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*Comparing Bayesian Statistical Models of Infectious Disease Outbreaks via Probability Scoring*

Model comparison and assessment are key components in statistical modeling. Here we consider these components for infectious disease models. The approach taken will be to develop the tool of proper probability scoring rules to assess calibration and sharpness of probabilistic forecasts for spatio-temporal epidemic models. Scoring rules work by rewarding a numerical value to a model based on the predictive distribution and on the infection/non-infection event observed. We show how such methods can be used and compare the performance of different probability score-based methods.