Branching stochastic processes as models of Covid-19 epidemic development

Maldives - 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 Maldives. 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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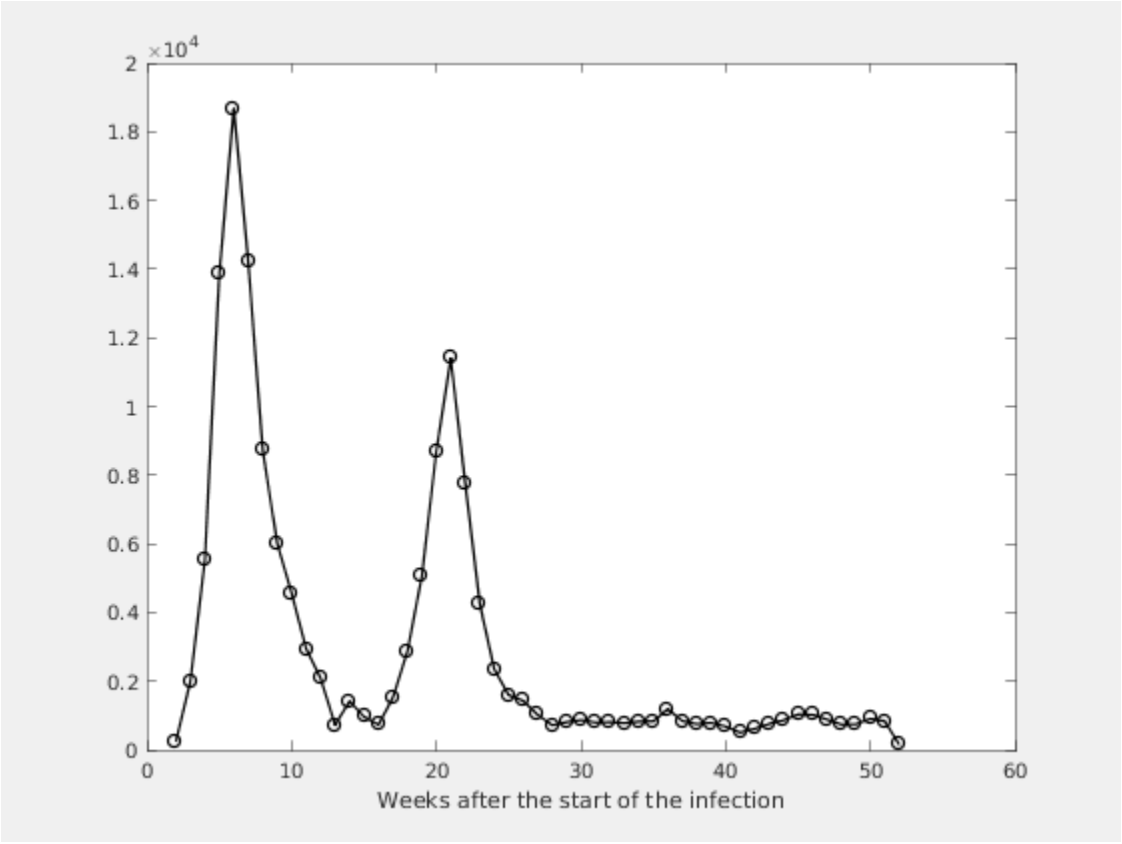
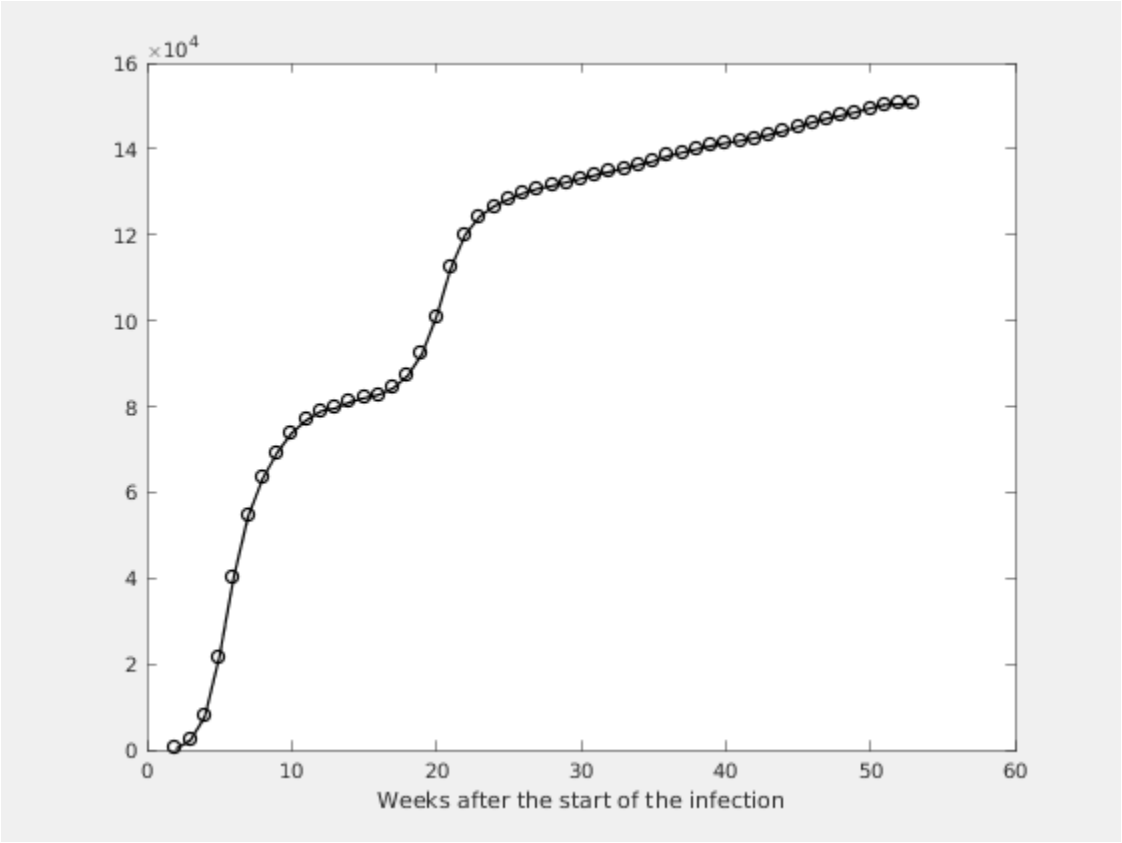


Figure 1.2. Number of the total registered cases



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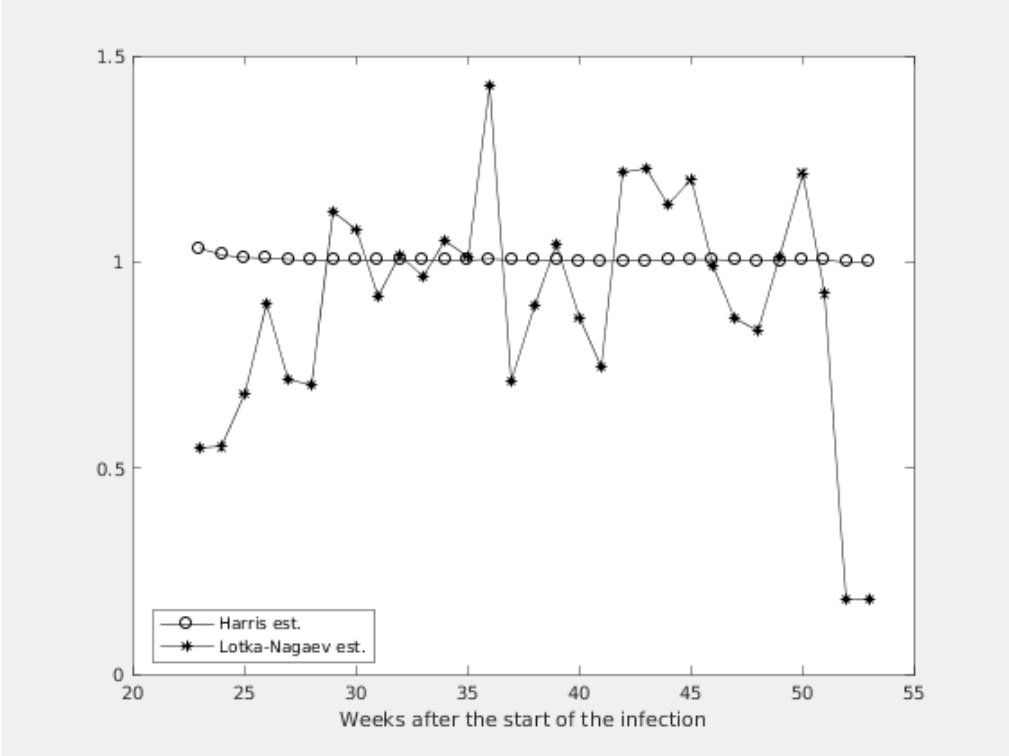


Figure 2.2. Figure

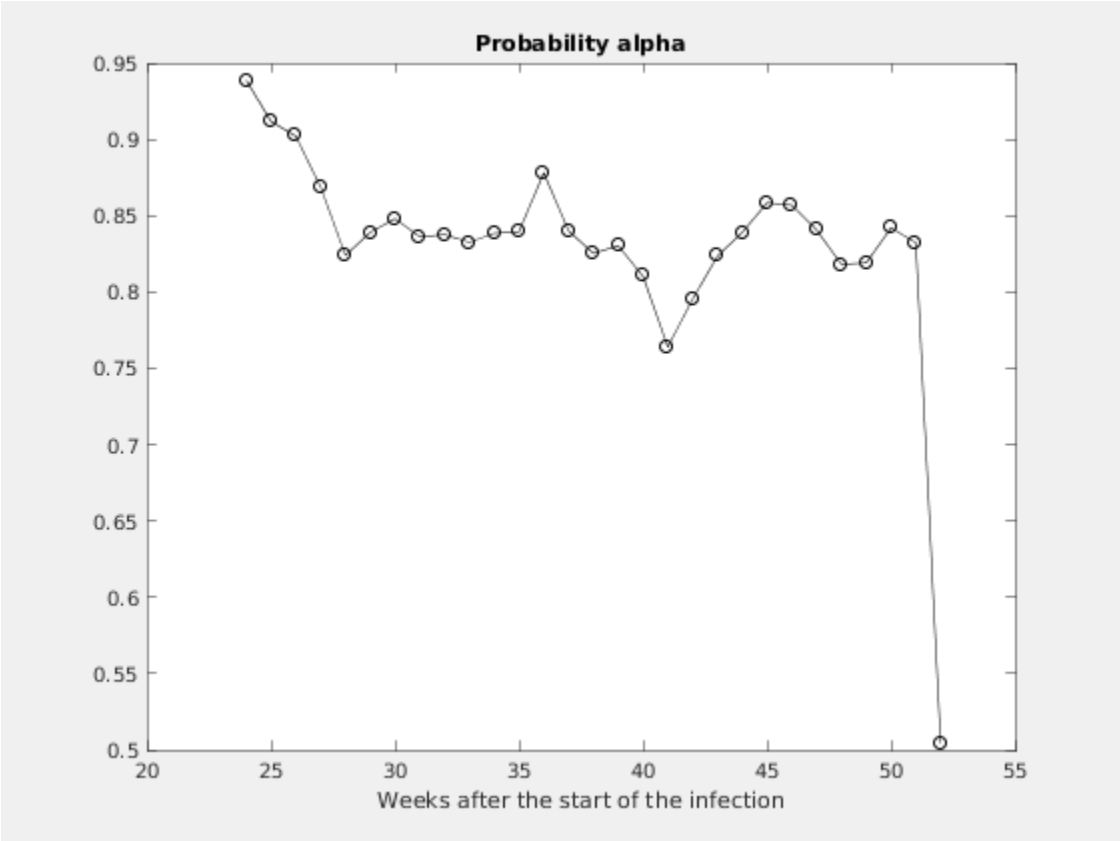


Figure 2.3. Expected number of the nonregistered infected individuals without immigration

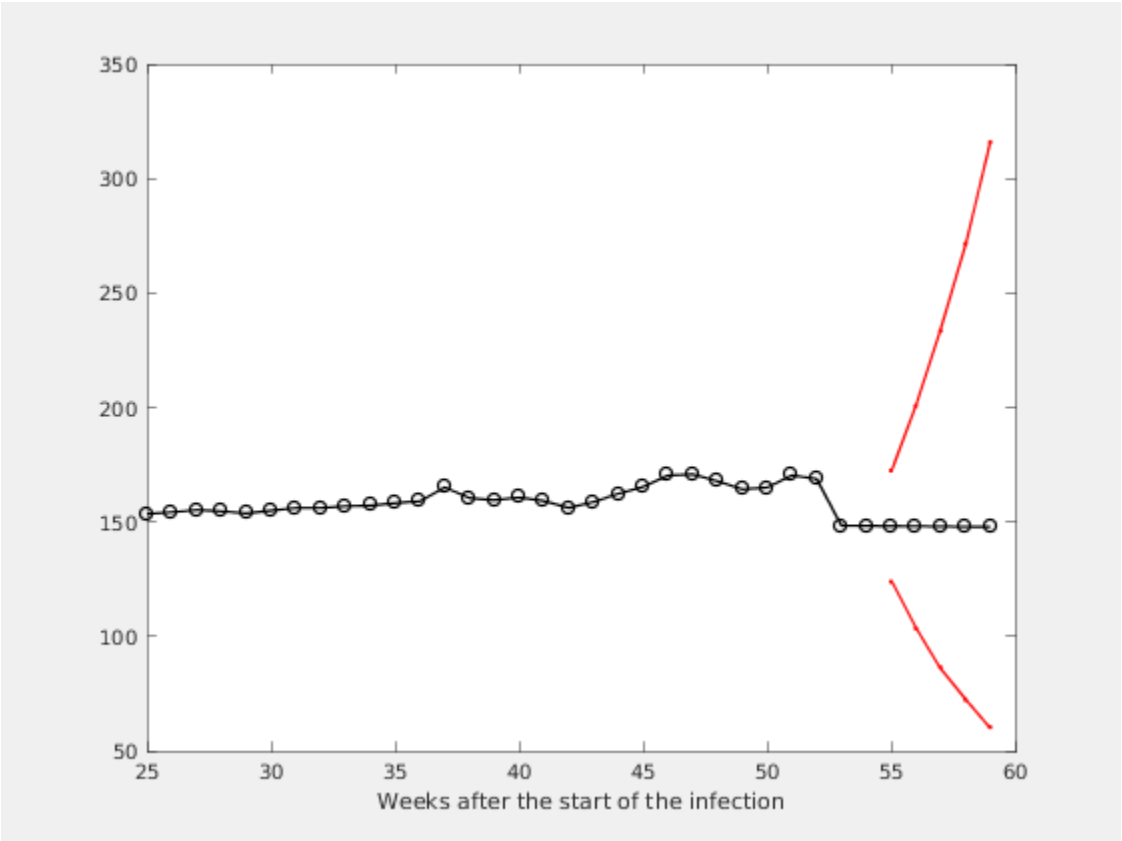
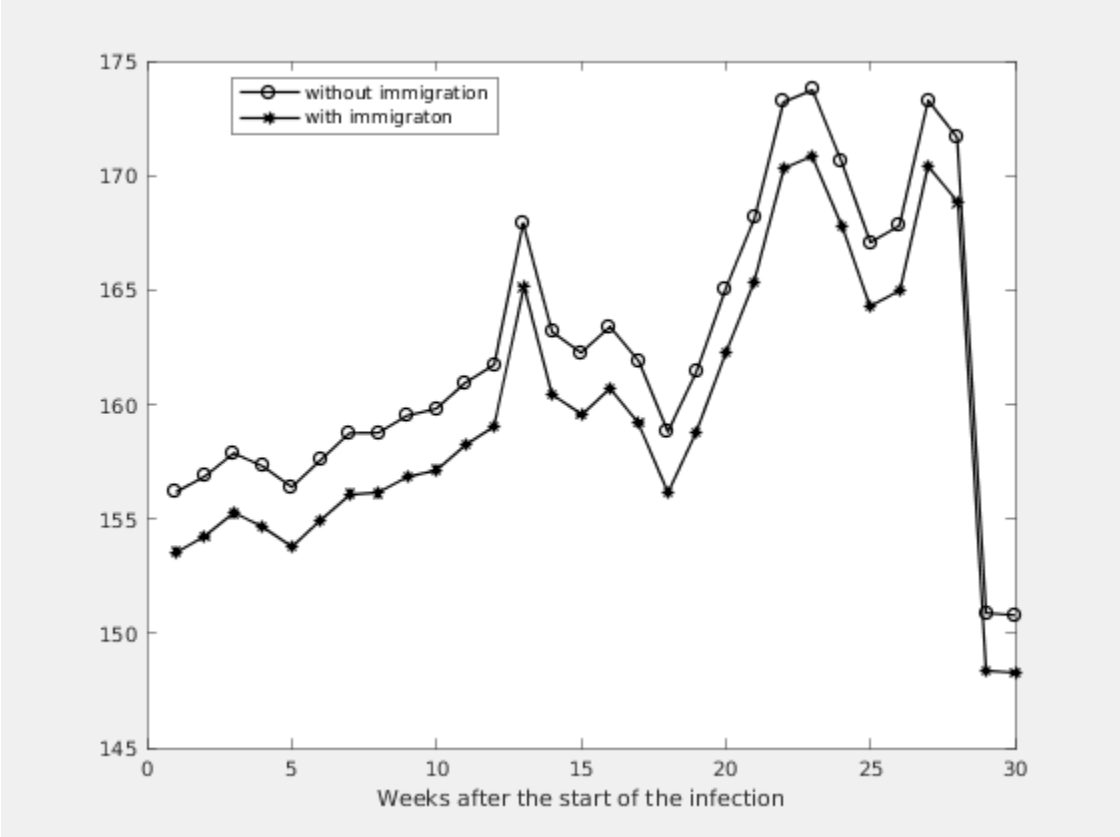


Figure 2.4. Expected number of the nonregistered infected individuals with immigration



Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	1.0034	0.8293 - 1.1775	0.8406	168	171
3	1.0045	0.8327 - 1.1762	0.8181	164	167
2	1.0040	0.8345 - 1.1735	0.8191	165	168
1	0.9994	0.8321 - 1.1667	0.8420	170	173
0	0.9994	0.8343 - 1.1645	0.8323	169	172