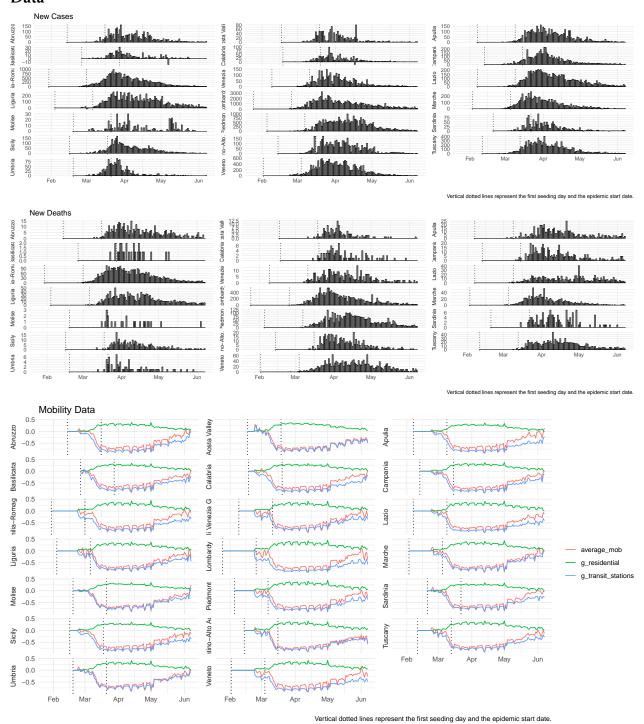
Italy

Data



Analysis

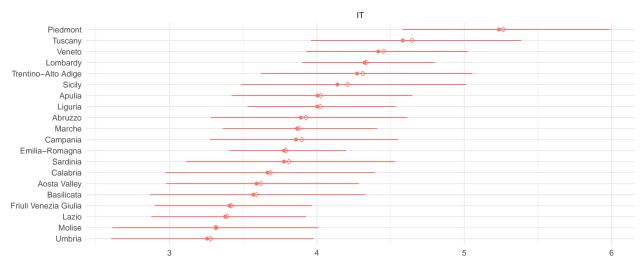
Number of divergent transitions = 0

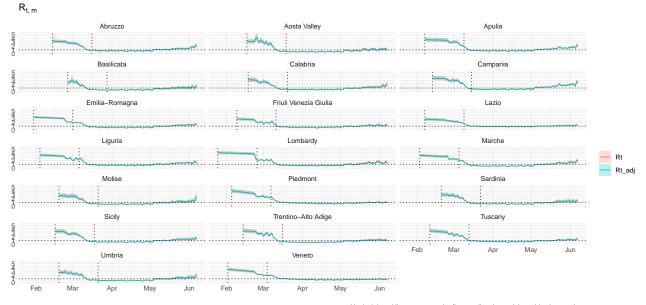
Maximum $\hat{R} = 1.016783$

Minimum Bulk ESS = 447.3264

Minimum Tail ESS = 520.7282

 $R_{0, m}$





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

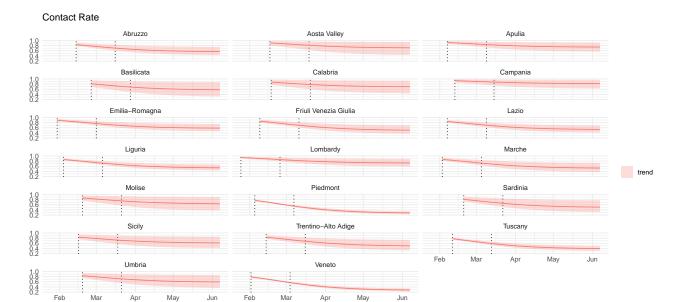
Ribbons represent the 80% credible intervals.

Contact rate function:

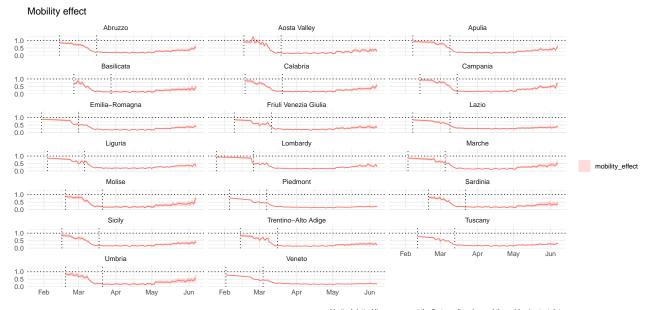
$$cr(t;t^*,\lambda_j,\kappa) = \lambda_j + \frac{1-\lambda_j}{1+\exp(\kappa(t-t^*))}$$

where

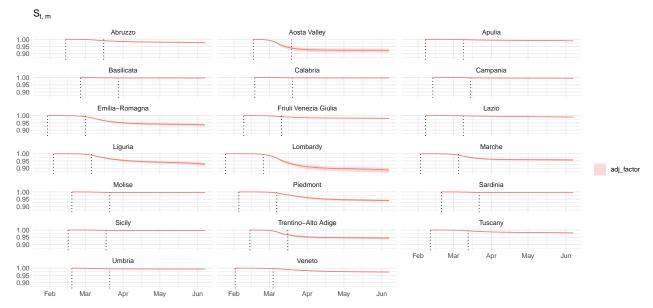
$$\lambda_j \sim \text{Beta}(3,1)$$
 $\kappa \sim \text{NegHalfNormal}(0,1).$



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

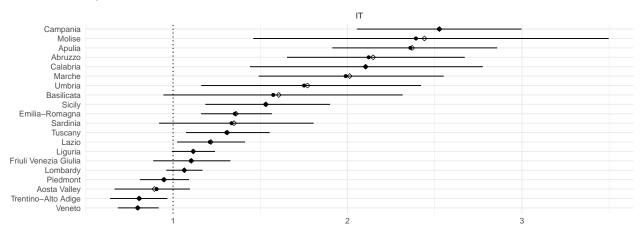


Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



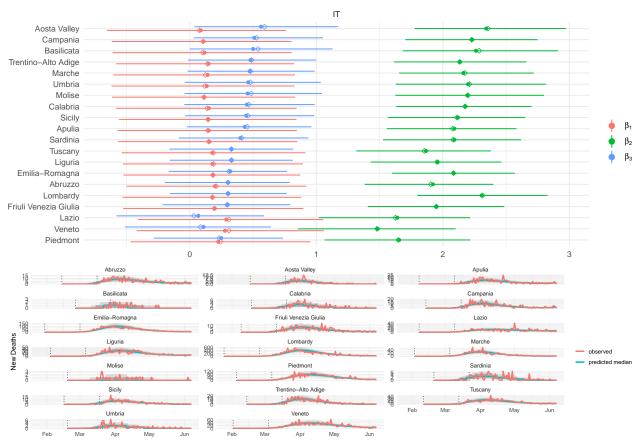
Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

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



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





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

