

# Model Likelihood Comparison

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Model	$R_0$	$-\ln(L)$	AIC	$\beta$	$\gamma$	$\zeta$	$\sigma$
SIR	3.538	76.568	157.135	1.687	0.477	NA	NA
SEIR	6.882	63.372	132.743	3.402	0.494	NA	1.209
SICR	3.546	76.656	159.312	1.689	0.135	0.476	NA
SEICR	NA	NA	NA	NA	NA	NA	NA

Table 1. **Model Fit Comparison.** Model selection criteria (negative log-likelihood and AIC) and parameter estimates for each model.

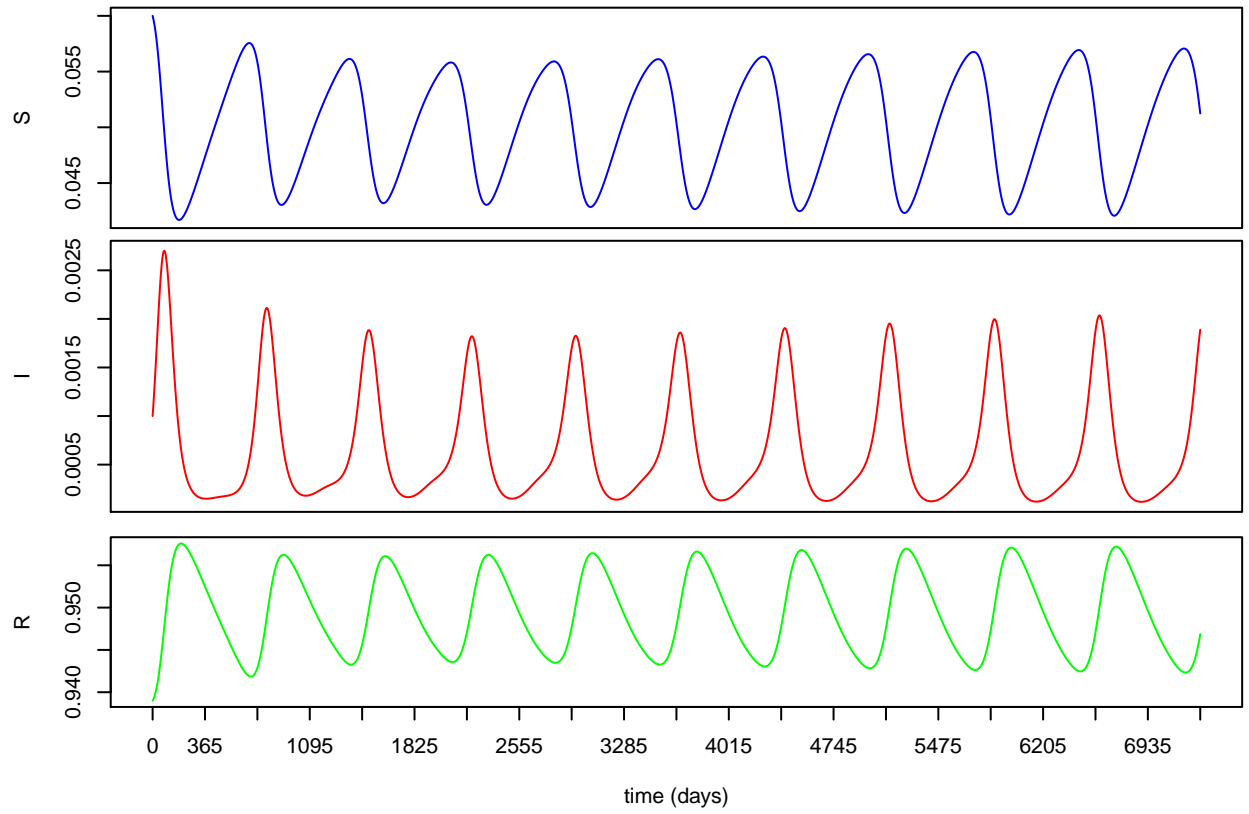


Figure 1. **Seasonality in SIR model.** Beta0 = 1.65, Beta1 = 0.05, Gamma = 0.08

Next step will be to do the bifurcation diagram...