Mathematical modeling of the development of confirmed daily infection numbers in the COVID-19 pandemic by a special exponential function

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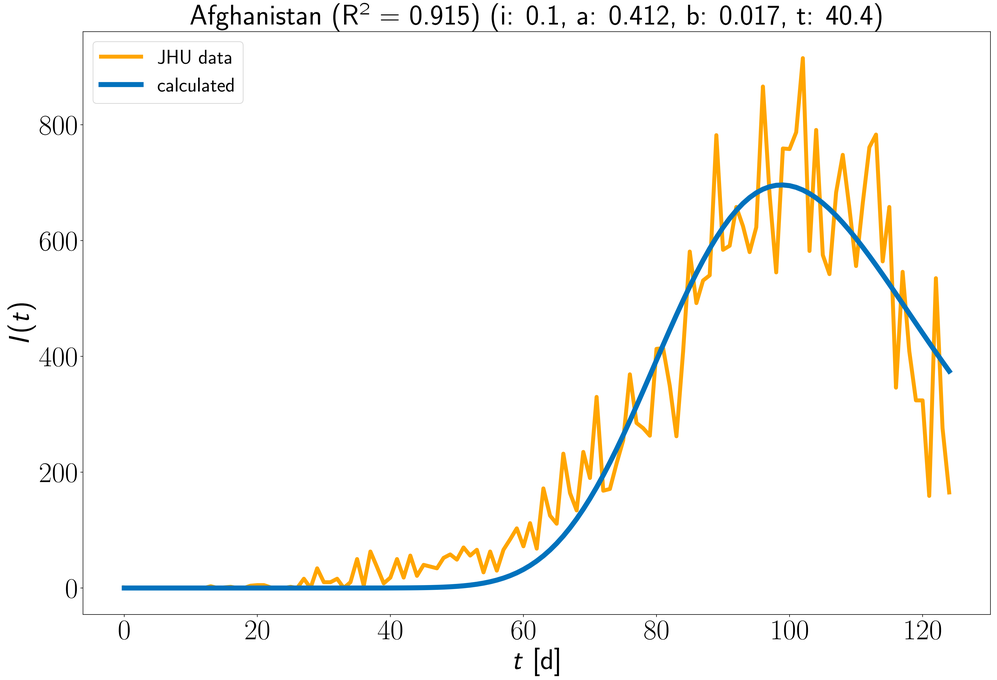
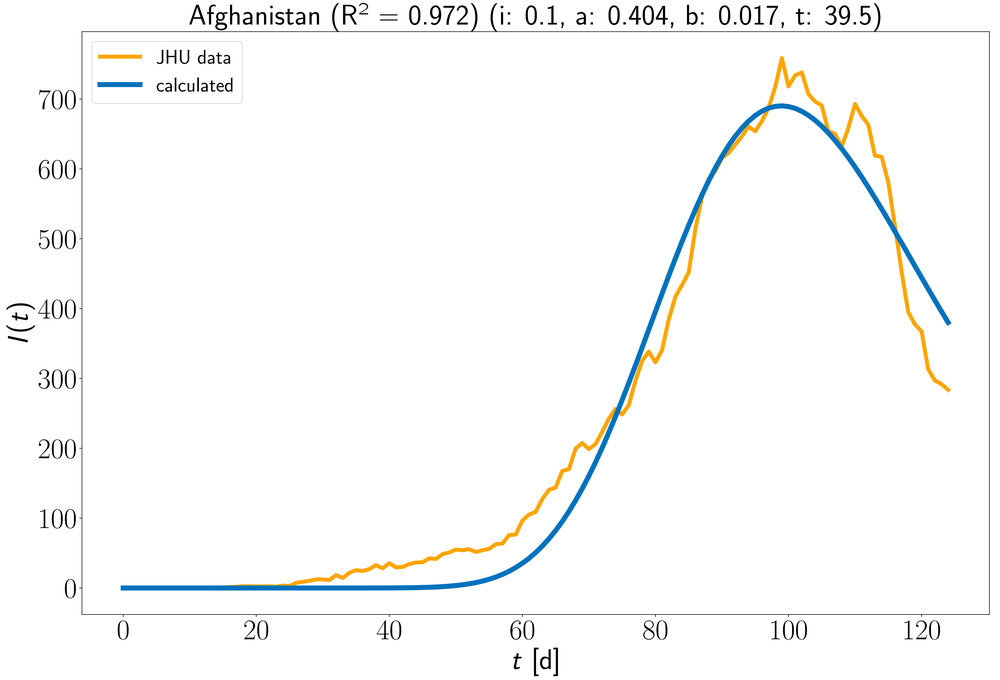
Supplementary Material I

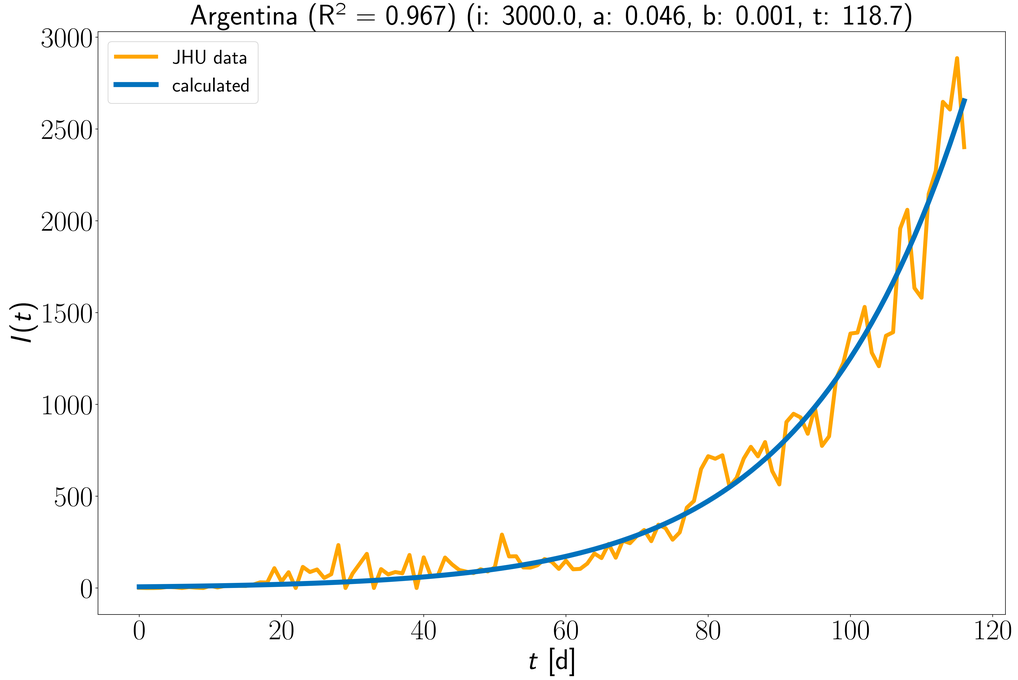
Diagrams of successful modeling attempts with one function of type (1)

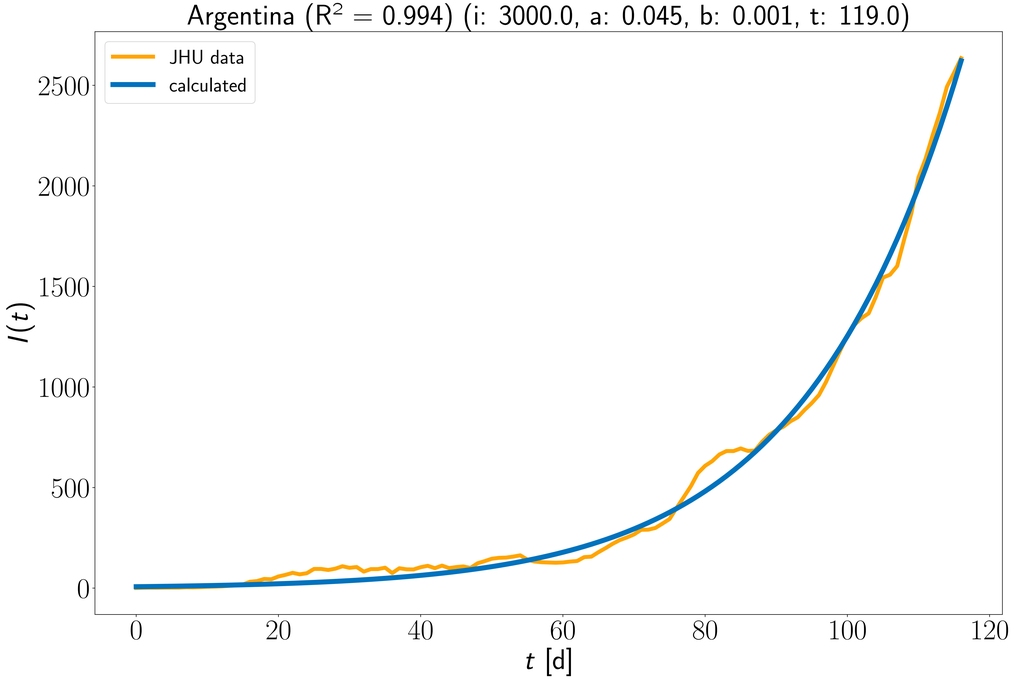
$$\hat{I}(t) = \hat{I}(0)\, e^{\left(ae^{-bt}\right)t} \quad (1)$$

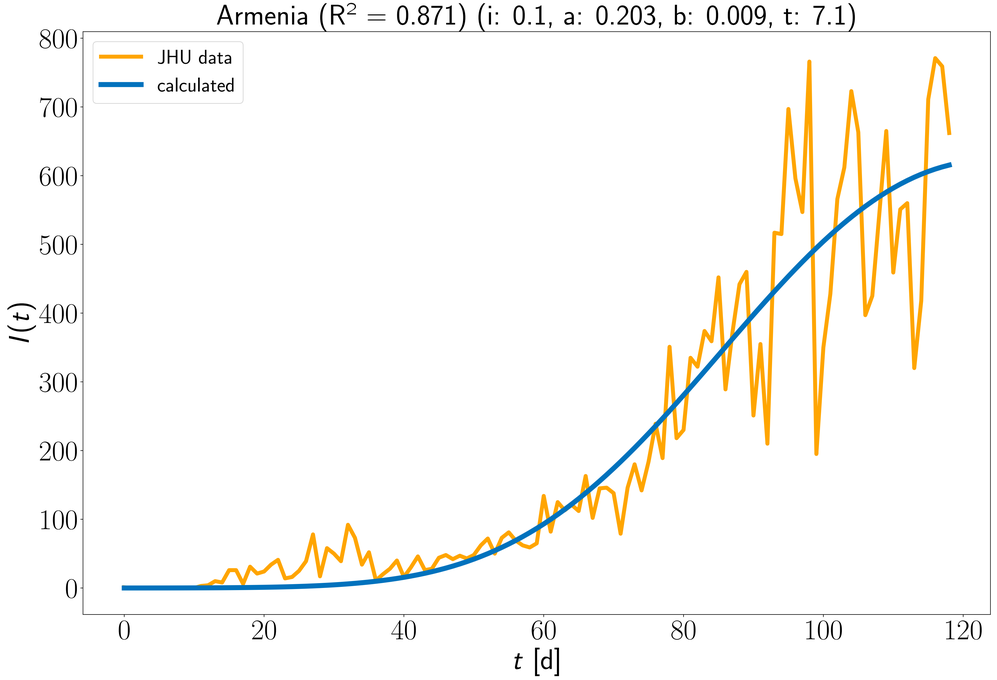
By an automatic procedure, daily infection number developments in all countries and US counties monitored by JHU [9] were modeled using one function of type (1) (status: end of June, 2020). The diagrams of those modeling attempts leading to an R^2 value > 0.97 (for the 7-days averaged data) are shown in the following. As in Fig. 1 of the paper, function parameters for raw data (left diagram) and for 7-days averaged data were determined separately (while for Fig. 2 parameters were determined for 7-days averaged data only).

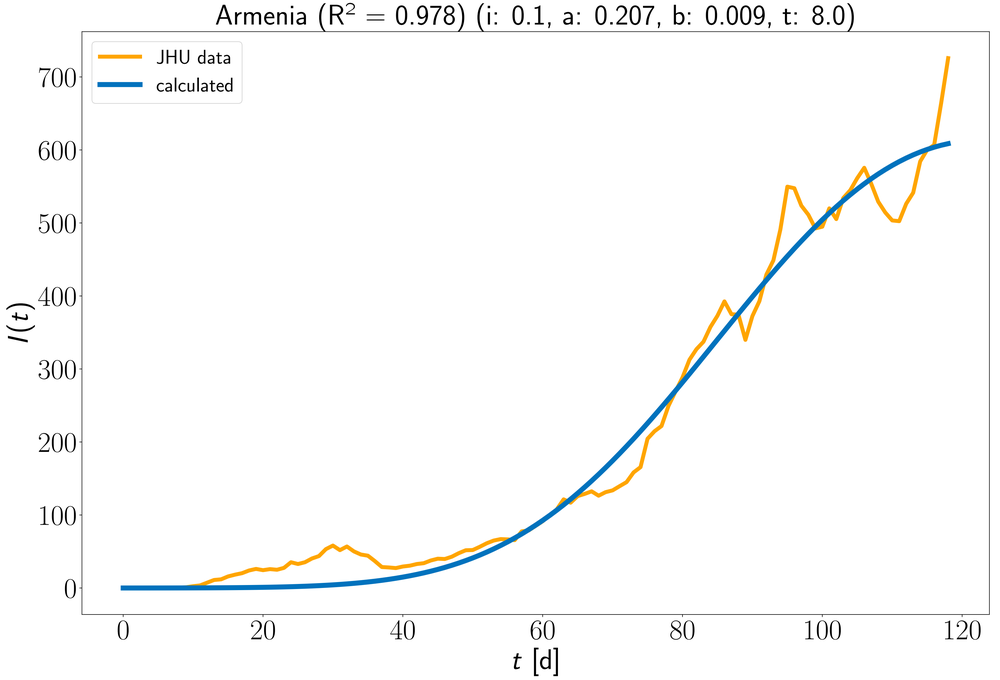

Afghanistan ($R^2 = 0.915$) (i: 0.1, a: 0.412, b: 0.017, t: 40.4)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
0
20
40
60
80
100
120

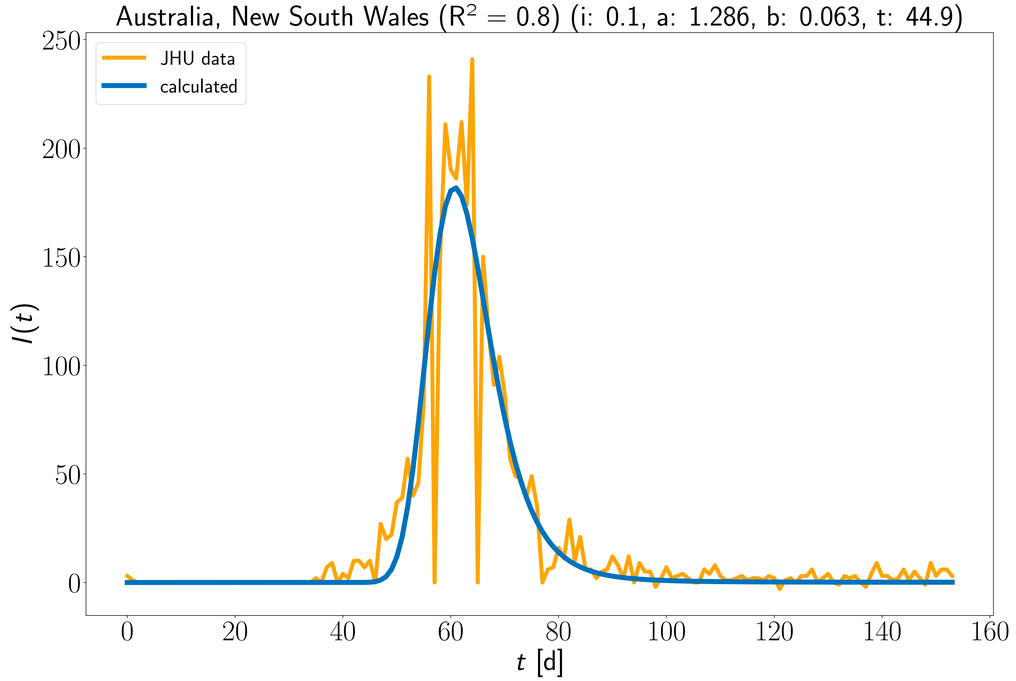

Afghanistan ($R^2 = 0.972$) (i: 0.1, a: 0.404, b: 0.017, t: 39.5)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
0
20
40
60
80
100
120

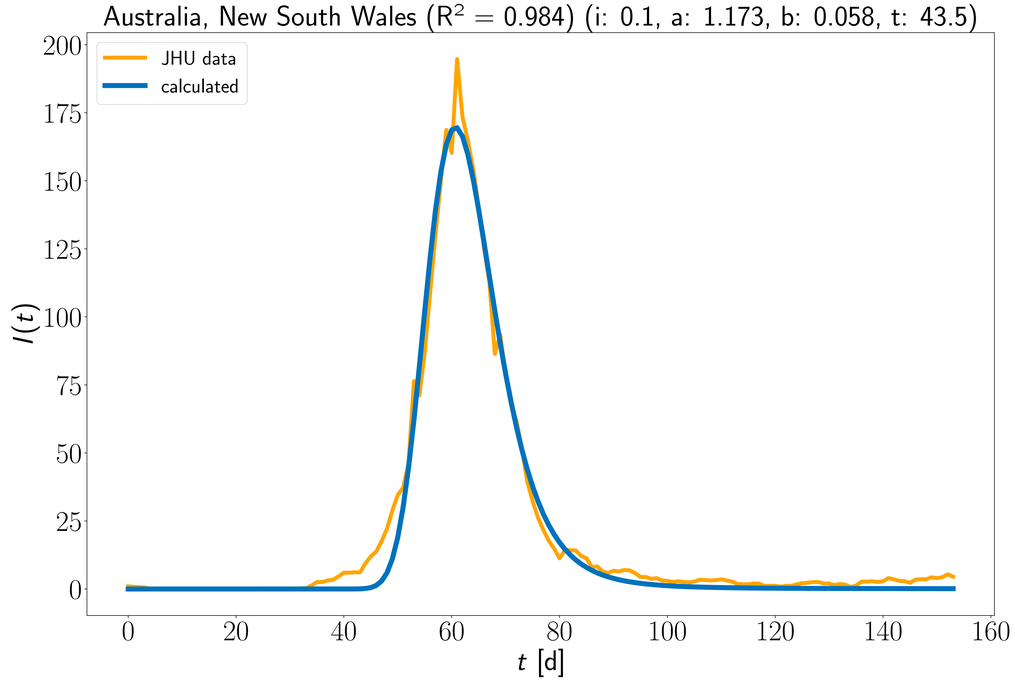

Argentina ($R^2 = 0.967$) (i: 3000.0, a: 0.046, b: 0.001, t: 118.7)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
2500
3000
0
20
40
60
80
100
120

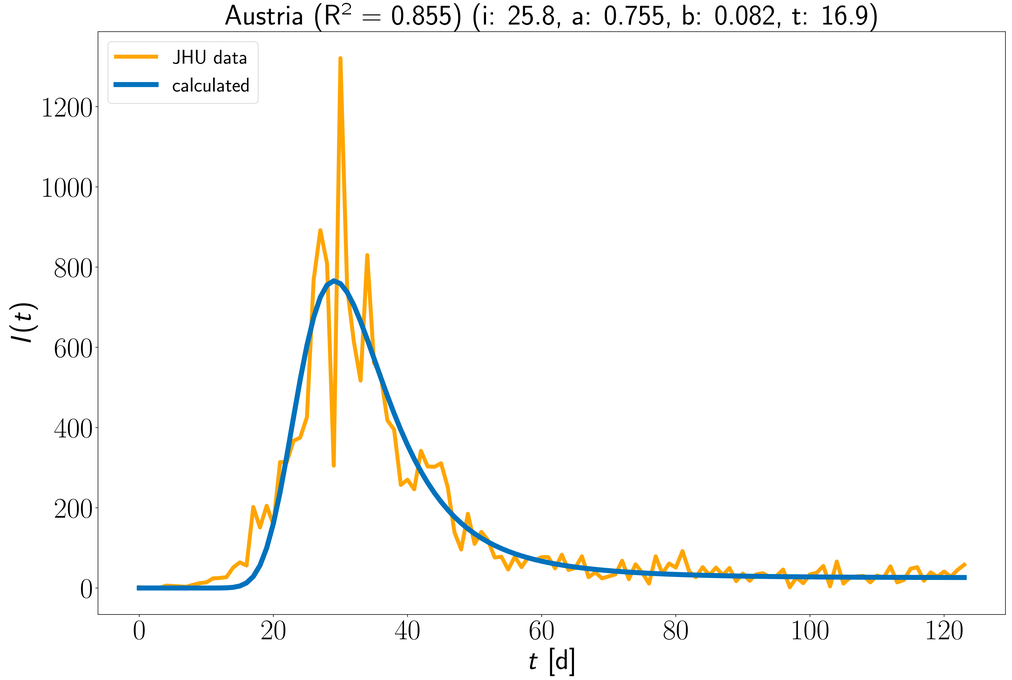

Argentina ($R^2 = 0.994$) (i: 3000.0, a: 0.045, b: 0.001, t: 119.0)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
2500
0
20
40
60
80
100
120

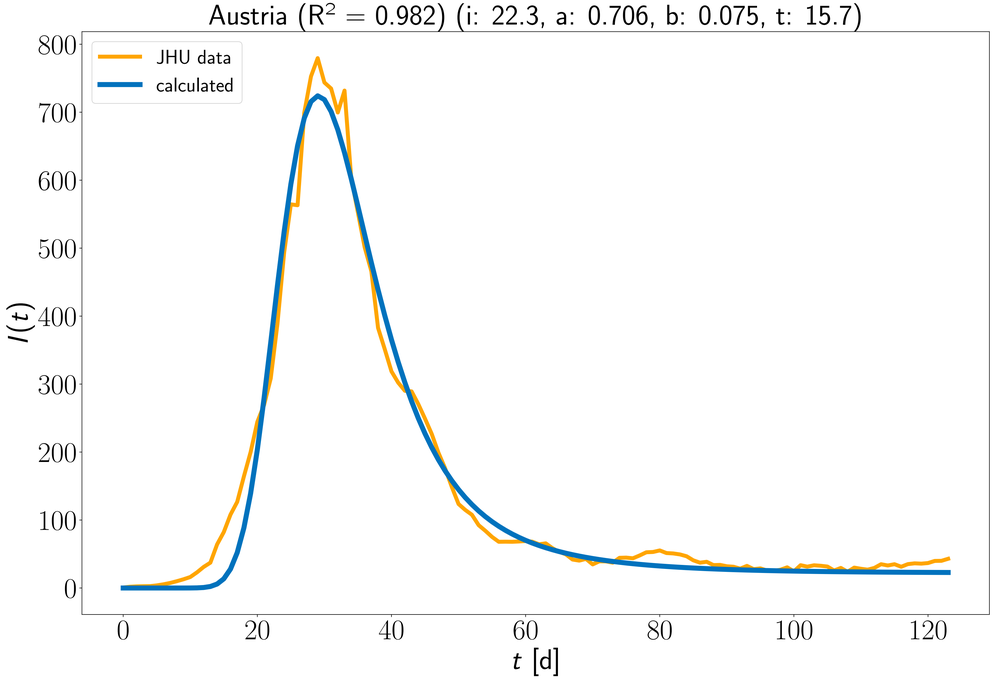

Armenia ($R^2 = 0.871$) (i: 0.1, a: 0.203, b: 0.009, t: 7.1)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
800
0
20
40
60
80
100
120

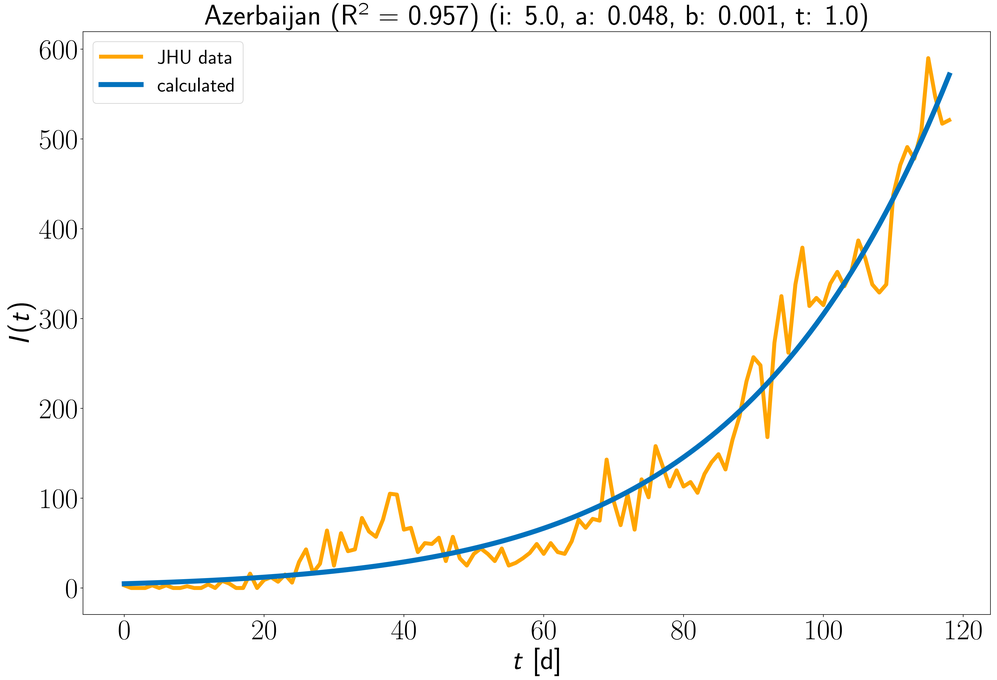

Armenia ($R^2 = 0.978$) (i: 0.1, a: 0.207, b: 0.009, t: 8.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
0
20
40
60
80
100
120

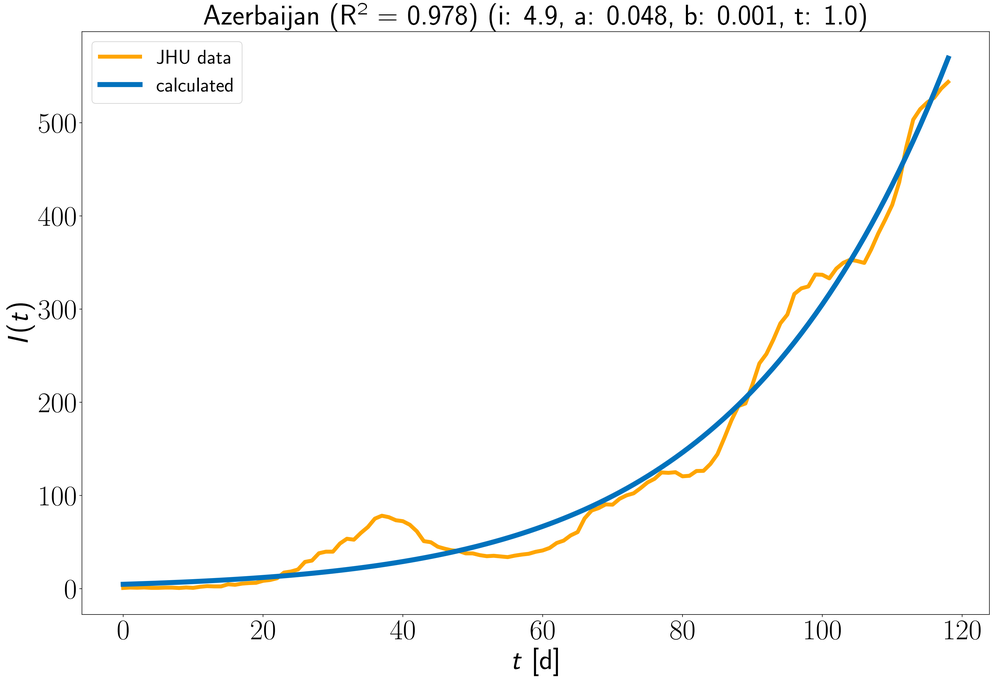

Australia, New South Wales ($R^2 = 0.8$) (i: 0.1, a: 1.286, b: 0.063, t: 44.9)
JHU data
calculated
$I(t)$
t [d]

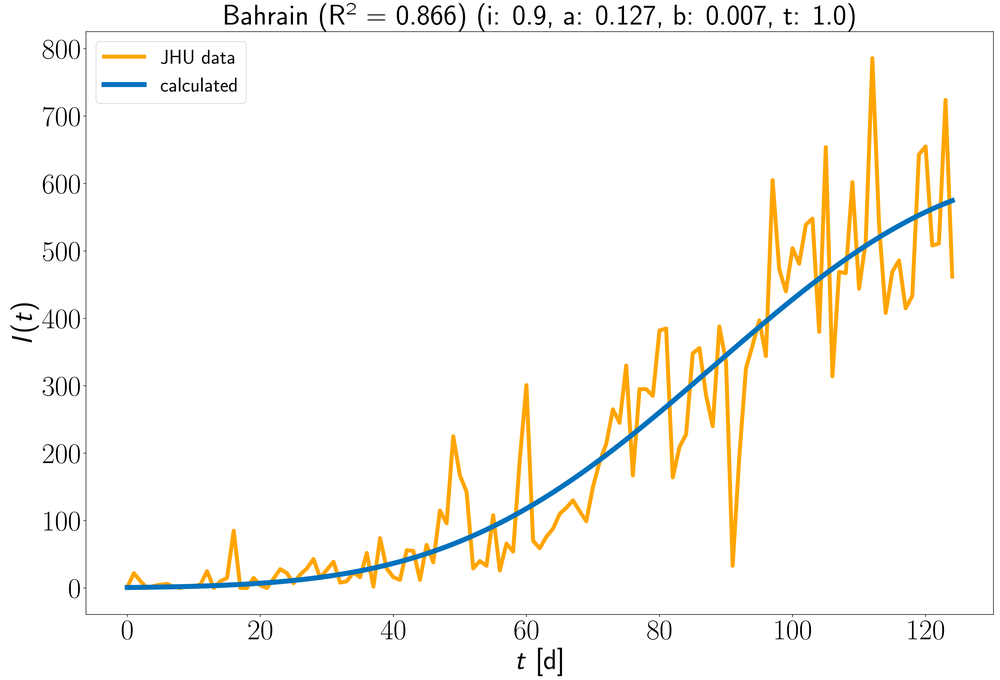

Australia, New South Wales ($R^2 = 0.984$) (i: 0.1, a: 1.173, b: 0.058, t: 43.5)
JHU data
calculated
$I(t)$
t [d]

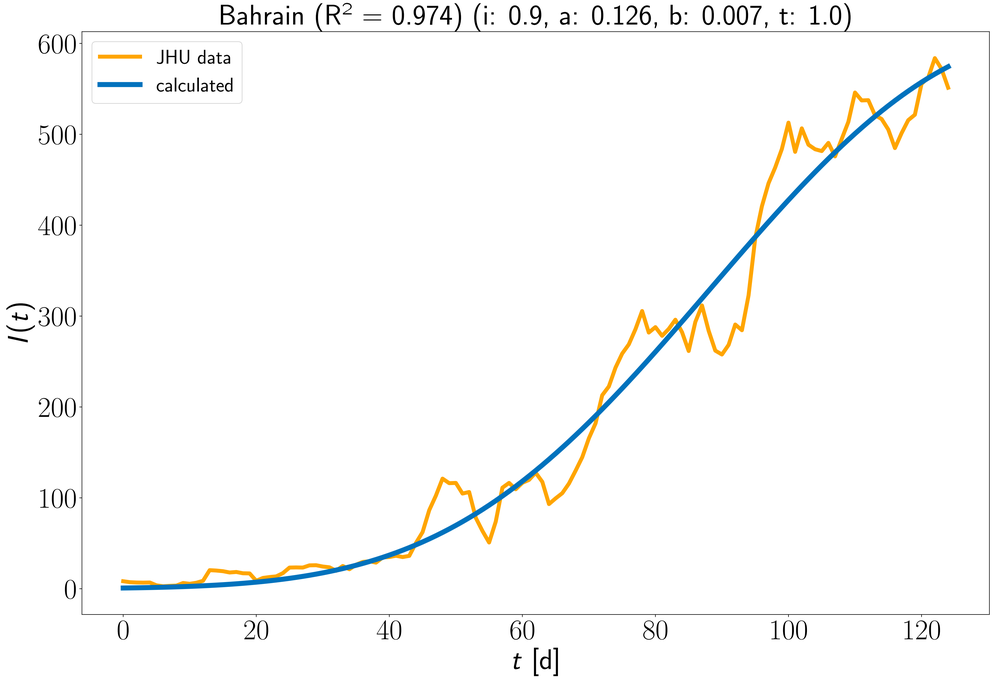

Austria ($R^2 = 0.855$) (i: 25.8, a: 0.755, b: 0.082, t: 16.9)
JHU data
calculated
$I(t)$
t [d]

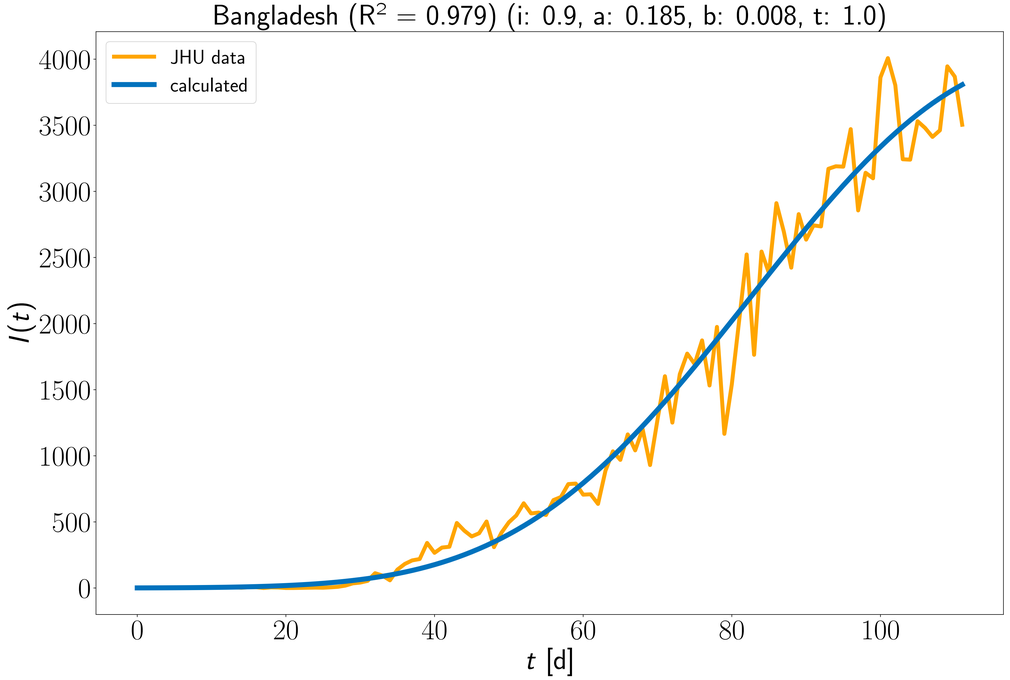

Austria ($R^2 = 0.982$) (i: 22.3, a: 0.706, b: 0.075, t: 15.7)
JHU data
calculated
$I(t)$
t [d]

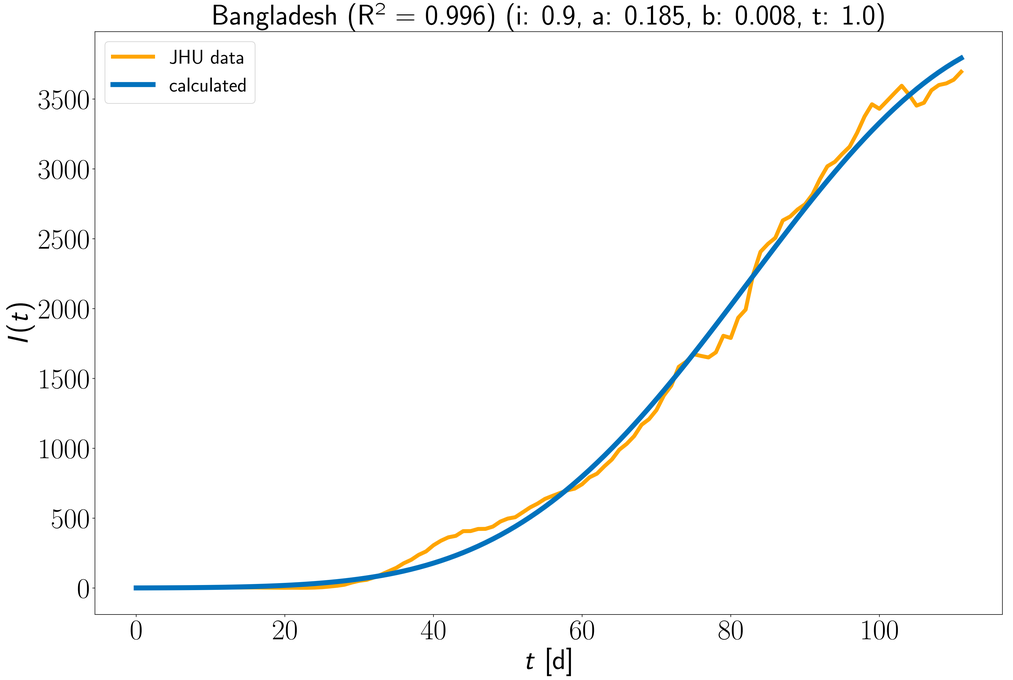

Azerbaijan ($R^2 = 0.957$) (i: 5.0, a: 0.048, b: 0.001, t: 1.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
0
20
40
60
80
100
120

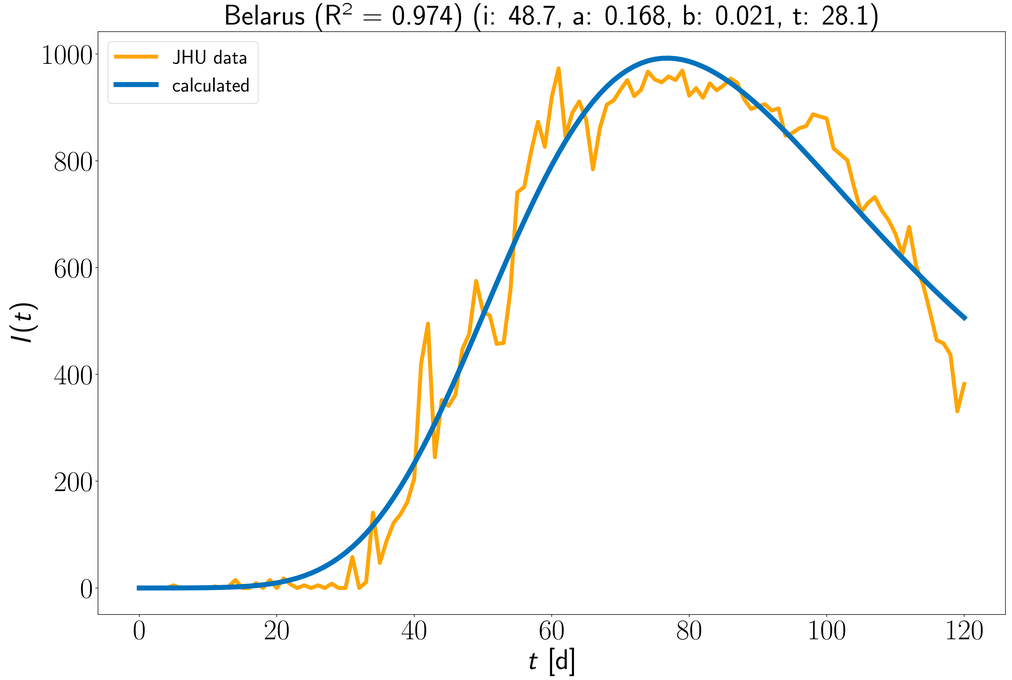

Azerbaijan ($R^2 = 0.978$) (i: 4.9, a: 0.048, b: 0.001, t: 1.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
0
20
40
60
80
100
120

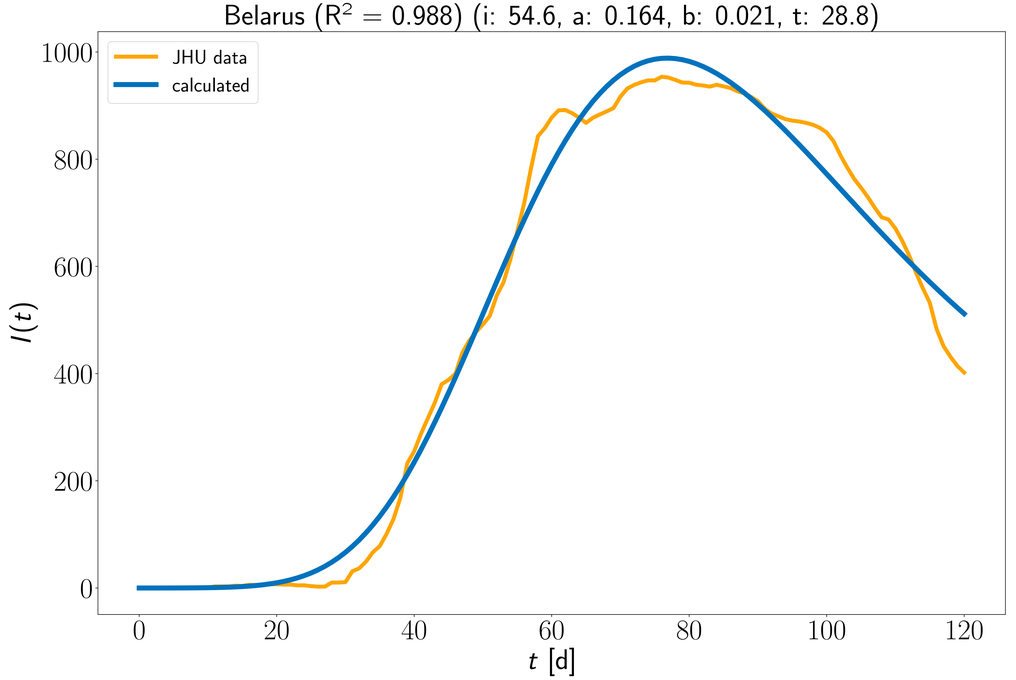

Bahrain ($R^2 = 0.866$) (i: 0.9, a: 0.127, b: 0.007, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

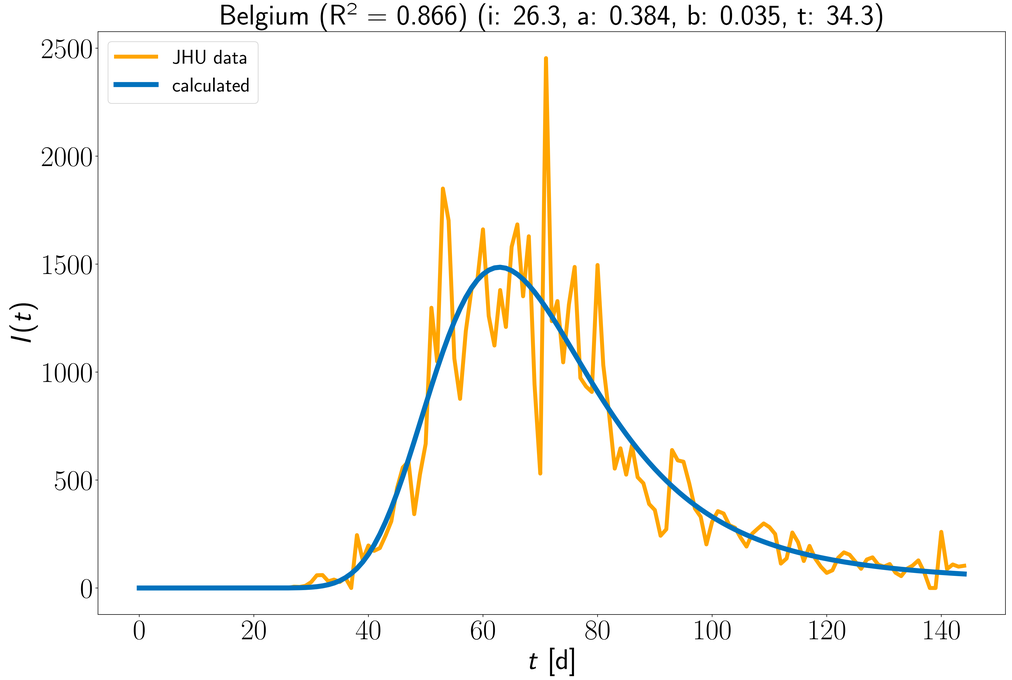

Bahrain ($R^2 = 0.974$) (i: 0.9, a: 0.126, b: 0.007, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

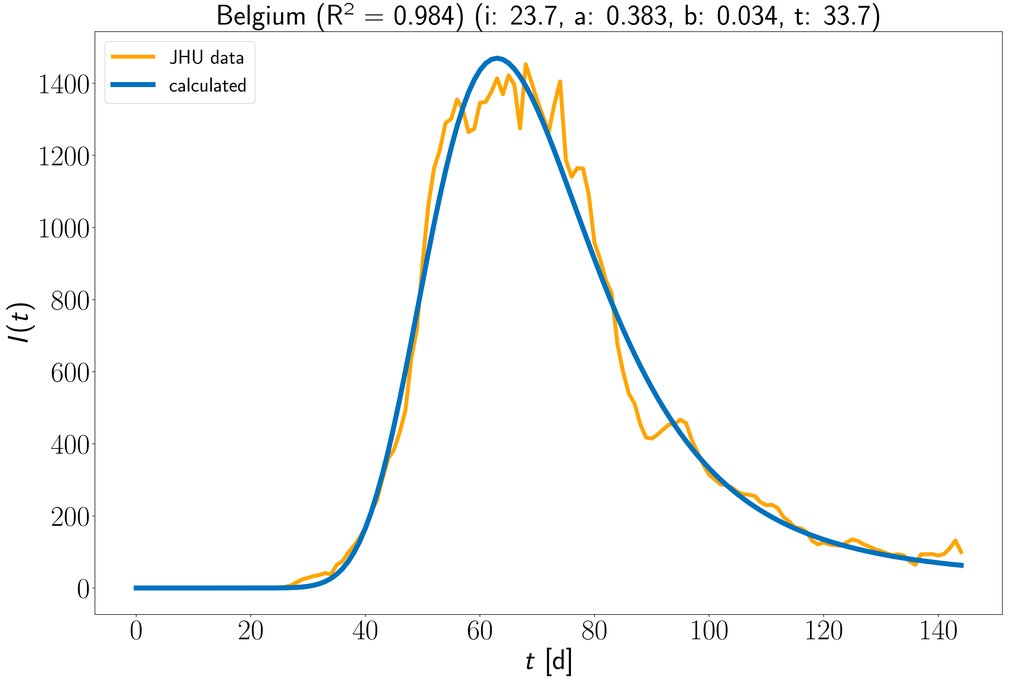

Bangladesh ($R^2 = 0.979$) (i: 0.9, a: 0.185, b: 0.008, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

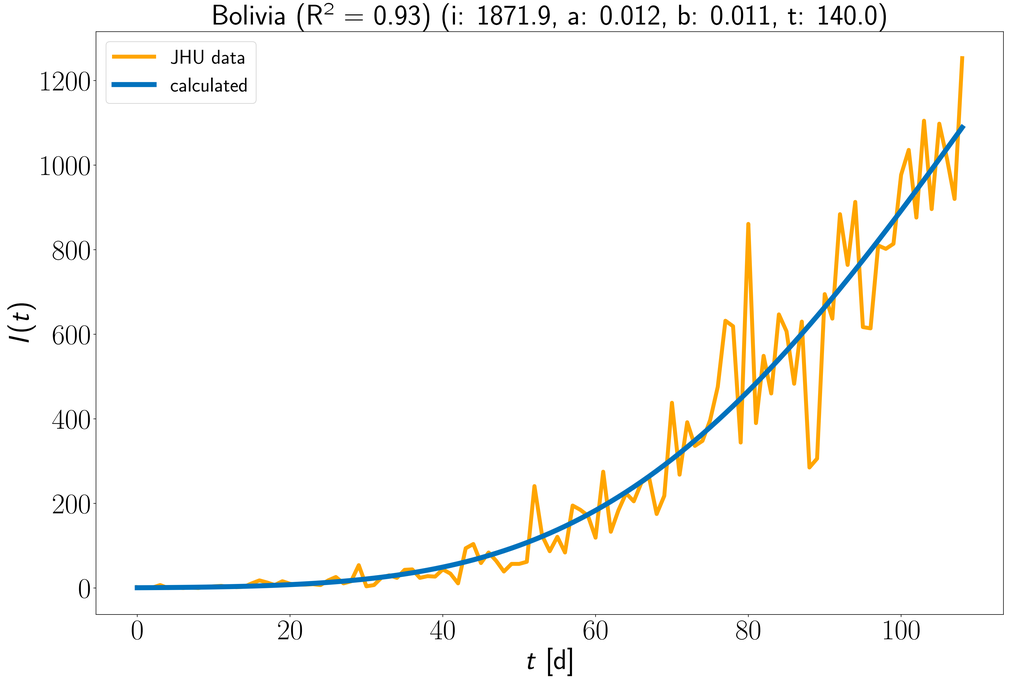

Bangladesh ($R^2 = 0.996$) (i: 0.9, a: 0.185, b: 0.008, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

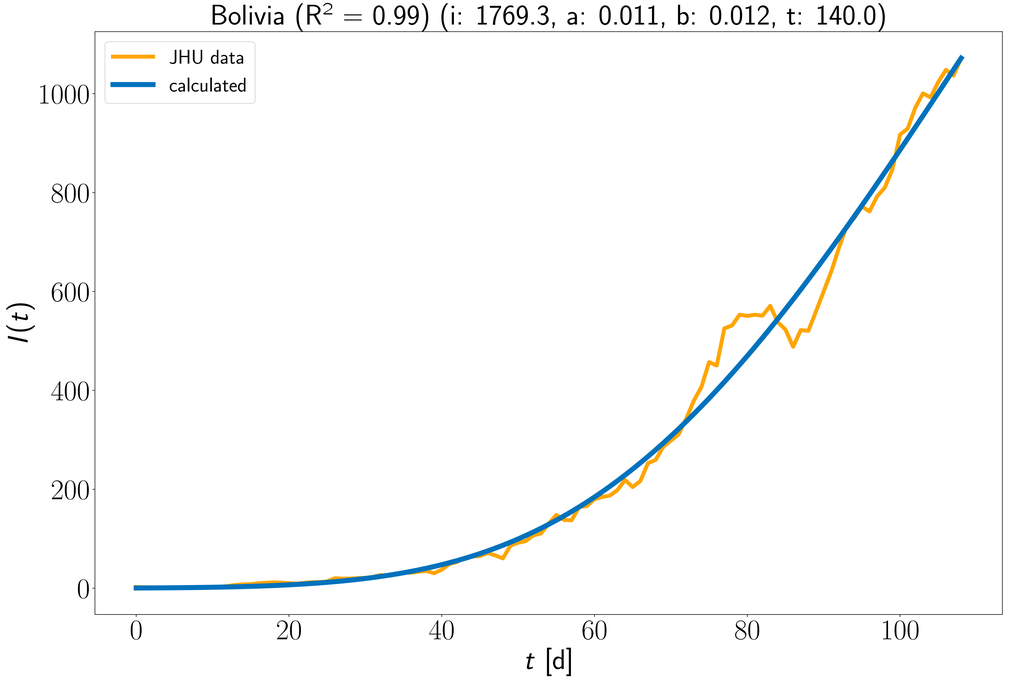

Belarus ($R^2 = 0.974$) (i: 48.7, a: 0.168, b: 0.021, t: 28.1)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100
120


Belarus ($R^2 = 0.988$) (i: 54.6, a: 0.164, b: 0.021, t: 28.8)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100
120


Belgium ($R^2 = 0.866$) (i: 26.3, a: 0.384, b: 0.035, t: 34.3)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
2500
0
20
40
60
80
100
120
140


Belgium ($R^2 = 0.984$) (i: 23.7, a: 0.383, b: 0.034, t: 33.7)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
1200
1400
0
20
40
60
80
100
120
140


Bolivia ($R^2 = 0.93$) (i: 1871.9, a: 0.012, b: 0.011, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
1200
0
20
40
60
80
100


Bolivia ($R^2 = 0.99$) (i: 1769.3, a: 0.011, b: 0.012, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
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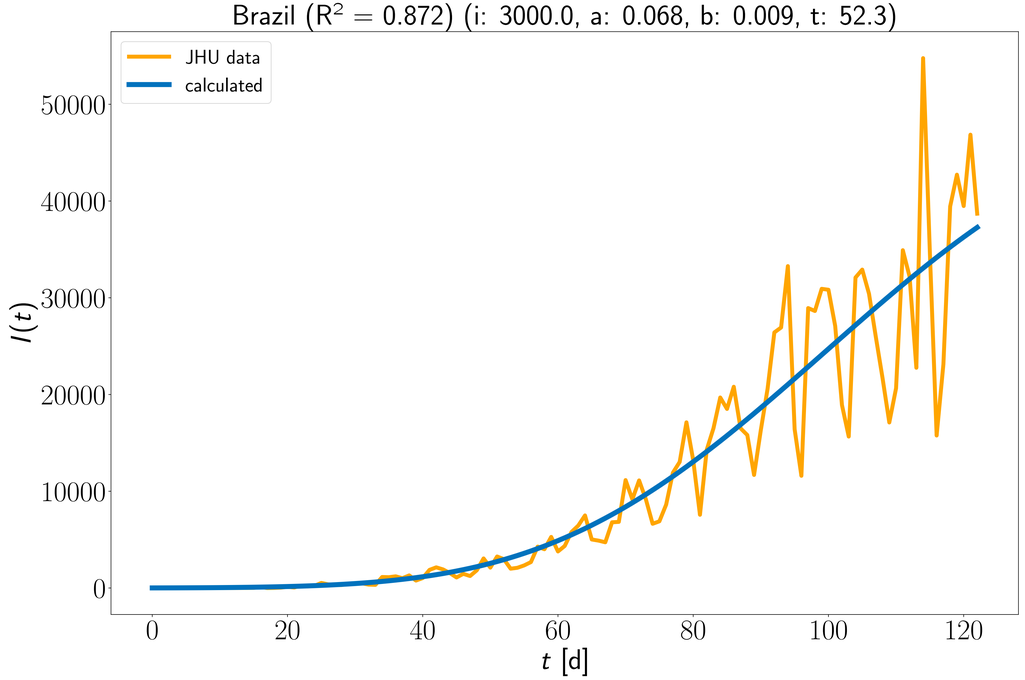
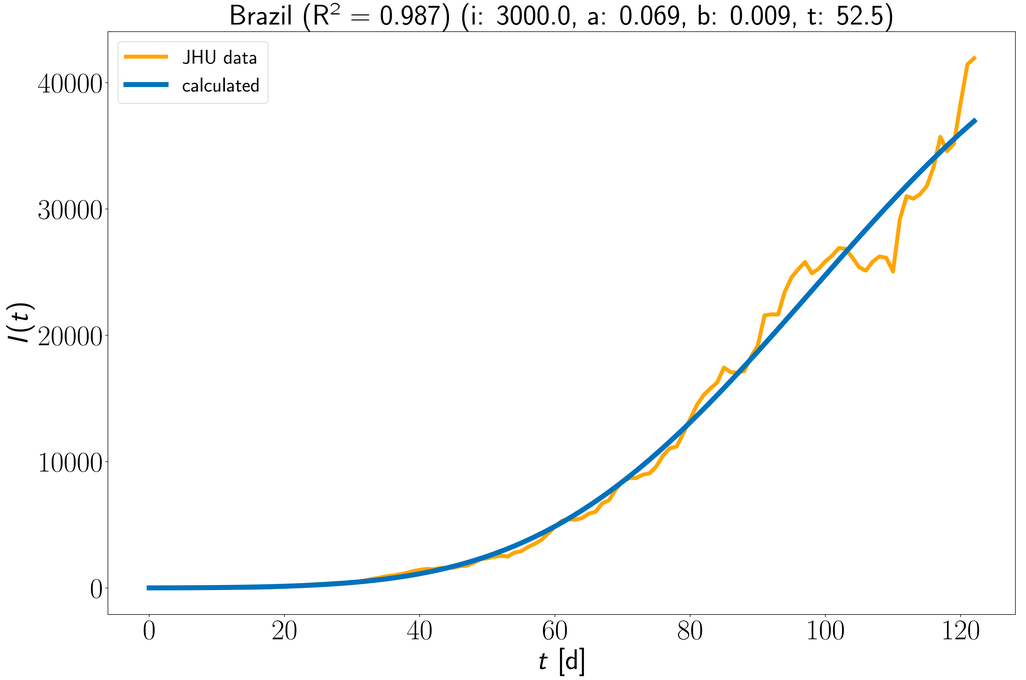
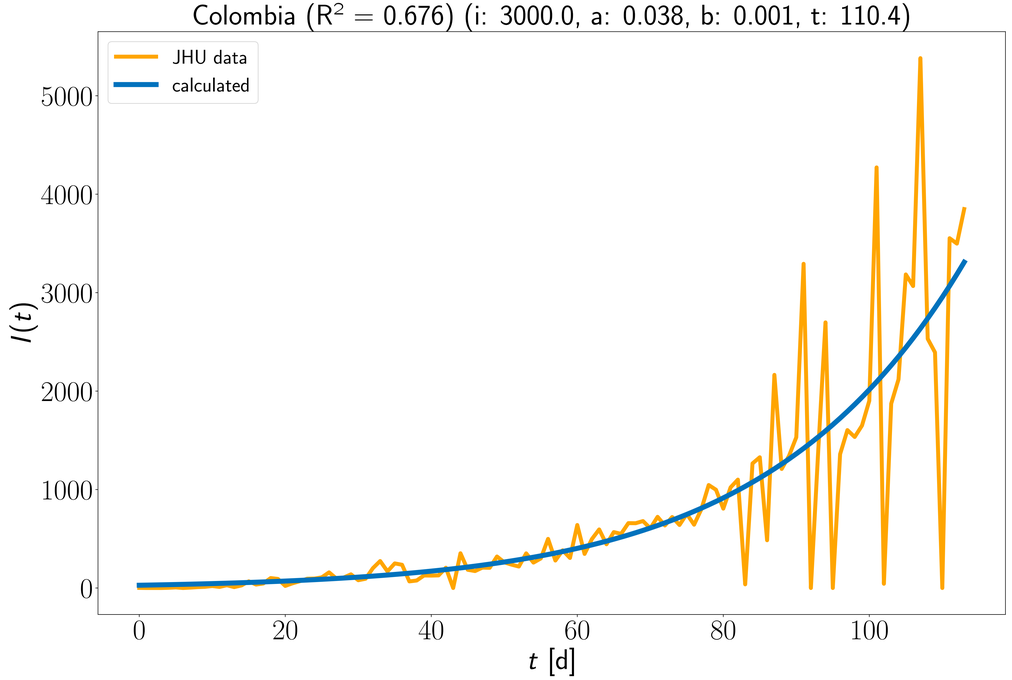
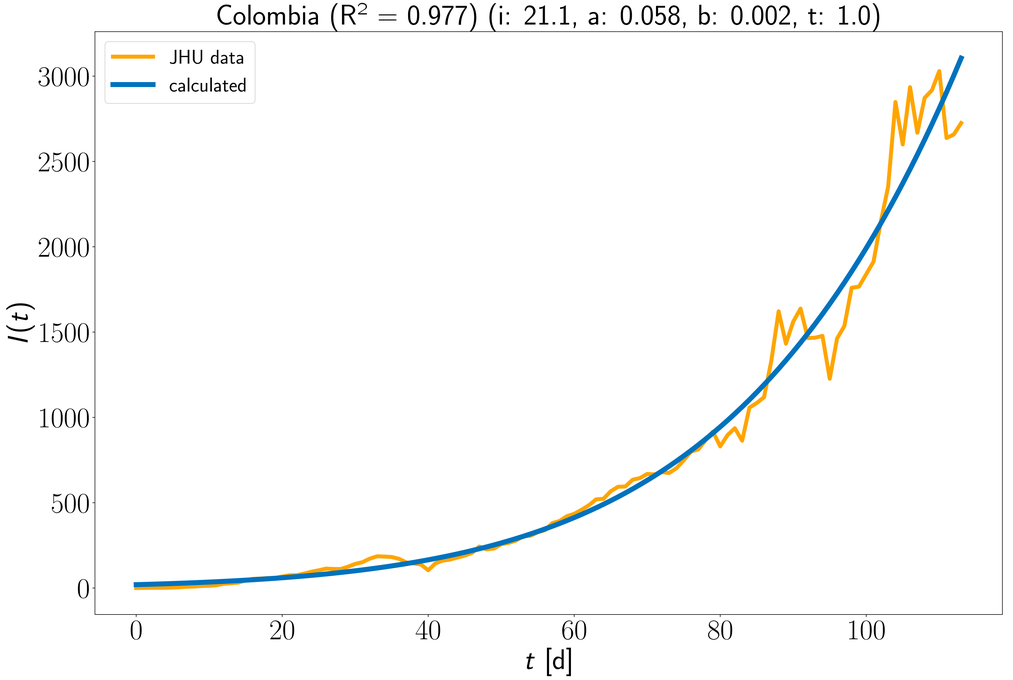
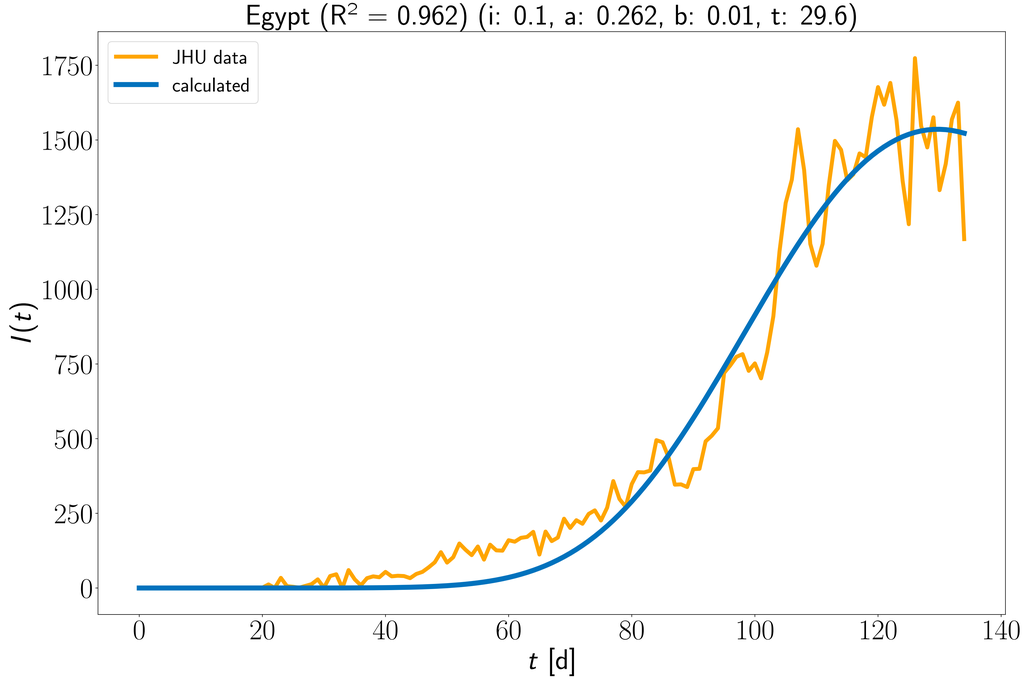
20
40
60
80
100

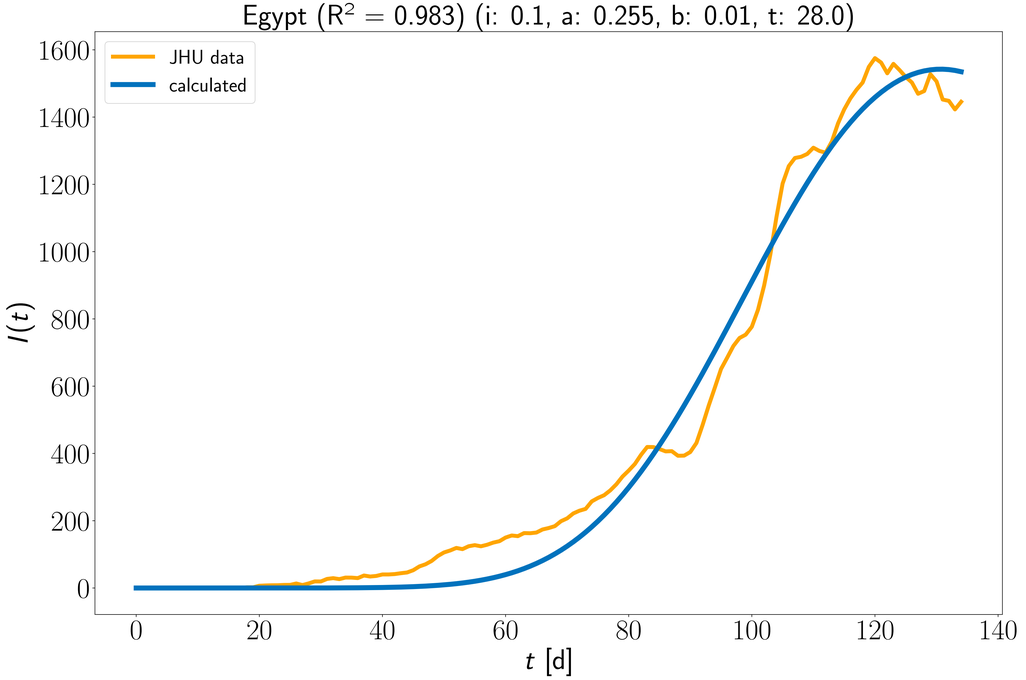

Brazil ($R^2 = 0.872$) (i: 3000.0, a: 0.068, b: 0.009, t: 52.3)
JHU data
calculated
50000
40000
30000
20000
10000
0
$I(t)$
0
20
40
60
80
100
120
t [d]

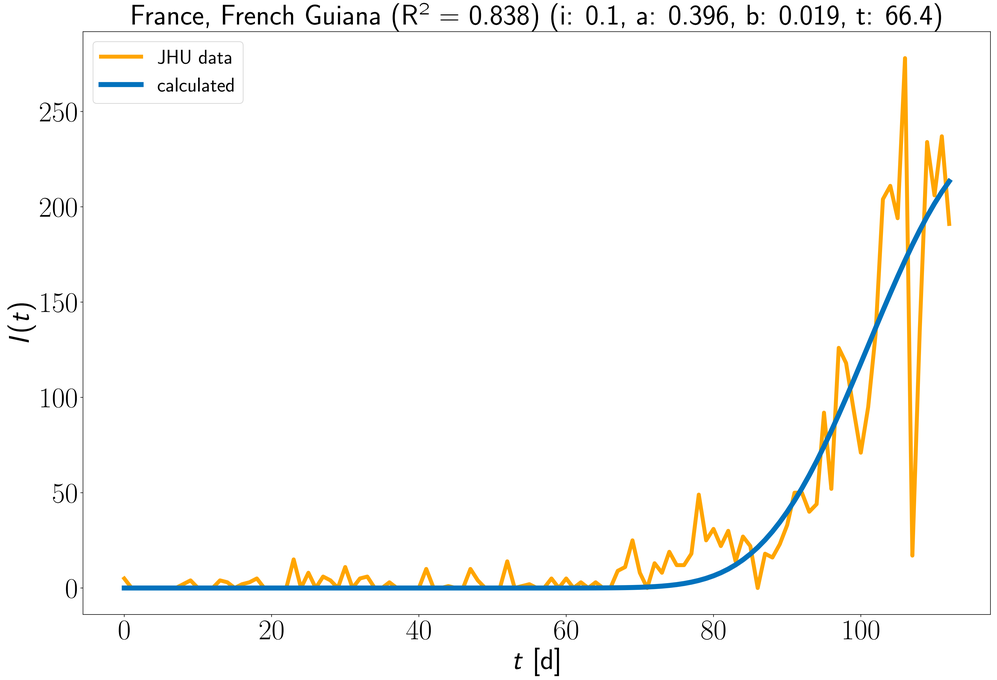

Brazil ($R^2 = 0.987$) (i: 3000.0, a: 0.069, b: 0.009, t: 52.5)
JHU data
calculated
40000
30000
20000
10000
0
$I(t)$
0
20
40
60
80
100
120
t [d]

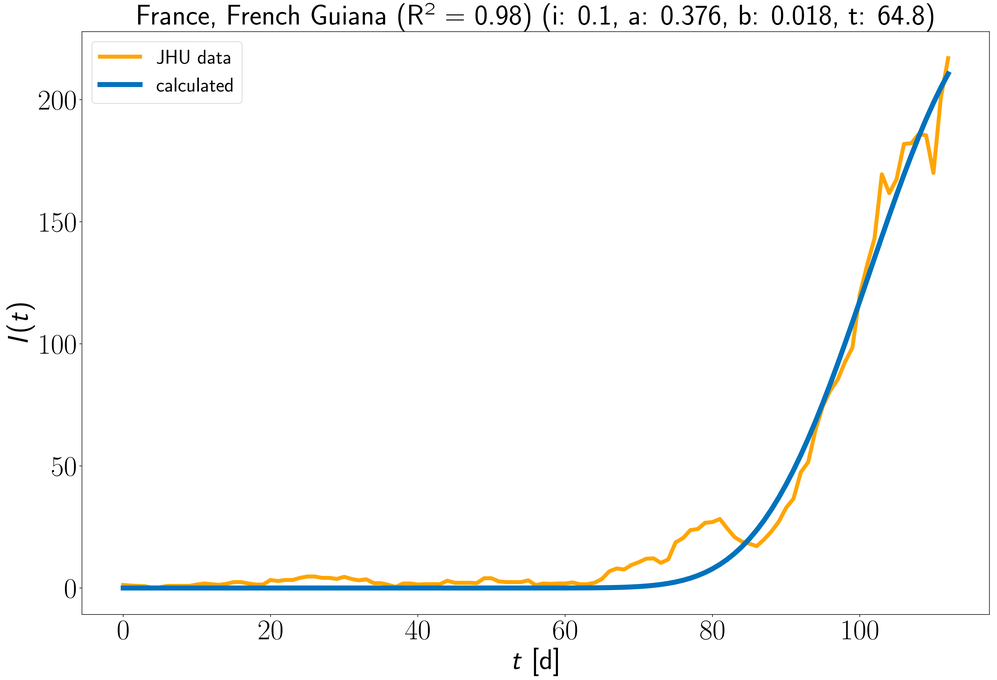

Colombia ($R^2 = 0.676$) (i: 3000.0, a: 0.038, b: 0.001, t: 110.4)
JHU data
calculated
$I(t)$
t [d]
0
1000
2000
3000
4000
5000
0
20
40
60
80
100

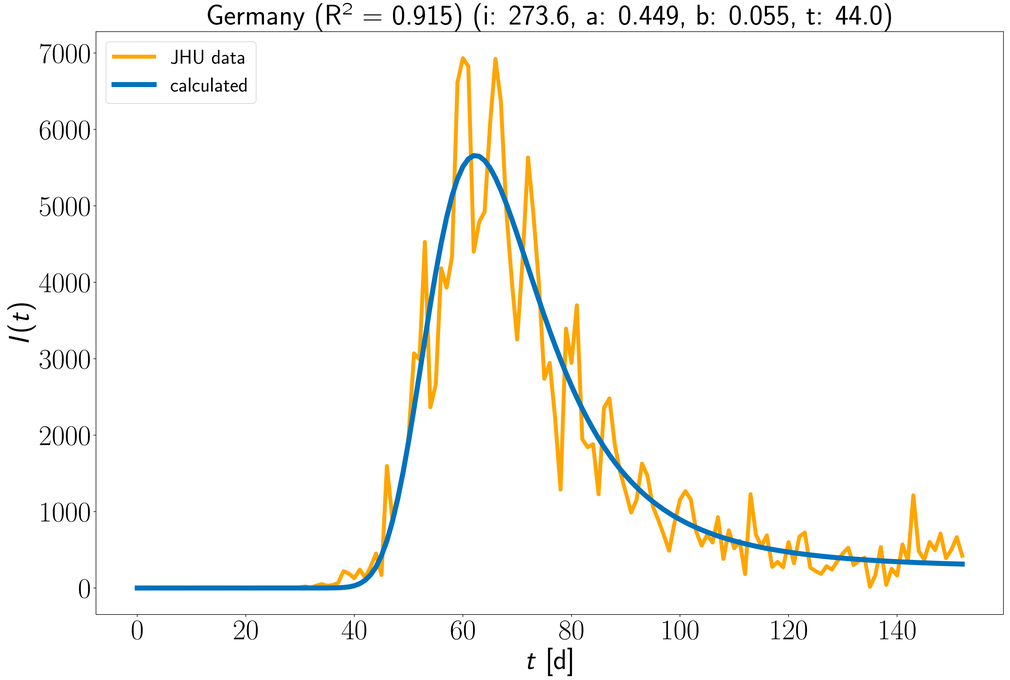

Colombia ($R^2 = 0.977$) (i: 21.1, a: 0.058, b: 0.002, t: 1.0)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
2500
3000
0
20
40
60
80
100

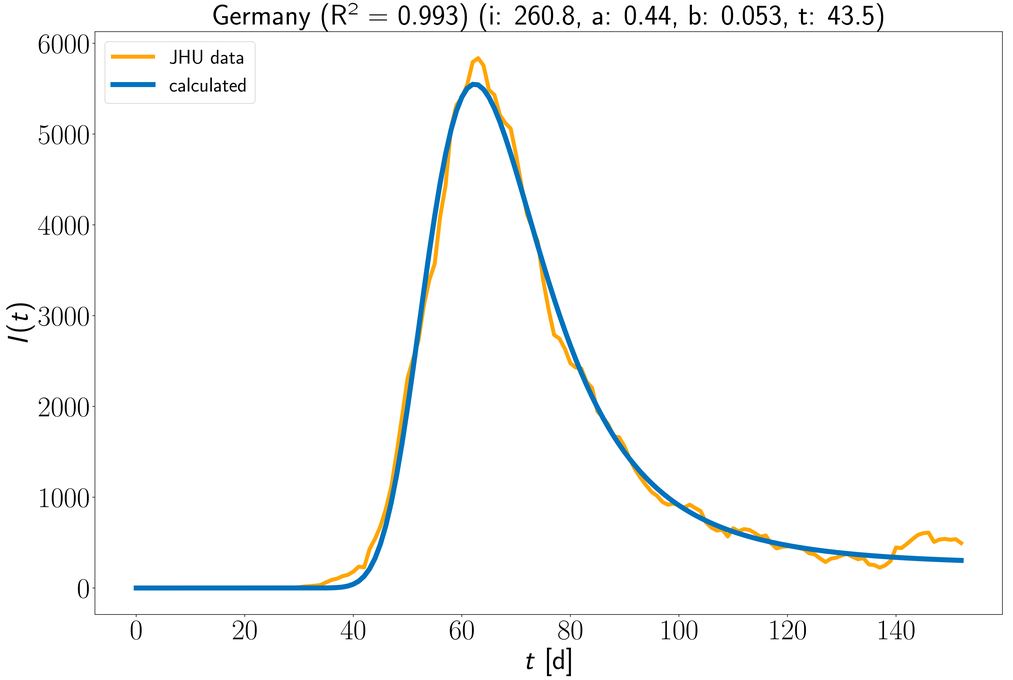

Egypt ($R^2 = 0.962$) (i: 0.1, a: 0.262, b: 0.01, t: 29.6)
JHU data
calculated
$I(t)$
t [d]

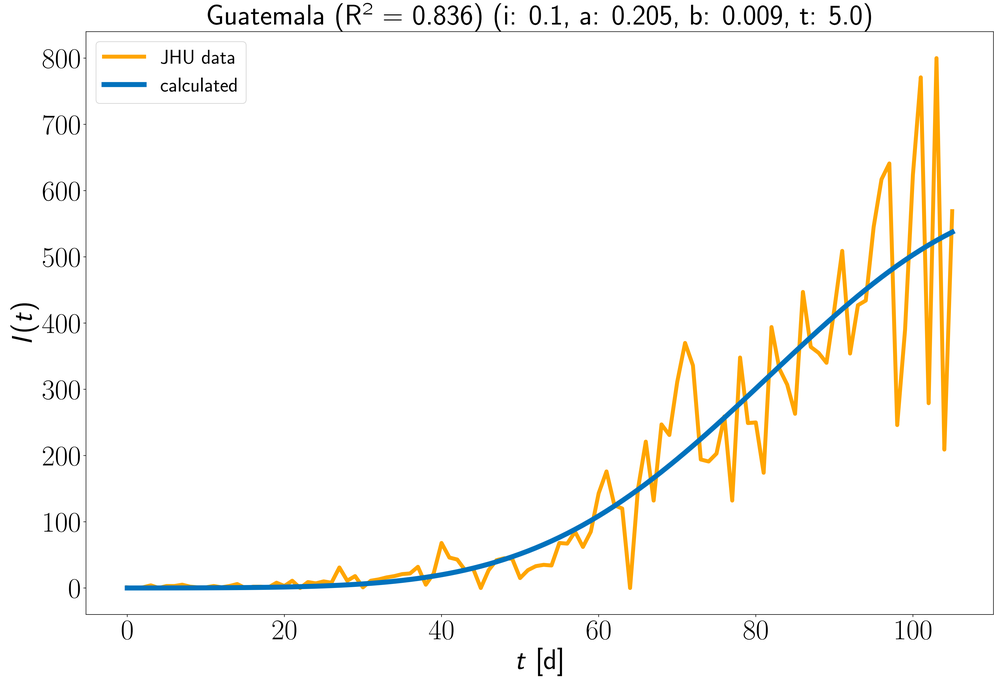

Egypt ($R^2 = 0.983$) (i: 0.1, a: 0.255, b: 0.01, t: 28.0)
JHU data
calculated
$I(t)$
t [d]

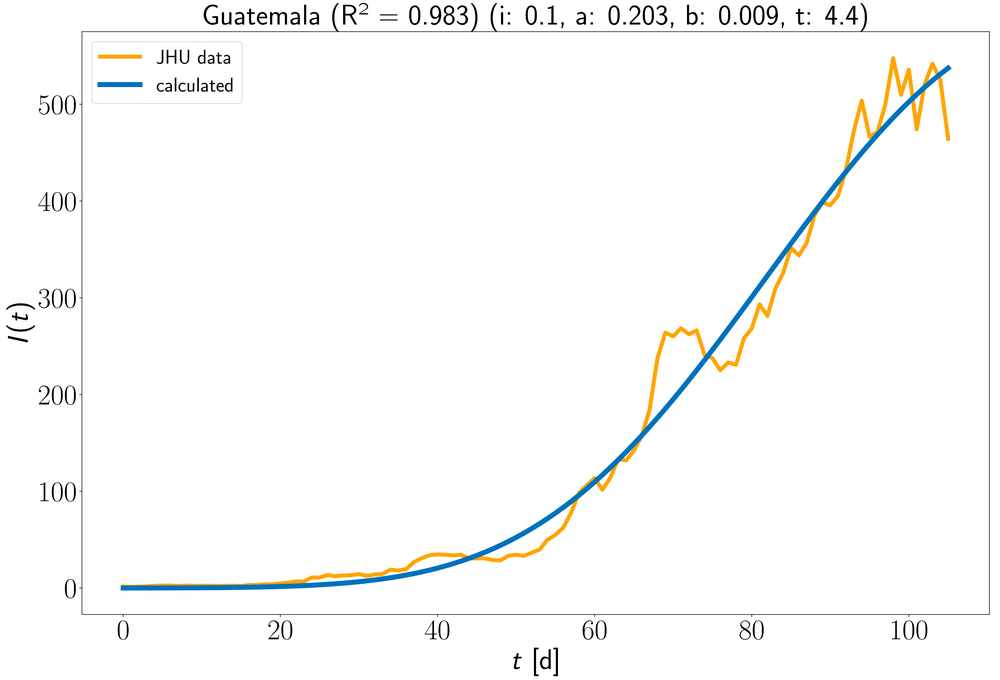

France, French Guiana ($R^2 = 0.838$) (i: 0.1, a: 0.396, b: 0.019, t: 66.4)
JHU data
calculated
$I(t)$
t [d]

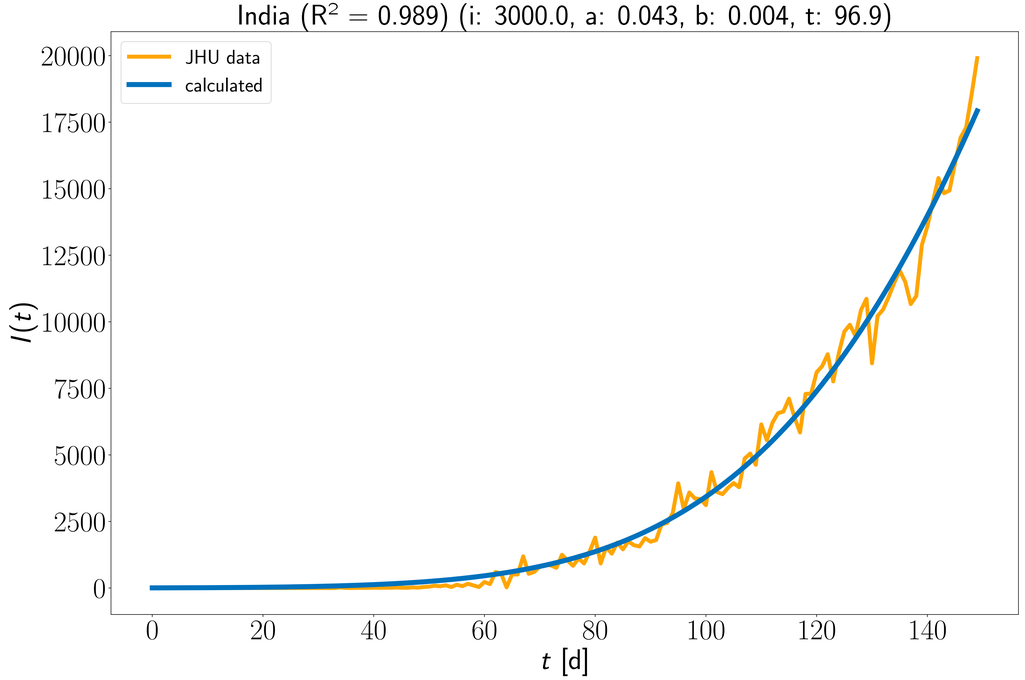

France, French Guiana ($R^2 = 0.98$) (i: 0.1, a: 0.376, b: 0.018, t: 64.8)
JHU data
calculated
$I(t)$
t [d]

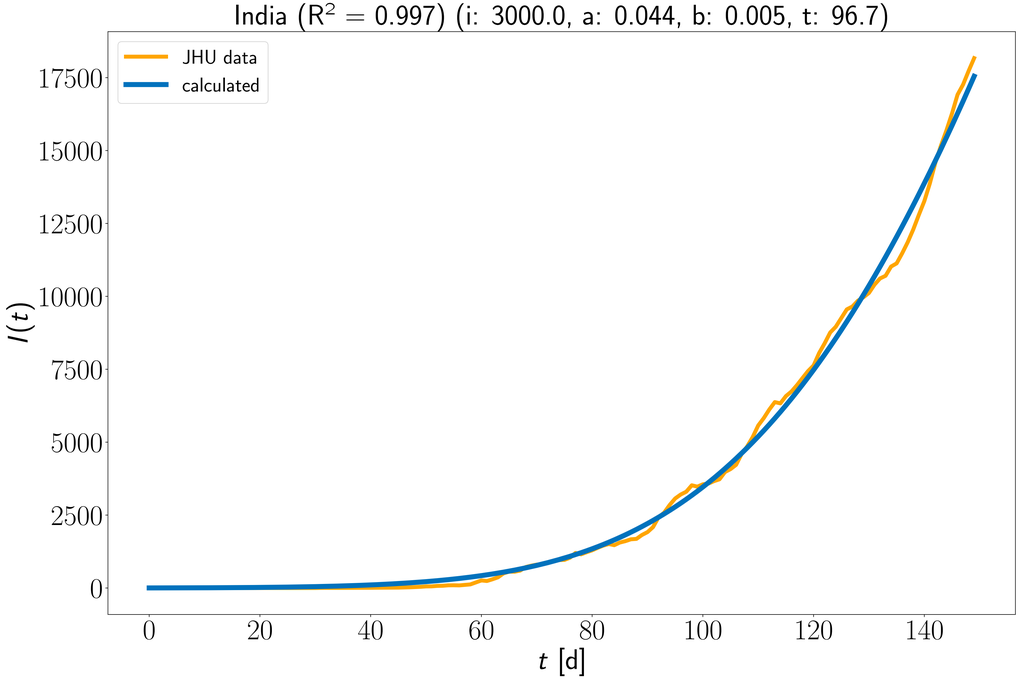

Germany ($R^2 = 0.915$) (i: 273.6, a: 0.449, b: 0.055, t: 44.0)
JHU data
calculated
$I(t)$
t [d]

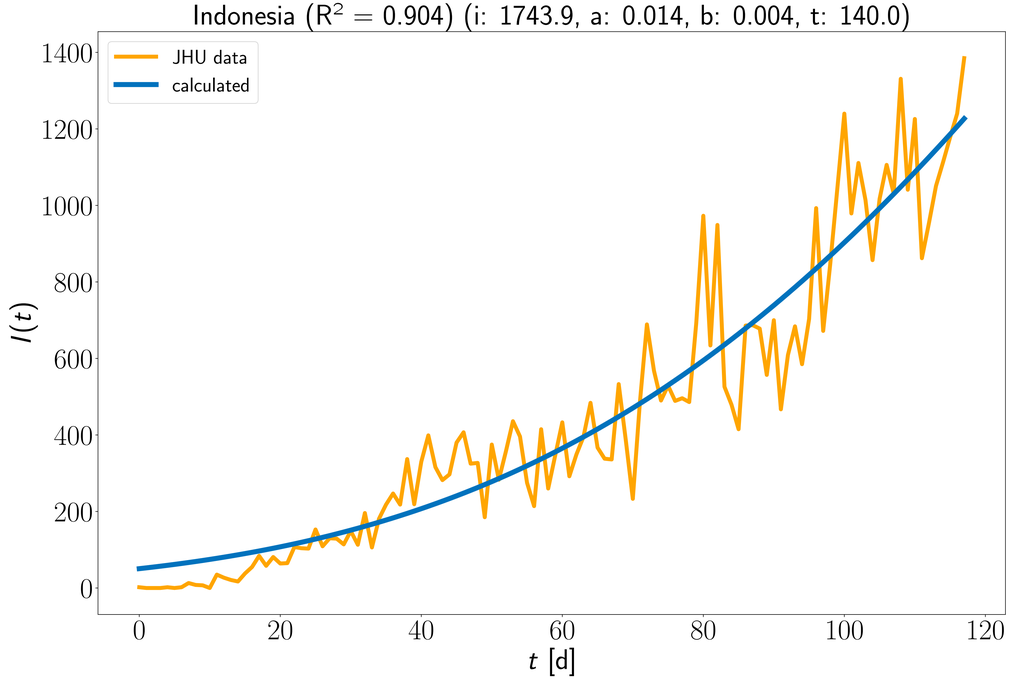

Germany ($R^2 = 0.993$) (i: 260.8, a: 0.44, b: 0.053, t: 43.5)
JHU data
calculated
$I(t)$
t [d]

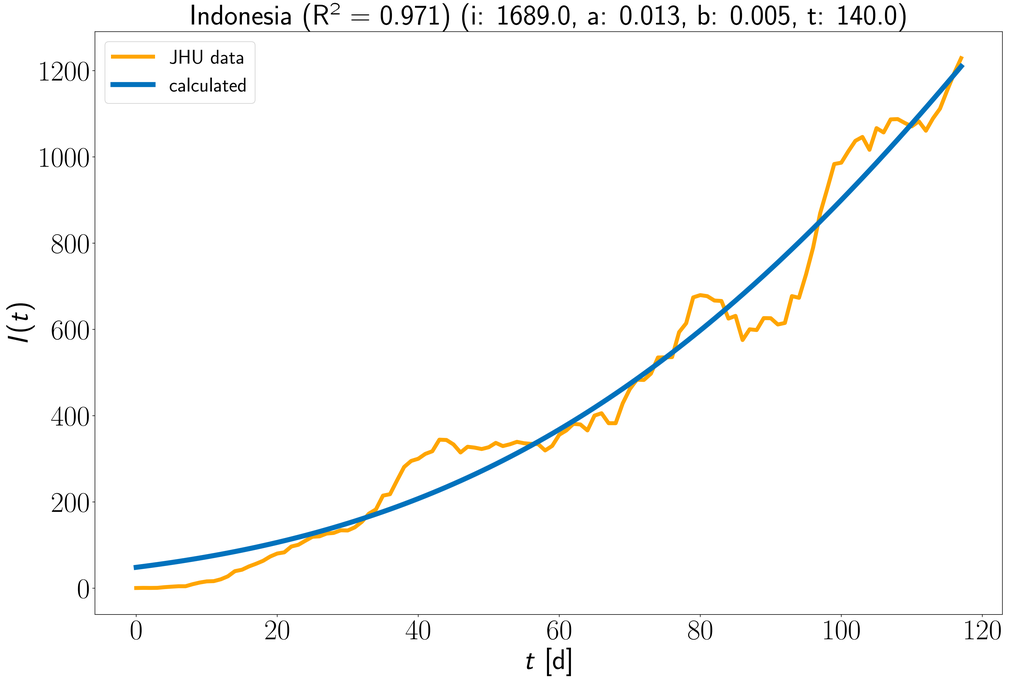

Guatemala ($R^2 = 0.836$) (i: 0.1, a: 0.205, b: 0.009, t: 5.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
800
0
20
40
60
80
100

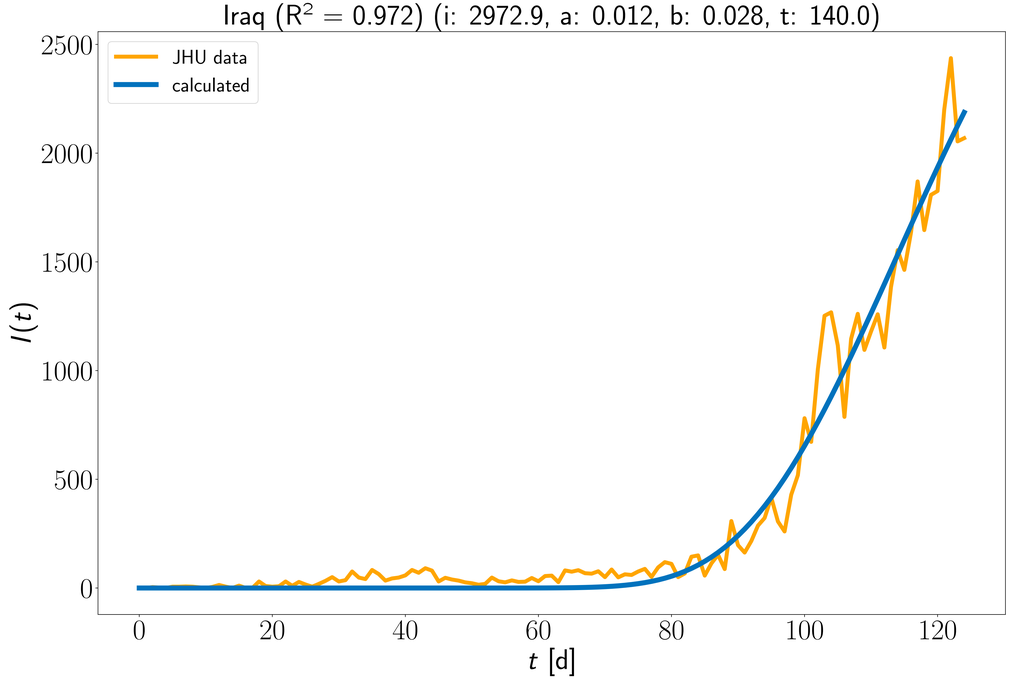

Guatemala ($R^2 = 0.983$) (i: 0.1, a: 0.203, b: 0.009, t: 4.4)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
0
20
40
60
80
100

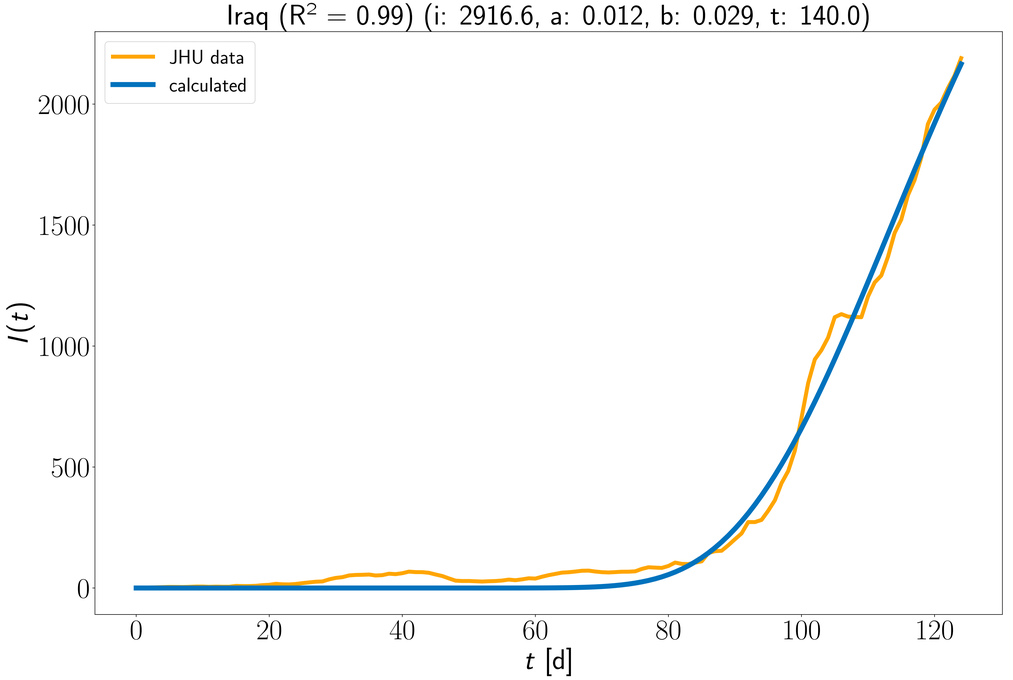

India (R^2 = 0.989) (i: 3000.0, a: 0.043, b: 0.004, t: 96.9)
JHU data
calculated
$I(t)$
t [d]

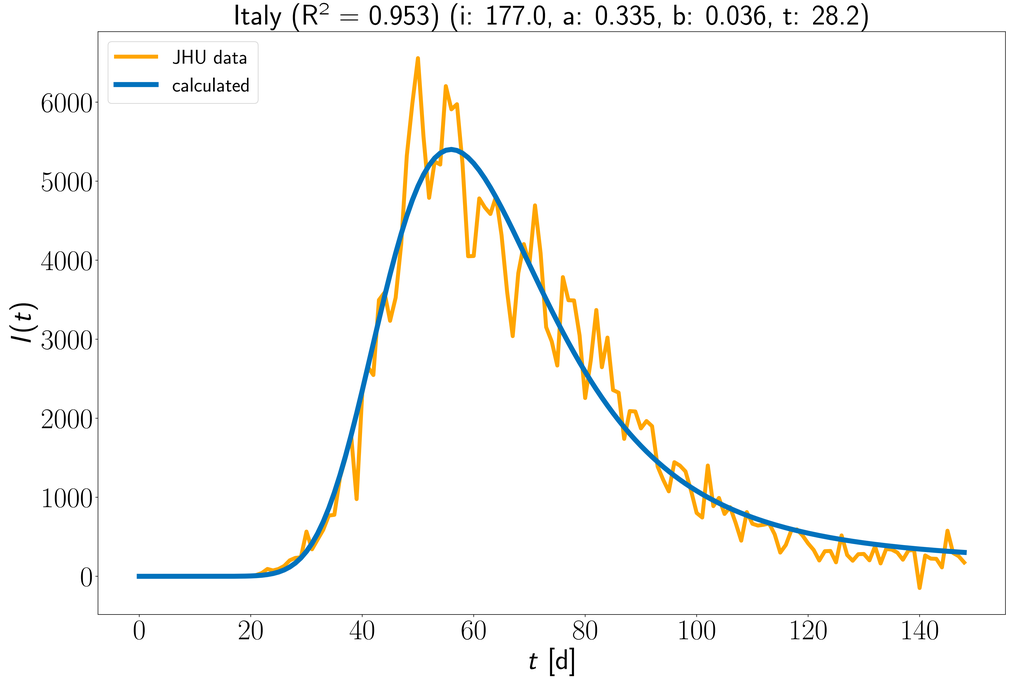

India (R^2 = 0.997) (i: 3000.0, a: 0.044, b: 0.005, t: 96.7)
JHU data
calculated
$I(t)$
t [d]

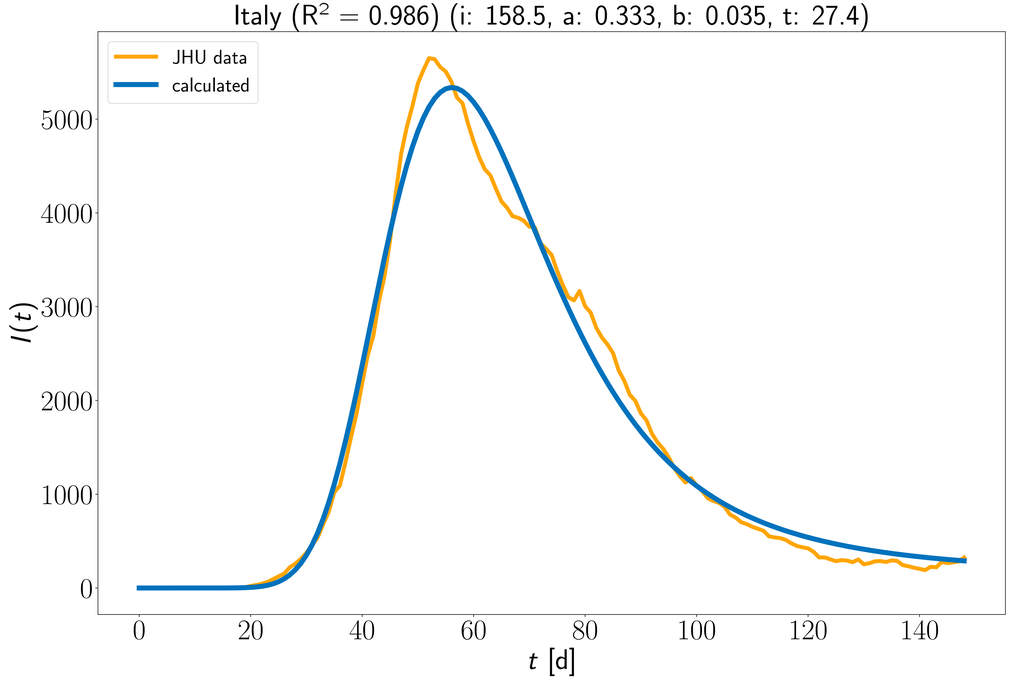

Indonesia ($R^2 = 0.904$) (i: 1743.9, a: 0.014, b: 0.004, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
1200
1400
0
20
40
60
80
100
120

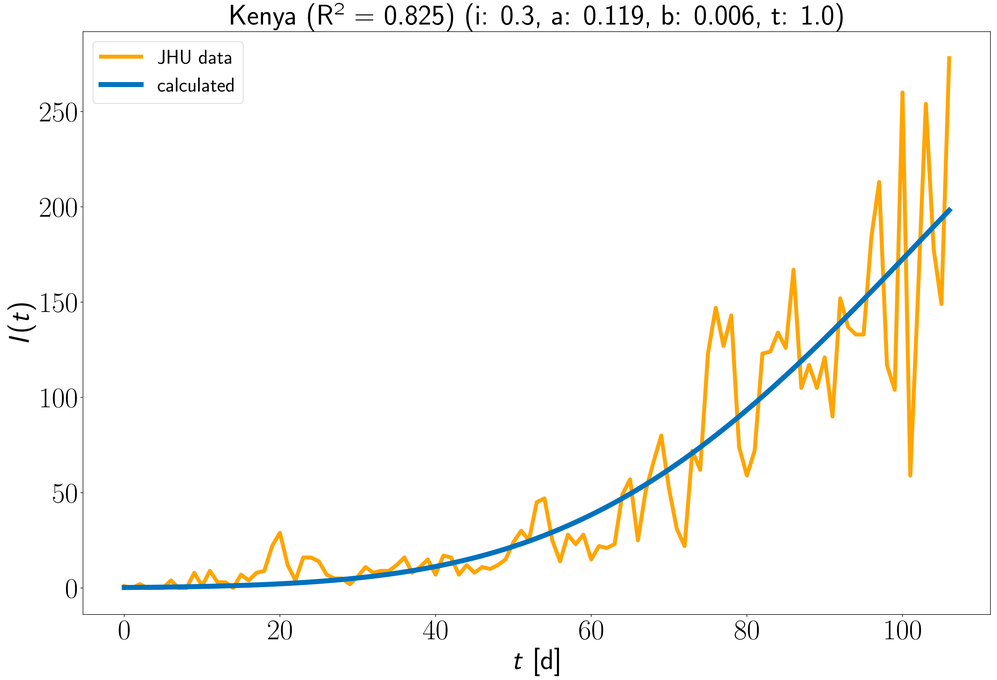

Indonesia ($R^2 = 0.971$) (i: 1689.0, a: 0.013, b: 0.005, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
1200
0
20
40
60
80
100
120

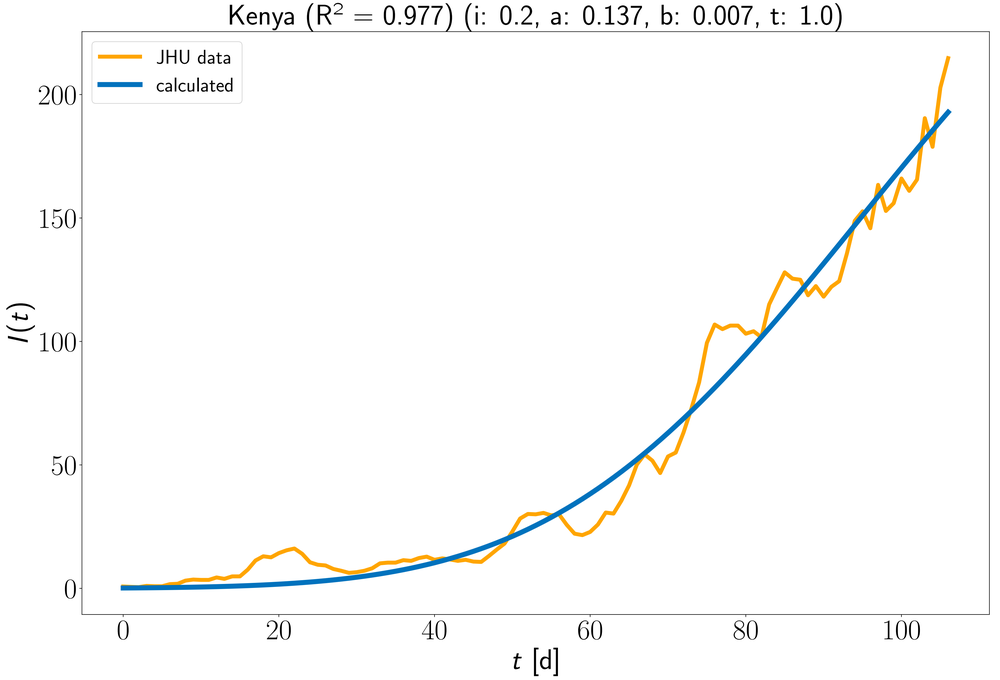

Iraq ($R^2 = 0.972$) (i: 2972.9, a: 0.012, b: 0.028, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
2500
0
20
40
60
80
100
120

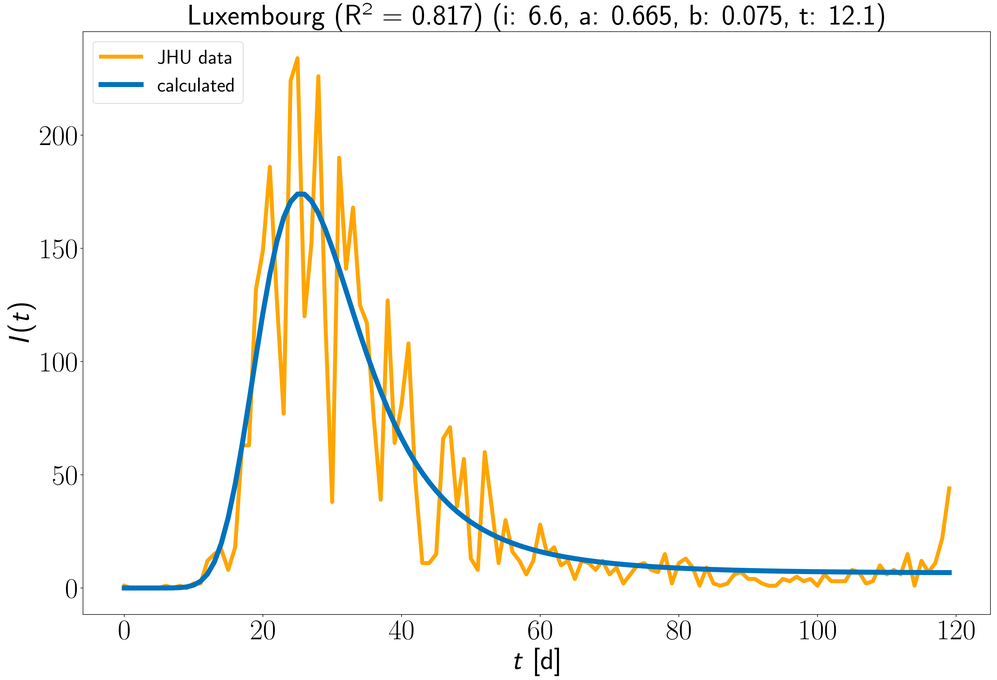

Iraq ($R^2 = 0.99$) (i: 2916.6, a: 0.012, b: 0.029, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
0
20
40
60
80
100
120

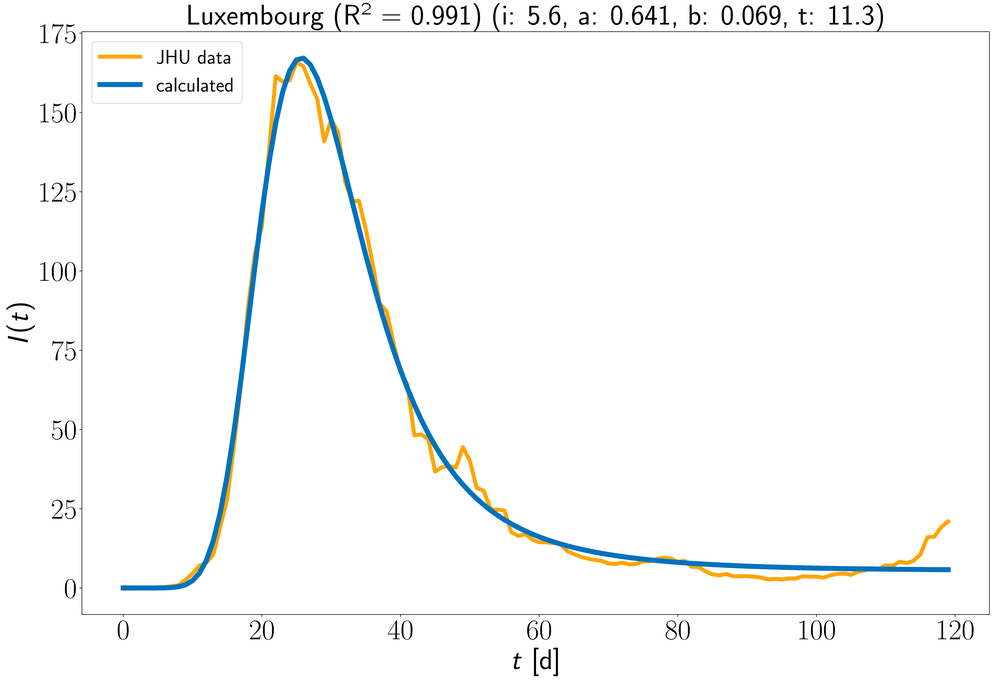

Italy ($R^2 = 0.953$) (i: 177.0, a: 0.335, b: 0.036, t: 28.2)
JHU data
calculated
$I(t)$
t [d]
0
1000
2000
3000
4000
5000
6000
0
20
40
60
80
100
120
140

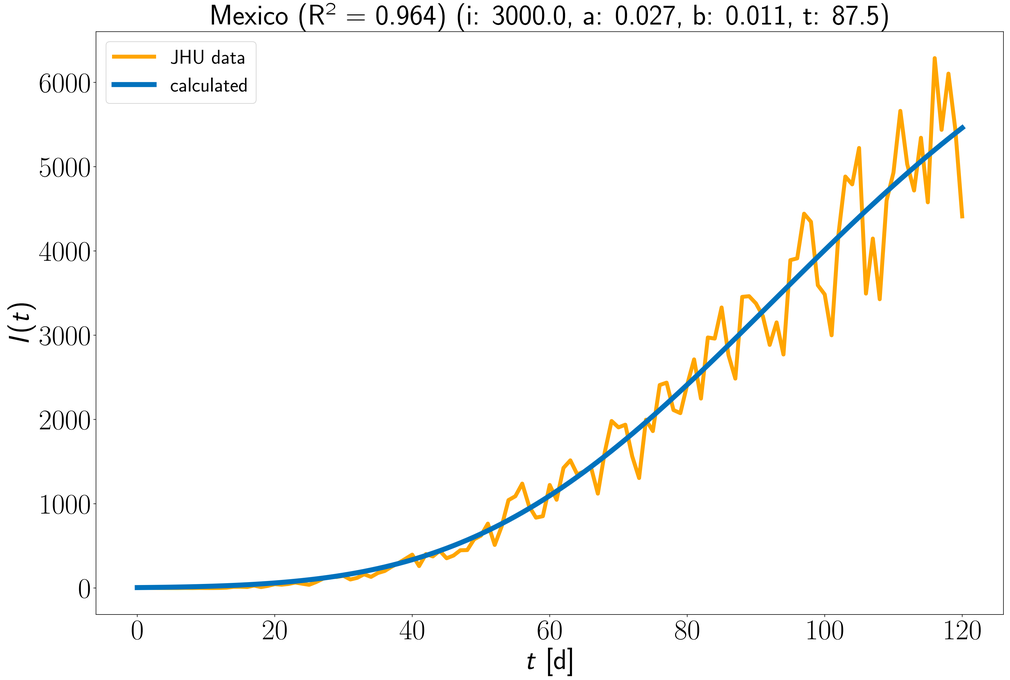

Italy ($R^2 = 0.986$) (i: 158.5, a: 0.333, b: 0.035, t: 27.4)
JHU data
calculated
$I(t)$
t [d]
0
1000
2000
3000
4000
5000
0
20
40
60
80
100
120
140

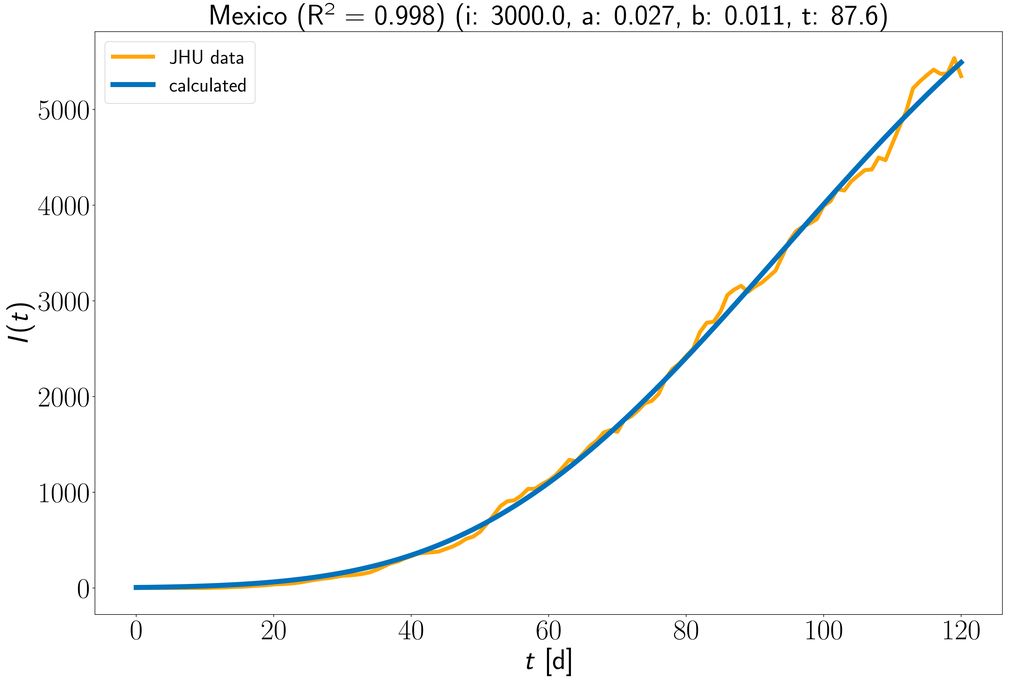

Kenya ($R^2 = 0.825$) (i: 0.3, a: 0.119, b: 0.006, t: 1.0)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
250
0
20
40
60
80
100

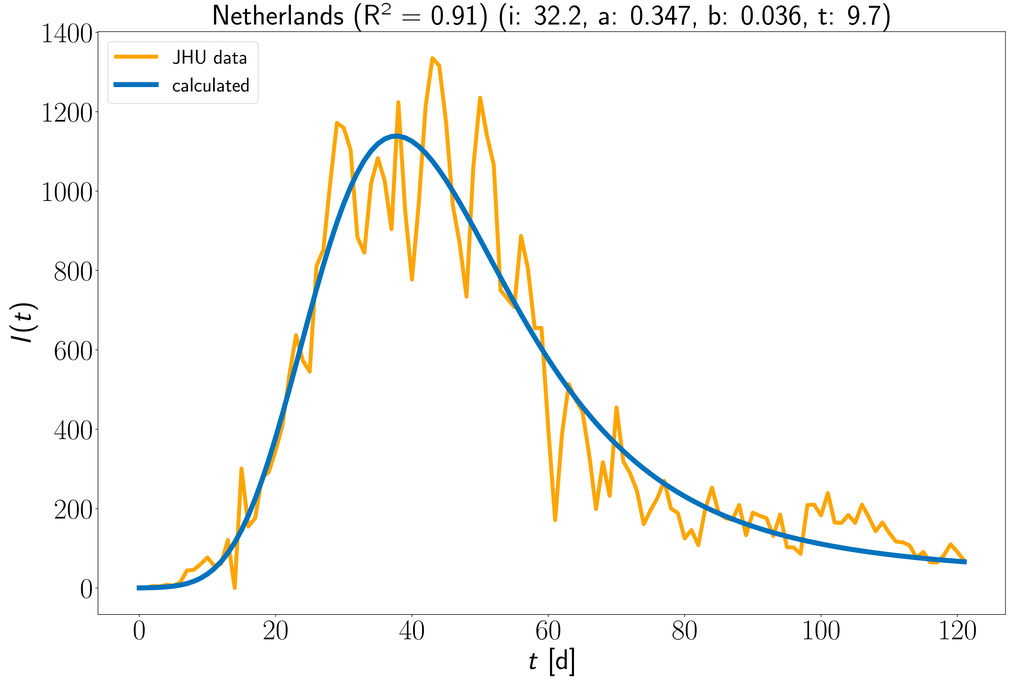

Kenya ($R^2 = 0.977$) (i: 0.2, a: 0.137, b: 0.007, t: 1.0)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
0
20
40
60
80
100

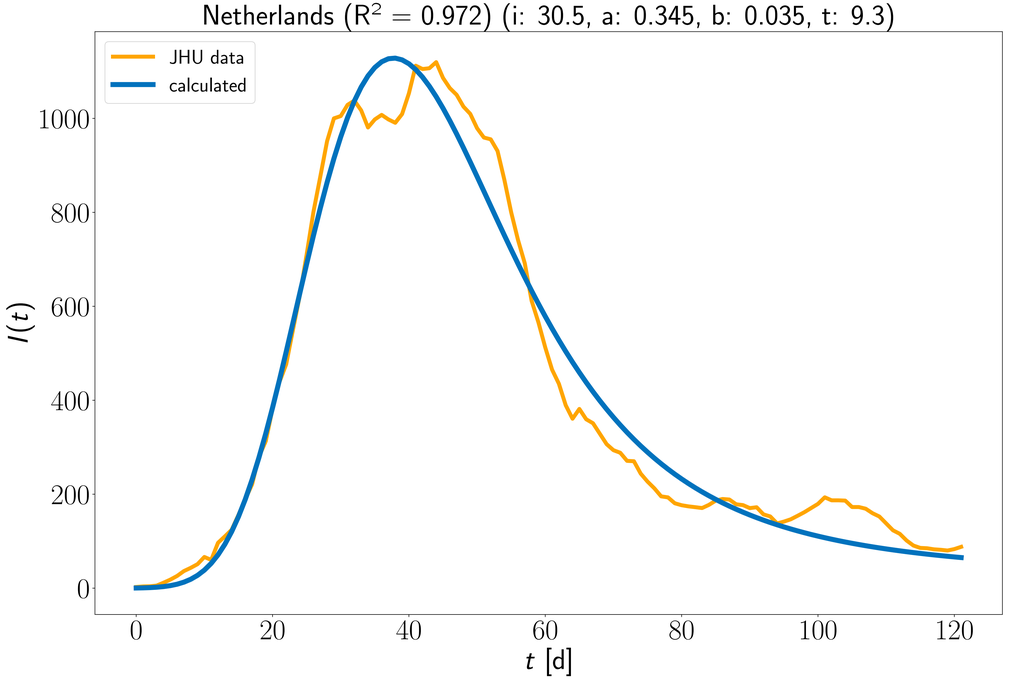

Luxembourg ($R^2 = 0.817$) (i: 6.6, a: 0.665, b: 0.075, t: 12.1)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
0
20
40
60
80
100
120

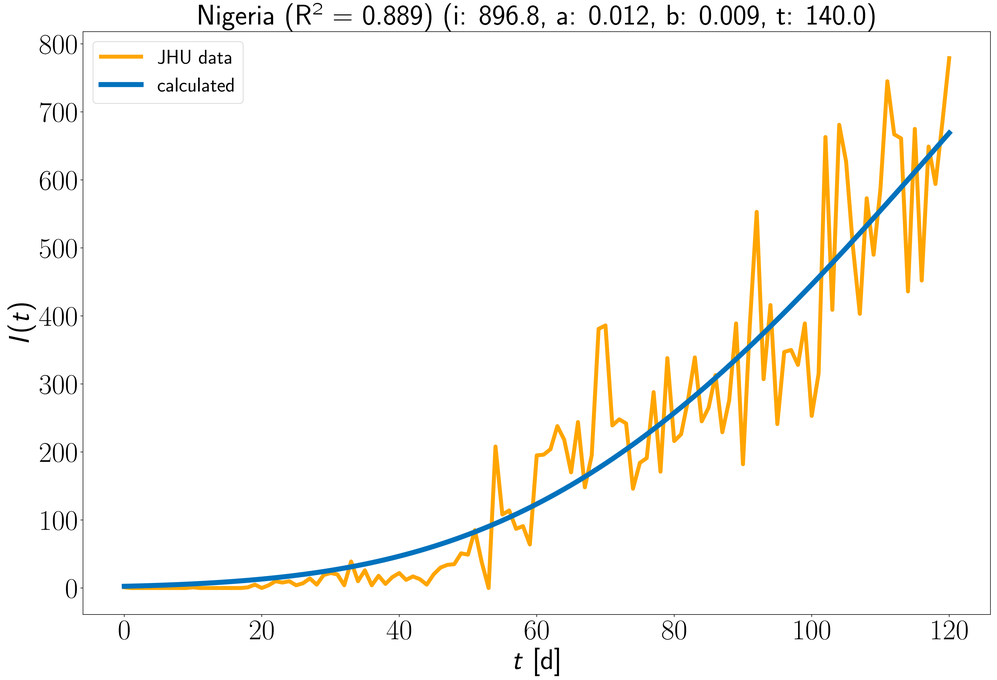

Luxembourg ($R^2 = 0.991$) (i: 5.6, a: 0.641, b: 0.069, t: 11.3)
JHU data
calculated
$I(t)$
t [d]
0
25
50
75
100
125
150
175
0
20
40
60
80
100
120

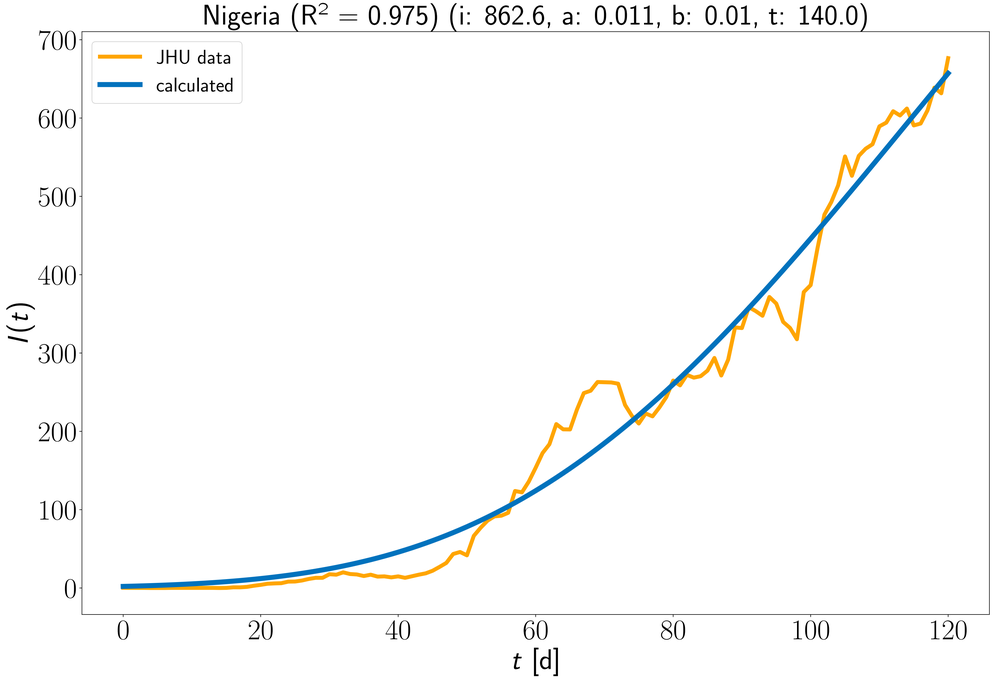

Mexico ($R^2 = 0.964$) (i: 3000.0, a: 0.027, b: 0.011, t: 87.5)
JHU data
calculated
$I(t)$
t [d]
0
1000
2000
3000
4000
5000
6000
0
20
40
60
80
100
120

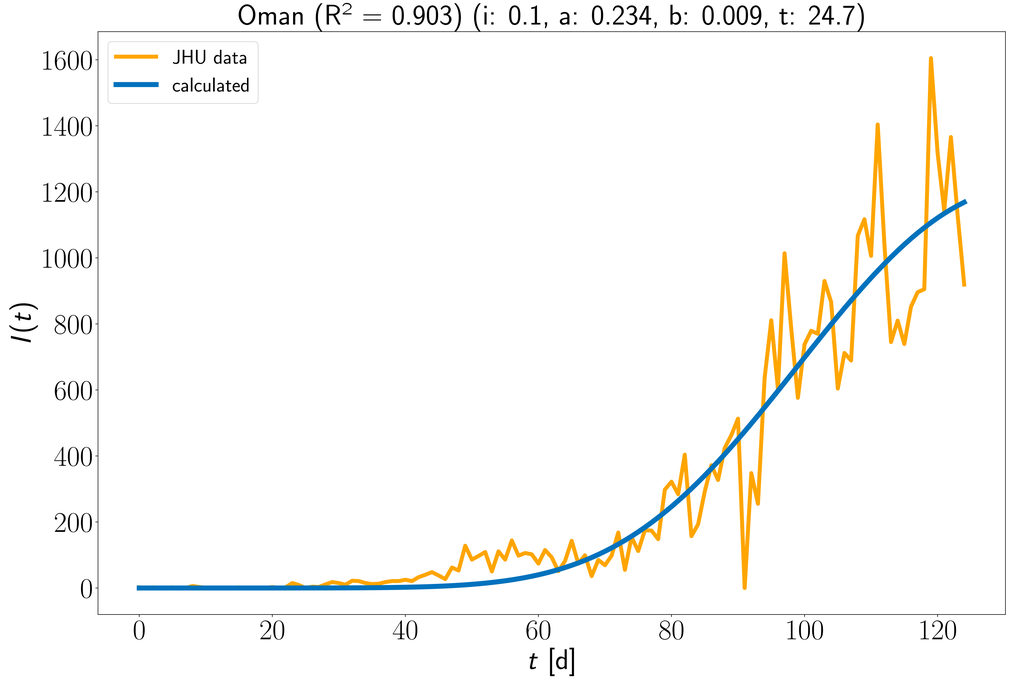

Mexico ($R^2 = 0.998$) (i: 3000.0, a: 0.027, b: 0.011, t: 87.6)
JHU data
calculated
$I(t)$
t [d]
0
1000
2000
3000
4000
5000
0
20
40
60
80
100
120

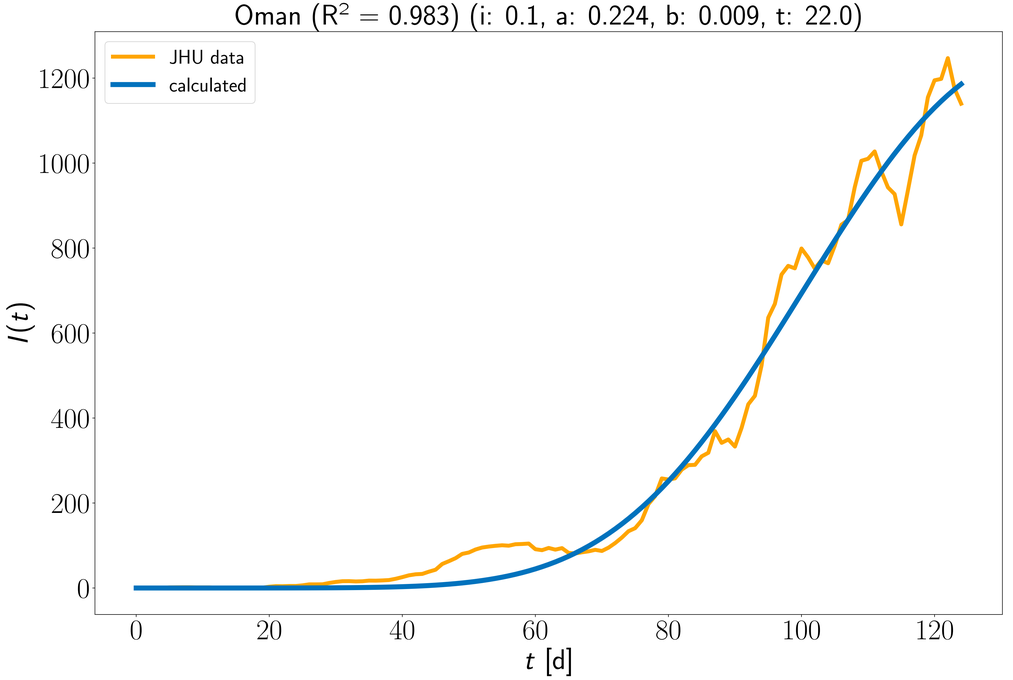

Netherlands ($R^2 = 0.91$) (i: 32.2, a: 0.347, b: 0.036, t: 9.7)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
1200
1400
0
20
40
60
80
100
120

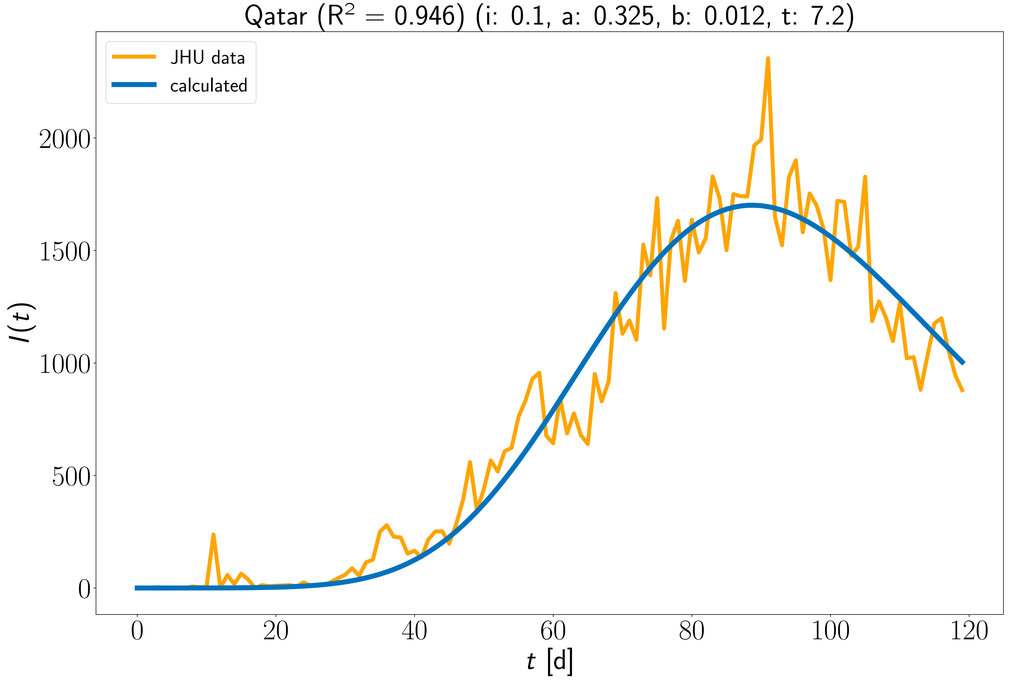

Netherlands ($R^2 = 0.972$) (i: 30.5, a: 0.345, b: 0.035, t: 9.3)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100
120

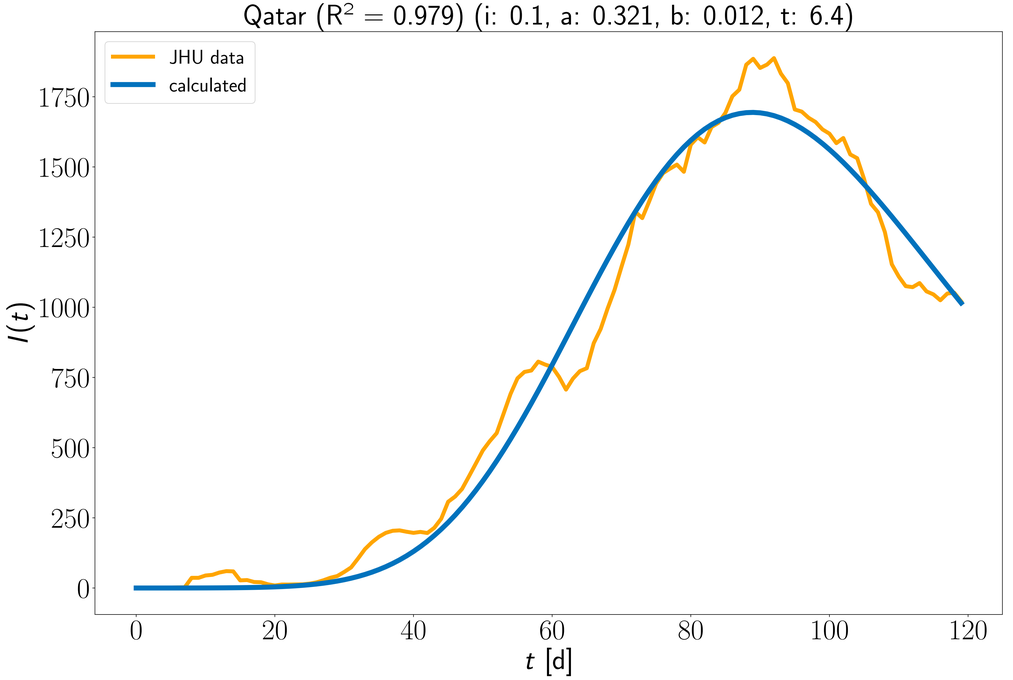

Nigeria ($R^2 = 0.889$) (i: 896.8, a: 0.012, b: 0.009, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
800
0
20
40
60
80
100
120

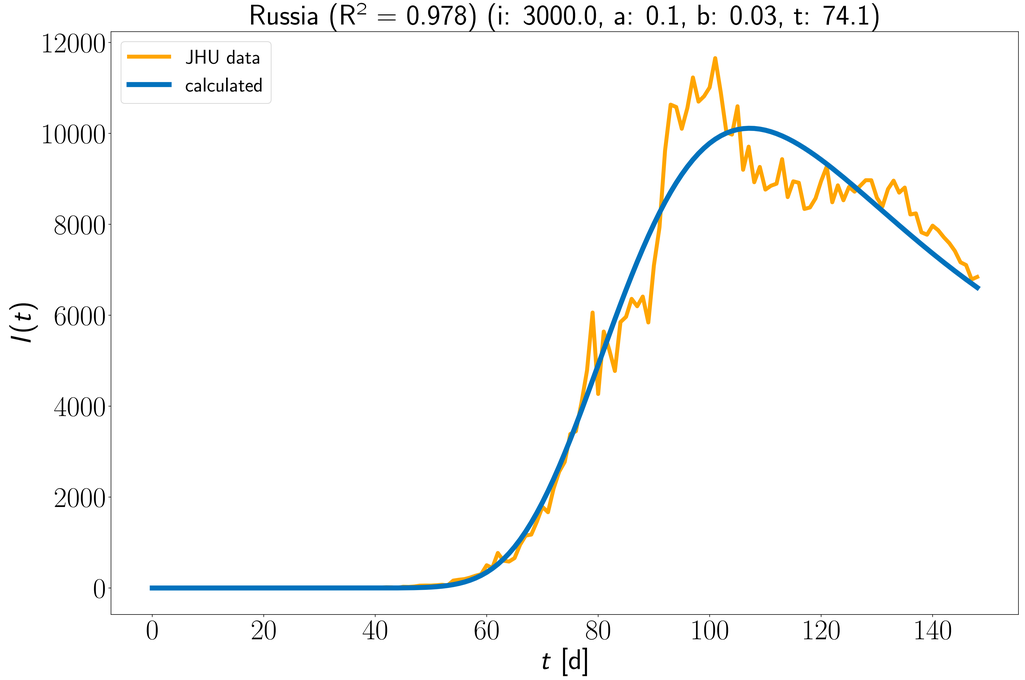

Nigeria ($R^2 = 0.975$) (i: 862.6, a: 0.011, b: 0.01, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
0
20
40
60
80
100
120

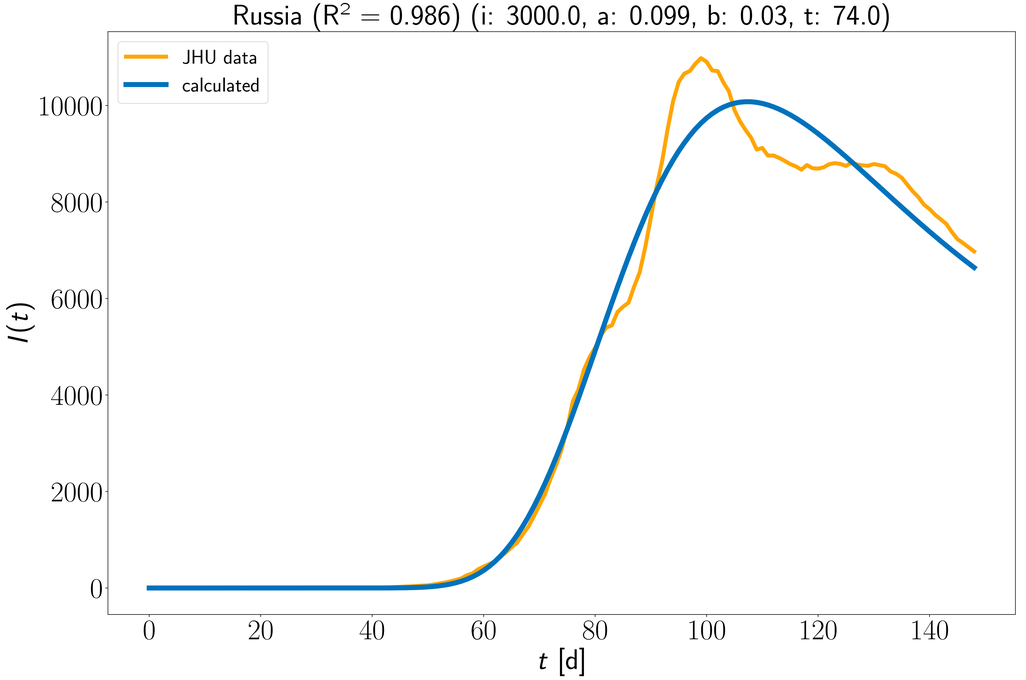

Oman (R^2 = 0.903) (i: 0.1, a: 0.234, b: 0.009, t: 24.7)
JHU data
calculated
$I(t)$
t [d]

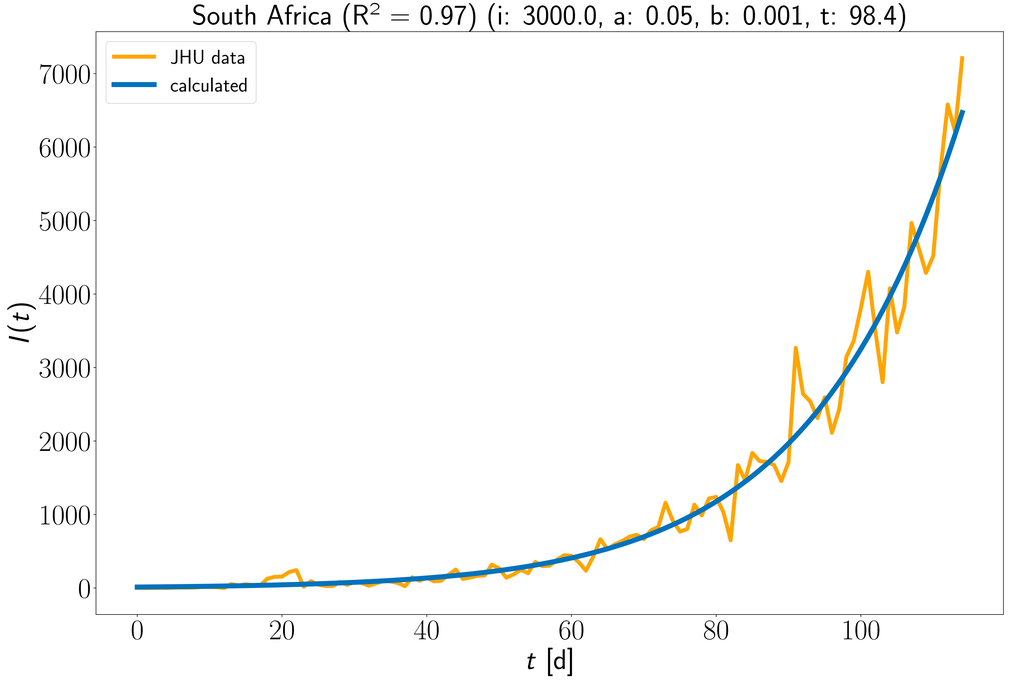

Oman (R^2 = 0.983) (i: 0.1, a: 0.224, b: 0.009, t: 22.0)
JHU data
calculated
$I(t)$
t [d]

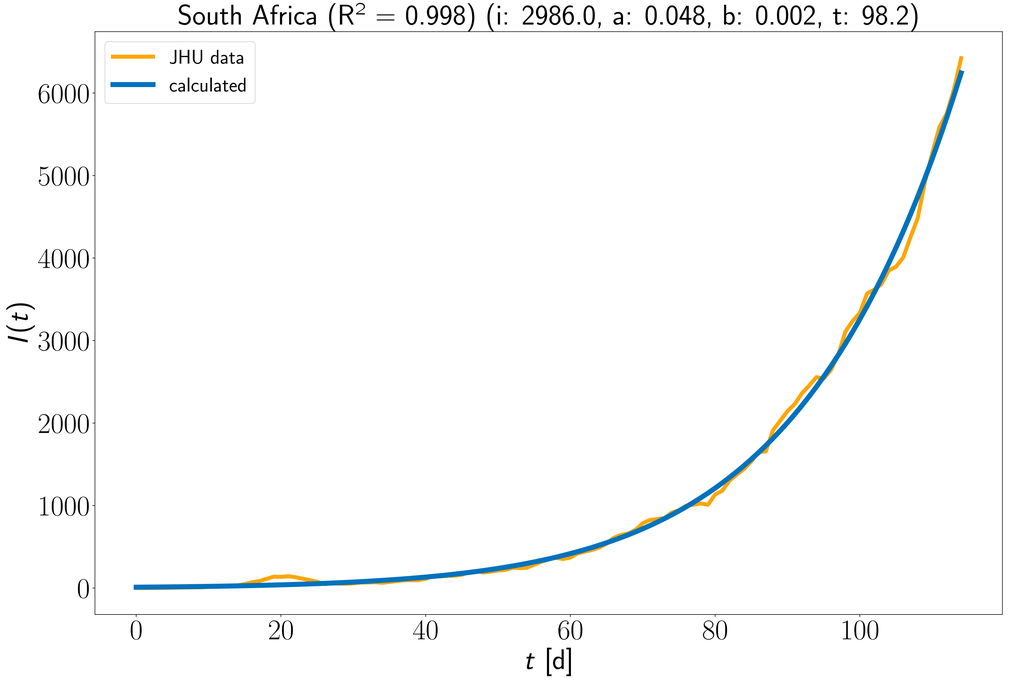

Qatar ($R^2 = 0.946$) (i: 0.1, a: 0.325, b: 0.012, t: 7.2)
JHU data
calculated
$I(t)$
t [d]
0
500
1000
1500
2000
0
20
40
60
80
100
120

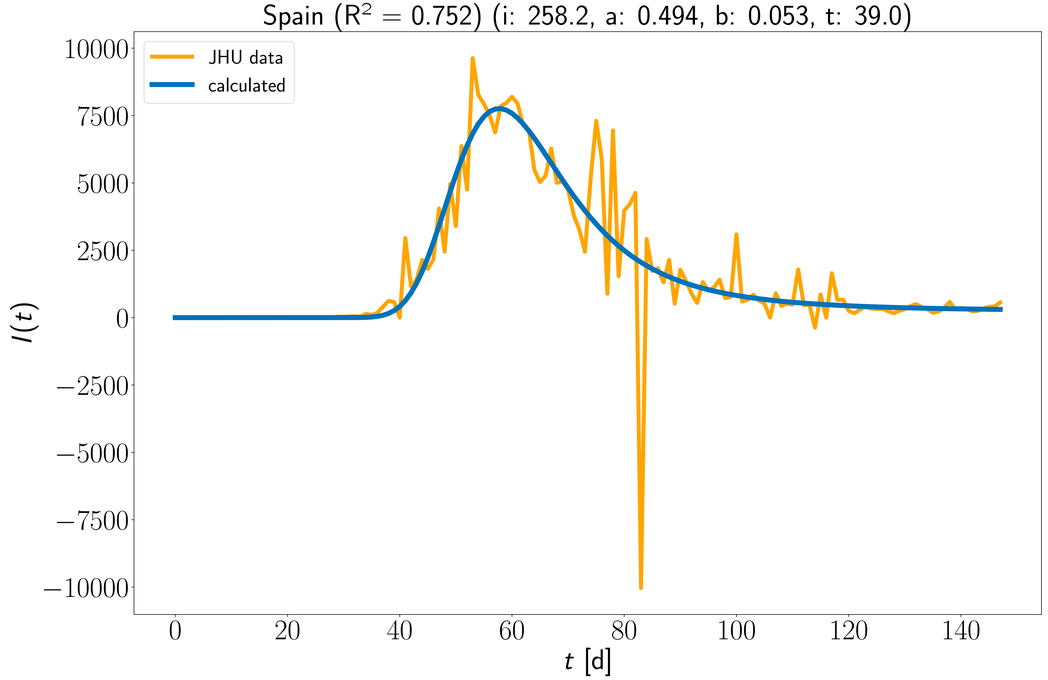

Qatar ($R^2 = 0.979$) (i: 0.1, a: 0.321, b: 0.012, t: 6.4)
JHU data
calculated
$I(t)$
t [d]
0
250
500
750
1000
1250
1500
1750
0
20
40
60
80
100
120

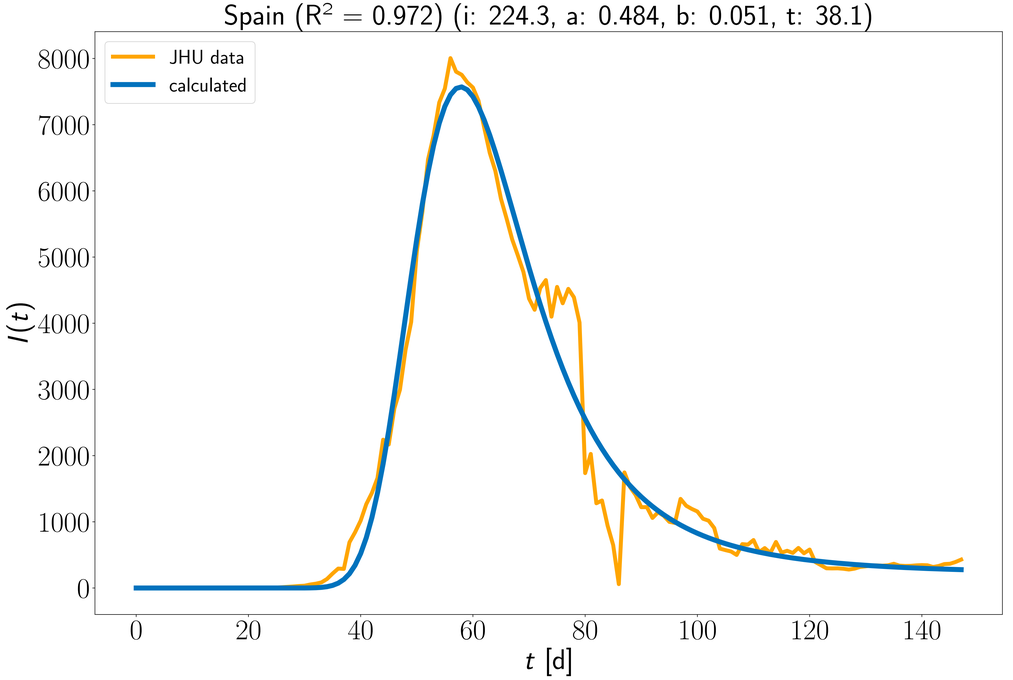

Russia ($R^2 = 0.978$) (i: 3000.0, a: 0.1, b: 0.03, t: 74.1)
JHU data
calculated
$I(t)$
t [d]

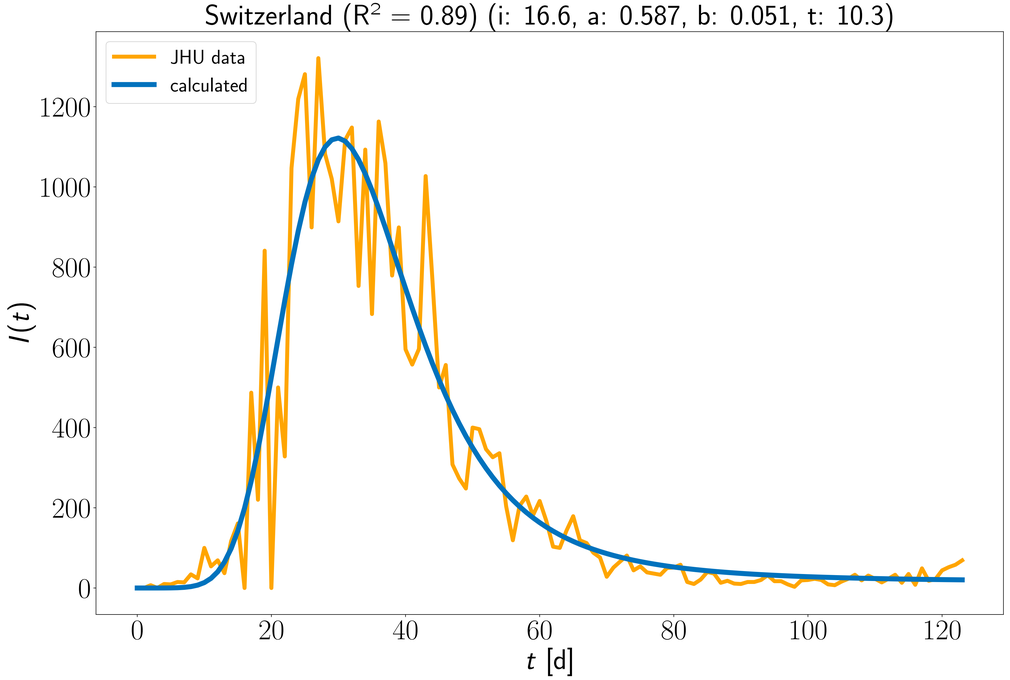

Russia ($R^2 = 0.986$) (i: 3000.0, a: 0.099, b: 0.03, t: 74.0)
JHU data
calculated
$I(t)$
t [d]

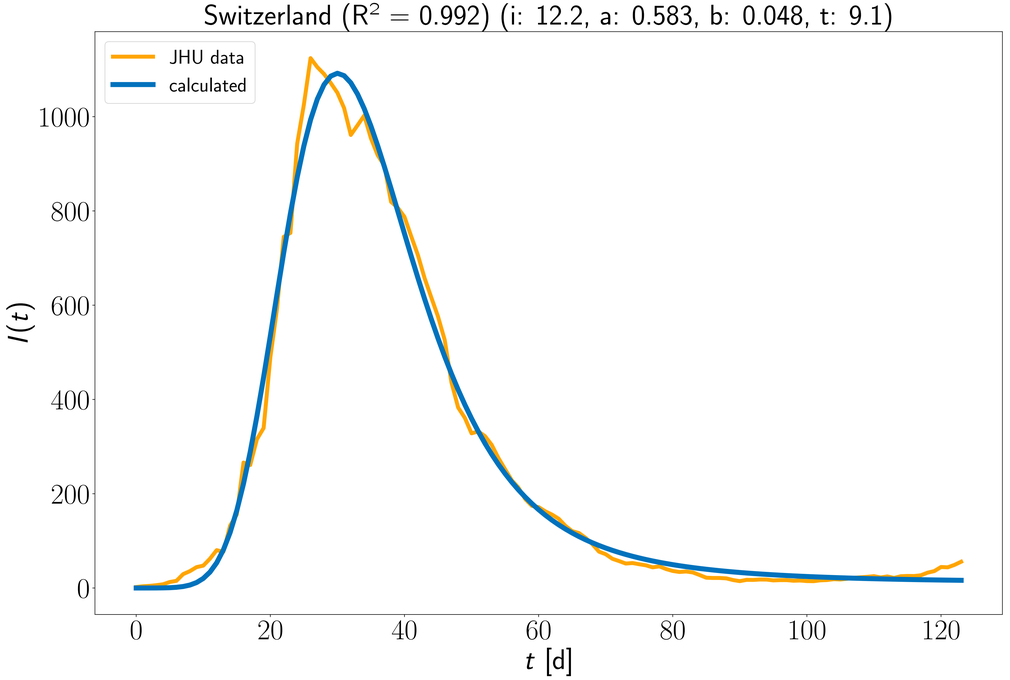

South Africa ($R^2 = 0.97$) (i: 3000.0, a: 0.05, b: 0.001, t: 98.4)
JHU data
calculated
$I(t)$
t [d]

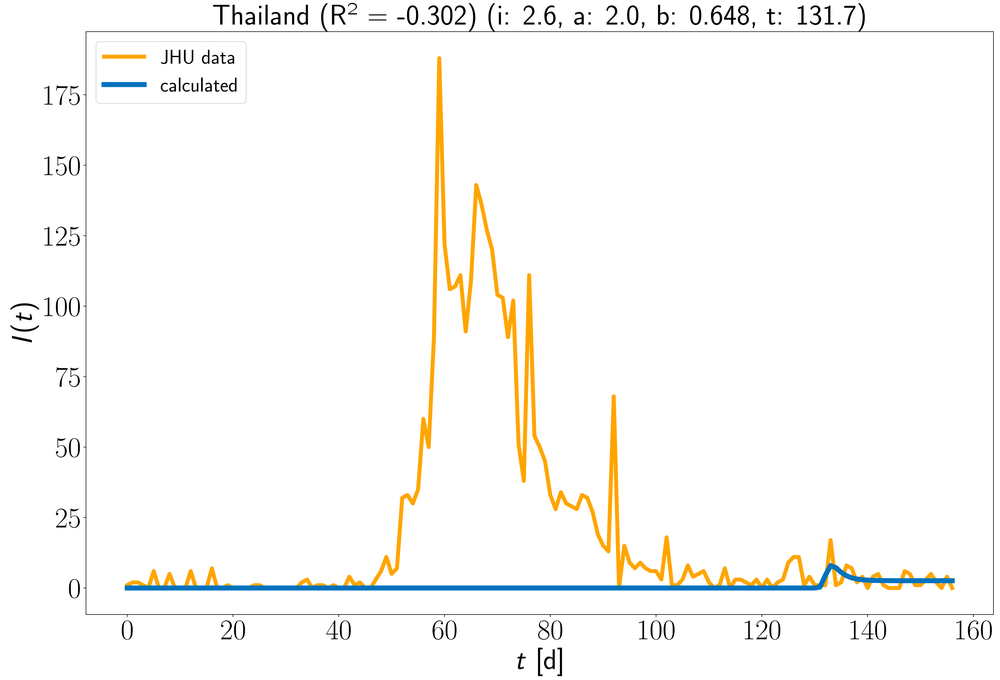

South Africa ($R^2 = 0.998$) (i: 2986.0, a: 0.048, b: 0.002, t: 98.2)
JHU data
calculated
$I(t)$
t [d]

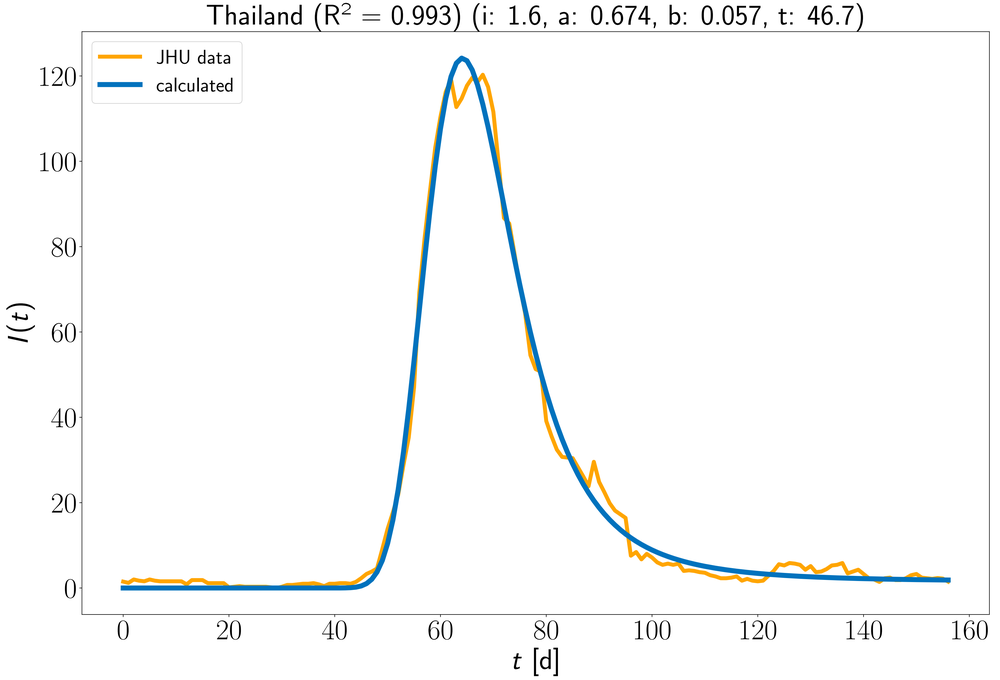

Spain ($R^2 = 0.752$) (i: 258.2, a: 0.494, b: 0.053, t: 39.0)
JHU data
calculated
$I(t)$
t [d]

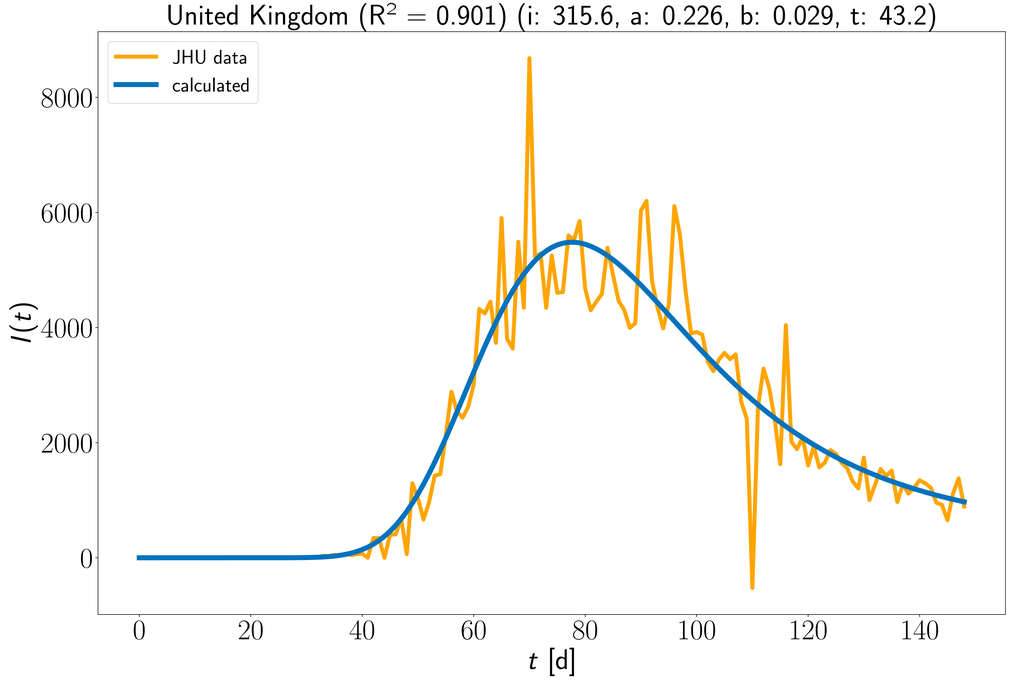

Spain ($R^2 = 0.972$) (i: 224.3, a: 0.484, b: 0.051, t: 38.1)
JHU data
calculated
$I(t)$
t [d]

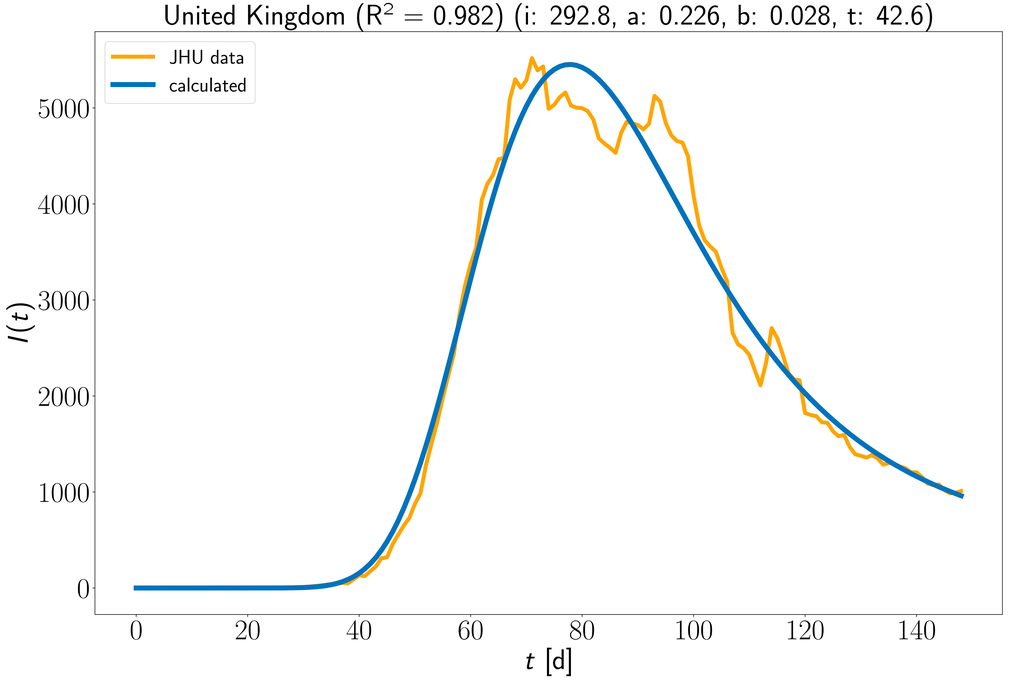

Switzerland ($R^2 = 0.89$) (i: 16.6, a: 0.587, b: 0.051, t: 10.3)
JHU data
calculated
$I(t)$
t [d]

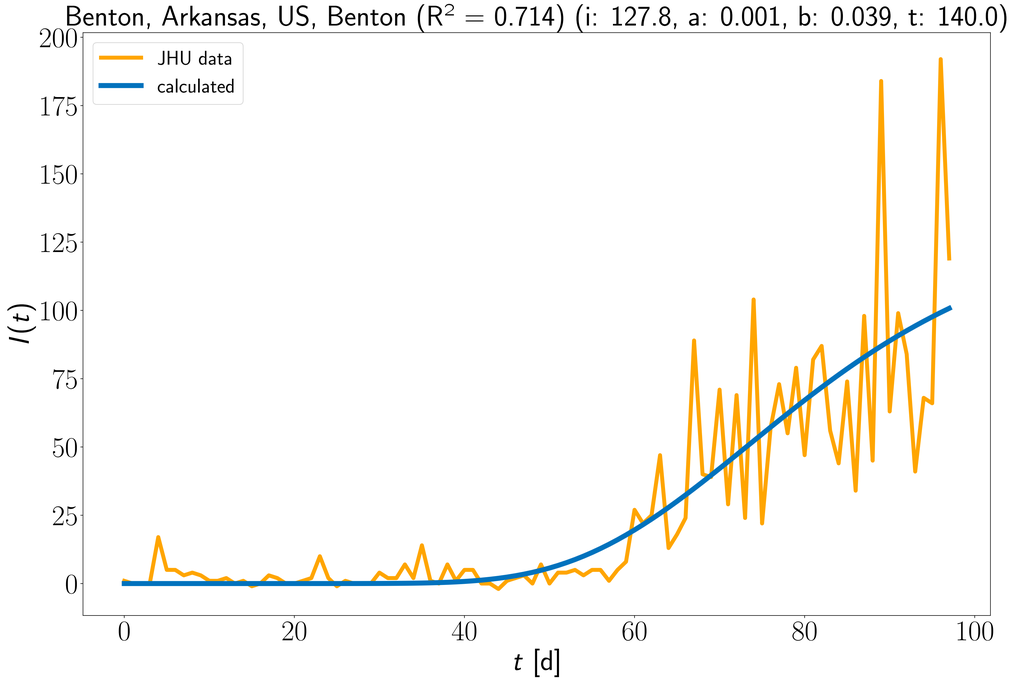

Switzerland ($R^2 = 0.992$) (i: 12.2, a: 0.583, b: 0.048, t: 9.1)
JHU data
calculated
$I(t)$
t [d]

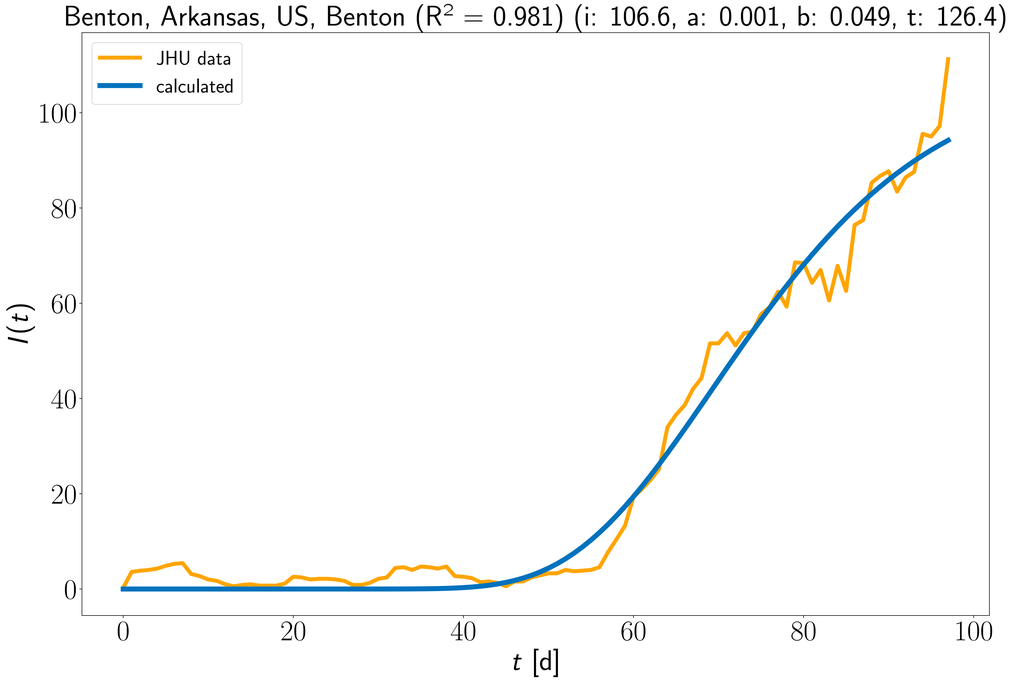

Thailand (R^2 = -0.302) (i: 2.6, a: 2.0, b: 0.648, t: 131.7)
JHU data
calculated
$I(t)$
t [d]

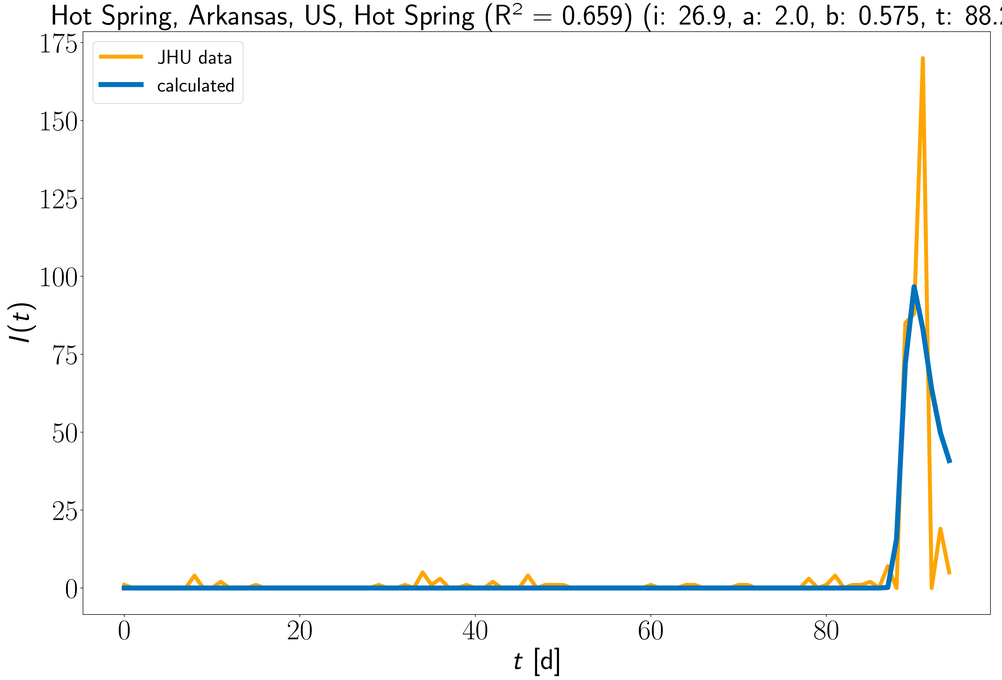

Thailand (R^2 = 0.993) (i: 1.6, a: 0.674, b: 0.057, t: 46.7)
JHU data
calculated
$I(t)$
t [d]

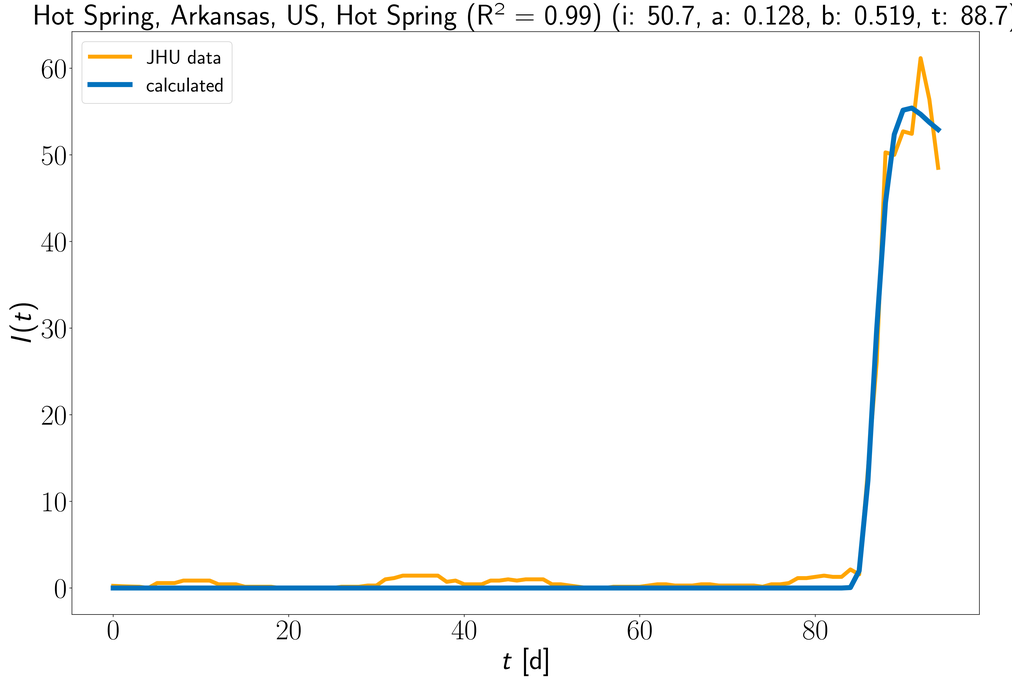

United Kingdom (R^2 = 0.901) (i: 315.6, a: 0.226, b: 0.029, t: 43.2)
JHU data
calculated
8000
6000
4000
2000
0
$I(t)$
0
20
40
60
80
100
120
140
t [d]

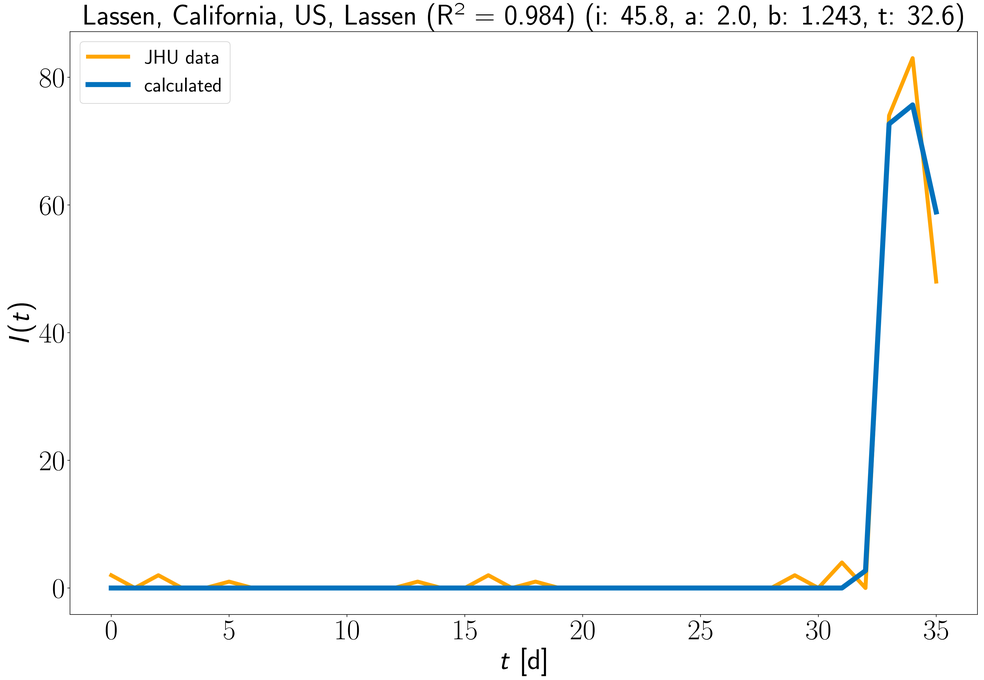

United Kingdom (R^2 = 0.982) (i: 292.8, a: 0.226, b: 0.028, t: 42.6)
JHU data
calculated
5000
4000
3000
2000
1000
0
$I(t)$
0
20
40
60
80
100
120
140
t [d]

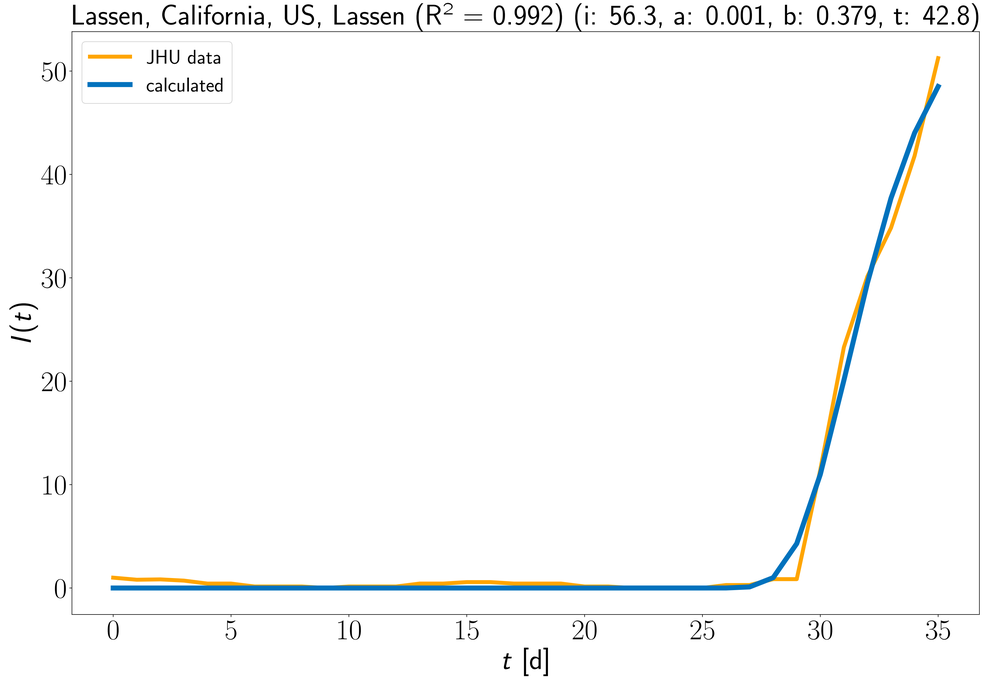

Benton, Arkansas, US, Benton ($R^2 = 0.714$) (i: 127.8, a: 0.001, b: 0.039, t: 140.0)
JHU data
calculated
$I(t)$
t [d]
0
25
50
75
100
125
150
175
200
0
20
40
60
80
100

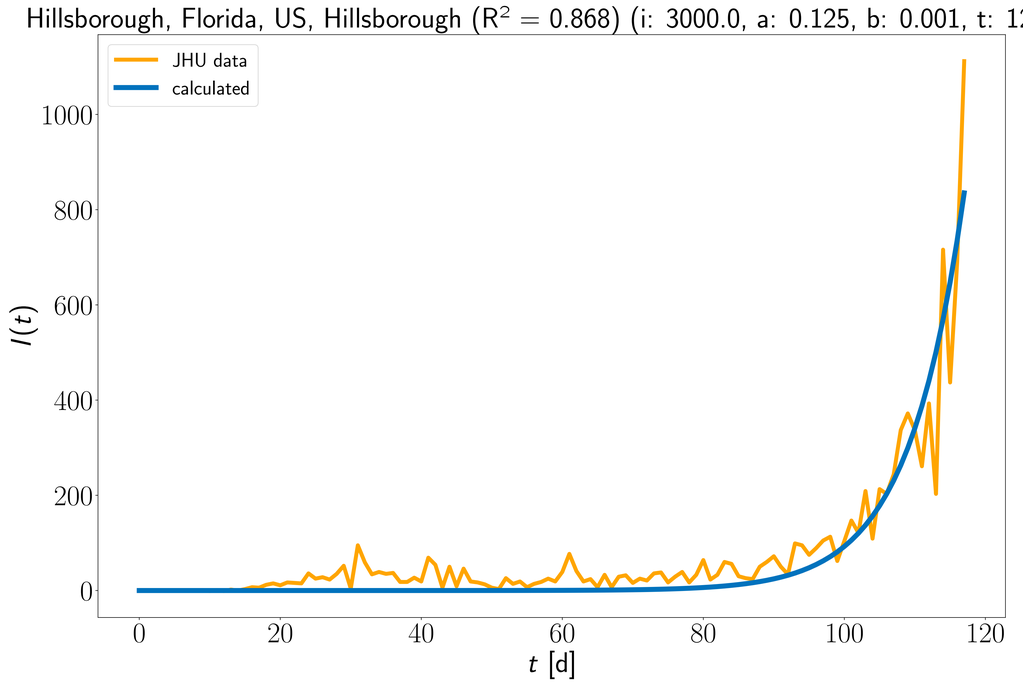

Benton, Arkansas, US, Benton ($R^2 = 0.981$) (i: 106.6, a: 0.001, b: 0.049, t: 126.4)
JHU data
calculated
$I(t)$
t [d]
0
20
40
60
80
100
0
20
40
60
80
100

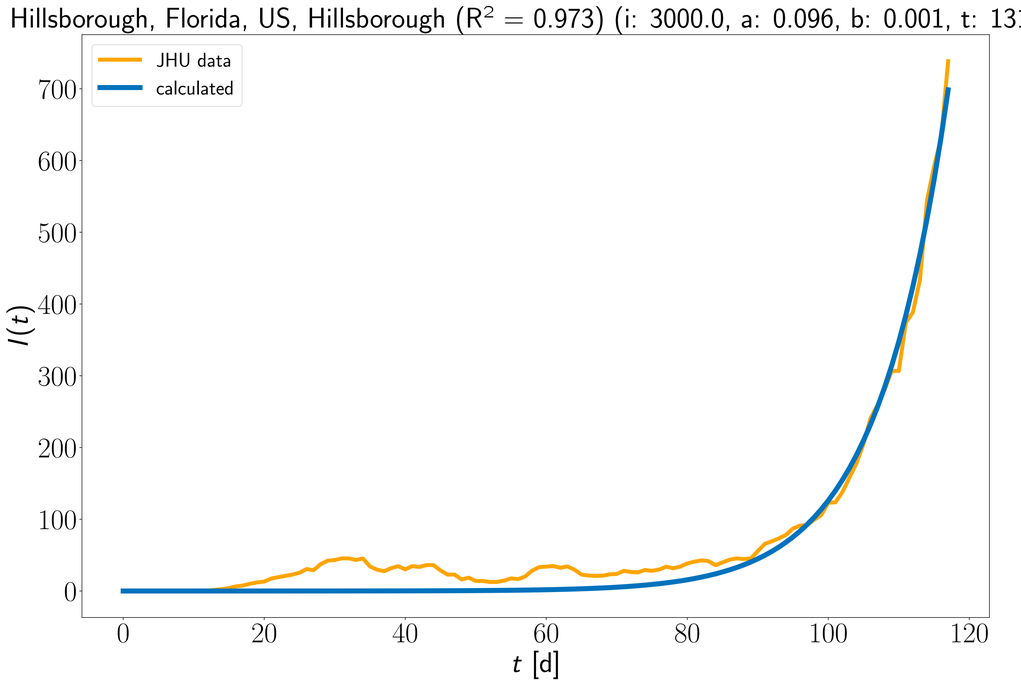

Hot Spring, Arkansas, US, Hot Spring ($R^2 = 0.659$) (i: 26.9, a: 2.0, b: 0.575, t: 88.2)
JHU data
calculated
$I(t)$
t [d]
0
25
50
75
100
125
150
175
0
20
40
60
80

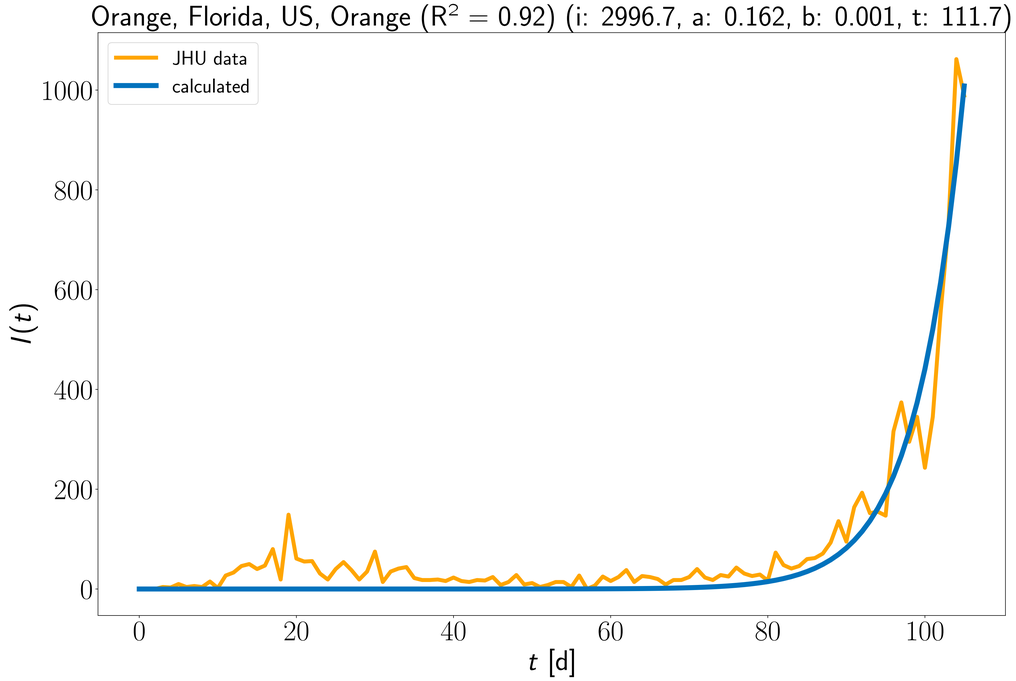

Hot Spring, Arkansas, US, Hot Spring ($R^2 = 0.99$) (i: 50.7, a: 0.128, b: 0.519, t: 88.7)
JHU data
calculated
$I(t)$
t [d]
0
10
20
30
40
50
60
0
20
40
60
80

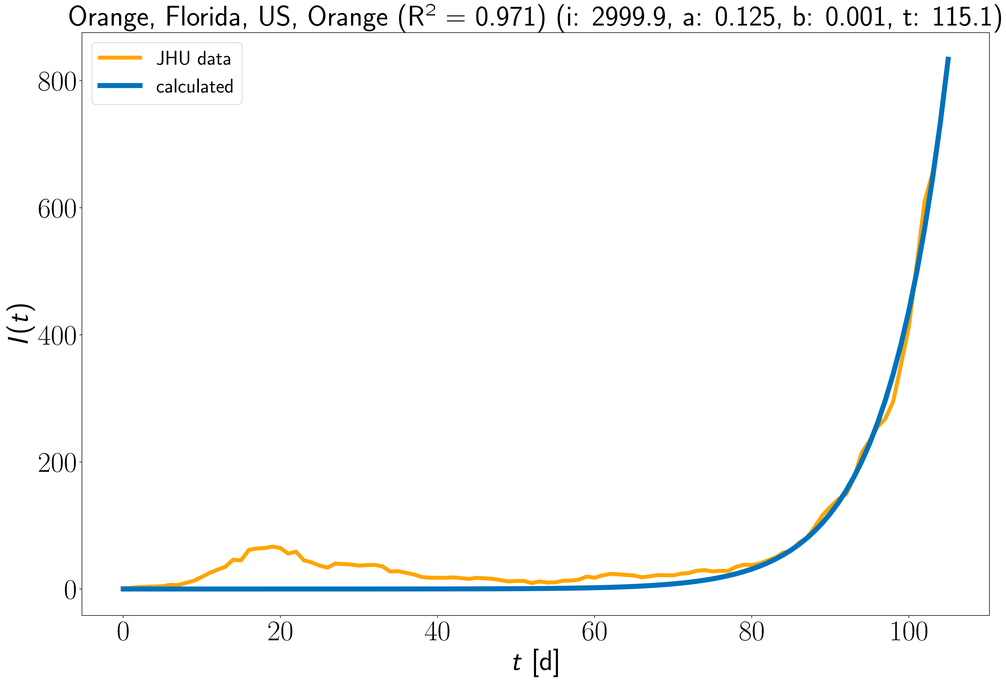

Lassen, California, US, Lassen ($R^2 = 0.984$) (i: 45.8, a: 2.0, b: 1.243, t: 32.6)
JHU data
calculated
$I(t)$
t [d]

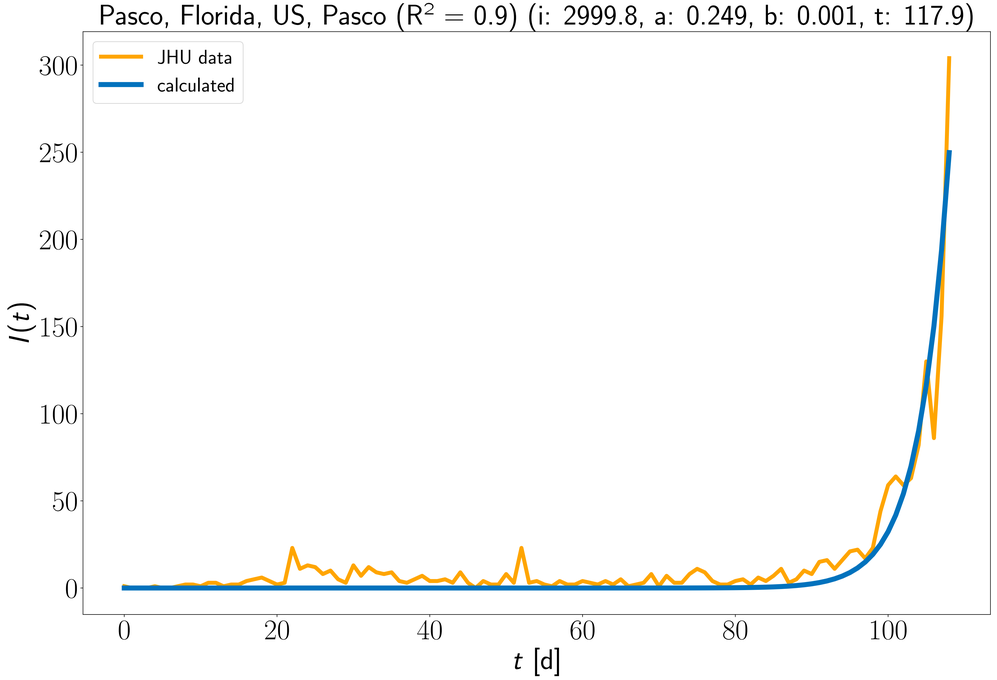

Lassen, California, US, Lassen ($R^2 = 0.992$) (i: 56.3, a: 0.001, b: 0.379, t: 42.8)
JHU data
calculated
$I(t)$
t [d]

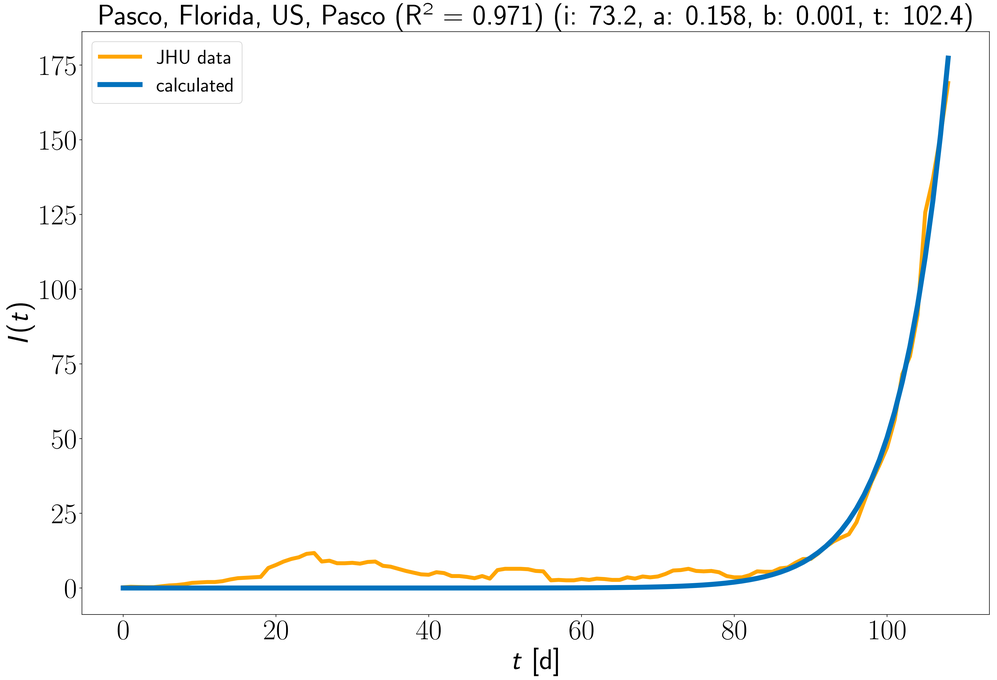

Hillsborough, Florida, US, Hillsborough ($R^2 = 0.868$) (i: 3000.0, a: 0.125, b: 0.001, t: 127.2)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100
120

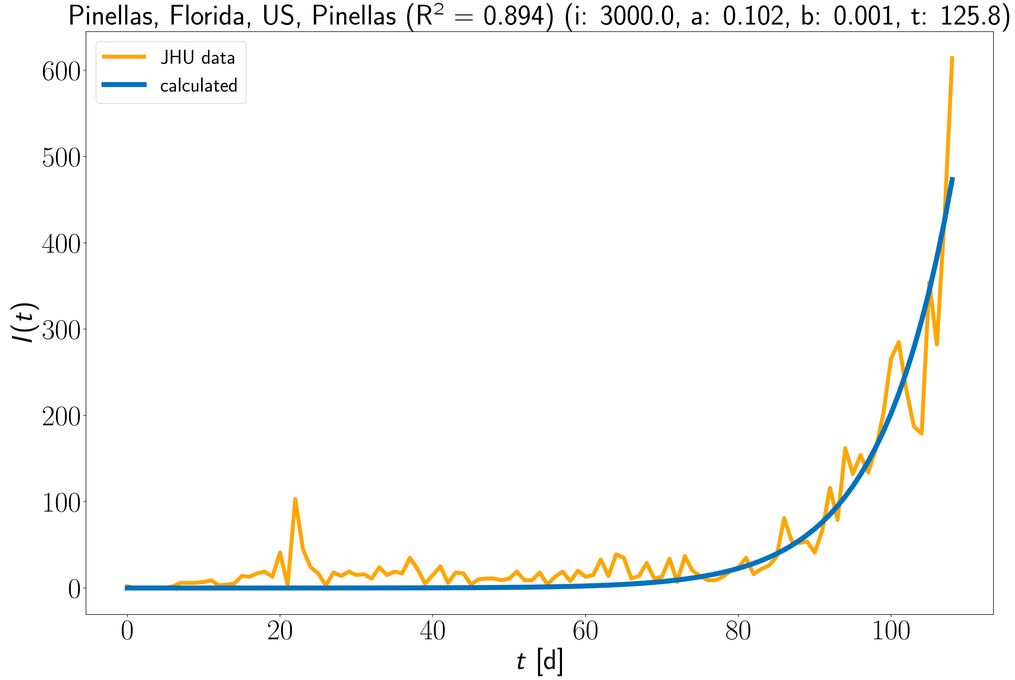

Hillsborough, Florida, US, Hillsborough ($R^2 = 0.973$) (i: 3000.0, a: 0.096, b: 0.001, t: 131.9)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
600
700
0
20
40
60
80
100
120

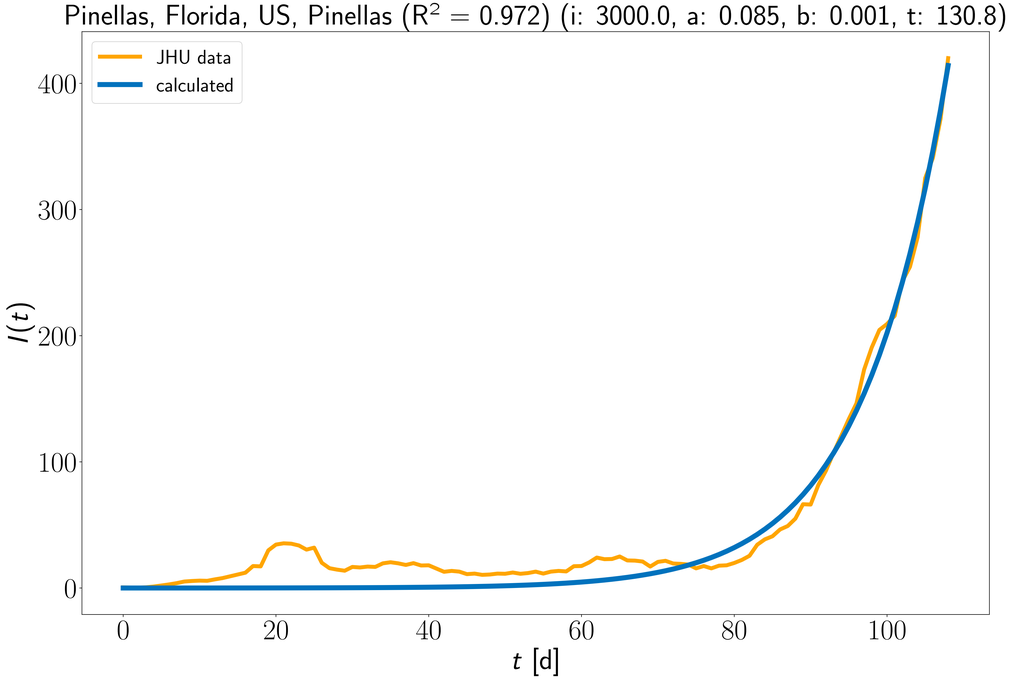

Orange, Florida, US, Orange ($R^2 = 0.92$) (i: 2996.7, a: 0.162, b: 0.001, t: 111.7)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100

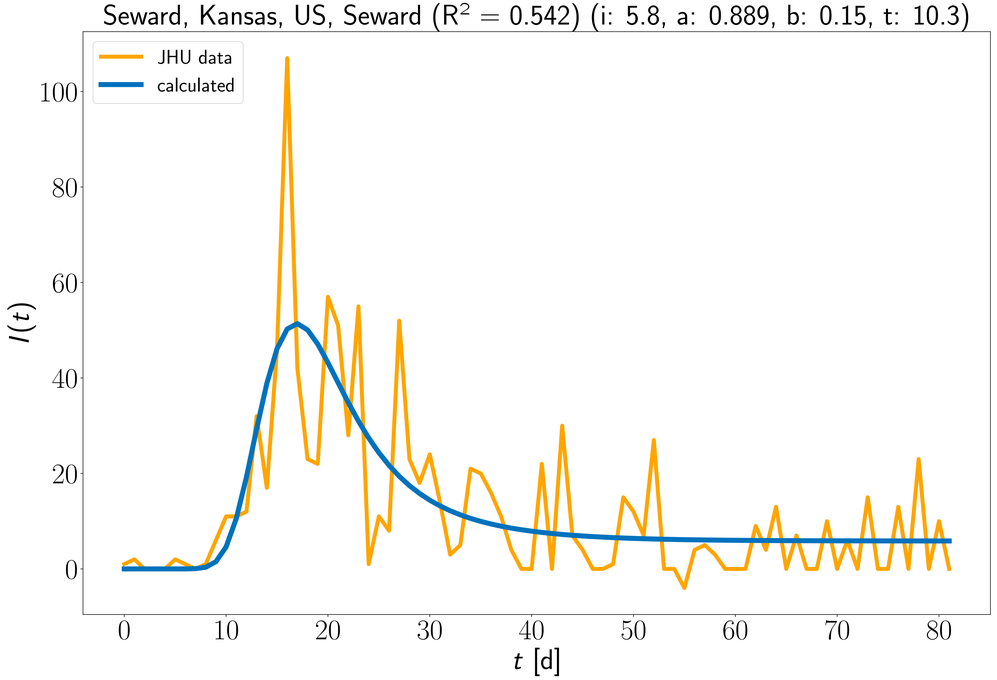

Orange, Florida, US, Orange ($R^2 = 0.971$) (i: 2999.9, a: 0.125, b: 0.001, t: 115.1)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
0
20
40
60
80
100

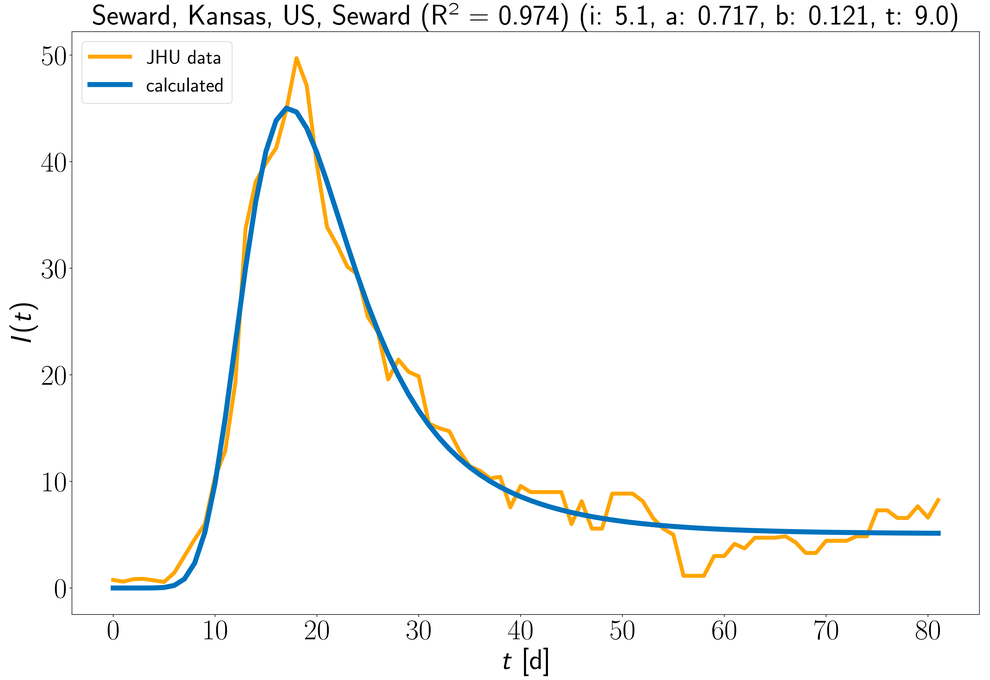

Pasco, Florida, US, Pasco ($R^2 = 0.9$) (i: 2999.8, a: 0.249, b: 0.001, t: 117.9)
JHU data
calculated
$I(t)$
t [d]

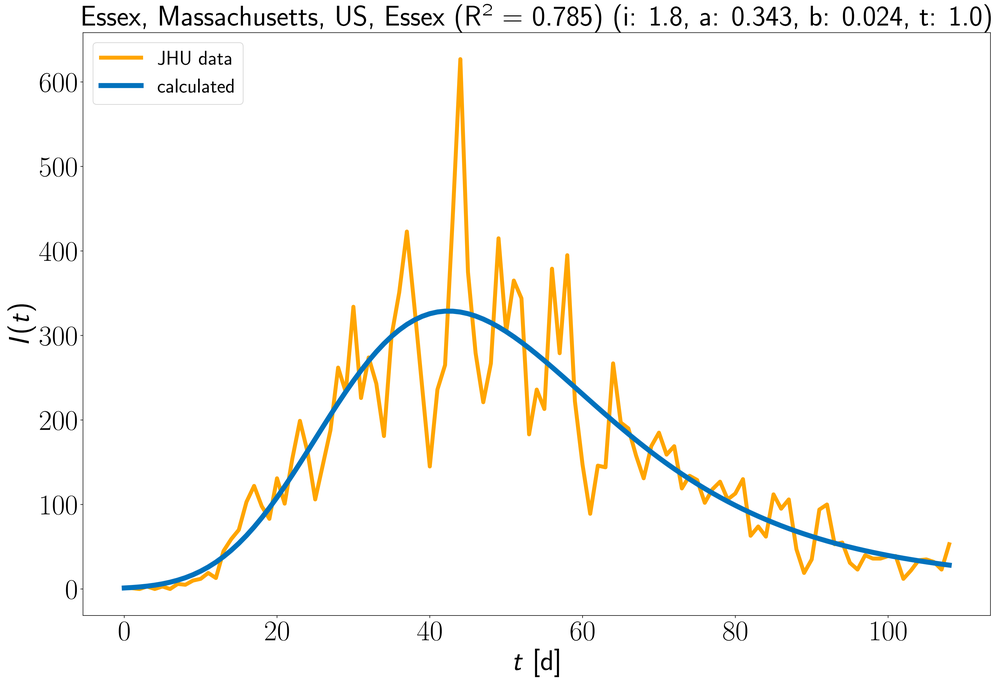

Pasco, Florida, US, Pasco ($R^2 = 0.971$) (i: 73.2, a: 0.158, b: 0.001, t: 102.4)
JHU data
calculated
$I(t)$
t [d]

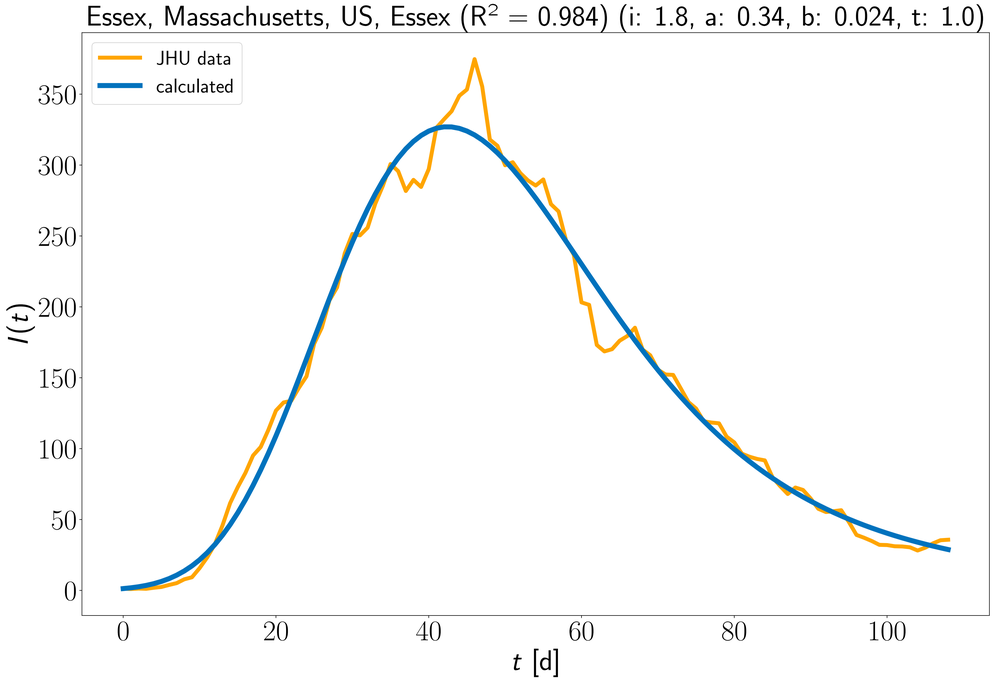

Pinellas, Florida, US, Pinellas ($R^2 = 0.894$) (i: 3000.0, a: 0.102, b: 0.001, t: 125.8)
JHU data
calculated
$I(t)$
t [d]

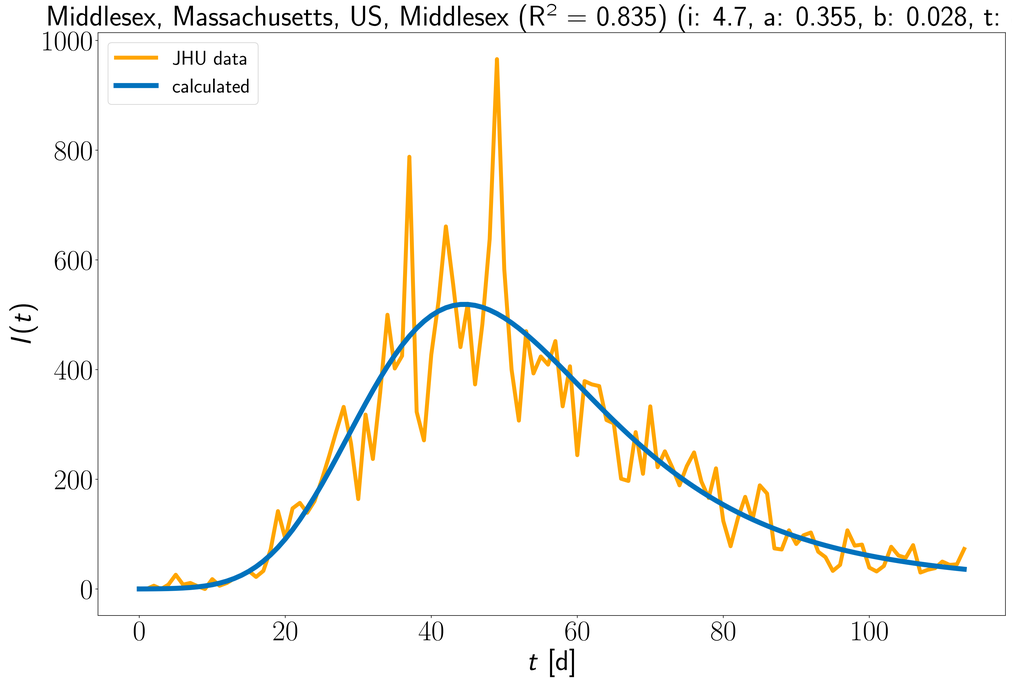

Pinellas, Florida, US, Pinellas ($R^2 = 0.972$) (i: 3000.0, a: 0.085, b: 0.001, t: 130.8)
JHU data
calculated
$I(t)$
t [d]

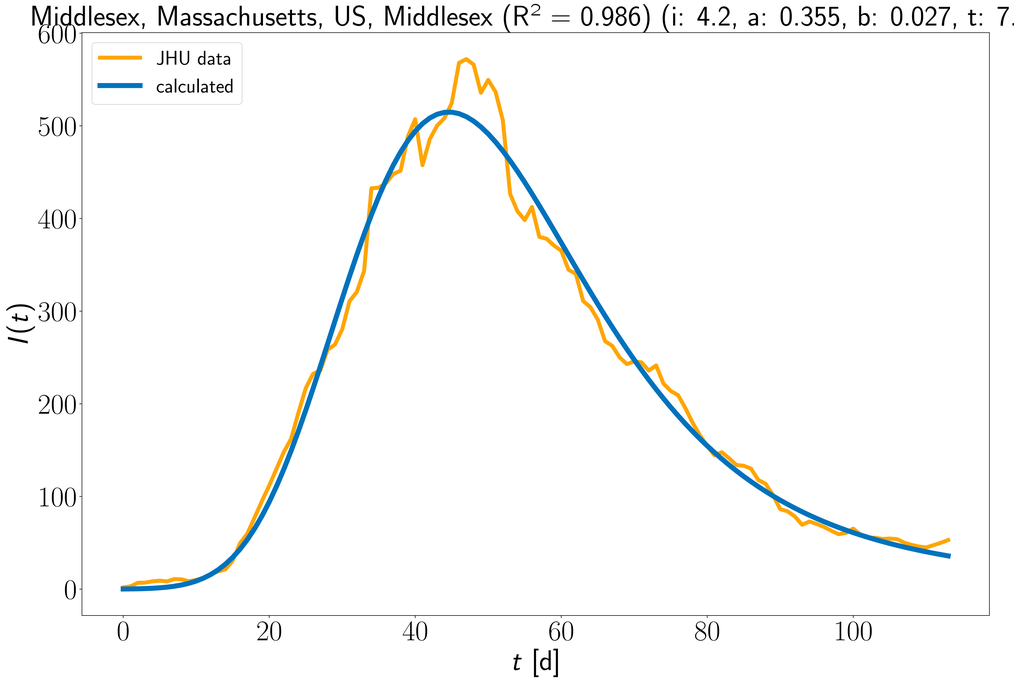

Seward, Kansas, US, Seward ($R^2 = 0.542$) (i: 5.8, a: 0.889, b: 0.15, t: 10.3)
JHU data
calculated
$I(t)$
t [d]

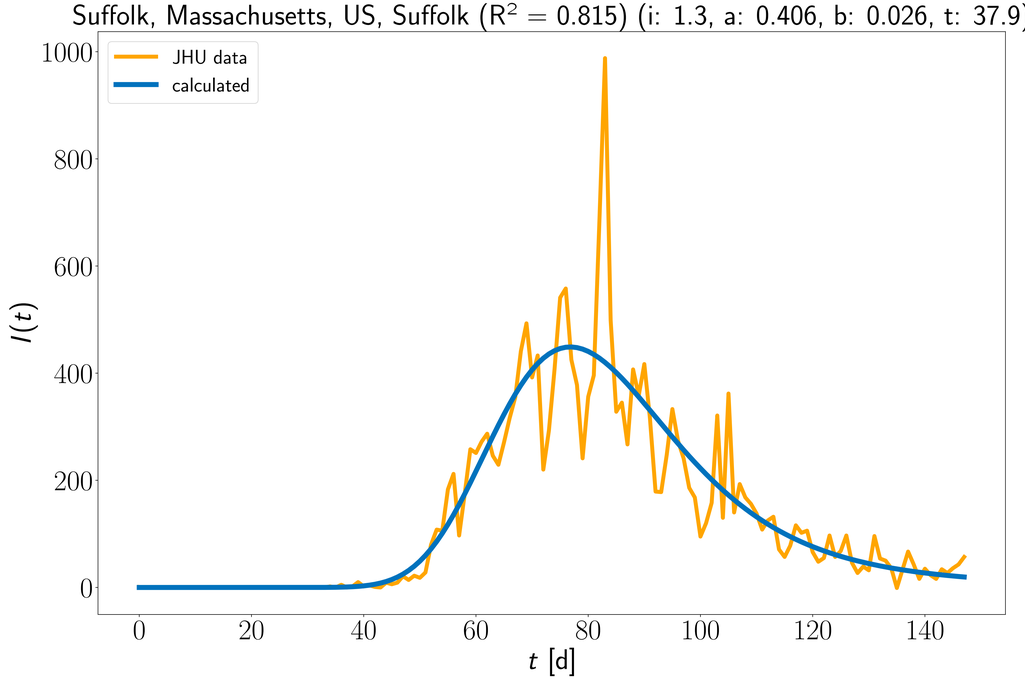

Seward, Kansas, US, Seward ($R^2 = 0.974$) (i: 5.1, a: 0.717, b: 0.121, t: 9.0)
JHU data
calculated
$I(t)$
t [d]

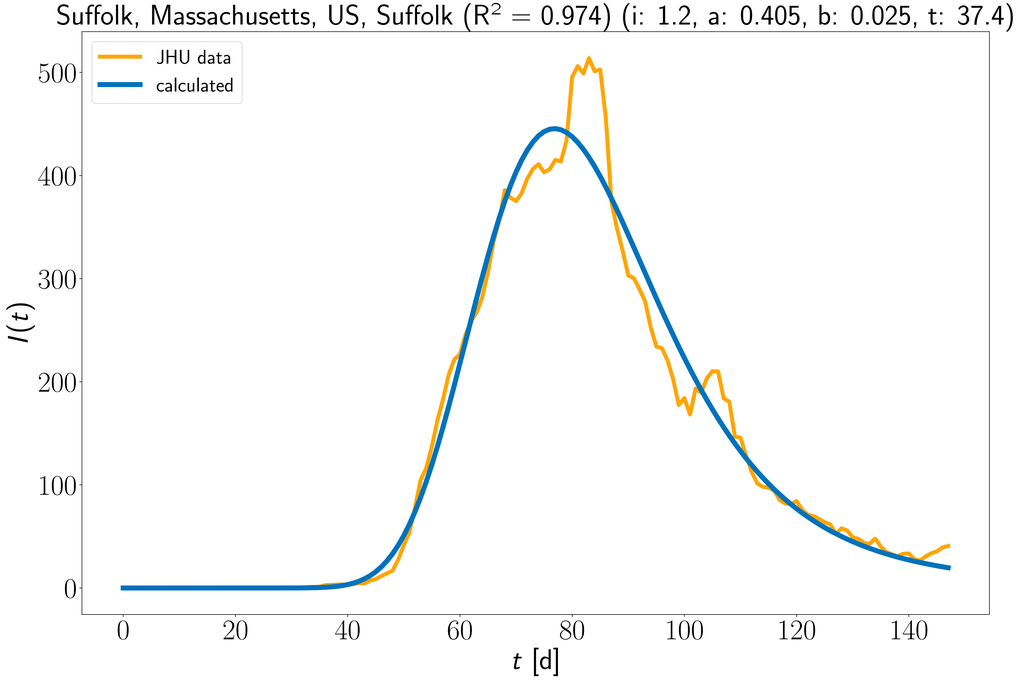

Essex, Massachusetts, US, Essex ($R^2 = 0.785$) (i: 1.8, a: 0.343, b: 0.024, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

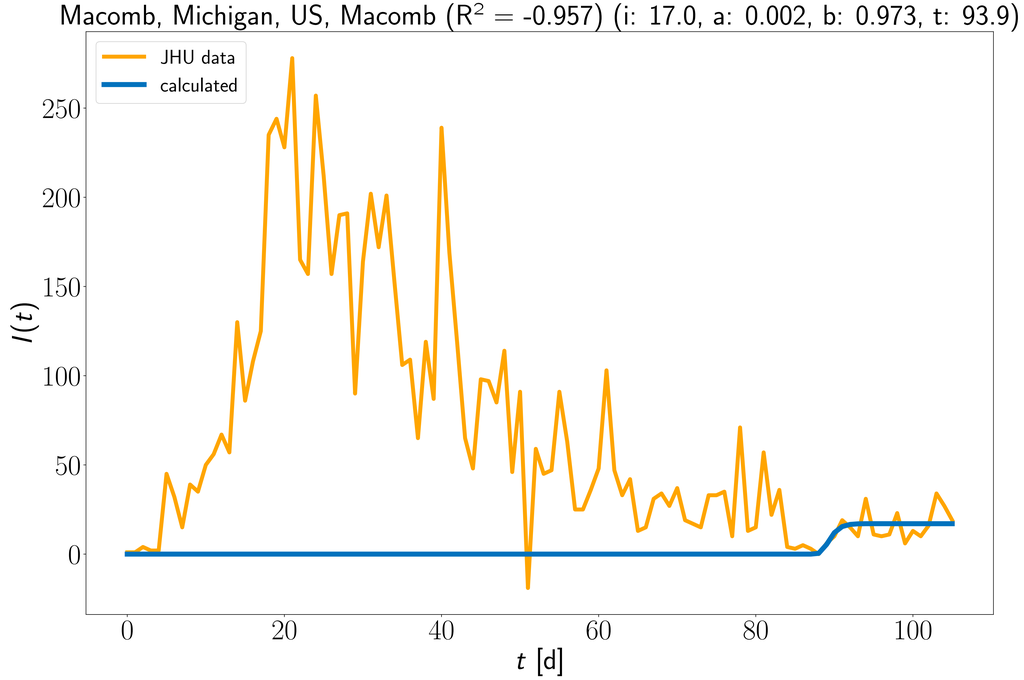

Essex, Massachusetts, US, Essex ($R^2 = 0.984$) (i: 1.8, a: 0.34, b: 0.024, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

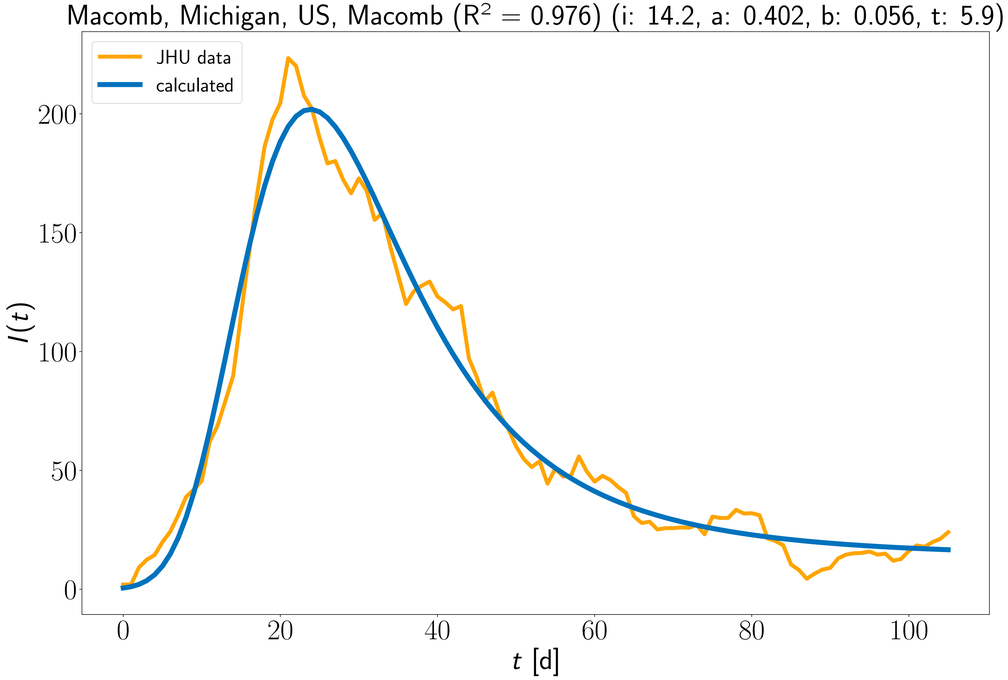

Middlesex, Massachusetts, US, Middlesex ($R^2 = 0.835$) (i: 4.7, a: 0.355, b: 0.028, t: 8.5)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100

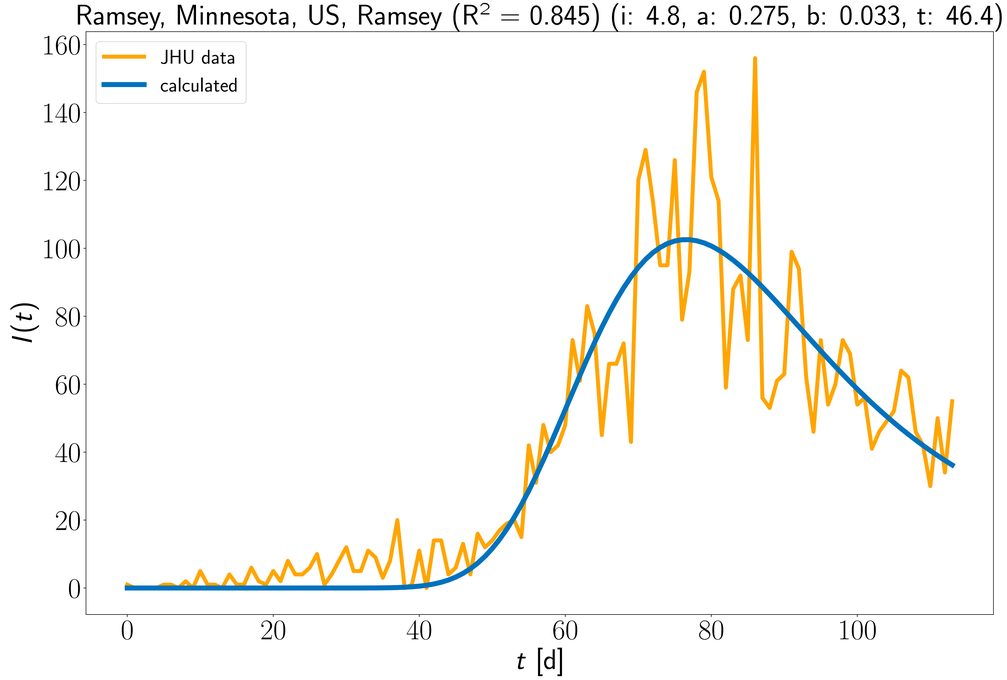

Middlesex, Massachusetts, US, Middlesex ($R^2 = 0.986$) (i: 4.2, a: 0.355, b: 0.027, t: 7.8)
JHU data
calculated
$I(t)$
t [d)
0
100
200
300
400
500
600
0
20
40
60
80
100

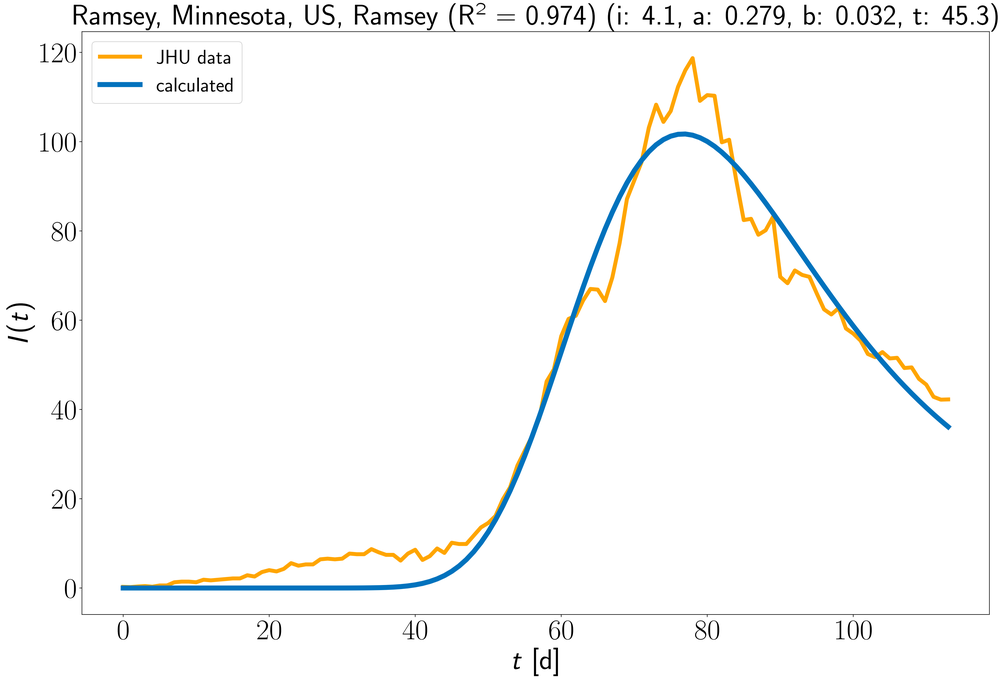

Suffolk, Massachusetts, US, Suffolk ($R^2 = 0.815$) (i: 1.3, a: 0.406, b: 0.026, t: 37.9)
JHU data
calculated
$I(t)$
t [d]
0
200
400
600
800
1000
0
20
40
60
80
100
120
140

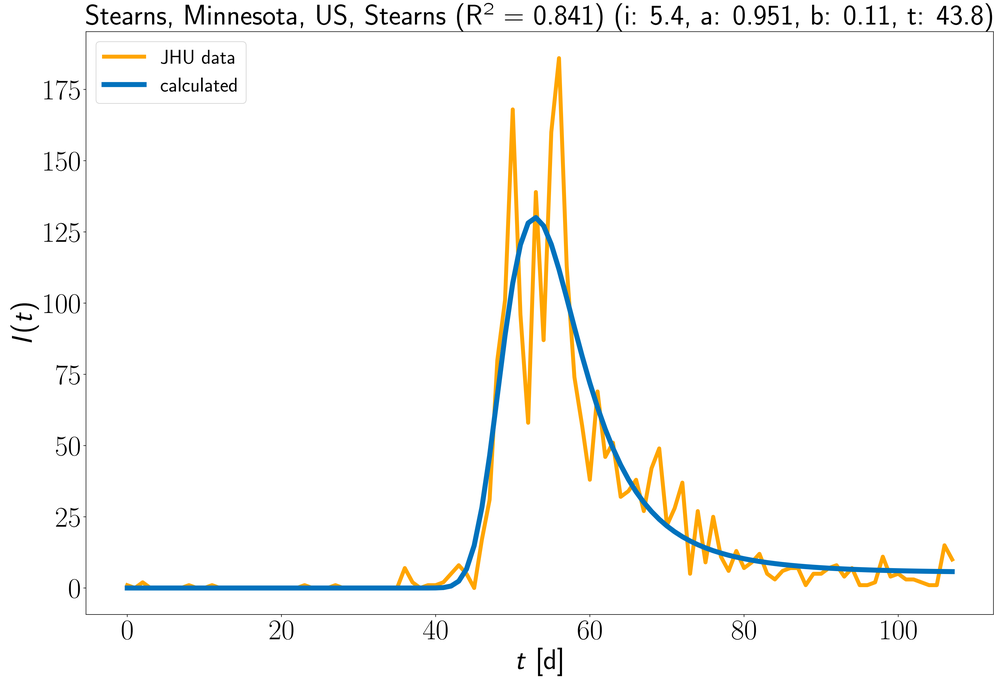

Suffolk, Massachusetts, US, Suffolk ($R^2 = 0.974$) (i: 1.2, a: 0.405, b: 0.025, t: 37.4)
JHU data
calculated
$I(t)$
t [d]
0
100
200
300
400
500
0
20
40
60
80
100
120
140

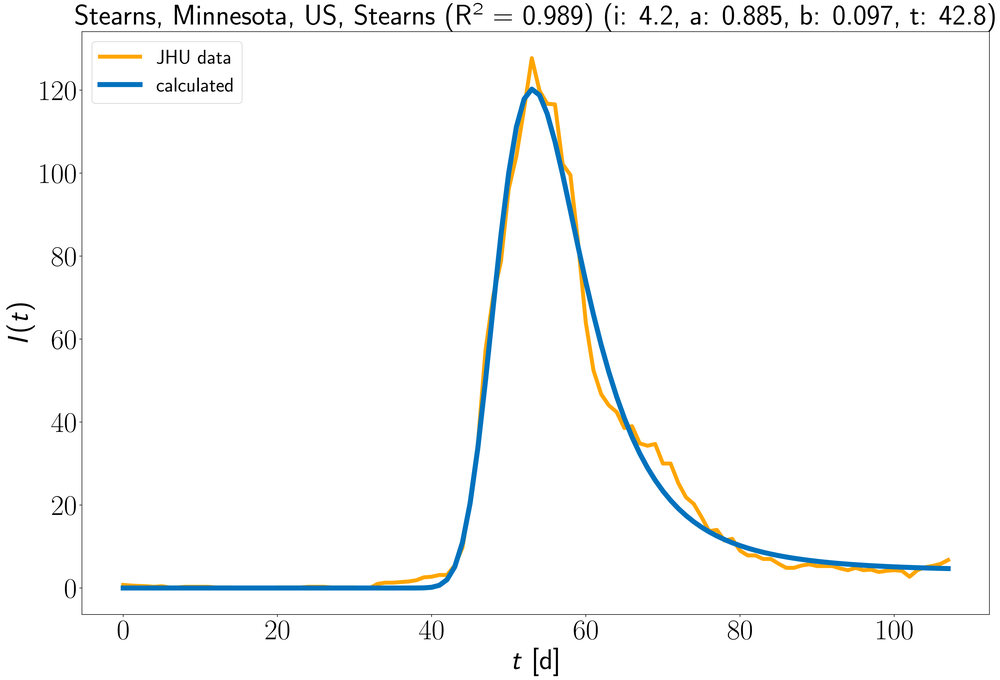

Macomb, Michigan, US, Macomb (R^2 = -0.957) (i: 17.0, a: 0.002, b: 0.973, t: 93.9)
JHU data
calculated
$I(t)$
t [d]

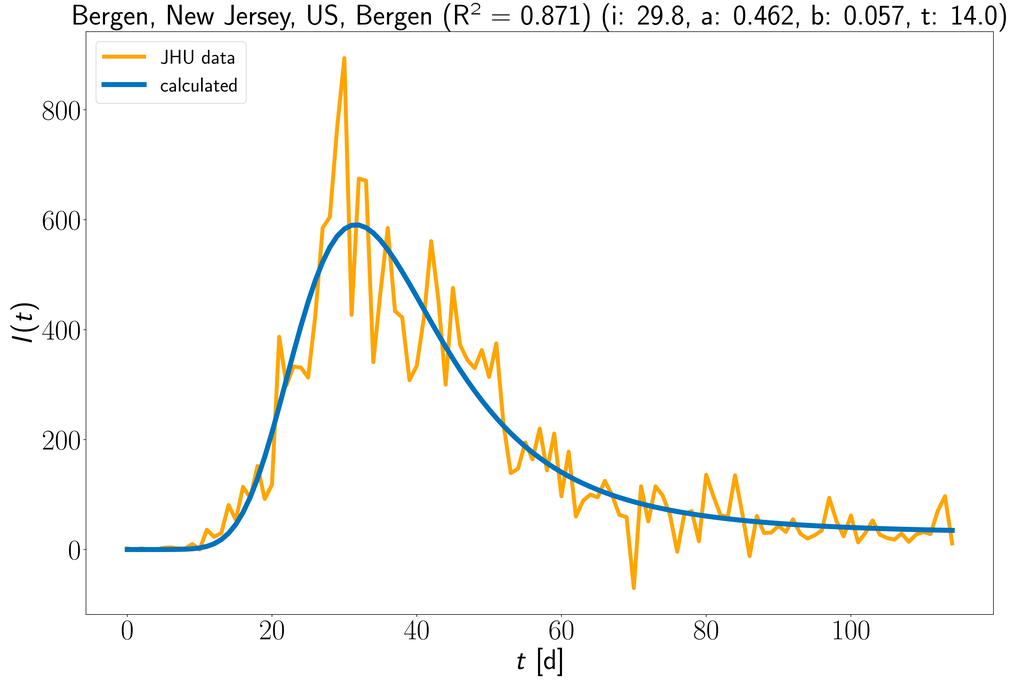

Macomb, Michigan, US, Macomb (R^2 = 0.976) (i: 14.2, a: 0.402, b: 0.056, t: 5.9)
JHU data
calculated
$I(t)$
t [d]

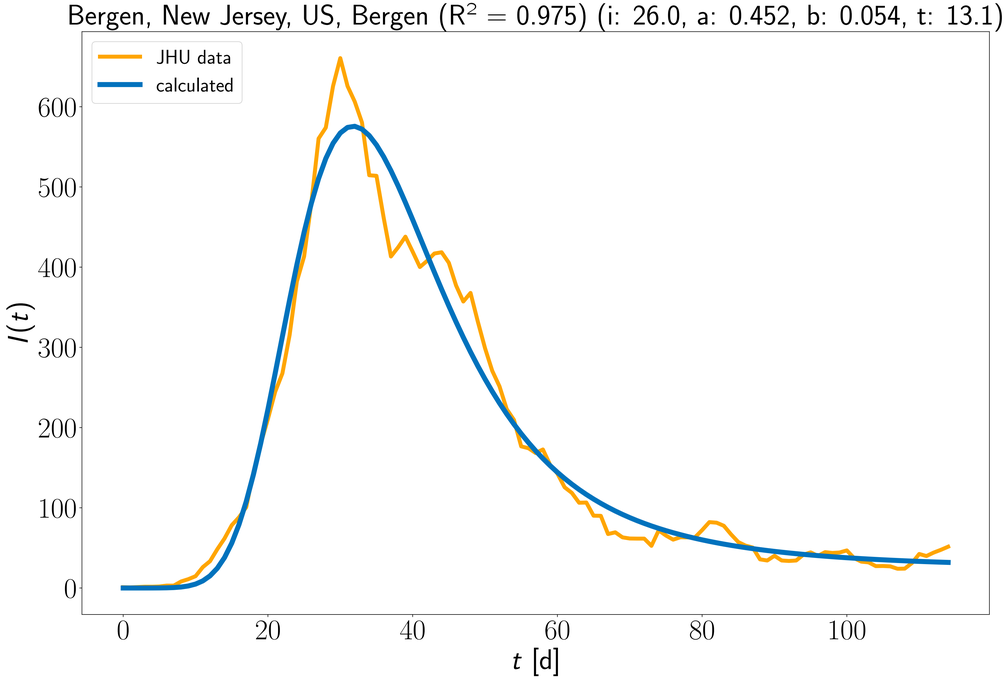

Ramsey, Minnesota, US, Ramsey ($R^2 = 0.845$) (i: 4.8, a: 0.275, b: 0.033, t: 46.4)
JHU data
calculated
$I(t)$
t [d]

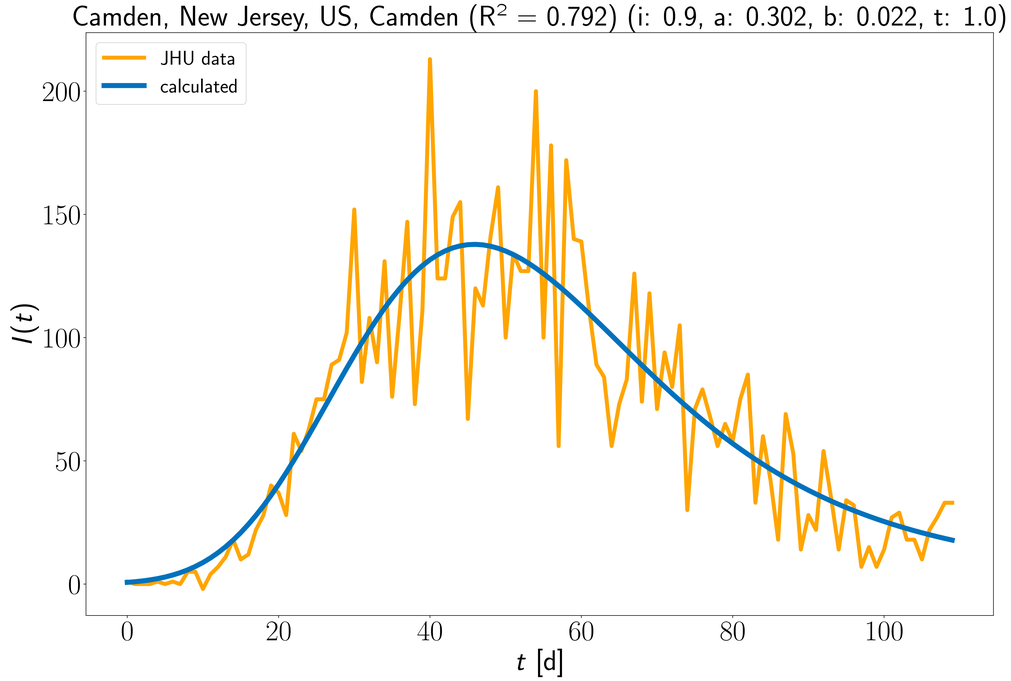

Ramsey, Minnesota, US, Ramsey ($R^2 = 0.974$) (i: 4.1, a: 0.279, b: 0.032, t: 45.3)
JHU data
calculated
$I(t)$
t [d]

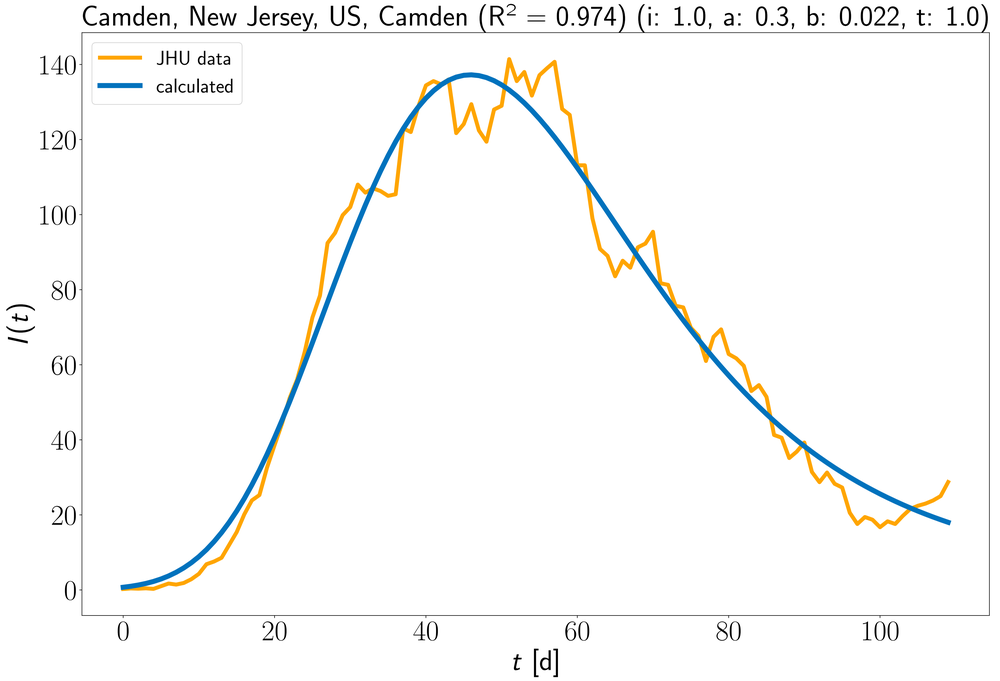

Stearns, Minnesota, US, Stearns ($R^2 = 0.841$) (i: 5.4, a: 0.951, b: 0.11, t: 43.8)
JHU data
calculated
$I(t)$
t [d]

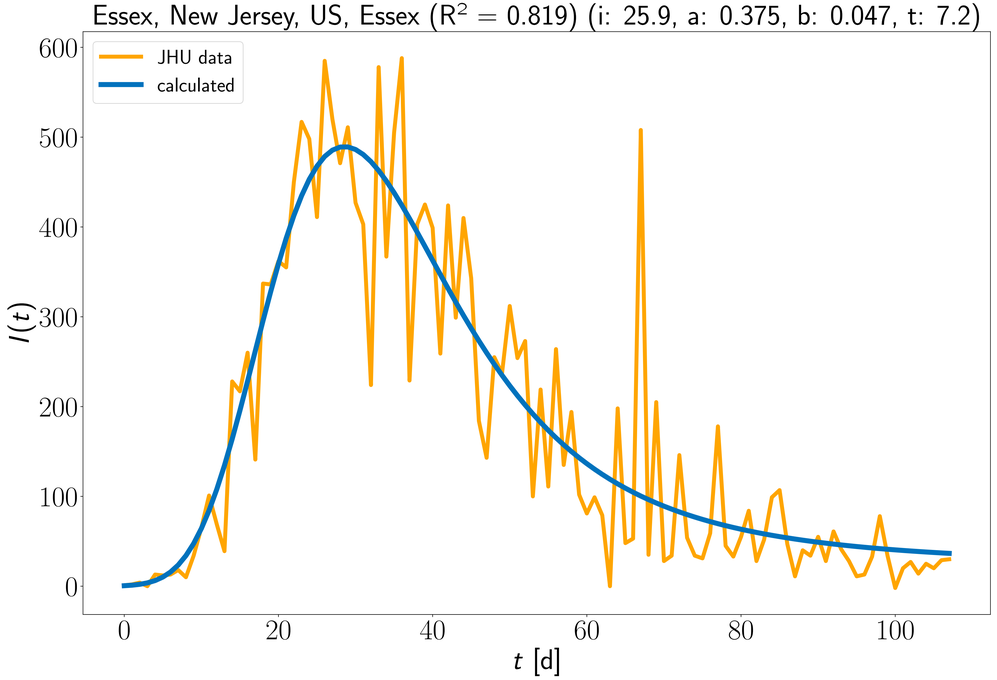

Stearns, Minnesota, US, Stearns ($R^2 = 0.989$) (i: 4.2, a: 0.885, b: 0.097, t: 42.8)
JHU data
calculated
$I(t)$
t [d]

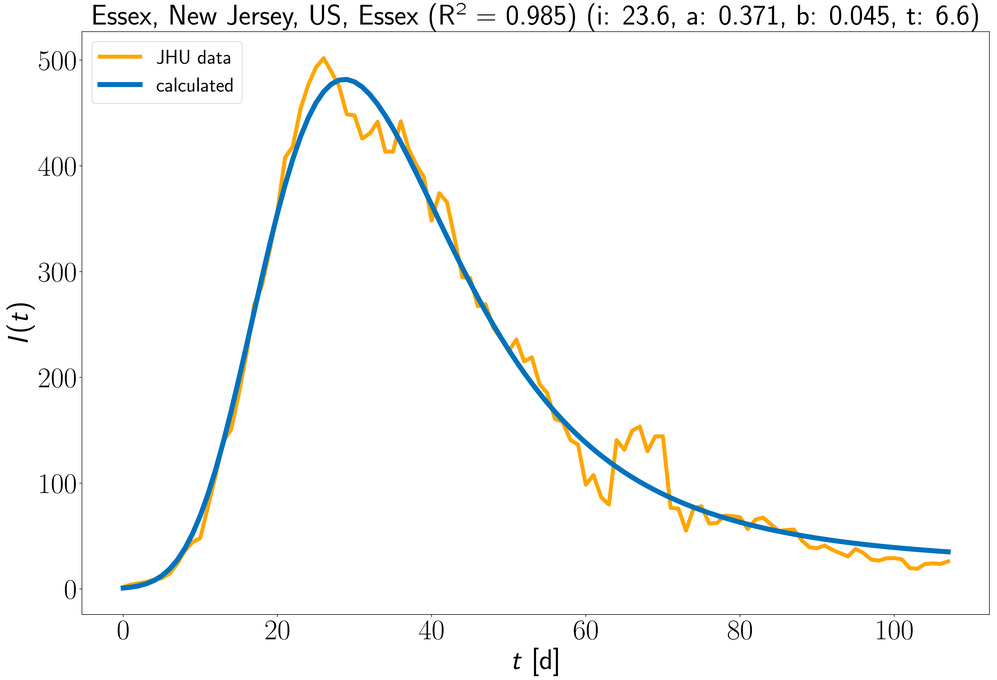

Bergen, New Jersey, US, Bergen ($R^2 = 0.871$) (i: 29.8, a: 0.462, b: 0.057, t: 14.0)
JHU data
calculated
$I(t)$
t [d]

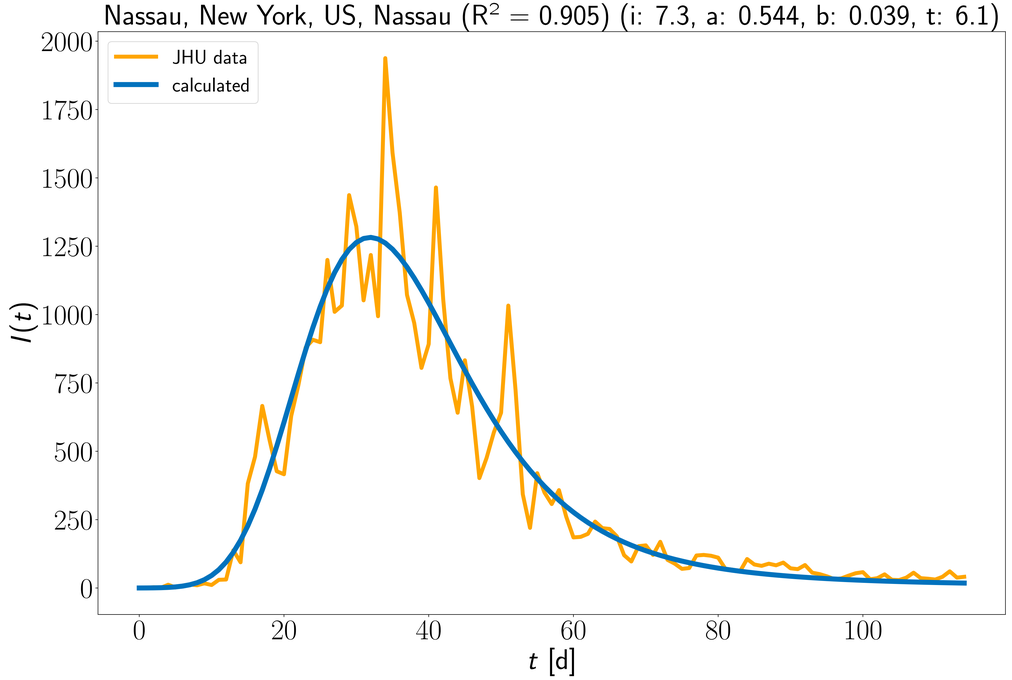

Bergen, New Jersey, US, Bergen ($R^2 = 0.975$) (i: 26.0, a: 0.452, b: 0.054, t: 13.1)
JHU data
calculated
$I(t)$
t [d]

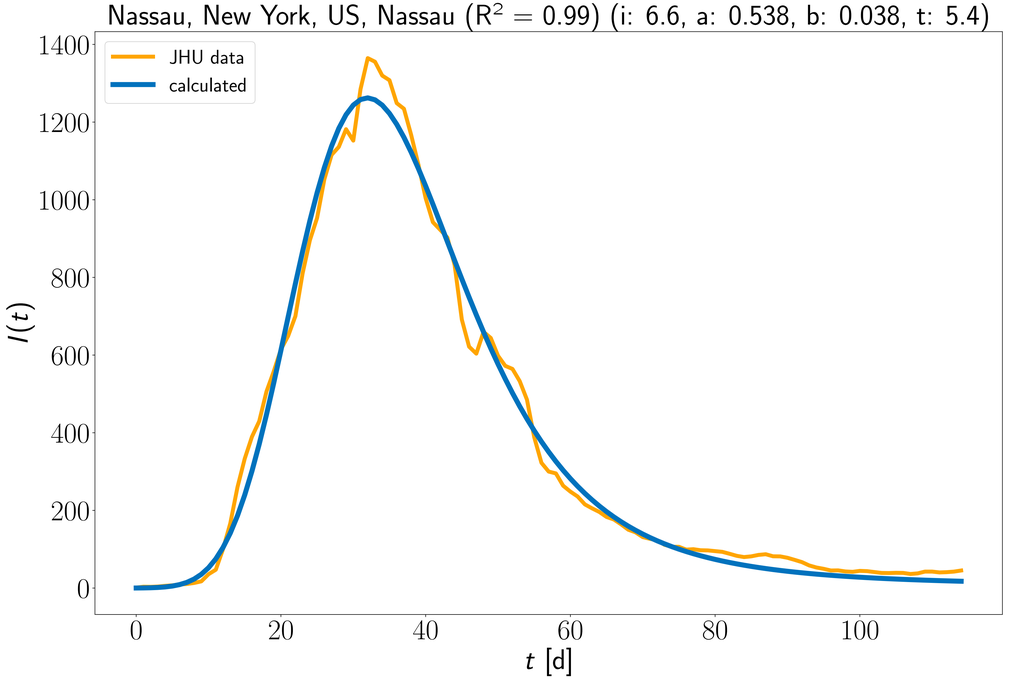

Camden, New Jersey, US, Camden ($R^2 = 0.792$) (i: 0.9, a: 0.302, b: 0.022, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

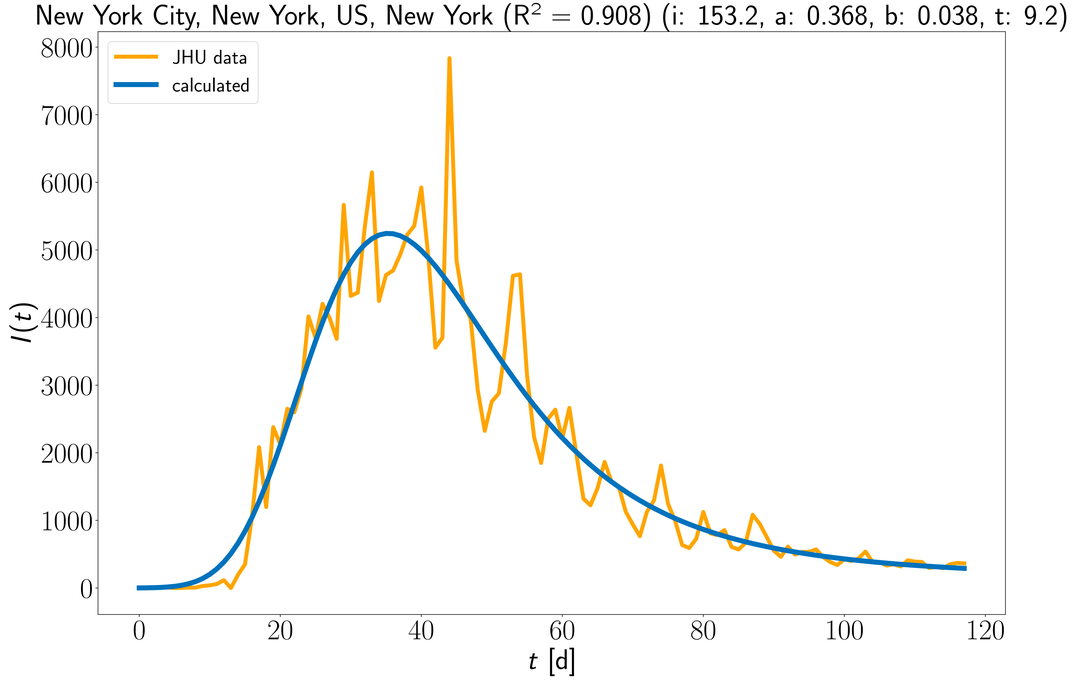

Camden, New Jersey, US, Camden ($R^2 = 0.974$) (i: 1.0, a: 0.3, b: 0.022, t: 1.0)
JHU data
calculated
$I(t)$
t [d]

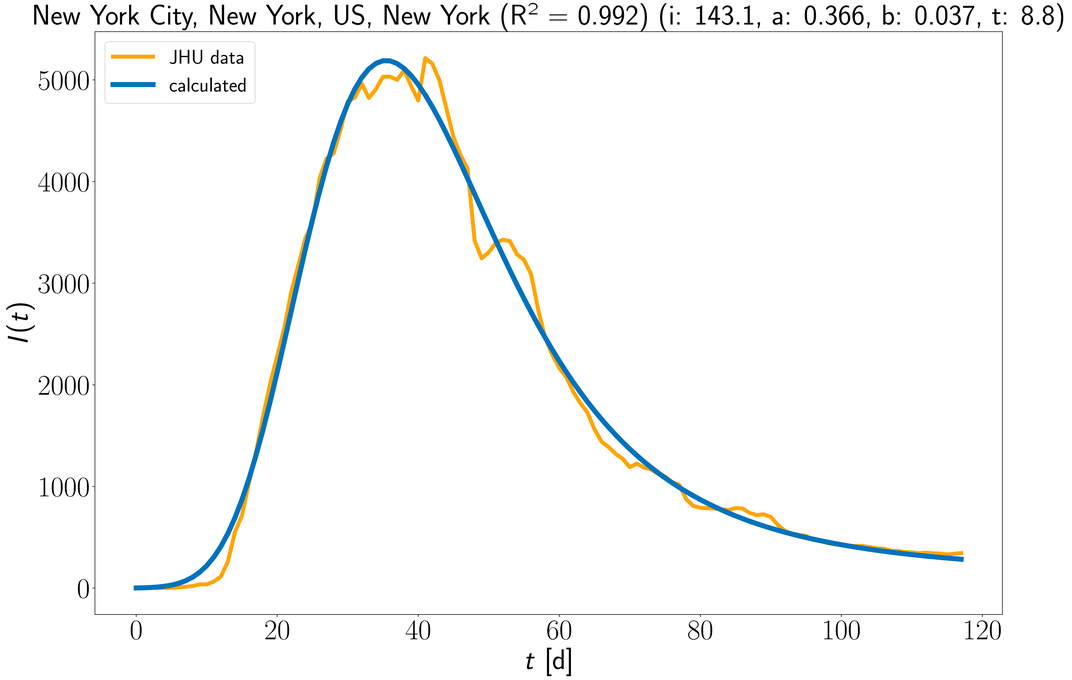

Essex, New Jersey, US, Essex ($R^2 = 0.819$) (i: 25.9, a: 0.375, b: 0.047, t: 7.2)
JHU data
calculated
$I(t)$
t [d]

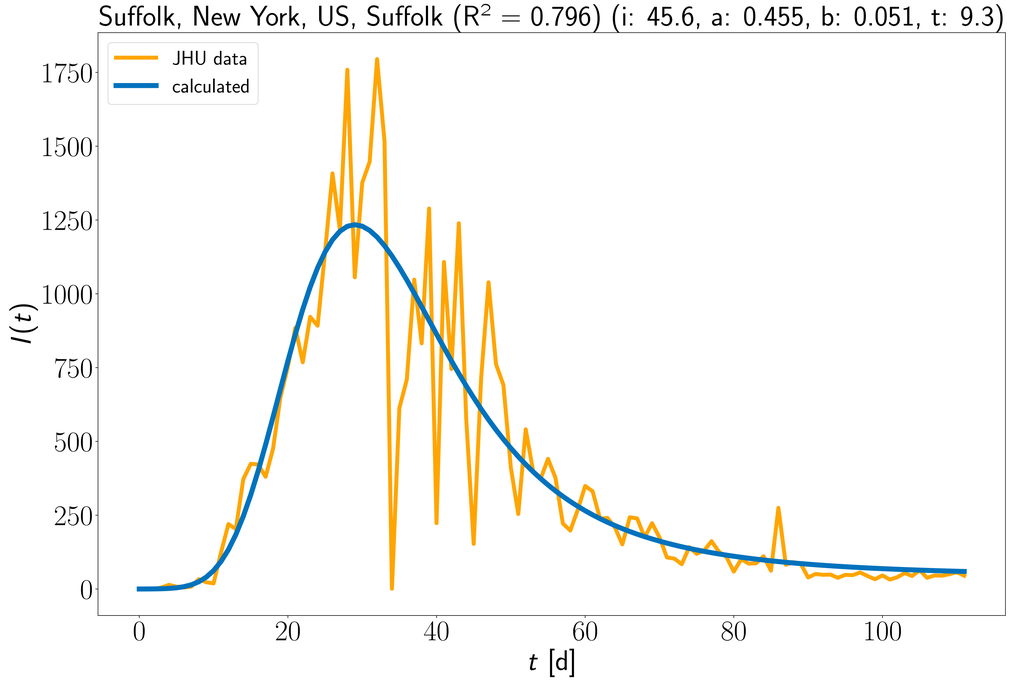

Essex, New Jersey, US, Essex ($R^2 = 0.985$) (i: 23.6, a: 0.371, b: 0.045, t: 6.6)
JHU data
calculated
$I(t)$
t [d]

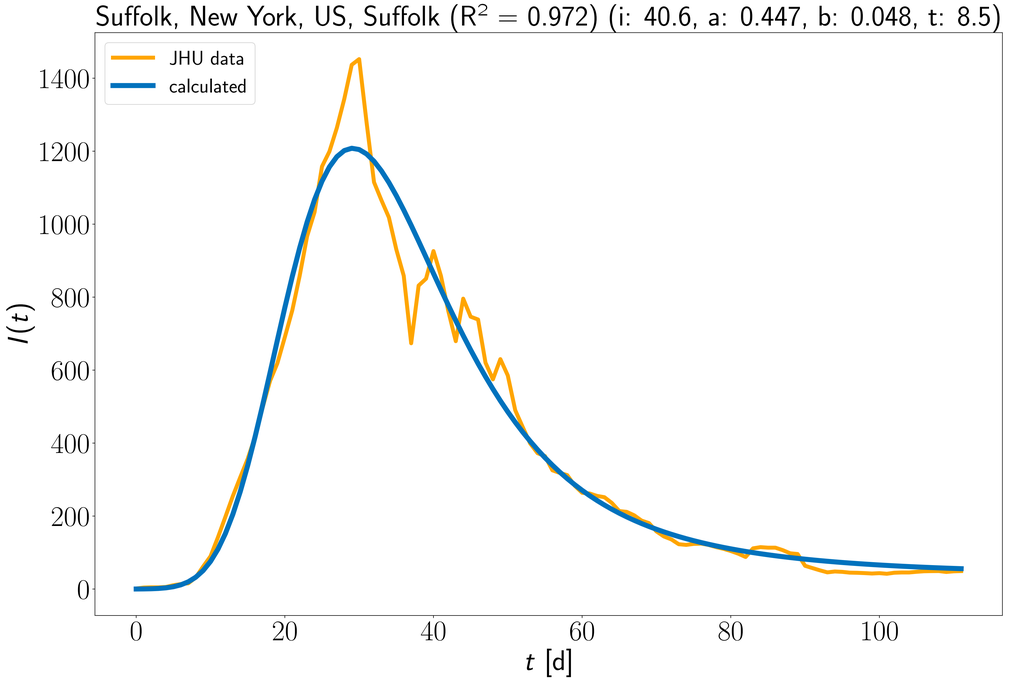

Nassau, New York, US, Nassau ($R^2 = 0.905$) (i: 7.3, a: 0.544, b: 0.039, t: 6.1)
JHU data
calculated
$I(t)$
t [d]

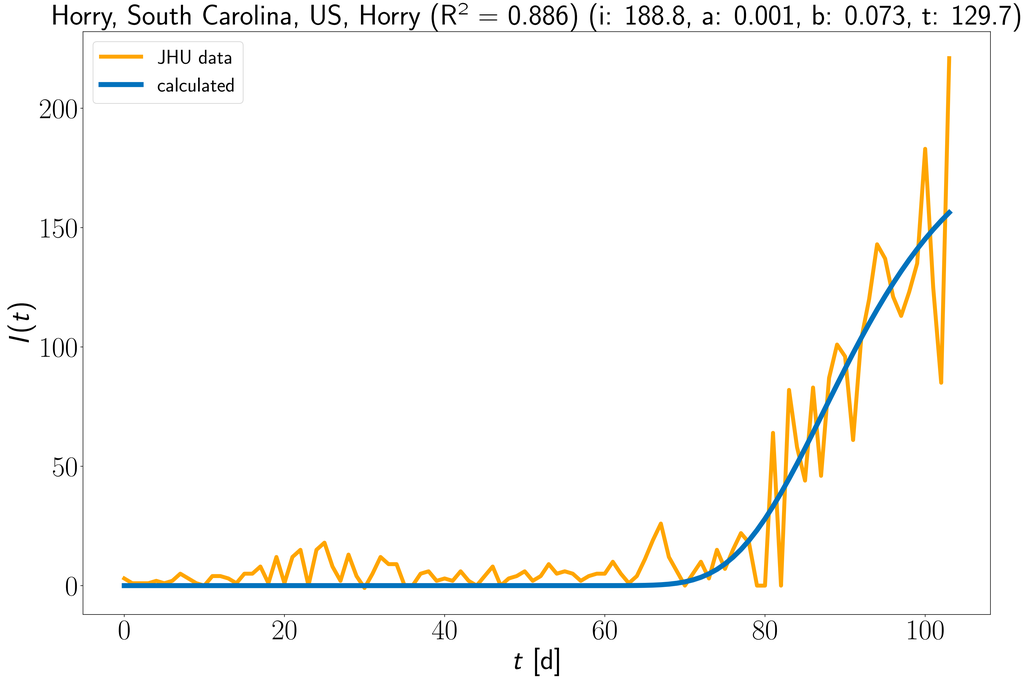

Nassau, New York, US, Nassau ($R^2 = 0.99$) (i: 6.6, a: 0.538, b: 0.038, t: 5.4)
JHU data
calculated
$I(t)$
t [d]

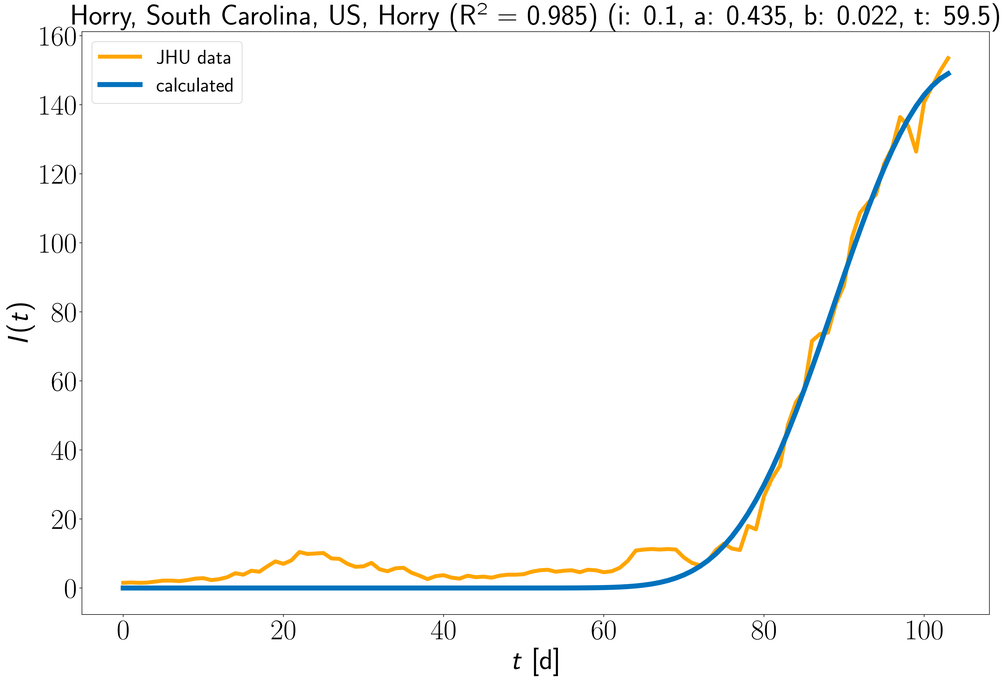

New York City, New York, US, New York ($R^2 = 0.908$) (i: 153.2, a: 0.368, b: 0.038, t: 9.2)
JHU data
calculated
8000
7000
6000
5000
4000
3000
2000
1000
0
$I(t)$
0
20
40
60
80
100
120
t [d]

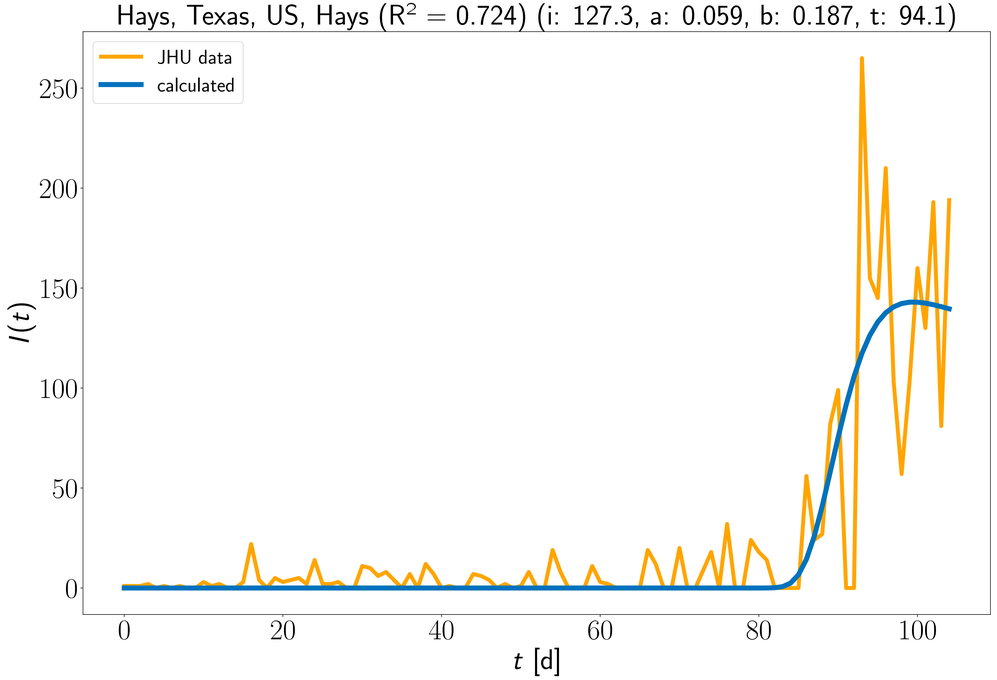

New York City, New York, US, New York ($R^2 = 0.992$) (i: 143.1, a: 0.366, b: 0.037, t: 8.8)
JHU data
calculated
5000
4000
3000
2000
1000
0
$I(t)$
0
20
40
60
80
100
120
t [d]

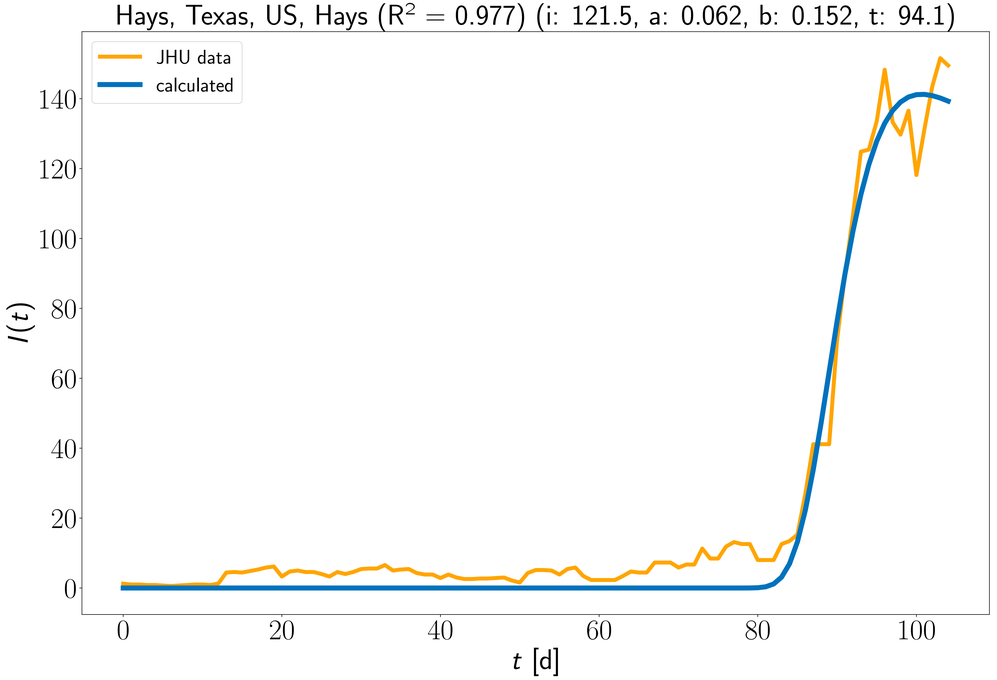

Suffolk, New York, US, Suffolk (R^2 = 0.796) (i: 45.6, a: 0.455, b: 0.051, t: 9.3)
JHU data
calculated
$I(t)$
t [d]

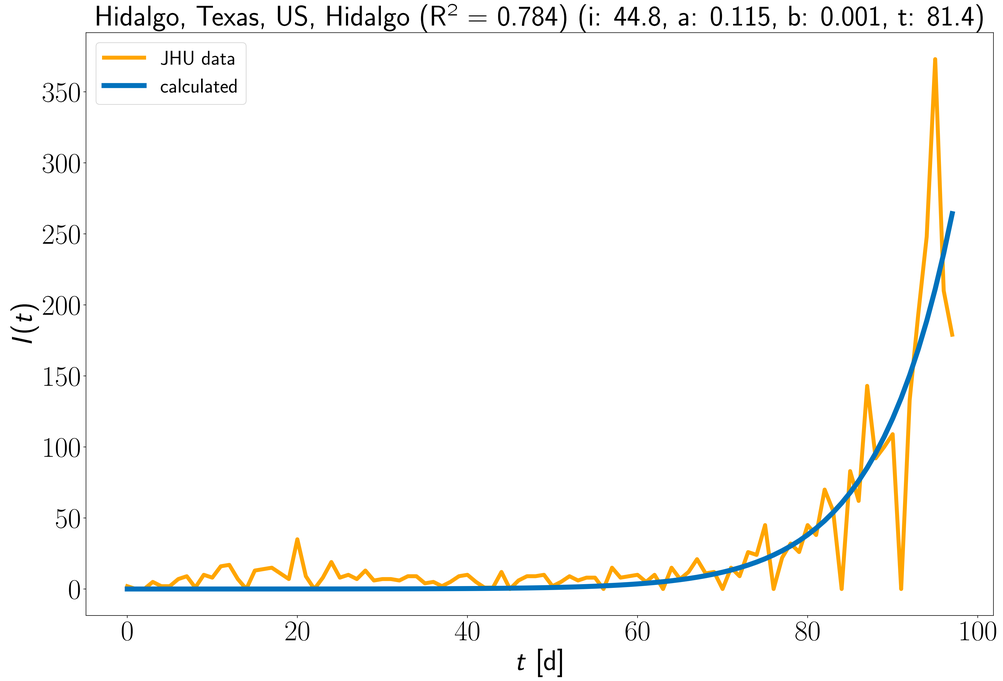

Suffolk, New York, US, Suffolk (R^2 = 0.972) (i: 40.6, a: 0.447, b: 0.048, t: 8.5)
JHU data
calculated
$I(t)$
t [d]

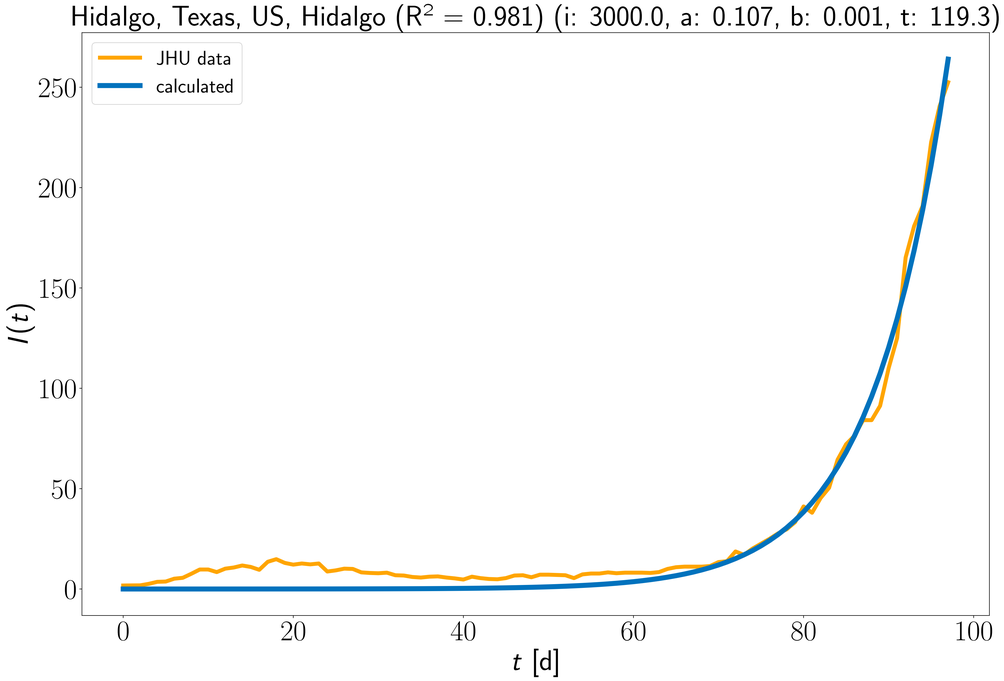

Horry, South Carolina, US, Horry ($R^2 = 0.886$) (i: 188.8, a: 0.001, b: 0.073, t: 129.7)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
0
20
40
60
80
100

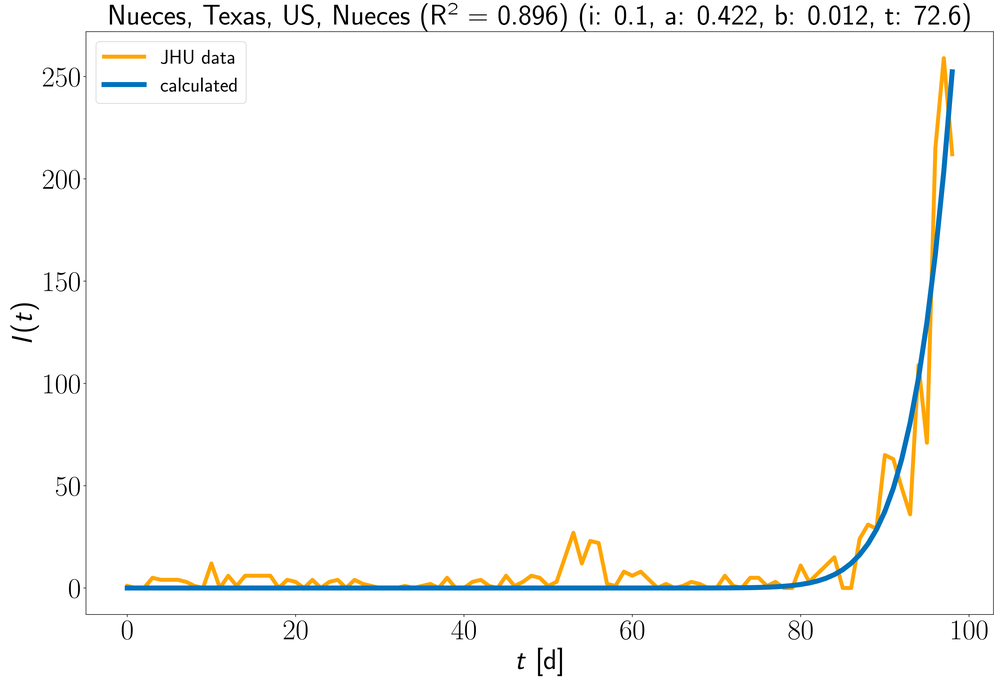

Horry, South Carolina, US, Horry ($R^2 = 0.985$) (i: 0.1, a: 0.435, b: 0.022, t: 59.5)
JHU data
calculated
$I(t)$
t [d]
0
20
40
60
80
100
120
140
160
0
20
40
60
80
100

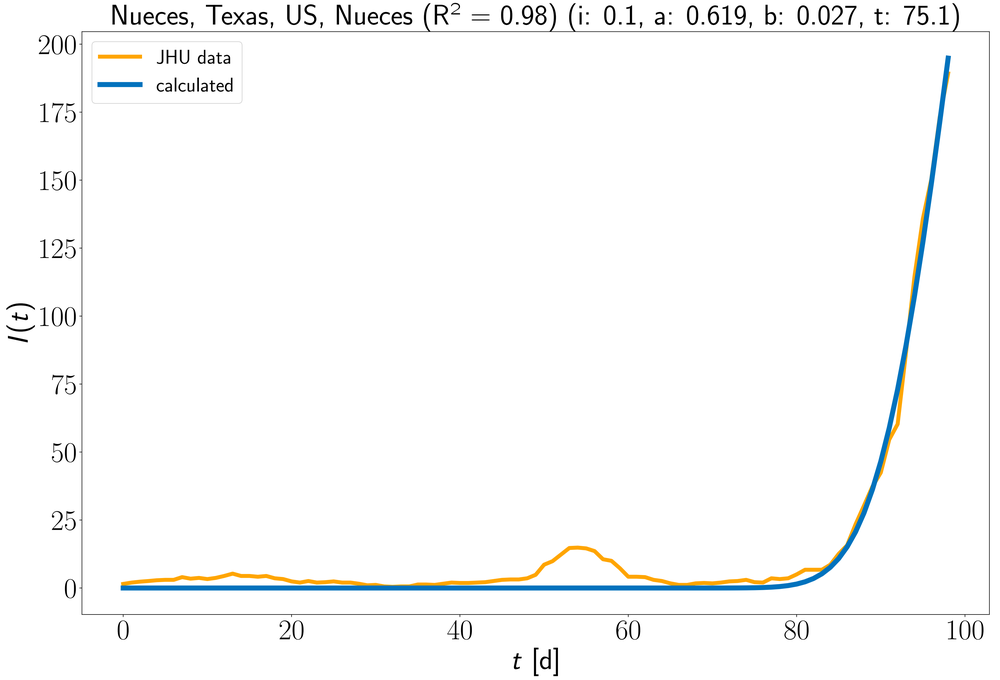

Hays, Texas, US, Hays ($R^2 = 0.724$) (i: 127.3, a: 0.059, b: 0.187, t: 94.1)
JHU data
calculated
$I(t)$
t [d]


Hays, Texas, US, Hays ($R^2 = 0.977$) (i: 121.5, a: 0.062, b: 0.152, t: 94.1)
JHU data
calculated
$I(t)$
t [d]


Hidalgo, Texas, US, Hidalgo ($R^2 = 0.784$) (i: 44.8, a: 0.115, b: 0.001, t: 81.4)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
250
300
350
0
20
40
60
80
100


Hidalgo, Texas, US, Hidalgo ($R^2 = 0.981$) (i: 3000.0, a: 0.107, b: 0.001, t: 119.3)
JHU data
calculated
$I(t)$
t [d]
0
50
100
150
200
250
0
20
40
60
80
100


Nueces, Texas, US, Nueces ($R^2 = 0.896$) (i: 0.1, a: 0.422, b: 0.012, t: 72.6)
JHU data
calculated
$I(t)$
t [d]


Nueces, Texas, US, Nueces ($R^2 = 0.98$) (i: 0.1, a: 0.619, b: 0.027, t: 75.1)
JHU data
calculated
$I(t)$
t [d]