Branching stochastic processes as models of Covid-19 epidemic development

Var8 - 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 Var8. 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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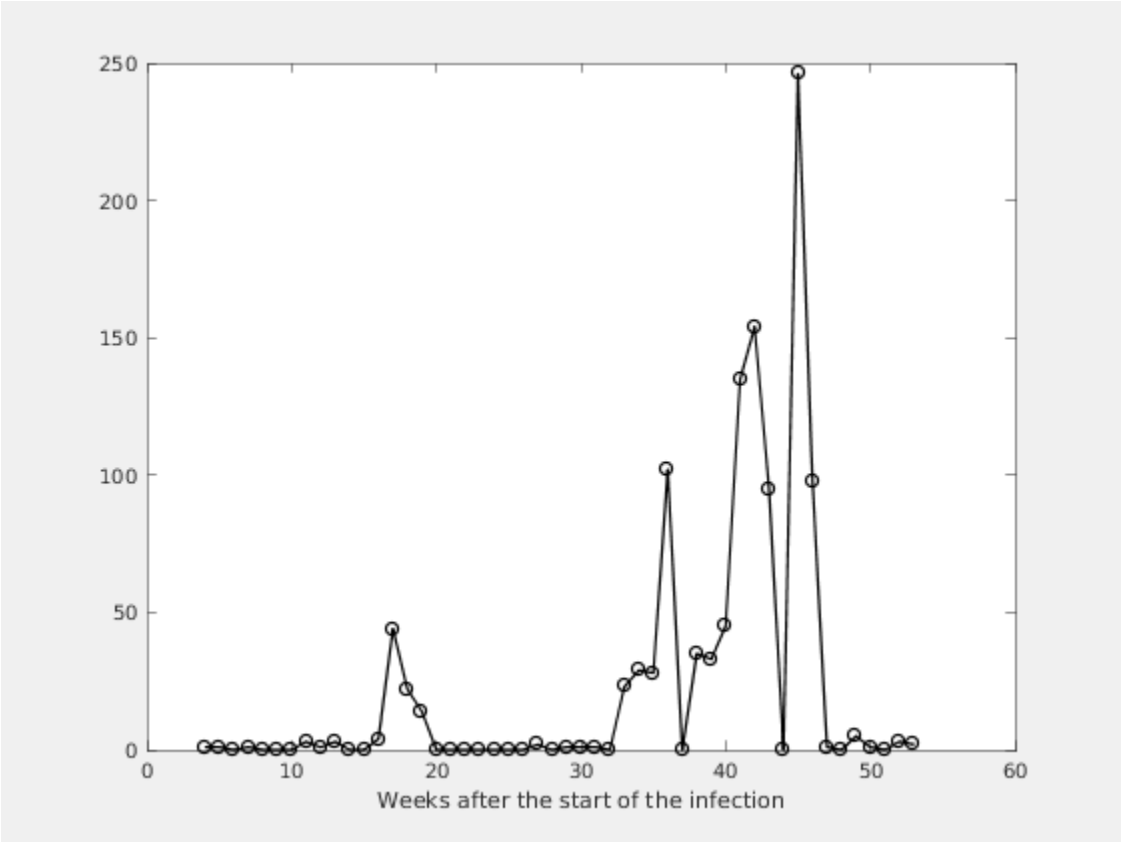
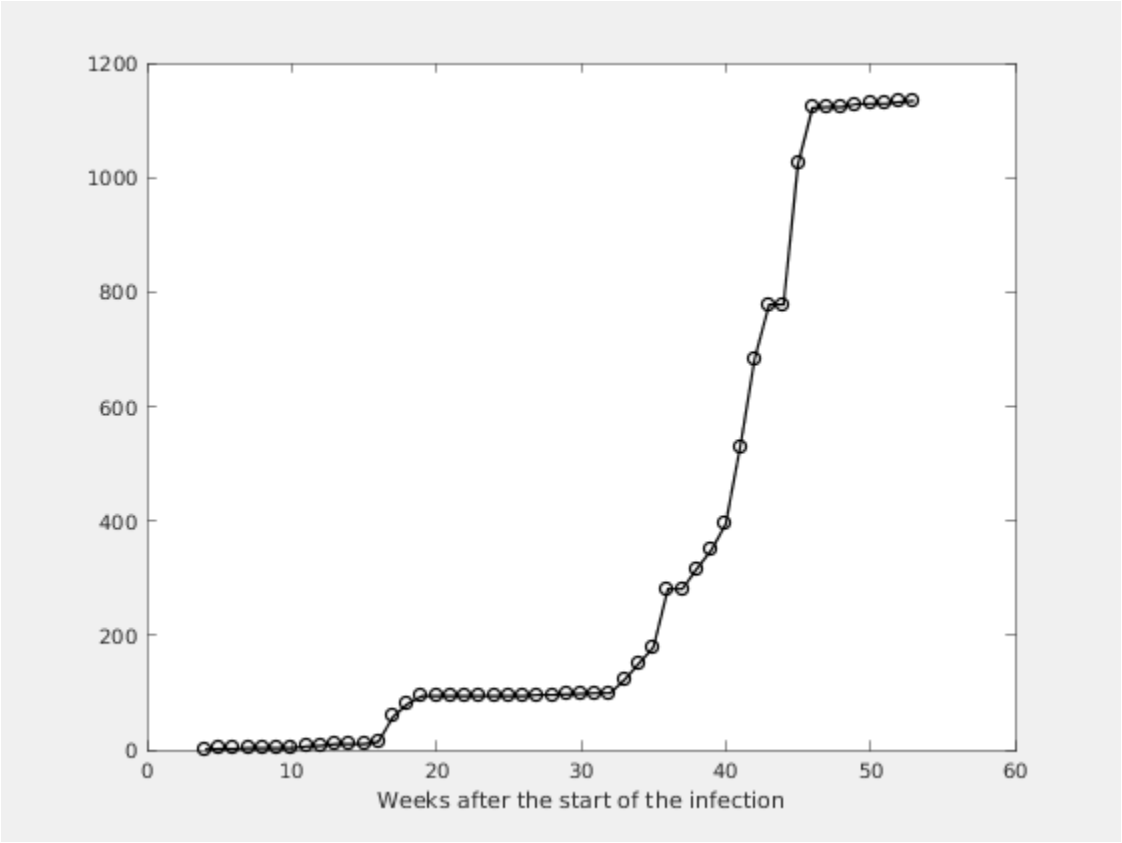


Figure 1.2. Number of the total registered cases



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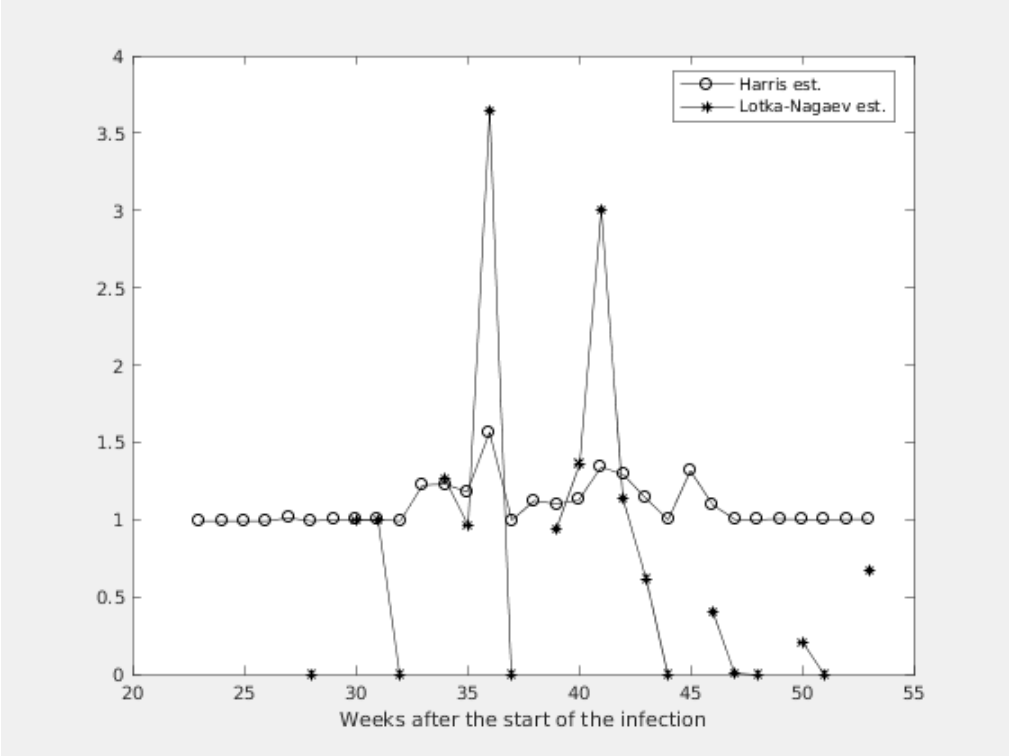


Figure 2.2. Figure

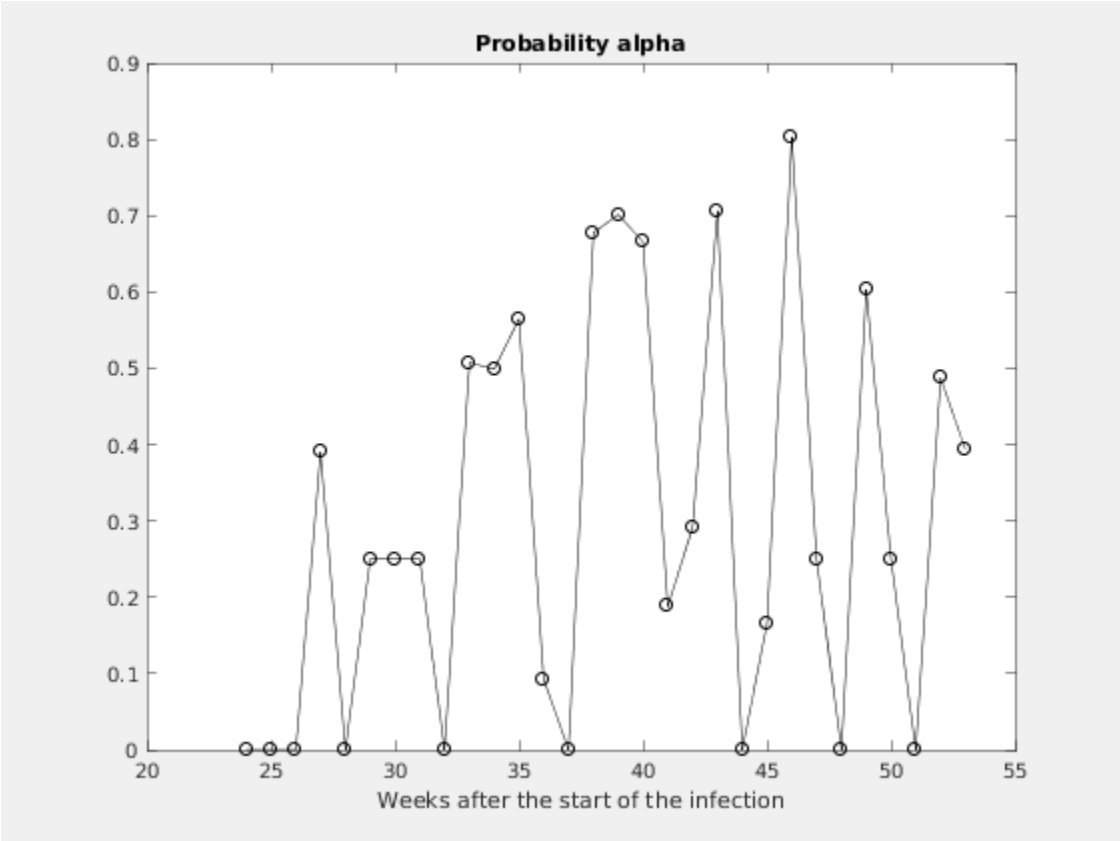


Figure 2.3. Expected number of the nonregistered infected individuals without immigration

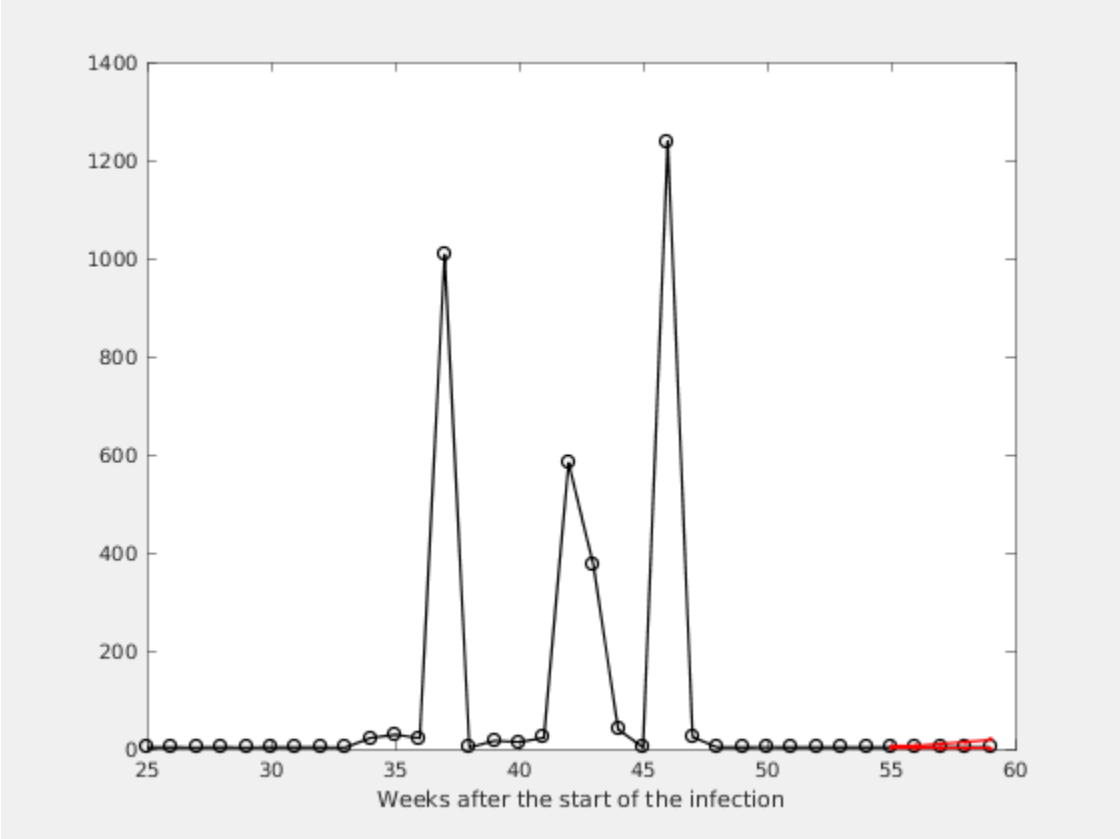
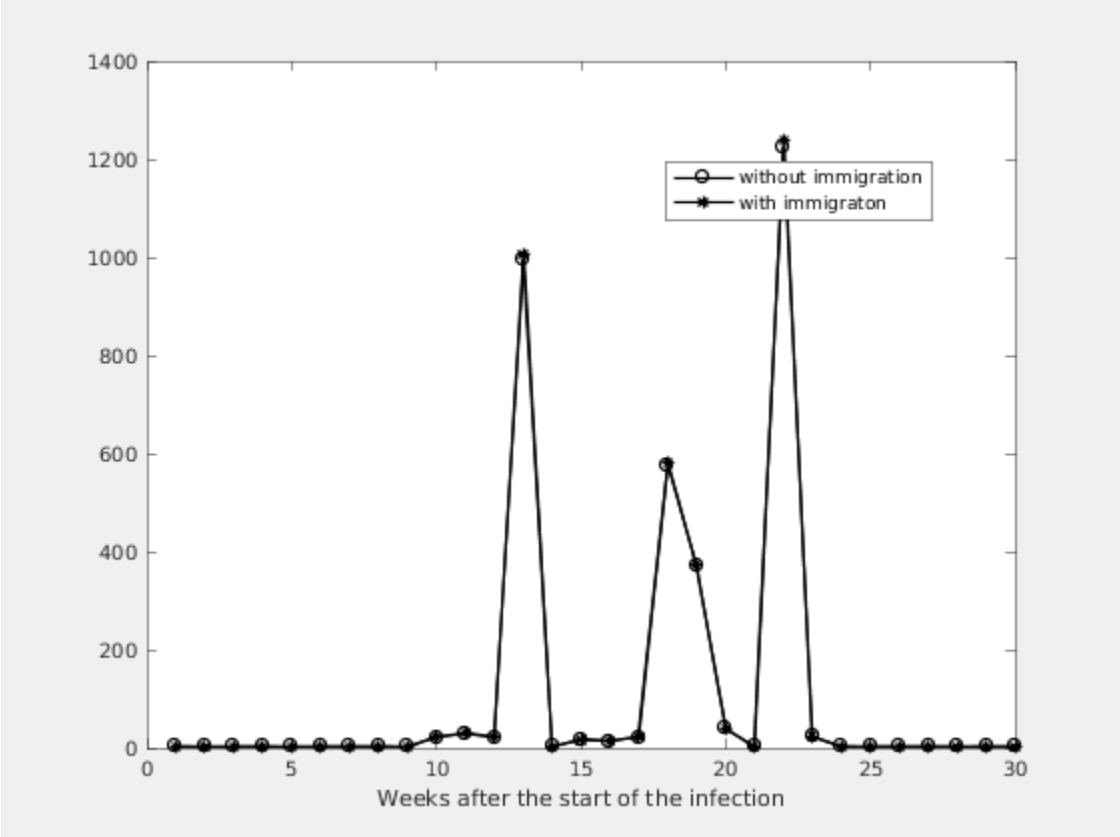


Figure 2.4. Expected number of the nonregistered infected individuals with immigration



Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	1.0036	0.5175 - 1.4897	0.2500	3	3
3	1.0000	0.5141 - 1.4859	0.0000	3	3
2	0.9991	0.5202 - 1.4780	0.6031	3	3
1	1.0018	0.5321 - 1.4714	0.2500	3	3
0	1.0009	0.5314 - 1.4703	0.0000	3	3