

Supplementary Material

- The prior and marginal posterior distributions of the death rate γ are depicted in Fig. S1.
- The pairwise posterior distributions of the parameters (α, I_0) , (α, γ) , (α, κ) , (γ, I_0) , (γ, κ) , (κ, I_0) are depicted in Fig. S2.
- To check the sensitivity of our results with respect to the choice of the initial number of susceptible individuals $S(t_0)$, we computed the values of R_e and $I(t_0)$ associated with the posterior mode, for several choices of $S(t_0)$. The results are depicted in Fig. S3.

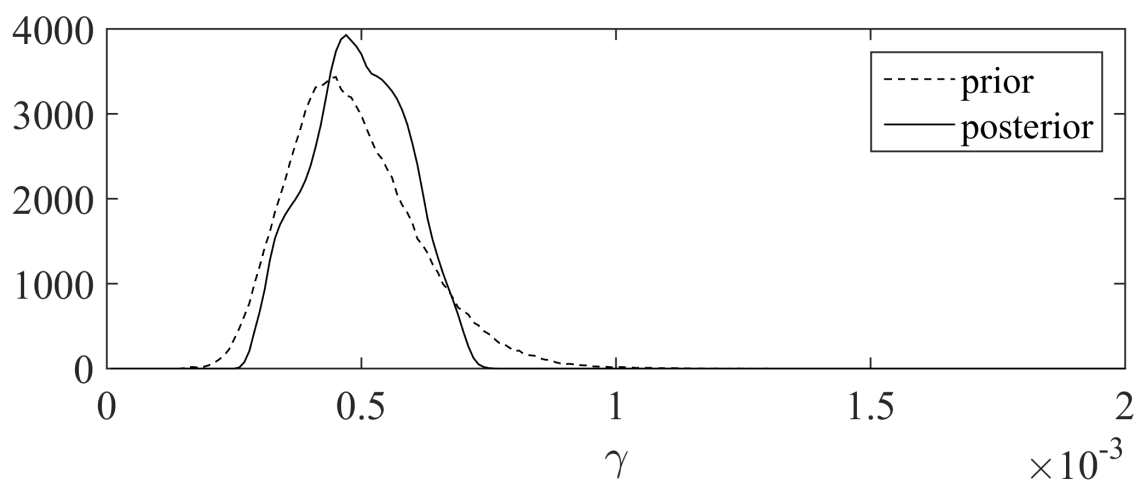


Figure S1. Prior and marginal posterior distributions of the death rate γ .

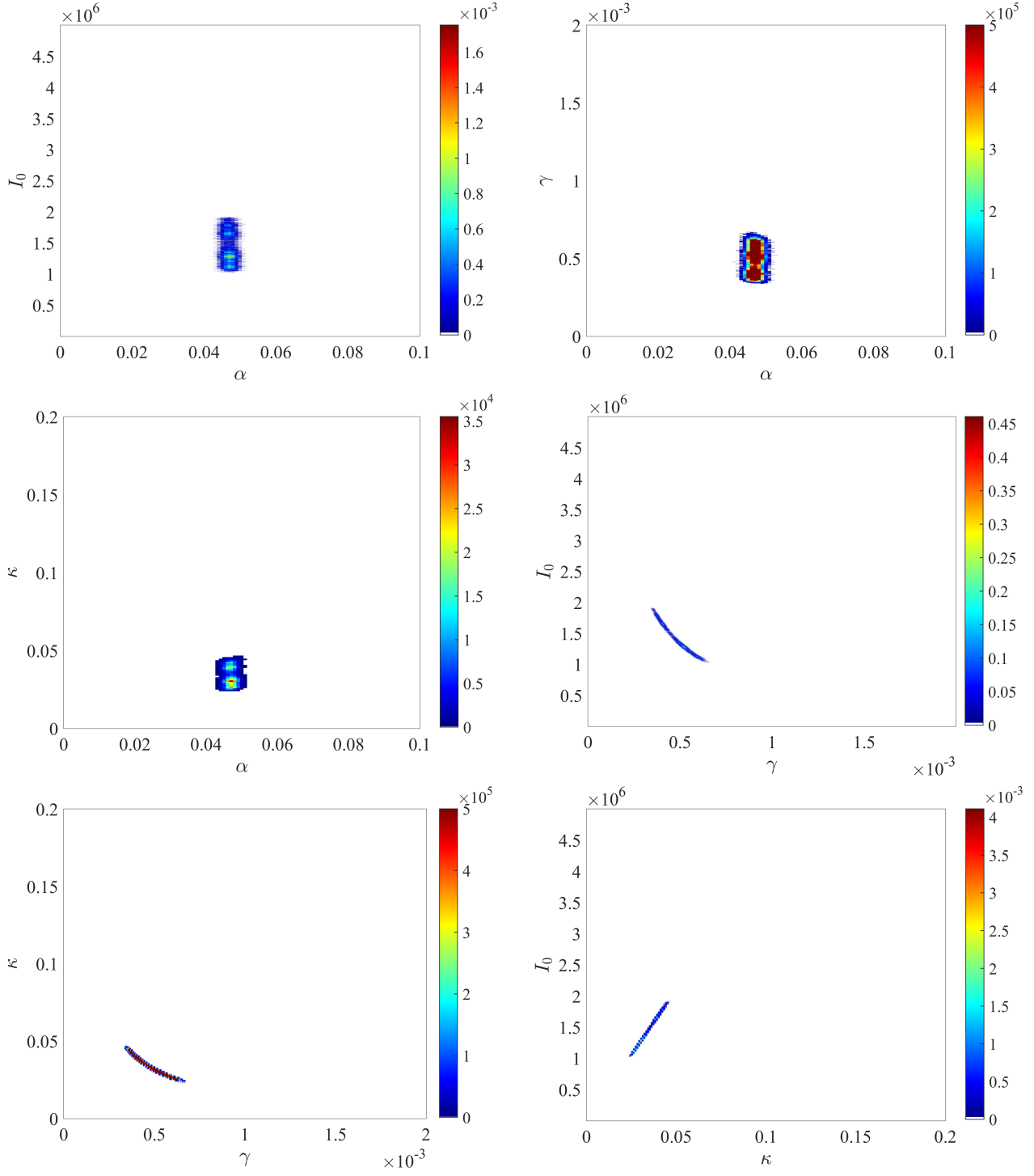


Figure S2. Joint posterior distributions of (α, I_0) , (α, γ) , (α, κ) , (γ, I_0) , (γ, κ) and (κ, I_0) .

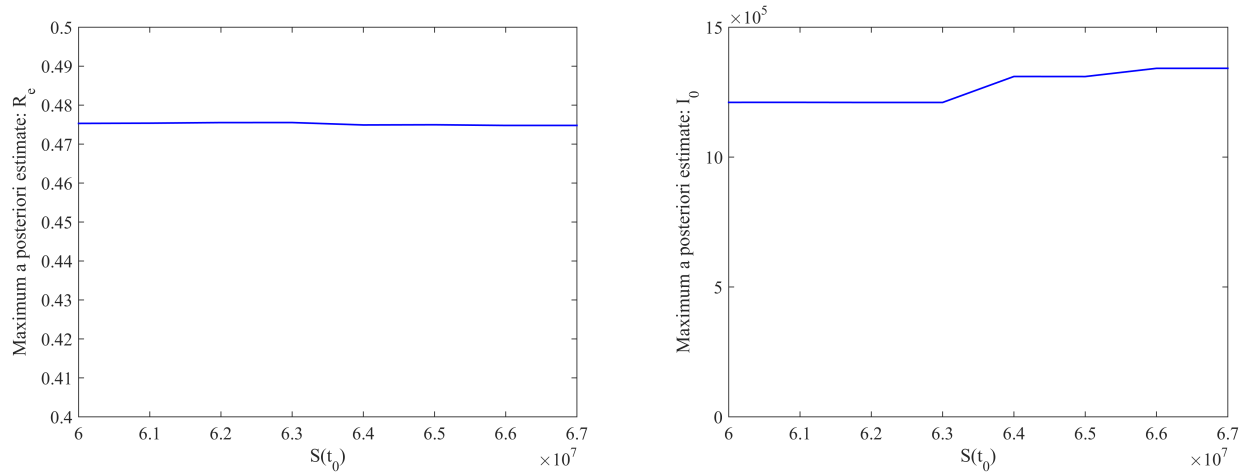


Figure S3. Dependence of the maximum posterior estimate of R_e and I_0 with respect to the initial number of susceptible individuals $S(t_0)$.