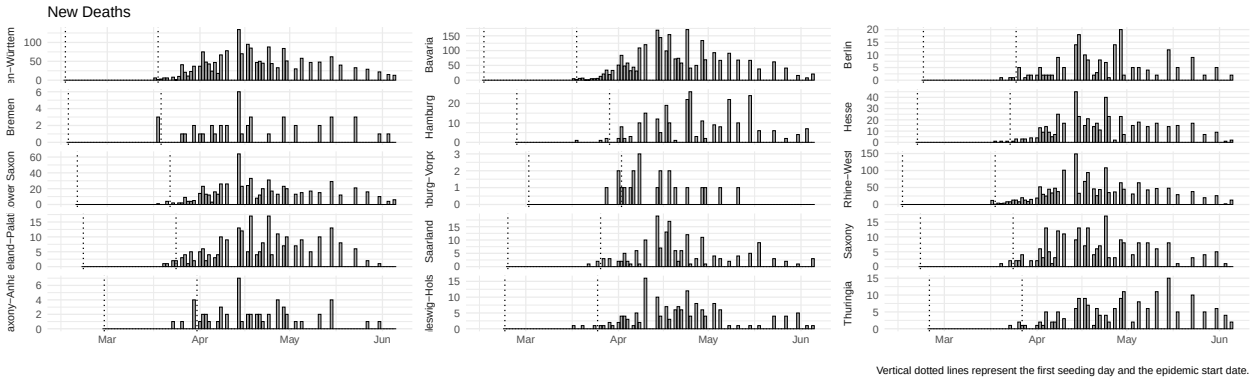
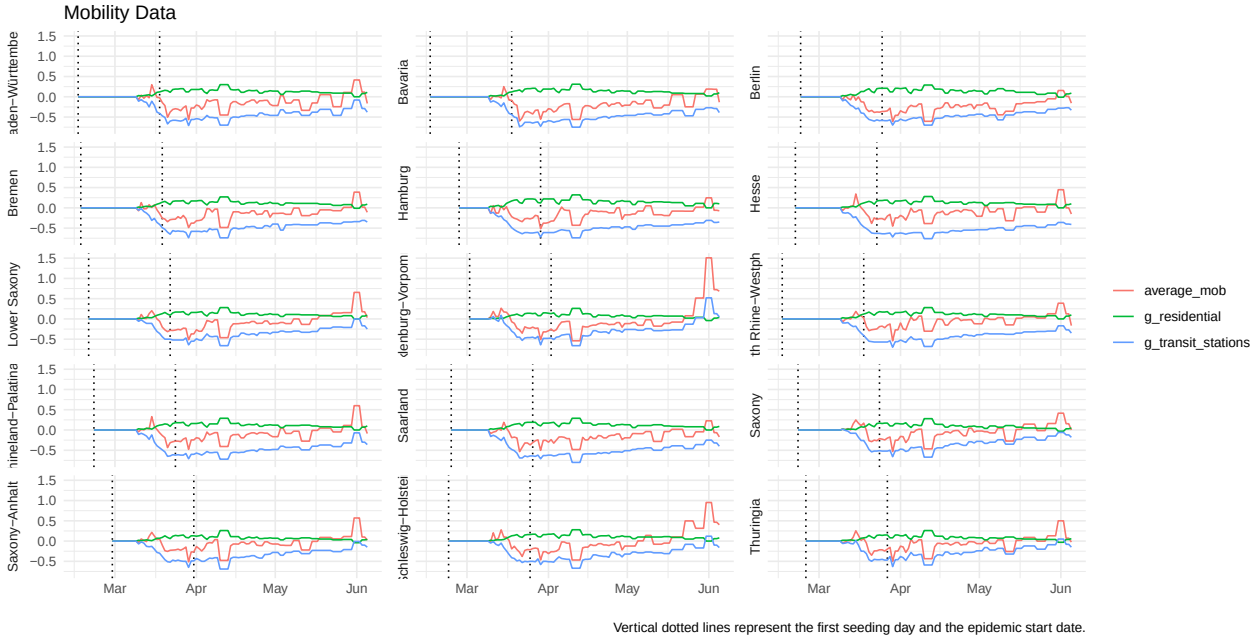
Germany

Data



Vertical dotted lines represent the first seeding day and the epidemic start date.



Vertical dotted lines represent the first seeding day and the epidemic start date.

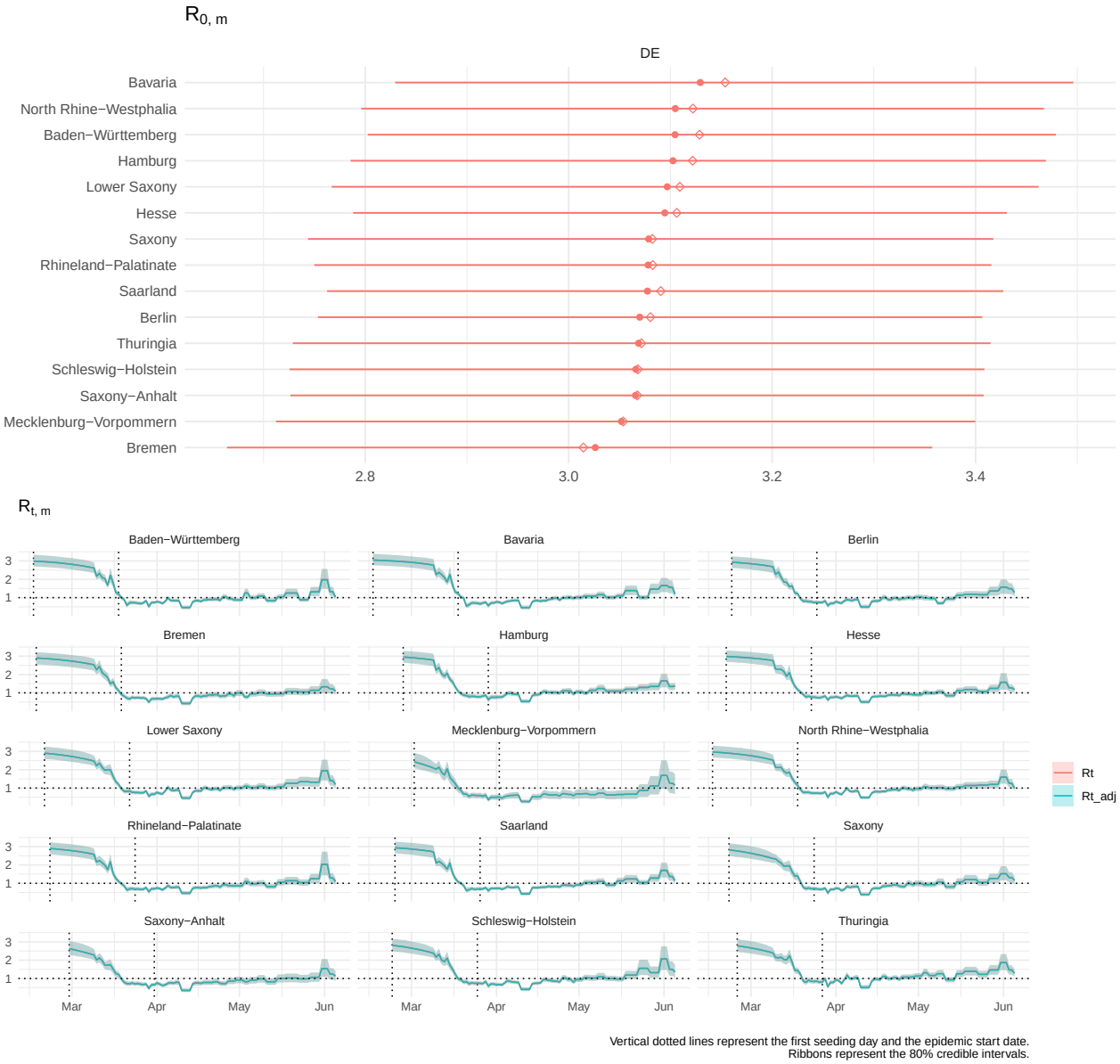
Analysis

Number of divergent transitions = 0

Maximum $\hat{R}$ = 1.005097

Minimum Bulk ESS = 823.5165

Minimum Tail ESS = 1088.014



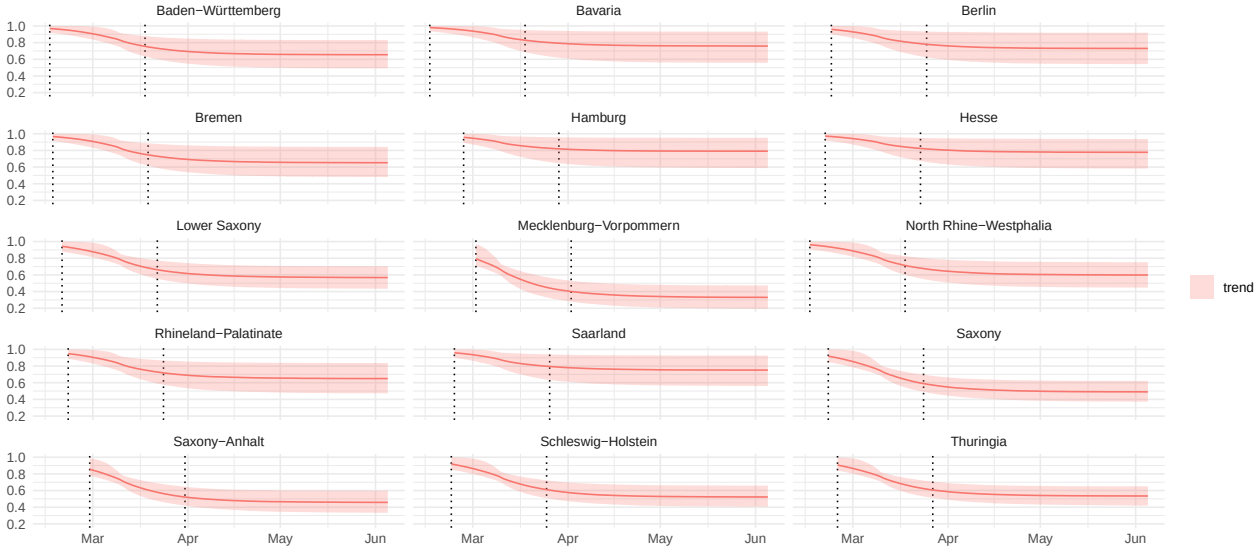
Contact rate function:

$$cr(t; t^*, \lambda_j, \kappa) = \lambda_j + \frac{1 - \lambda_j}{1 + \exp(\kappa(t - t^*))}$$

where

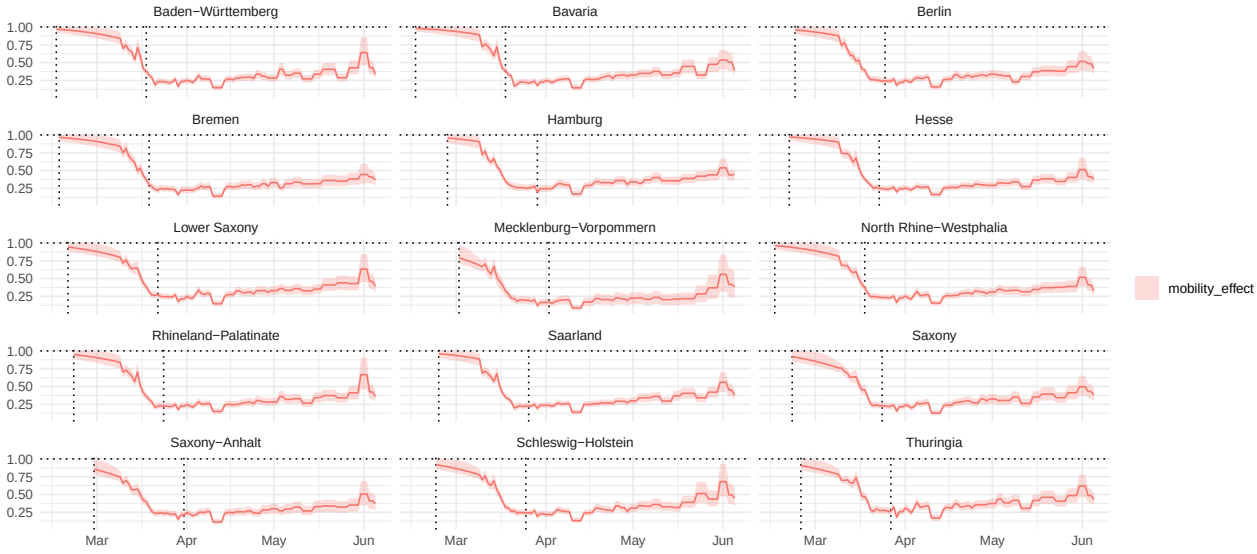
$$\lambda_j \sim \texttt{Beta}(3, 1)$$
$$\kappa \sim \texttt{NegHalfNormal}(0, 1).$$

Contact Rate

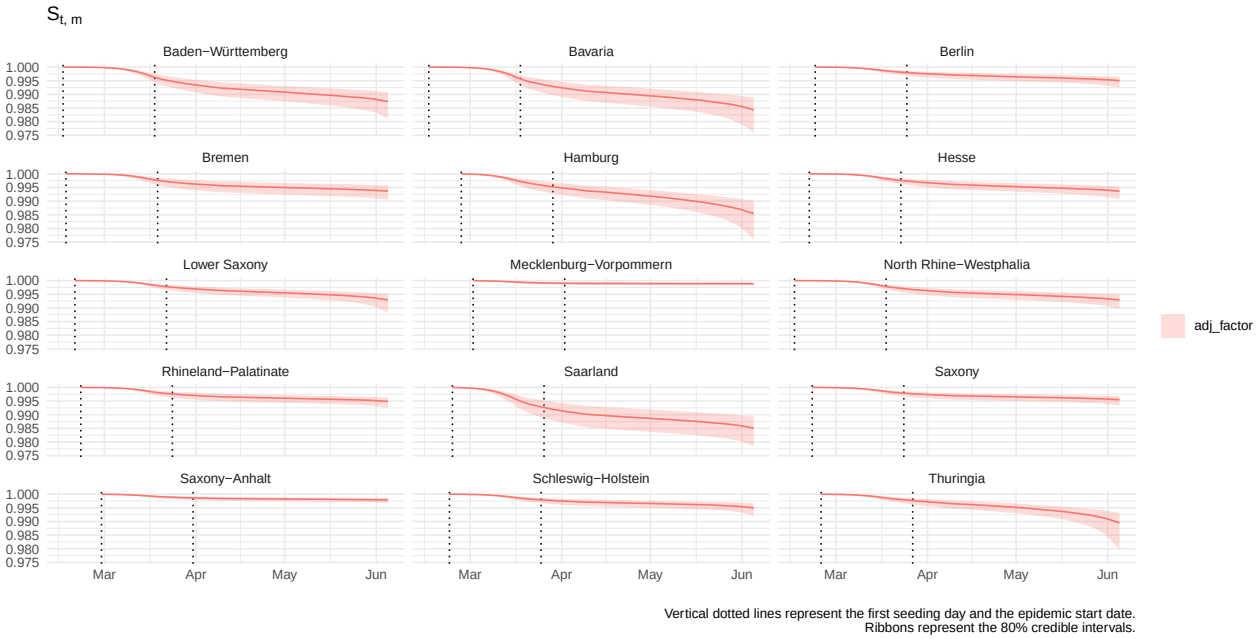


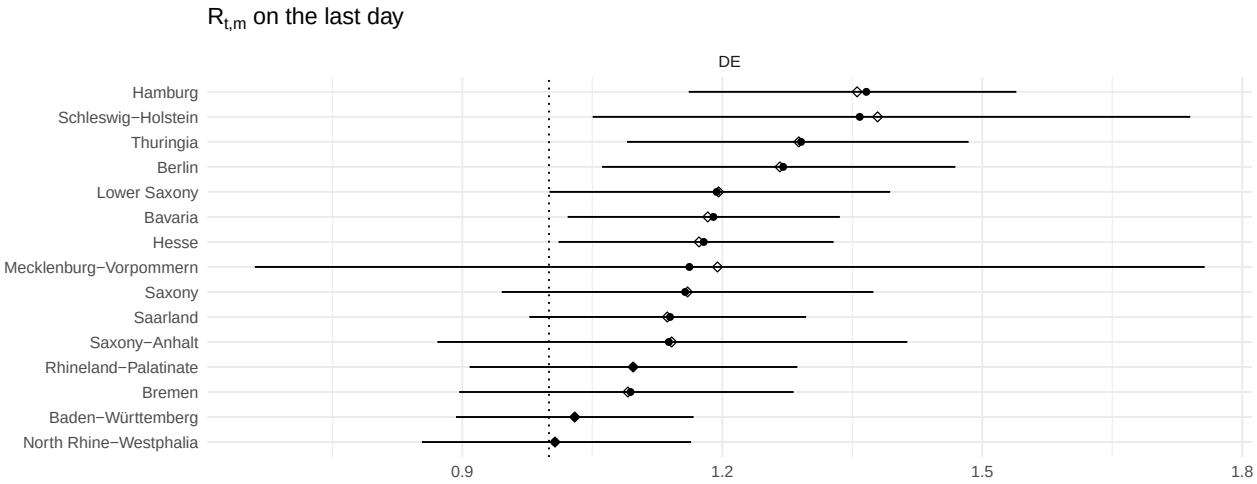
Vertical dotted lines represent the first seeding day and the epidemic start date.
Ribbons represent the 80% credible intervals.

Mobility effect



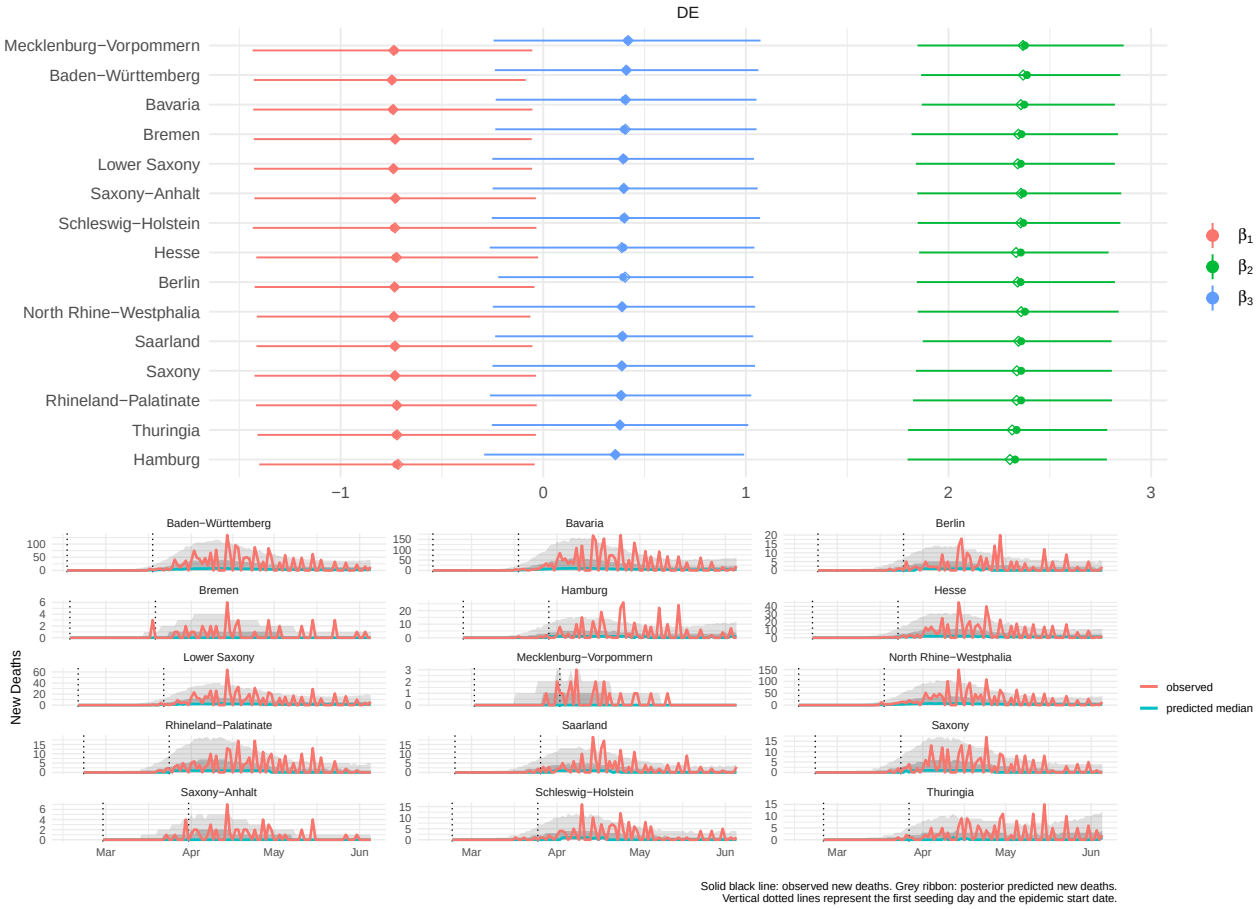
Vertical dotted lines represent the first seeding day and the epidemic start date.
Ribbons represent the 80% credible intervals.





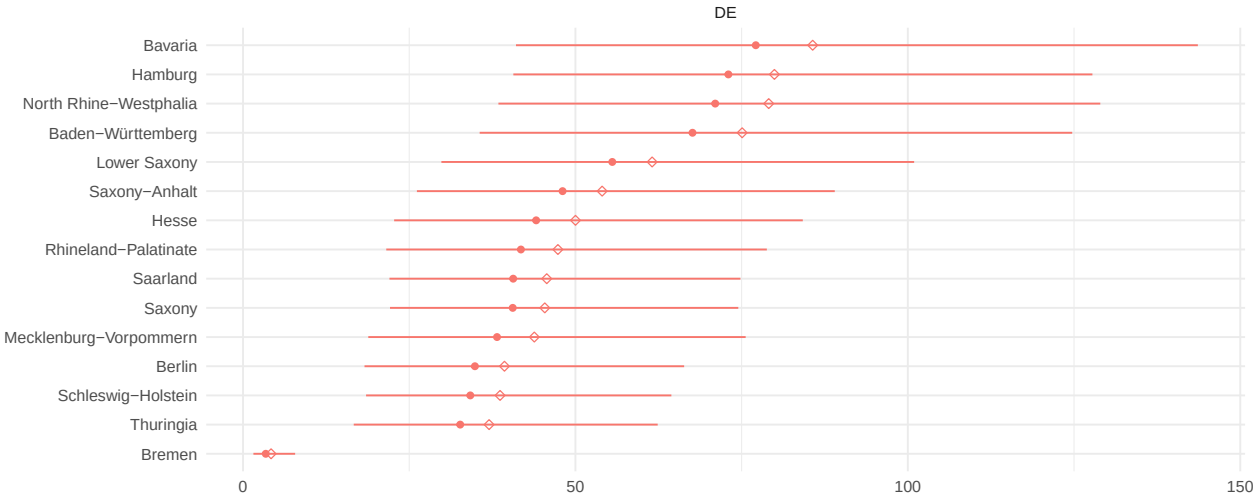
Mobility linear model: $\beta_1 \cdot X_{\text{residential}} + \beta_2 \cdot X_{\text{transit}} + \beta_3 \cdot X_{\text{average}}$.

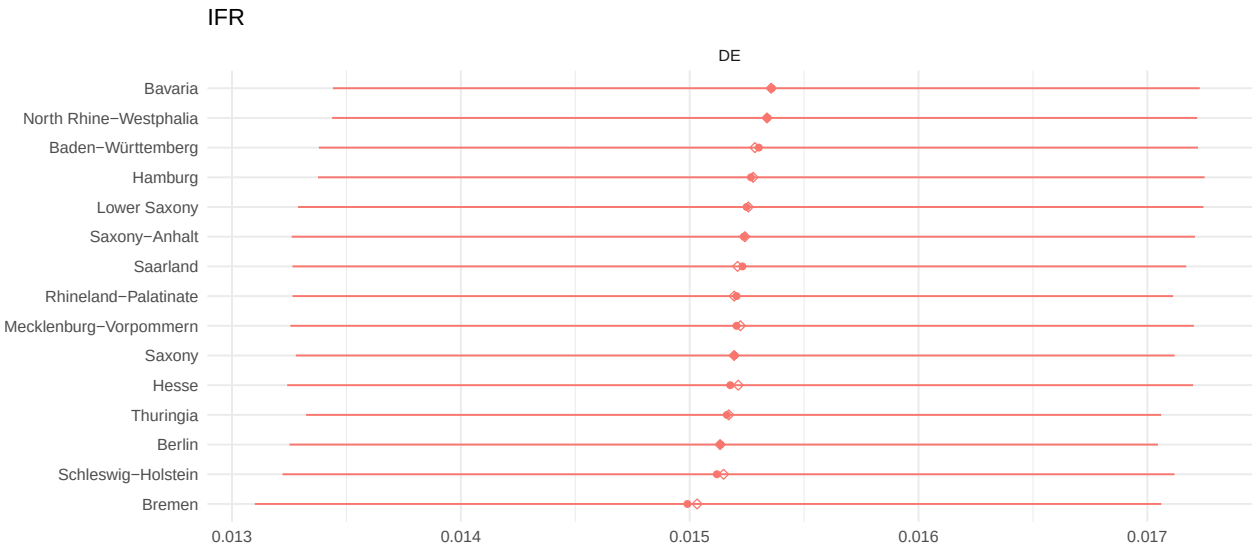
β



Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths.
Vertical dotted lines represent the first seeding day and the epidemic start date.

Imputed Cases




IFR
DE
Bavaria
North Rhine−Westphalia
Baden−Württemberg
Hamburg
Lower Saxony
Saxony−Anhalt
Saarland
Rhineland−Palatinate
Mecklenburg−Vorpommern
Saxony
Hesse
Thuringia
Berlin
Schleswig−Holstein
Bremen
0.013
0.014
0.015
0.016
0.017