Branching stochastic processes as models of Covid-19 epidemic development

FalklandIslands - 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 FalklandIslands. 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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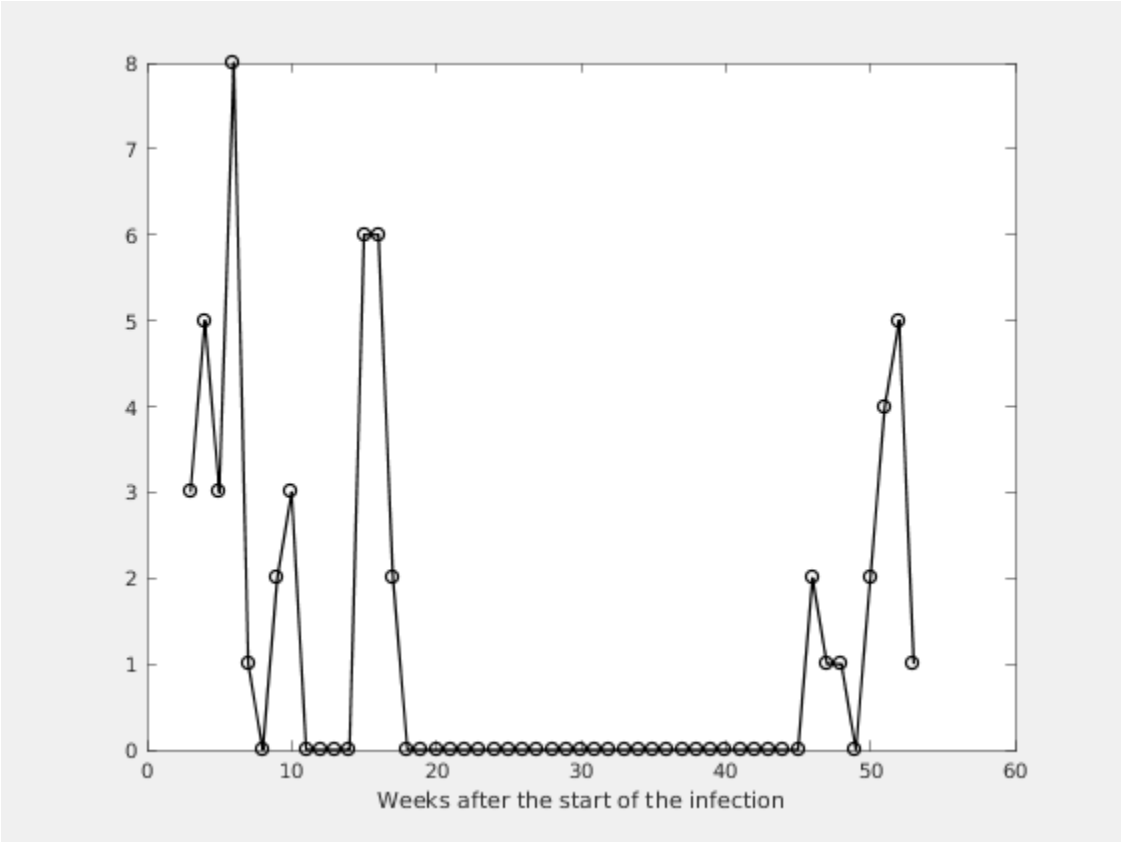
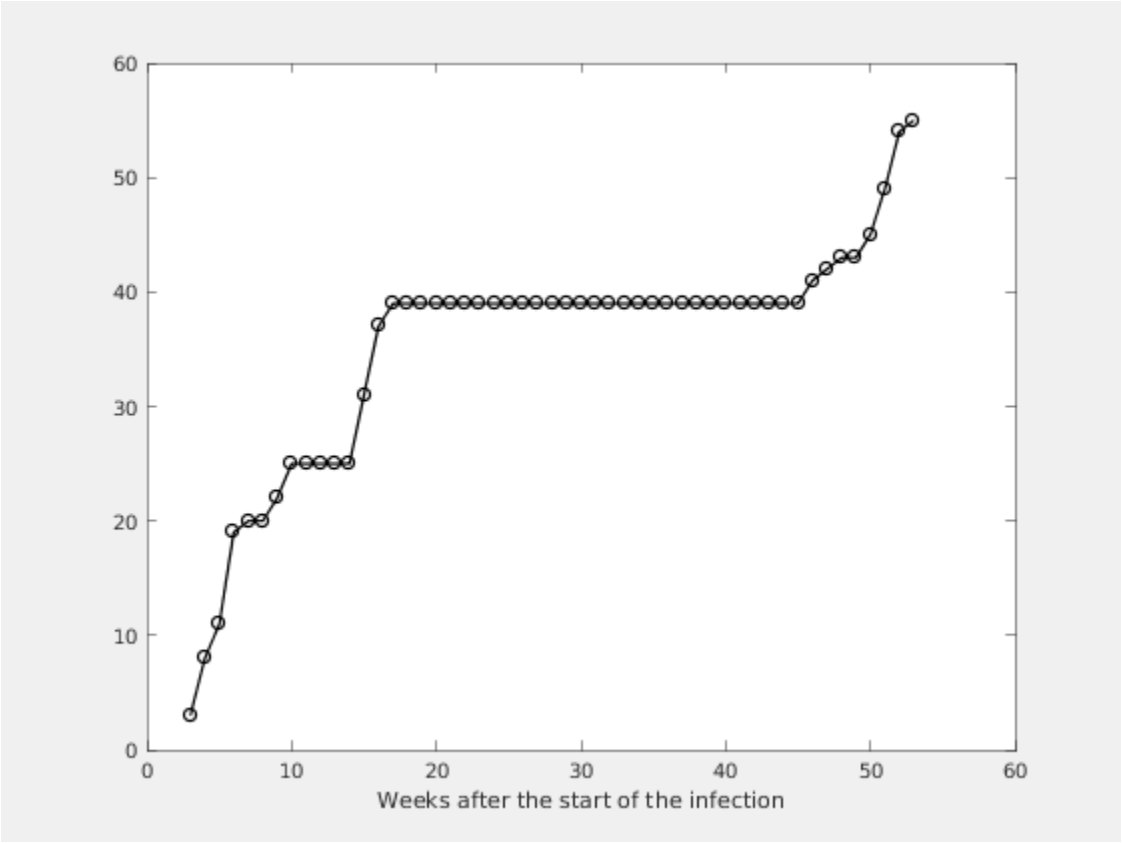


Figure 1.2. Number of the total registered cases



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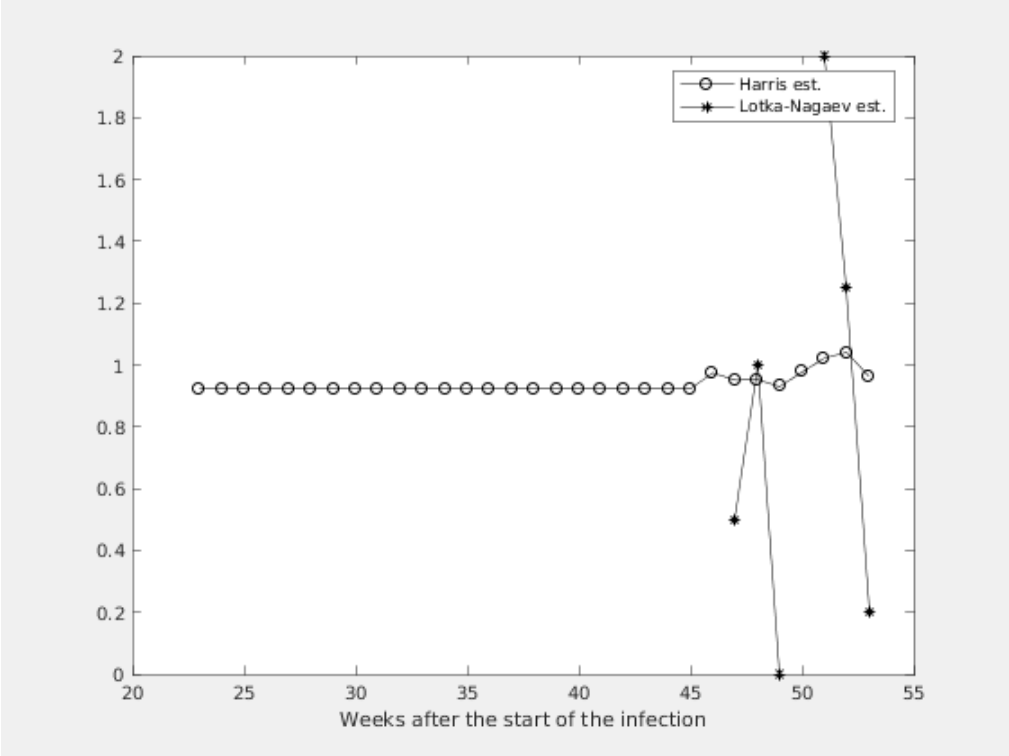


Figure 2.2. Figure

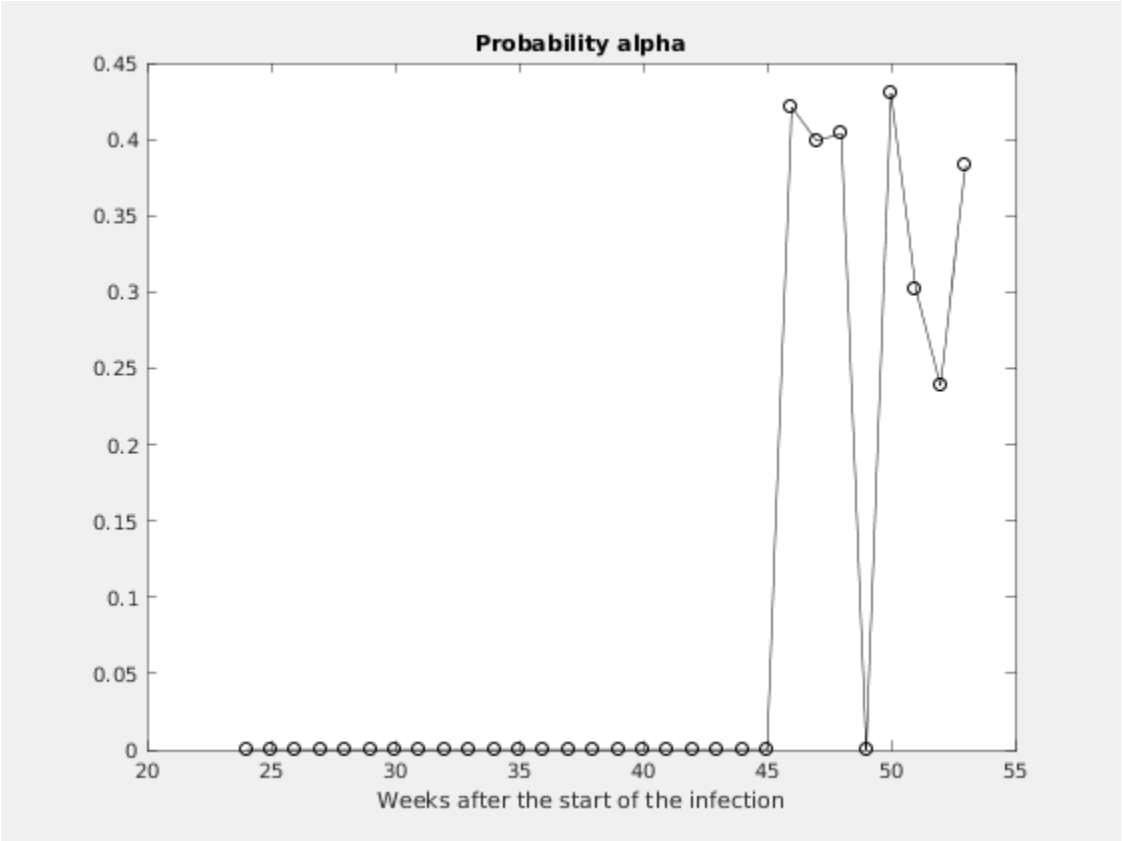


Figure 2.3. Expected number of the nonregistered infected individuals without immigration

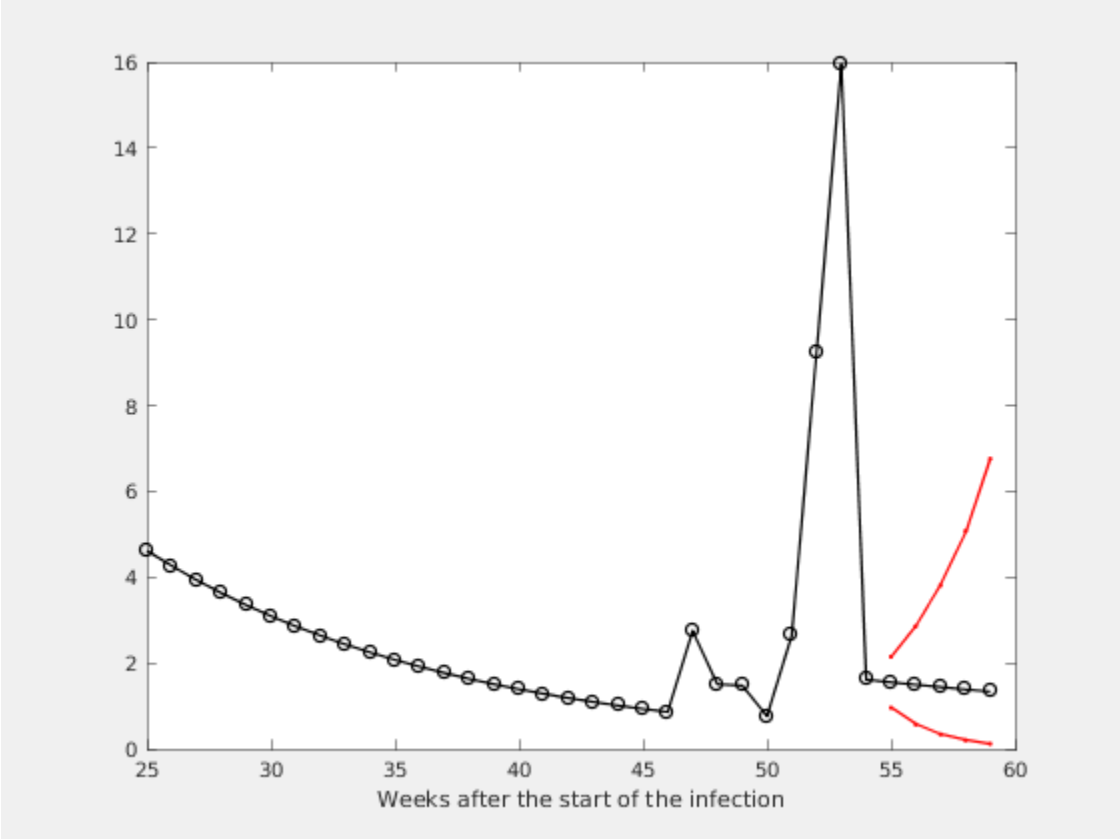
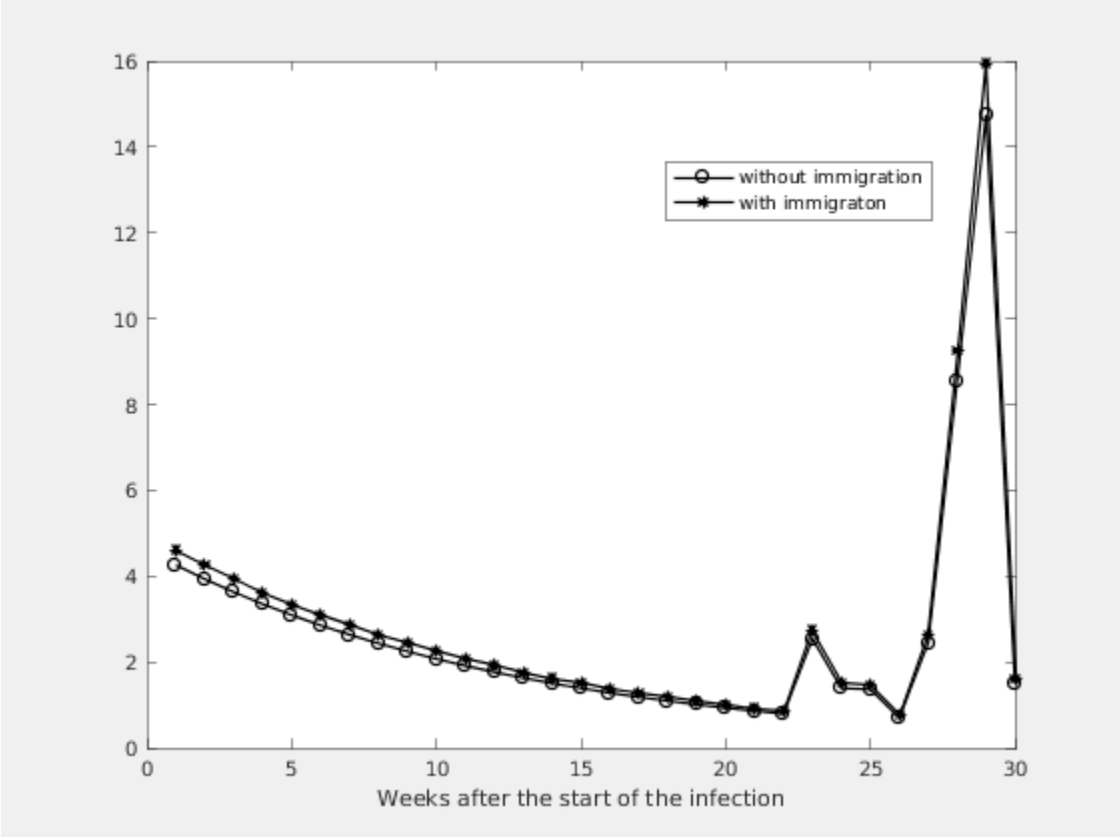


Figure 2.4. Expected number of the nonregistered infected individuals with immigration



Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	0.9302	0.4764 - 1.3840	0.3991	2	1
3	0.9767	0.5474 - 1.4061	0.4038	1	1
2	1.0222	0.5963 - 1.4481	0.0000	1	1
1	1.0408	0.6229 - 1.4587	0.4302	3	2
0	0.9630	0.5543 - 1.3717	0.3018	9	9