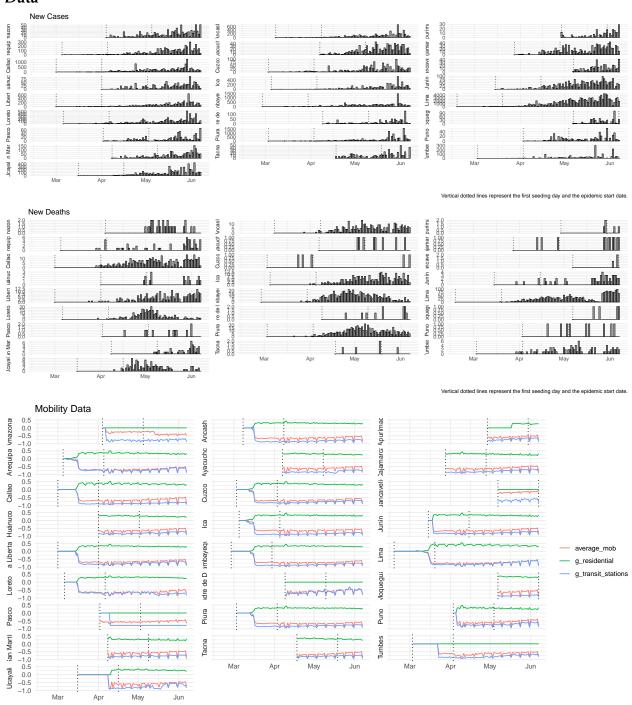
Peru

Data



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

Analysis

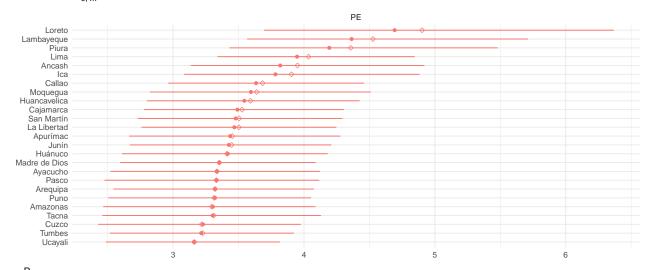
Number of divergent transitions = 0

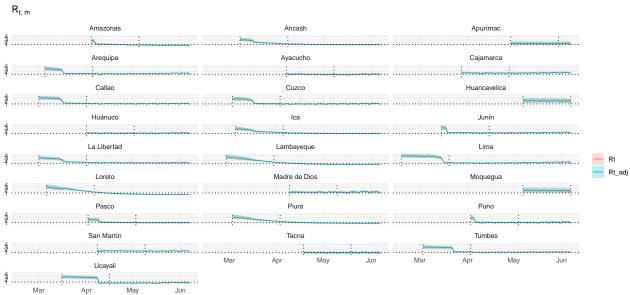
Maximum $\hat{R} = 1.009893$

Minimum Bulk ESS = 686.1896

Minimum Tail ESS = 657.2672

 $R_{0, m}$





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

Ribbons represent the 80% credible intervals.

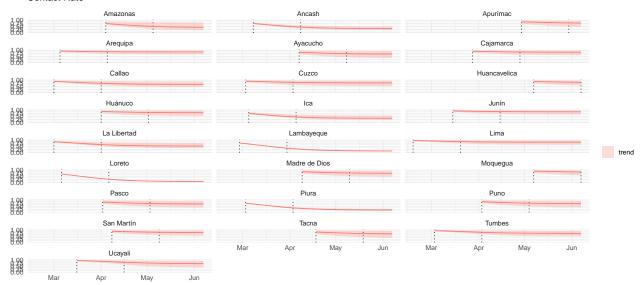
Contact rate function:

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

where

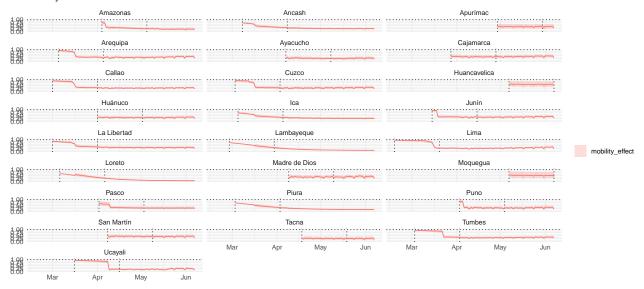
$$\lambda_{j} \sim \text{Beta}(3,1)$$
 $\kappa \sim \text{NegHalfNormal}(0,1).$

Contact Rate

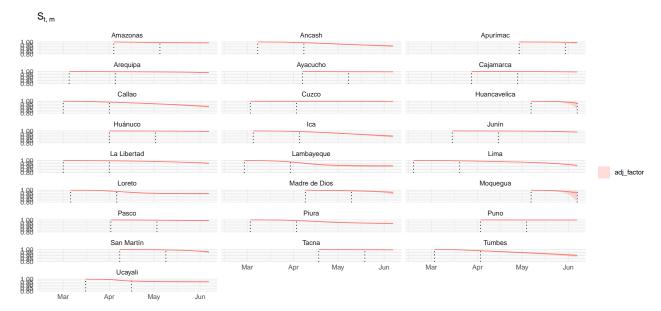


Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

Mobility effect

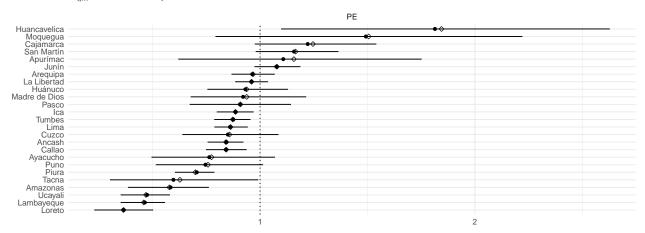


Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.



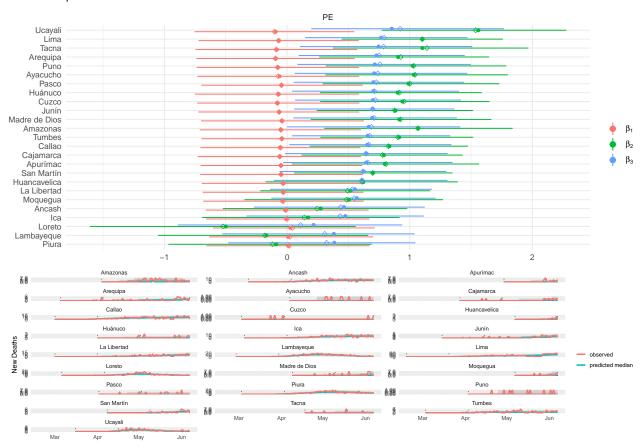
Vertical dotted lines represent the first seeding day and the epidemic start date. Ribbons represent the 80% credible intervals.

$\boldsymbol{R}_{t,m}$ 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

