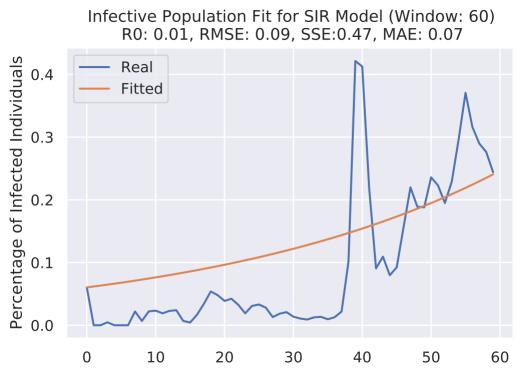


Infective Population Fit for SIR Model (Window: 42) R0: 0.01, RMSE: 0.09, SSE:0.35, MAE: 0.06 Percentage of Infected Individuals Real **Fitted** 0.0 10 20 30

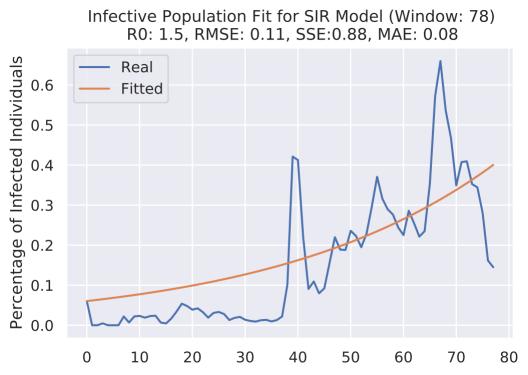
Infective Population Fit for SIR Model (Window: 48) R0: -0.02, RMSE: 0.09, SSE:0.37, MAE: 0.07 Percentage of Infected Individuals Real **Fitted** 0.0 20 10 30 40

Infective Population Fit for SIR Model (Window: 54) R0: 0.02, RMSE: 0.09, SSE: 0.4, MAE: 0.07 Percentage of Infected Individuals Real Fitted 0.0 10 20 50 30 40

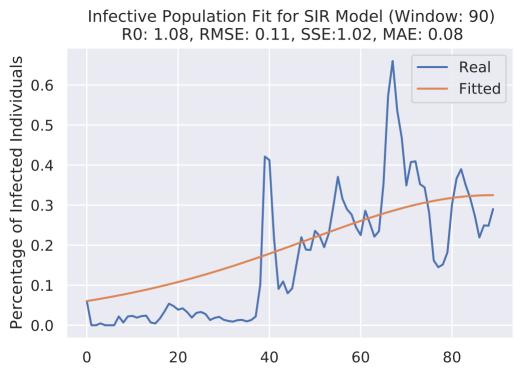


Infective Population Fit for SIR Model (Window: 66) R0: 0.01, RMSE: 0.09, SSE:0.48, MAE: 0.07 Percentage of Infected Individuals Real 0.4 **Fitted** 0.3 0.2 0.1 0.0 20 30 10 40 50 60

Infective Population Fit for SIR Model (Window: 72) R0: 0.0, RMSE: 0.1, SSE:0.7, MAE: 0.08 Percentage of Infected Individuals Real **Fitted** 0.0 10 20 30 40 50 60 70



Infective Population Fit for SIR Model (Window: 84) R0: 1.09, RMSE: 0.11, SSE:0.97, MAE: 0.08 Percentage of Infected Individuals Real **Fitted** 0.0 20 40 60 80

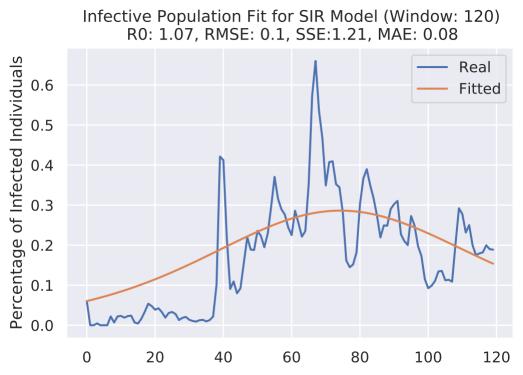


Infective Population Fit for SIR Model (Window: 96) R0: 1.07, RMSE: 0.1, SSE:1.05, MAE: 0.08 Percentage of Infected Individuals Real Fitted 0.0 20 40 60 80

Infective Population Fit for SIR Model (Window: 102) R0: 1.05, RMSE: 0.19, SSE:3.59, MAE: 0.16 Percentage of Infected Individuals Real Fitted 0.0 20 100 40 60 80

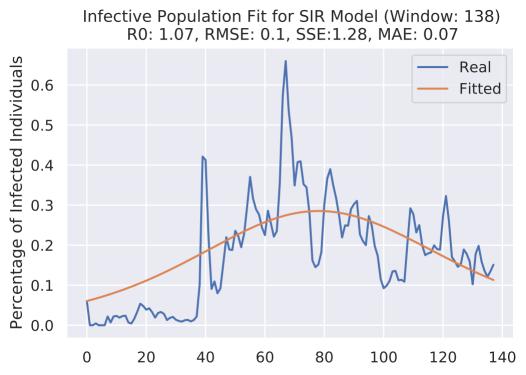
Infective Population Fit for SIR Model (Window: 108) R0: 1.07, RMSE: 0.1, SSE:1.17, MAE: 0.08 Percentage of Infected Individuals Real Fitted 0.0 20 60 40 80 100

Infective Population Fit for SIR Model (Window: 114) R0: 1.07, RMSE: 0.1, SSE:1.2, MAE: 0.08 Percentage of Infected Individuals Real **Fitted** 0.0 20 60 40 80 100

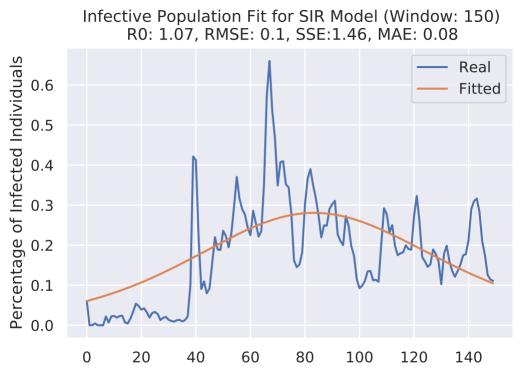


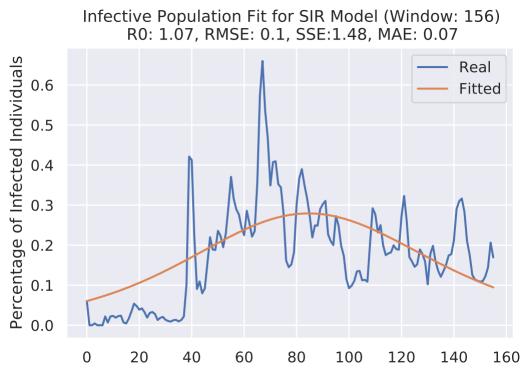
Infective Population Fit for SIR Model (Window: 126) R0: 1.07, RMSE: 0.1, SSE:1.26, MAE: 0.08 Percentage of Infected Individuals Real Fitted 0.0 20 40 60 80 100 120

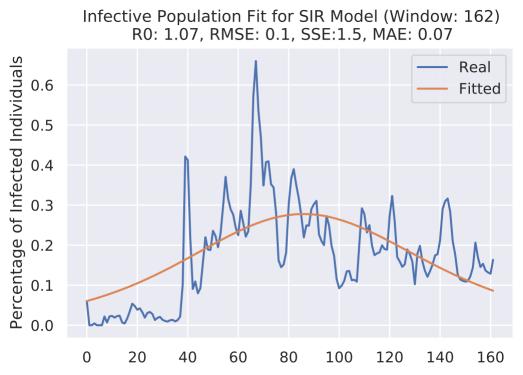
Infective Population Fit for SIR Model (Window: 132) R0: 1.07, RMSE: 0.1, SSE:1.27, MAE: 0.08 Percentage of Infected Individuals Real Fitted 0.0 20 60 40 80 100 120

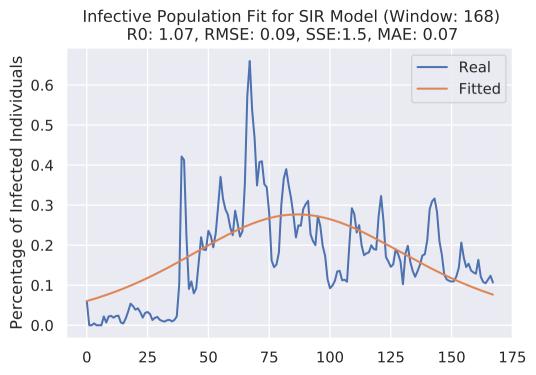


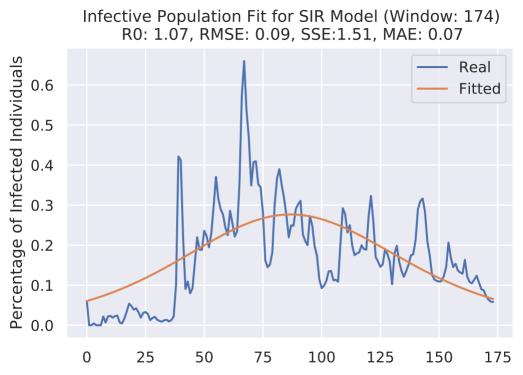
Infective Population Fit for SIR Model (Window: 144) R0: 1.07, RMSE: 0.1, SSE:1.41, MAE: 0.08 Percentage of Infected Individuals Real **Fitted** 0.0 20 40 60 80 100 120 140



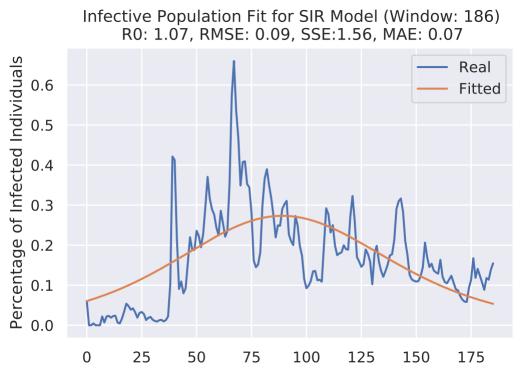


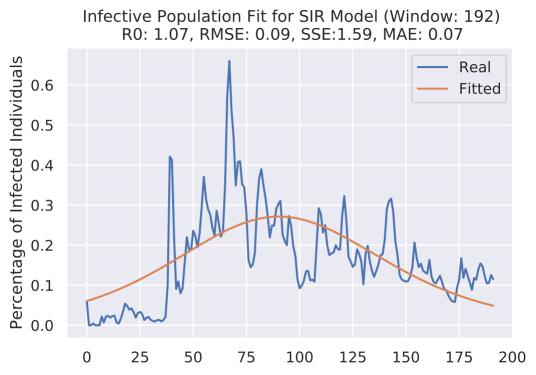


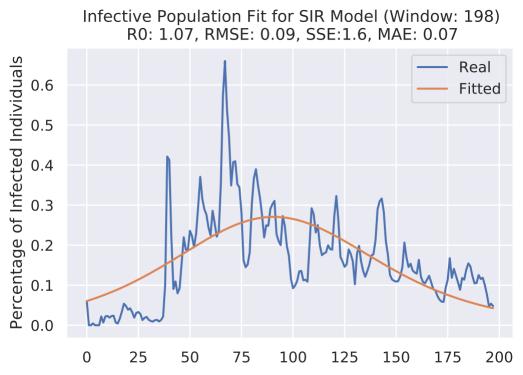


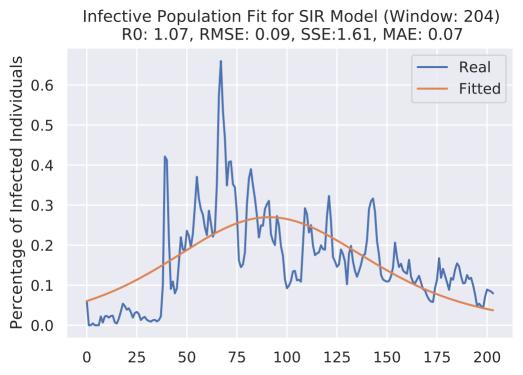


Infective Population Fit for SIR Model (Window: 180) R0: 1.07, RMSE: 0.09, SSE:1.53, MAE: 0.07 Percentage of Infected Individuals Real **Fitted** 25 50 75 100 125 150 175









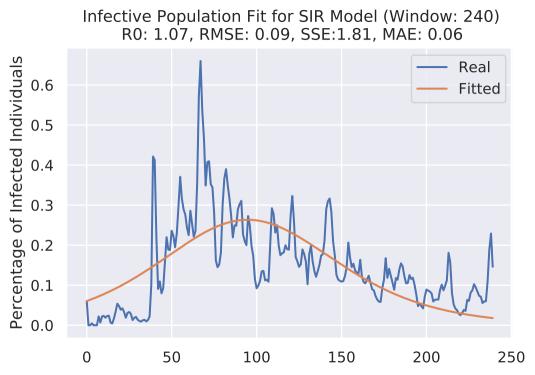
Infective Population Fit for SIR Model (Window: 210) R0: 1.07, RMSE: 0.09, SSE:1.62, MAE: 0.07 Real Fitted 50 100 150 200

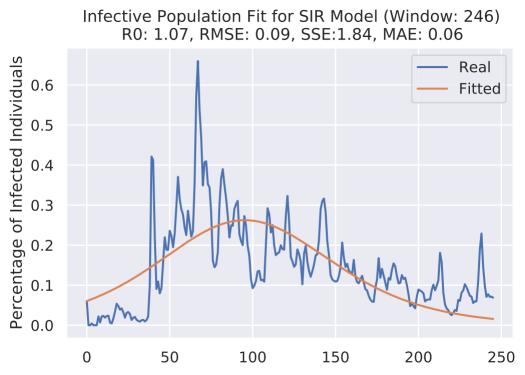
Infective Population Fit for SIR Model (Window: 216) R0: 1.07, RMSE: 0.09, SSE:1.68, MAE: 0.07 Percentage of Infected Individuals Real Fitted 50 200 100 150

Infective Population Fit for SIR Model (Window: 222) R0: 1.07, RMSE: 0.09, SSE:1.68, MAE: 0.06 Percentage of Infected Individuals Real Fitted 50 200 100 150

Infective Population Fit for SIR Model (Window: 228) R0: 1.07, RMSE: 0.09, SSE:1.69, MAE: 0.06 Real **Fitted** 50 100 150 200

Infective Population Fit for SIR Model (Window: 234) R0: 1.07, RMSE: 0.09, SSE:1.71, MAE: 0.06 Percentage of Infected Individuals Real **Fitted** 50 200 100 150





Infective Population Fit for SIR Model (Window: 252) R0: 1.07, RMSE: 0.09, SSE:1.85, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 250 100 150 200

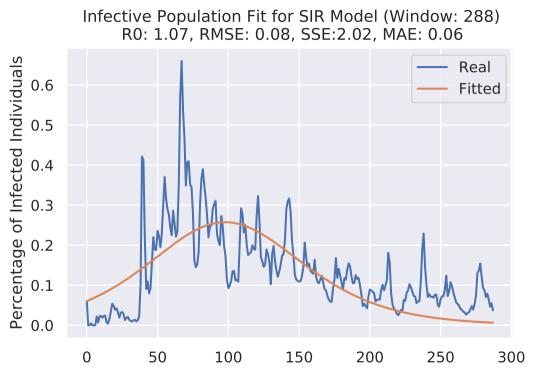
Infective Population Fit for SIR Model (Window: 258) R0: 1.07, RMSE: 0.09, SSE:1.89, MAE: 0.06 Real **Fitted** 50 250 100 150 200

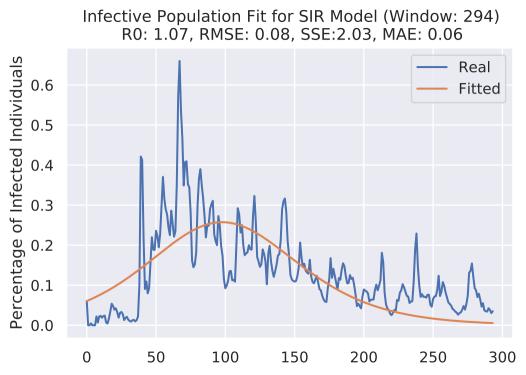
Infective Population Fit for SIR Model (Window: 264) R0: 1.07, RMSE: 0.09, SSE:1.91, MAE: 0.06 Percentage of Infected Individuals Real **Fitted** 50 100 150 200 250

Infective Population Fit for SIR Model (Window: 270) R0: 1.07, RMSE: 0.08, SSE:1.92, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250

Infective Population Fit for SIR Model (Window: 276) R0: 1.07, RMSE: 0.08, SSE:1.93, MAE: 0.06 Real **Fitted** 50 100 150 200 250

Infective Population Fit for SIR Model (Window: 282) R0: 1.07, RMSE: 0.08, SSE:2.01, MAE: 0.06 Percentage of Infected Individuals Real **Fitted** 50 250 100 150 200





Infective Population Fit for SIR Model (Window: 300) R0: 1.07, RMSE: 0.08, SSE:2.04, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300

Infective Population Fit for SIR Model (Window: 306) R0: 1.05, RMSE: 0.14, SSE:5.88, MAE: 0.12 Percentage of Infected Individuals Real **Fitted** 0.0 50 100 150 200 250 300

Infective Population Fit for SIR Model (Window: 312) R0: 1.05, RMSE: 0.14, SSE:6.27, MAE: 0.12 Percentage of Infected Individuals Real **Fitted** 50 100 150 200 250 300

Infective Population Fit for SIR Model (Window: 318) R0: 1.07, RMSE: 0.08, SSE:2.06, MAE: 0.06 Percentage of Infected Individuals

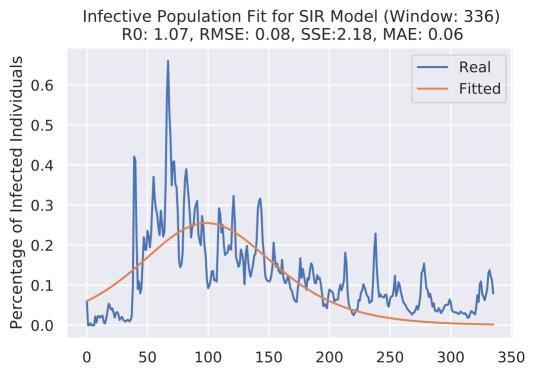
0 0 0 0 0 0 0 0

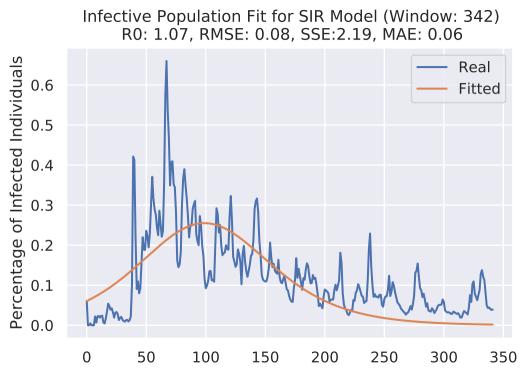
1 0 0 0 0 0 0

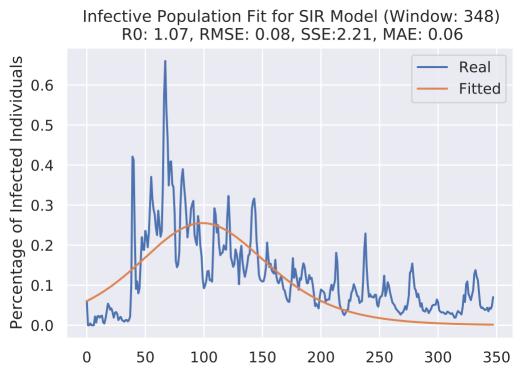
9 0 0 0 0 Real Fitted 50 100 150 200 250 300

Infective Population Fit for SIR Model (Window: 324) R0: 1.07, RMSE: 0.08, SSE:2.07, MAE: 0.06 Percentage of Infected Individuals Real Fitted 50 100 150 200 250 300

Infective Population Fit for SIR Model (Window: 330) R0: 1.05, RMSE: 0.14, SSE:6.32, MAE: 0.11 Percentage of Infected Individuals Real **Fitted** 0.0 50 100 150 200 250 300







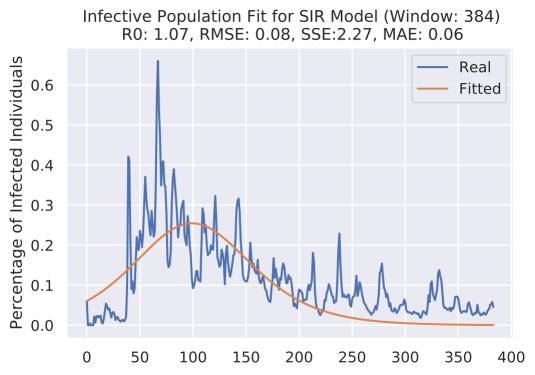
Infective Population Fit for SIR Model (Window: 354) R0: 1.05, RMSE: 0.14, SSE:6.72, MAE: 0.11 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350

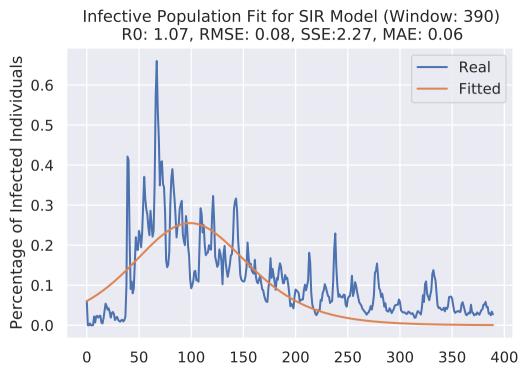
Infective Population Fit for SIR Model (Window: 360) R0: 1.07, RMSE: 0.08, SSE:2.23, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350

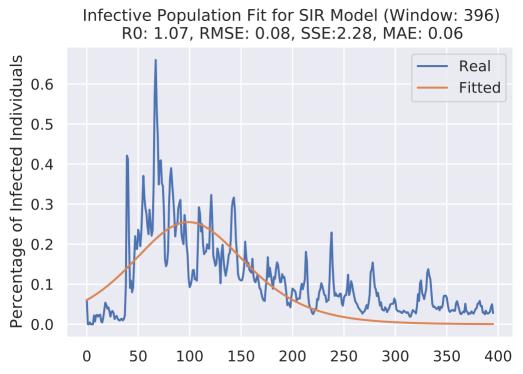
Infective Population Fit for SIR Model (Window: 366) R0: 1.07, RMSE: 0.08, SSE:2.24, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350

Infective Population Fit for SIR Model (Window: 372) R0: 1.07, RMSE: 0.08, SSE:2.25, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350

Infective Population Fit for SIR Model (Window: 378) R0: 1.07, RMSE: 0.08, SSE:2.25, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350







Infective Population Fit for SIR Model (Window: 402) R0: 1.07, RMSE: 0.08, SSE:2.28, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350 400

Infective Population Fit for SIR Model (Window: 408) R0: 1.07, RMSE: 0.07, SSE:2.29, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 50 100 150 200 250 300 350 400

Infective Population Fit for SIR Model (Window: 414) R0: 1.07, RMSE: 0.07, SSE:2.29, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0

200

300

400

100

Infective Population Fit for SIR Model (Window: 420) R0: 1.07, RMSE: 0.07, SSE:2.3, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 100 400

200

300

Infective Population Fit for SIR Model (Window: 426) R0: 1.07, RMSE: 0.07, SSE:2.31, MAE: 0.06 Percentage of Infected Individuals Real Fitted 0.0 400 100 200 300

Infective Population Fit for SIR Model (Window: 432) R0: 1.07, RMSE: 0.07, SSE:2.31, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 400 100 200 300

Infective Population Fit for SIR Model (Window: 438) R0: 1.07, RMSE: 0.07, SSE:2.32, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

100

400

Infective Population Fit for SIR Model (Window: 444) R0: 1.07, RMSE: 0.07, SSE:2.33, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

300

400

Infective Population Fit for SIR Model (Window: 450) R0: 1.05, RMSE: 0.12, SSE:6.65, MAE: 0.09 Percentage of Infected Individuals Real Fitted 0.0

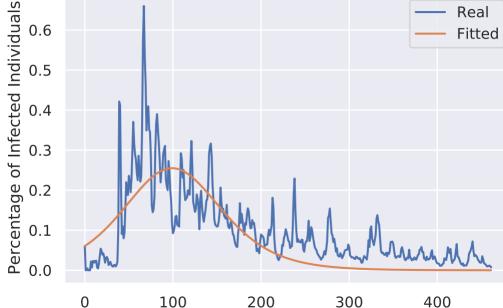
200

300

400

Infective Population Fit for SIR Model (Window: 456) R0: 1.07, RMSE: 0.07, SSE:2.34, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 400 100 200 300

Infective Population Fit for SIR Model (Window: 462) R0: 1.07, RMSE: 0.07, SSE:2.34, MAE: 0.05 Real Fitted



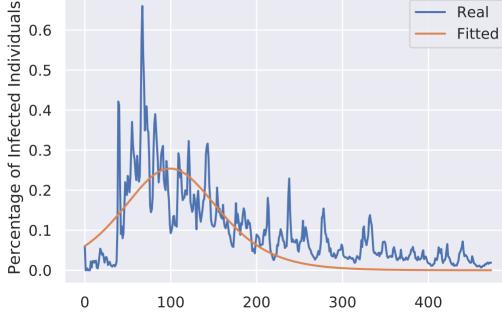
Infective Population Fit for SIR Model (Window: 468) R0: 1.07, RMSE: 0.07, SSE:2.34, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

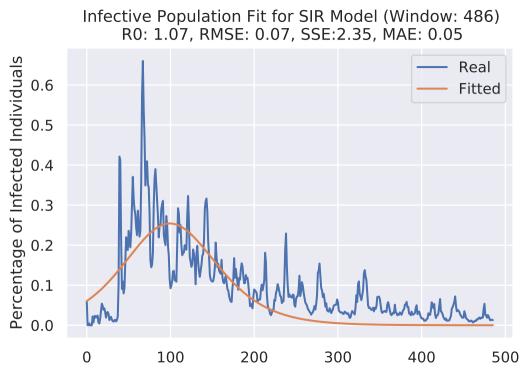
300

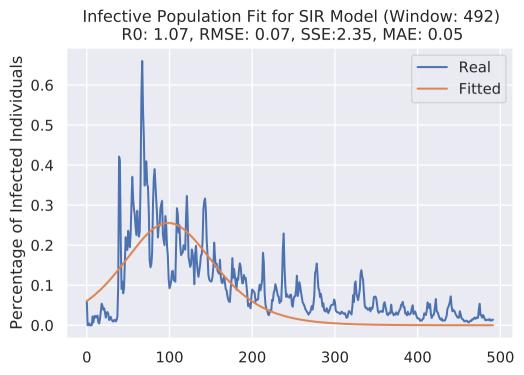
400

Infective Population Fit for SIR Model (Window: 474) R0: 1.07, RMSE: 0.07, SSE:2.35, MAE: 0.05 Real Fitted



Infective Population Fit for SIR Model (Window: 480) R0: 1.07, RMSE: 0.07, SSE:2.35, MAE: 0.05 Percentage of Infected Individuals Real **Fitted** 0.0 100 200 300 400 500





Infective Population Fit for SIR Model (Window: 498) R0: 1.07, RMSE: 0.07, SSE:2.36, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500

Infective Population Fit for SIR Model (Window: 504) R0: 1.07, RMSE: 0.07, SSE:2.36, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

300

400

100

Infective Population Fit for SIR Model (Window: 510) R0: 1.07, RMSE: 0.07, SSE:2.36, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 500 100 200 300 400

Infective Population Fit for SIR Model (Window: 516) R0: 1.07, RMSE: 0.07, SSE:2.36, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

300

400

500

Infective Population Fit for SIR Model (Window: 522) R0: 1.07, RMSE: 0.07, SSE:2.36, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500

Infective Population Fit for SIR Model (Window: 528) R0: 1.07, RMSE: 0.07, SSE:2.37, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

200

300

400

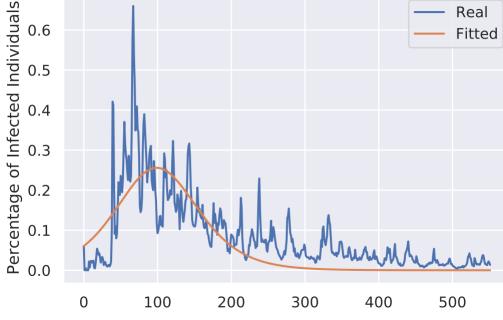
500

Infective Population Fit for SIR Model (Window: 534) R0: 1.07, RMSE: 0.07, SSE:2.37, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500

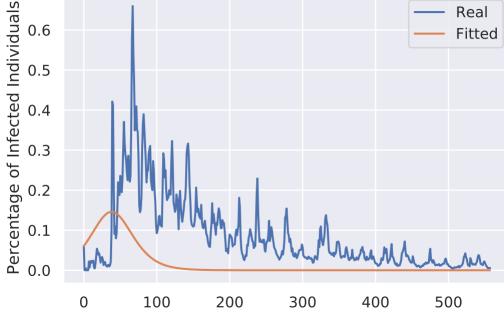
Infective Population Fit for SIR Model (Window: 540) R0: 1.07, RMSE: 0.07, SSE:2.37, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 500 100 200 300 400

Infective Population Fit for SIR Model (Window: 546) R0: 1.07, RMSE: 0.07, SSE:2.38, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500

Infective Population Fit for SIR Model (Window: 552) R0: 1.07, RMSE: 0.07, SSE:2.38, MAE: 0.05 Real Fitted



Infective Population Fit for SIR Model (Window: 558) R0: 1.04, RMSE: 0.11, SSE:6.91, MAE: 0.08 Real Fitted



Infective Population Fit for SIR Model (Window: 564) R0: 1.07, RMSE: 0.06, SSE:2.38, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0

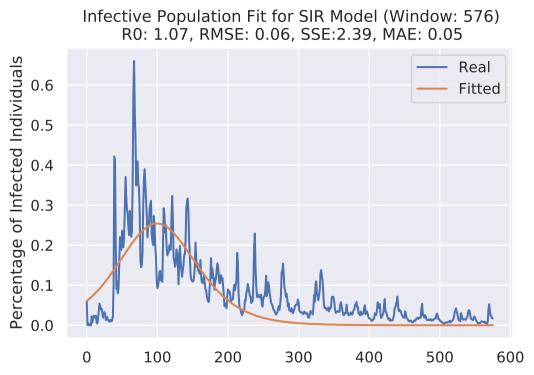
300

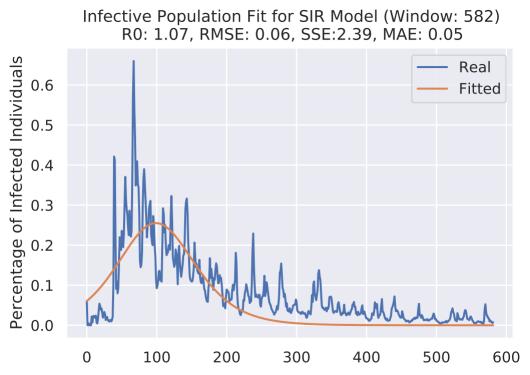
100

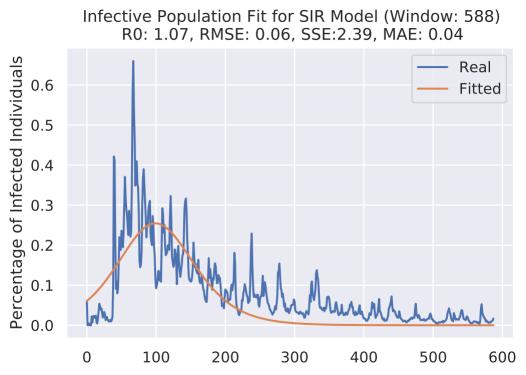
200

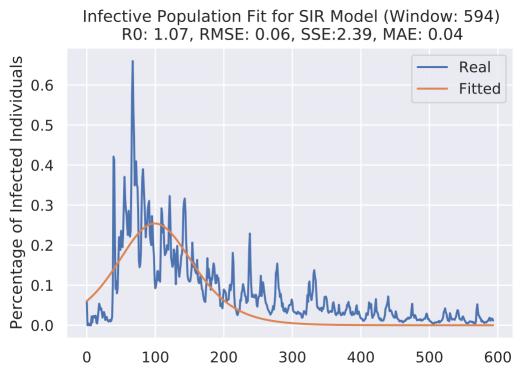
500

Infective Population Fit for SIR Model (Window: 570) R0: 1.07, RMSE: 0.06, SSE:2.38, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500









Infective Population Fit for SIR Model (Window: 600) R0: 1.07, RMSE: 0.06, SSE:2.42, MAE: 0.05 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500 600

Infective Population Fit for SIR Model (Window: 606) R0: 1.07, RMSE: 0.06, SSE:2.39, MAE: 0.04 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500 600

Infective Population Fit for SIR Model (Window: 612) R0: 1.07, RMSE: 0.06, SSE:2.39, MAE: 0.04 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500 600

Infective Population Fit for SIR Model (Window: 618) R0: 1.07, RMSE: 0.06, SSE:2.39, MAE: 0.04 Percentage of Infected Individuals Real Fitted 0.0 100 200 300 400 500 600