1 Simulation results and discussion

1.1 Results of the SIR model

All the values for the compartments s, x and r calculated by the model are within the possible intervals. Figure 1 and 2 show the mean over all districts for the susceptible and removed compartments respectively. One can see that the slope of the curve is steadier for the calculated model compared to the observed data. The observed curve of the infectious compartment is highly nonlinear and the magnitude is slightly earlier than our calculated data. It is important to not only look at the means but the distribution of s, x and r within Haiti.

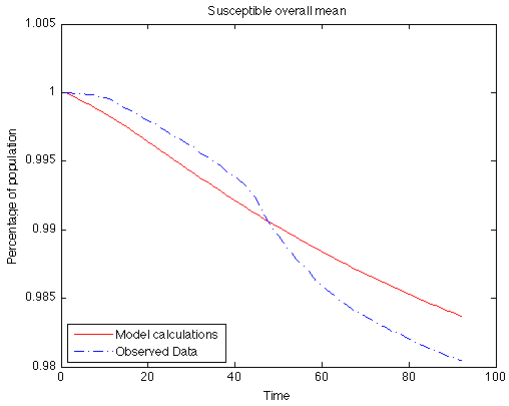

Figure 1: Mean over all districts for the susceptible compartment

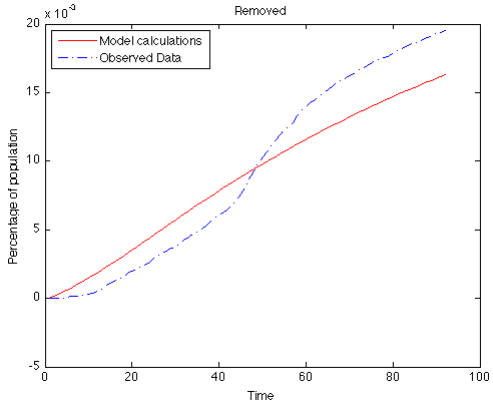

Figure 2: Mean over all districts for the removed compartment

The plot LABEL shows the observed and calculated values of all ten compartments.

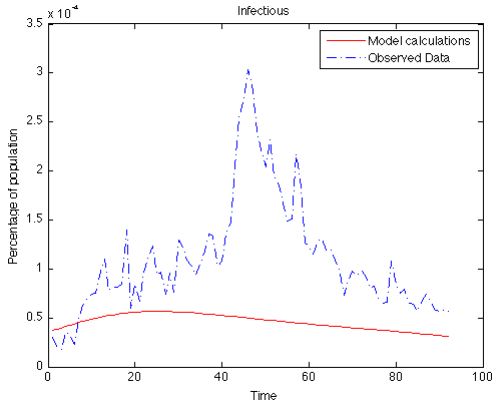

Figure 3: Mean over all districts for the infectious compartment

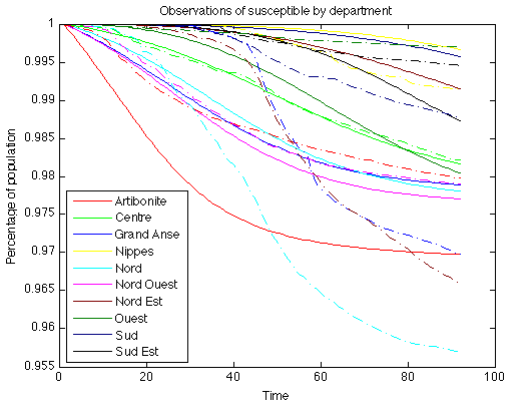

Figure 4: Observed and calculated data for all districts of the susceptible compartment

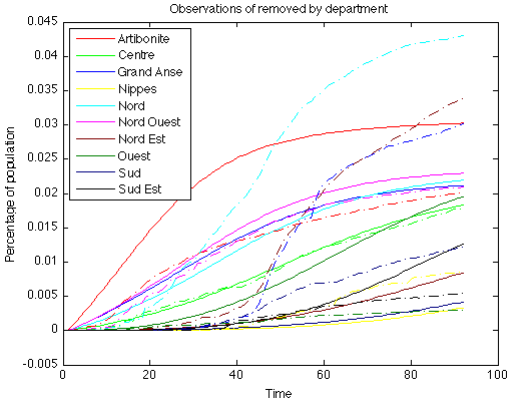

Figure 5: Observed and calculated data for all districts of the removed compartment

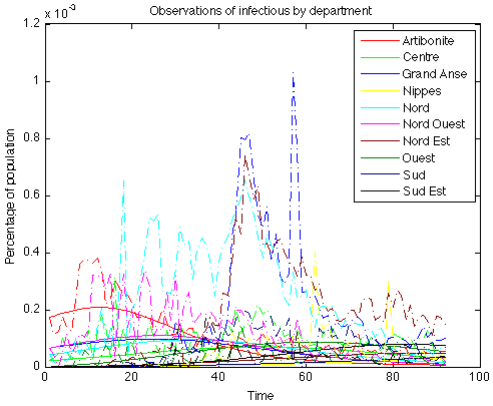

Figure 6: Observed and calculated data for all districts of the infectious compartment