Covid Plots

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1 Introduction

Global Total =54,110,061 as at November 15, 2020

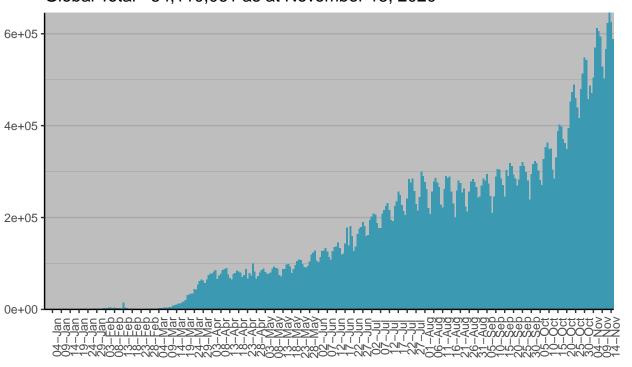


Figure 1: Daily cases Globally to date

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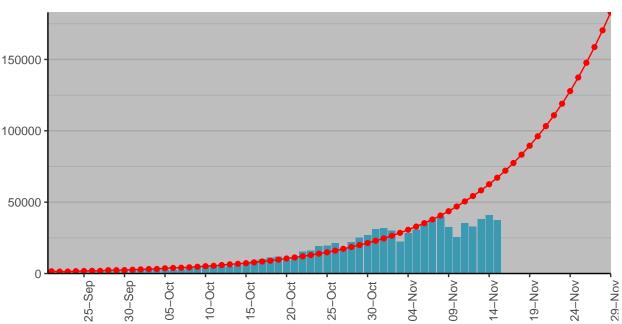


Figure 2: Comparison of the basic model with the actual data, Italy (x-diagram)

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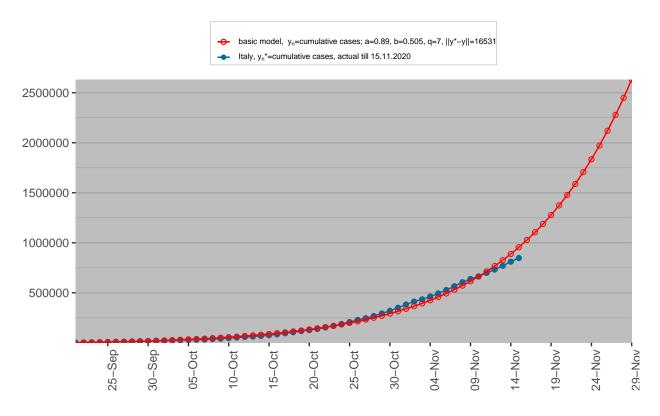


Figure 3: Comparison of the basic model with the actual data, Italy (x-diagram)

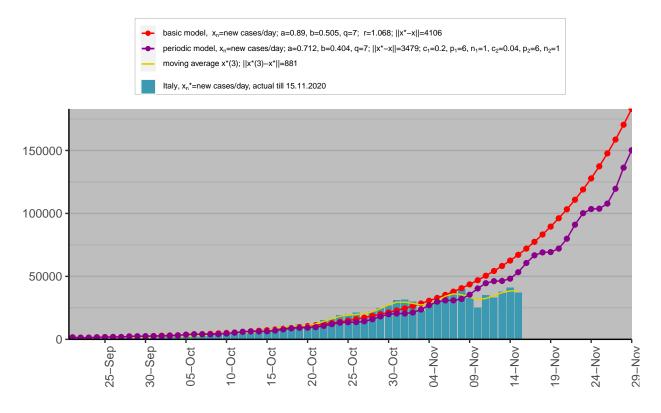


Figure 4: Comparison of basic and periodic models with moving averages, Italy

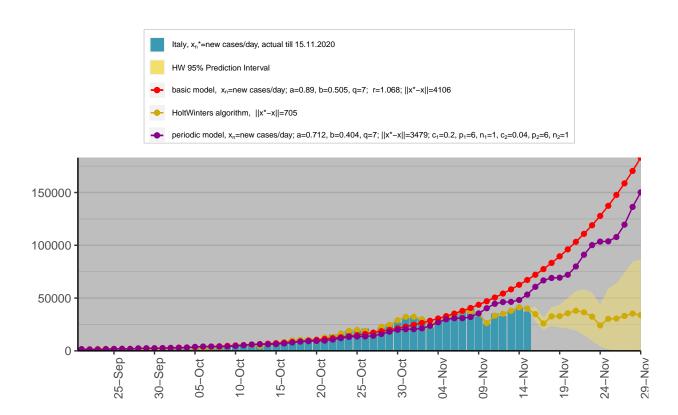


Figure 5: Comparison of basic and periodic models with HoltWinters model, Italy

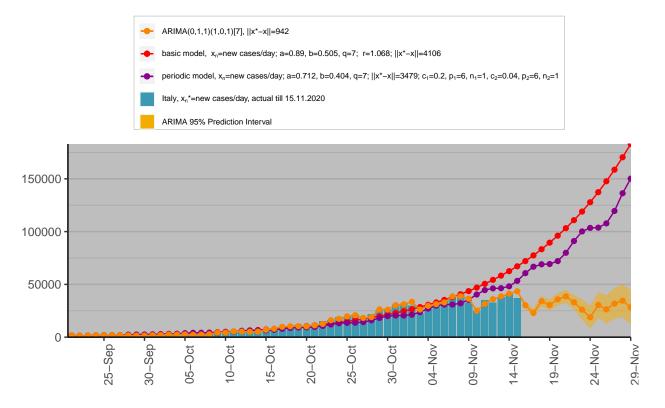


Figure 6: Comparison of basic and periodic models with ARIMA model, Italy

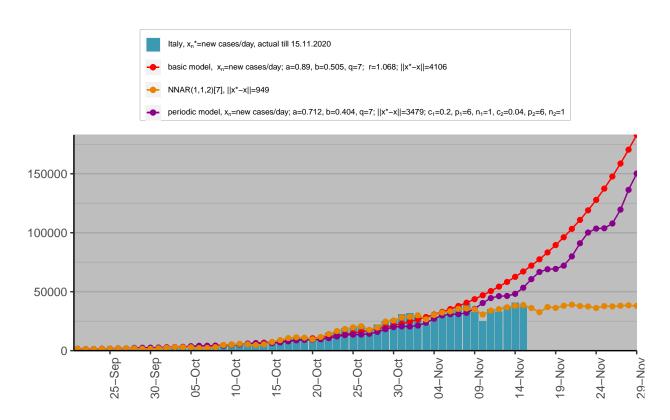


Figure 7: Comparison of basic and periodic models with Neural Network model, Italy

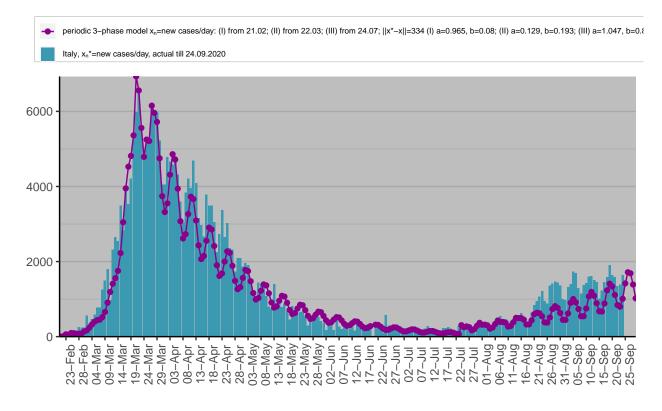
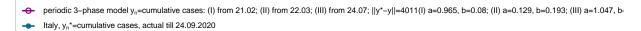


Figure 8: A multi-phase periodic model for Italy (x-diagram)



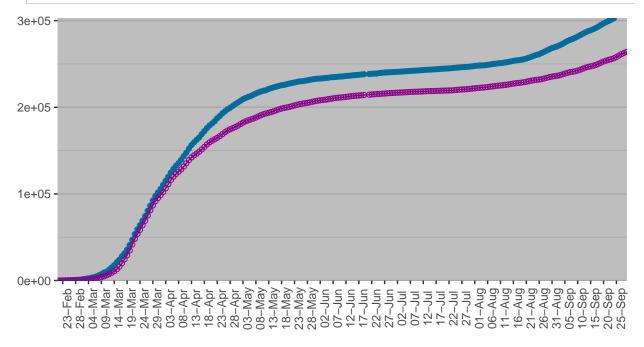


Figure 9: A multi-phase periodic model for Italy (y-diagram)

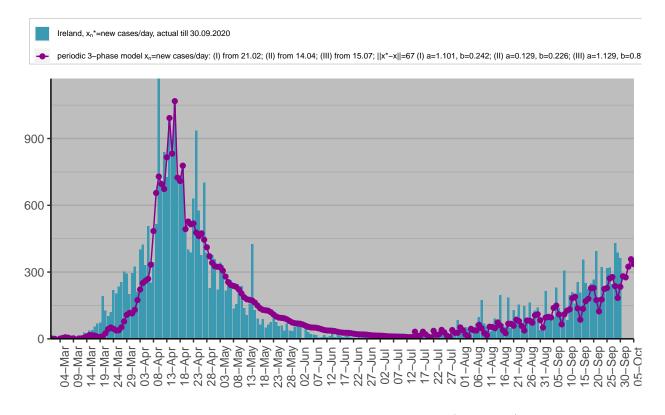
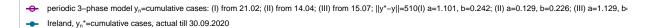


Figure 10: A multi-phase periodic model for Ireland (x-diagram)



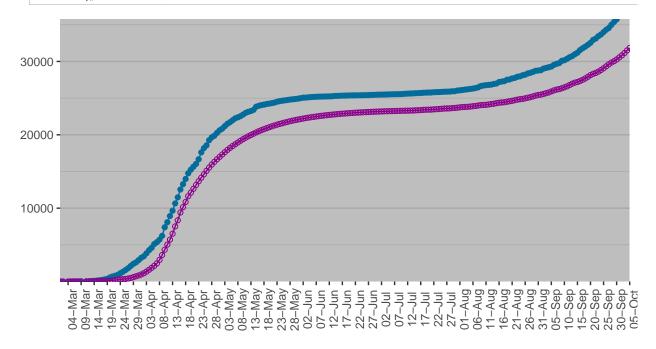


Figure 11: A multi-phase periodic model for Ireland (y-diagram)

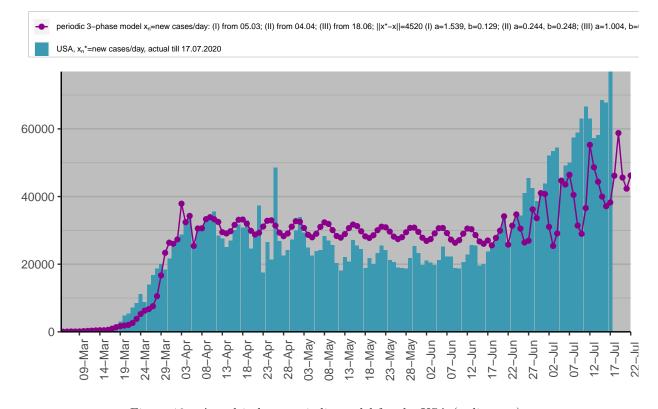
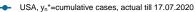


Figure 12: A multi-phase periodic model for the USA (x-diagram)

 $\begin{array}{c} \bullet \bullet \quad \text{periodic 3-phase model y}_n = \text{cumulative cases: (I) from 05.03; (II) from 04.04; (III) from 18.06; } \\ ||y^*-y|| = 21295(I) \ a = 1.539, \ b = 0.129; \ (II) \ a = 0.244, \ b = 0.248; \ (III) \ a = 1.004, \ III \\ ||y^*-y|| = 21295(I) \ a = 1.539, \ b = 0.129; \ (II) \ a = 0.244, \ b = 0.248; \ (III) \ a = 1.004, \ III \\ ||y^*-y|| = 21295(I) \ a = 1.539, \ b = 0.129; \ (III) \ a = 0.244, \ b = 0.248; \ (III) \ a = 0.248; \ (III) \$



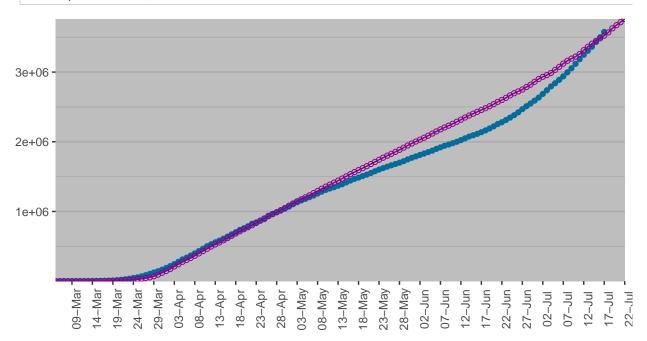


Figure 13: A multi-phase periodic model for the USA (y-diagram)