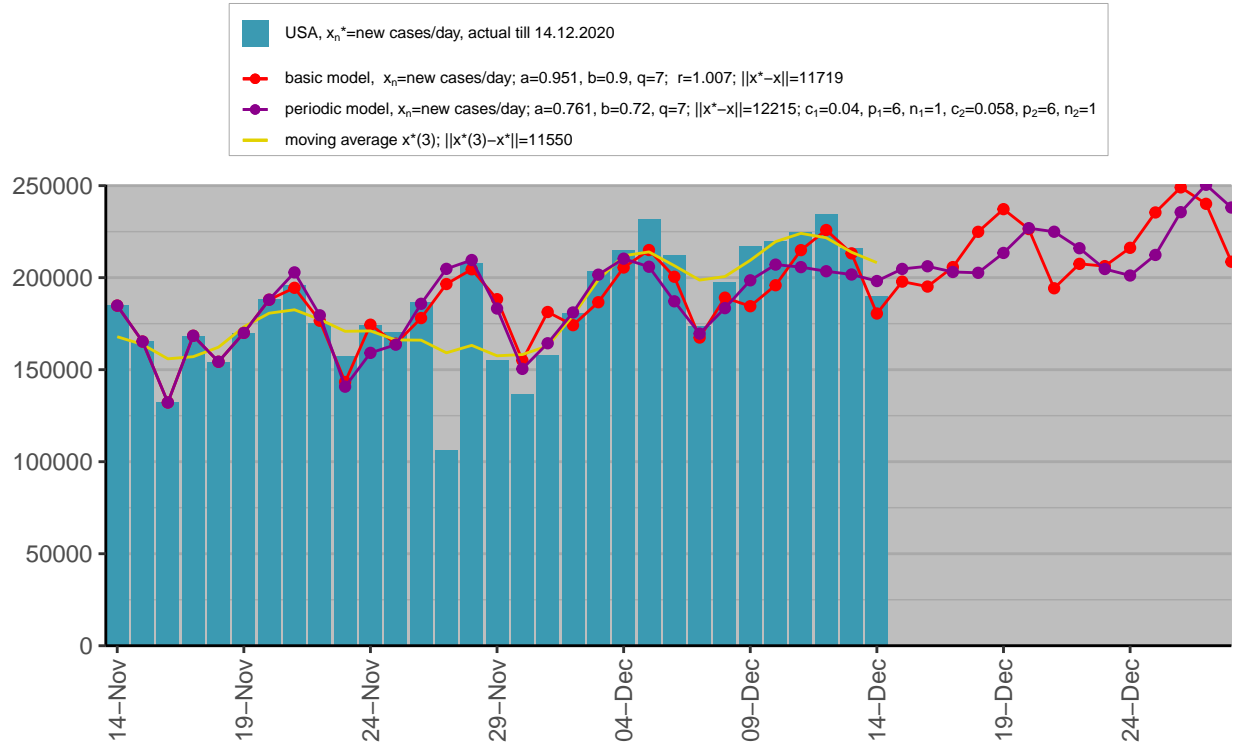

Figure 25: Comparison of basic and periodic models with moving averages, USA
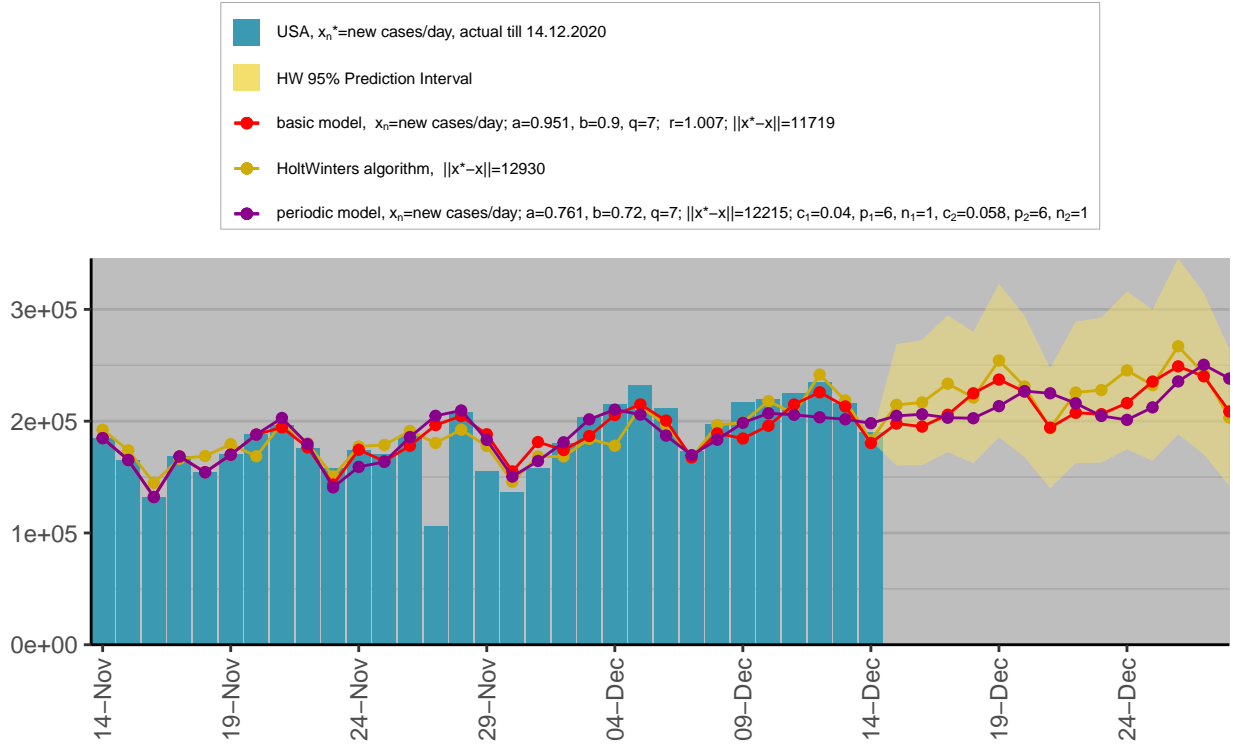
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Figure 26: Comparison of basic and periodic models with HoltWinters model, USA
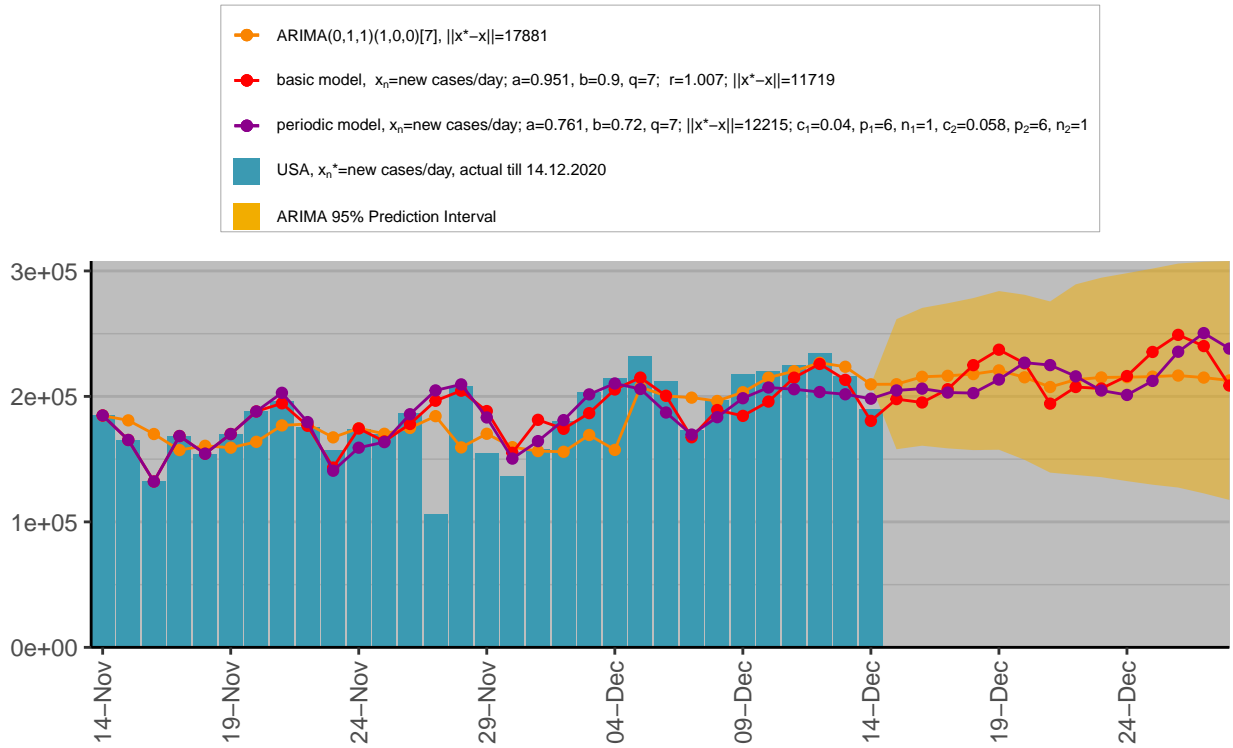

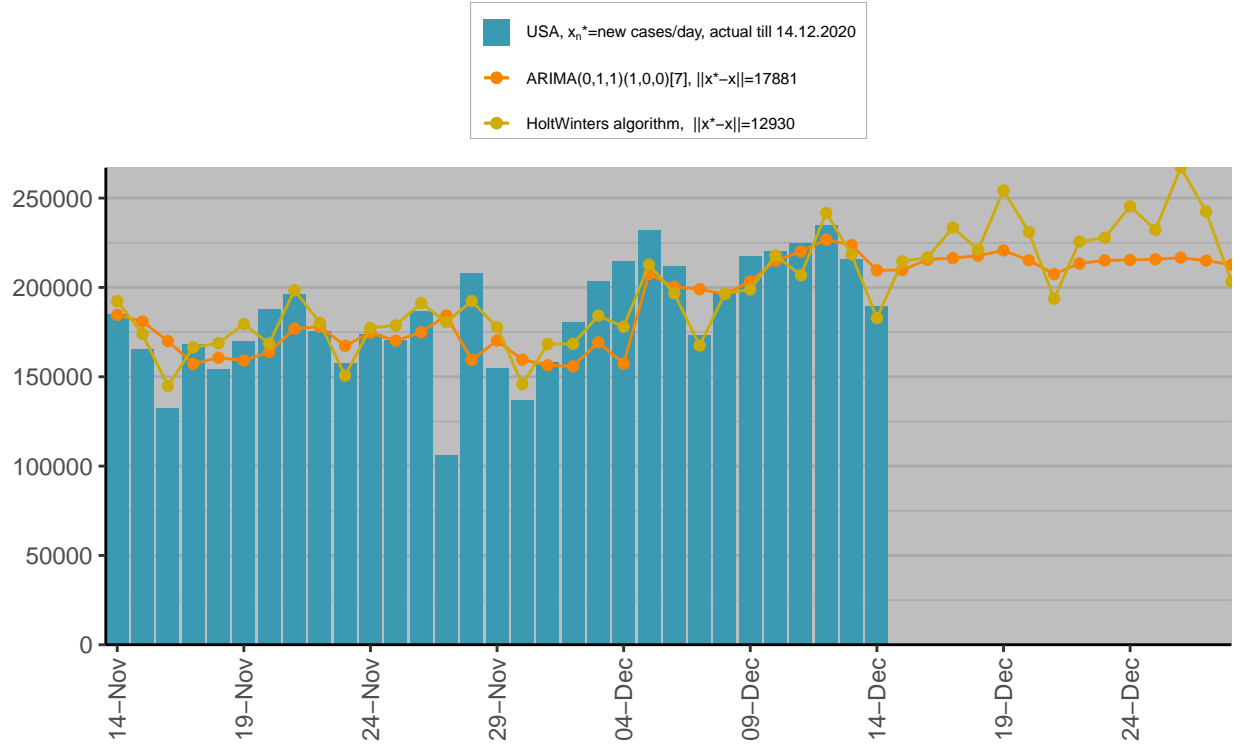Figure 27: Comparison of basic and periodic models with ARIMA model, USA

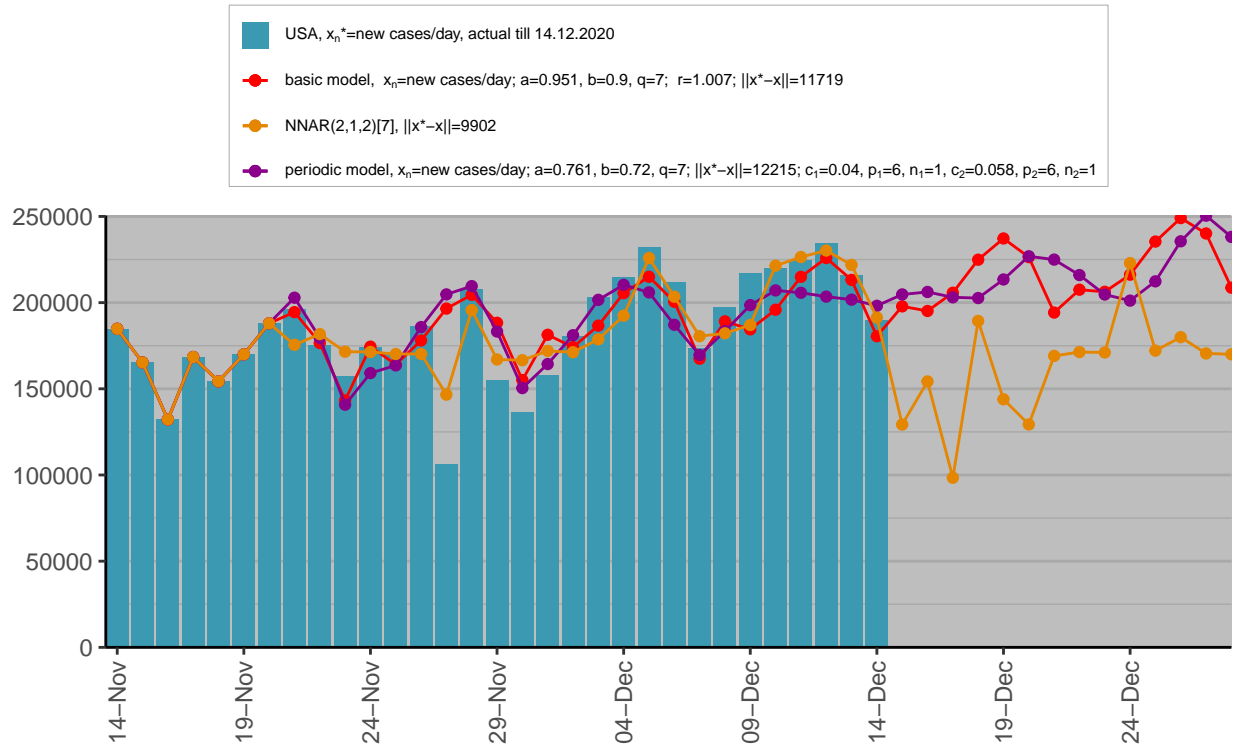Figure 28: Comparison of HoltWinters and ARIMA models, USA

Figure 29: Comparison of basic and periodic models with Neural Network model, USA
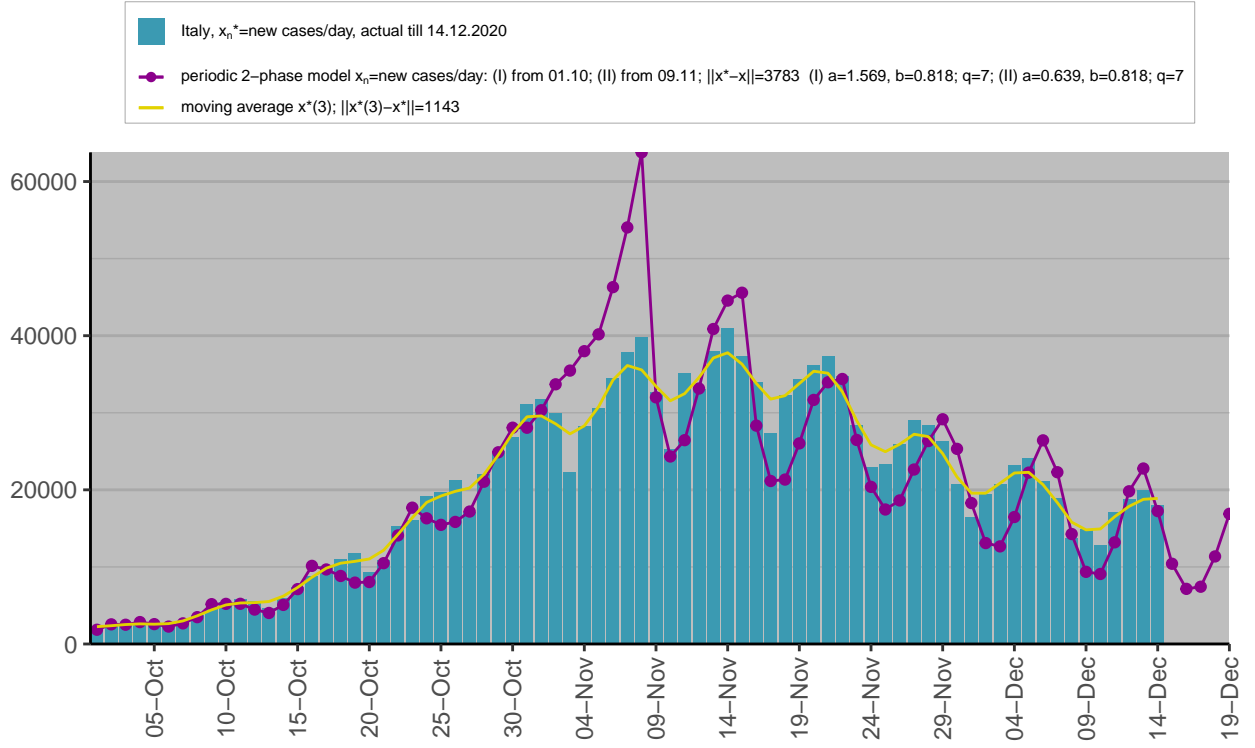
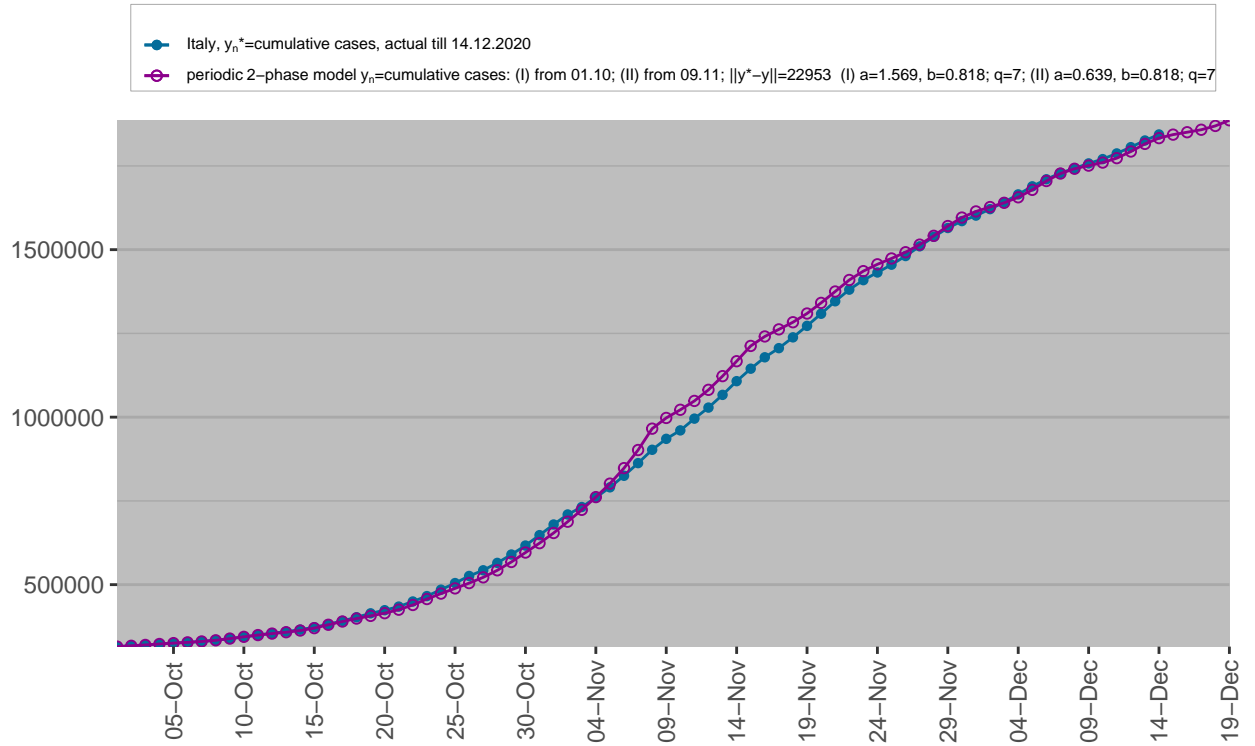Figure 30: A multi-phase periodic model for Italy (x-diagram)

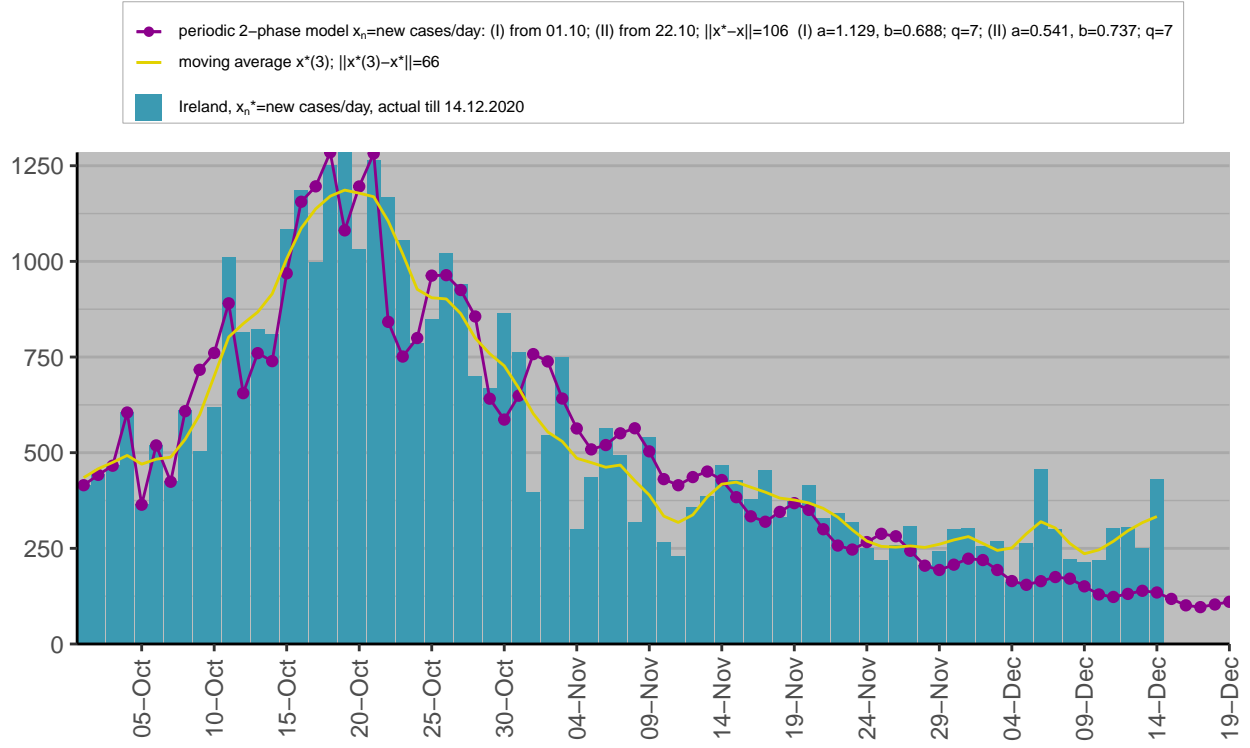Figure 31: A multi-phase periodic model for Italy (y-diagram)

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Figure 32: A multi-phase periodic model for Ireland (x-diagram)
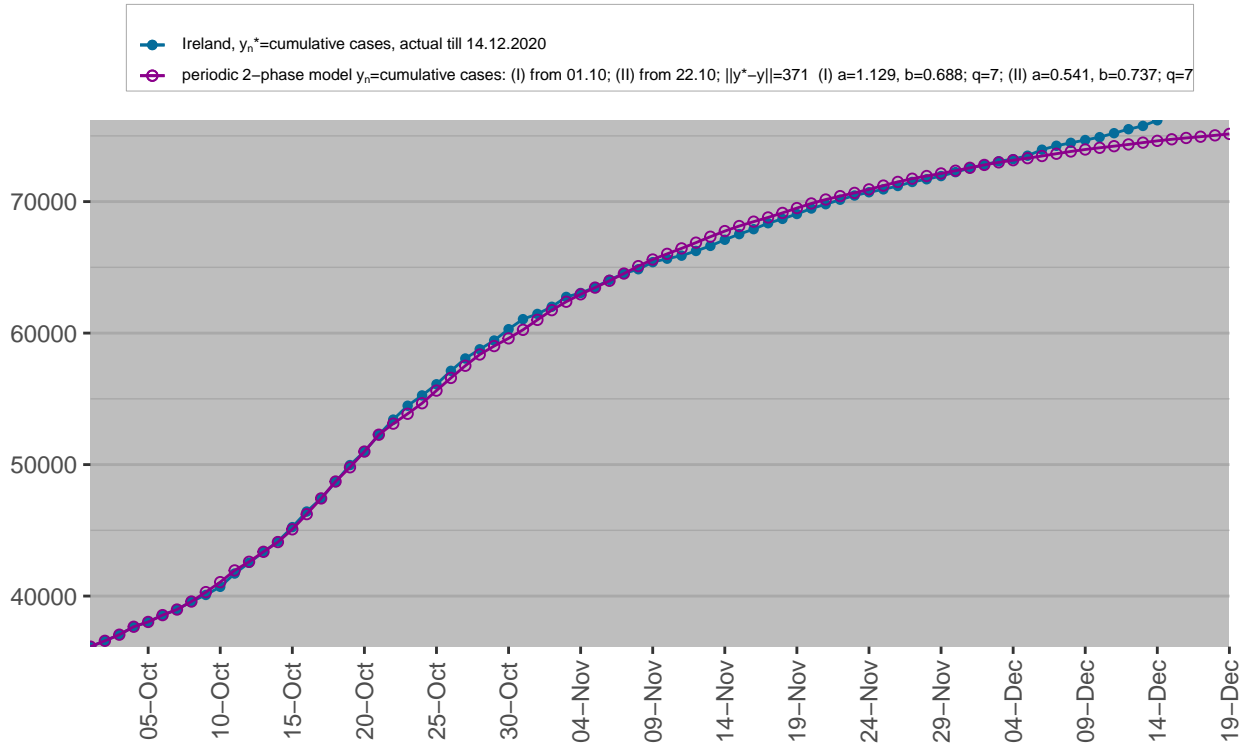

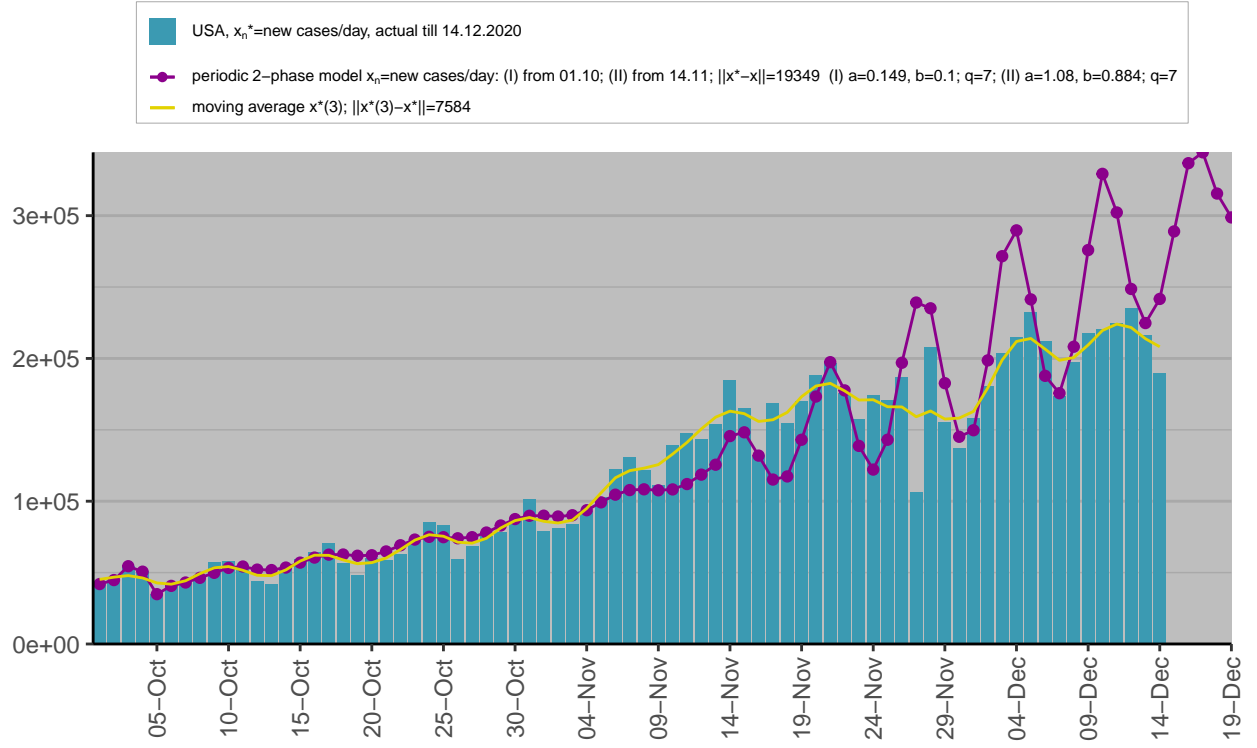Figure 33: A multi-phase periodic model for Ireland (y-diagram)

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Figure 34: A multi-phase periodic model for the USA (x-diagram)
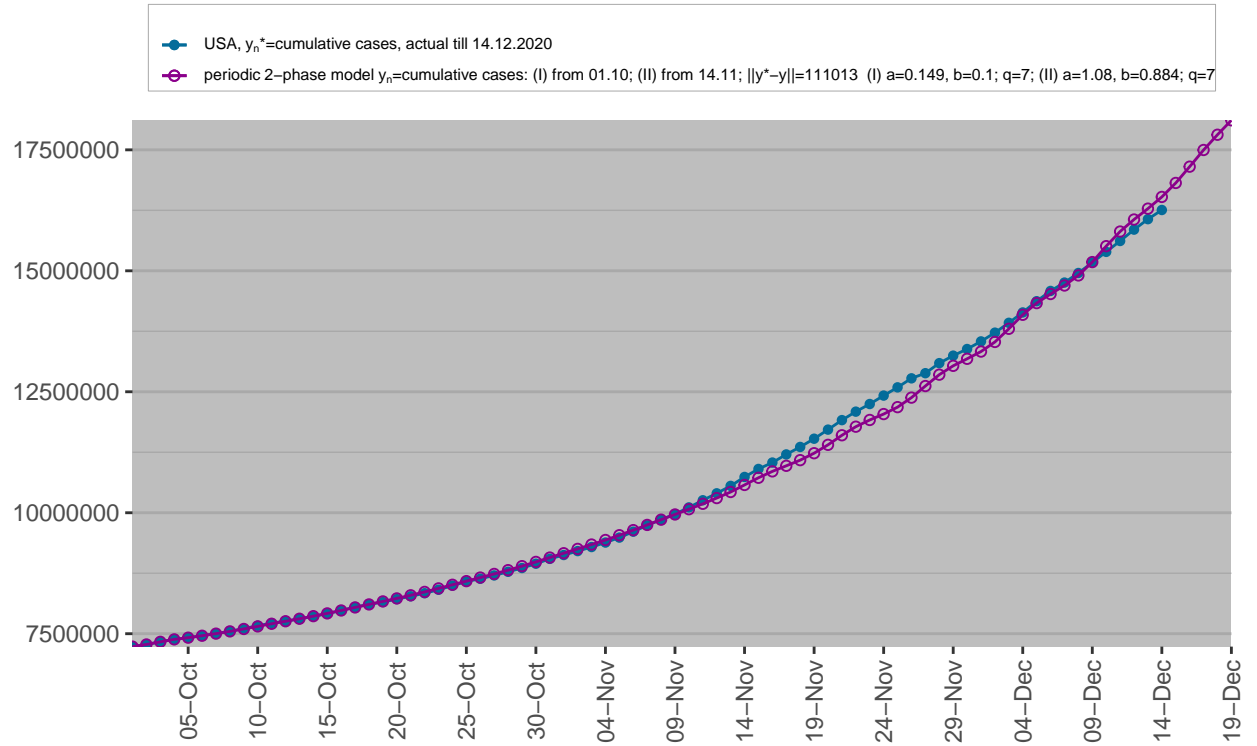

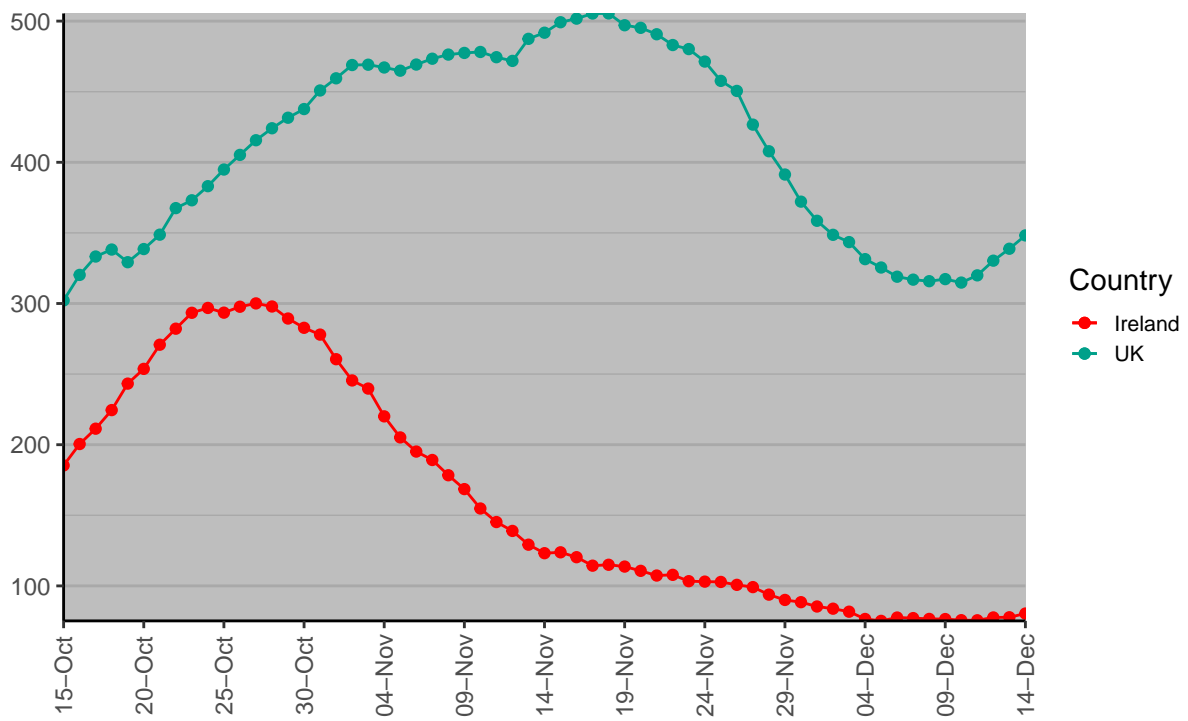Figure 35: A multi-phase periodic model for the USA (y-diagram)

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Figure 36: A Comparison of the cumulative number of cases for 14 days per 100,000 of the populaiton - Ireland vs UK
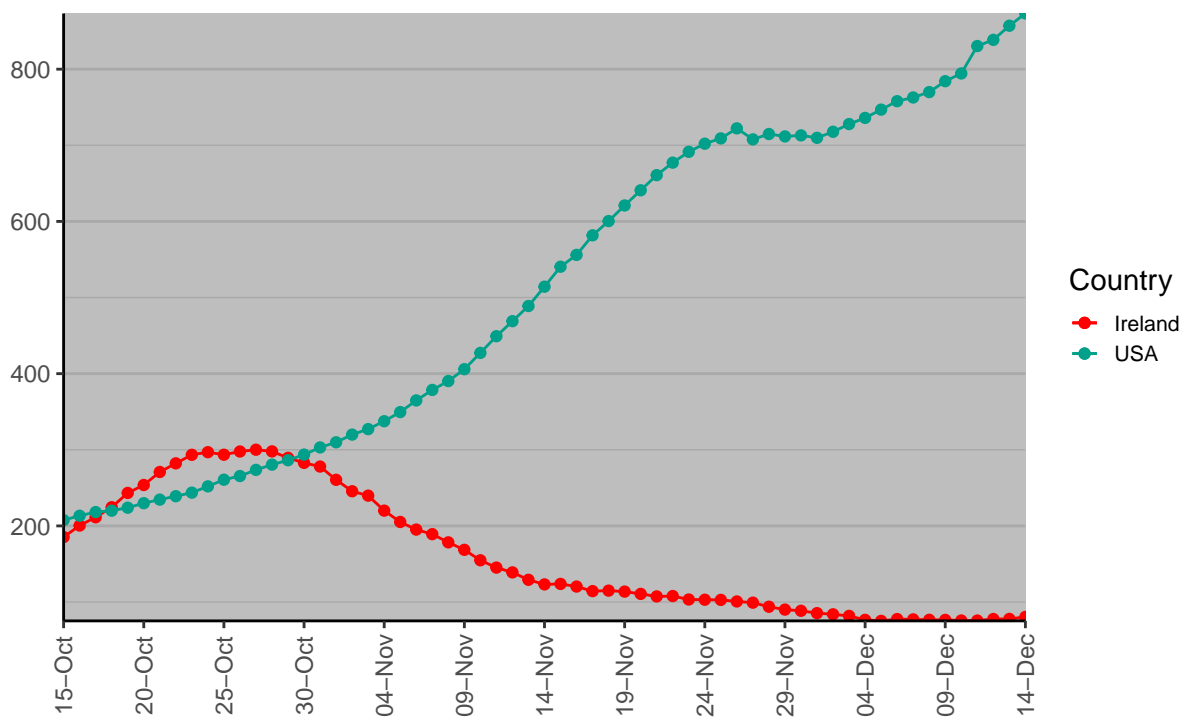
Figure 37: A Comparison of the cumulative number of cases for 14 days per 100,000 of the populaiton - Ireland vs USA
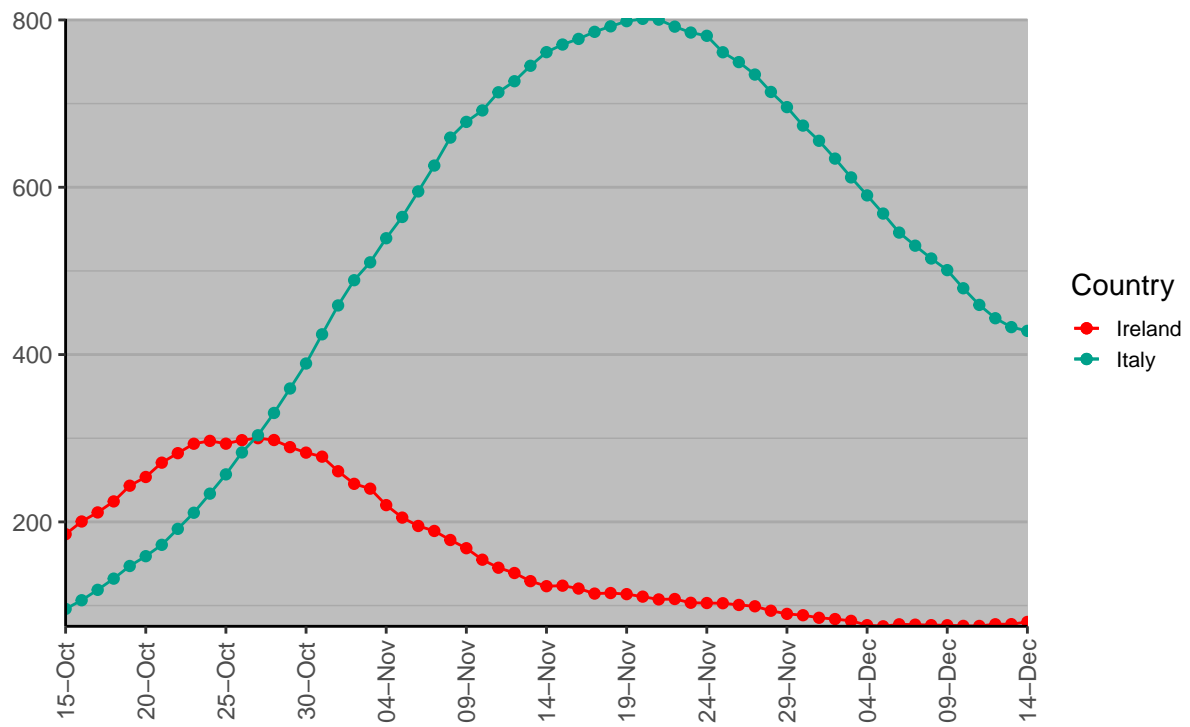
Figure 38: A Comparison of the cumulative number of cases for 14 days per 100,000 of the populaiton - Ireland vs Italy
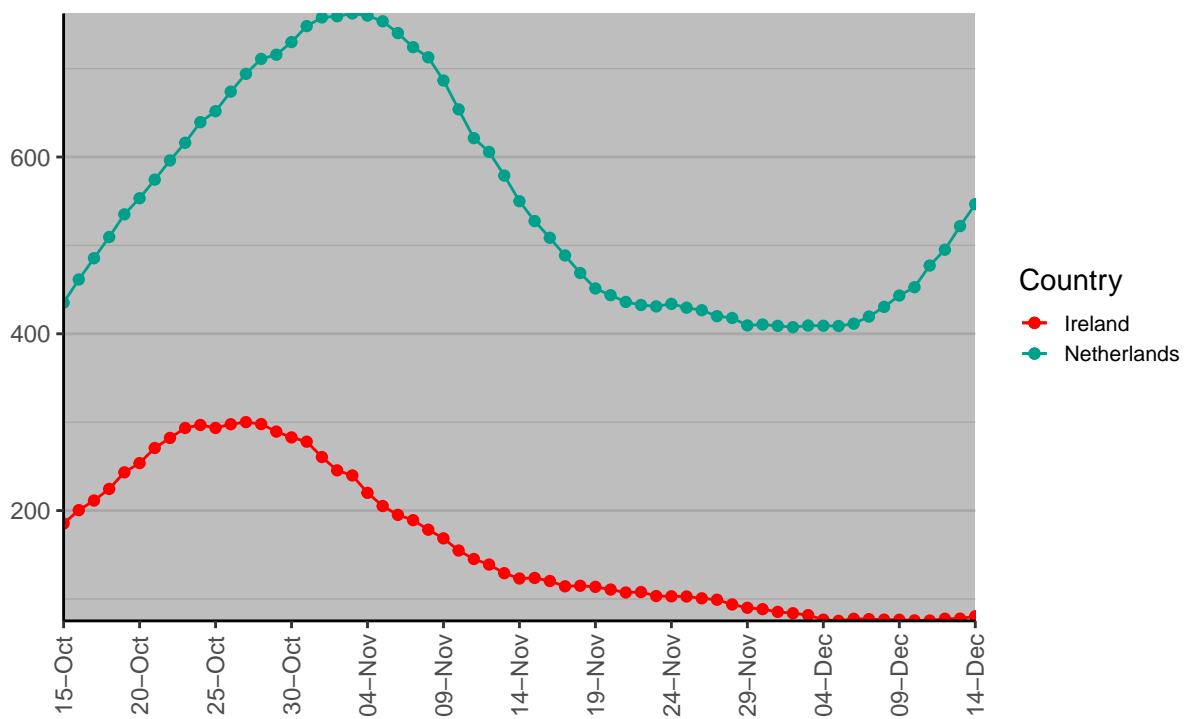
Figure 39: A Comparison of the cumulative number of cases for 14 days per 100,000 of the populaiton - Ireland vs Netherlands
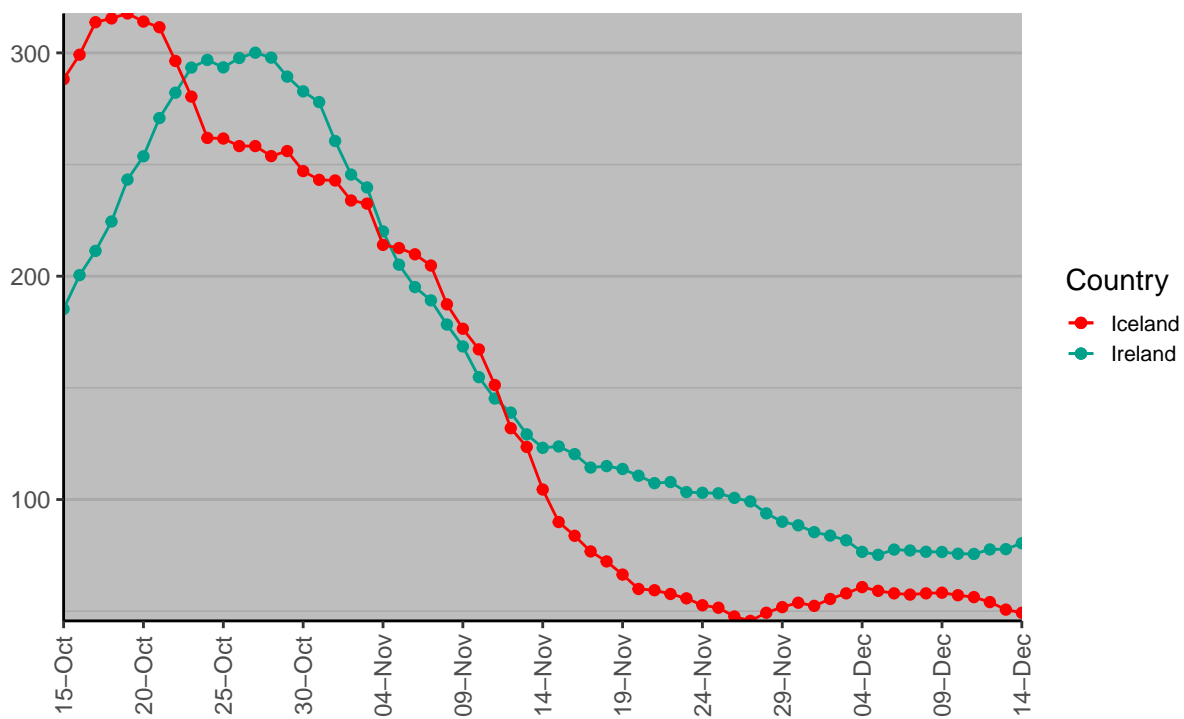
Figure 40: A Comparison of the cumulative number of cases for 14 days per 100,000 of the populaiton - Ireland vs Iceland