

# Supporting Information for: Consensus and conflict among ecological forecasts of Zika virus outbreaks in the United States

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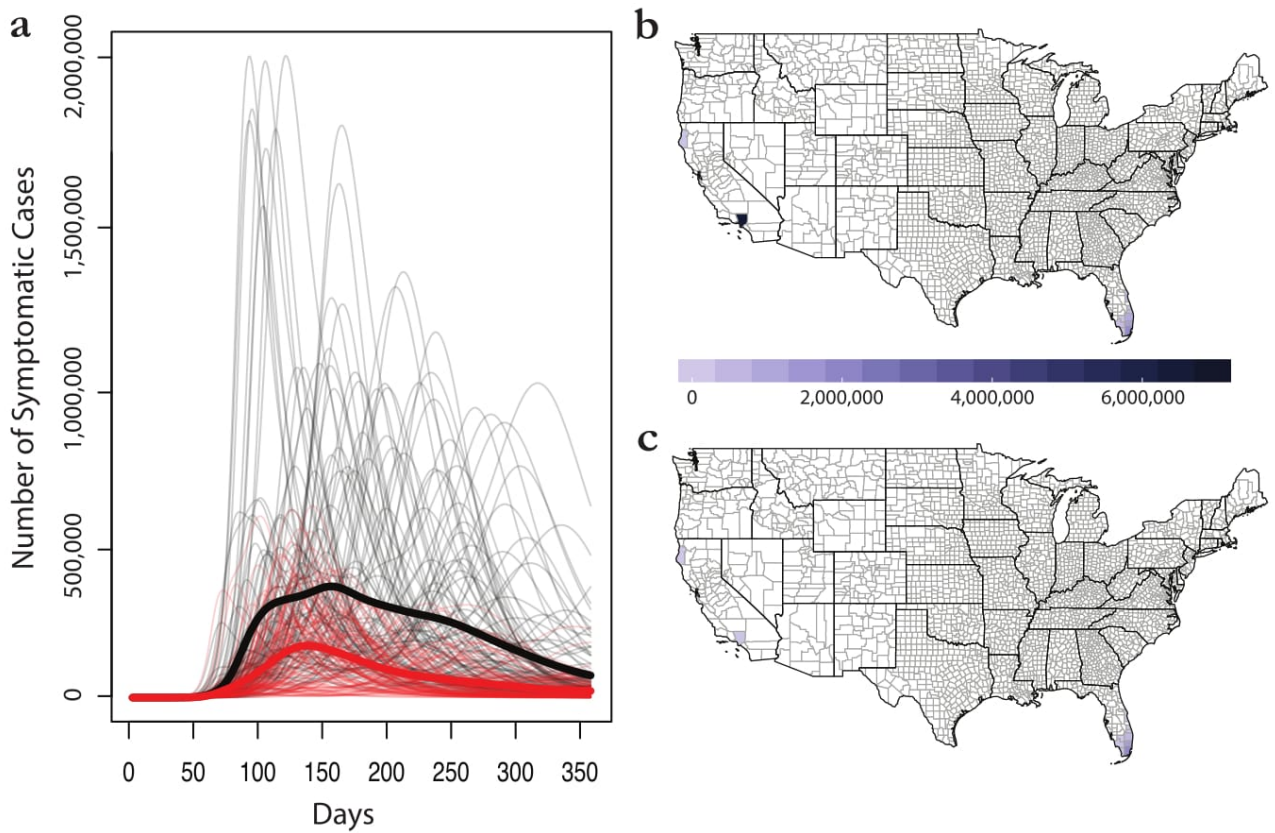
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## ABSTRACT

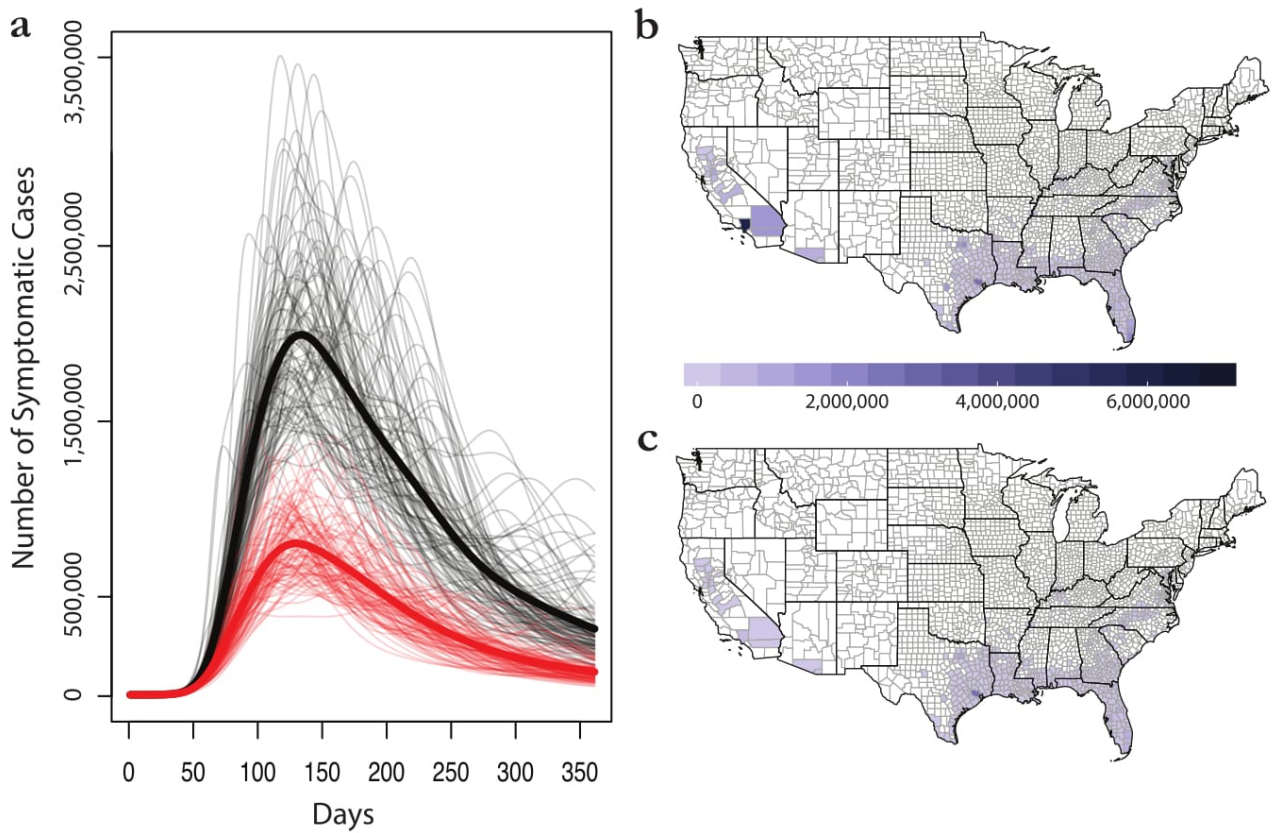
Below, we provide find supplemental information for the study.

**Table 1.** Epidemiological parameters for the SEIAR & SEI models presented in the main text; values taken directly from from Table 1 of Gao *et al.*'s (2017) study.

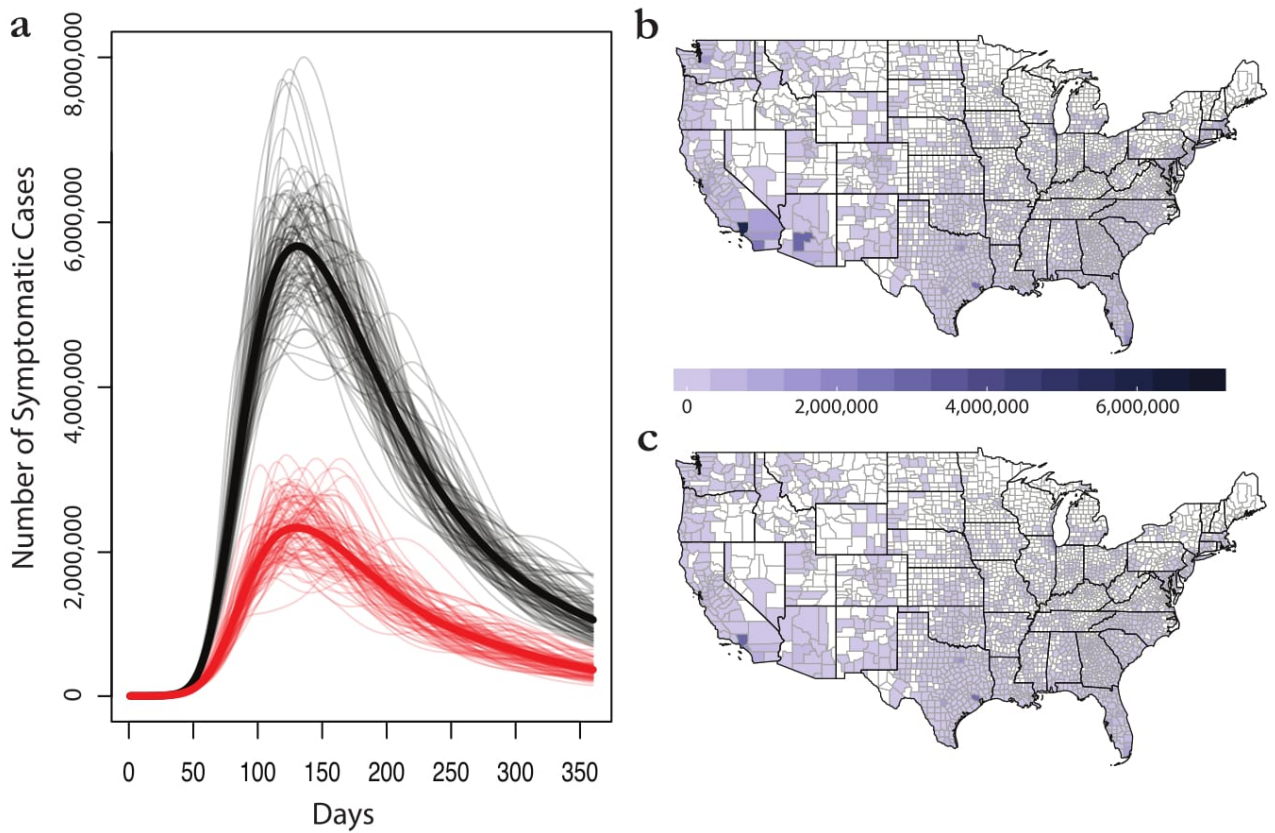
Parameter	Description	Range
$a$	Mosquito biting rate ( $mosquito^{-1}day^{-1}$ )	(0.3, 1)
$b$	Mosquito to human transmission rate ( $bite^{-1}$ )	(0.1, 0.75)
$c$	Human to mosquito transmission rate ( $bite^{-1}$ )	(0.3, 0.75)
$\beta$	Human to human (sexual) transmission rate	(0.001, 0.1)
$1/\gamma_{h1}$	Infectious period (acute)	(3, 7)
$1/\gamma_{h2}$	Infectious period (convalescent)	(14, 30)
$1/\gamma_h$	Infectious period (asymptomatic)	(5, 10)
$\eta$	Exposed human to mosquito transmission proportion	(5, 10)
$\theta$	Proportion symptomatic infections	(0.1, 0.27)
$\kappa$	Exposed human to human transmission proportion	(0, 1)
$1/\mu$	Mosquito lifespan (day)	(4, 35)
$1/\nu_h$	Intrinsic incubation period (day)	(2, 7)
$1/\nu_v$	Extrinsic incubation period (day)	(8, 12)
$\tau$	Convalescent human to human transmission proportion	(0, 1)



**Figure 1.** Full county versus partial population simulations with the Carlson model. Outbreak simulations (a) are given in black for the full county, and red for the partial county. Mean county case totals are mapped for the full county (b) and partial county (c). Maps were made in R 3.3.2<sup>63</sup> (<https://www.R-project.org>), using U.S. Census shapefiles.



**Figure 2.** Full county versus partial population simulations with the Messina model. Outbreak simulations (a) are given in black for the full county, and red for the partial county. Mean county case totals are mapped for the full county (b) and partial county (c). Maps were made in R 3.3.2<sup>63</sup> (<https://www.R-project.org>), using U.S. Census shapefiles.



**Figure 3.** Full county versus partial population simulations with the Samy model. Outbreak simulations (a) are given in black for the full county, and red for the partial county. Mean county case totals are mapped for the full county (b) and partial county (c). Maps were made in R 3.3.2 <sup>63</sup> (<https://www.R-project.org>), using U.S. Census shapefiles.