# SUPPLEMENTARY MATERIAL

**Supplemental material: Forecasting seasonal influenza with a state-space SIR model** (DOI: 10.1214/16-AOAS1000SUPP; .pdf). This supplement consists of five parts. Part 1 provides the details of the fourth order Runge–Kutta approximation. Part 2 presents the table of parameter estimates from the regression described in Section 6.5. Part 3 provides the algorithm for sampling from the prior predictive distribution of equation (6.1). Part 4 provides the algorithm for sampling from the posterior predictive distribution of equation (5.2). Part 5 provides MCMC diagnostics for the illustrative forecasting example of Section 7.1.