Branching stochastic processes as models of Covid-19 epidemic development

Var213 - 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 Var213. 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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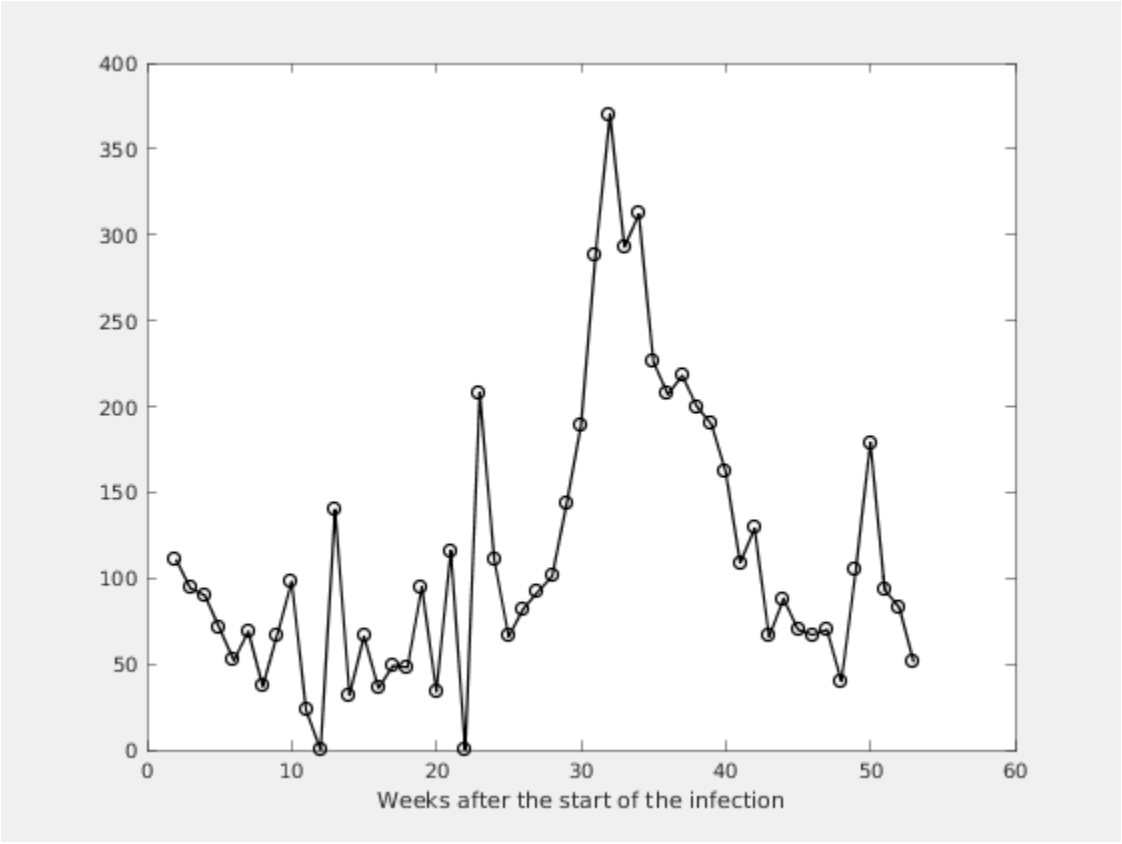
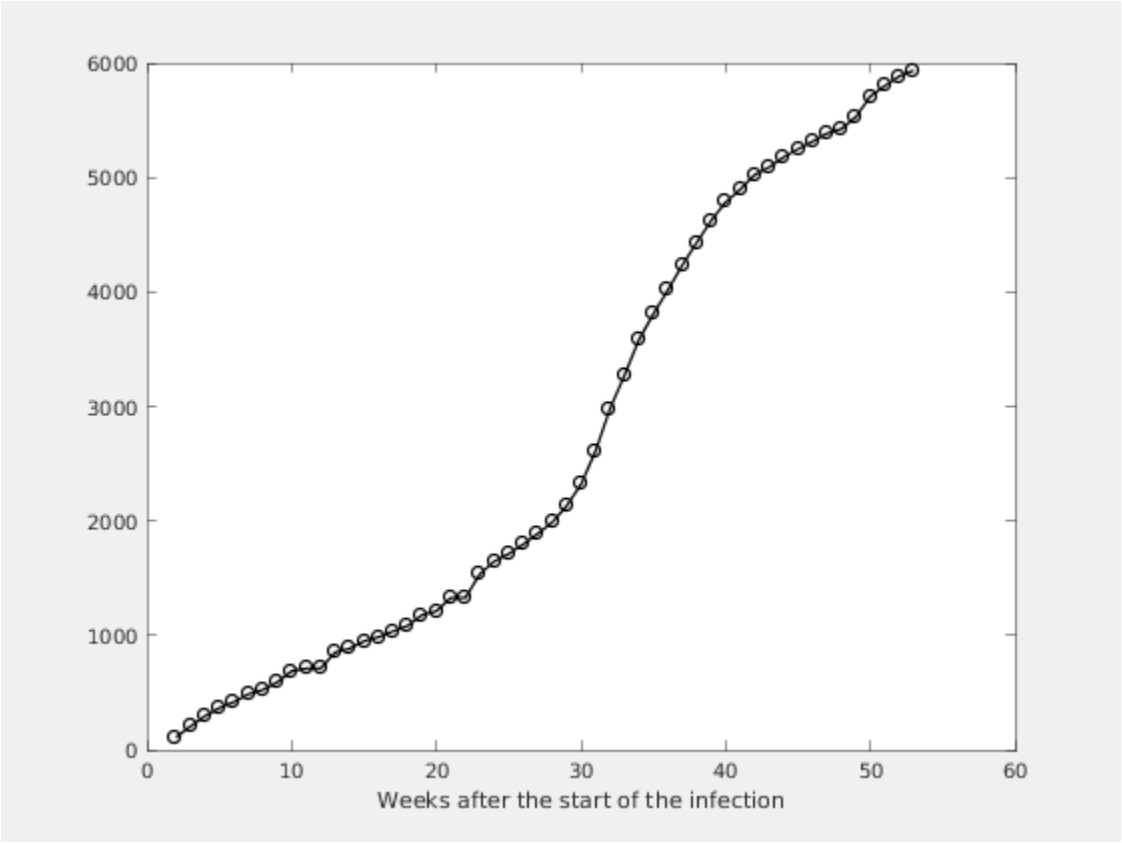


Figure 1.2. Number of the total registered cases



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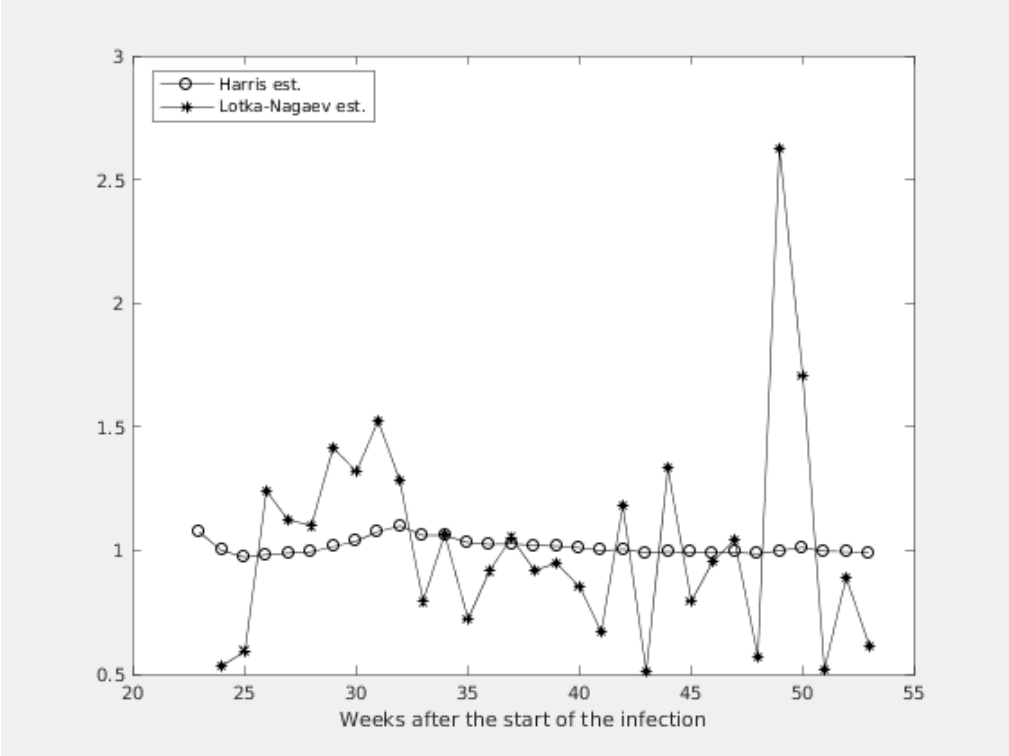


Figure 2.2. Figure

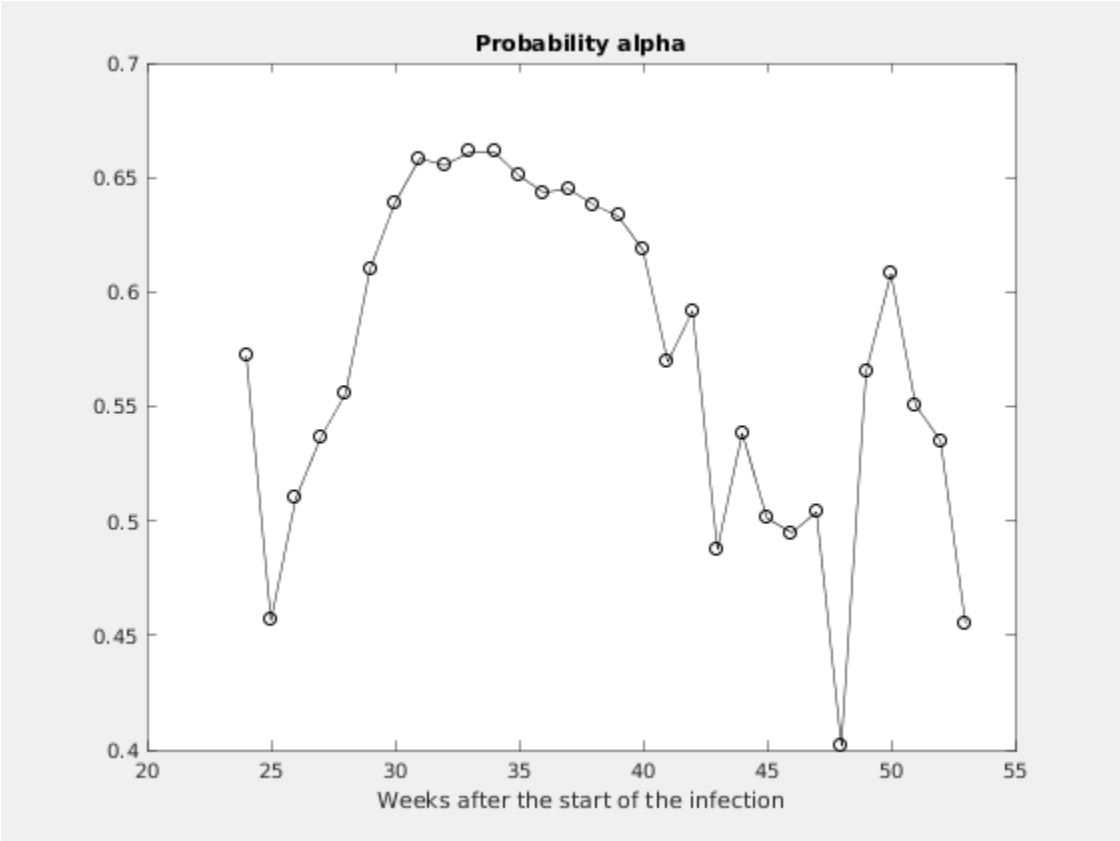
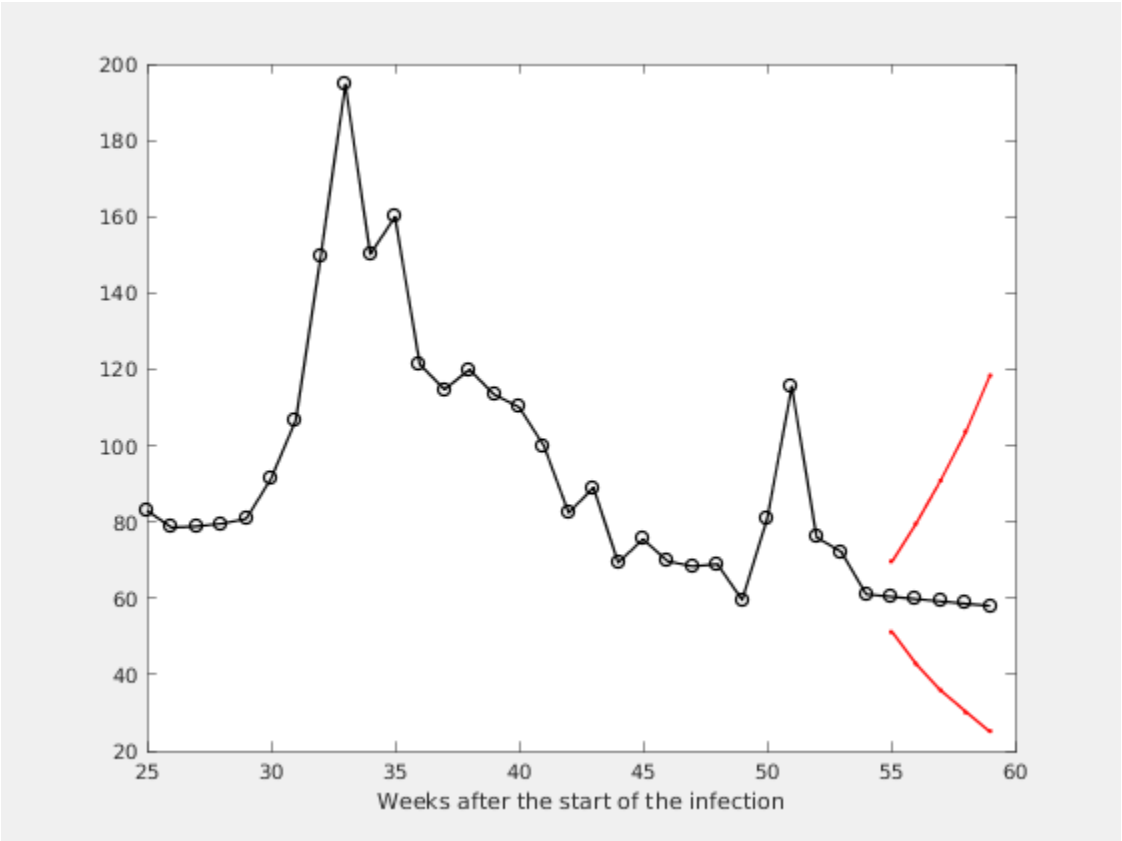


Figure 2.3. Expected number of the nonregistered infected individuals without immigration



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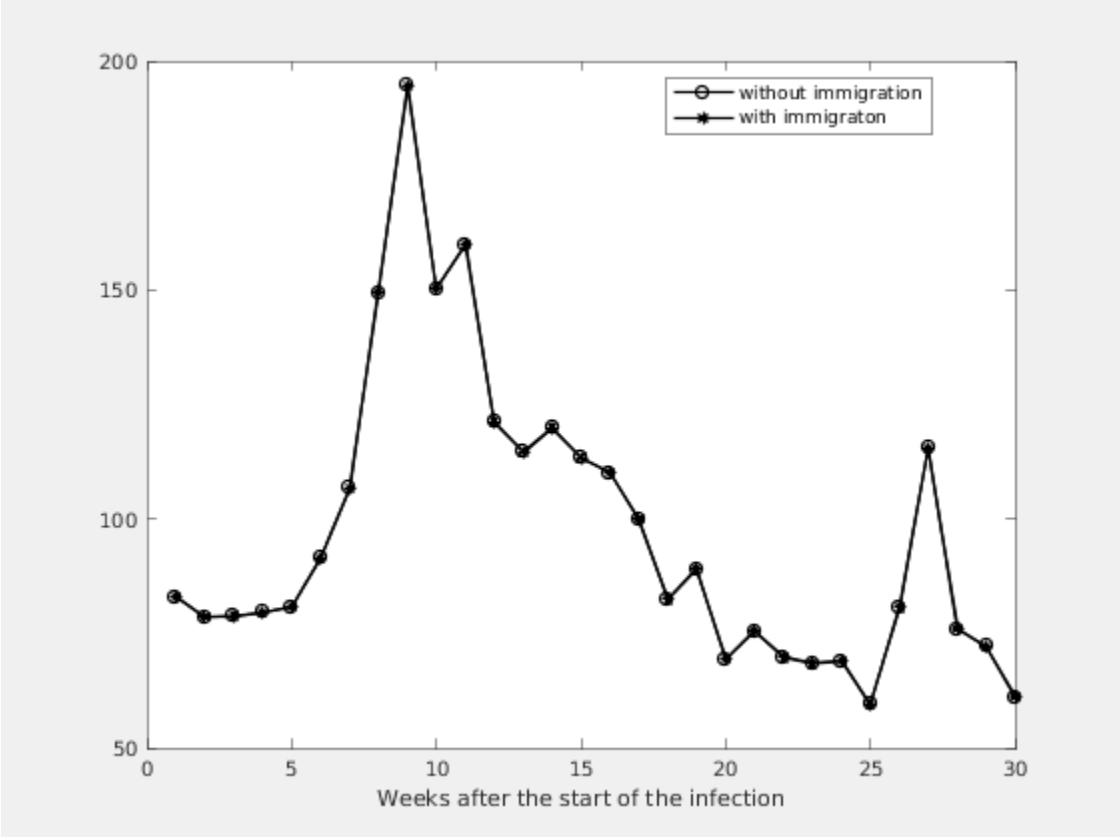

Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	0.9989	0.8398 - 1.1580	0.5039	69	69
3	1.0123	0.8552 - 1.1694	0.4018	60	60
2	0.9968	0.8369 - 1.1568	0.5656	81	81
1	0.9952	0.8360 - 1.1544	0.6079	115	115
0	0.9898	0.8329 - 1.1467	0.5504	76	76