Sweden

Data

New Cases

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

New Deaths

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

Mobility Data

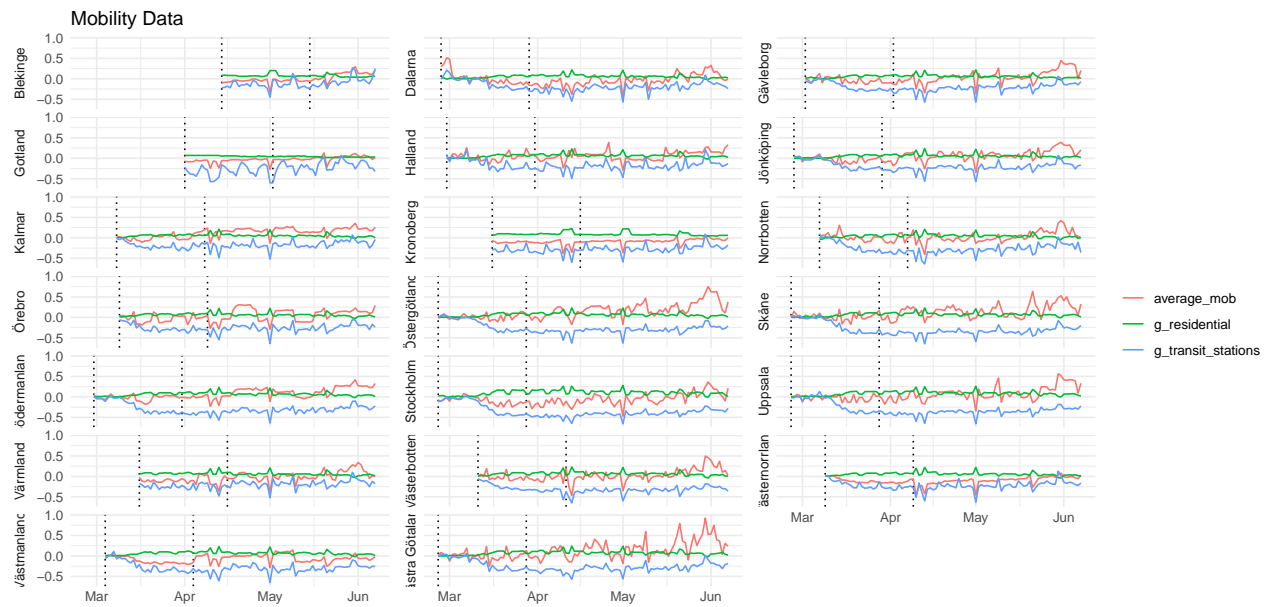Vertical dotted lines represent the first seeding day and the epidemic start date.
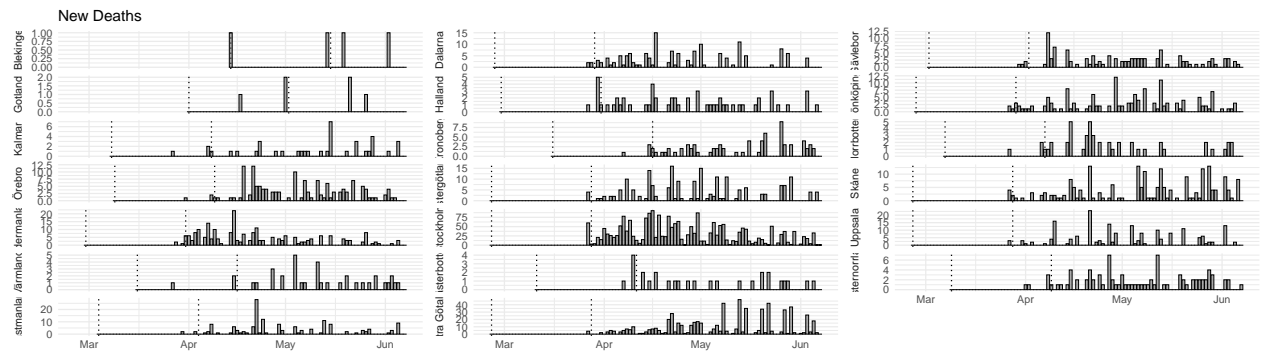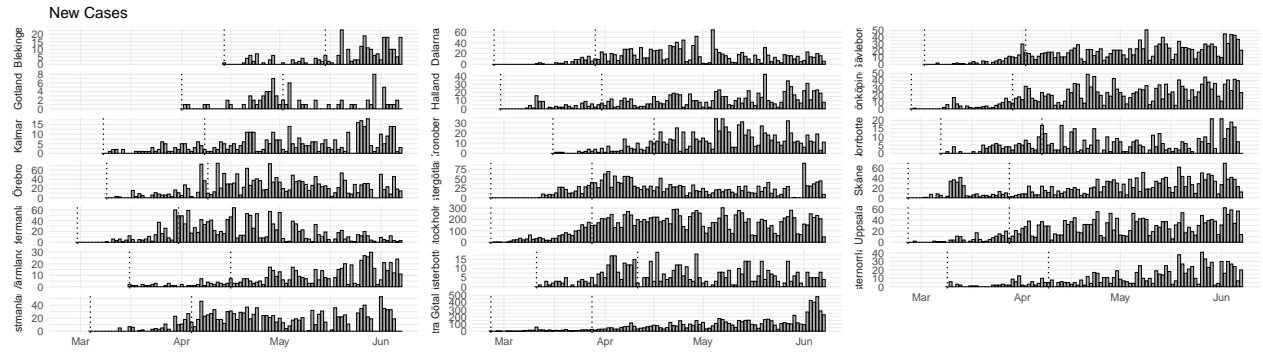
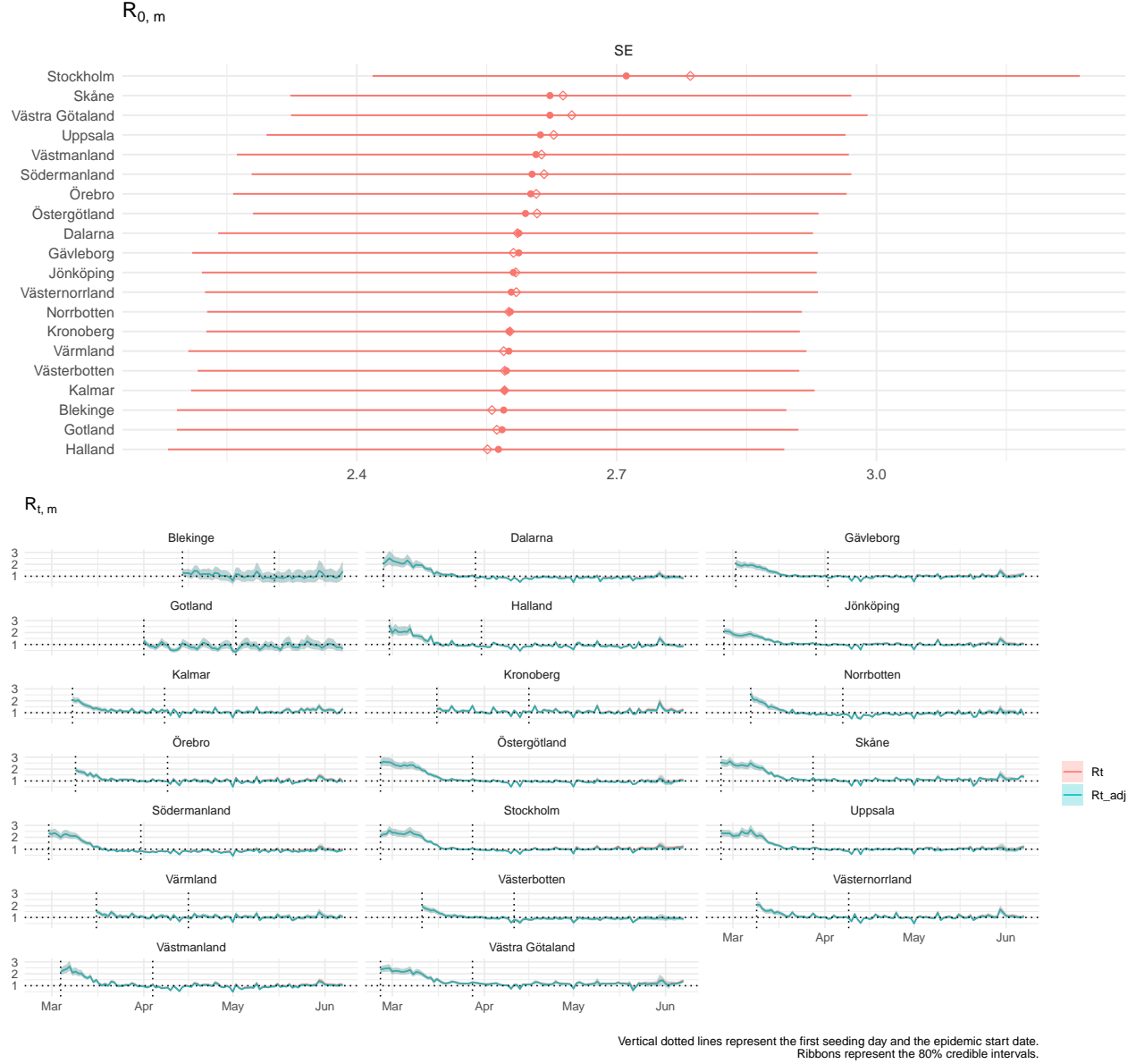# Analysis

Number of divergent transitions = 0

Maximum $\hat{R}$ = 1.005434

Minimum Bulk ESS = 820.7995

Minimum Tail ESS = 1025.544

$R_{0,m}$

$R_{t,m}$

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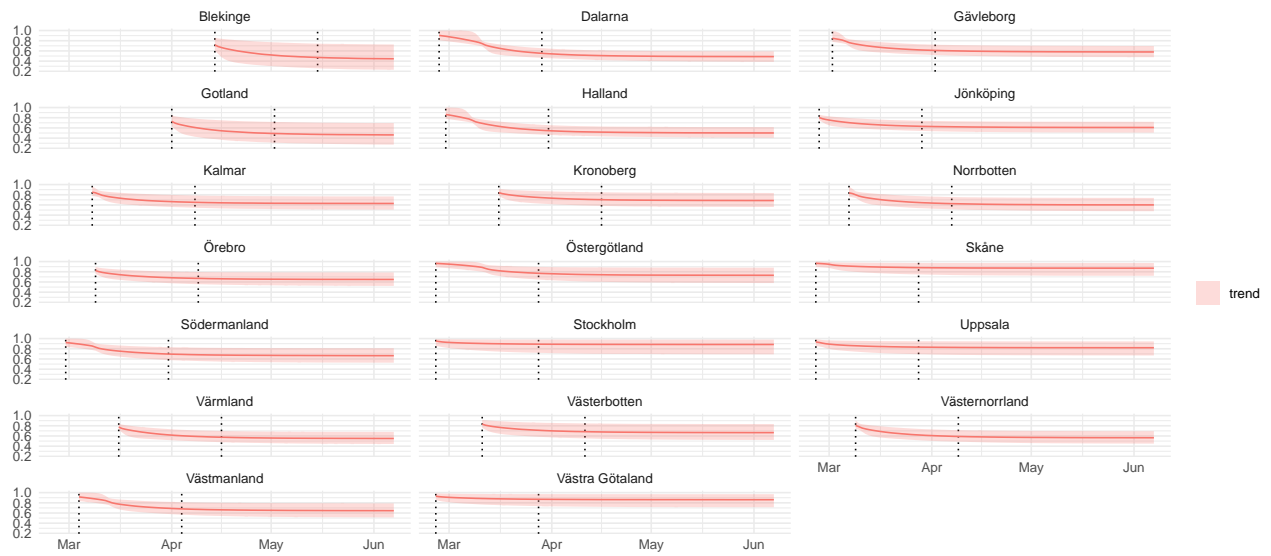
Contact rate function:

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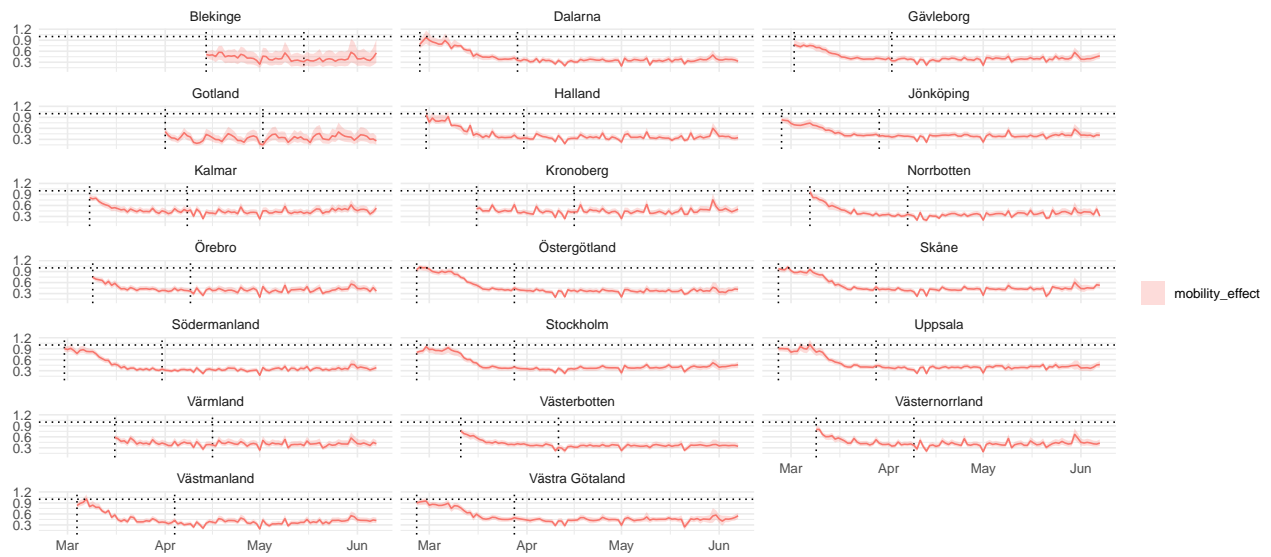
where

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

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.

$S_{t, m}$

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

$R_{t,m}$ on the last day

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

4

β

SE

Skåne
Kalmar
Gotland
Dalarna
Västra Götaland
Örebro
Uppsala
Östergötland
Blekinge
Värmland
Halland
Västmanland
Norrbotten
Gävleborg
Jönköping
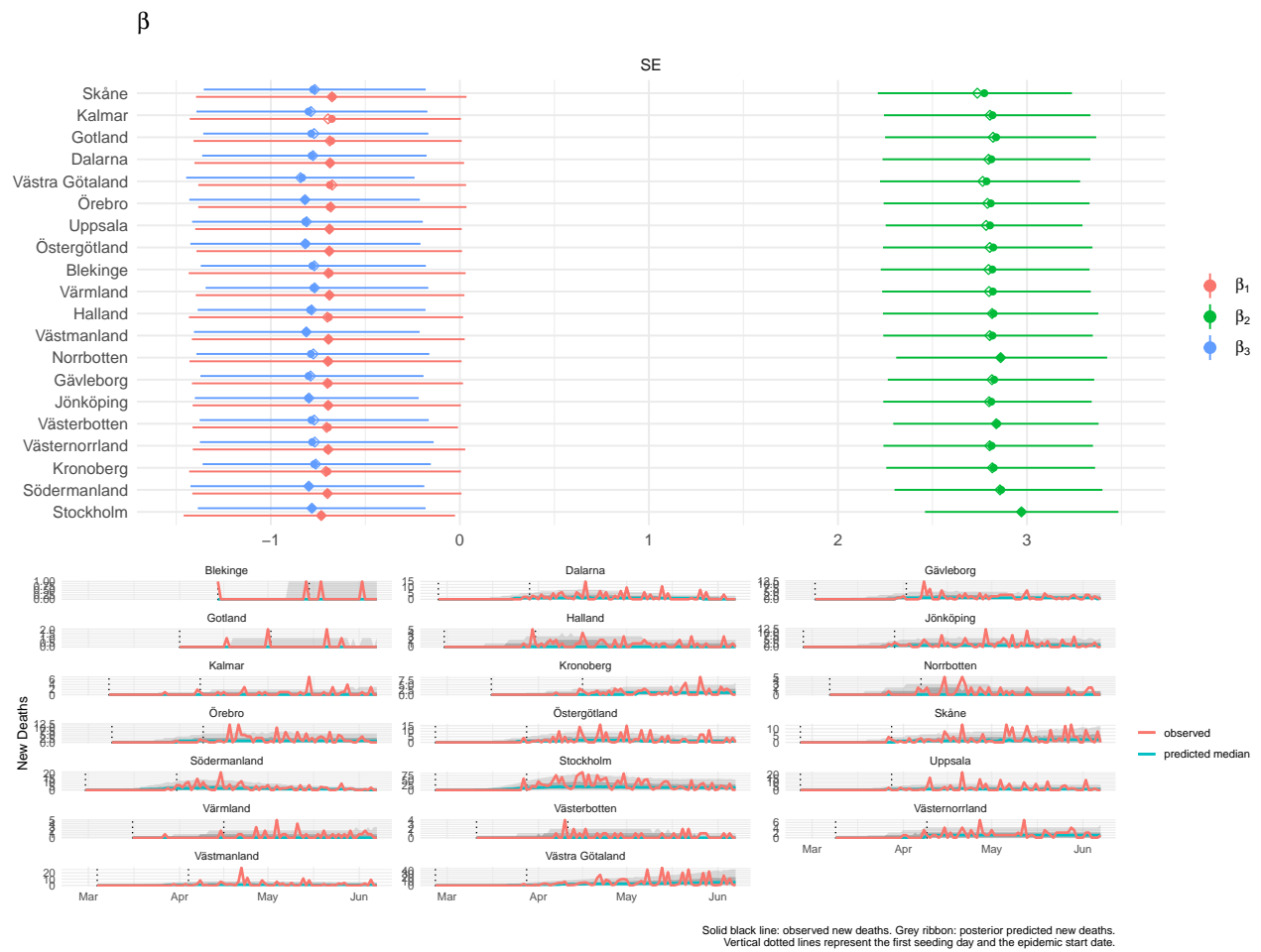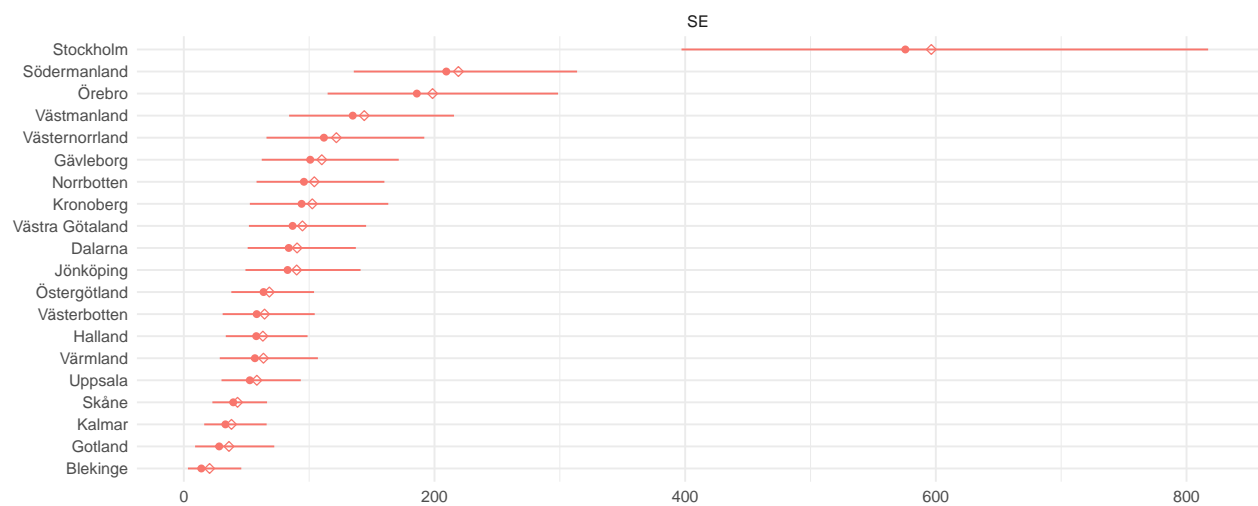Västerbotten
Västernorrland
Kronoberg
Södermanland
Stockholm

−1   0   1   2   3

β_1
β_2
β_3

New Deaths

Blekinge   Dalarna   Gävleborg
Gotland   Halland   Jönköping
Kalmar   Kronoberg   Norrbotten
Örebro   Östergötland   Skåne
Södermanland   Stockholm   Uppsala
Värmland   Västerbotten   Västernorrland
Västmanland   Västra Götaland

Mar   Apr   May   Jun

observed
predicted median

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

SE

Stockholm
Södermanland
Örebro
Västmanland
Västernorrland
Gävleborg
Norrbotten
Kronoberg
Västra Götaland
Dalarna
Jönköping
Östergötland
Västerbotten
Halland
Värmland
Uppsala
Skåne
Kalmar
Gotland
Blekinge

0   200   400   600   800

IFR

SE

Stockholm
Södermanland
Örebro
Västmanland
Västernorrland
Gävleborg
Jönköping
Norrbotten
Västra Götaland
Kronoberg
Halland
Dalarna
Östergötland
Västerbotten
Värmland
Uppsala
Skåne
Gotland
Blekinge
Kalmar

0.012   0.013   0.014   0.015   0.016