Branching stochastic processes as models of Covid-19 epidemic development

Andorra - week 53

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Abstract

The results presented here are obtained using the methologi proposed in the paper https://arxiv.org/abs/2004.14838 for the country Andorra. The data comes from European Centre for Disease Prevention and Control available at https://opendata.ecdc.europa.eu/covid19/casedistribution/csv.

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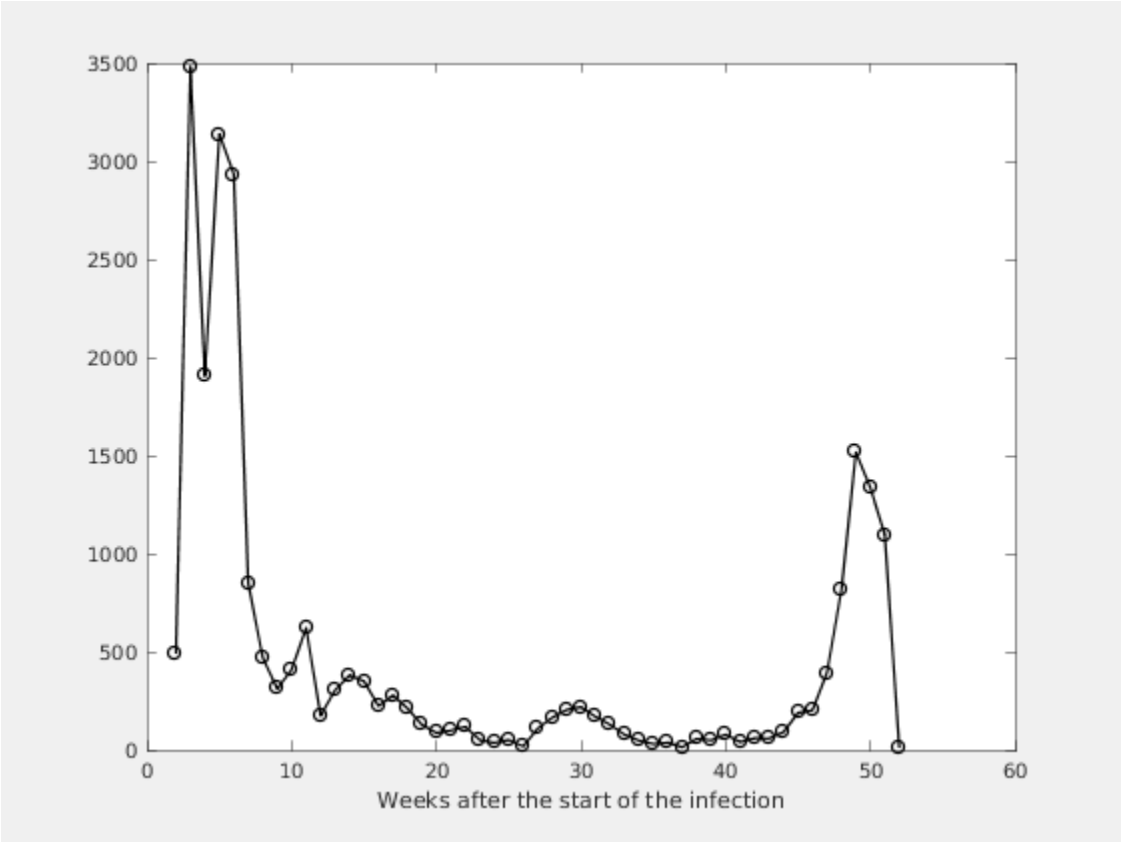
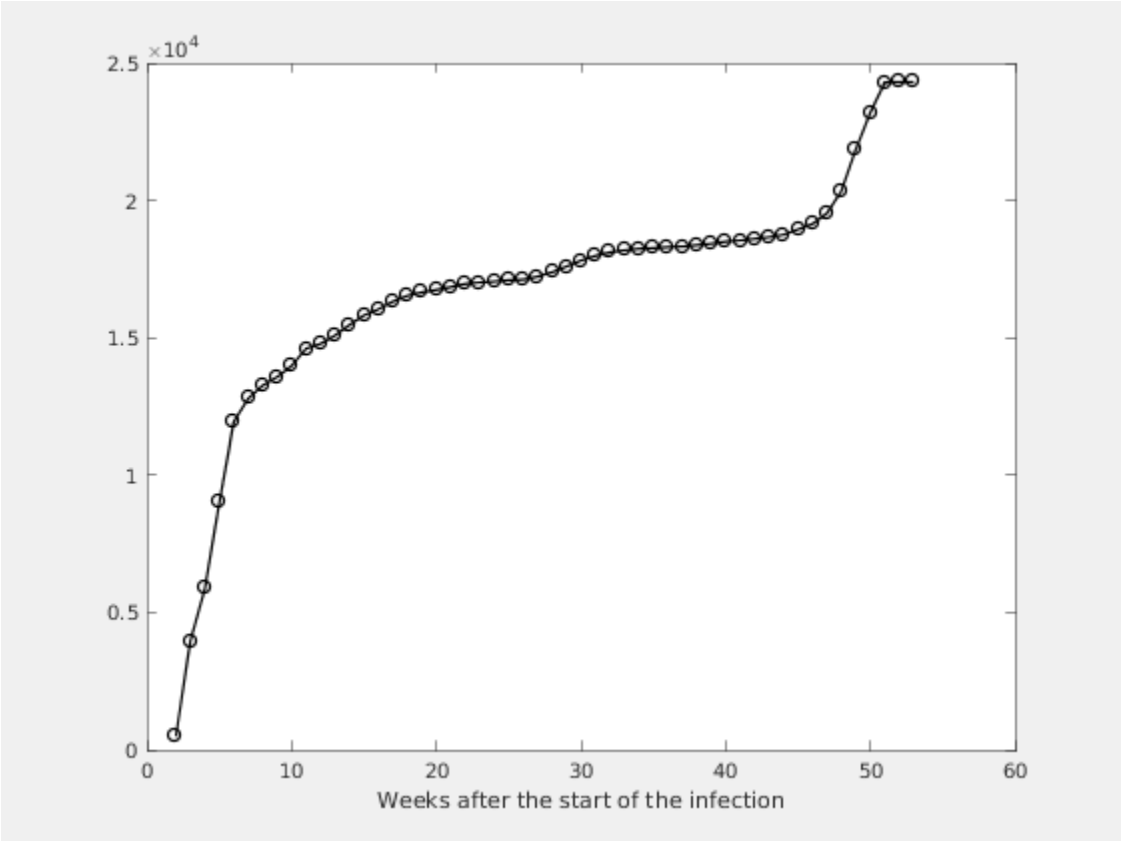


Figure 1.2. Number of the total registered cases



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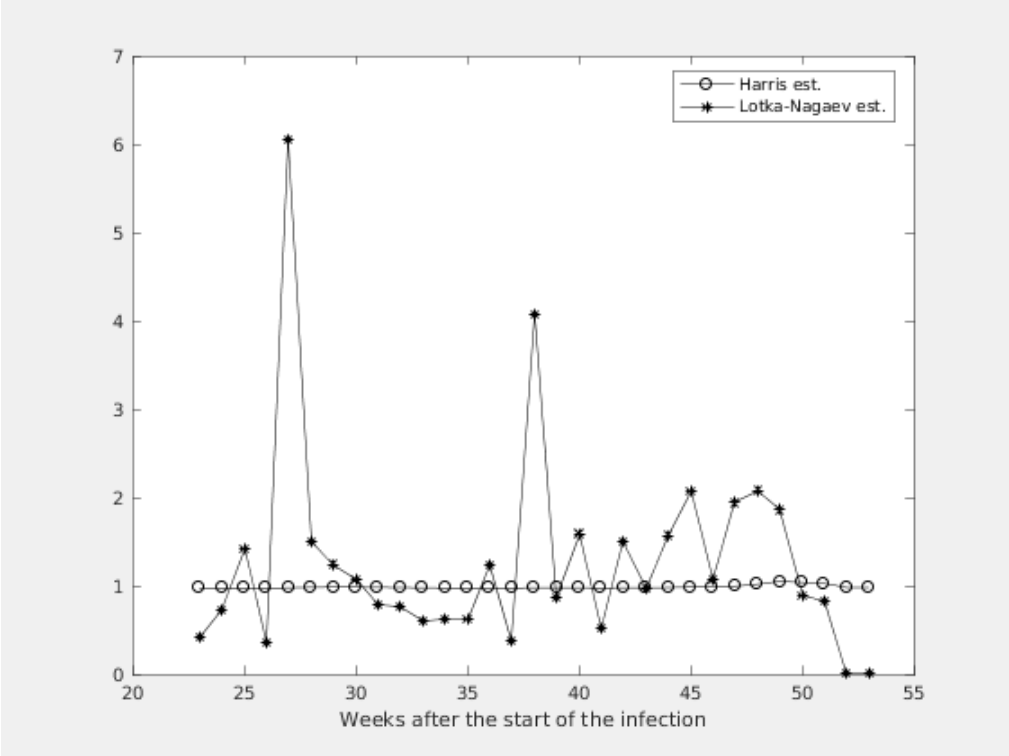


Figure 2.2. Figure

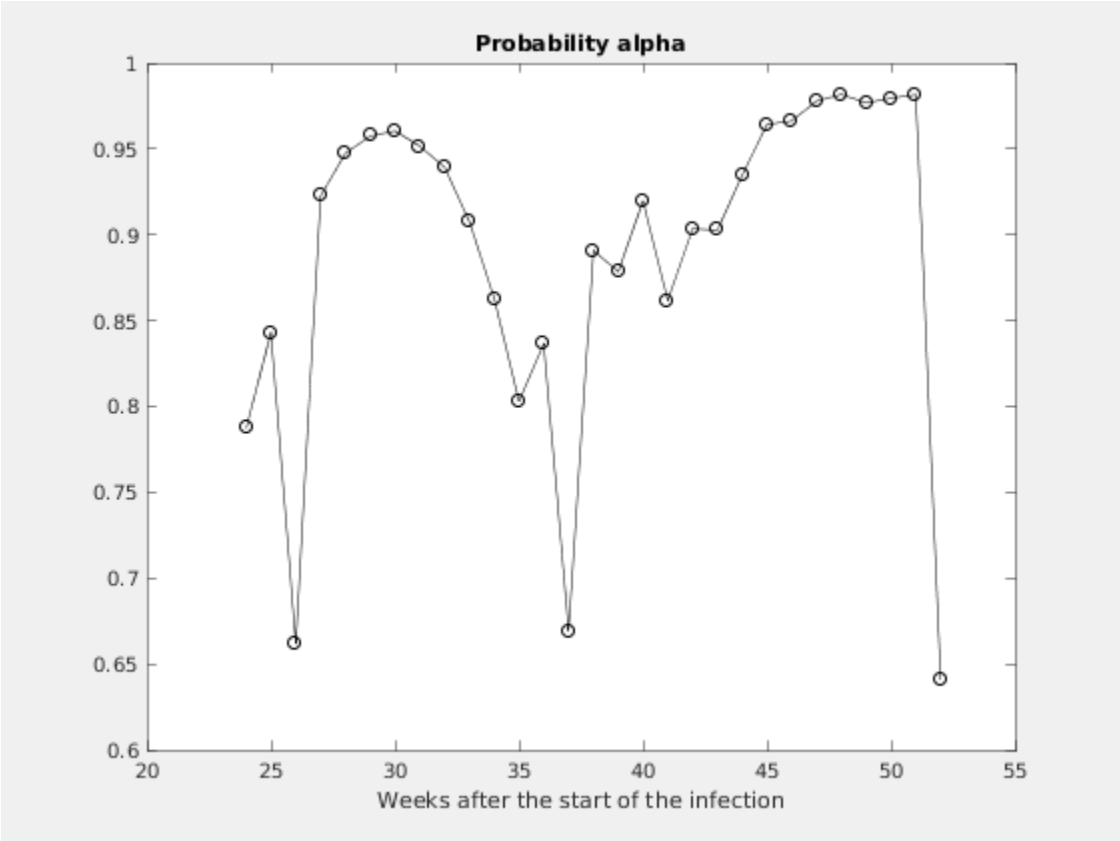


Figure 2.3. Expected number of the nonregistered infected individuals without immigration

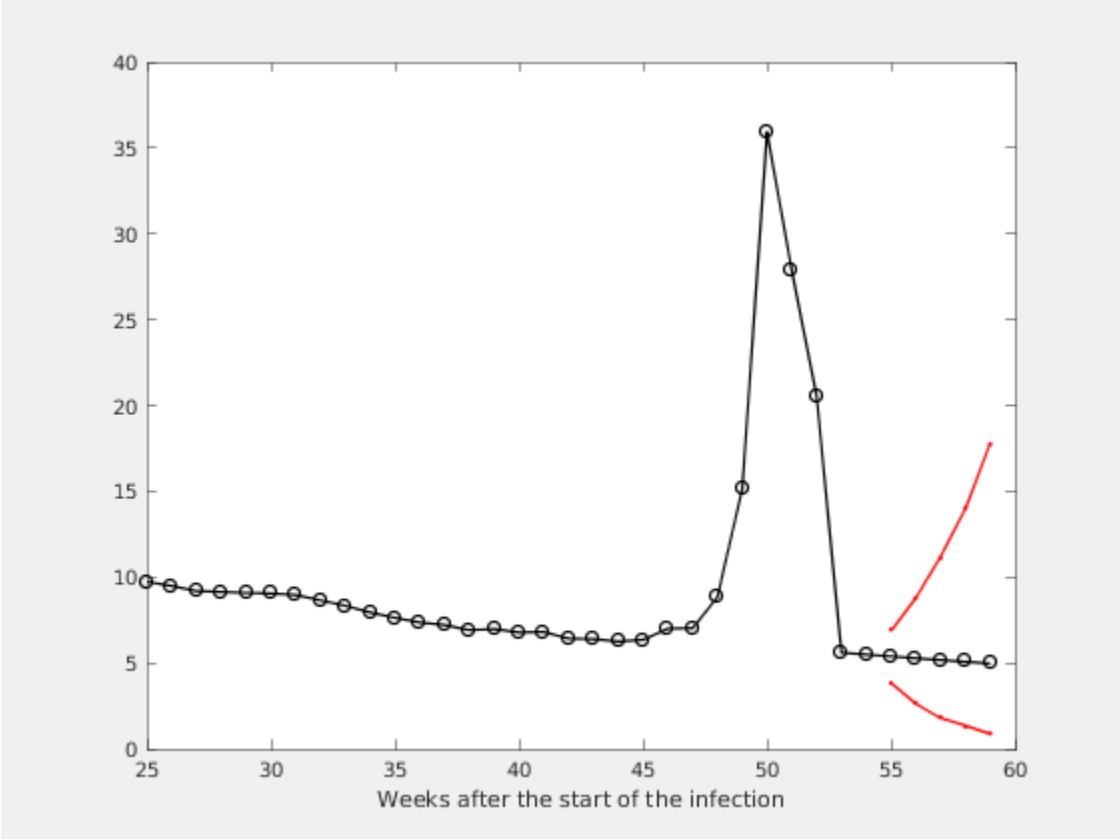
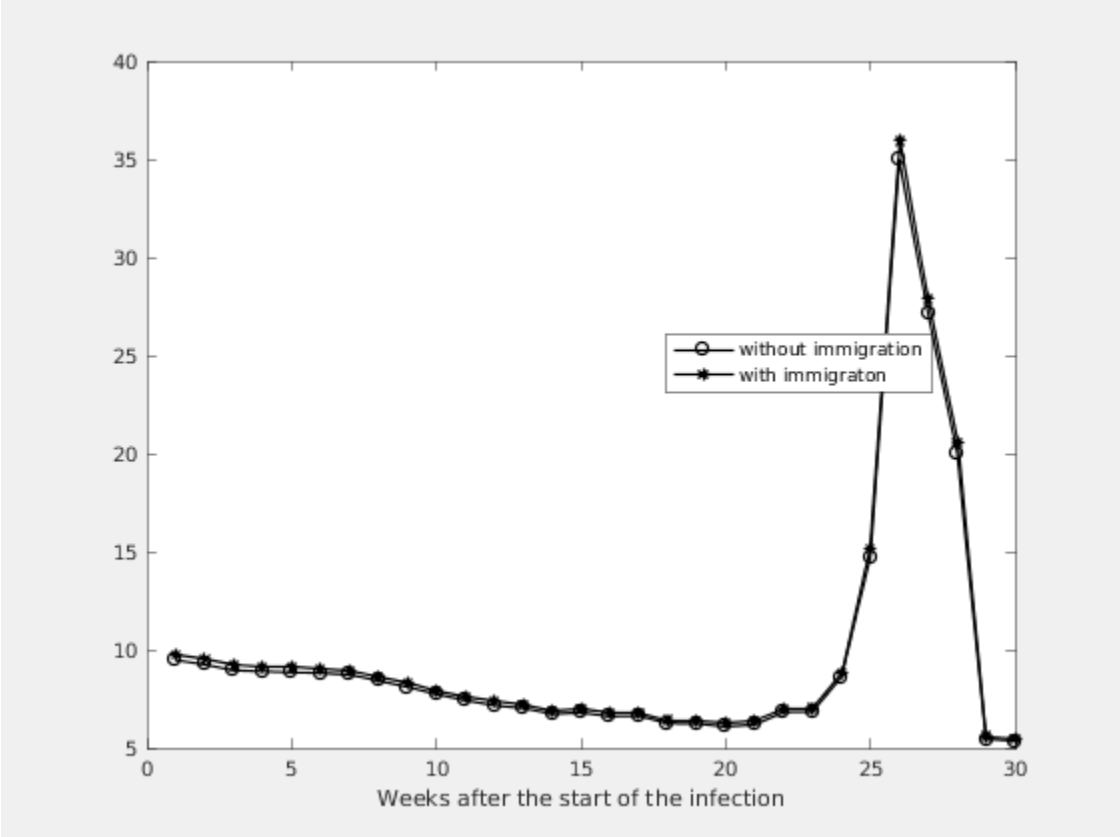


Figure 2.4. Expected number of the nonregistered infected individuals with immigration



Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	1.0504	0.7276 - 1.3733	0.9779	9	9
3	1.0387	0.7199 - 1.3575	0.9818	15	15
2	1.0261	0.7134 - 1.3387	0.9769	36	35
1	0.9802	0.6812 - 1.2793	0.9796	28	27
0	0.9802	0.6927 - 1.2678	0.9816	21	20