Gavekal Intelligence Software

05 May 2020

COVID-19 Projections

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COVID-19 Deaths' Projection Method

At the beginning, epidemic processes are exponential by nature, in other words, the number of cases of infection or death accelerates.

Making projections therefore requires to capture the derivative of the acceleration, named 'the jolt' by mathematicians. In the following projections, we fit the accelerating or fading nature of the jolt, and project its dynamics over the subsequent four weeks.

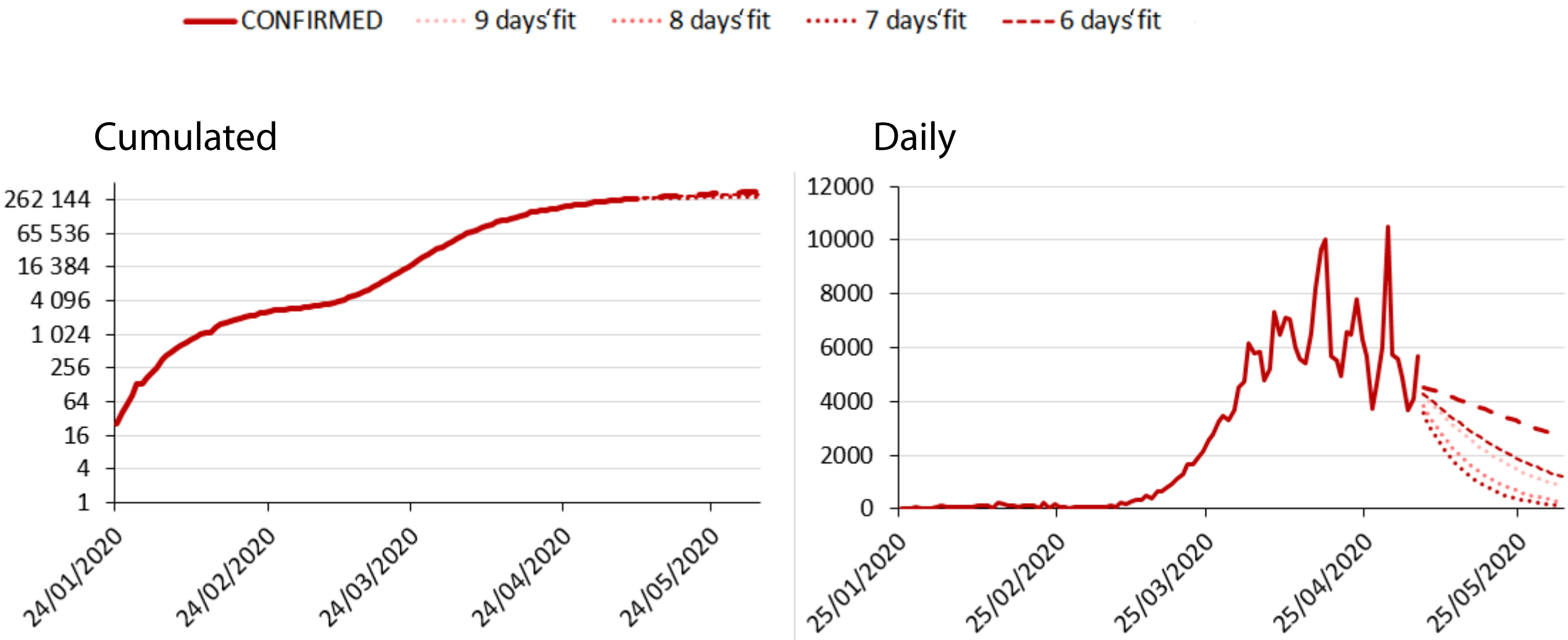
The jolt is fitted with an exponential function over, respectively, the previous 5, 6, 7 ,8 and 9 days. Large numbers are truncated to facilitate the reading of the charts.

Fitting over various windows provides an information on the most recent dynamics of the COVID-19 diffusion. The thicker dotted red line is the shortest trend, i.e. calculated over the previous five days.

During the early days of an epidemic, projections can be extremely volatile, and it is therefore recommended not to draw black-and-white conclusions from a daily report, but to follow the evolution over many days.

DEATHS - PROJECTIONS

World



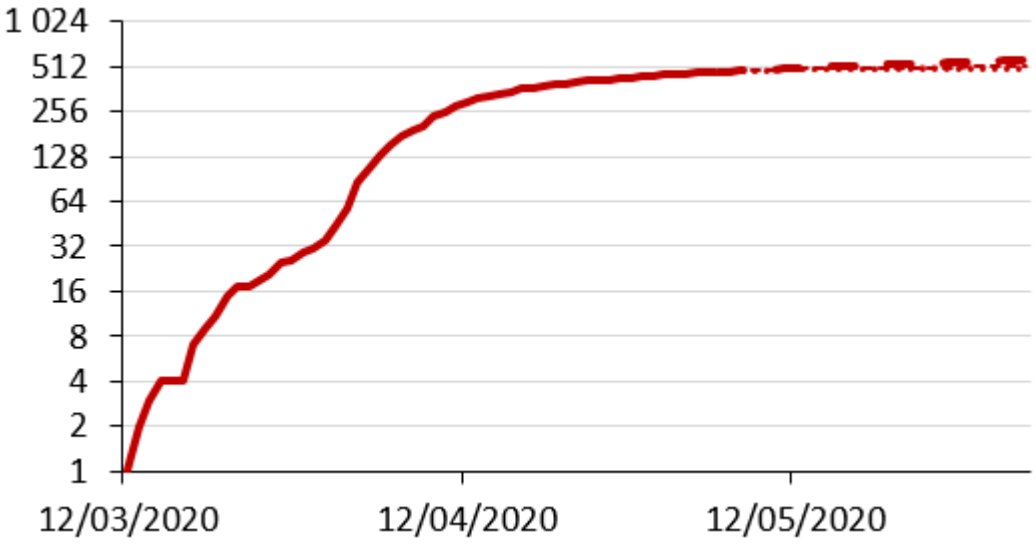
The apparent second peak is due to a statistical bias on the 29/04 when the UK changed its reporting method

Data: The Johns Hopkins University, Politolog.com

Algeria

CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



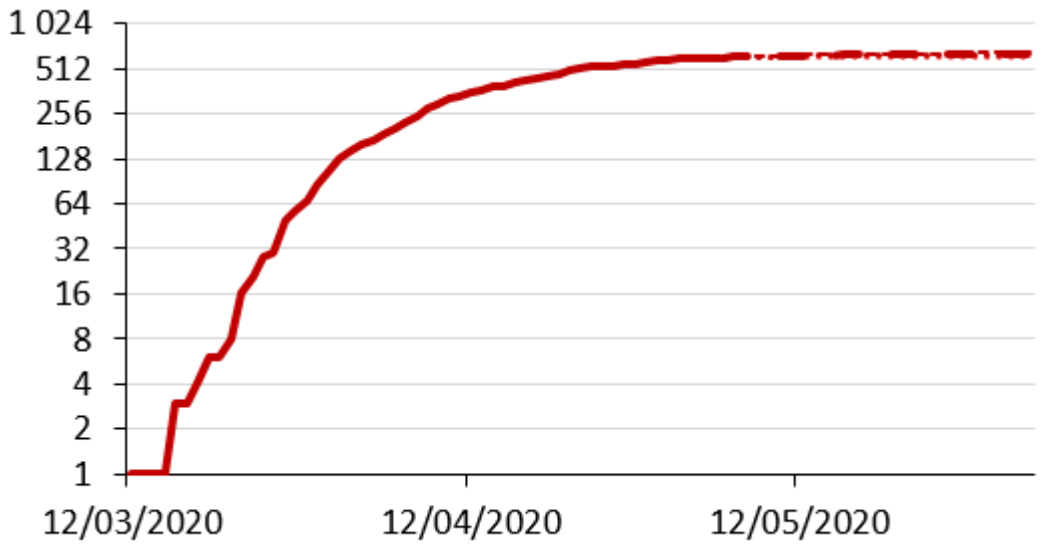
Daily

Data: The Johns Hopkins University, Politolog.com

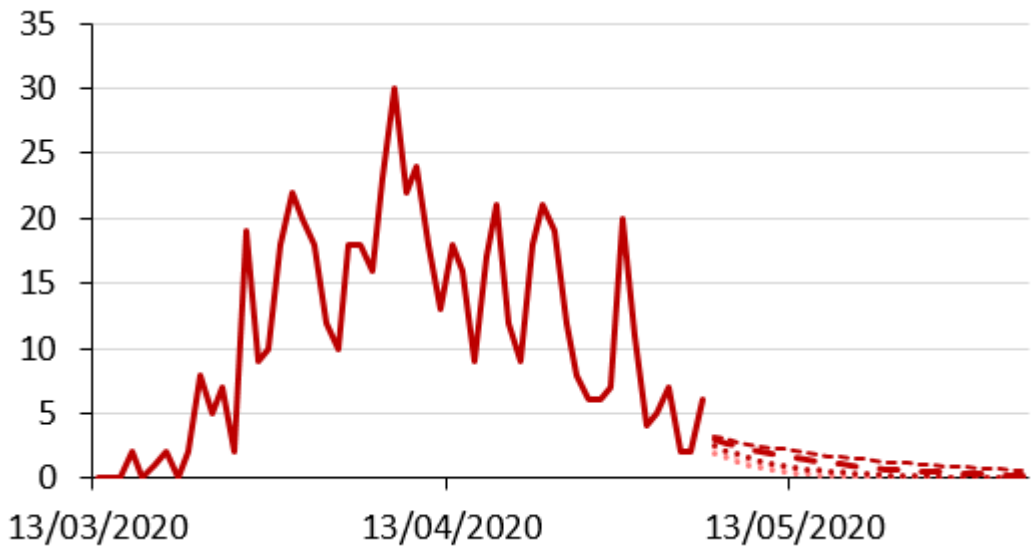
Austria

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

Cumulated



Daily

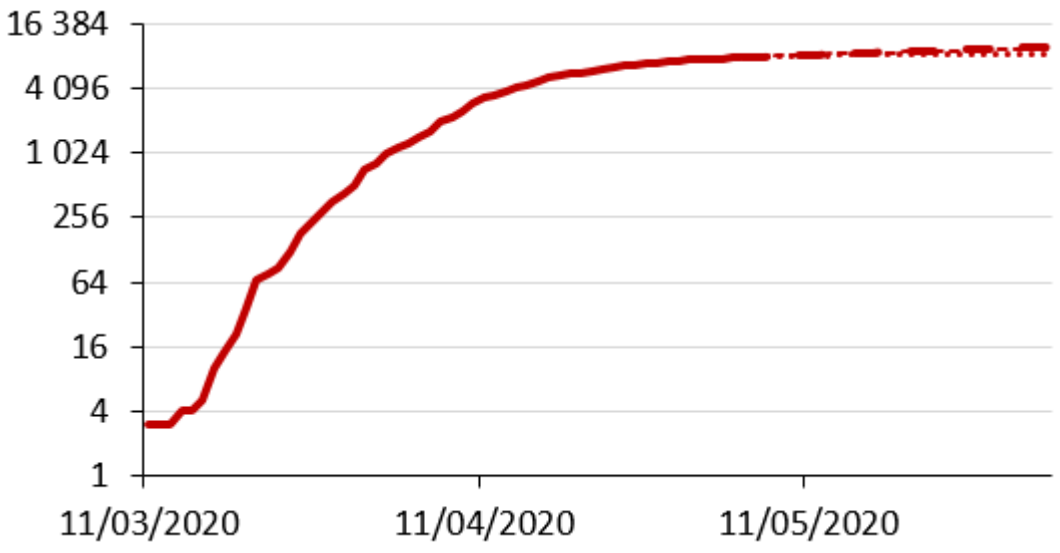


Data: The Johns Hopkins University, Politolog.com

Belgium

CONFIRMED · 9 days'fit · 8 days'fit · 7 days'fit · 6 days'fit · 5 days'fit

Cumulated



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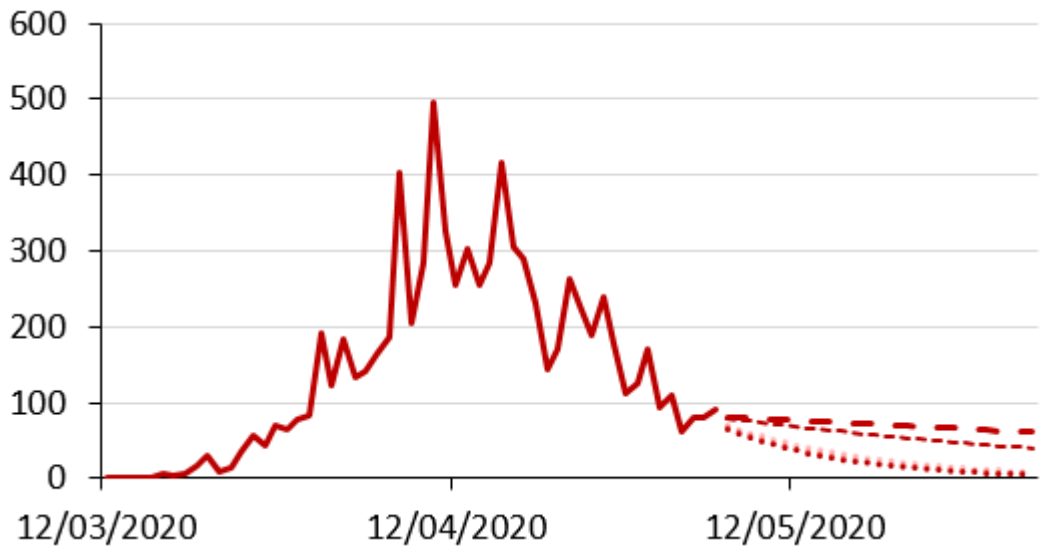
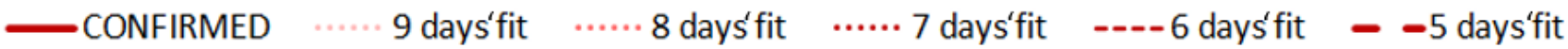


Data: The Johns Hopkins University, Politolog.com

Brazil



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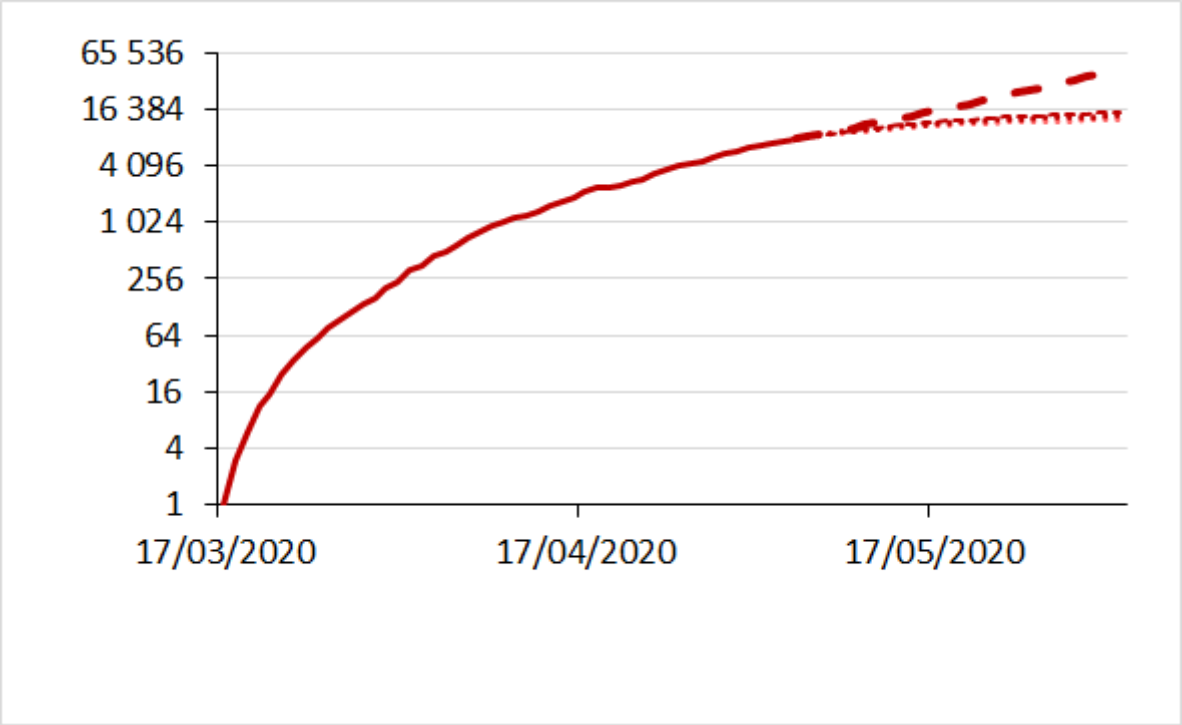

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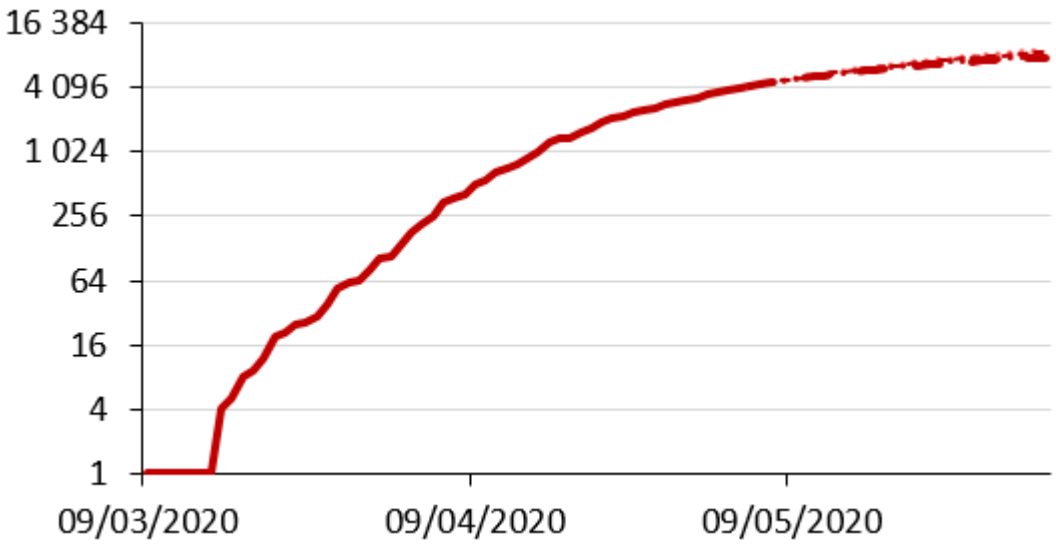
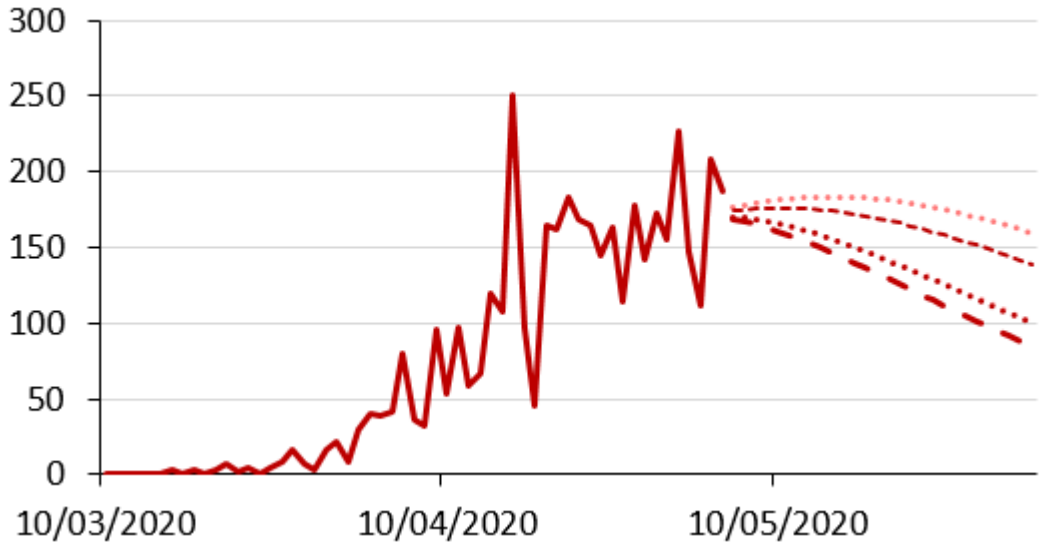
Canada

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

Cumulated

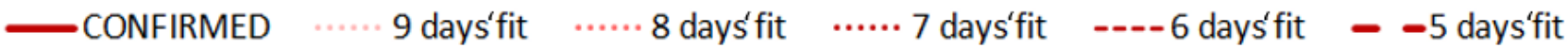


Daily



Data: The Johns Hopkins University, Politolog.com

China



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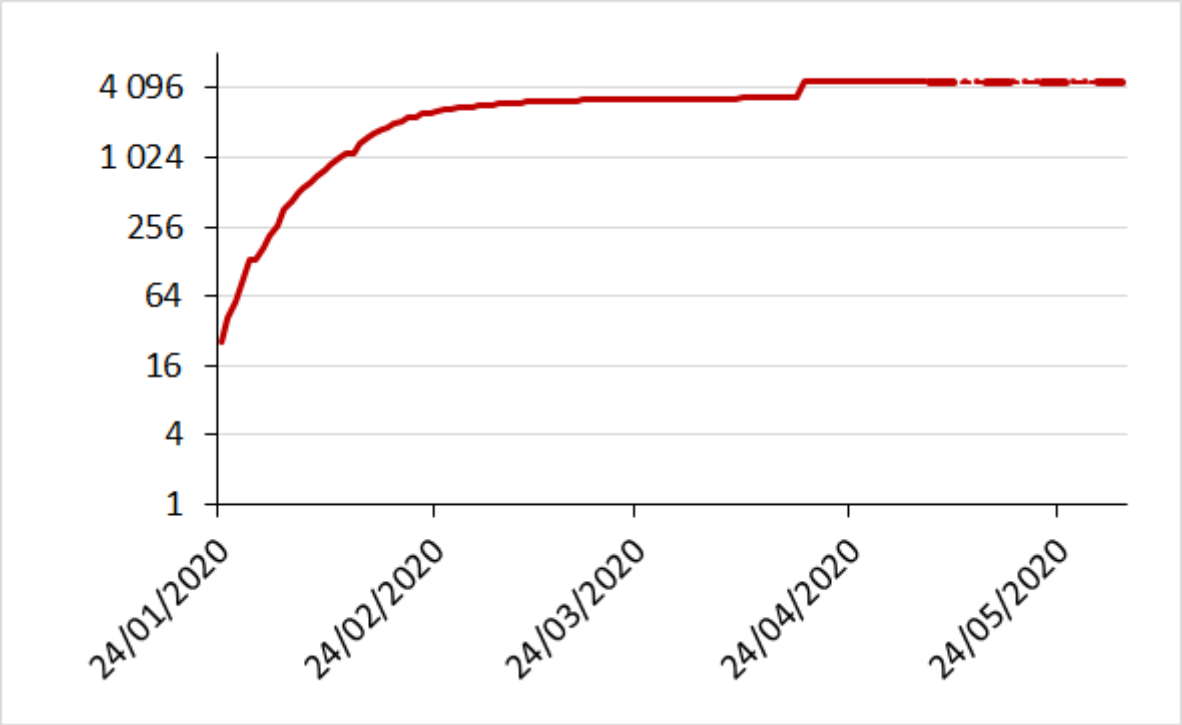

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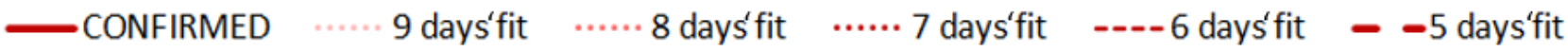
Denmark



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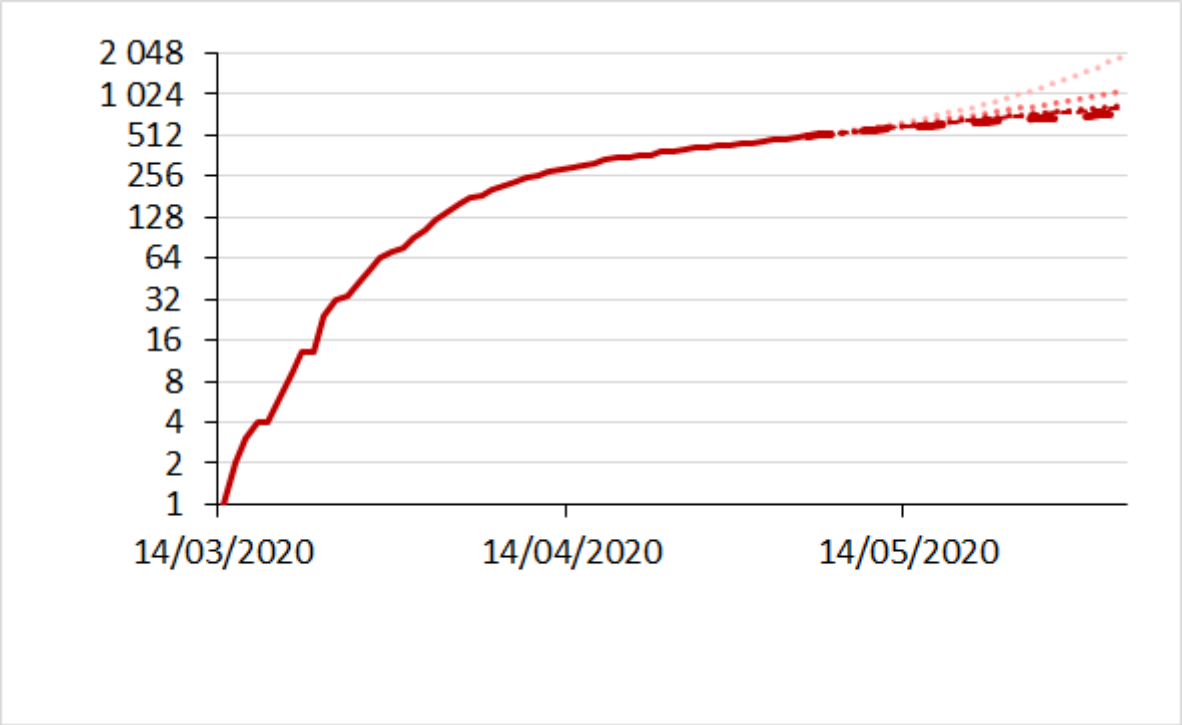

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Egypt

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

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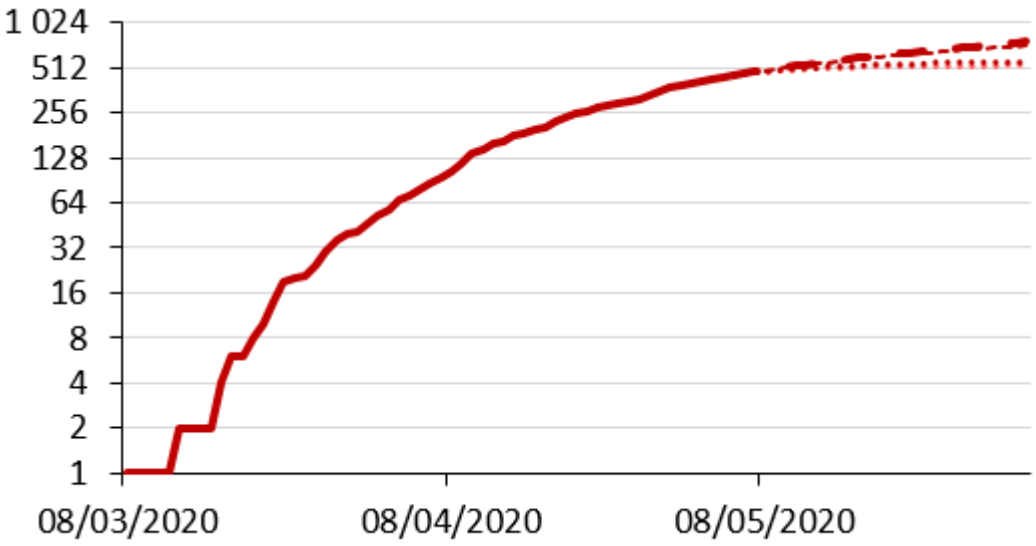

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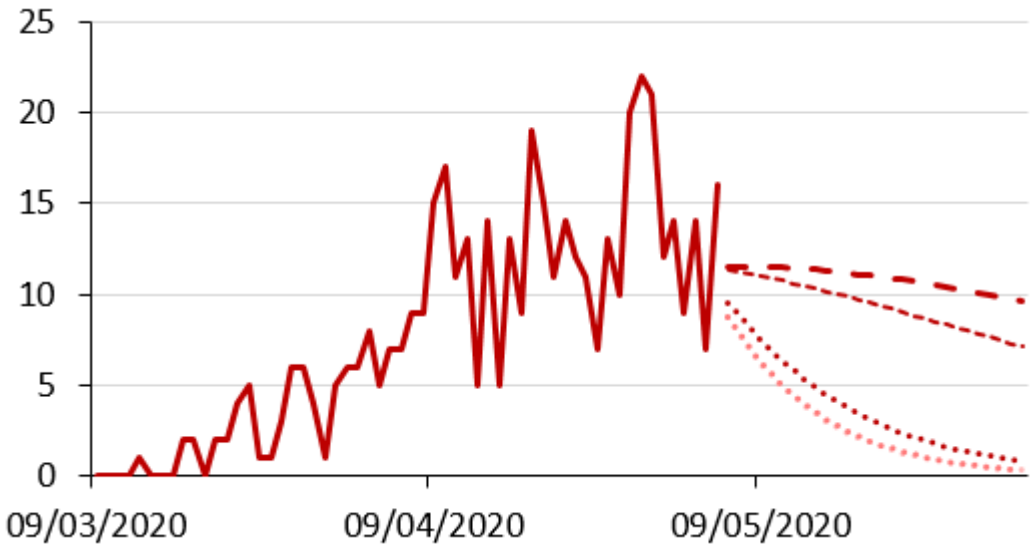

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France

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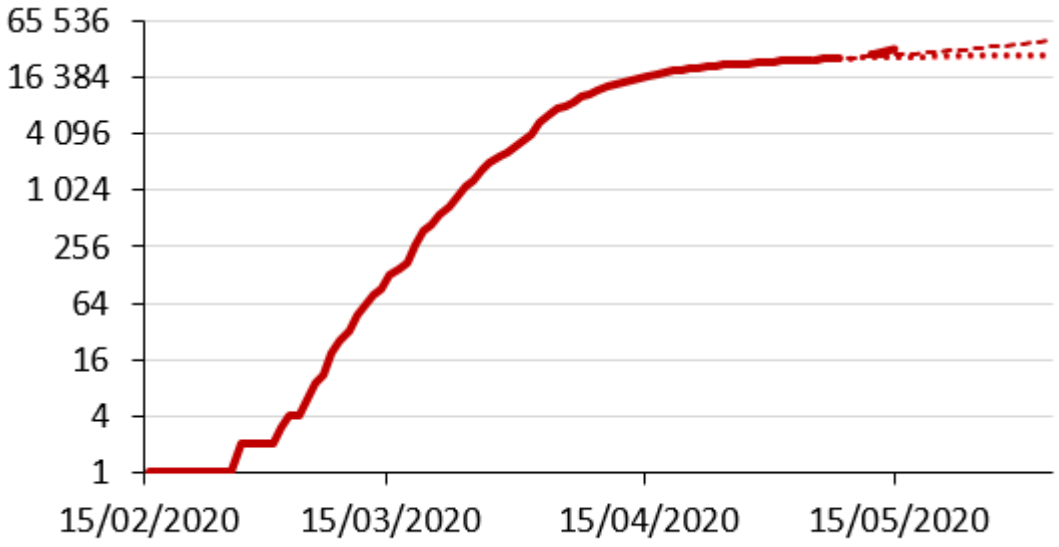

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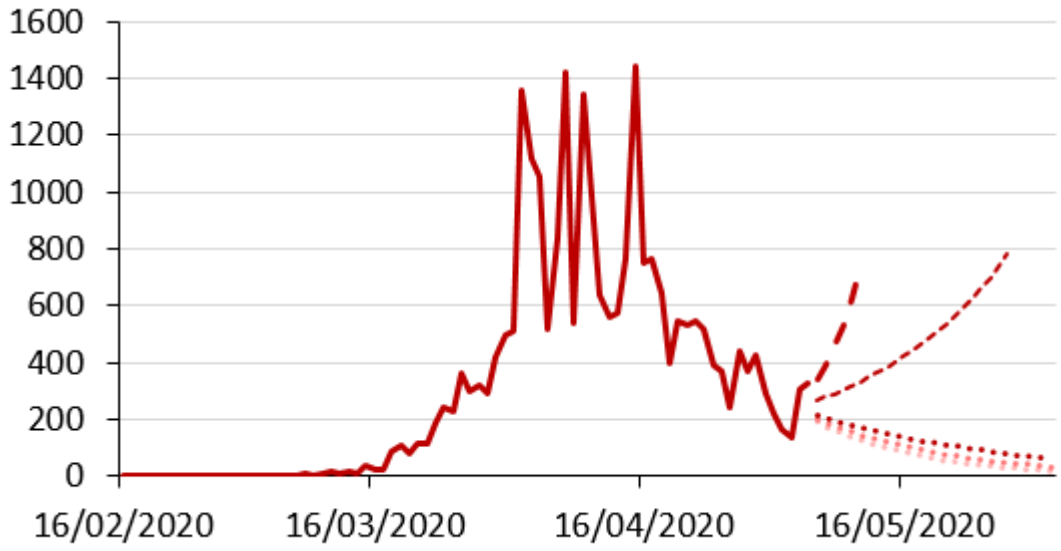

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Germany

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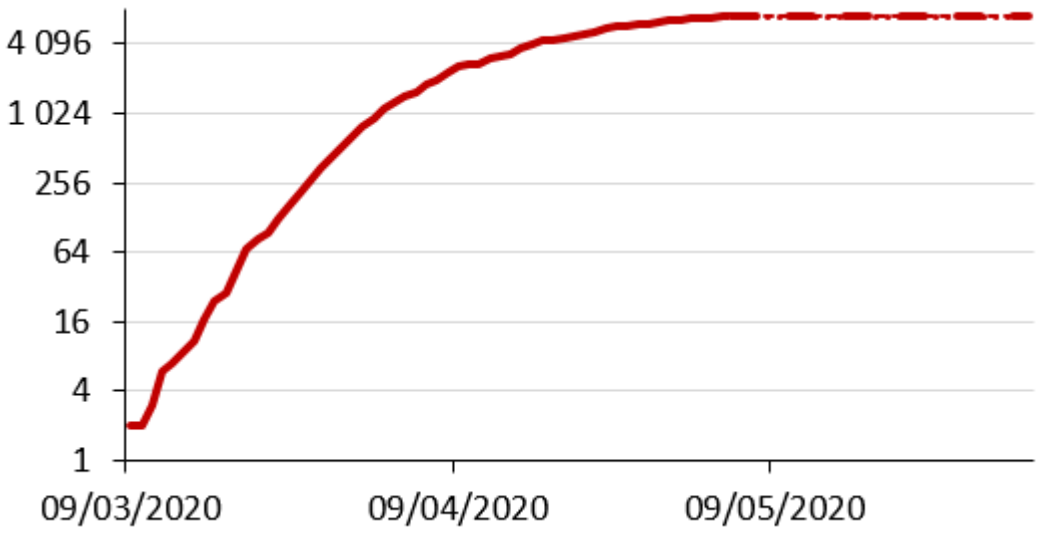

Daily

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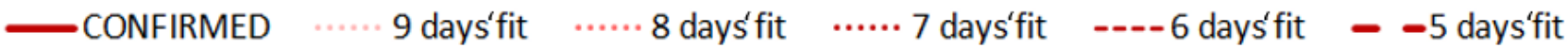
India



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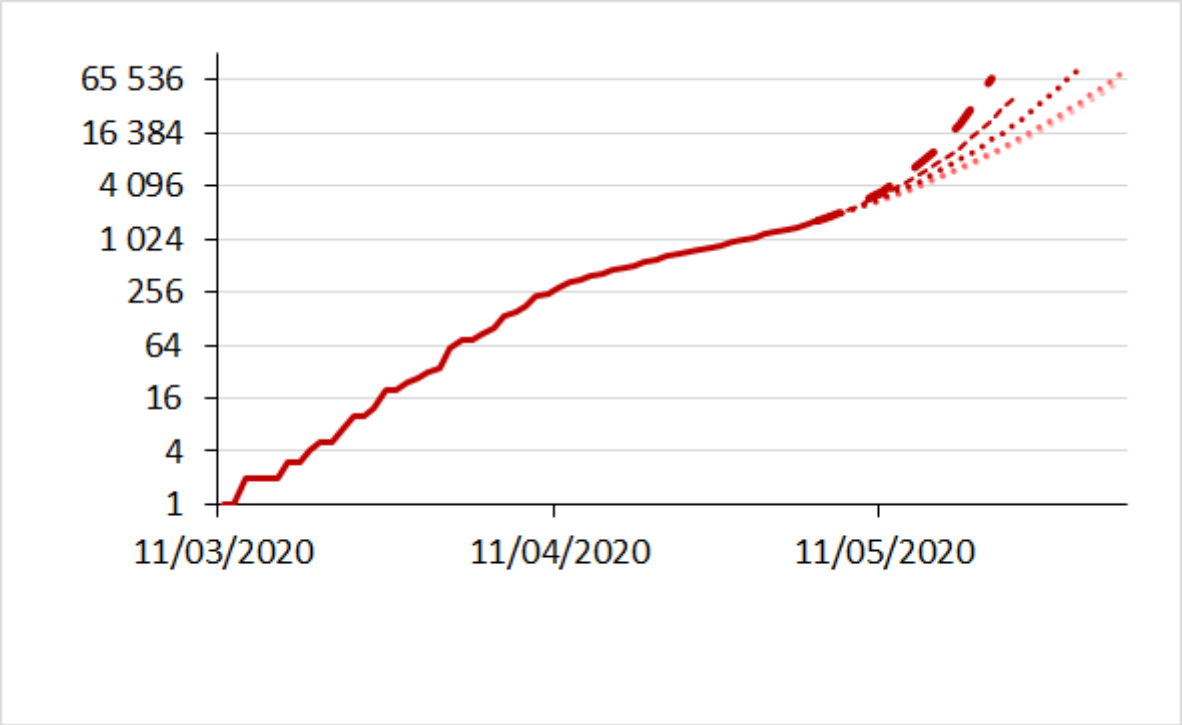

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Indonesia

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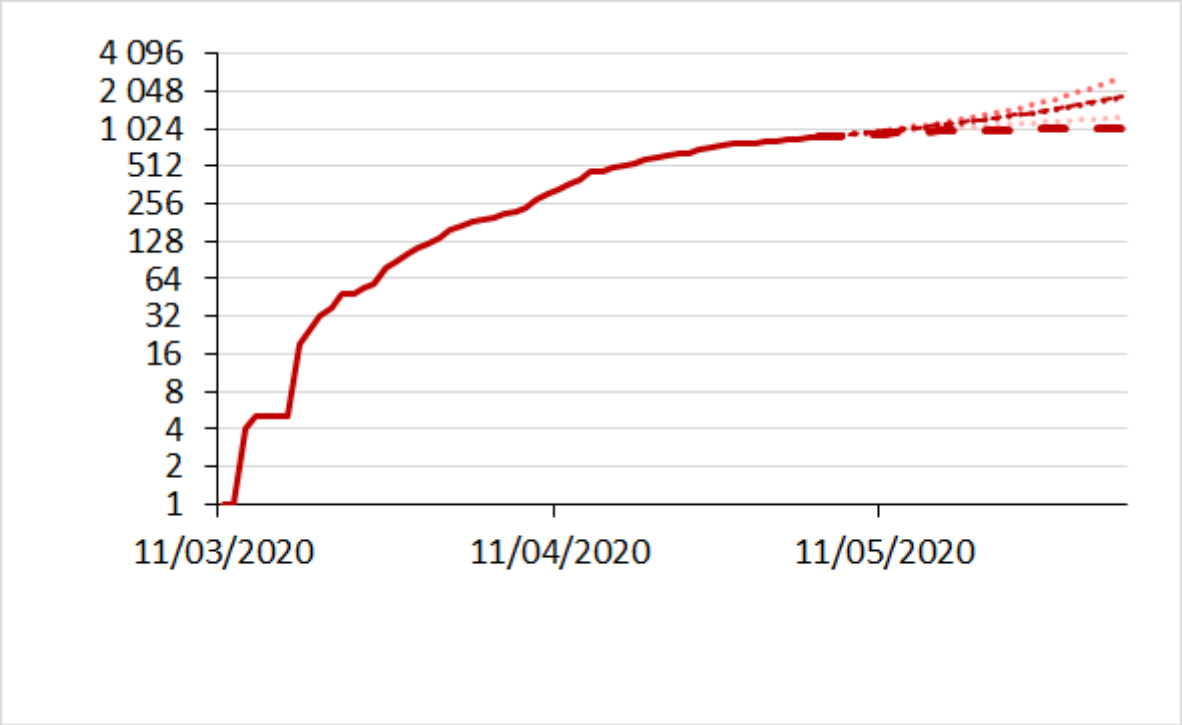

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Iran

CONFIRMED · 9 days'fit · 8 days'fit · 7 days'fit · 6 days'fit · 5 days'fit

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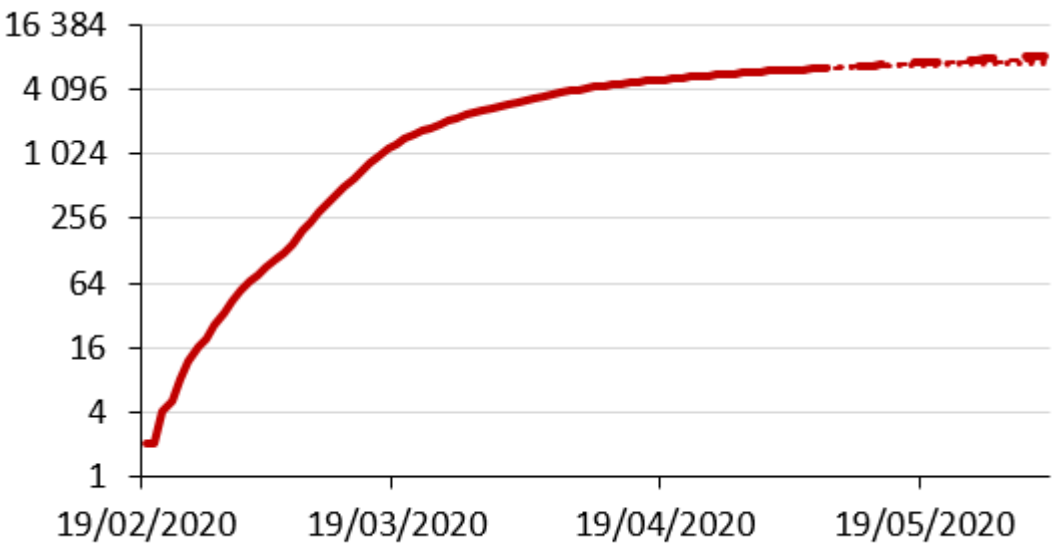

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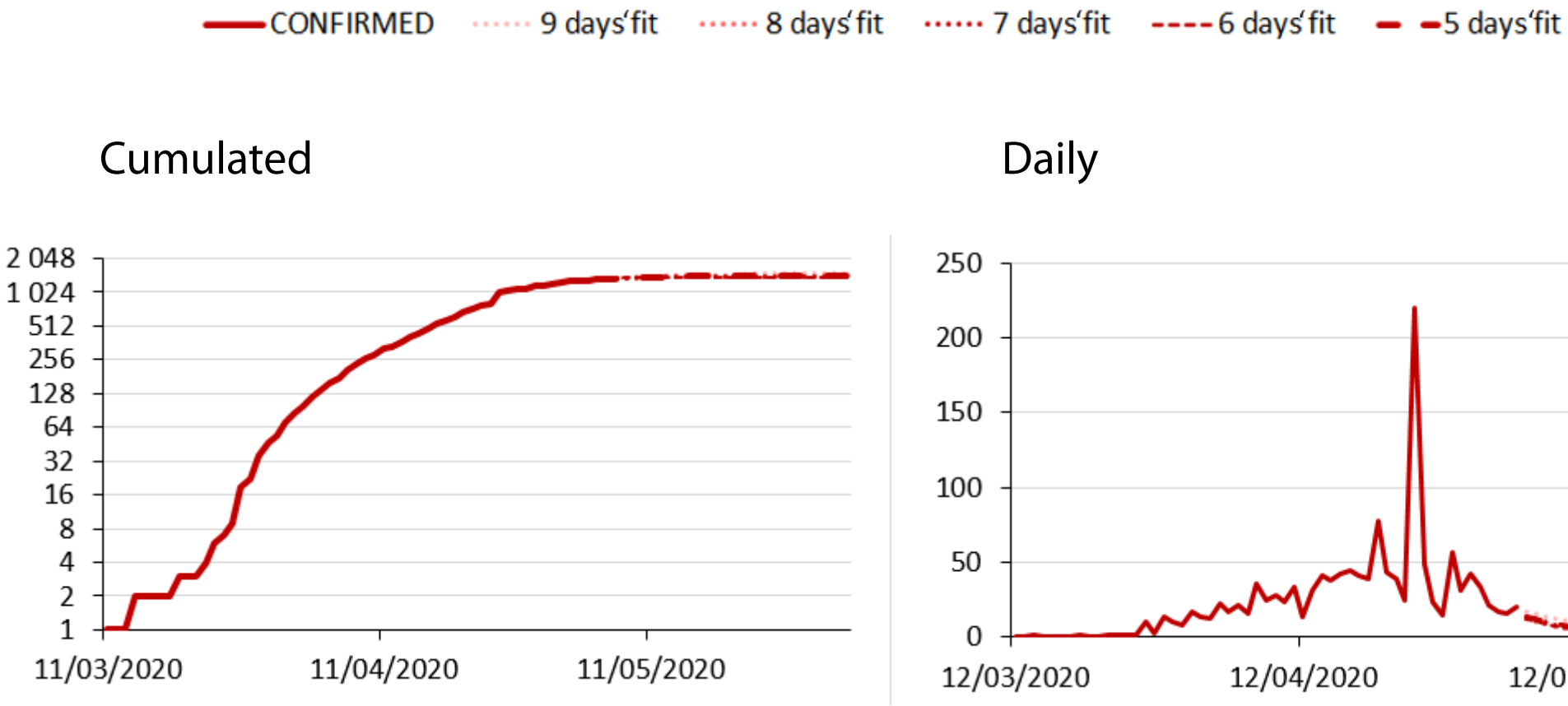
Ireland



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Italy

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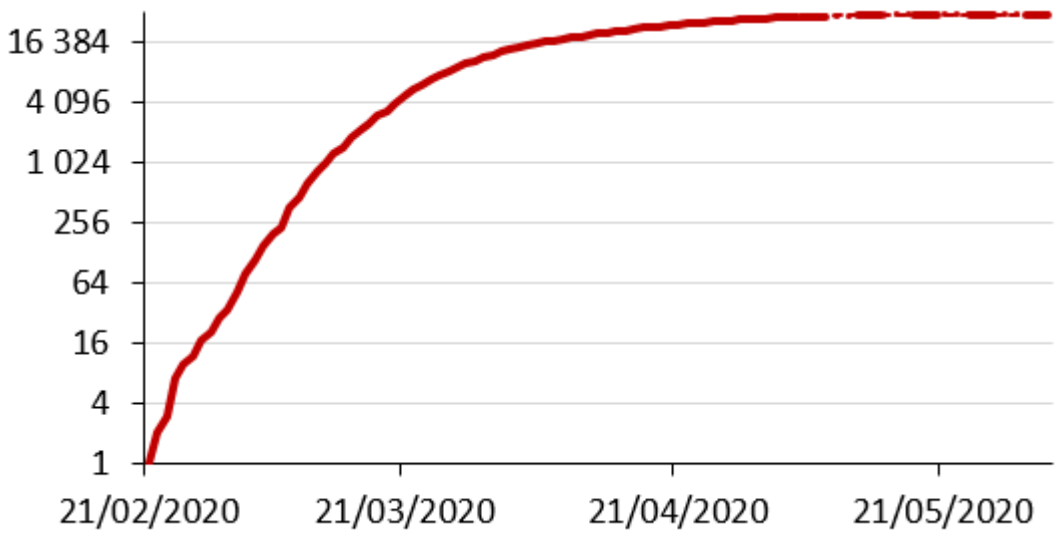

Daily

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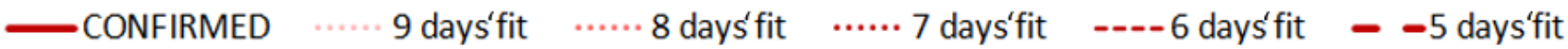
Japan



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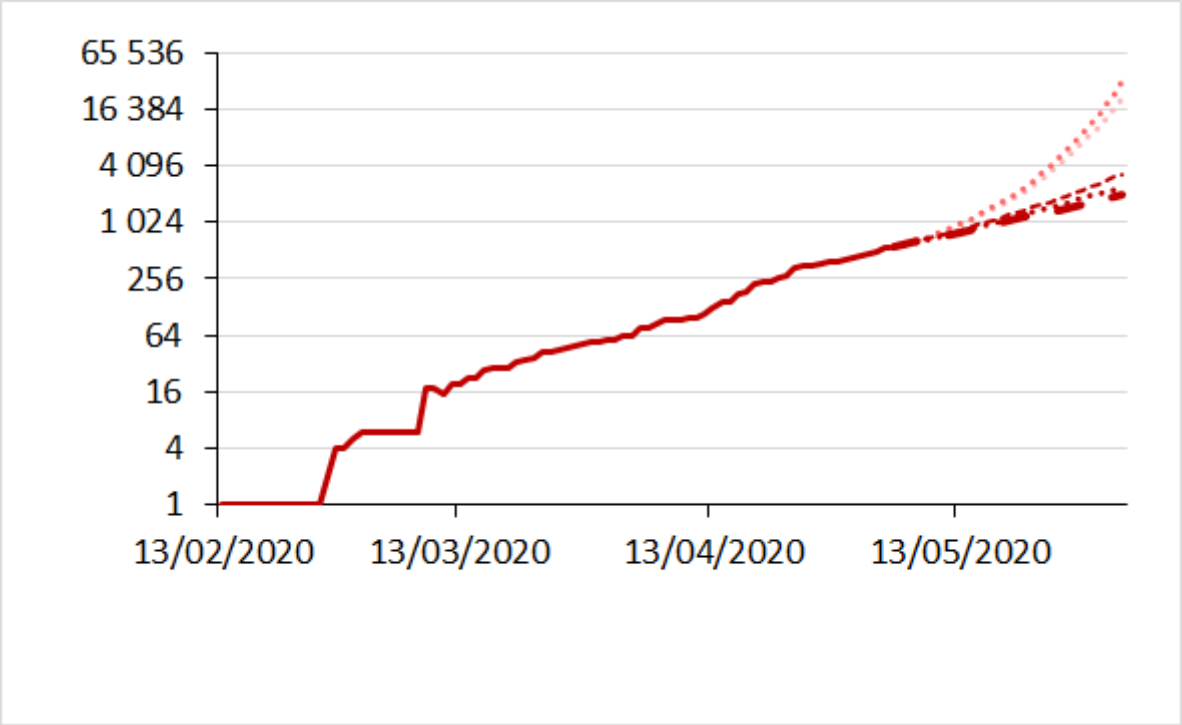

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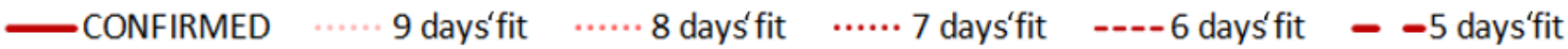
Mexico



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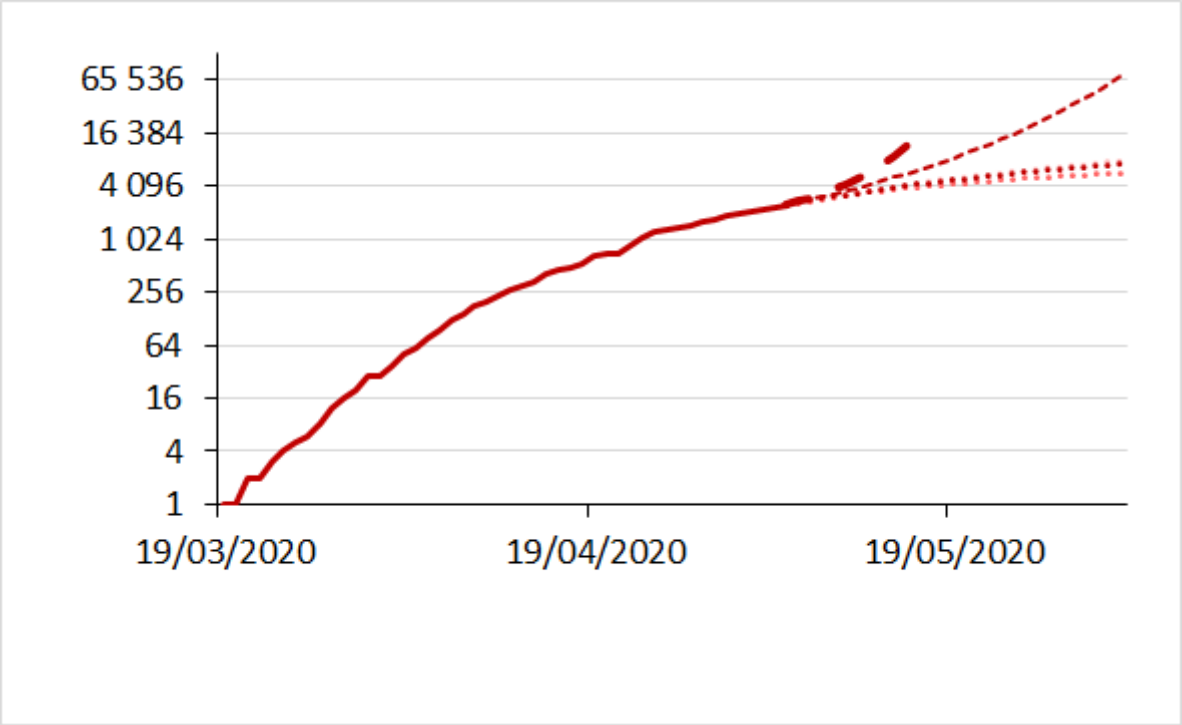

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Netherlands

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

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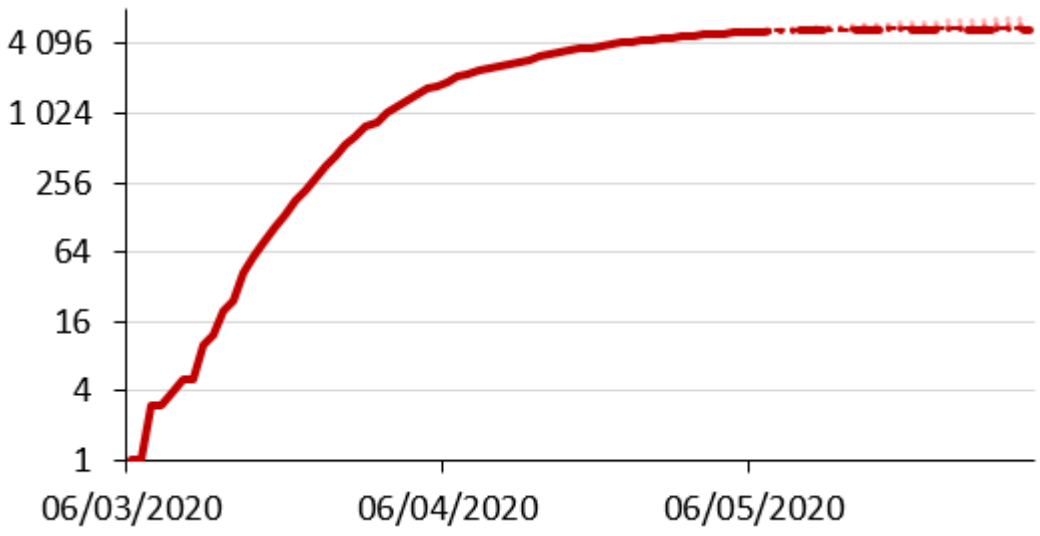

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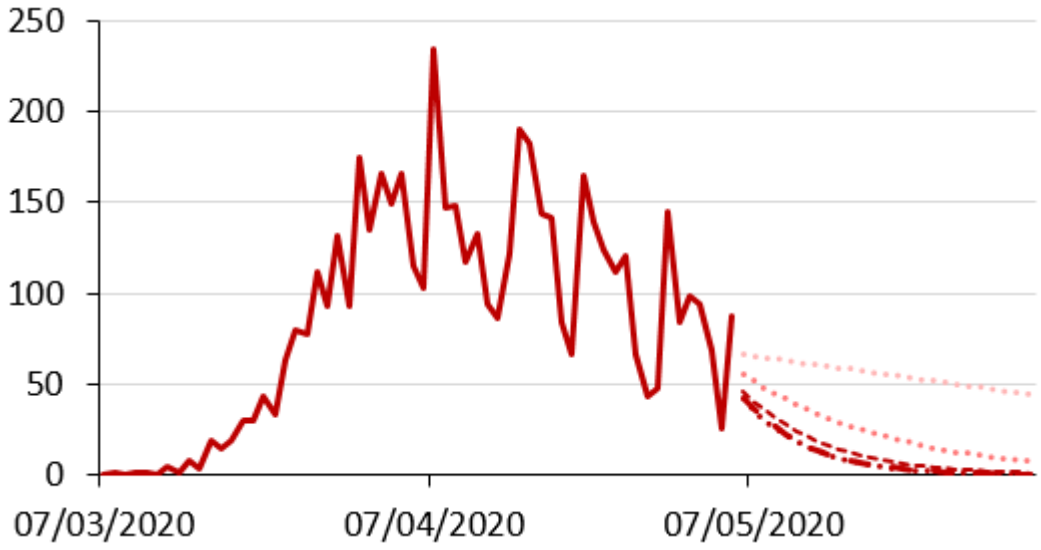
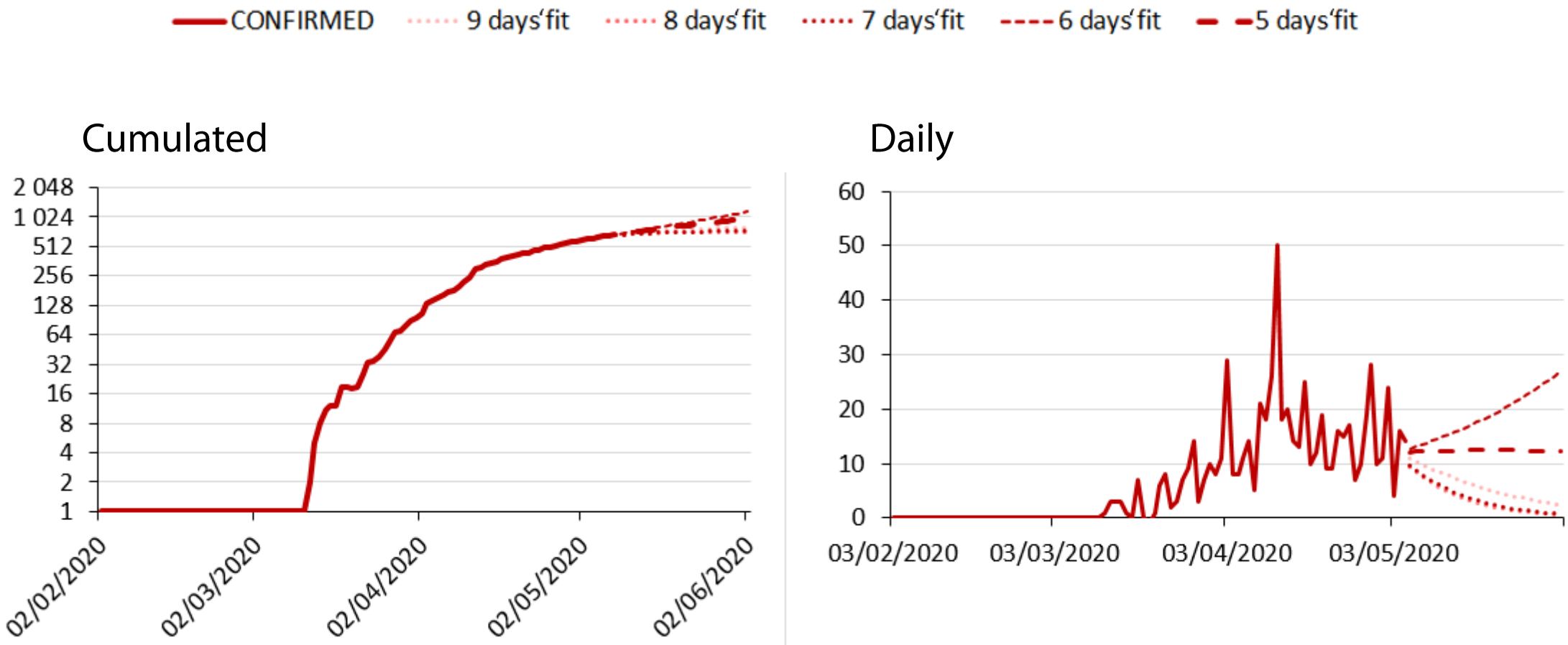


Data: The Johns Hopkins University, Politolog.com

Philippines



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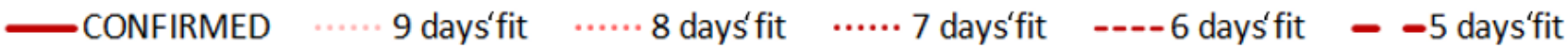
Poland



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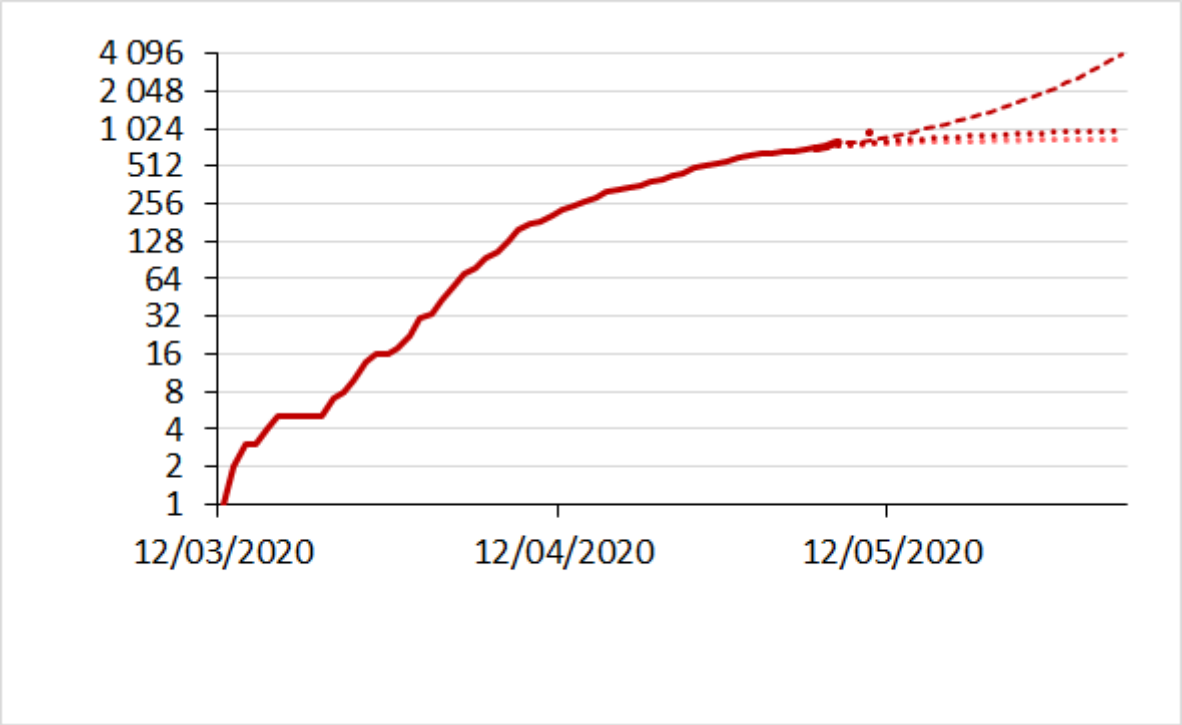

Data: The Johns Hopkins University, Politolog.com

Portugal

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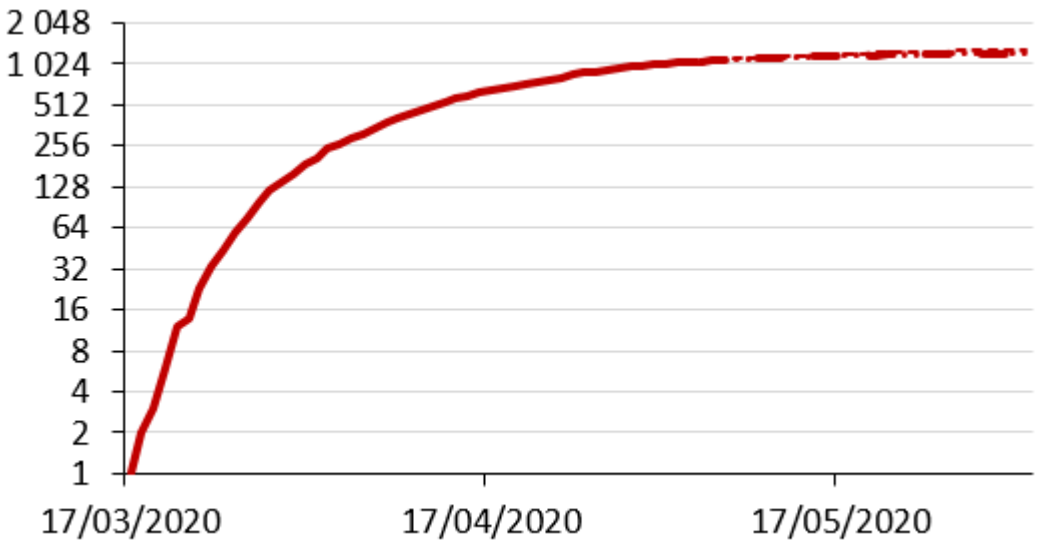
Cumulated



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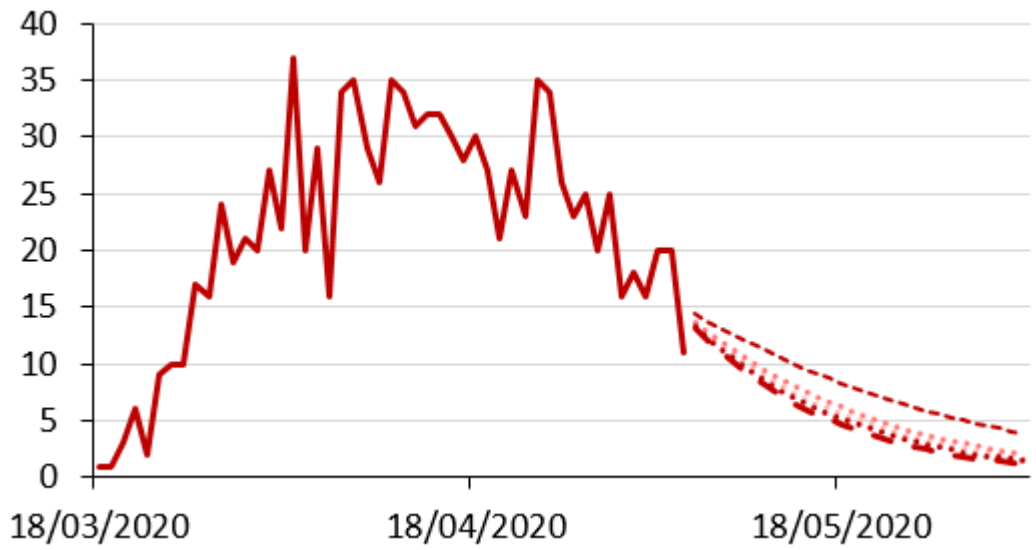

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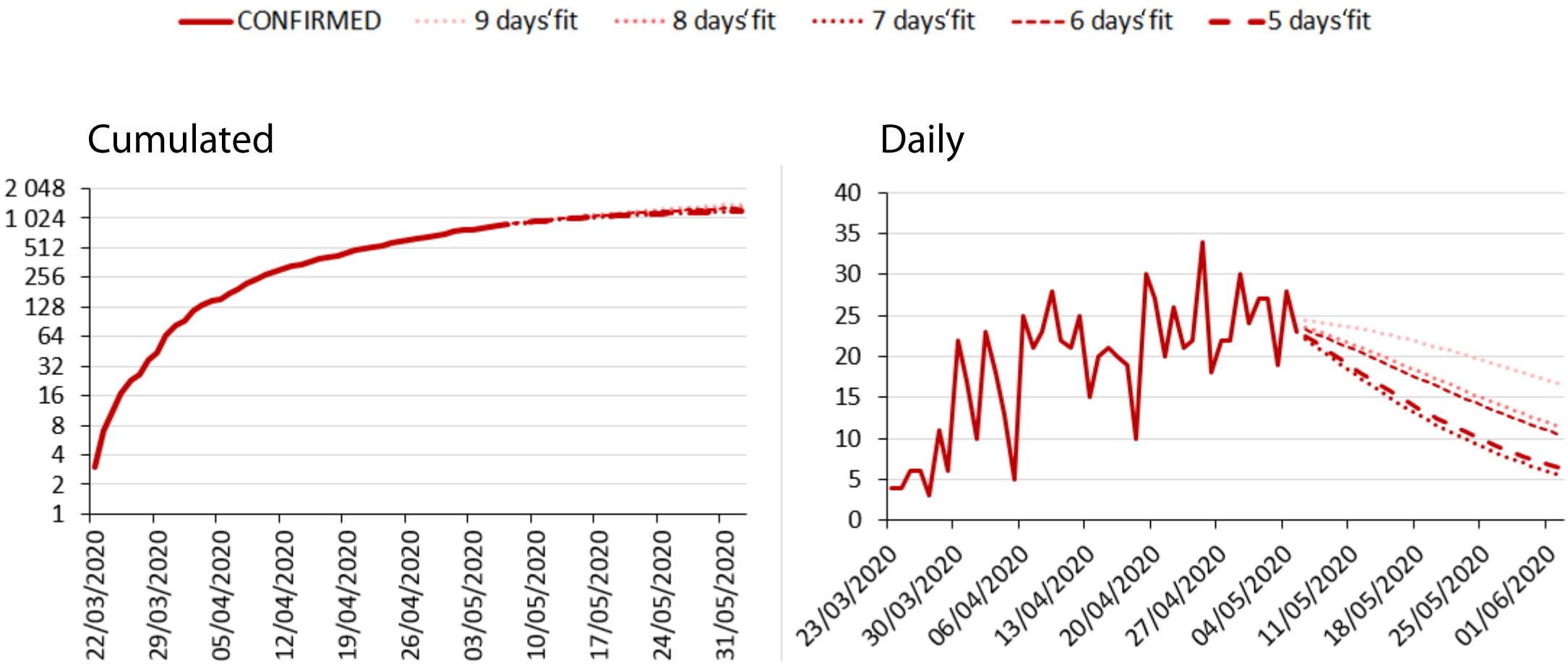
Romania



Data: The Johns Hopkins University, Politolog.com

Russia

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

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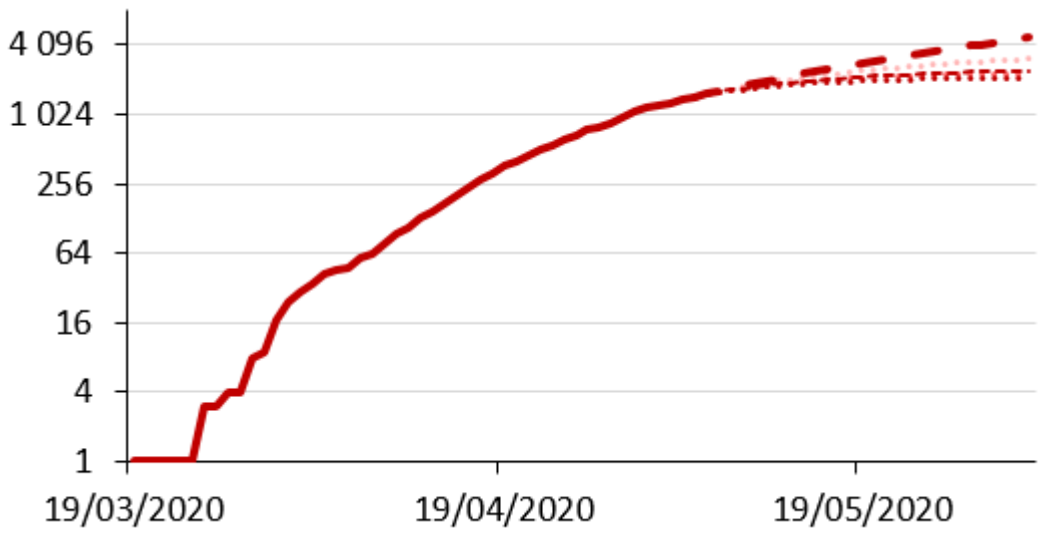

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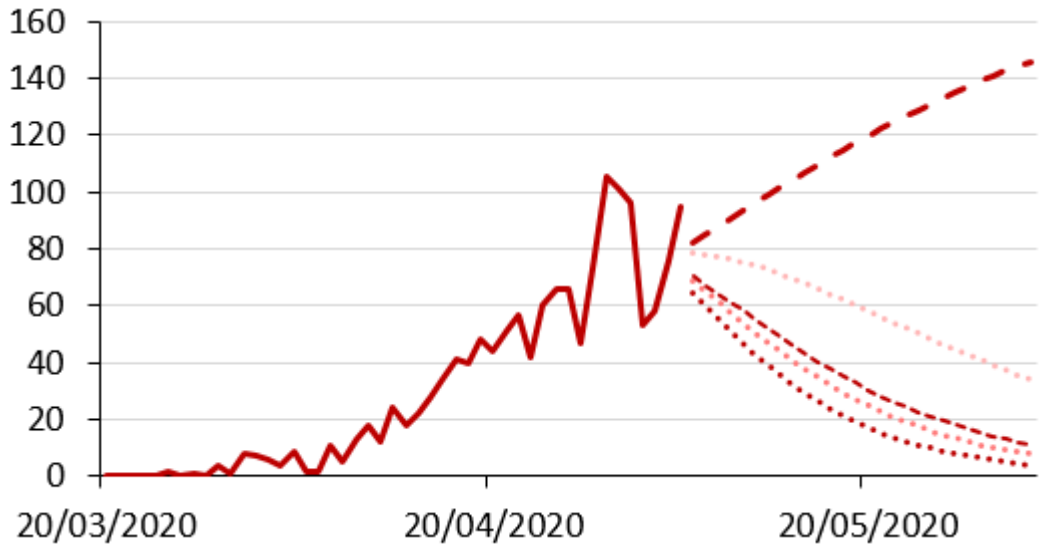

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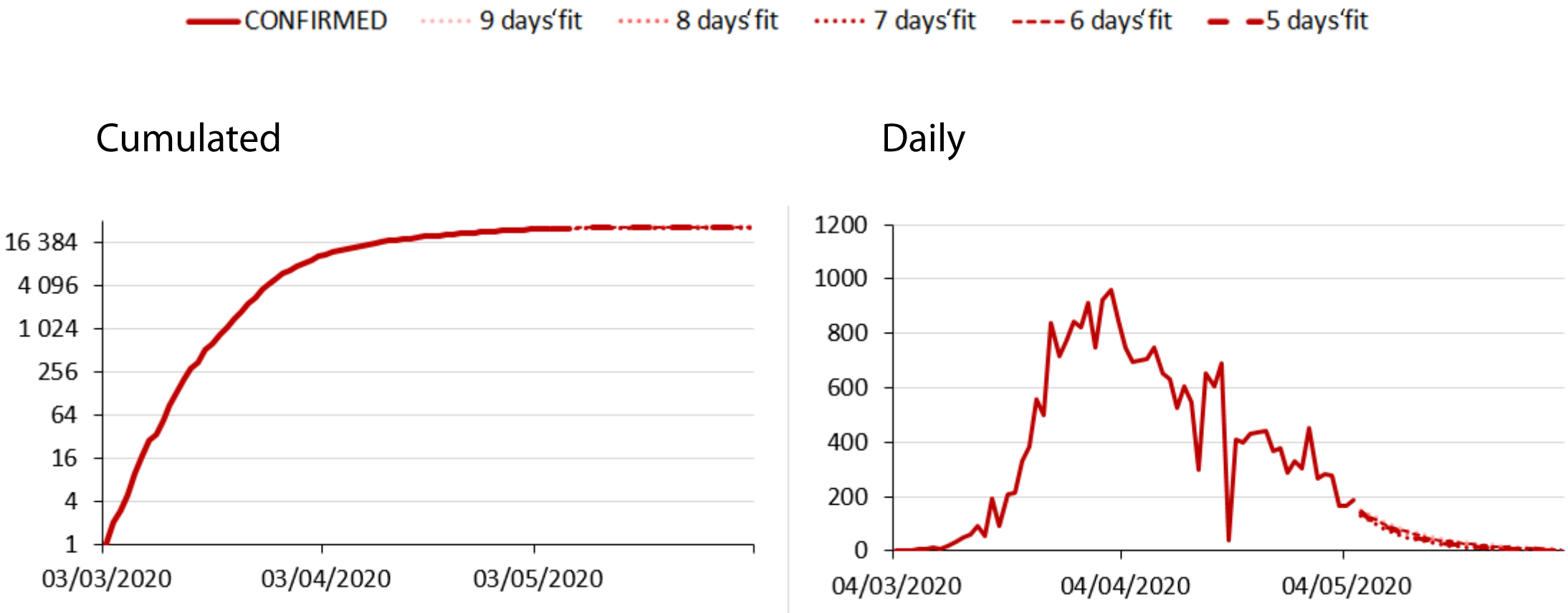
Spain

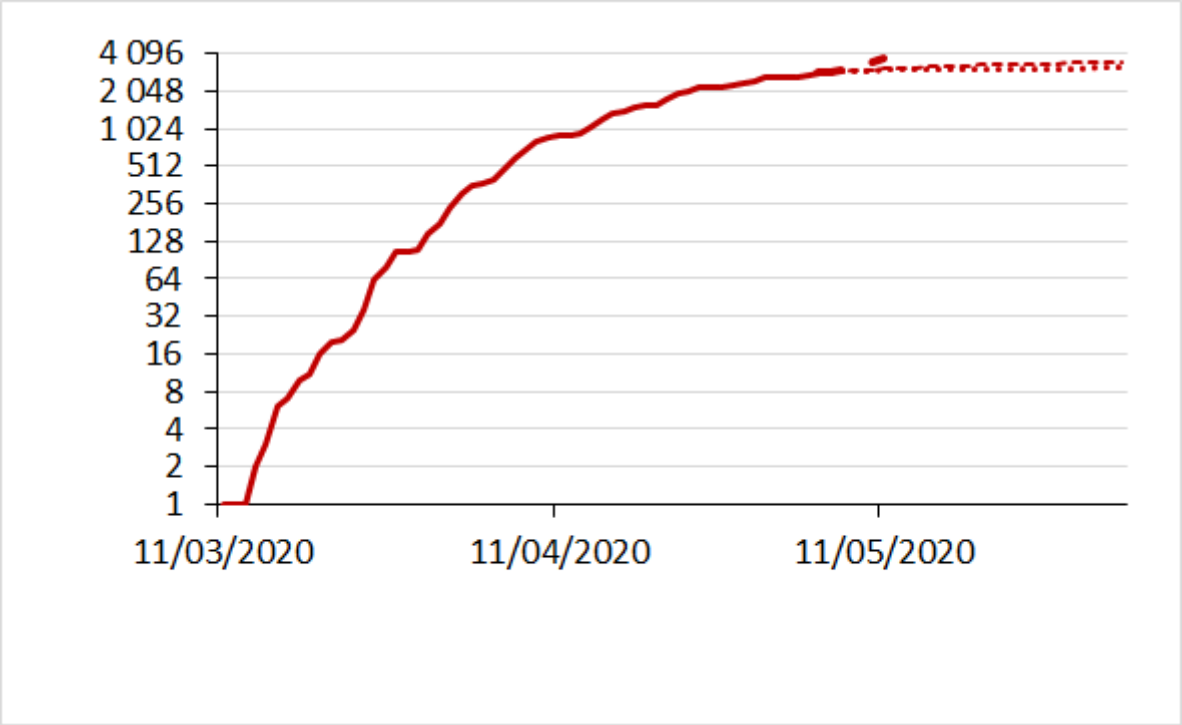


Data: The Johns Hopkins University, Politolog.com

Sweden

CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



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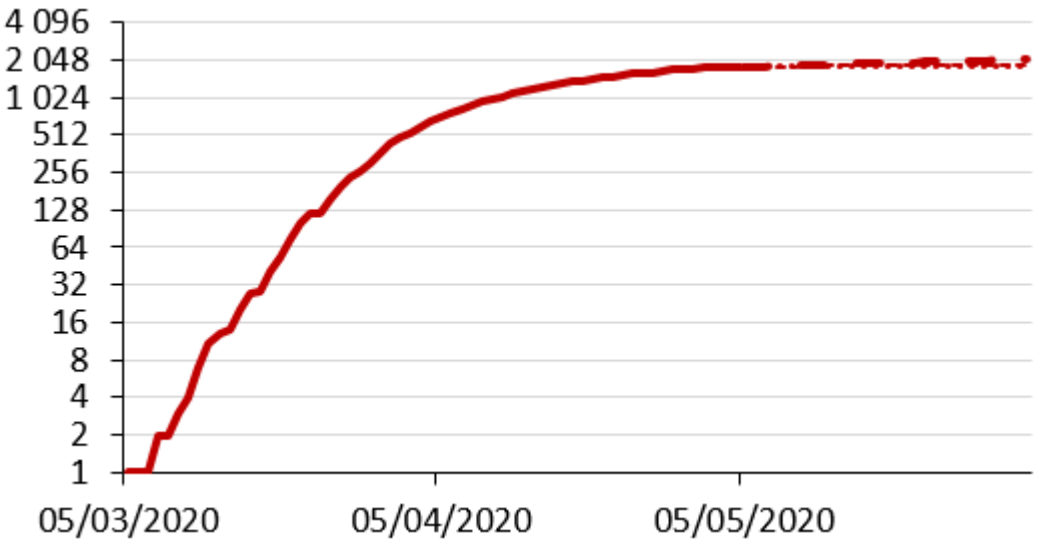
Switzerland

CONFIRMED · 9 days'fit · 8 days'fit · 7 days'fit · 6 days'fit · 5 days'fit

Cumulated



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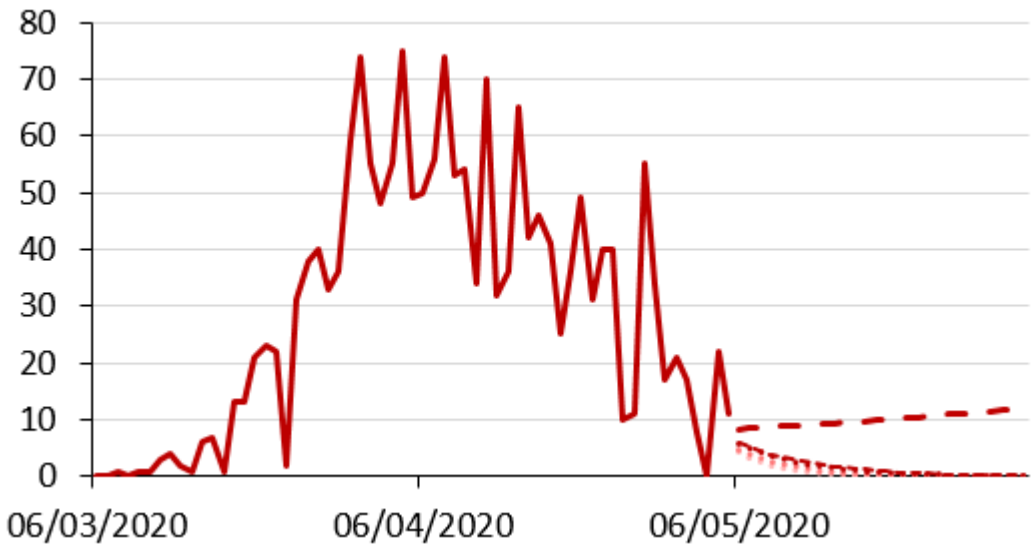
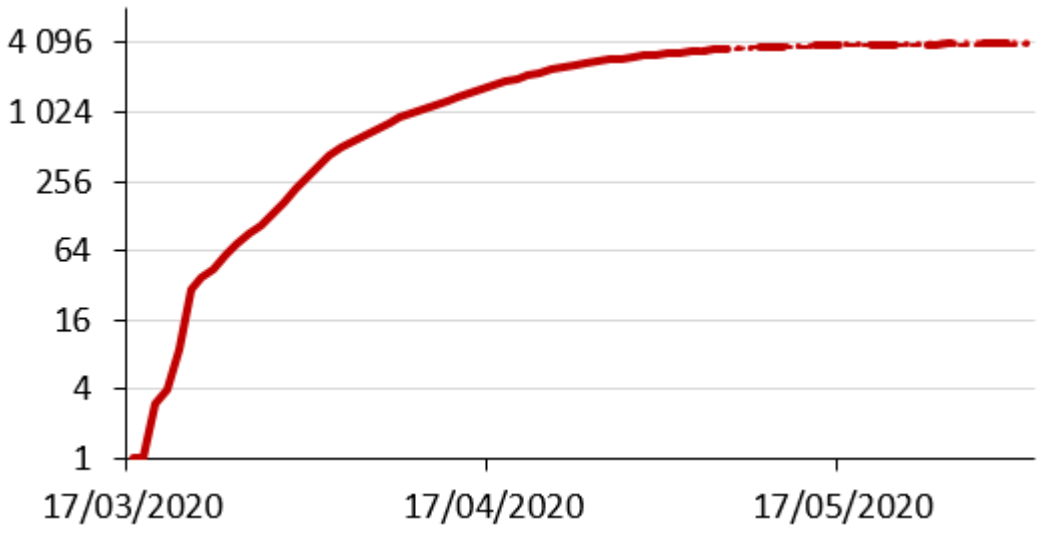


Data: The Johns Hopkins University, Politolog.com

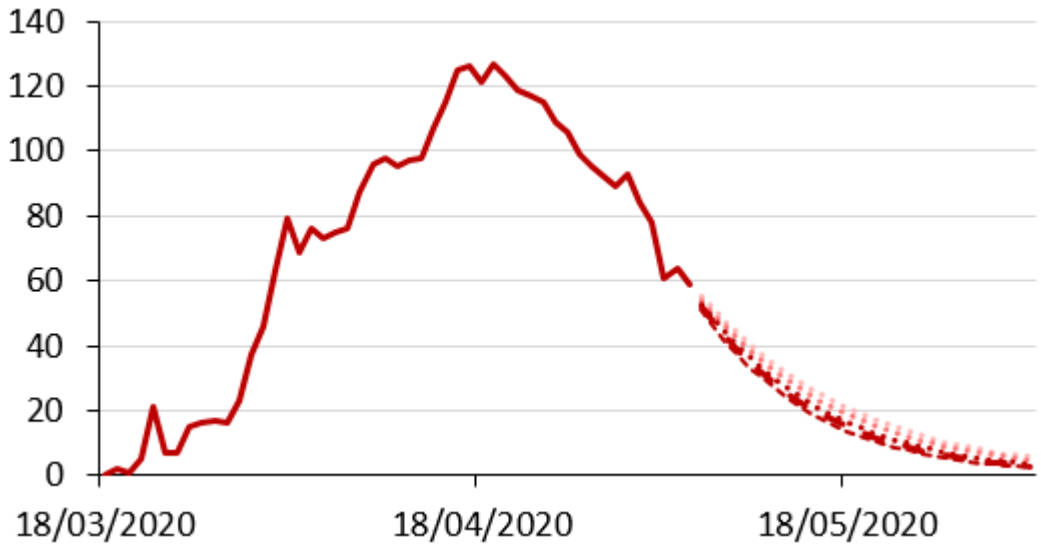
Turkey

CONFIRMED | 9 days'fit | 8 days'fit | 7 days'fit | 6 days'fit | 5 days'fit

Cumulated



Daily



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United Kingdom

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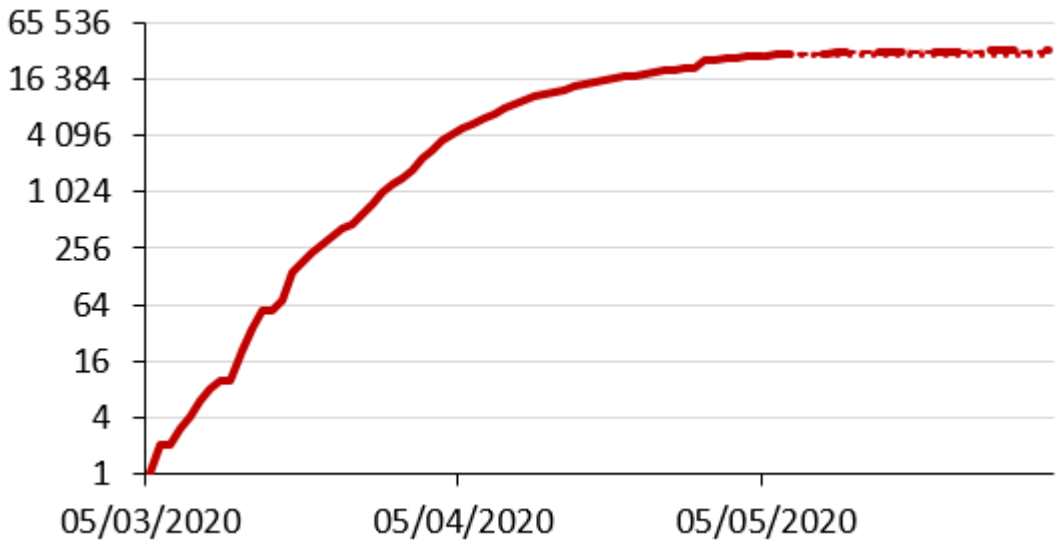
Cumulated



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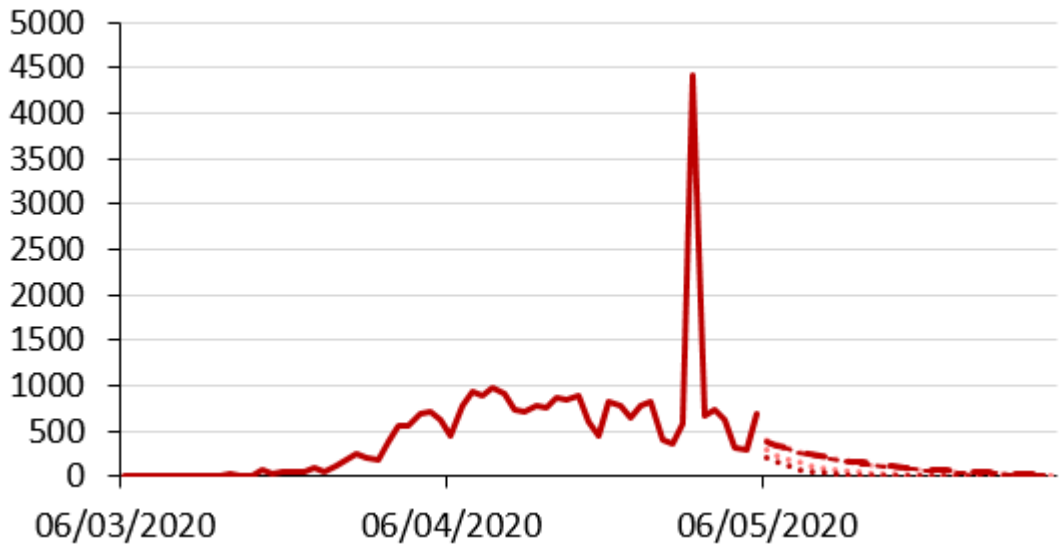


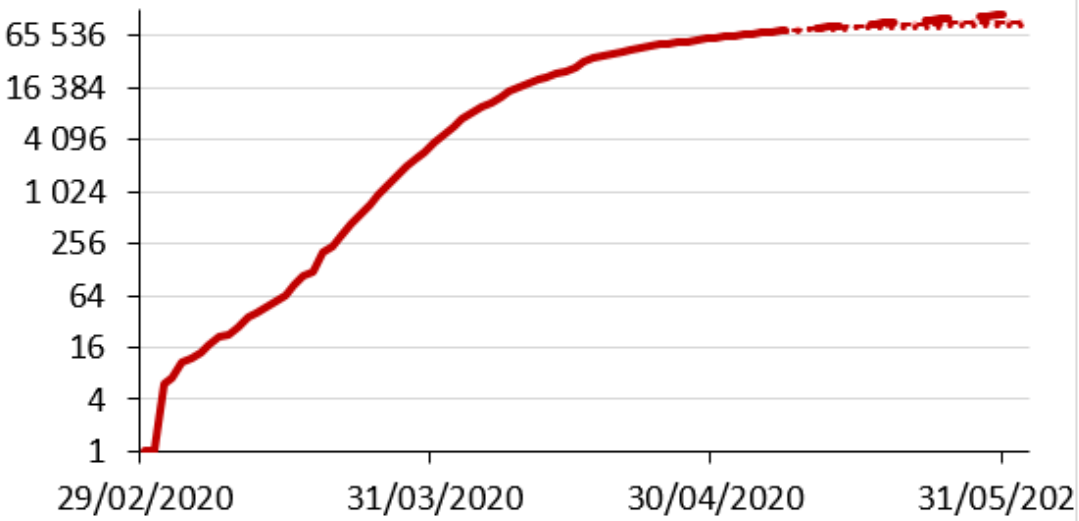
The UK changed its reporting method on the 29th of May (second peak)

Data: The Johns Hopkins University, Politolog.com

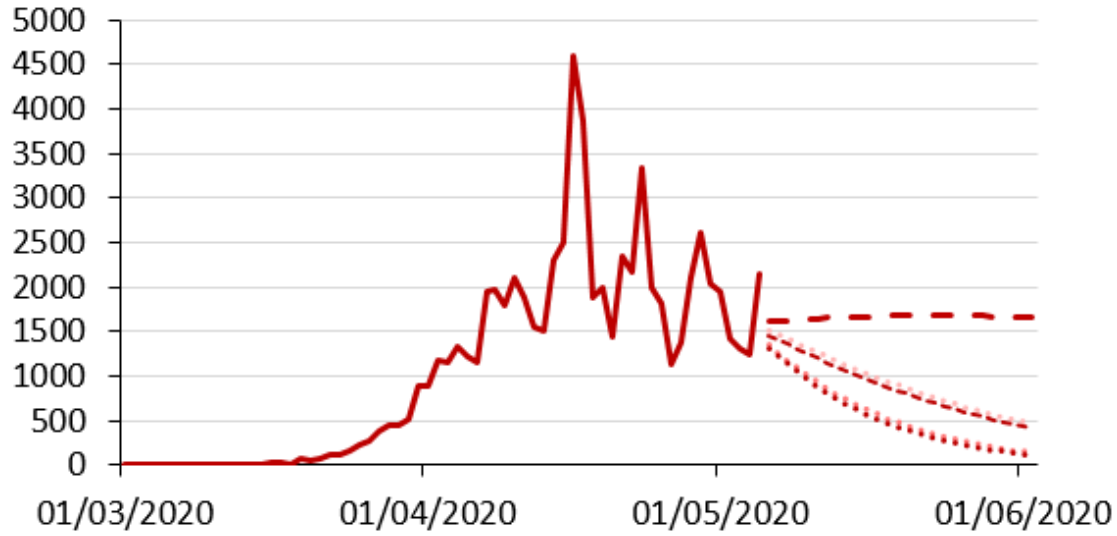
USA

CONFIRMED · 9 days'fit · 8 days'fit · 7 days'fit · 6 days'fit

Cumulated



Daily



Data: The Johns Hopkins University, Politolog.com

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