Cambridge Judge Business School
Cambridge Centre for Health Leadership & Enterprise

COVID-19 TRACKER: INDIA

5 June 2022

Centre for
Health Leadership & Enterprise

UNIVERSITY OF CAMBRIDGE
Judge Business School

HSTP
Health Systems
Transformation Platform

**National Institute of Economic and Social Research**

The filtered daily growth rate of new cases in India has increased steadily over the past 12 days, and stood at 6.2% as of 5 June 2022. The reproduction number was 1.2. Daily cases are likely to nudge 12,000 per day nationally in two weeks' time.
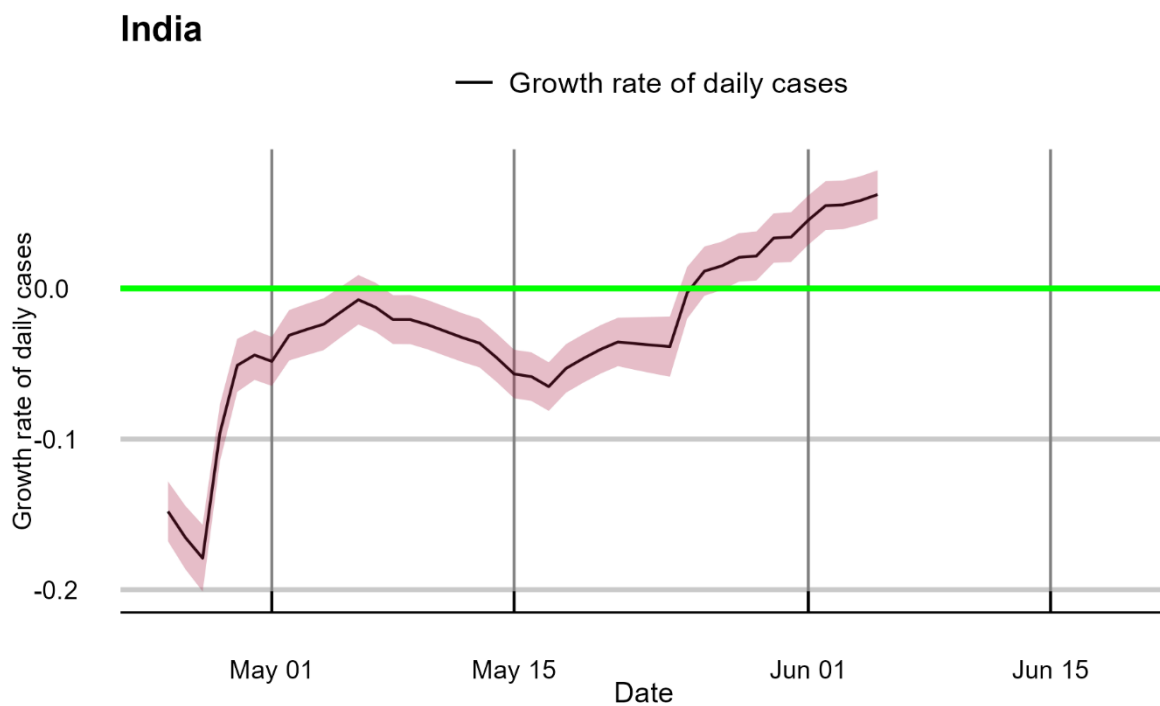
Among the states and union territories, growth of infection is of grave concern in Goa, Himachal Pradesh, Jharkhand and Maharashtra. Daily cases are currently growing at rates exceeding 10% per day in these states.

Gujarat, Karnataka, Kerala, Tamil Nadu and Telangana are the other states with both significant incidence and concerning growth rates of infection which currently fall between 5 and 10% per day.

Forecast of daily Covid-19 cases in India:
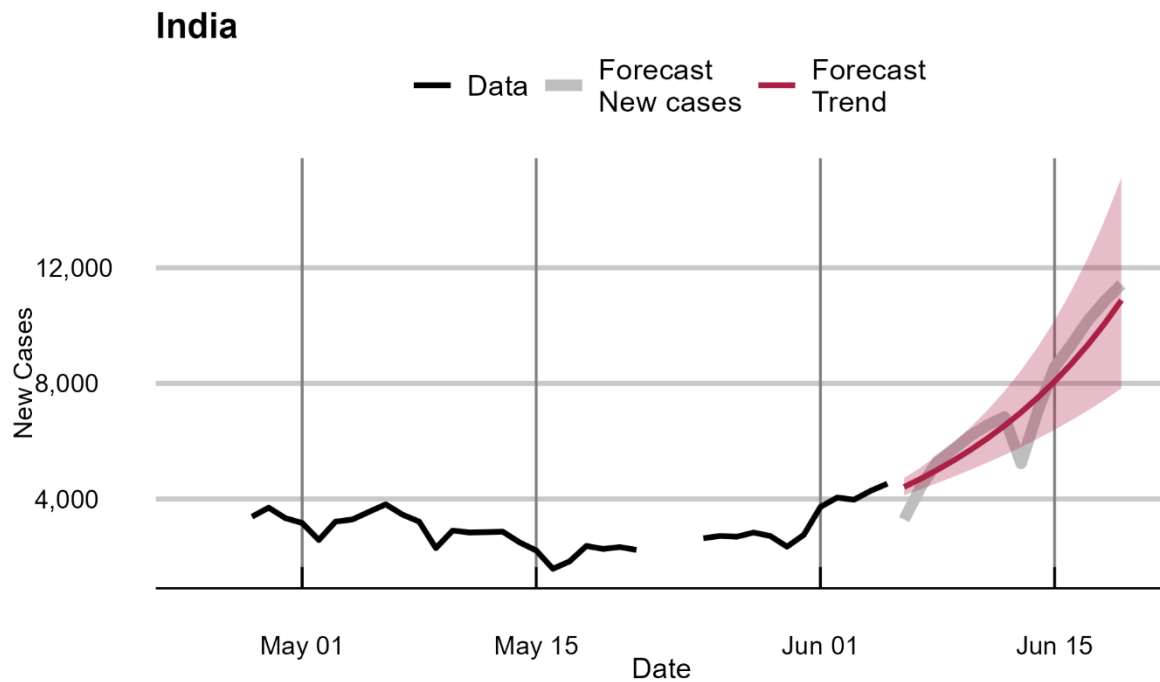
India
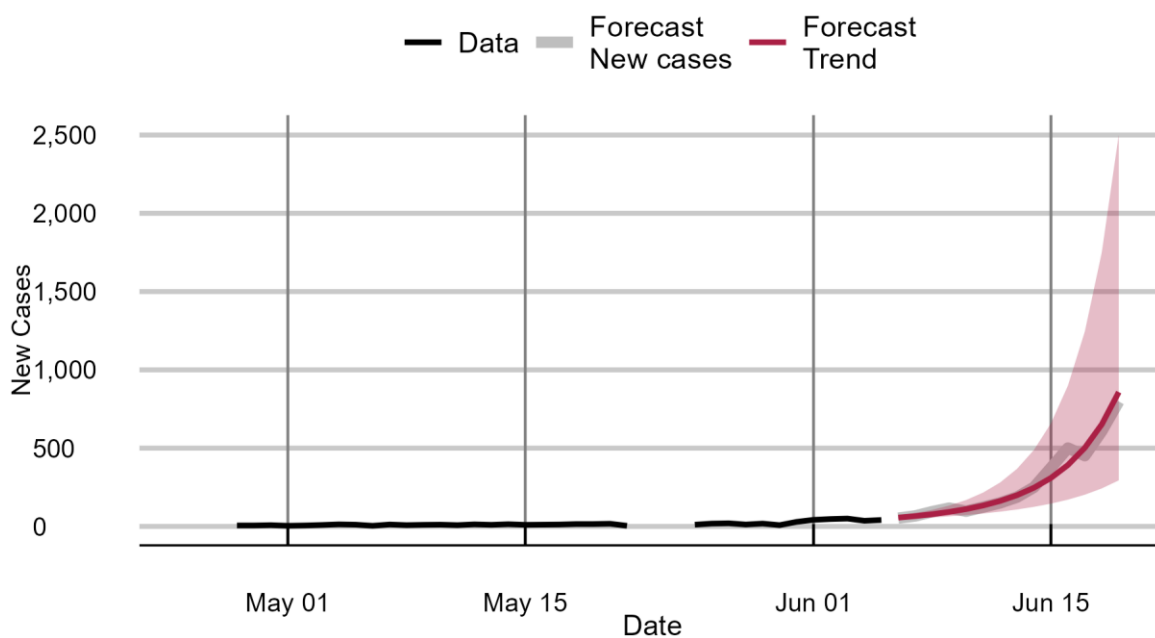

Filtered daily growth rate of COVID-19 cases in India

India

CJBS COVID-19 Tracker for India can be accessed at: www.jbs.cam.ac.uk/covid-india.
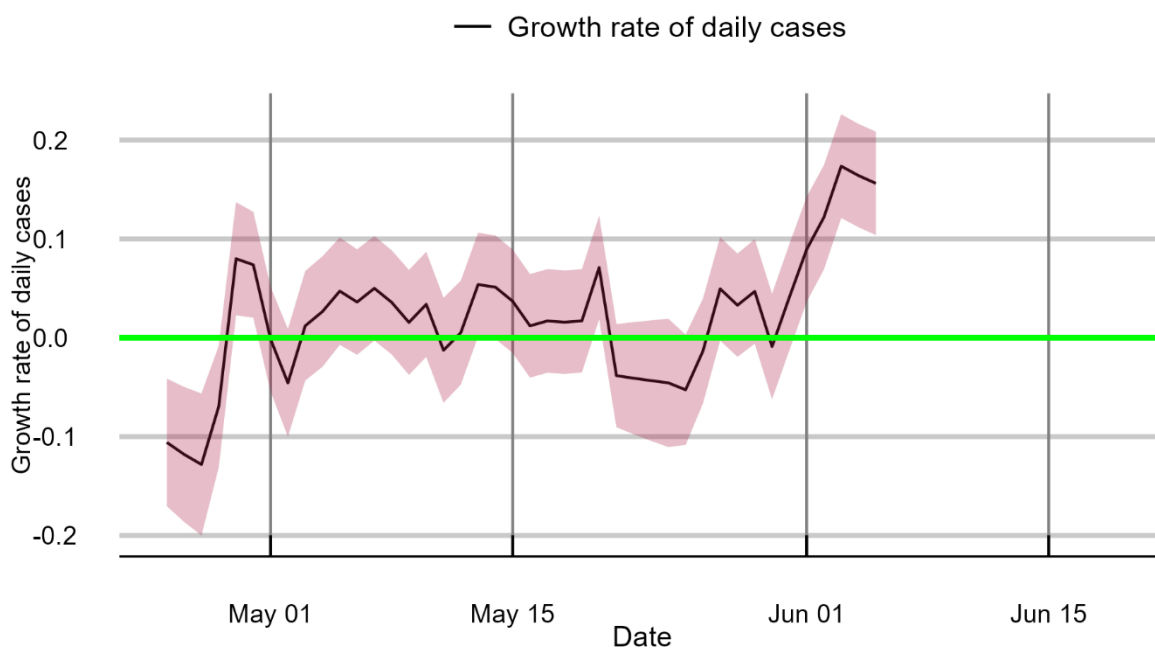
Email: Paul Kattuman

Forecasts of daily cases,
and Filtered daily growth rates of cases,
COVID-19: States and Union territories

Goa

Goa
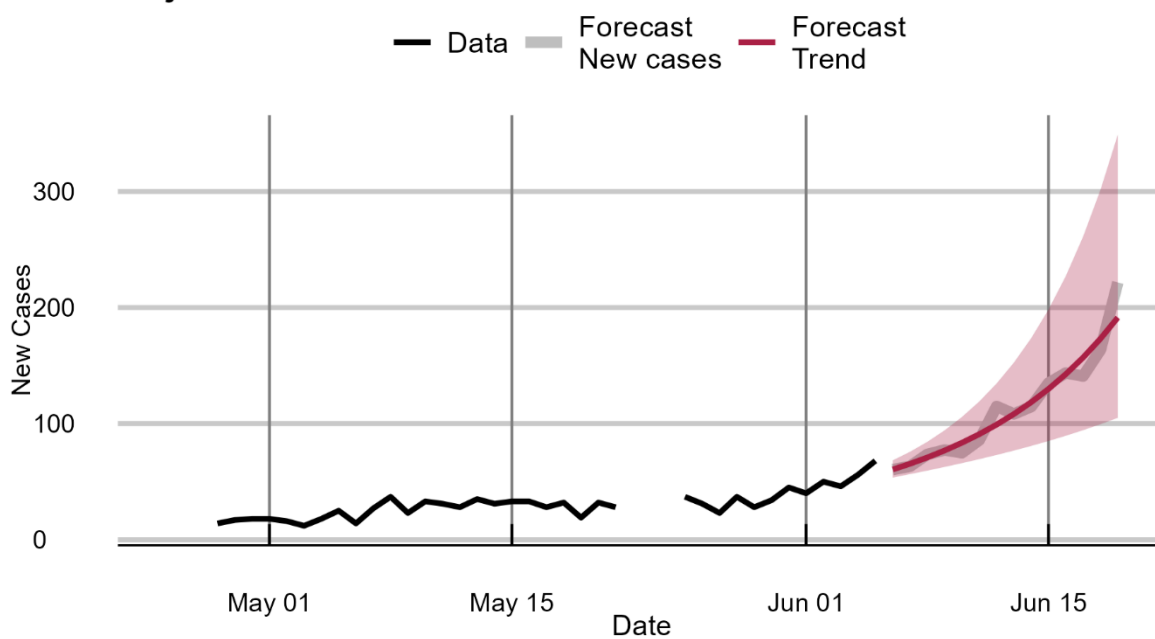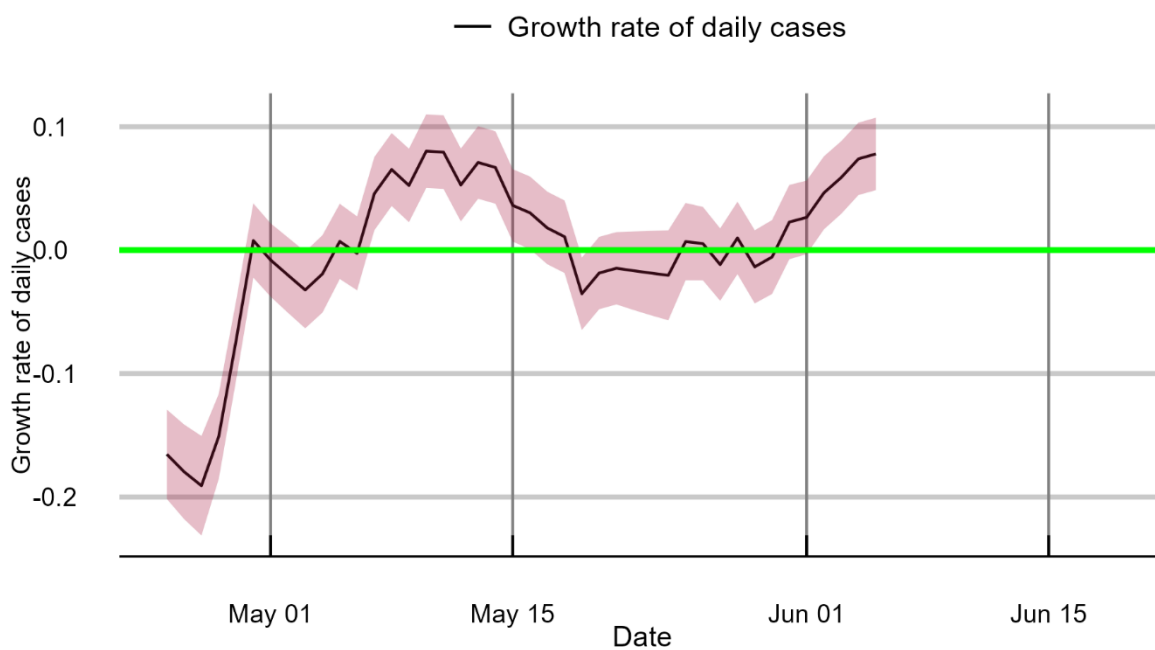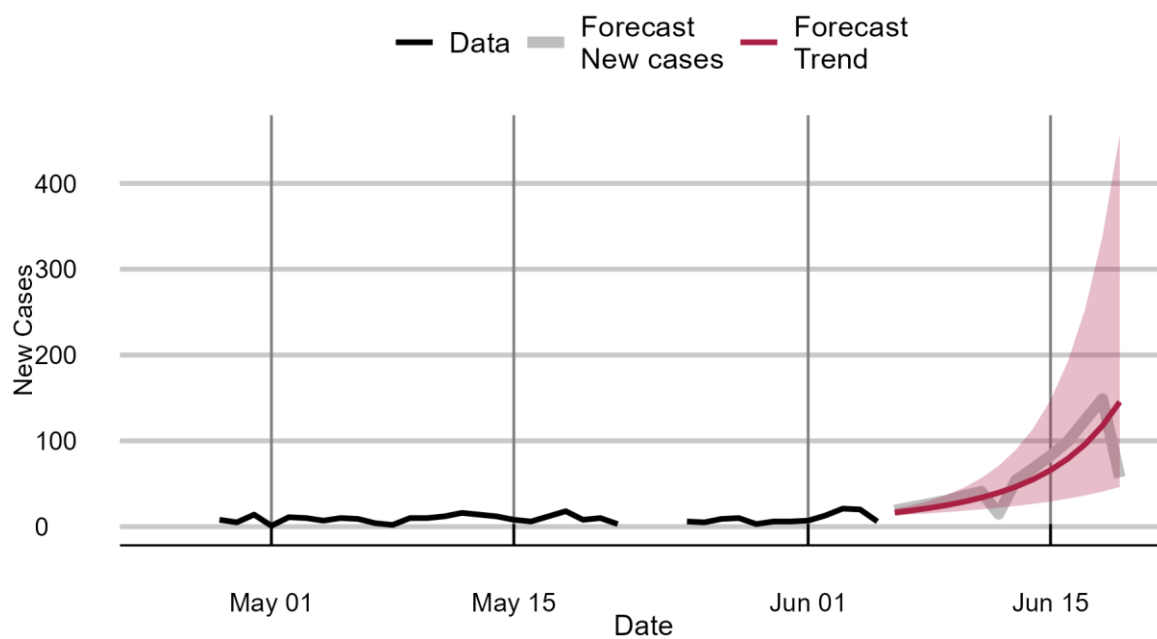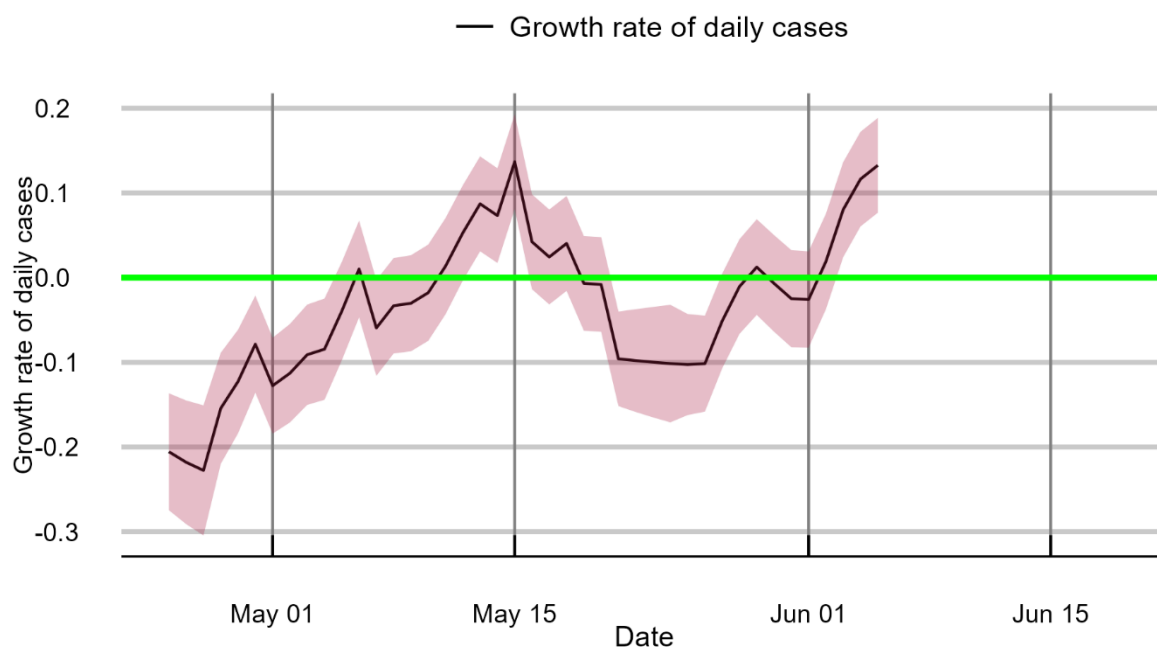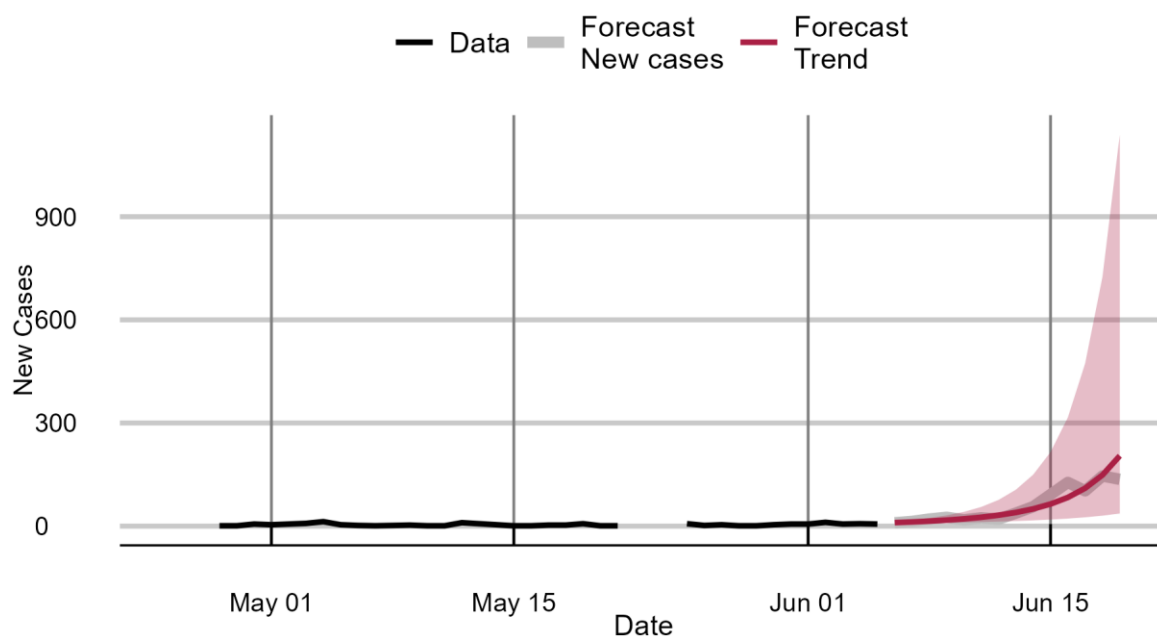
Gujarat

Gujarat

Himachal Pradesh

Himachal Pradesh

Jharkhand

Jharkhand
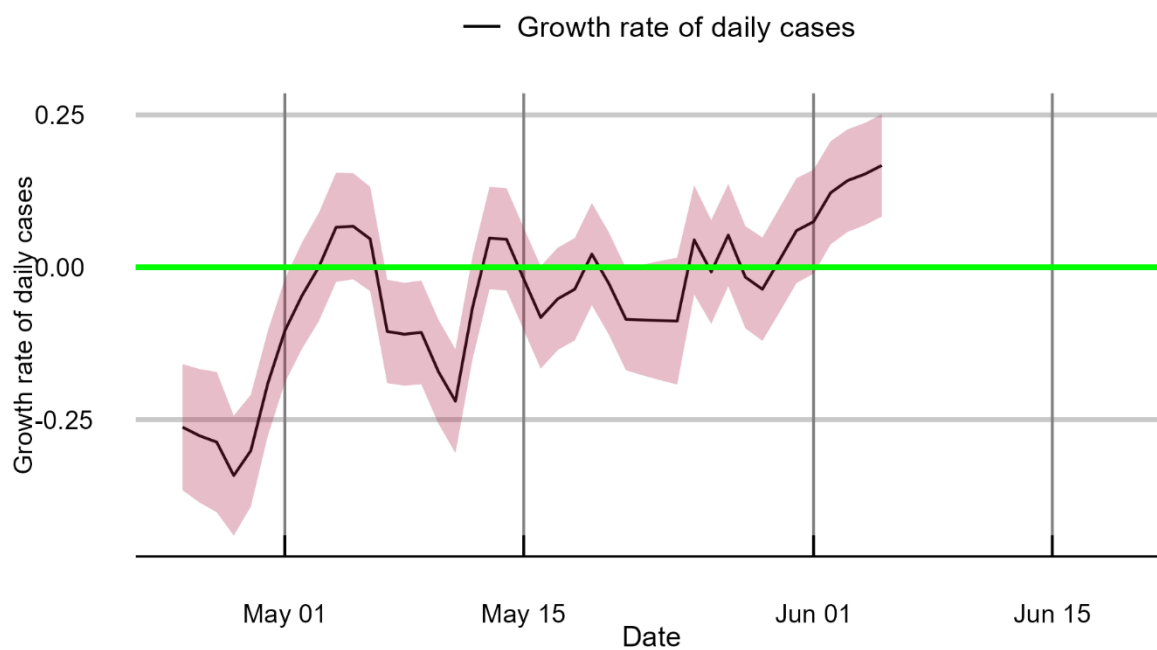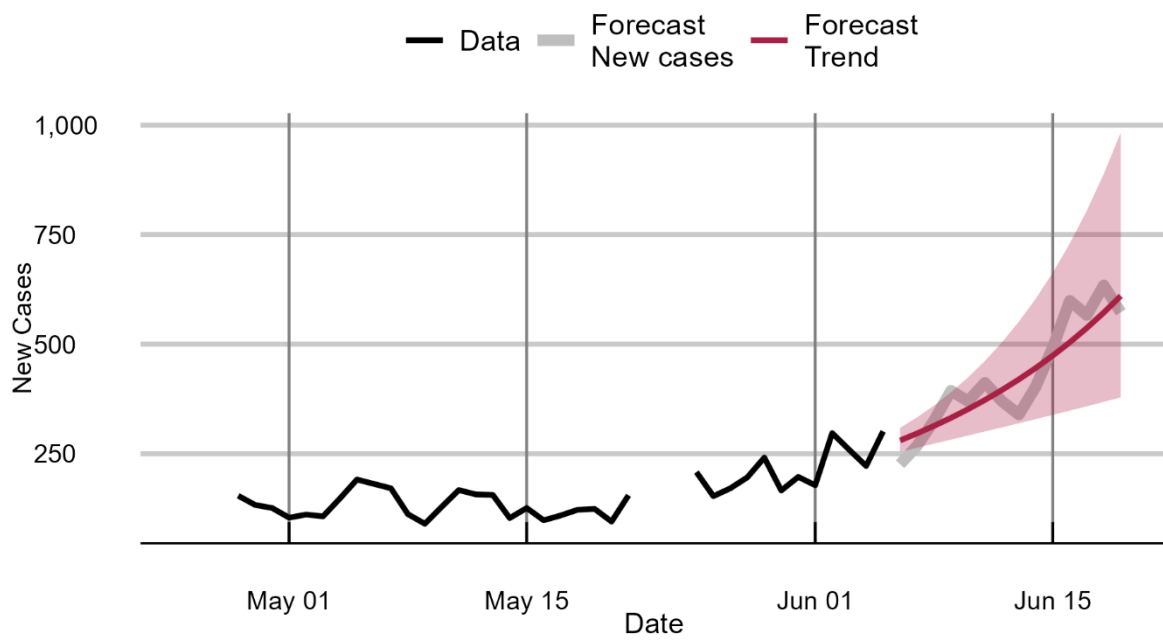
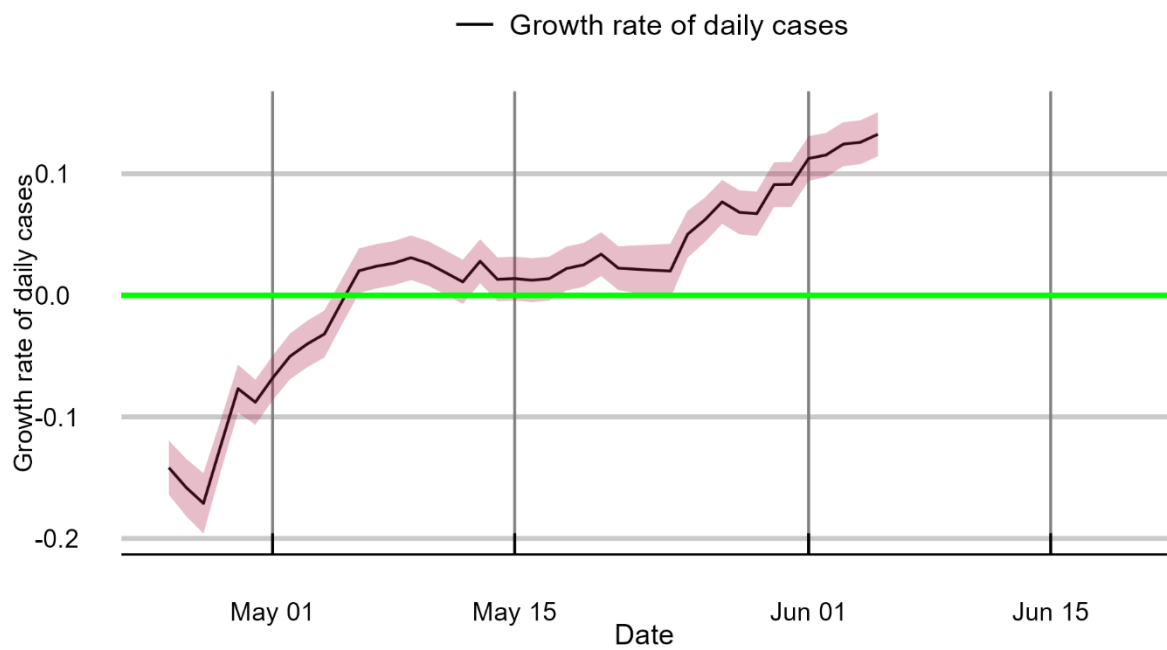**Karnataka**
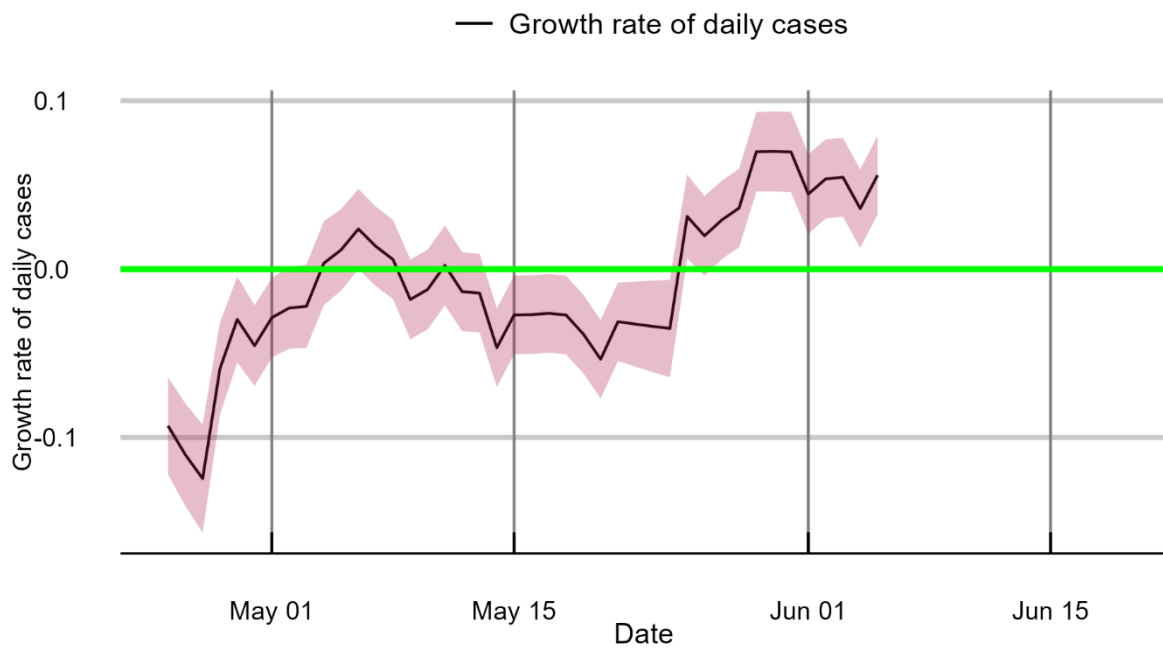
Kerala
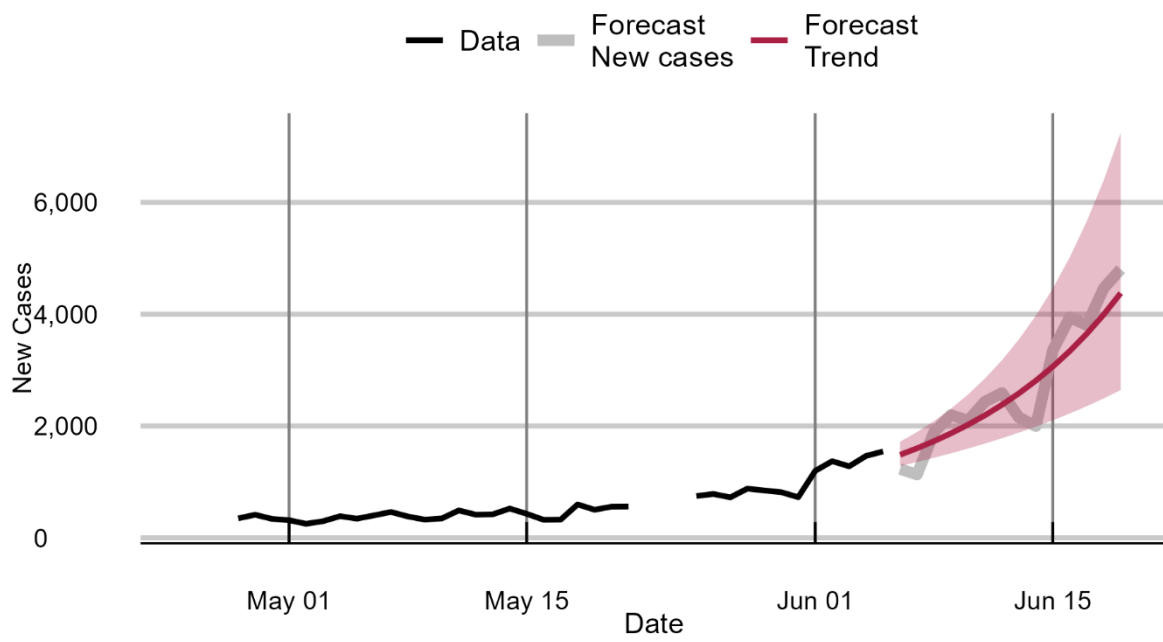
Kerala
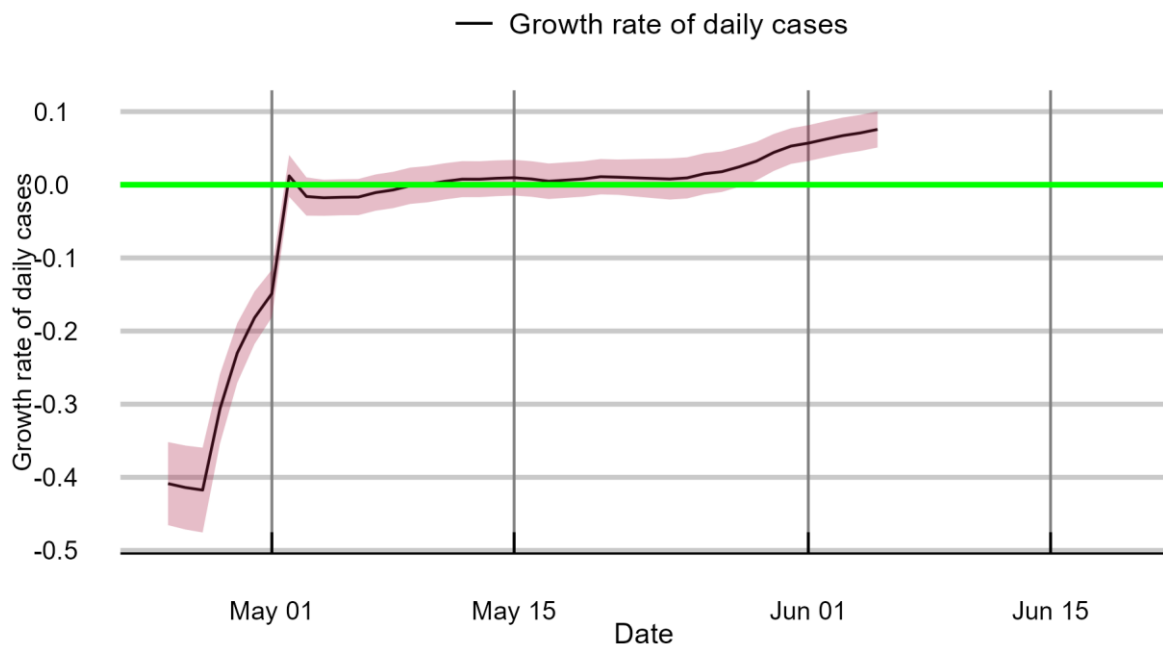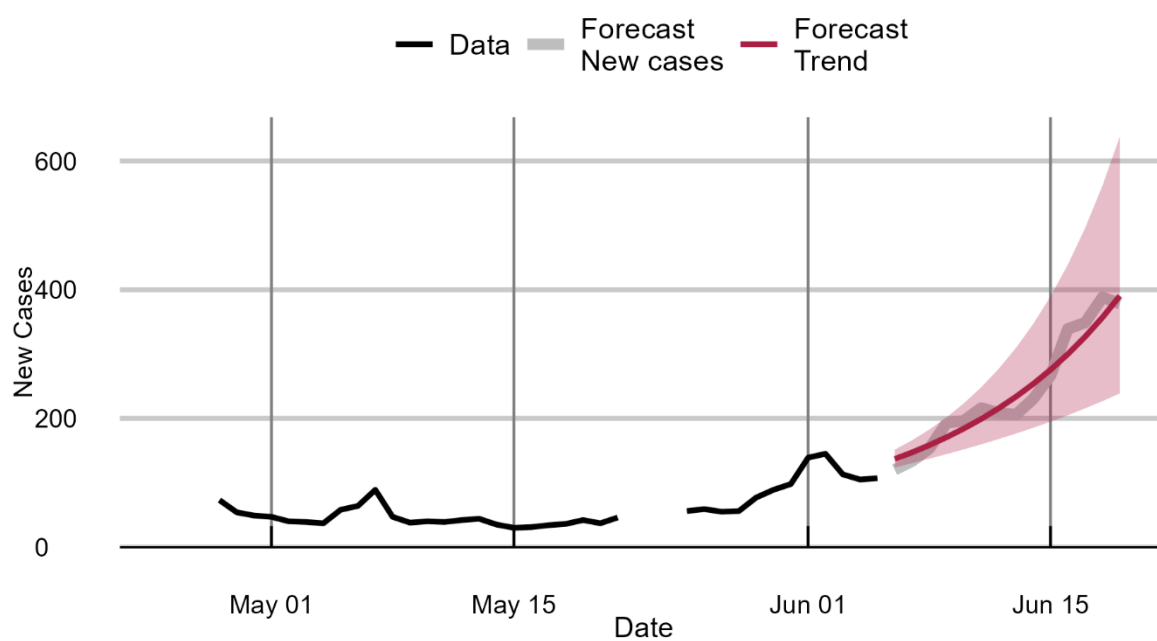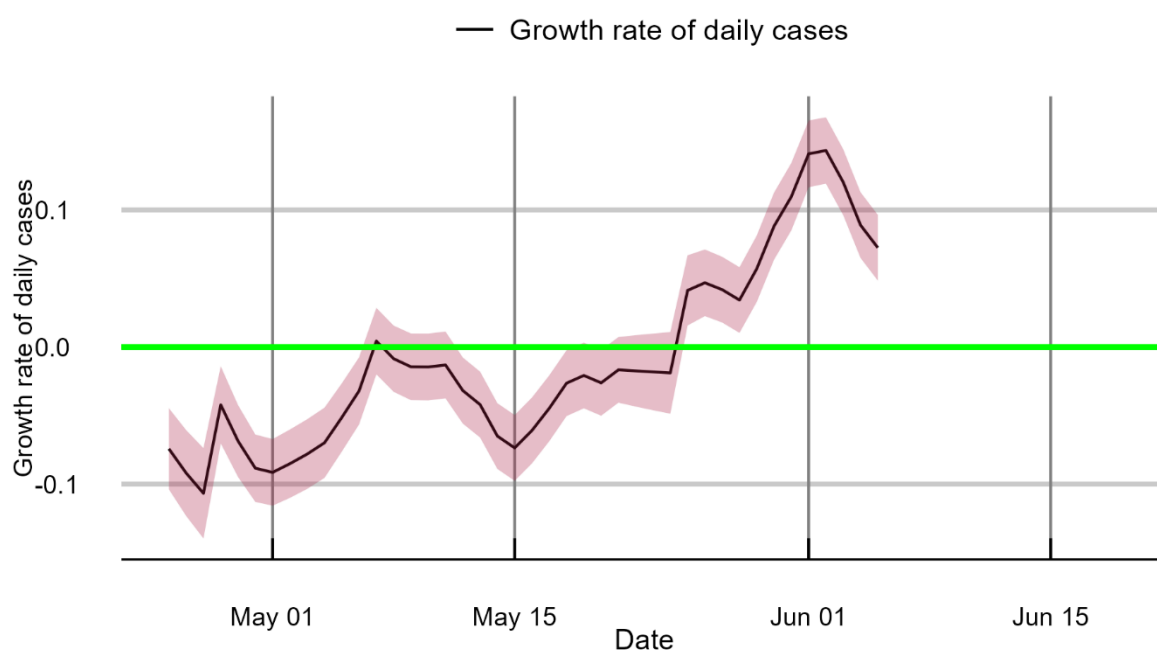
Maharashtra
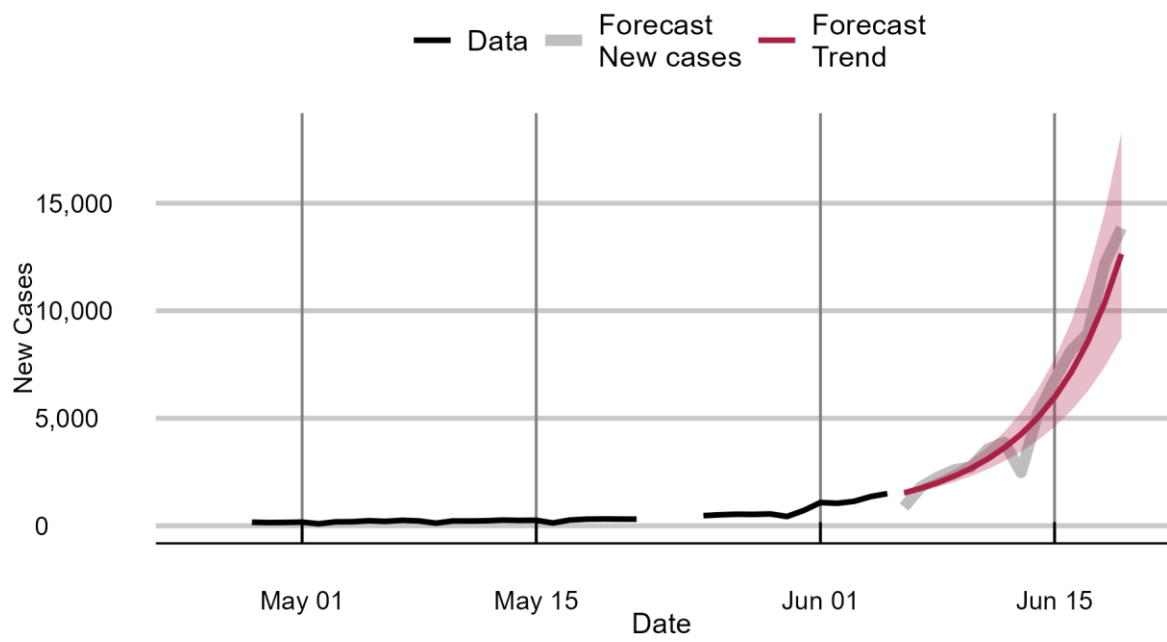
Maharashtra

Tamil Nadu

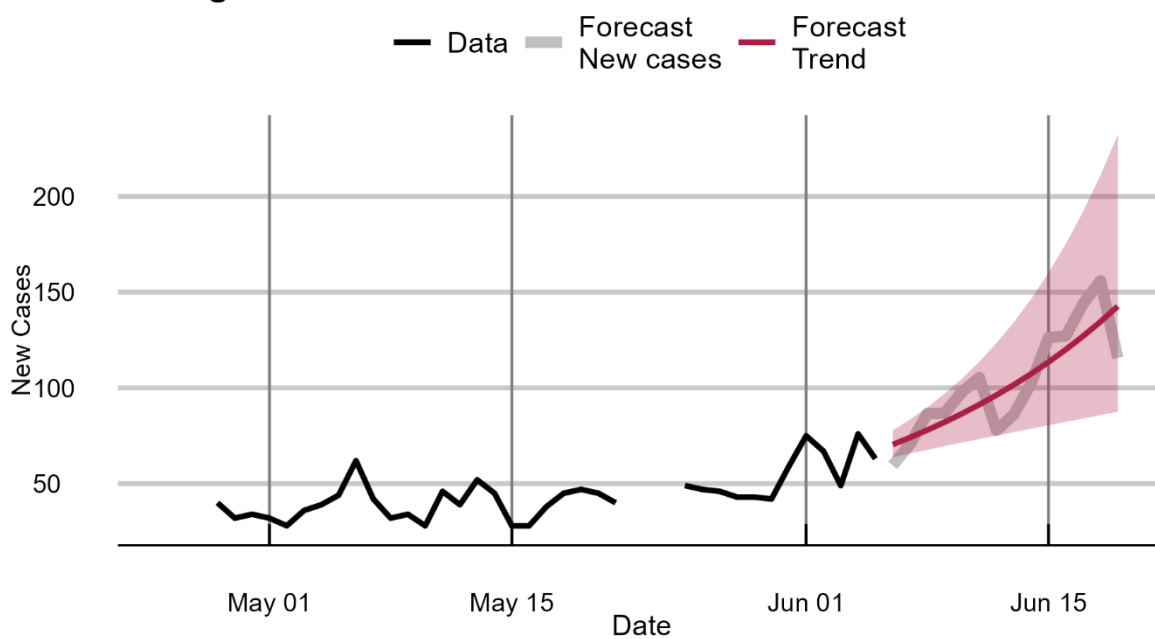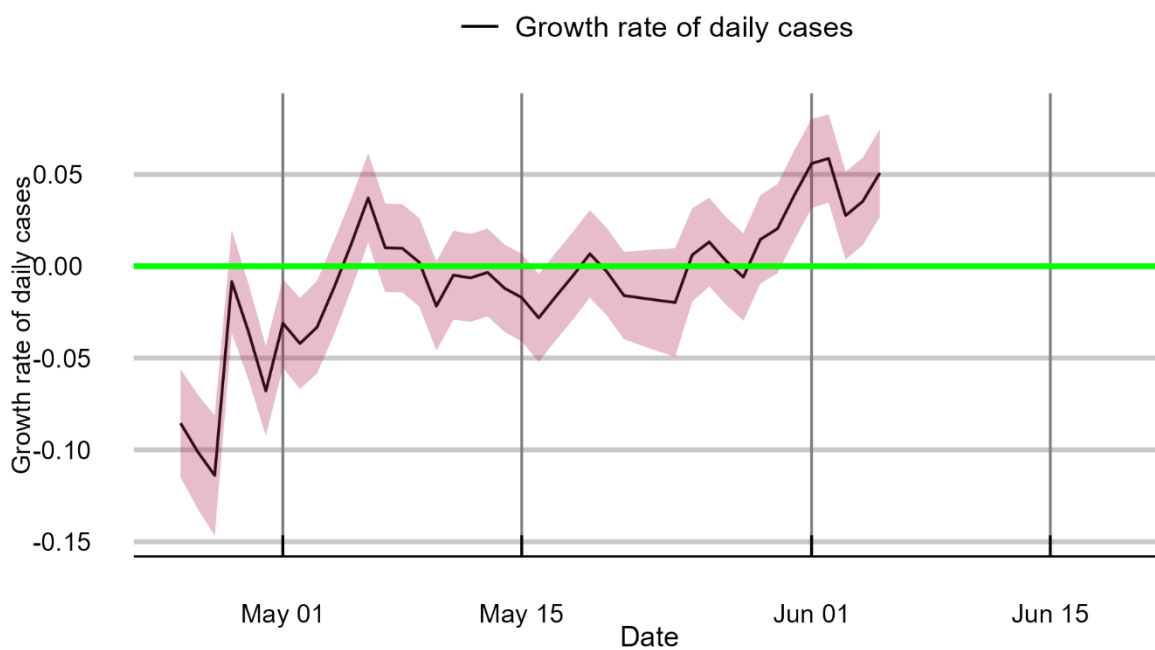## Tamil Nadu

Telangana

Telangana

Notes

This tracker was developed by researchers at Cambridge Judge Business School and National Institute of Economic and Social Research, working with Health Systems Transformation Platform in India, as part of a pandemic monitoring series devoted to India and its states and union territories. It provides short term forecasts of the trajectory of the pandemic, identifying states and union territories that are at risk of increases in infection incidence.

Data: COVID-19 confirmed cases and deaths data are sourced from Johns Hopkins University (JHU), Center for Systems Science and Engineering (CSSE).

New cases: growth rate. The filtered trends presented for daily growth rates of cases are estimated using the Kalman filter, applied to the observed series. The method filters out day of the week effects and random noise to reveal the underlying signal. Unlike methods such as the moving average, this method adapts the trend to changes in real time and characterises underlying patterns of surges or attenuations that are hidden in the volatile series. See: Harvey, A. and P. Kattuman (2020). Time series models based on growth curves with applications to forecasting coronavirus. *Harvard Data Science Review*, Special issue 1 - COVID -19. https://hdsr.mitpress.mit.edu/pub/ozgjx0yn/release/2

Note: Accuracy relies on the quality of the published data. Further, changes in government pandemic policies including testing, and changes in transmission relevant social behaviour may lead to actual outcomes that differ from the current projections.

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