

Appendix 2. Model fit

We evaluated model fit by comparing statistics of our empirical network to distributions of corresponding statistics drawn from simulations of networks using model parameters. When values of empirical statistics are not statistically different from the expected values of corresponding statistics from simulated networks, we infer good model fit. Figure A2.1 indicates good model fit, both in terms of the parameters included in the model (Panel A) as well as network structures not included in the model, although the model slightly overestimated higher geodesic distances (Panel B).

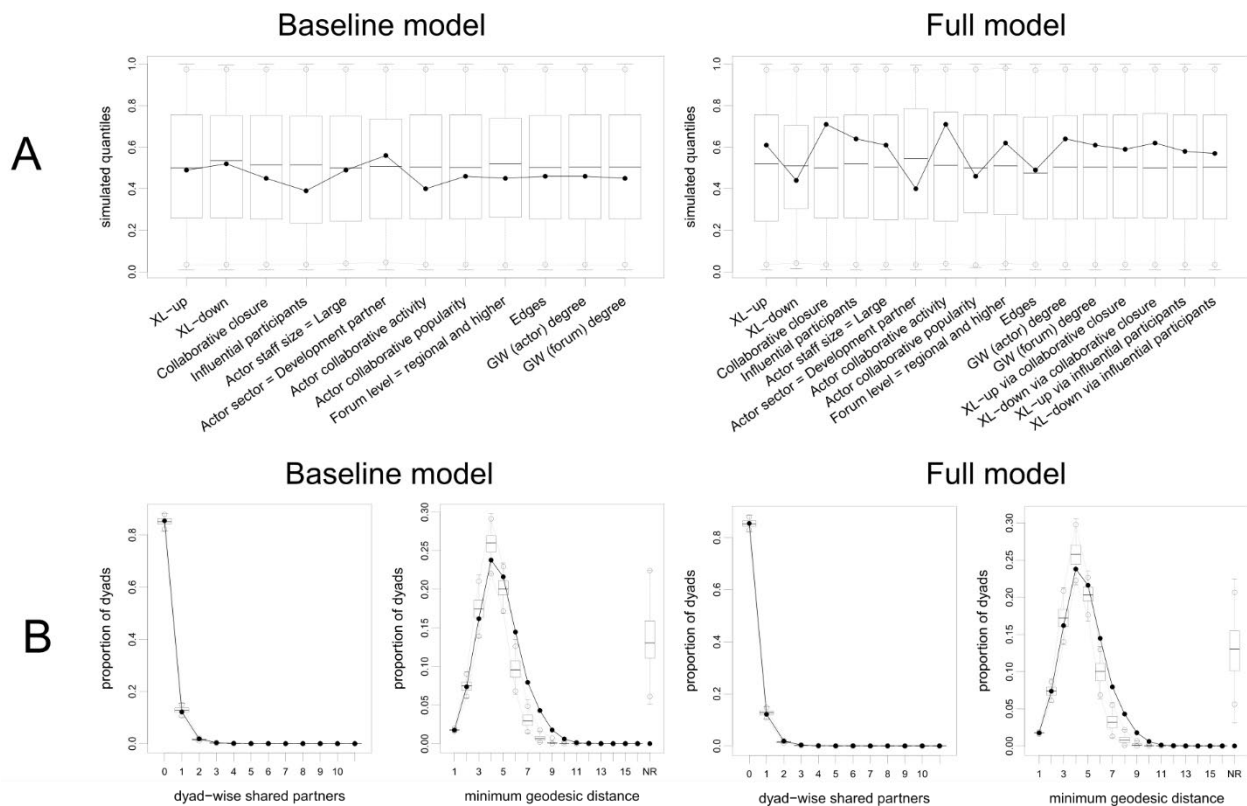


Figure A2.1 Goodness of fit of the exponential random graph models. In each plot, boxplots indicate statistics drawn from networks simulated using the model parameters, while the thick black line represents corresponding statistics from the observed network.