Appendix S1 – Overview of model selection and diagnostics

Ordered logit regression

Table S2. Model comparison from leave-one-out cross-validation, representing theoretical expected log pointwise predictive density (ELPD) and their standard error (SE). Leave-one-out cross retained the time when wolves were found and the level of anthropization of the site where they had been found. Splines follow the following nomenclature (Wood, 2017): "s" = thin plate spline, "cc" = cyclic cubic spline.

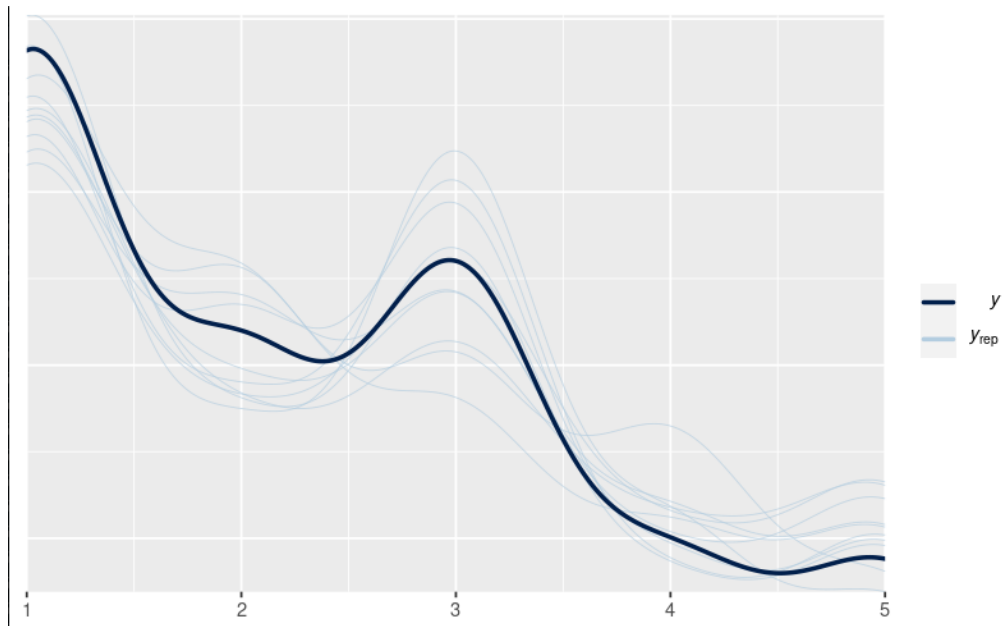| Model structure	ELPD ± S.E.
N. rodenticides ~ 1	-274.8 ± 7.2
N. rodenticides ~ anthropization	-268.2 ± 7.4
N. rodenticides ~ anthropization + sex	-268.9 ± 7.9
N. rodenticides ~ anthropization + sex + age class	-264.8 ± 7.8
N. rodenticides ~ anthropization + sex + s(time, bs = "cc")	-216.7 ± 11.0
N. rodenticides ~ anthropization + sex + s(time, bs = "cc") + s(lon, lat)	-216.8 ± 11.0

Fig. S6. Comparison between the empirical distribution of the data (y) with the distributions of simulated/replicated data from the posterior predictive distributions (y_{rep}). See: https://mc-stan.org/bayesplot/reference/PPC-distributions.html
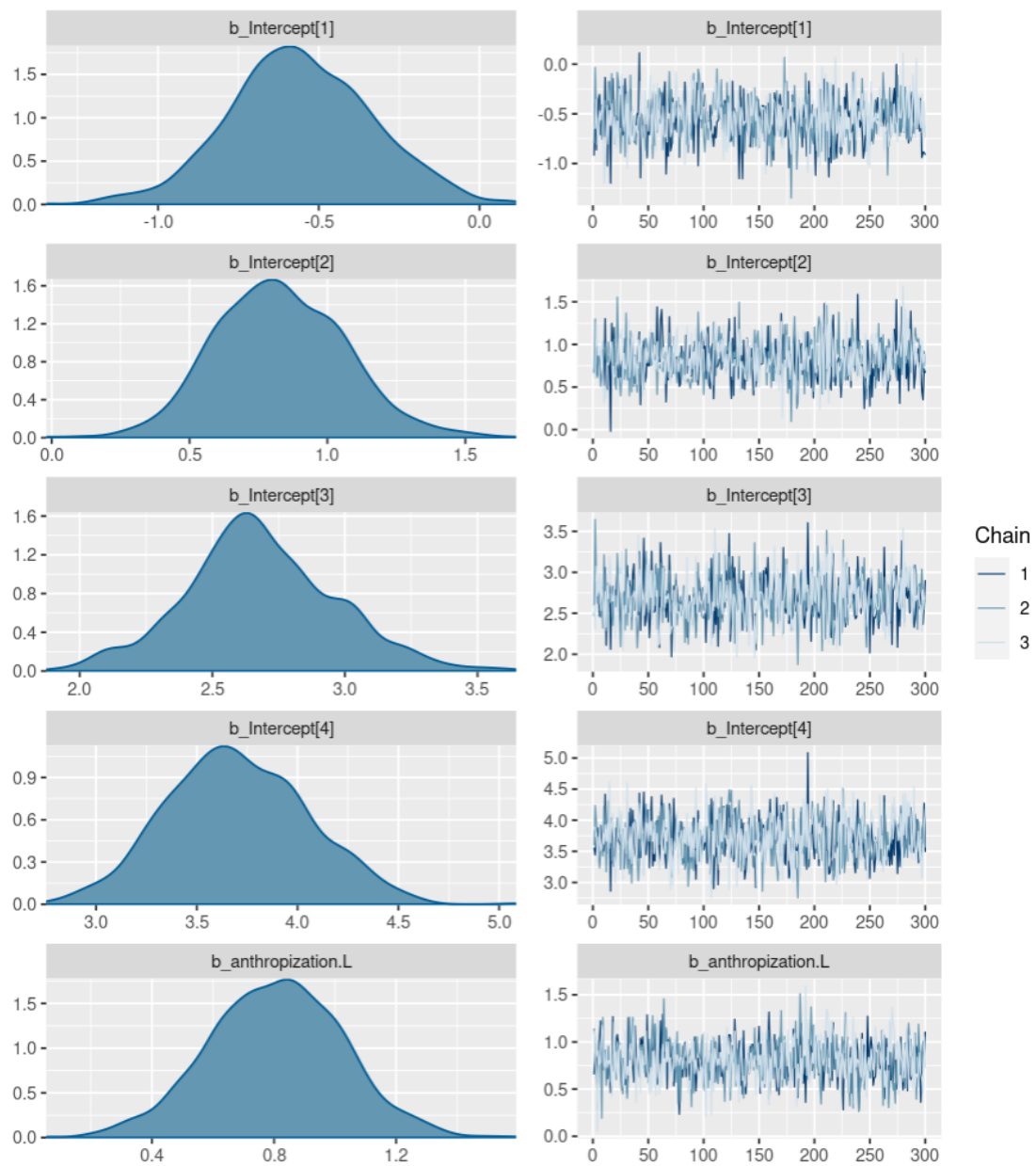
Fig. S7. Overview of the posterior distribution of model parameters (left) and MCMC (right).
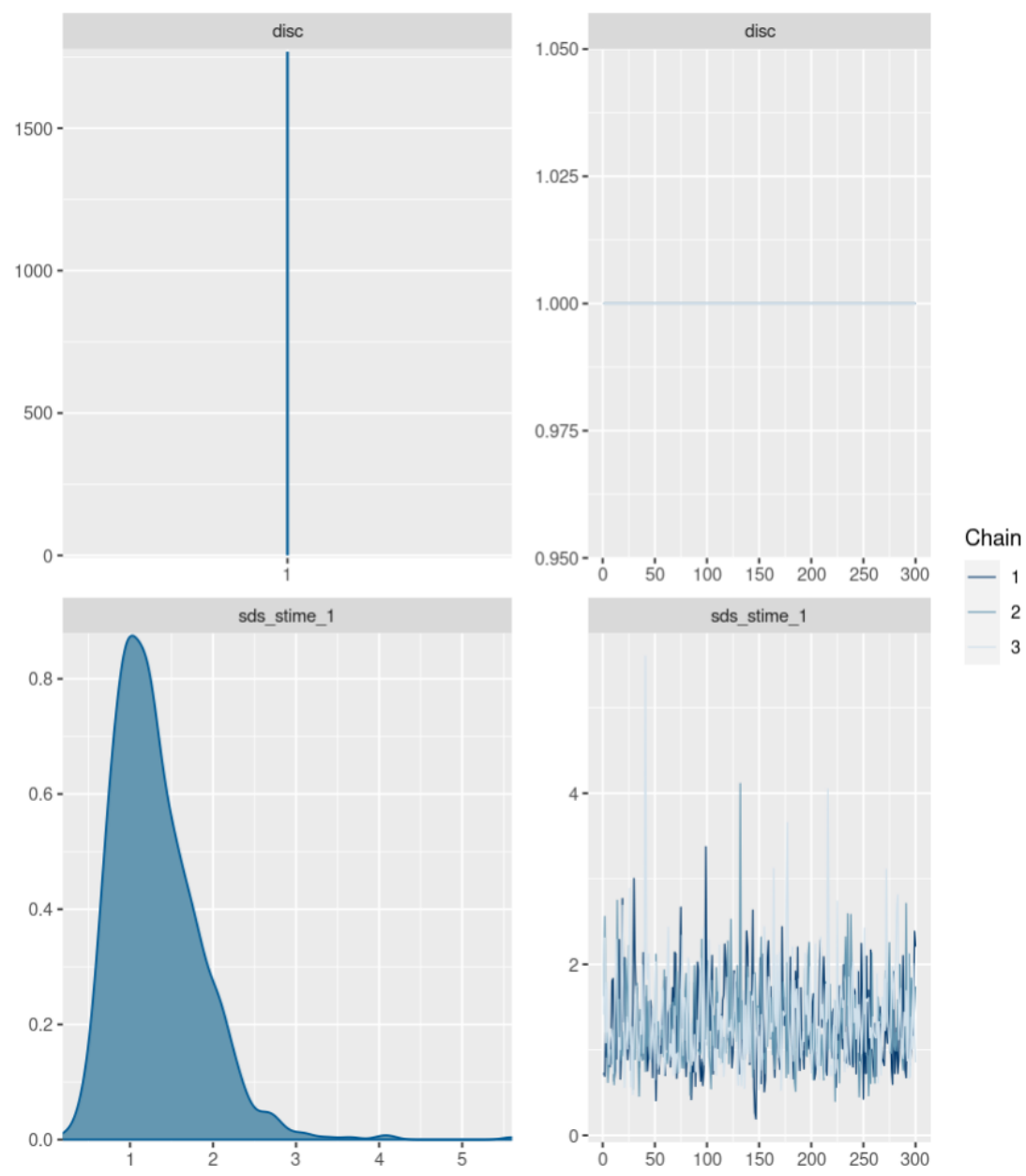
Fig. S8. Overview of the posterior distribution of model parameters (left) and MCMC (right).

Zero-altered gamma regression: Brodifacoum concentration

Table S3. Model comparison from leave-one-out cross-validation, representing theoretical expected log pointwise predictive density (ELPD) and their standard error (SE). Leave-one-out cross retained the level of anthropization of the site where they had been found. Splines follow the following nomenclature (Wood, 2017): "s" = thin plate spline, "cc" = cyclic cubic spline.

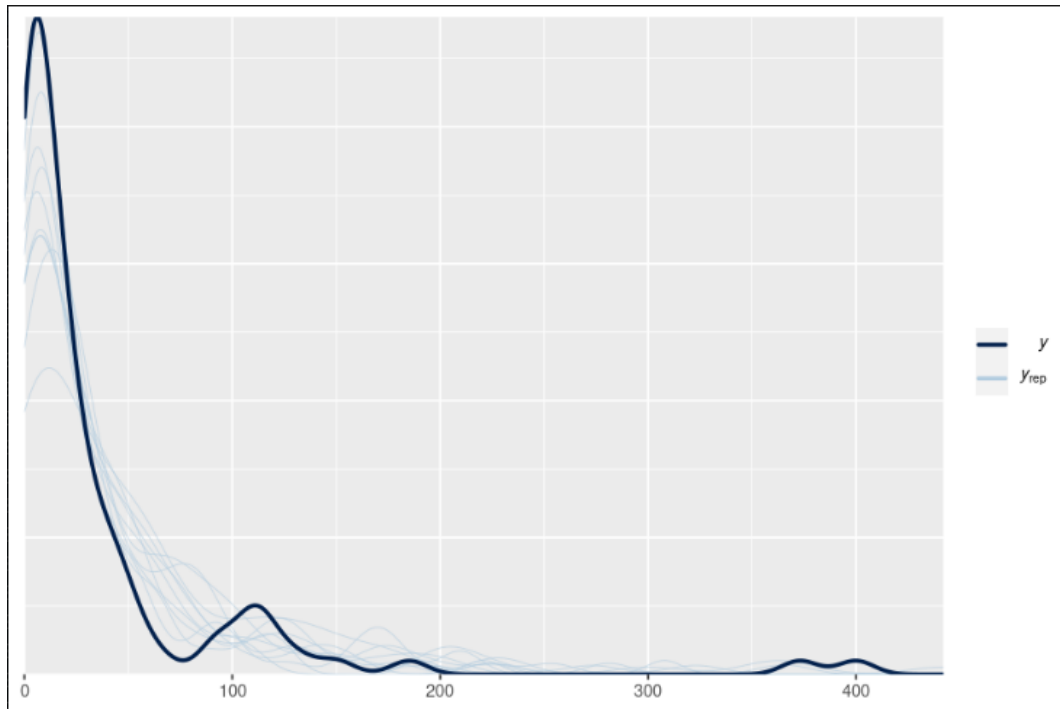| Model structure	ELPD ± S.E.
N. rodenticides ~ 1	-414.3 ± 15.9
N. rodenticides ~ anthropization	-410.5 ± 15.3
N. rodenticides ~ anthropization + sex	-410.3 ± 15.2
N. rodenticides ~ anthropization + sex + age class	-412.0 ± 15.5
N. rodenticides ~ anthropization + sex + s(lon, lat)	-411.6 ± 15.3
N. rodenticides ~ anthropization + sex + s(time, bs = "cc") + s(lon, lat)	-411.9 ± 15.5

Fig. S9. Comparison between the empirical distribution of the data (y) with the distributions of simulated/replicated data from the posterior predictive distributions (y_{rep}). See: https://mc-stan.org/bayesplot/reference/PPC-distributions.html
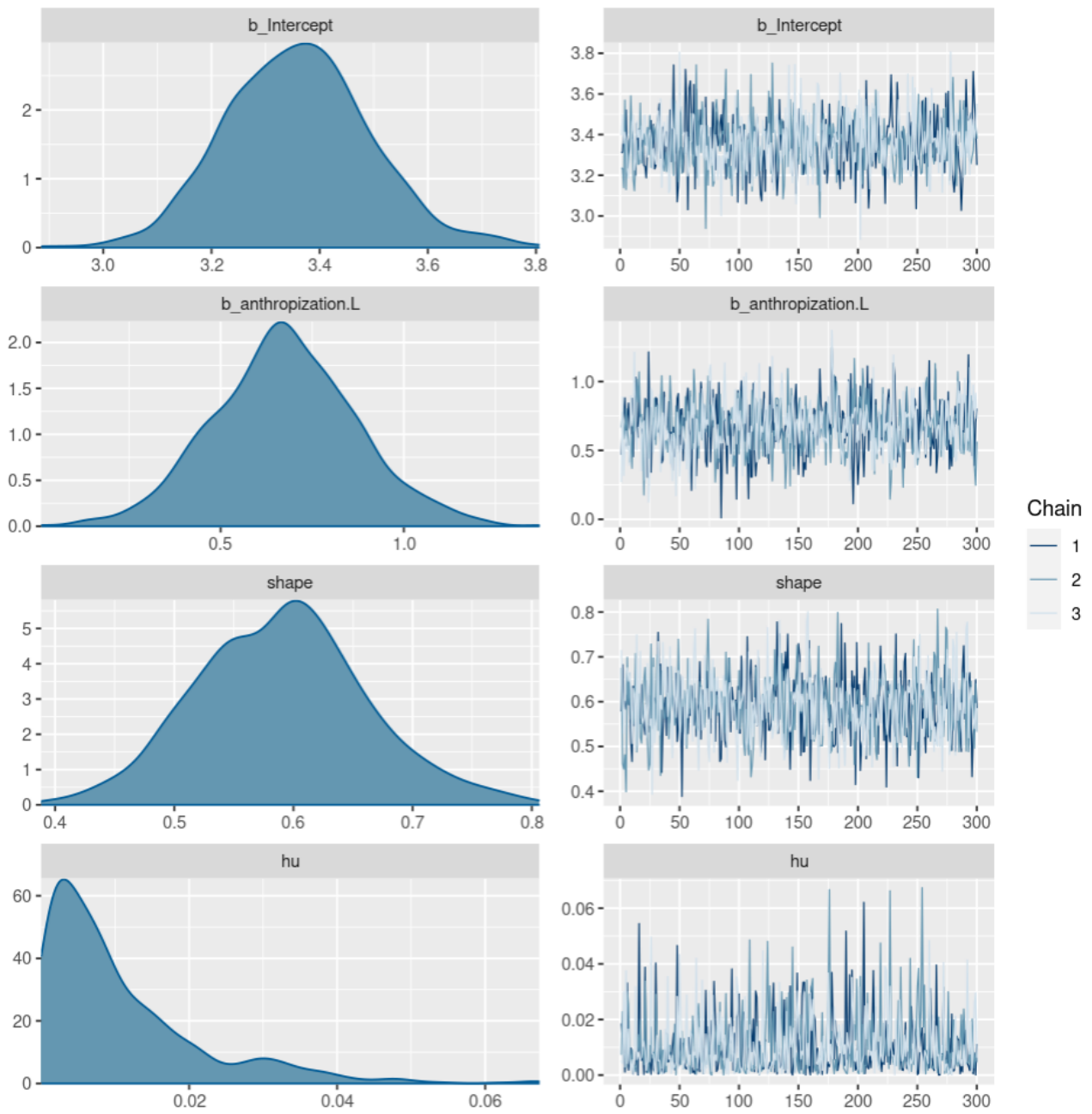
Fig. S10. Overview of the posterior distribution of model parameters (left) and MCMC (right).

Zero-altered gamma regression: Bromadiolone concentration

Table S4. Model comparison from leave-one-out cross-validation, representing theoretical expected log pointwise predictive density (ELPD) and their standard error (SE). Leave-one-out cross retained the time when wolves were found and the level of anthropization of the site where they had been found. Splines follow the following nomenclature (Wood, 2017): "s" = thin plate spline, "cc" = cyclic cubic spline.

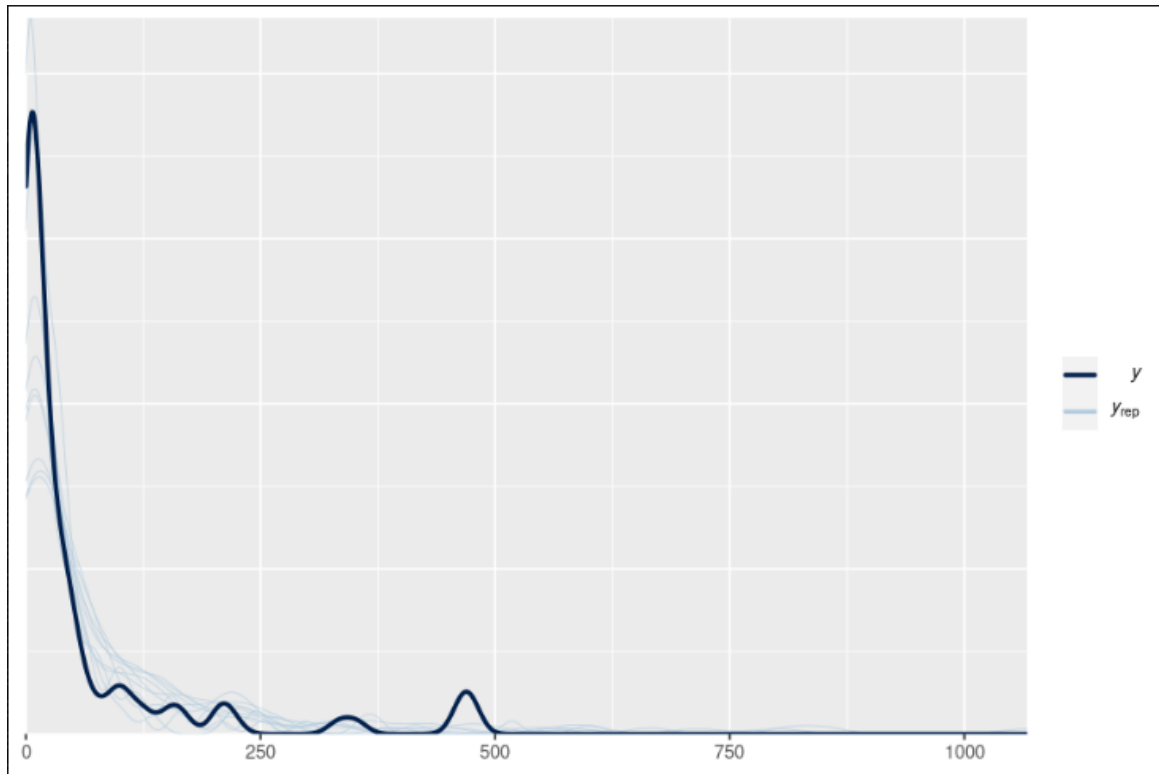| Model structure	ELPD ± S.E.
N. rodenticides ~ 1	-467.9 ± 16.7
N. rodenticides ~ anthropization	-469.1 ± 17.5
N. rodenticides ~ anthropization + sex	-471.0 ± 17.2
N. rodenticides ~ anthropization + sex + age class	-471.8 ± 18.2
N. rodenticides ~ anthropization + s(lon, lat)	-468.4 ± 17.0
N. rodenticides ~ anthropization + s(time, bs = "cc")	-464.8 ± 17.2

Fig. S11. Comparison between the empirical distribution of the data (y) with the distributions of simulated/replicated data from the posterior predictive distributions (y_{rep}). See: https://mc-stan.org/bayesplot/reference/PPC-distributions.html
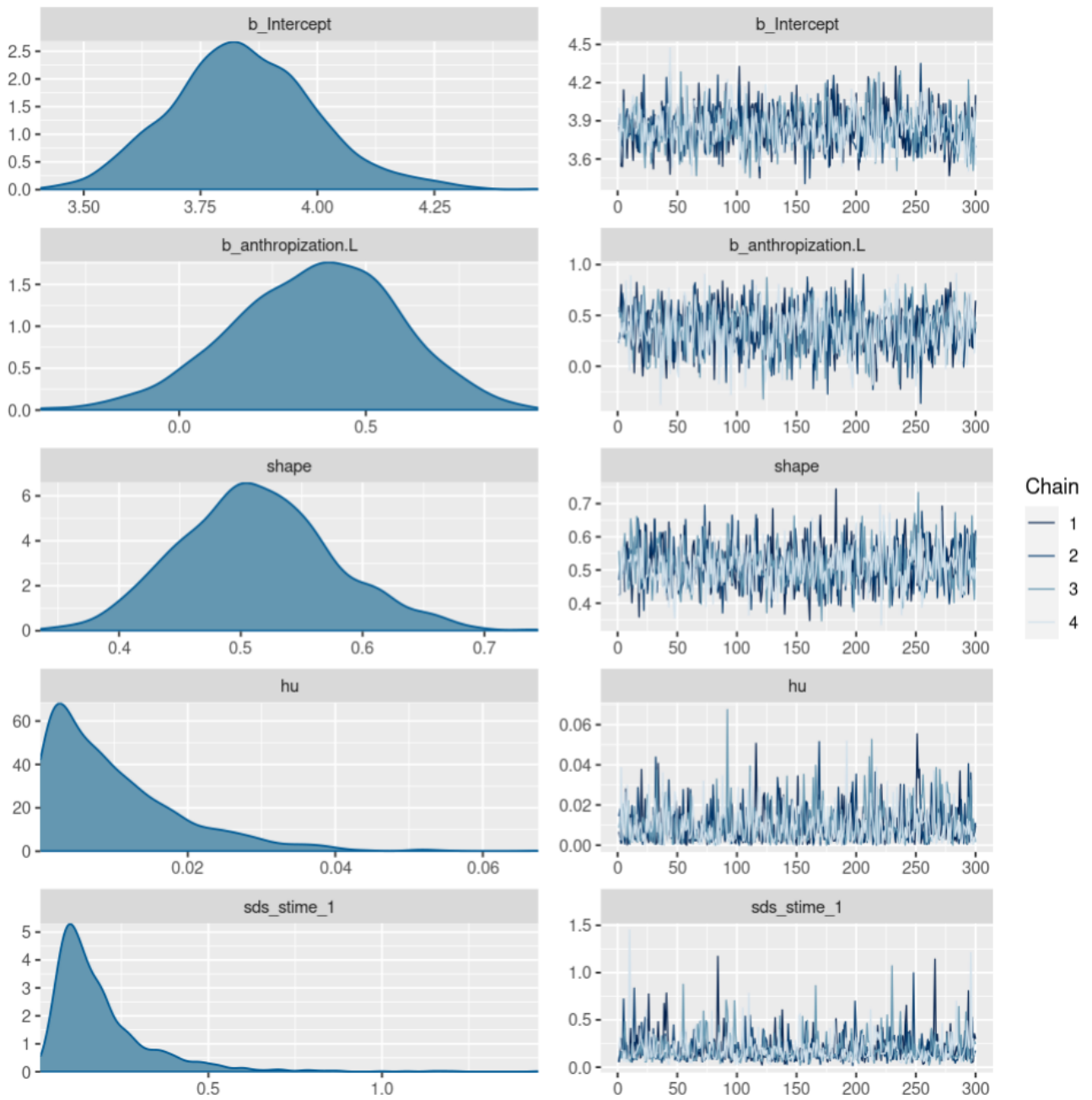
Fig. S12. Overview of the posterior distribution of model parameters (left) and MCMC (right).
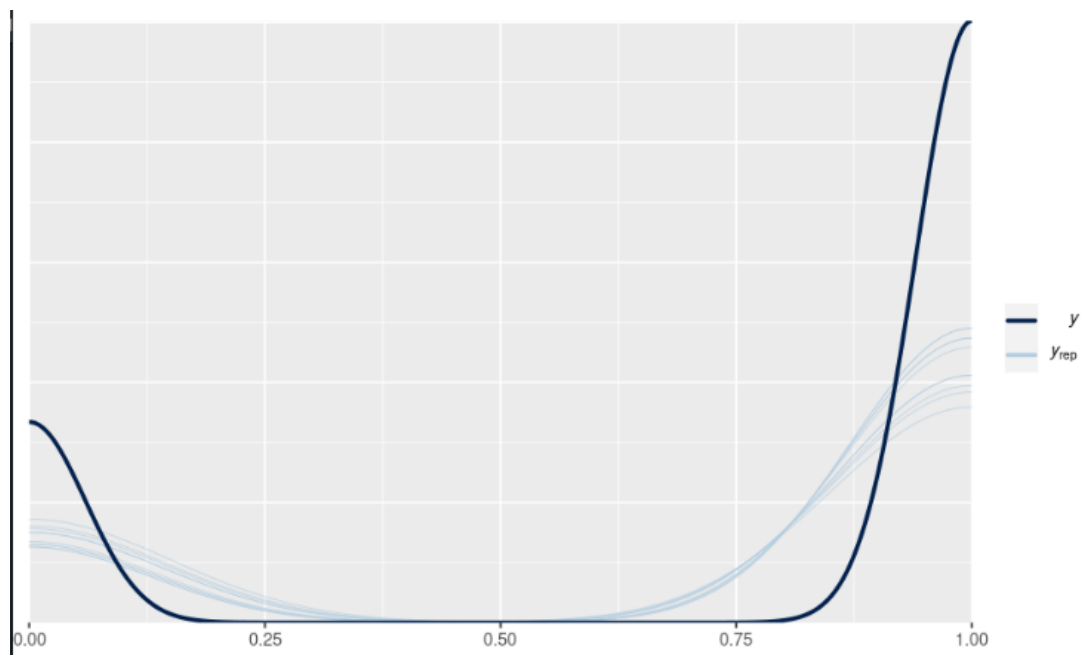
Bernoulli regression

Fig. S13. Comparison between the empirical distribution of the data (*y*) with the distributions of simulated/replicated data from the posterior predictive distributions (y_{rep}). See: https://mc-stan.org/bayesplot/reference/PPC-distributions.html
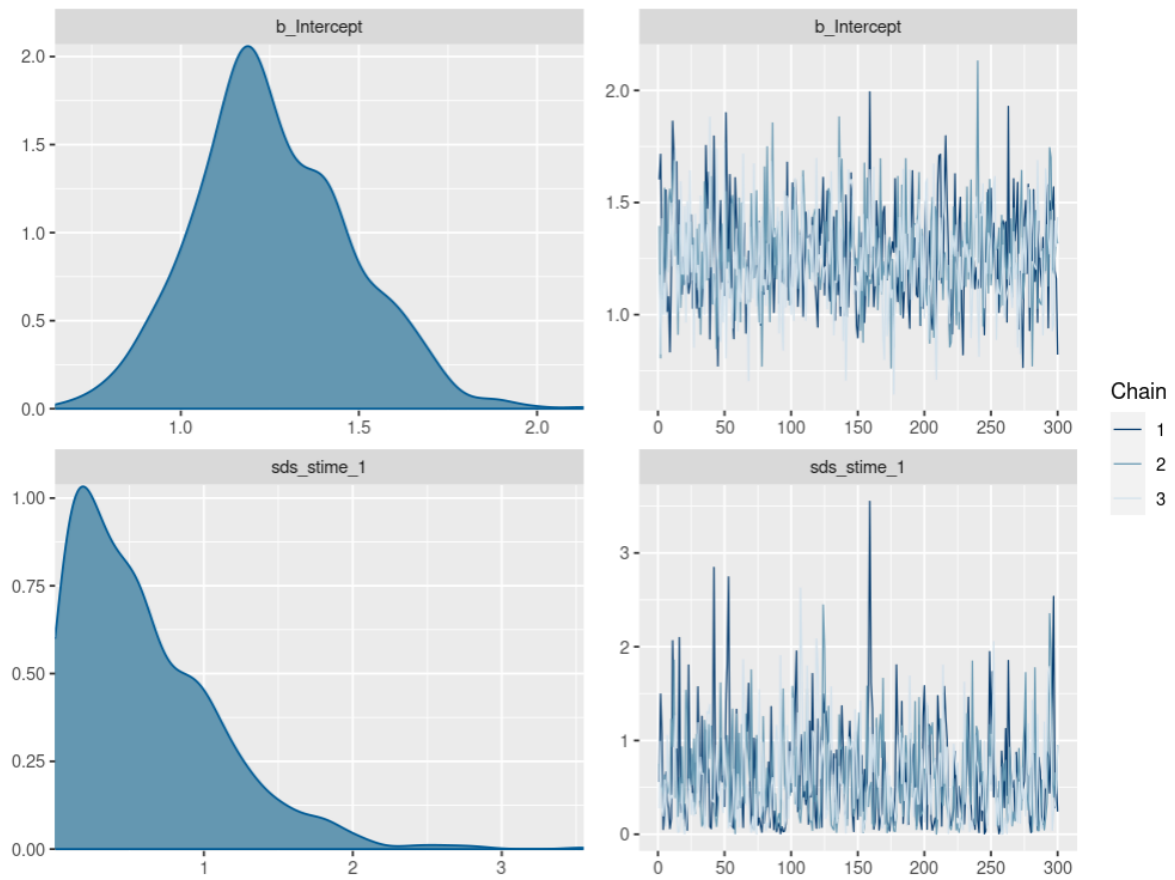
Fig. S14. Overview of the posterior distribution of model parameters (left) and MCMC (right).