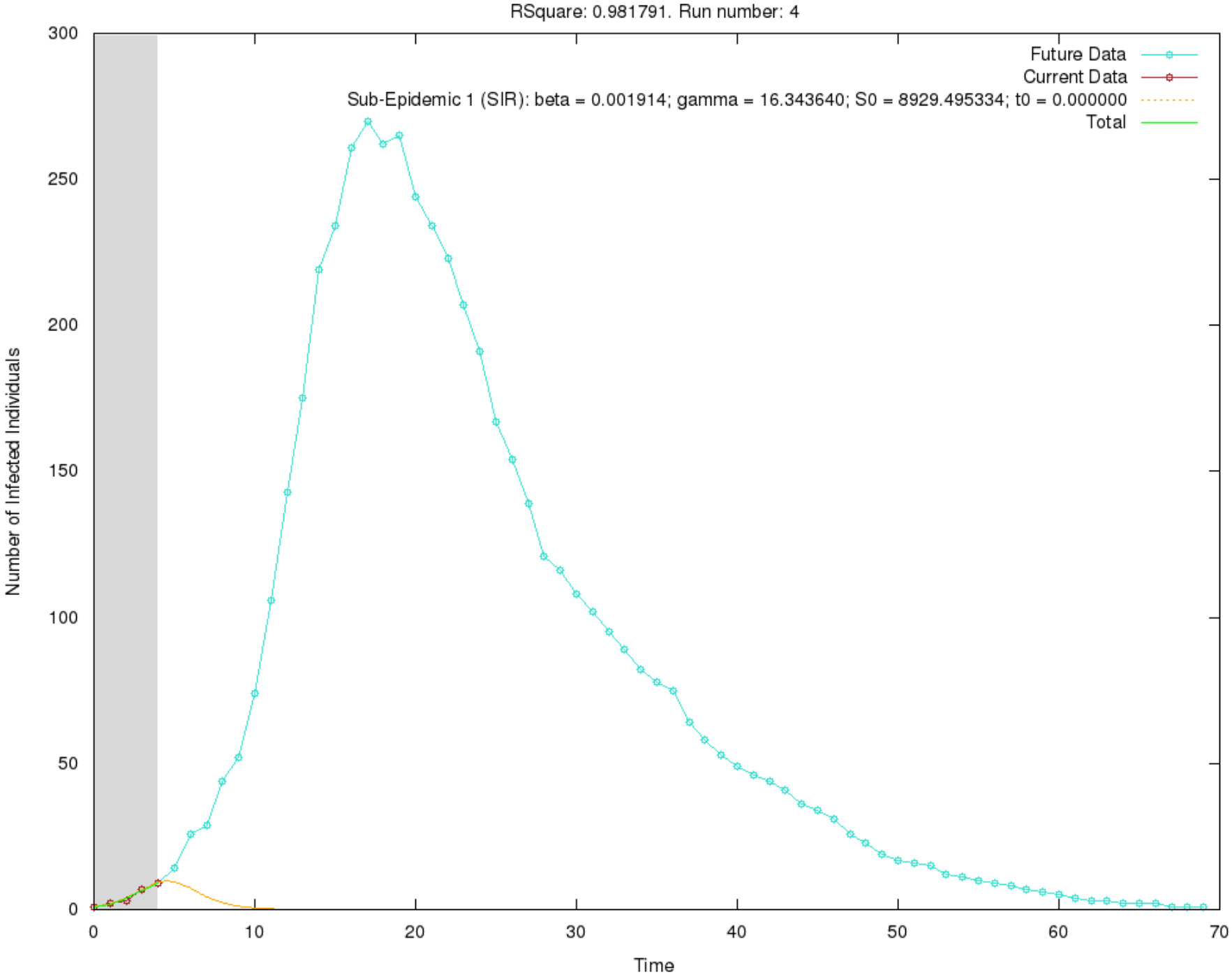
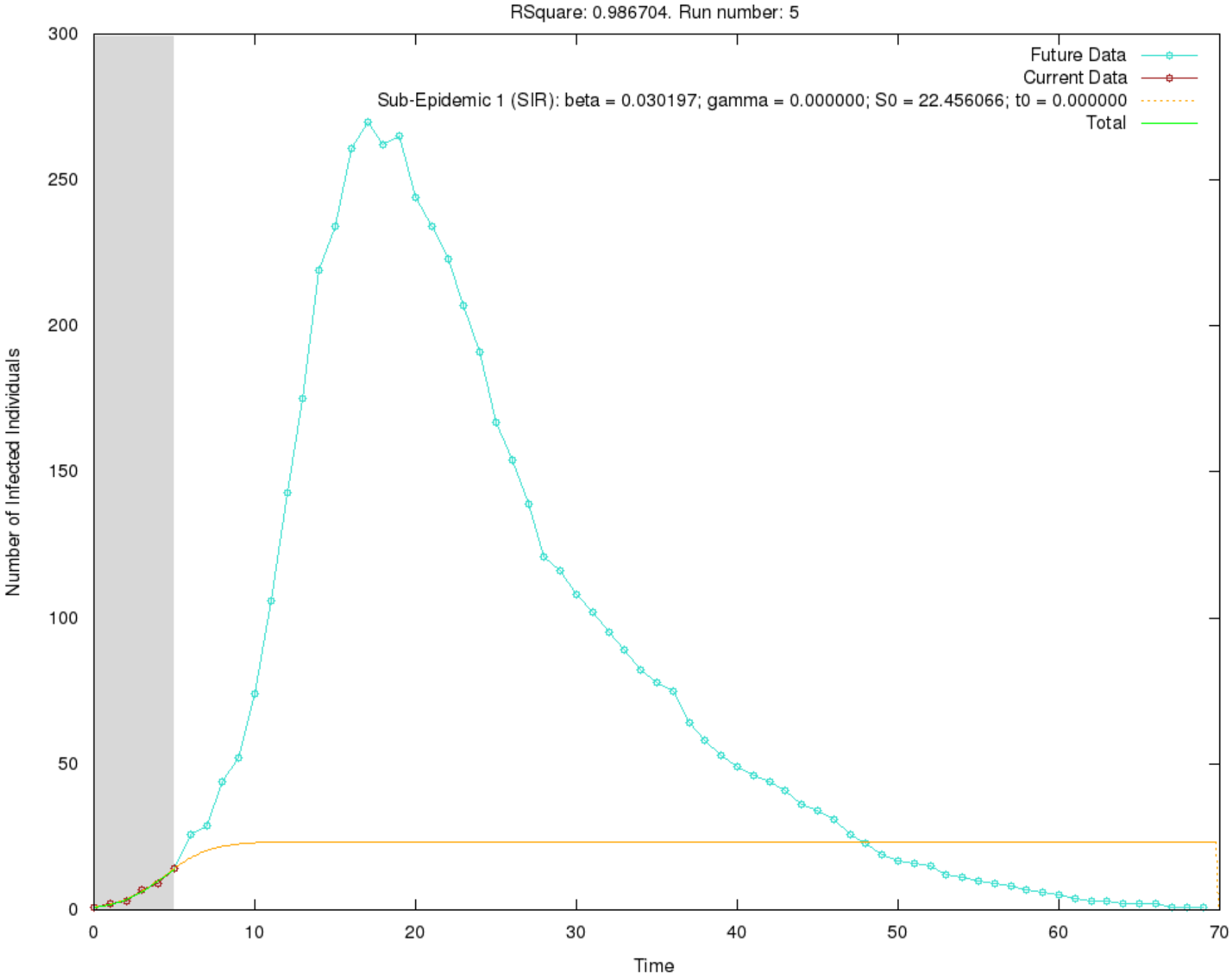
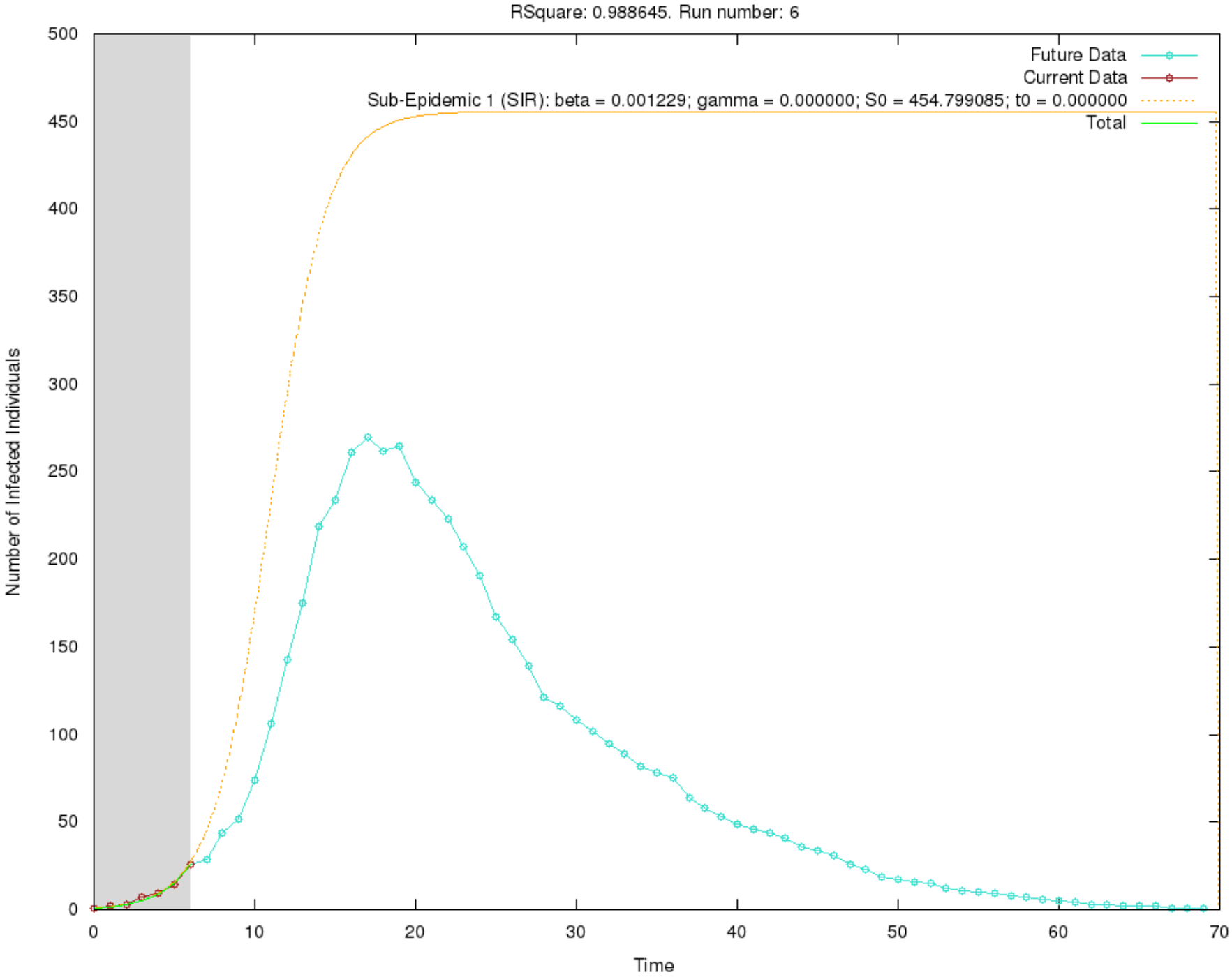
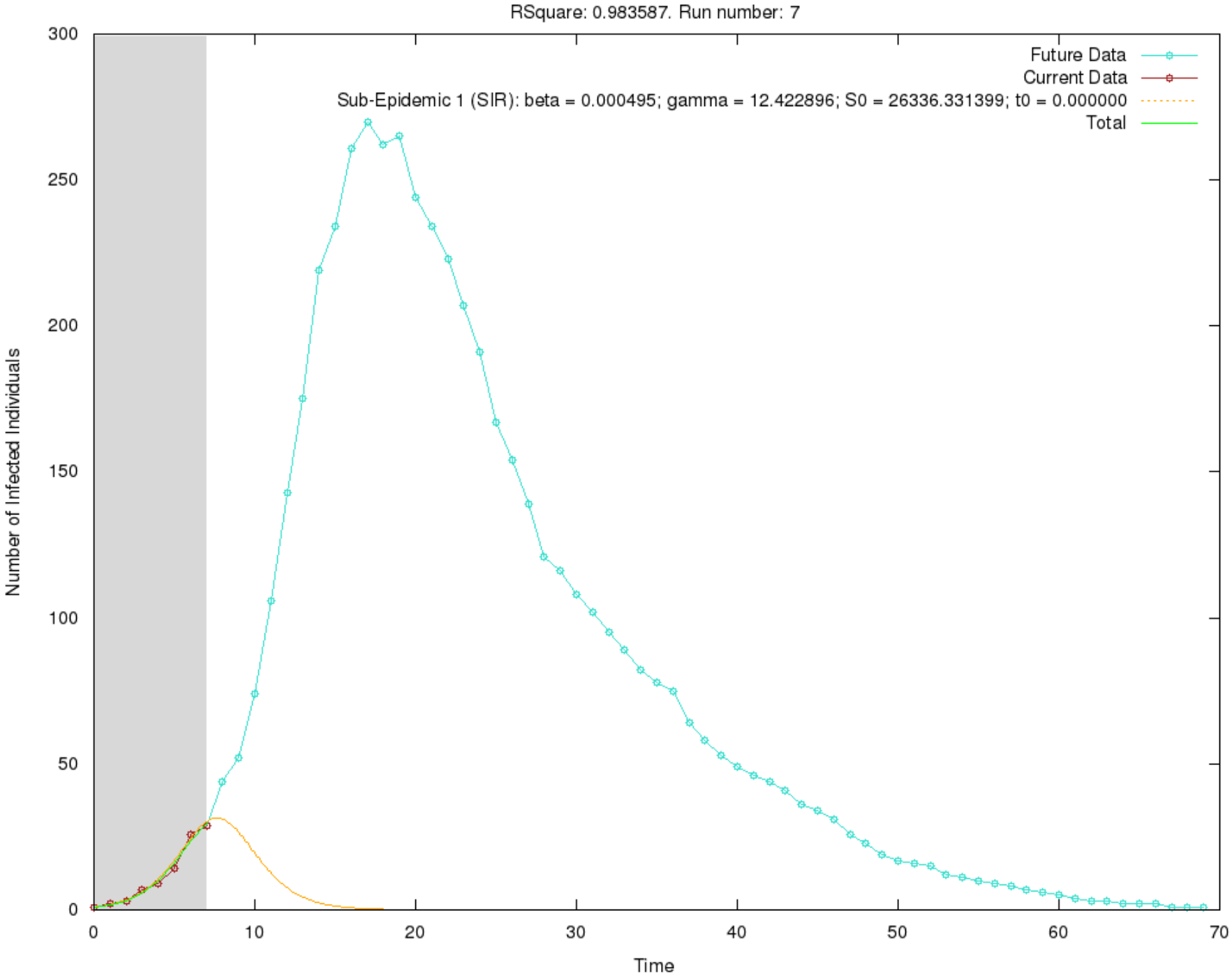
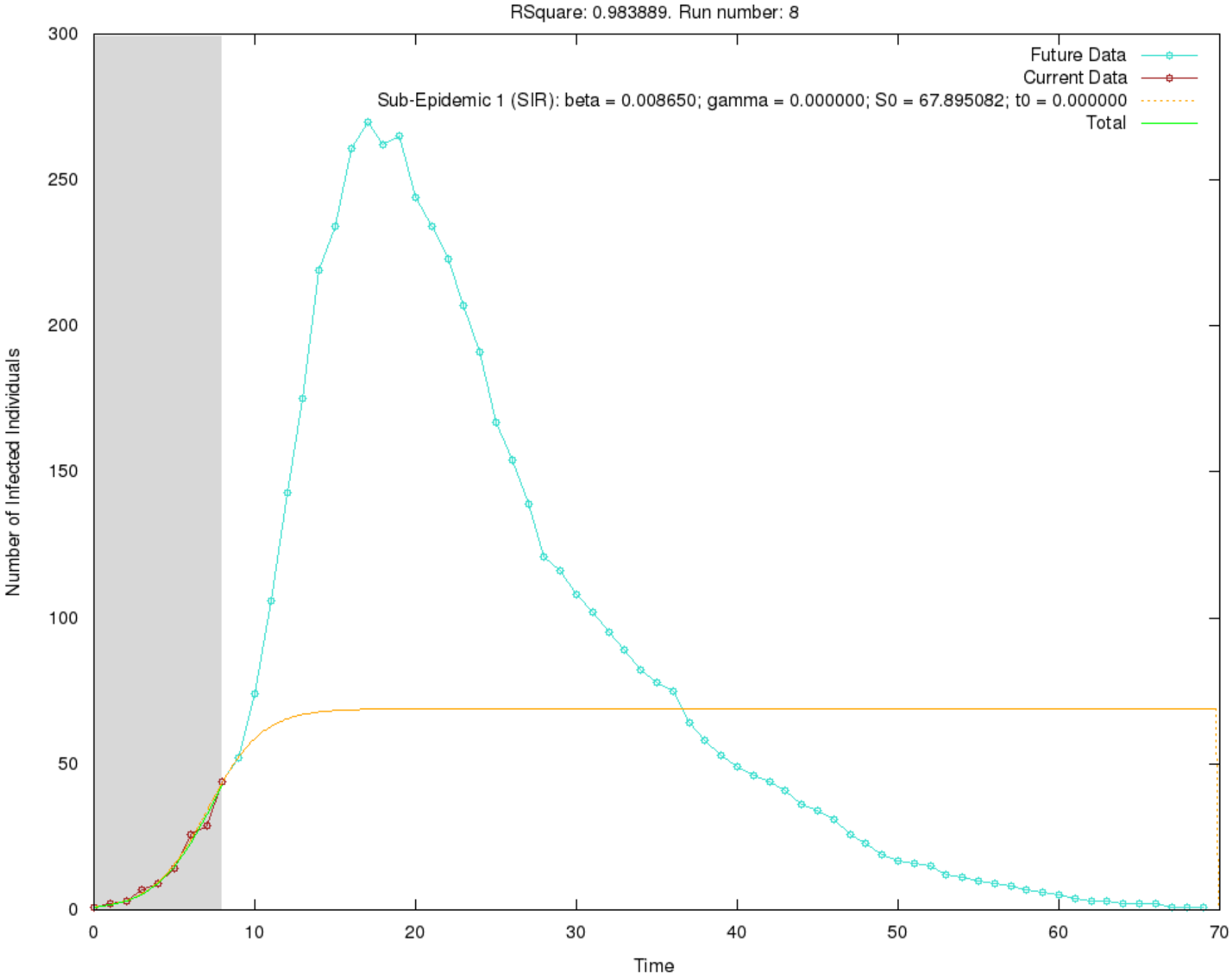
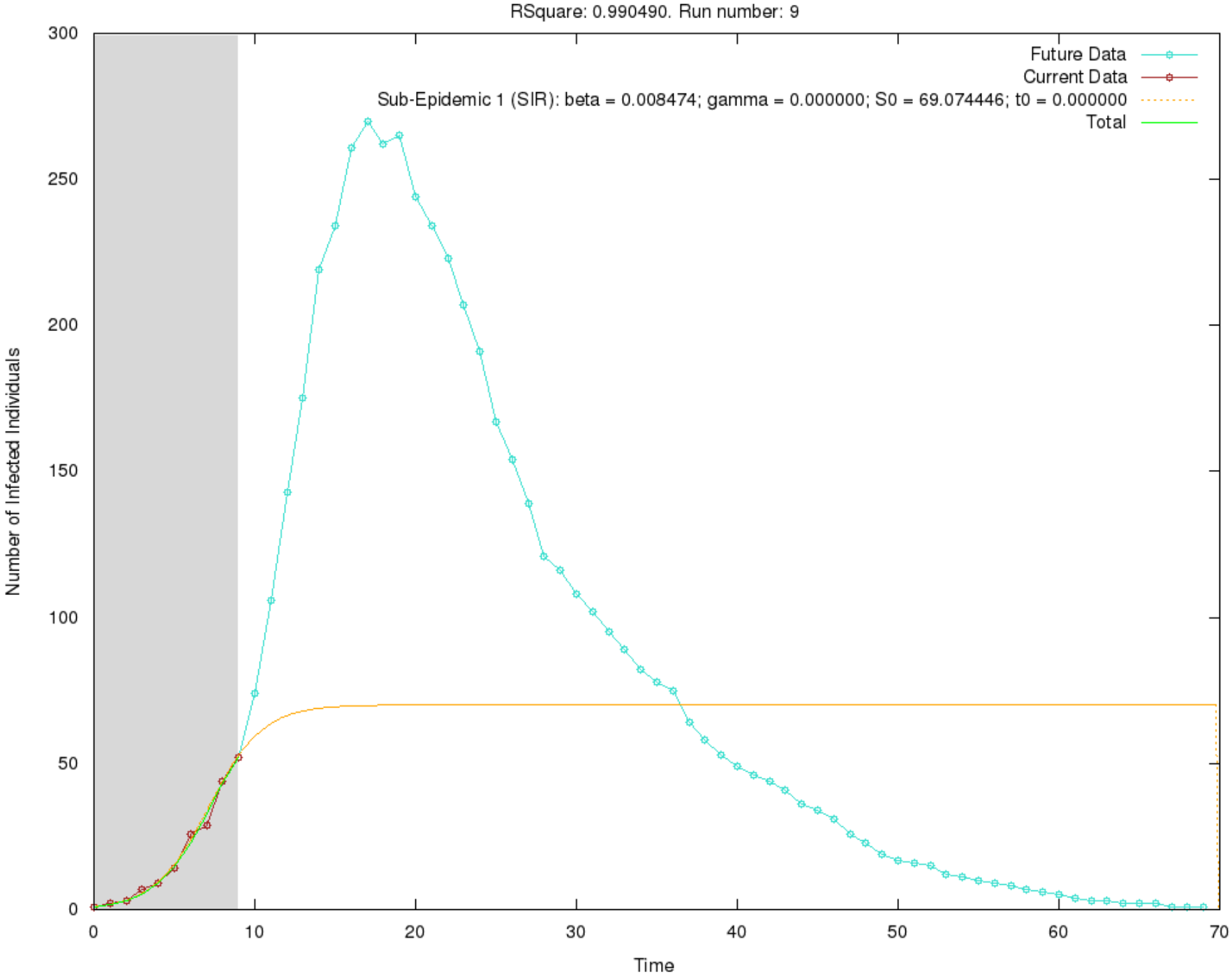

RSquare: 0.981791. Run number: 4
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001914; gamma = 16.343640; S0 = 8929.495334; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

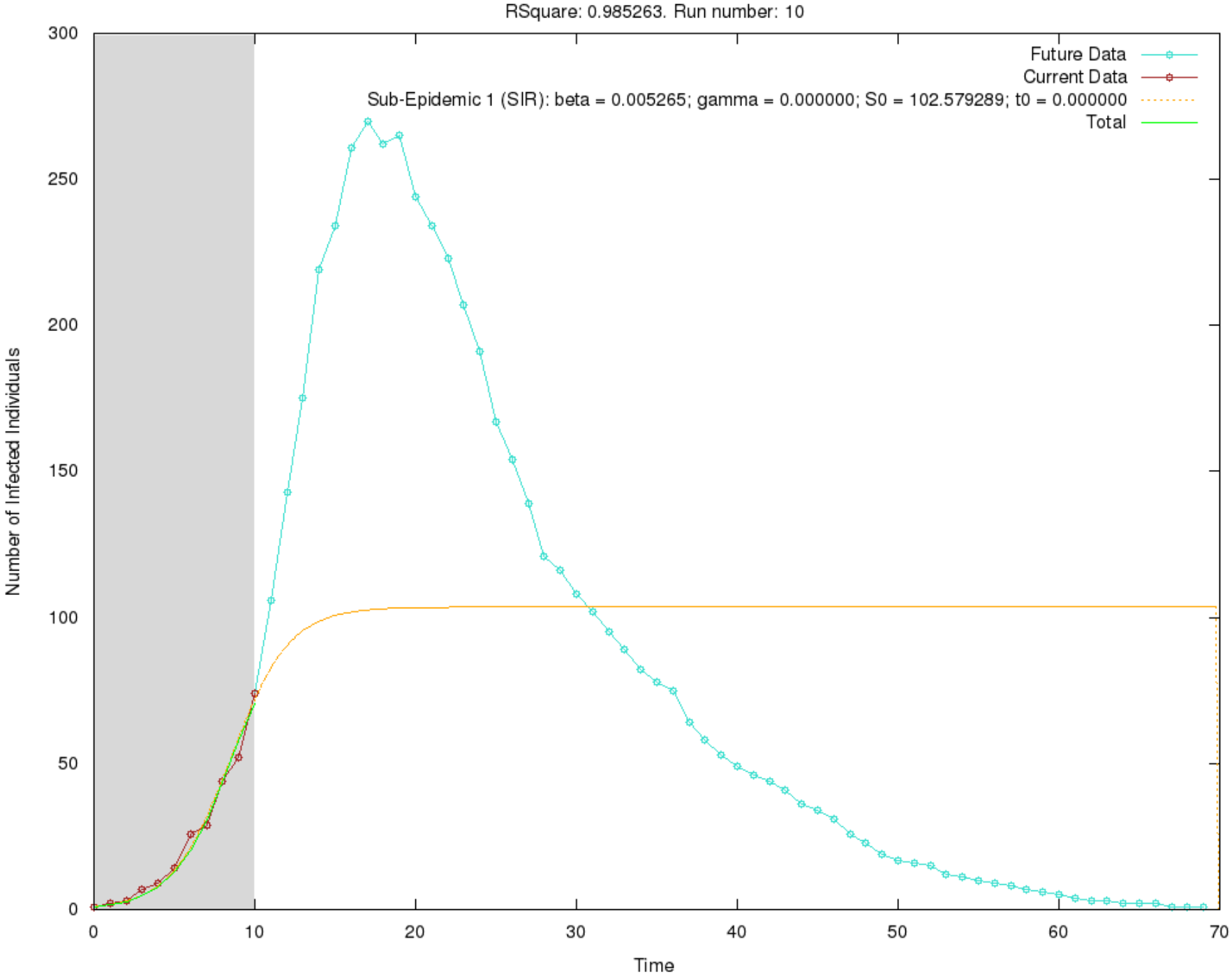

RSquare: 0.986704. Run number: 5
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.030197; gamma = 0.000000; S0 = 22.456066; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

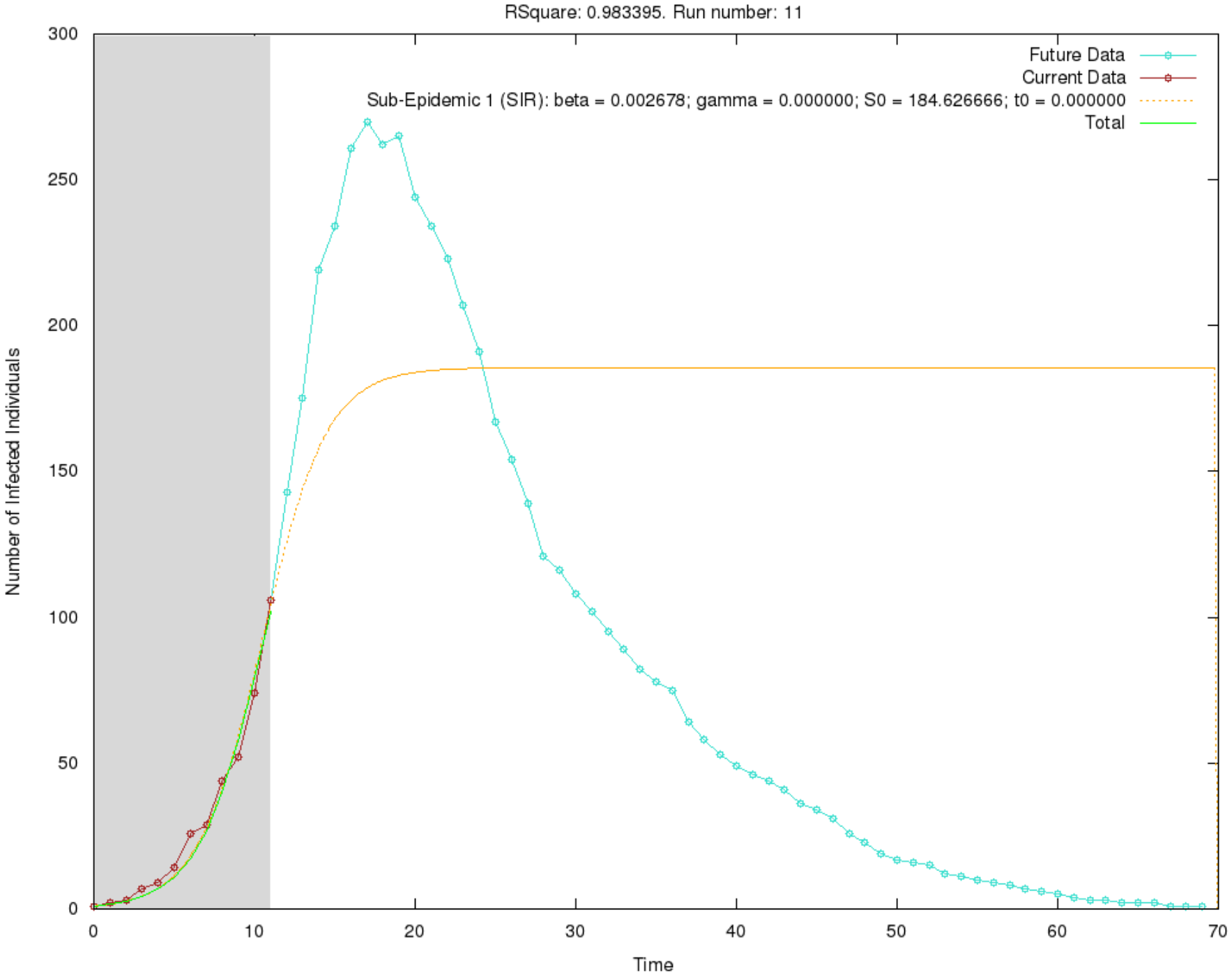

RSquare: 0.988645. Run number: 6
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001229; gamma = 0.000000; S0 = 454.799085; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
350
400
450
500
0
10
20
30
40
50
60
70

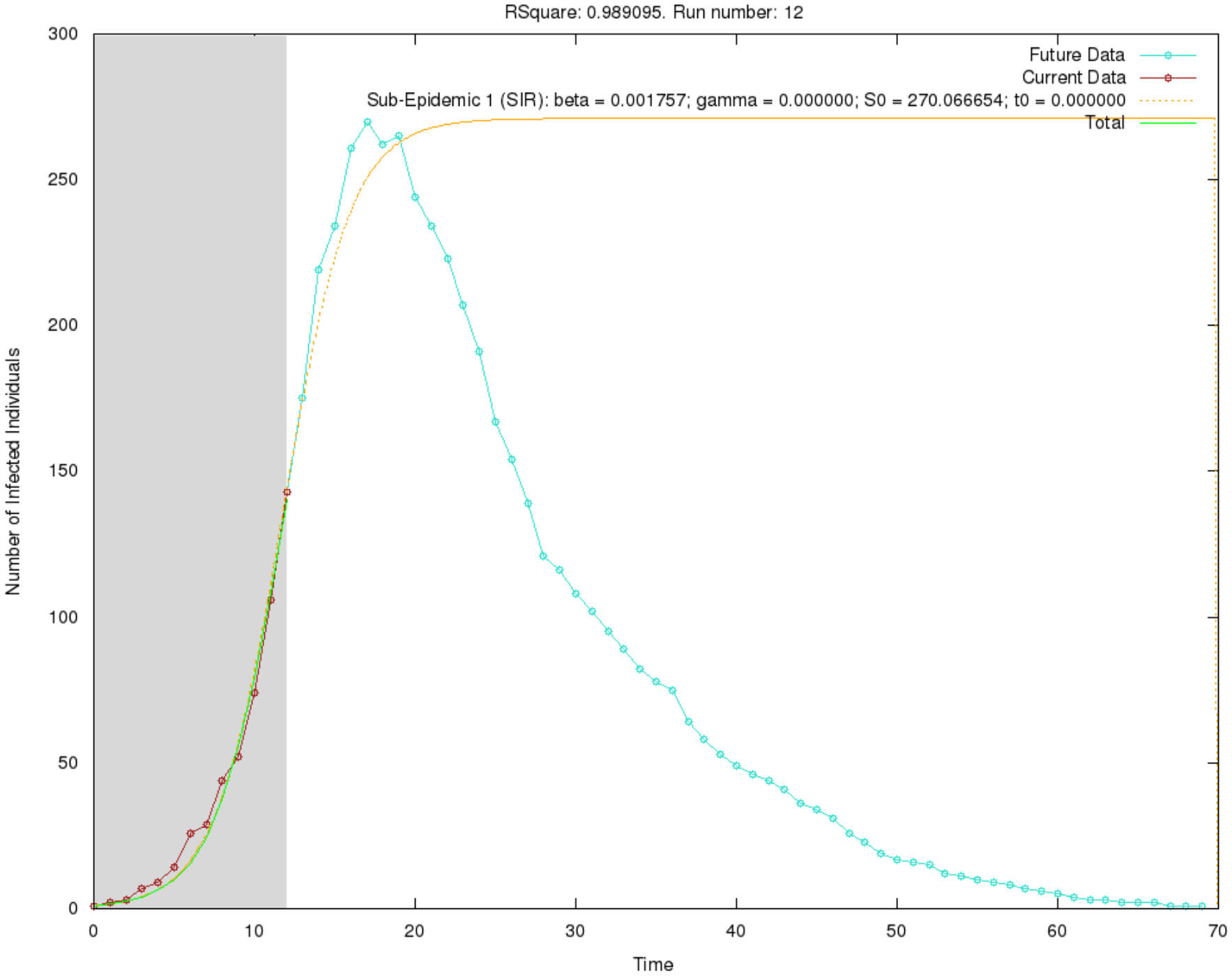

RSquare: 0.983587. Run number: 7
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.000495; gamma = 12.422896; S0 = 26336.331399; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

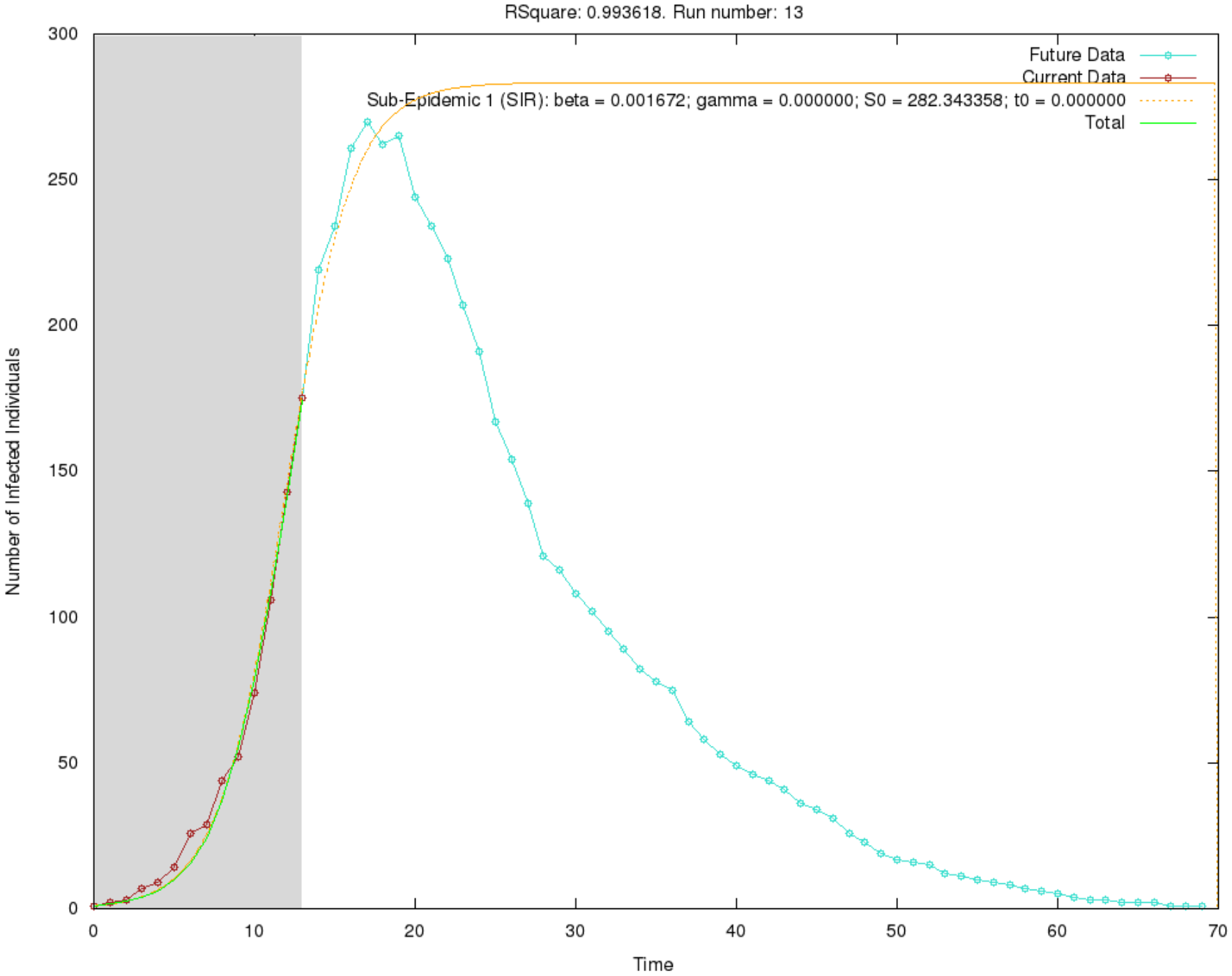

RSquare: 0.983889. Run number: 8
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.008650; gamma = 0.000000; S0 = 67.895082; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

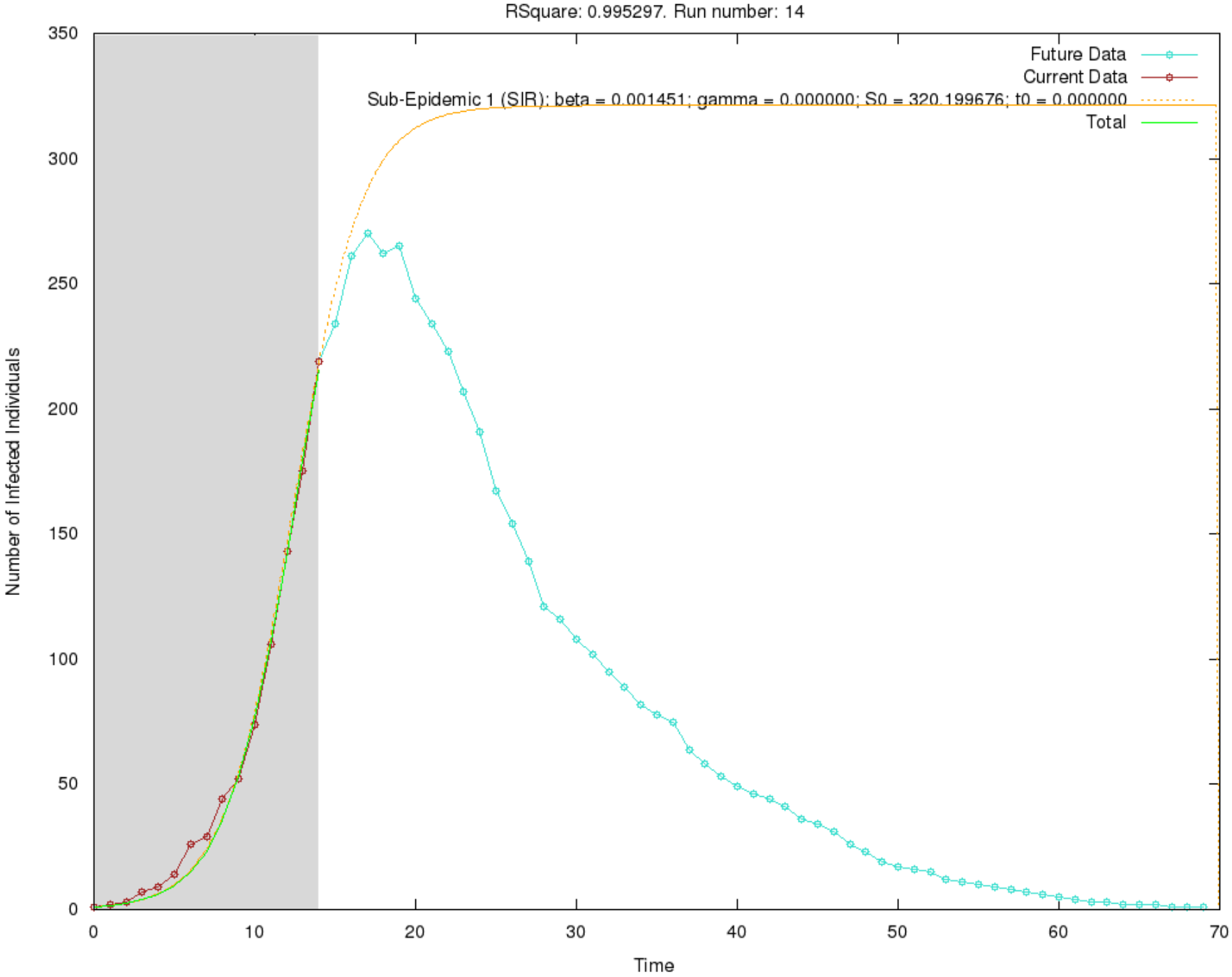

RSquare: 0.990490. Run number: 9
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.008474; gamma = 0.000000; S0 = 69.074446; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

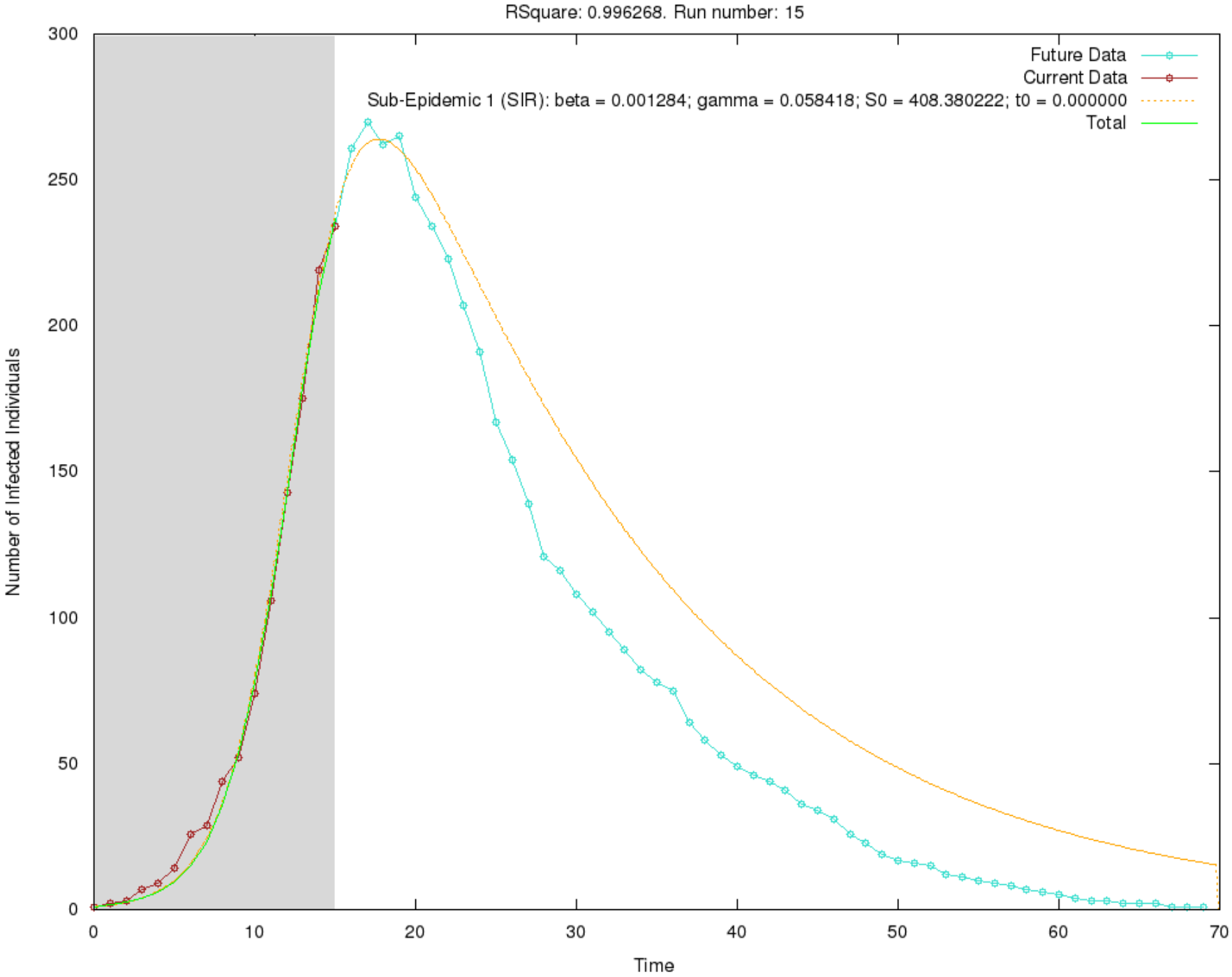

RSquare: 0.985263. Run number: 10
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.005265; gamma = 0.000000; S0 = 102.579289; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

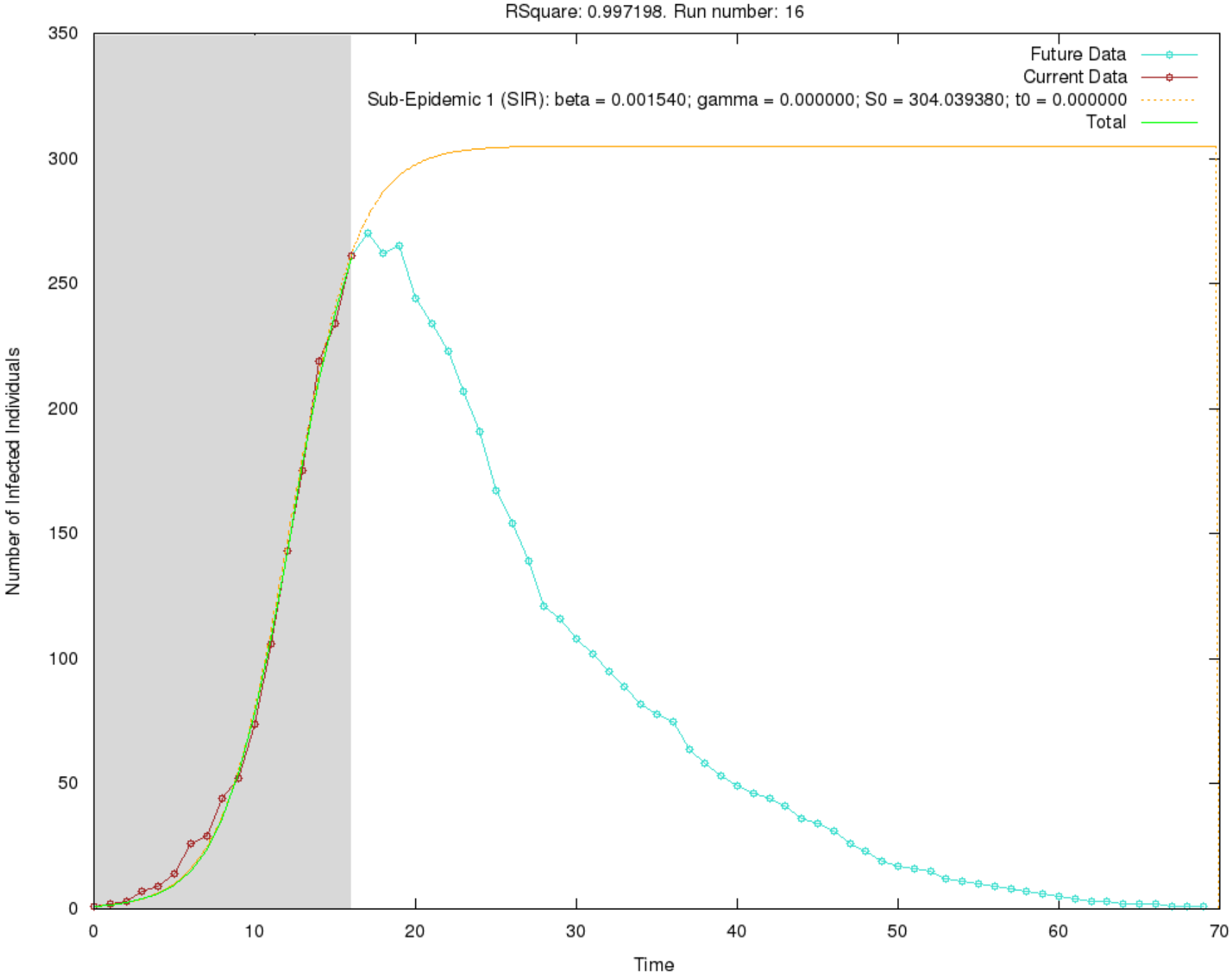

RSquare: 0.983395. Run number: 11
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.002678; gamma = 0.000000; S0 = 184.626666; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

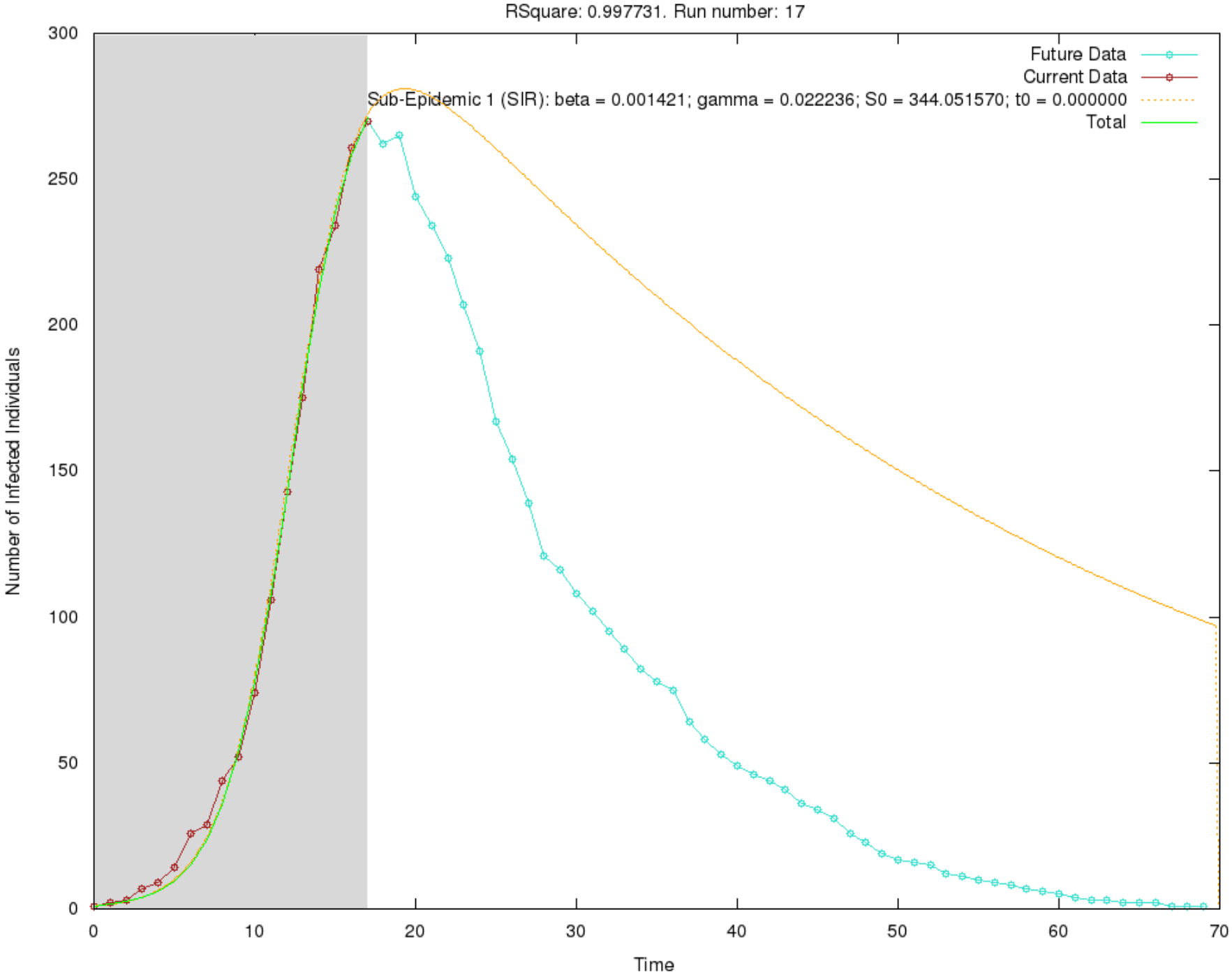

RSquare: 0.989095. Run number: 12
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001757; gamma = 0.000000; S0 = 270.066654; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

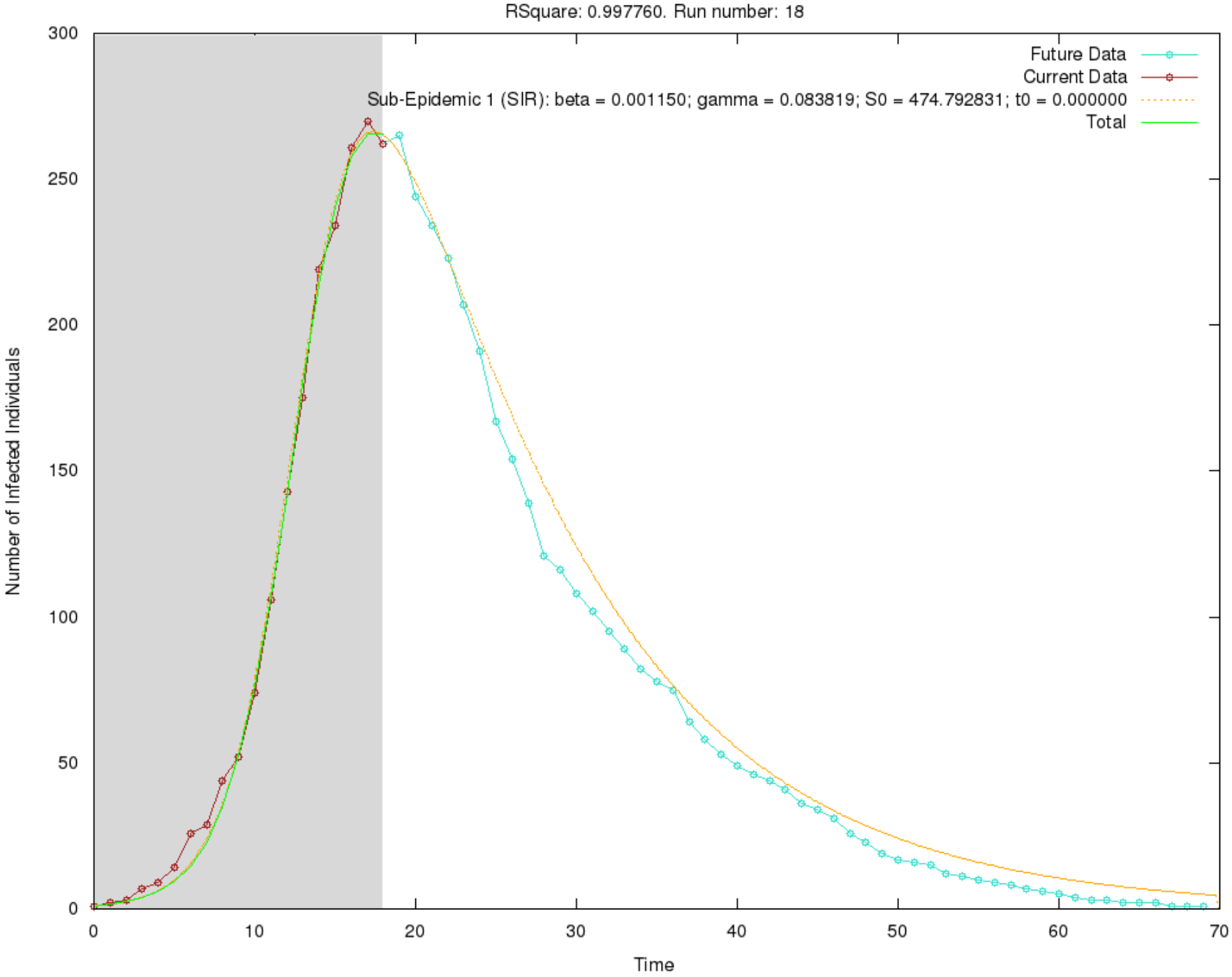

RSquare: 0.993618. Run number: 13
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001672; gamma = 0.000000; S0 = 282.343358; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

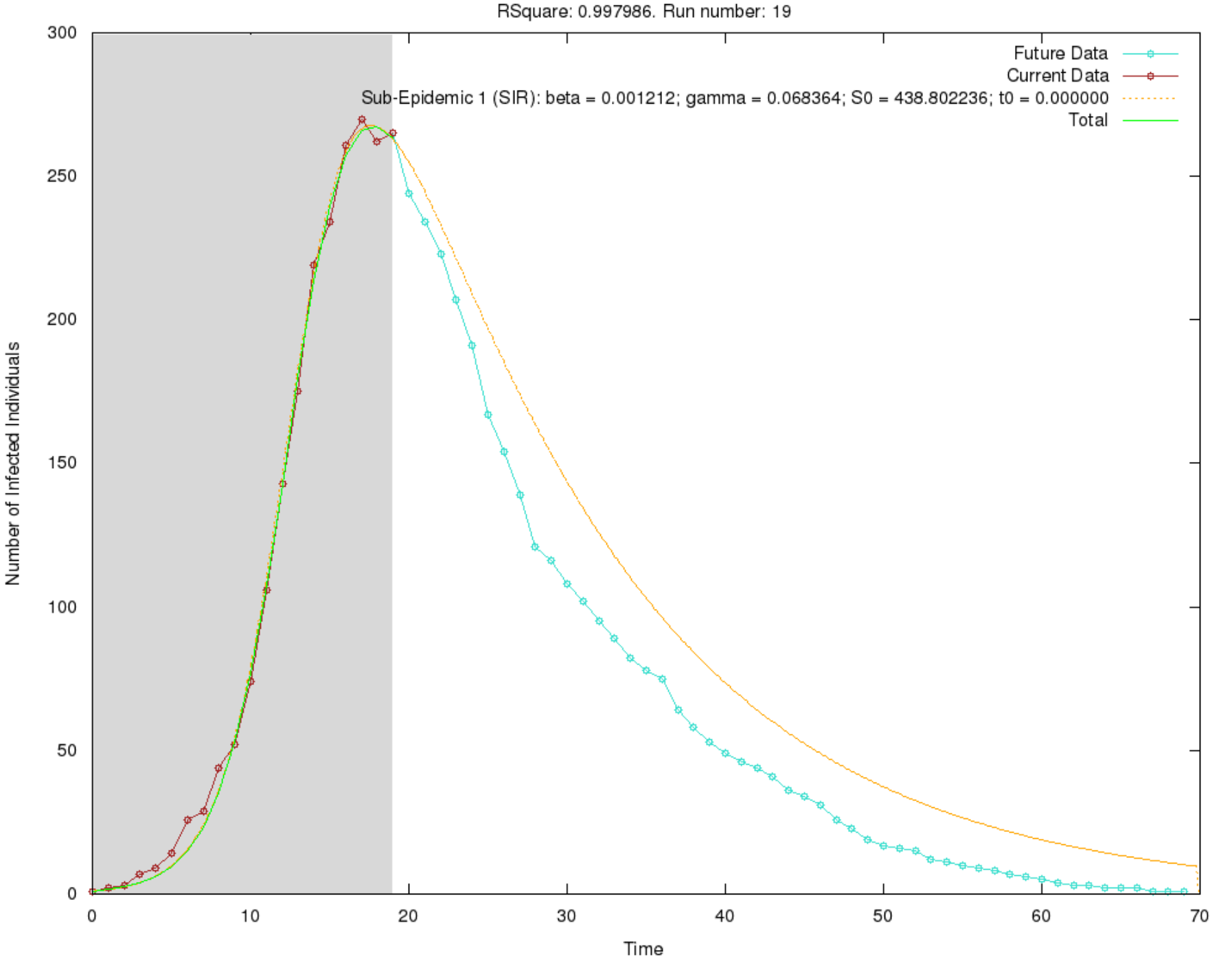

RSquare: 0.995297. Run number: 14
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001451; gamma = 0.000000; S0 = 320.199676; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
350
0
10
20
30
40
50
60
70

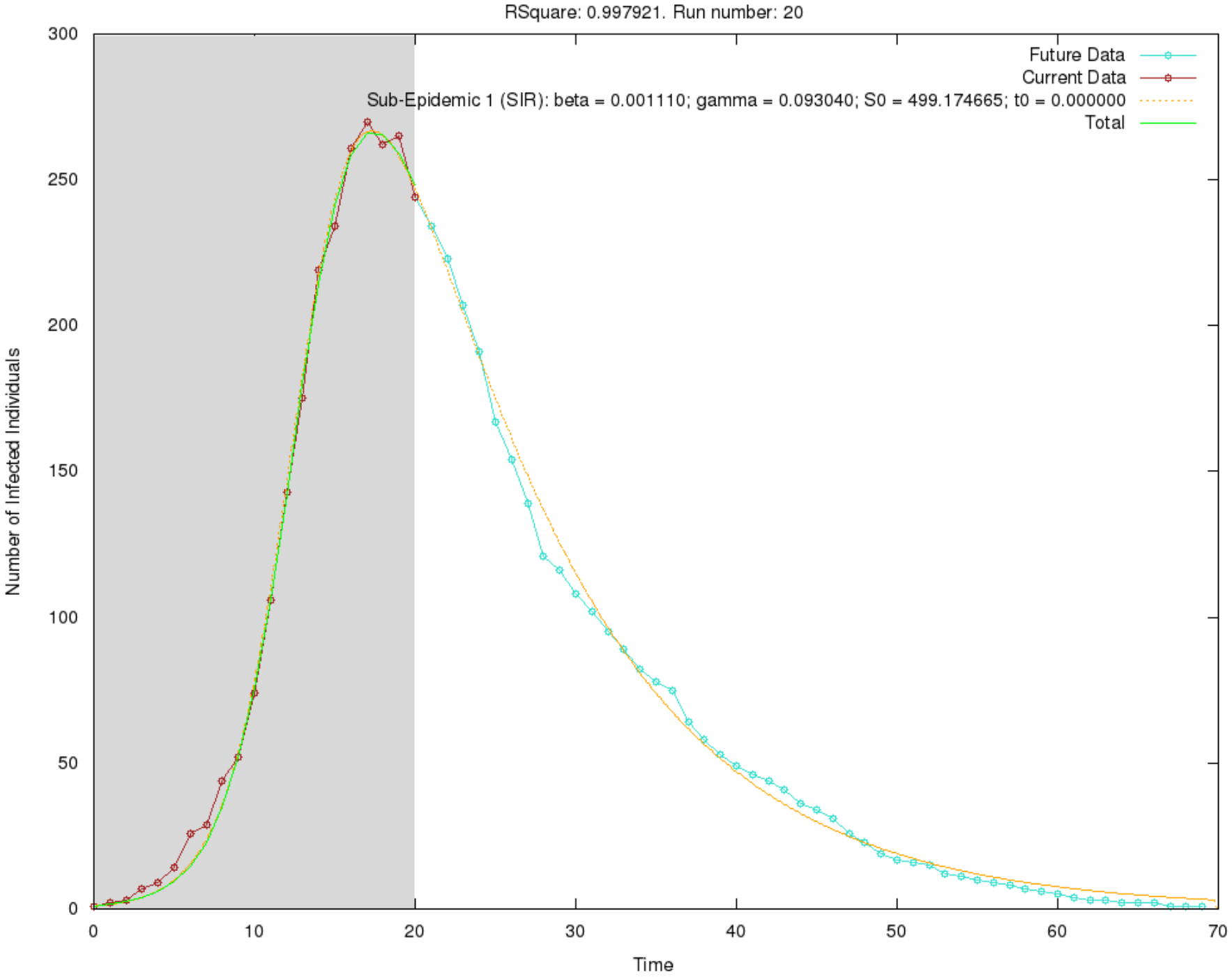

RSquare: 0.996268. Run number: 15
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001284; gamma = 0.058418; S0 = 408.380222; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

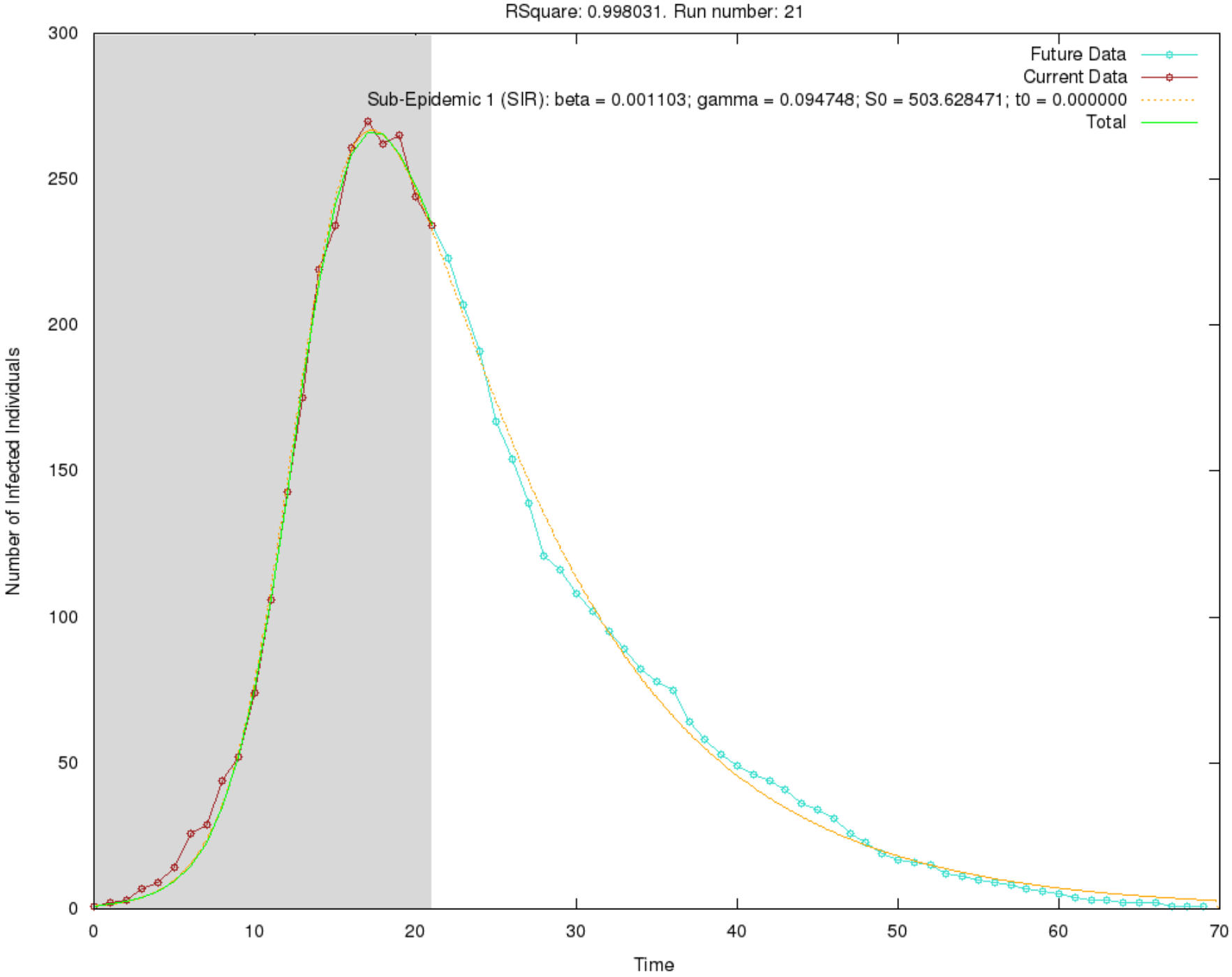

RSquare: 0.997198. Run number: 16
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001540; gamma = 0.000000; S0 = 304.039380; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
350
0
10
20
30
40
50
60
70

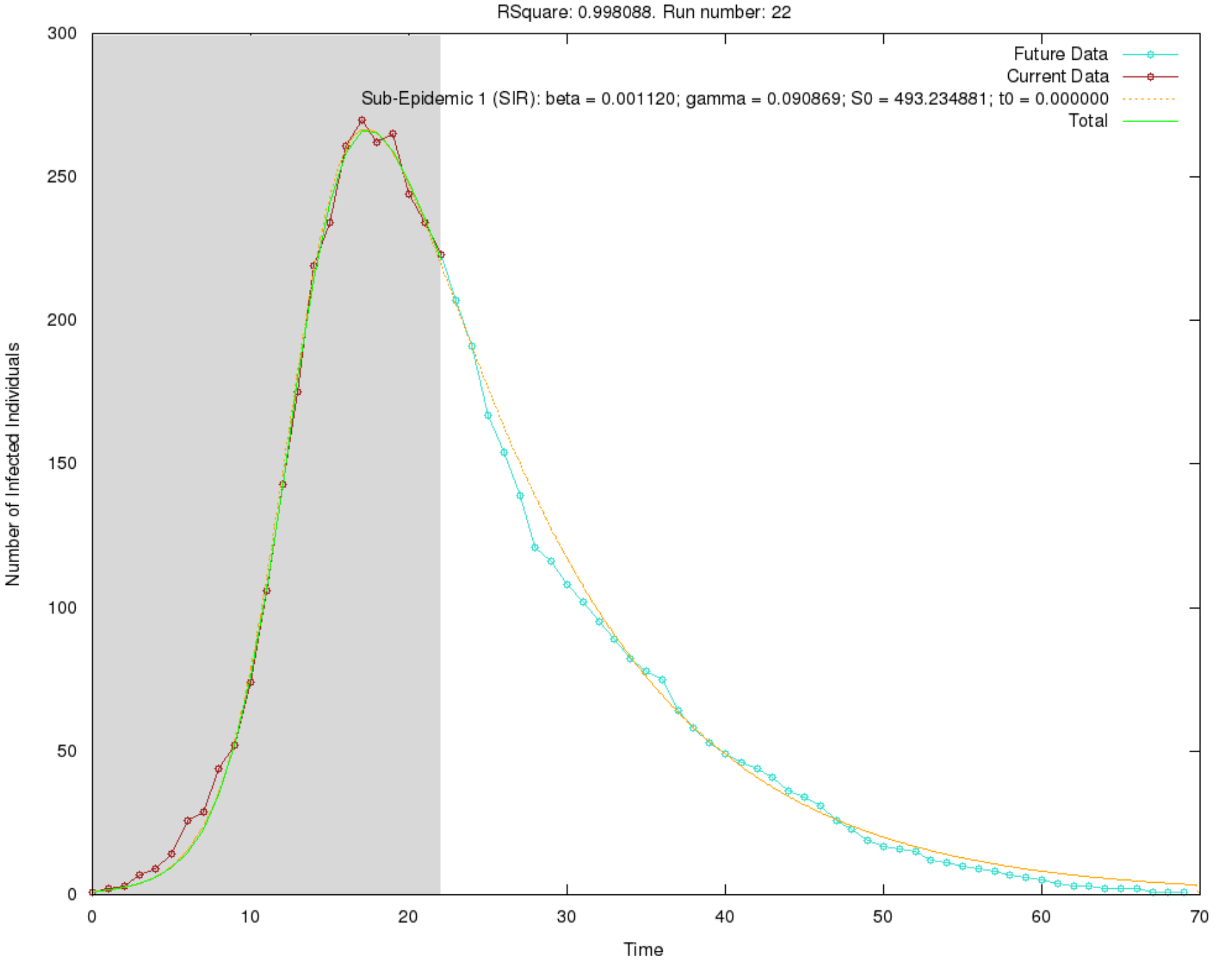

RSquare: 0.997731. Run number: 17
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001421; gamma = 0.022236; S0 = 344.051570; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

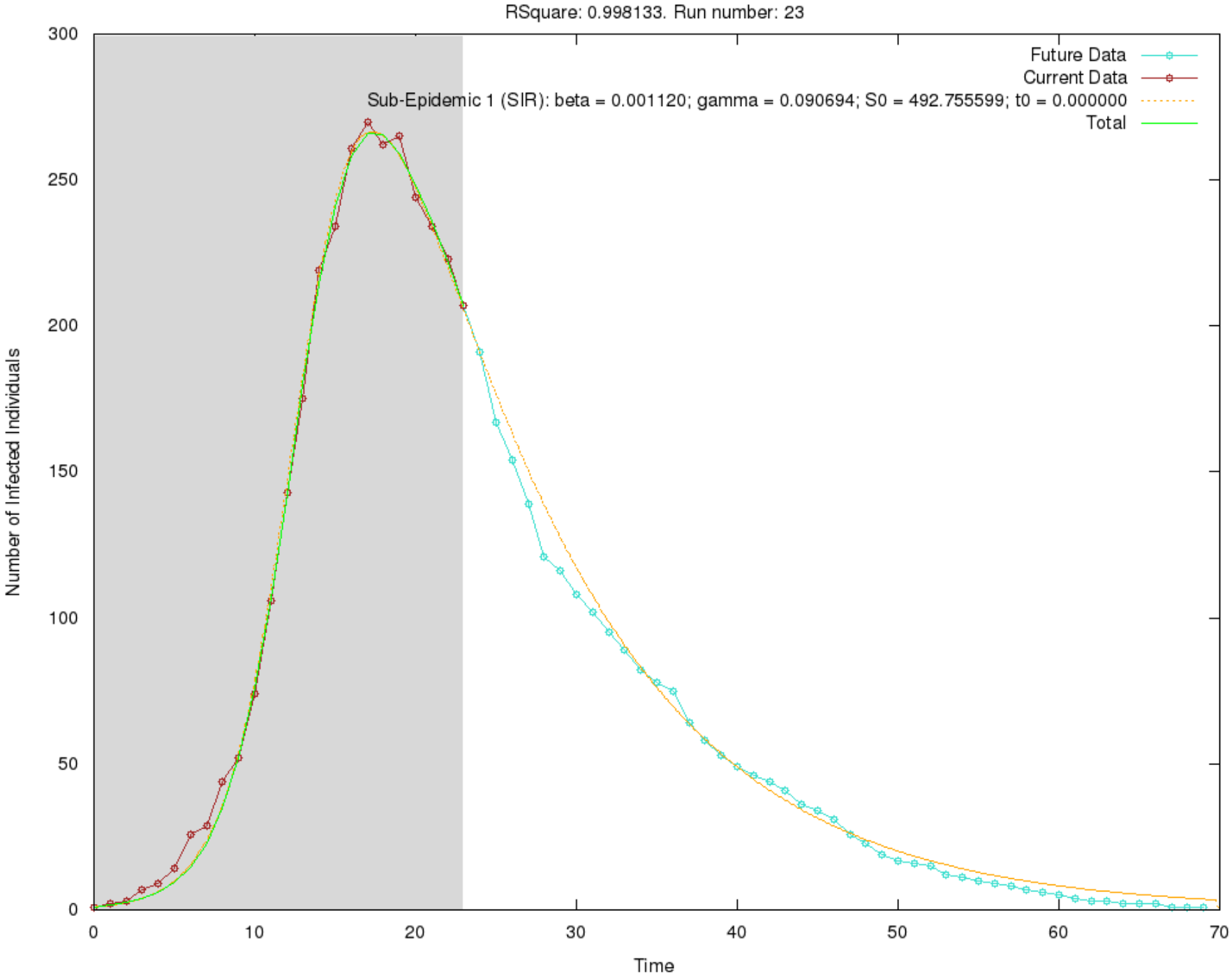

RSquare: 0.997760. Run number: 18
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001150; gamma = 0.083819; S0 = 474.792831; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

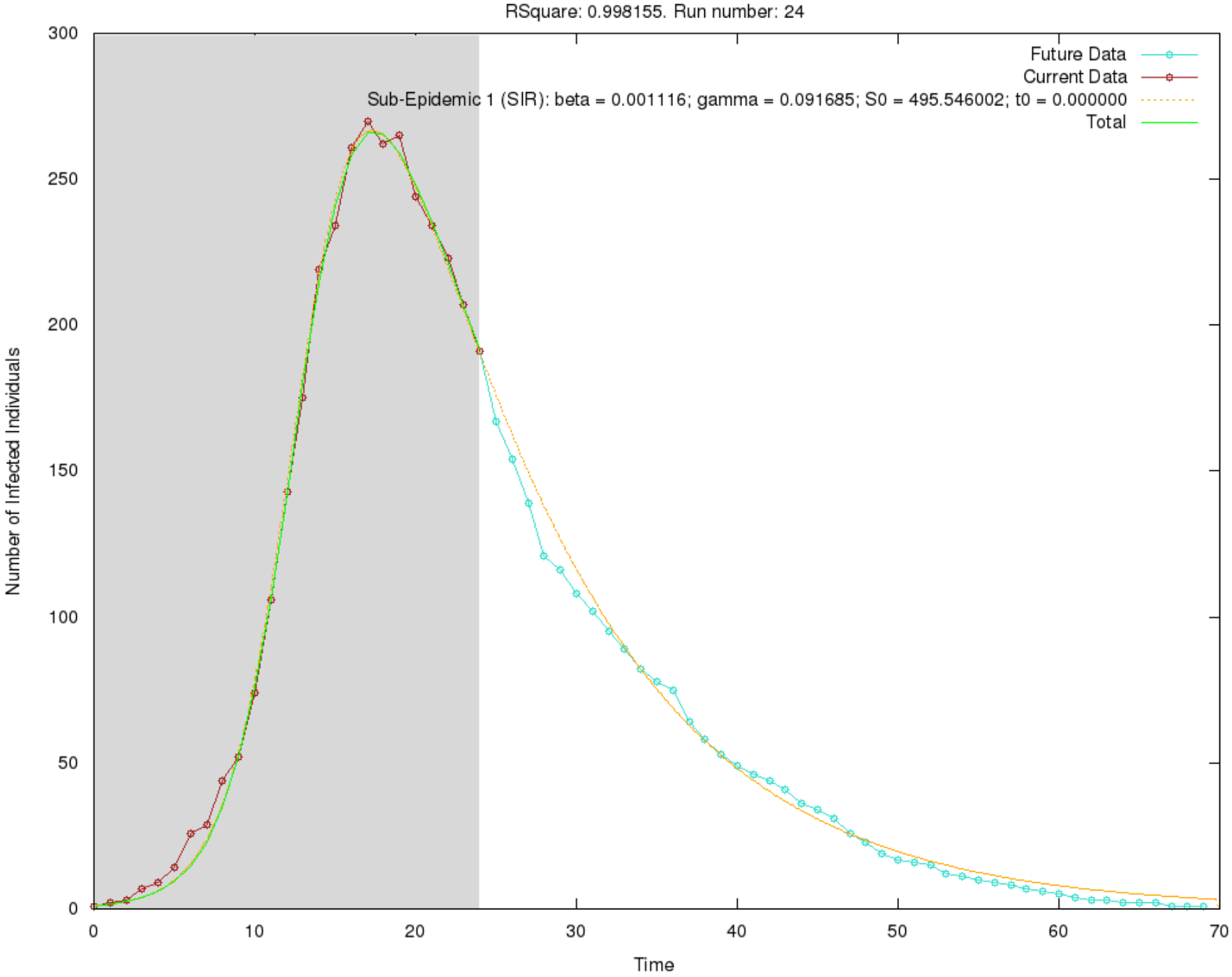

RSquare: 0.997986. Run number: 19
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001212; gamma = 0.068364; S0 = 438.802236; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

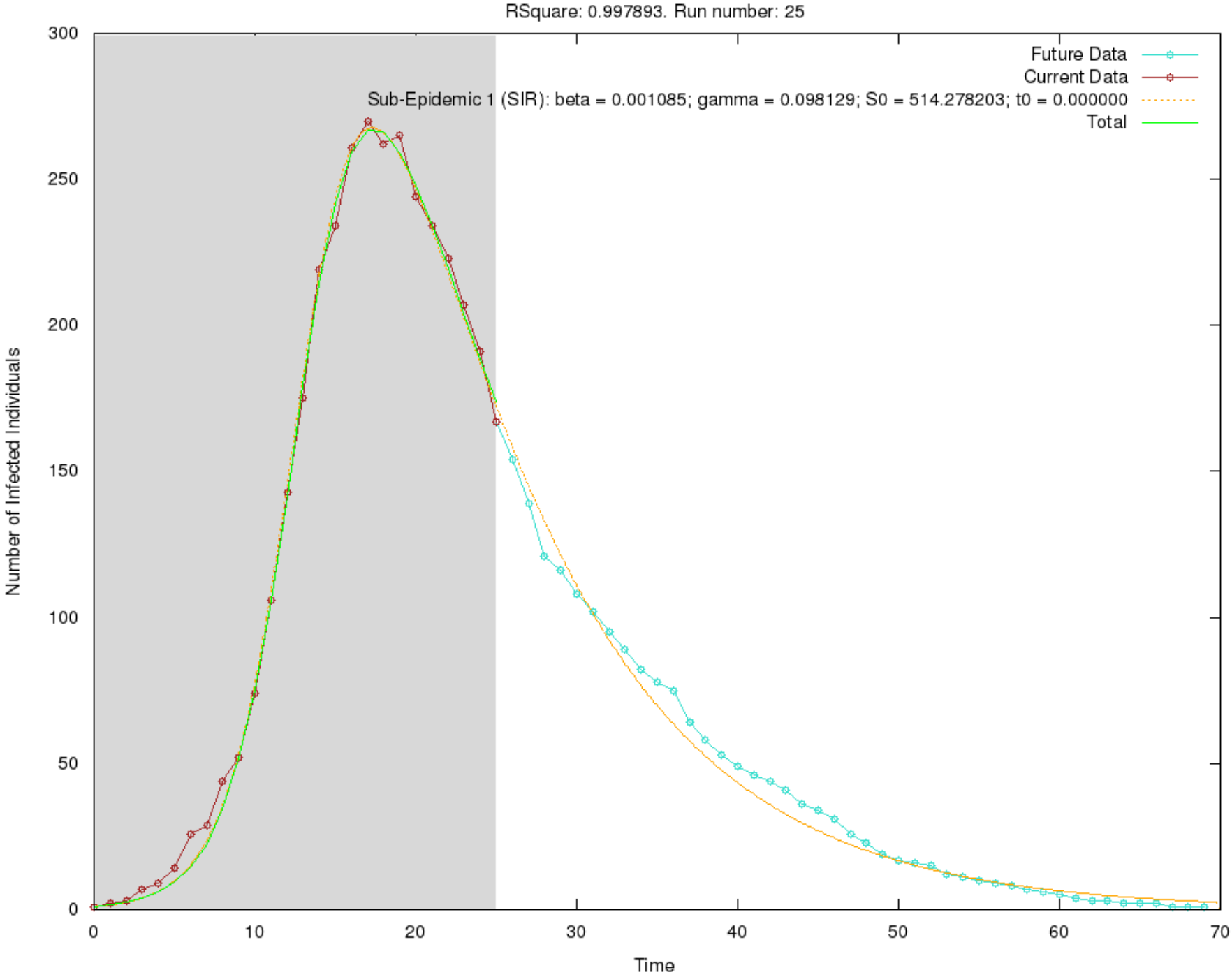

RSquare: 0.997921. Run number: 20
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001110; gamma = 0.093040; S0 = 499.174665; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

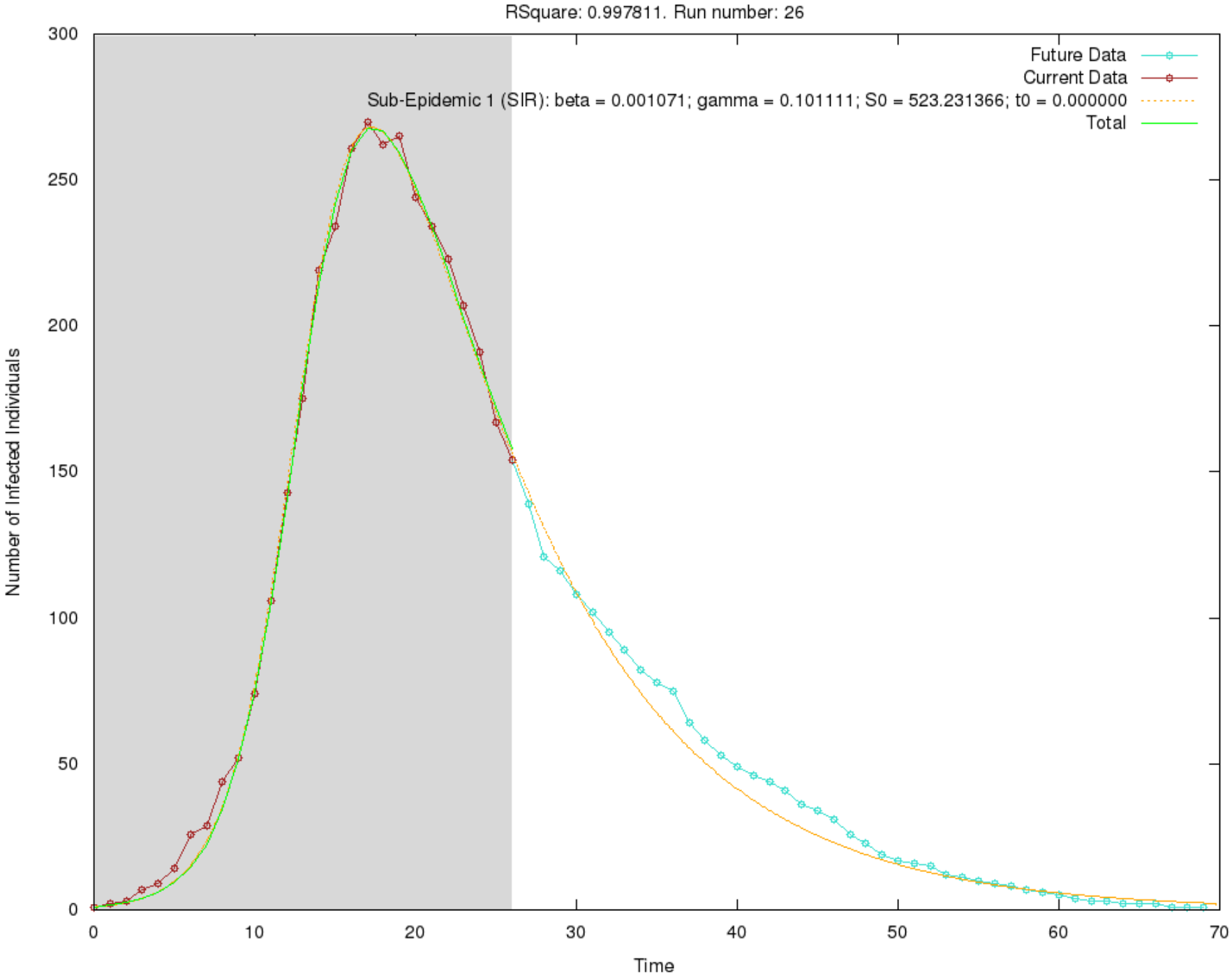

RSquare: 0.998031. Run number: 21
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001103; gamma = 0.094748; S0 = 503.628471; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

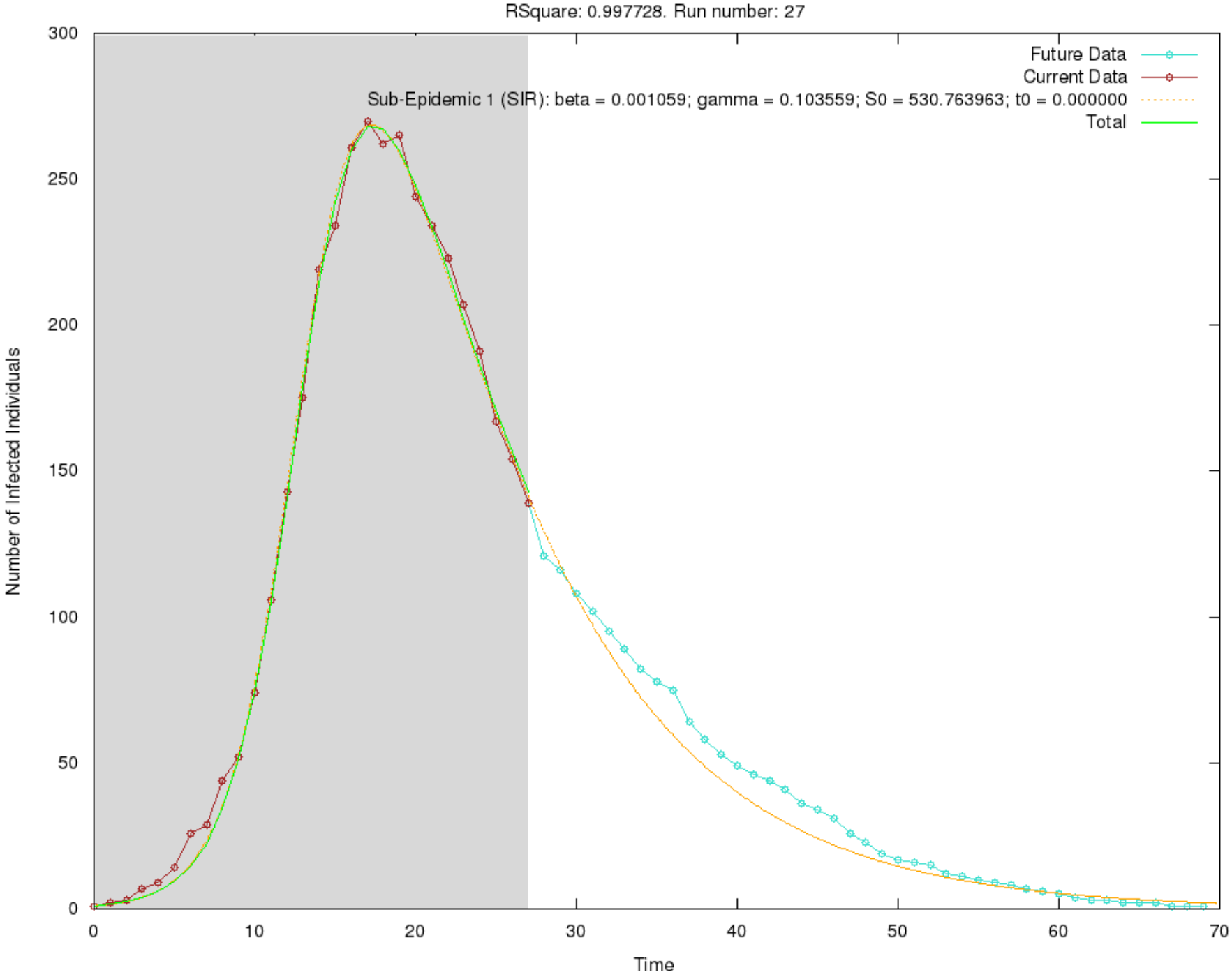

RSquare: 0.998088. Run number: 22
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001120; gamma = 0.090869; S0 = 493.234881; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

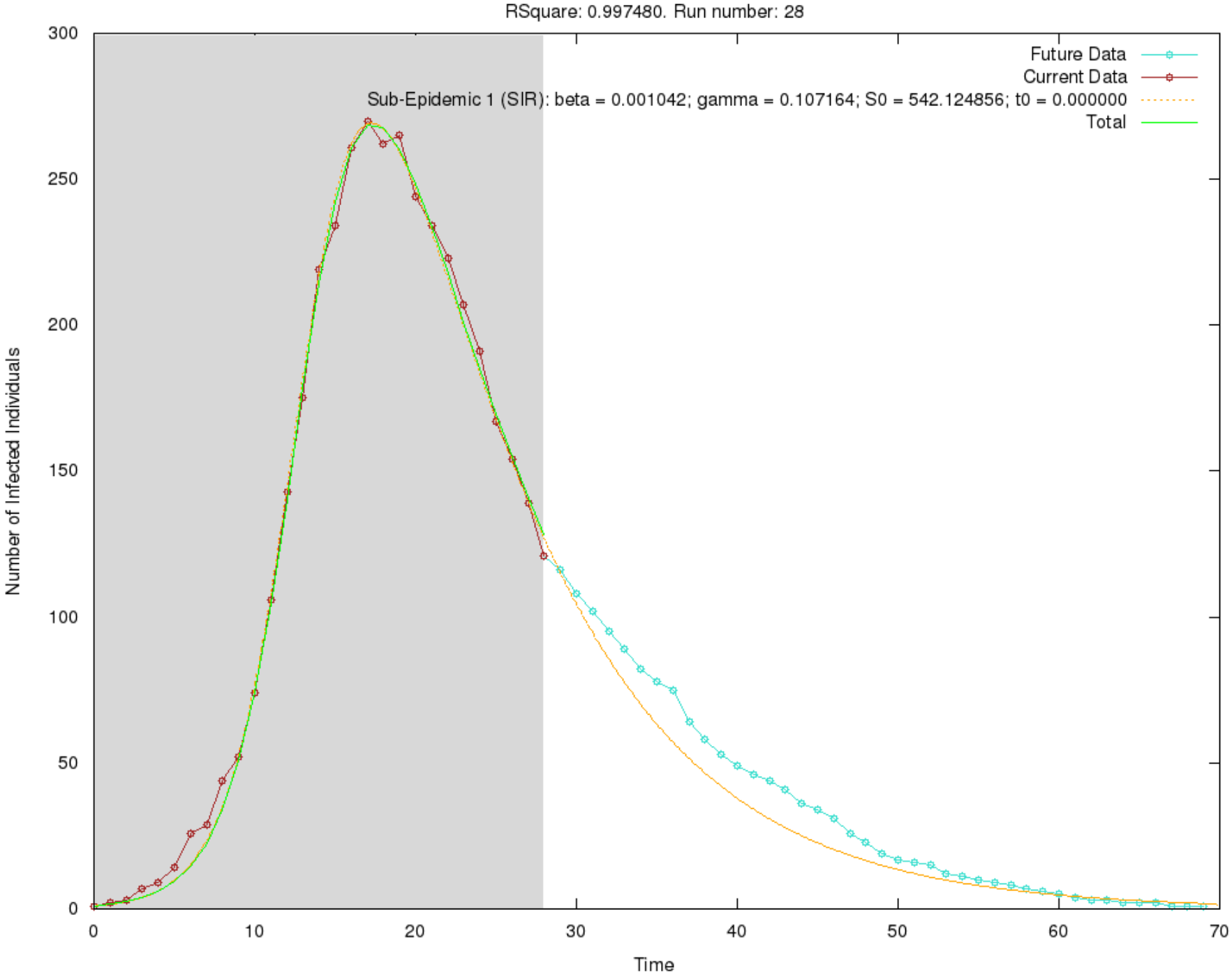

RSquare: 0.998133. Run number: 23
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001120; gamma = 0.090694; S0 = 492.755599; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

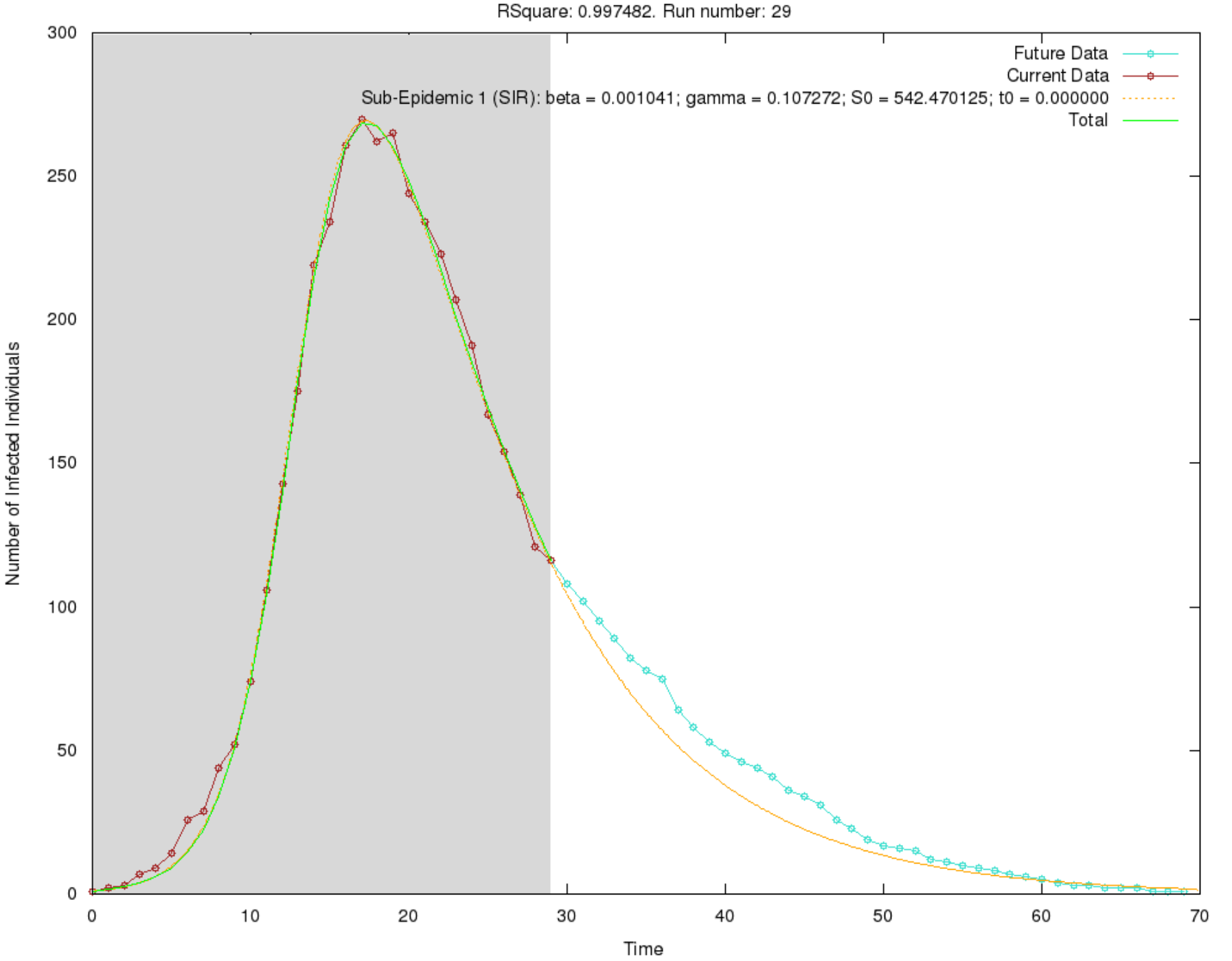

RSquare: 0.998155. Run number: 24
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001116; gamma = 0.091685; S0 = 495.546002; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

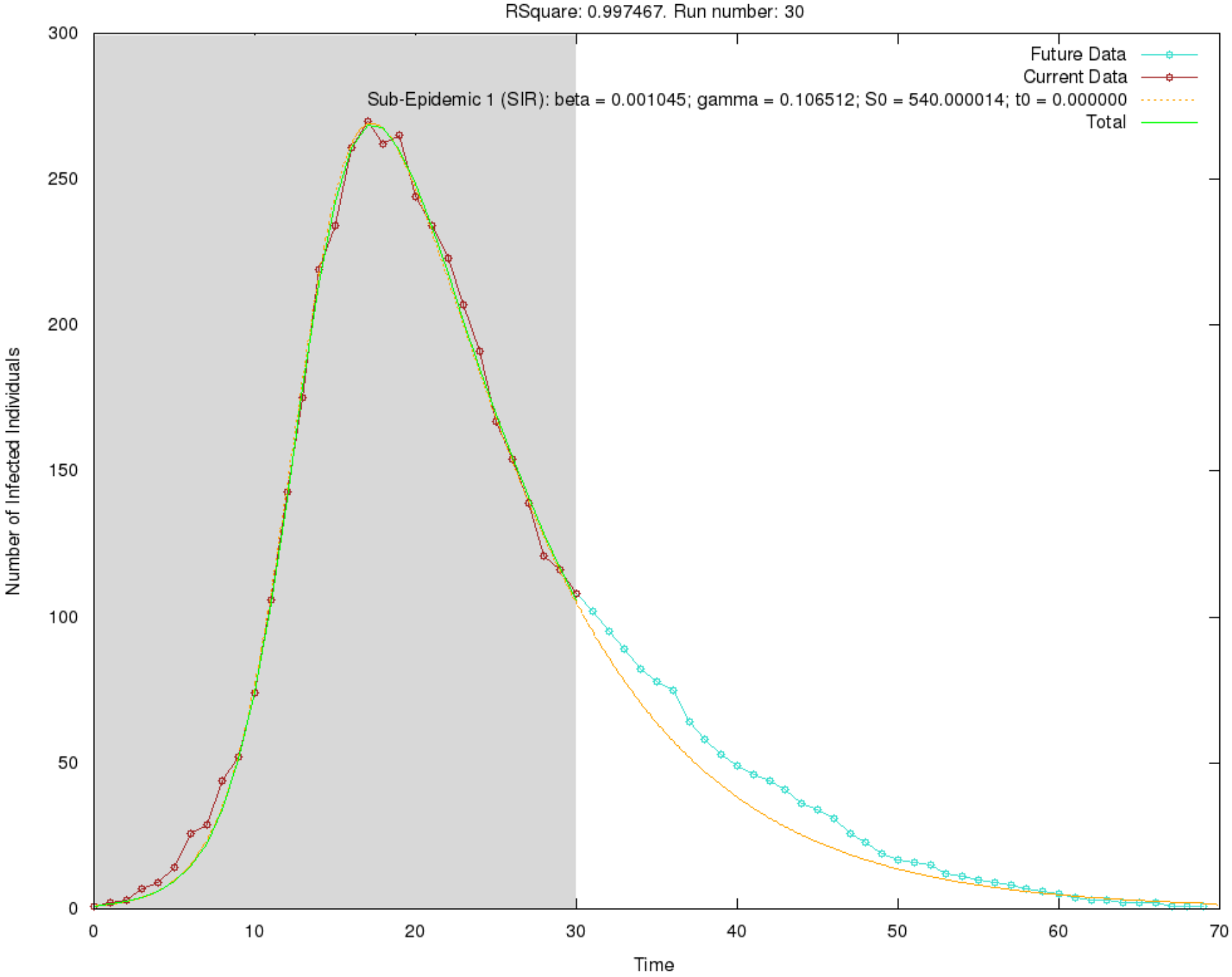

RSquare: 0.997893. Run number: 25
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001085; gamma = 0.098129; S0 = 514.278203; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

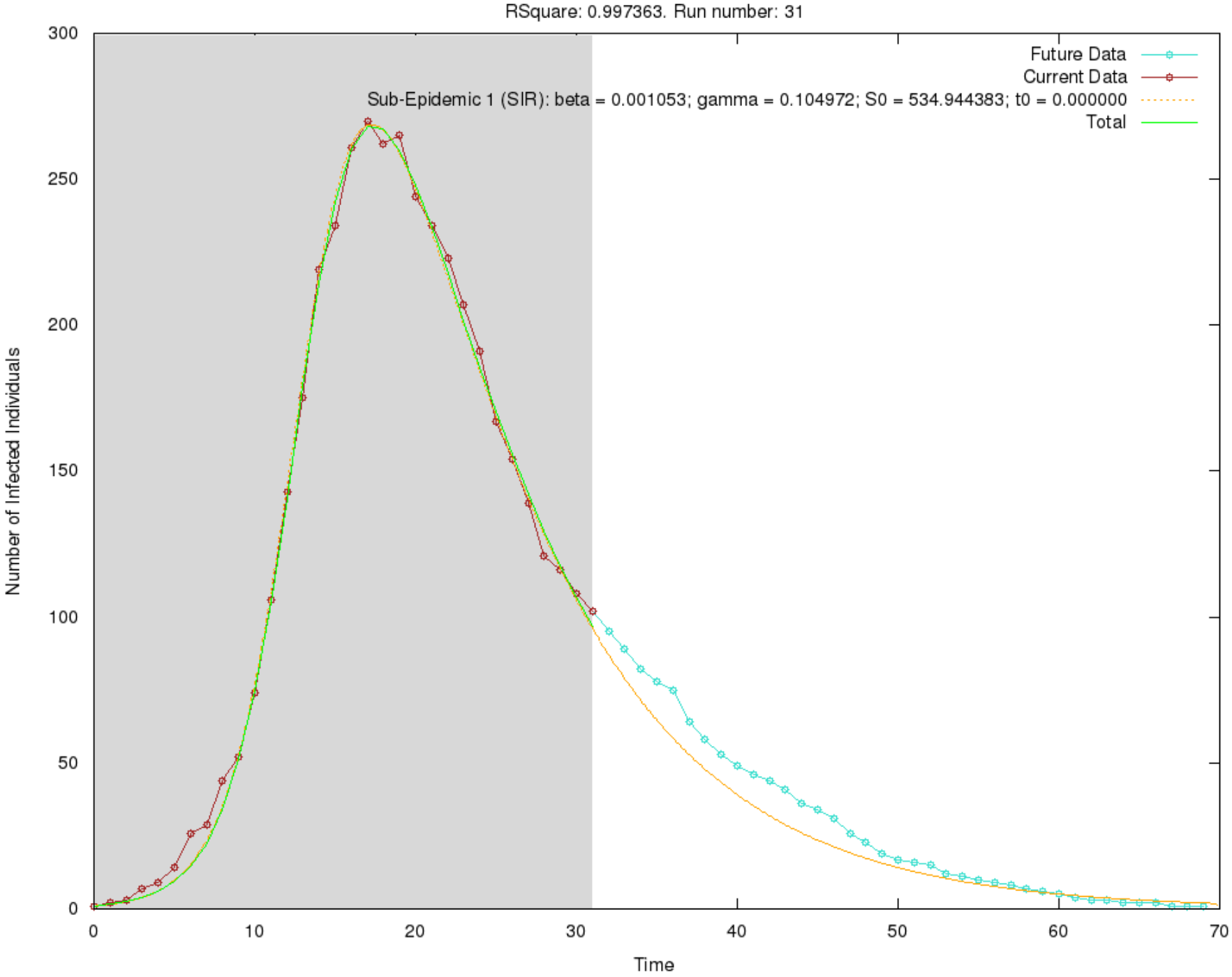

RSquare: 0.997811. Run number: 26
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001071; gamma = 0.101111; S0 = 523.231366; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

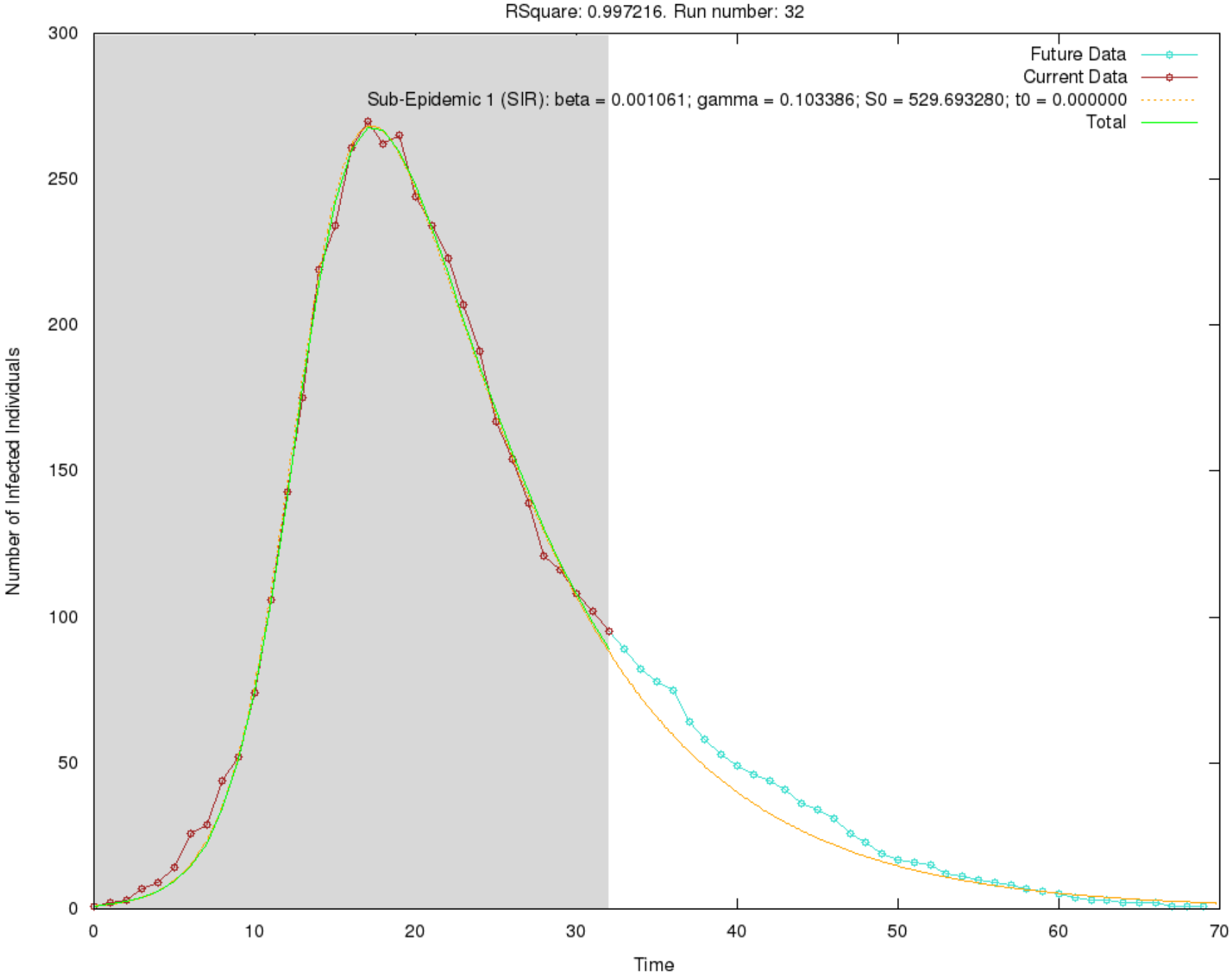

RSquare: 0.997728. Run number: 27
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001059; gamma = 0.103559; S0 = 530.763963; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

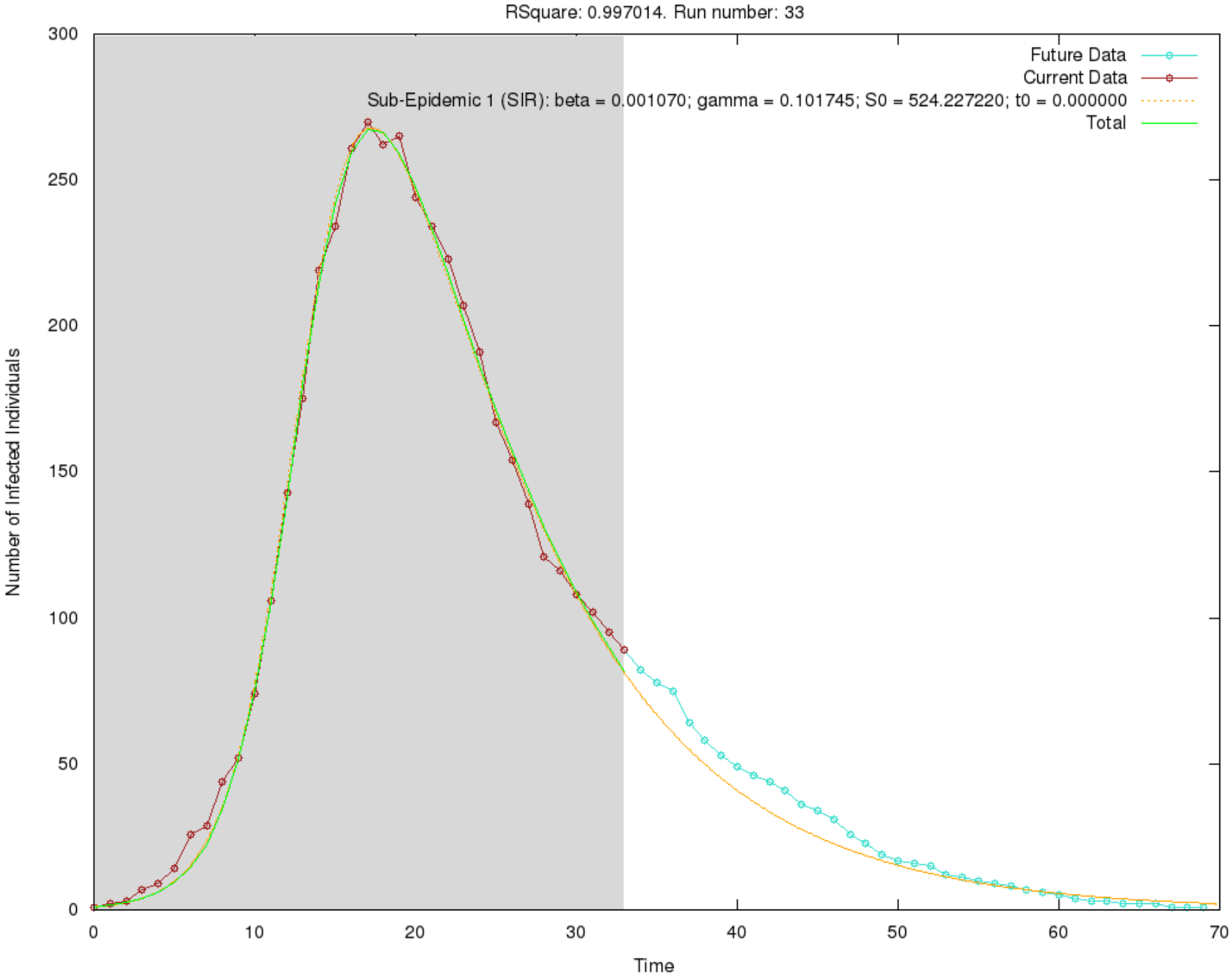

RSquare: 0.997480. Run number: 28
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001042; gamma = 0.107164; S0 = 542.124856; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

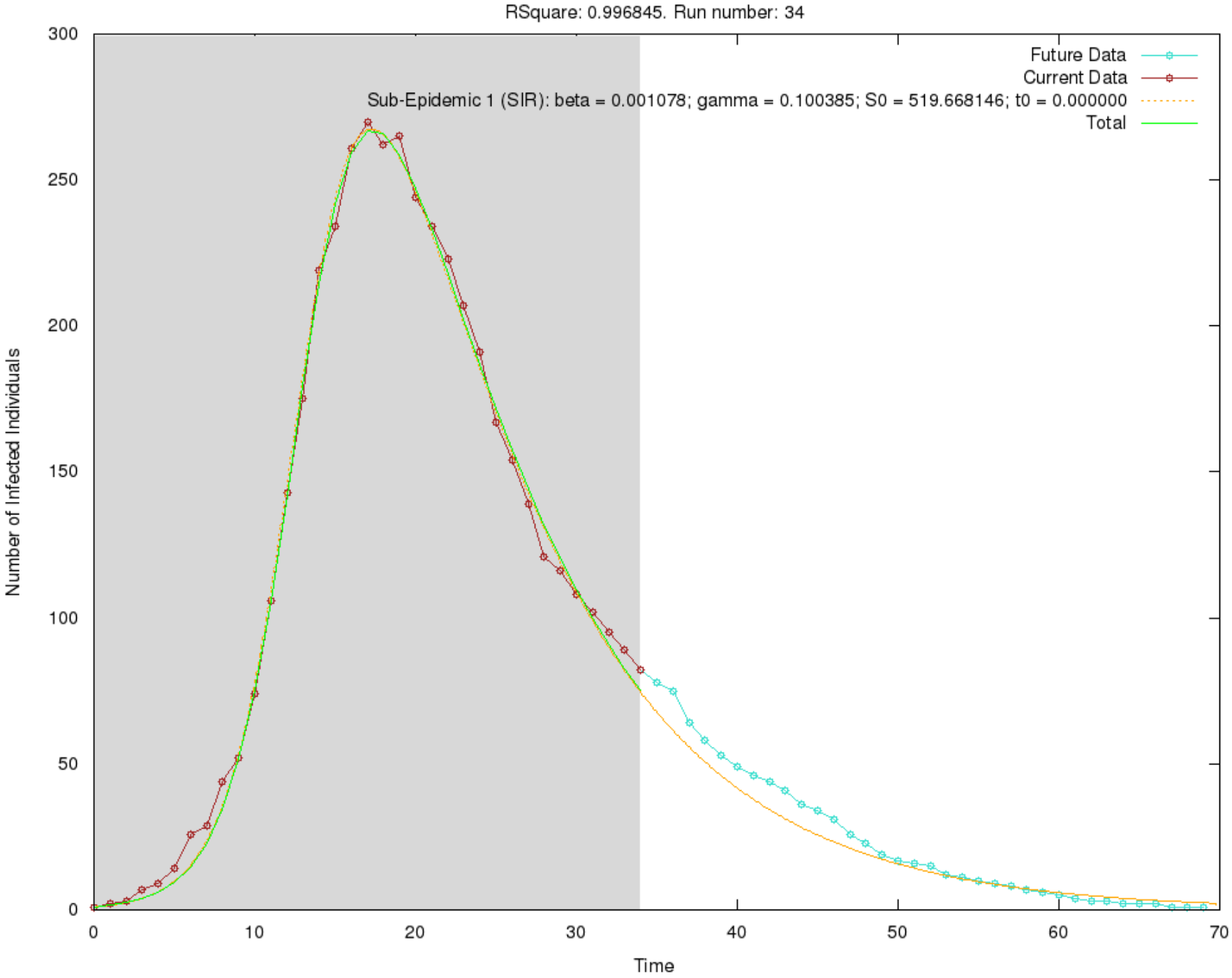

RSquare: 0.997482. Run number: 29
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001041; gamma = 0.107272; S0 = 542.470125; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

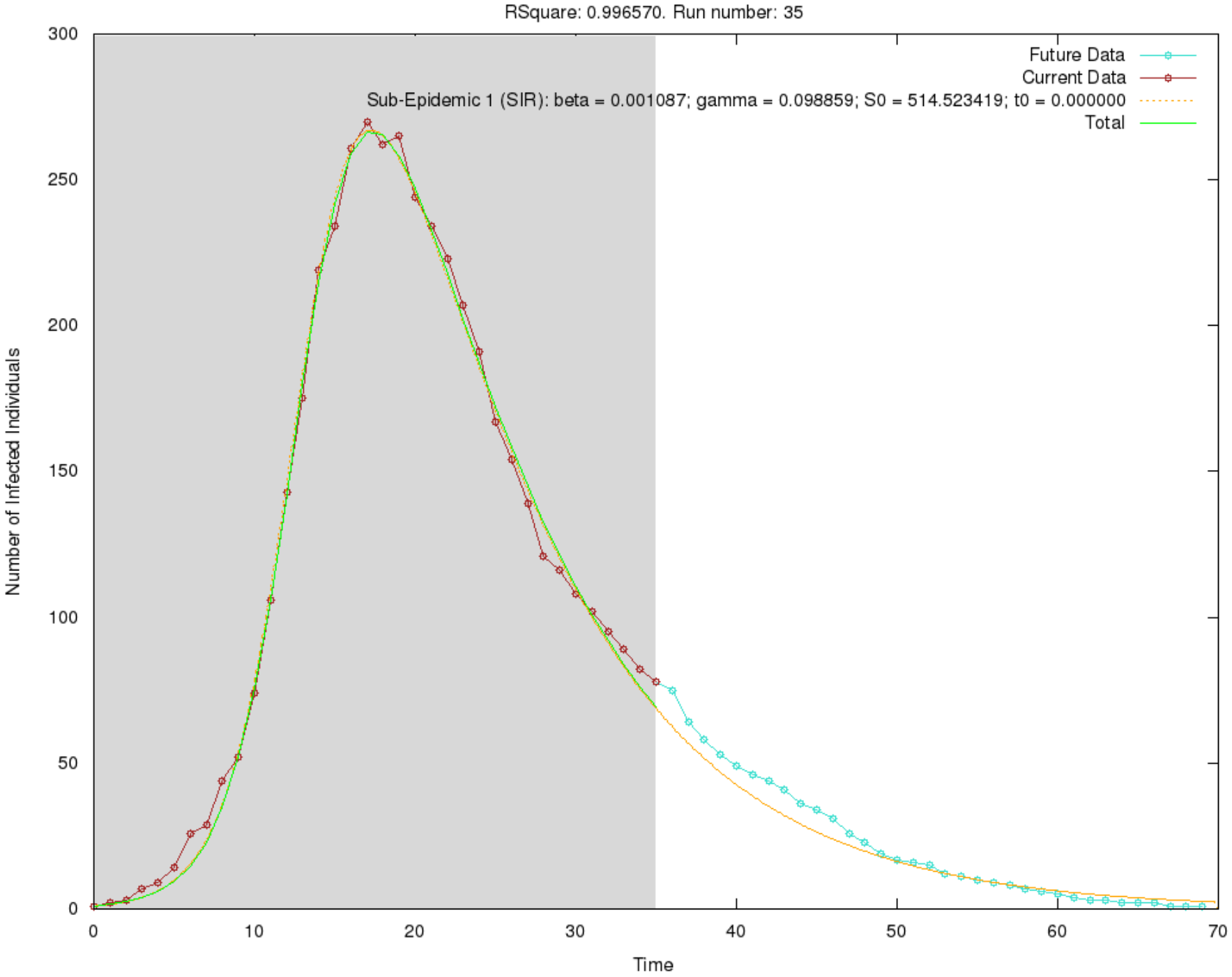

RSquare: 0.997467. Run number: 30
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001045; gamma = 0.106512; S0 = 540.000014; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

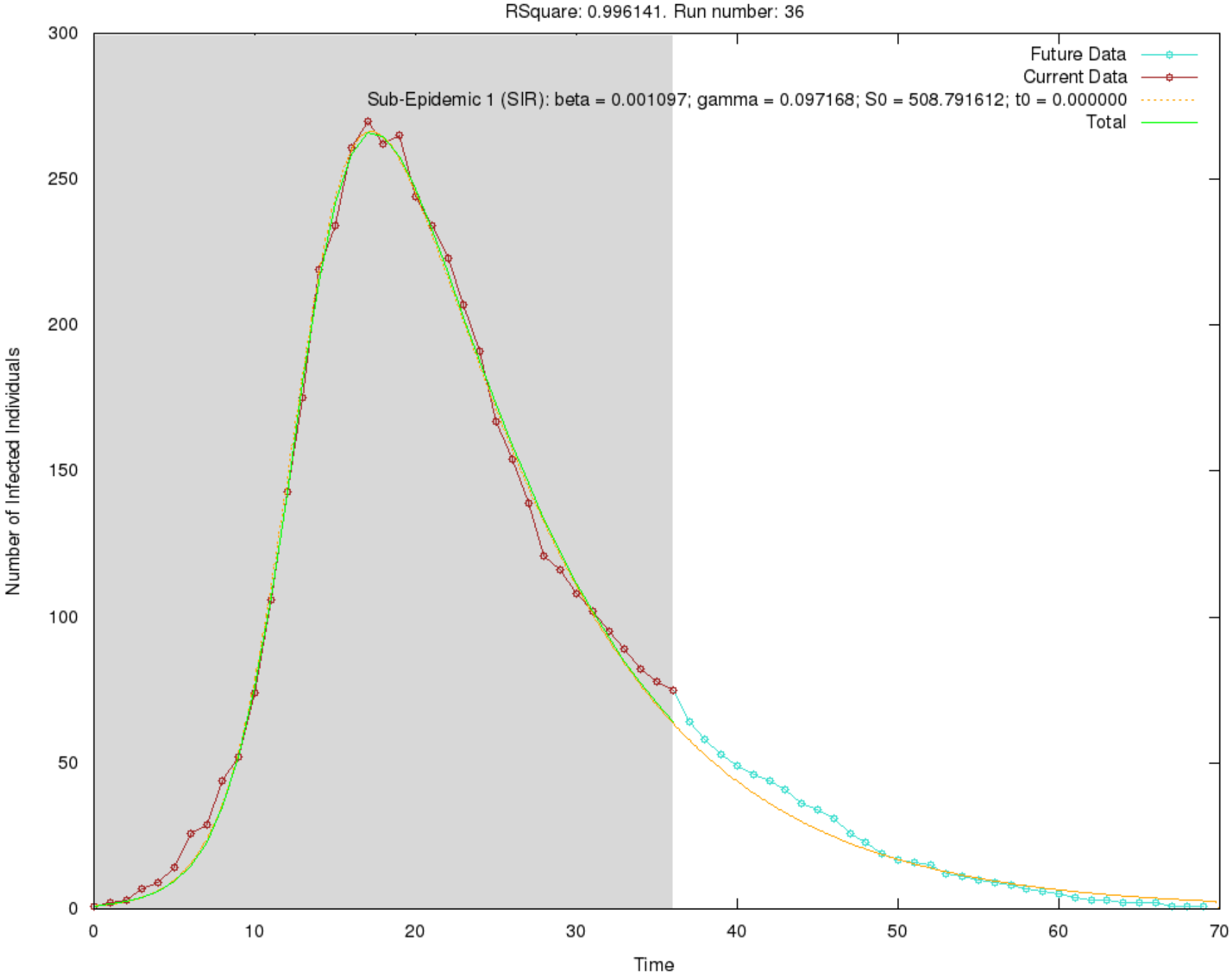

RSquare: 0.997363. Run number: 31
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001053; gamma = 0.104972; S0 = 534.944383; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

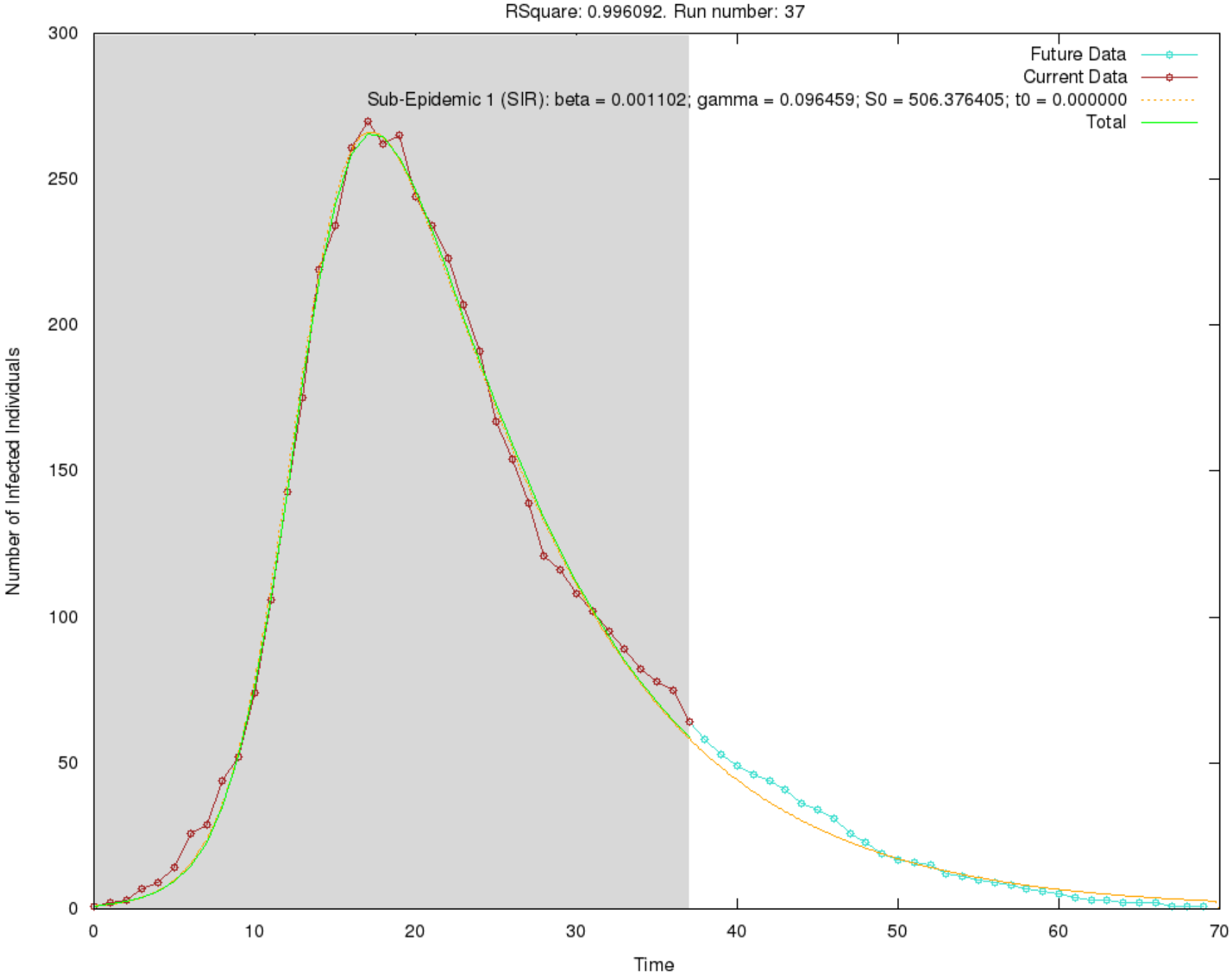

RSquare: 0.997216. Run number: 32
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001061; gamma = 0.103386; S0 = 529.693280; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

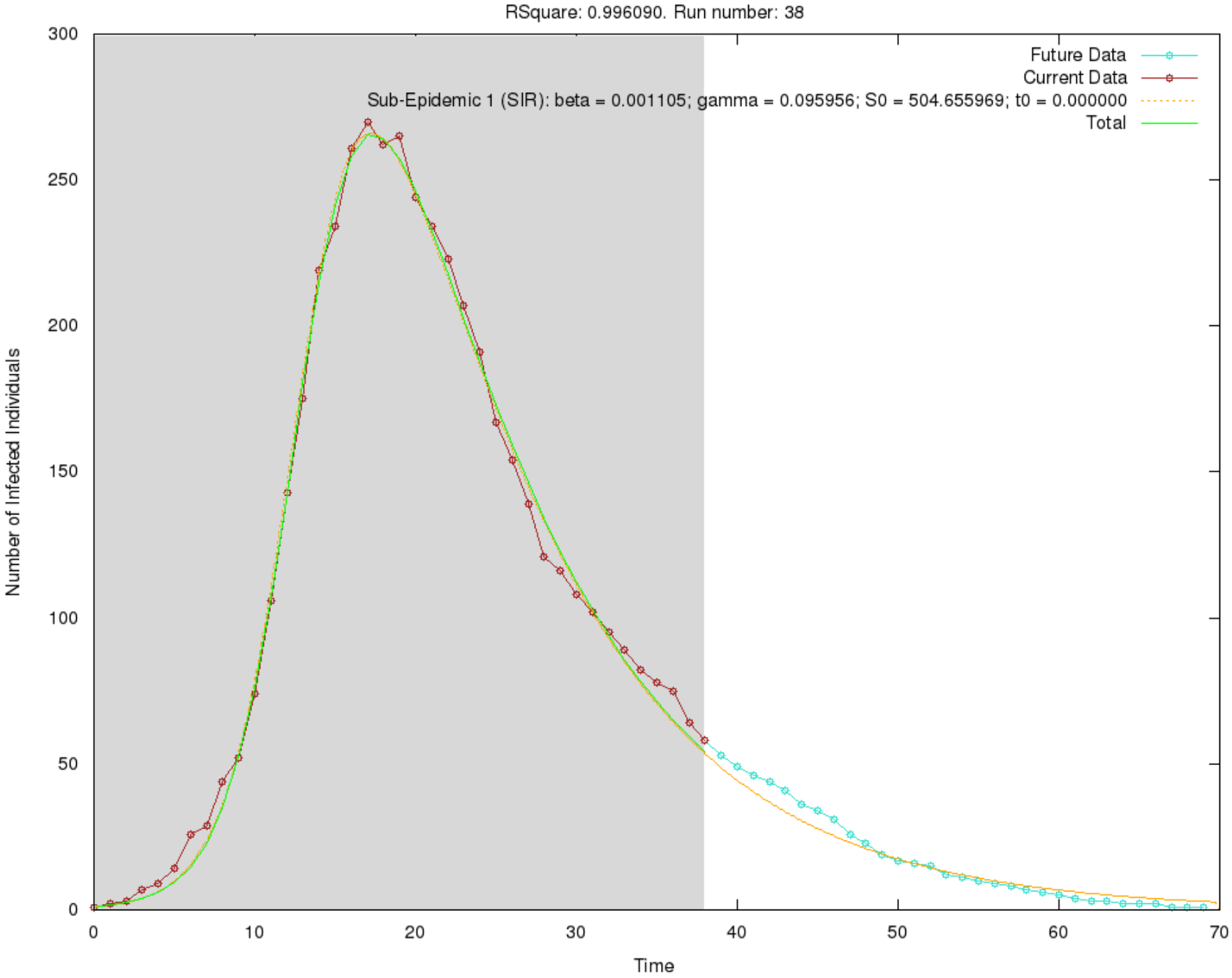

RSquare: 0.997014. Run number: 33
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001070; gamma = 0.101745; S0 = 524.227220; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

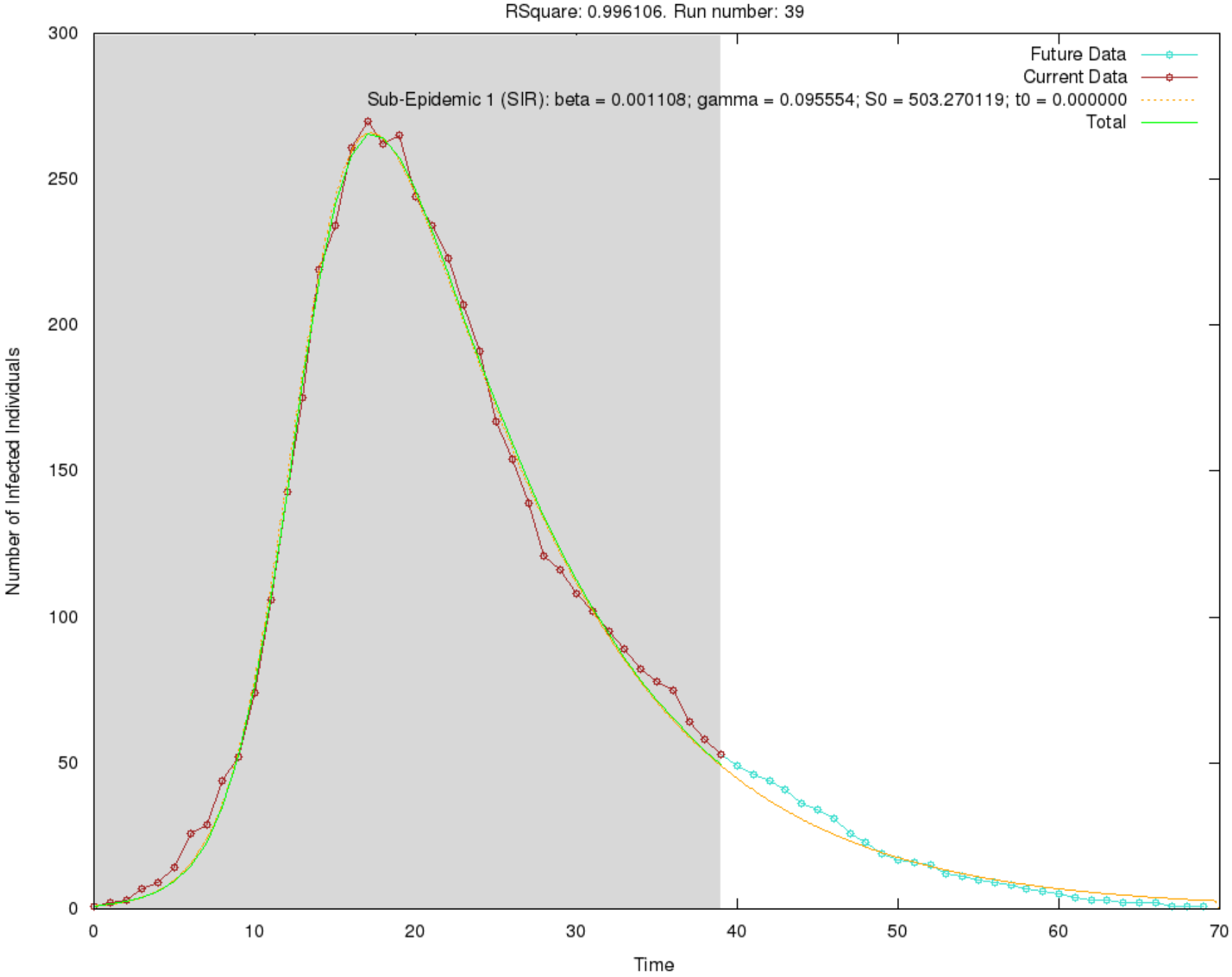

RSquare: 0.996845. Run number: 34
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001078; gamma = 0.100385; S0 = 519.668146; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

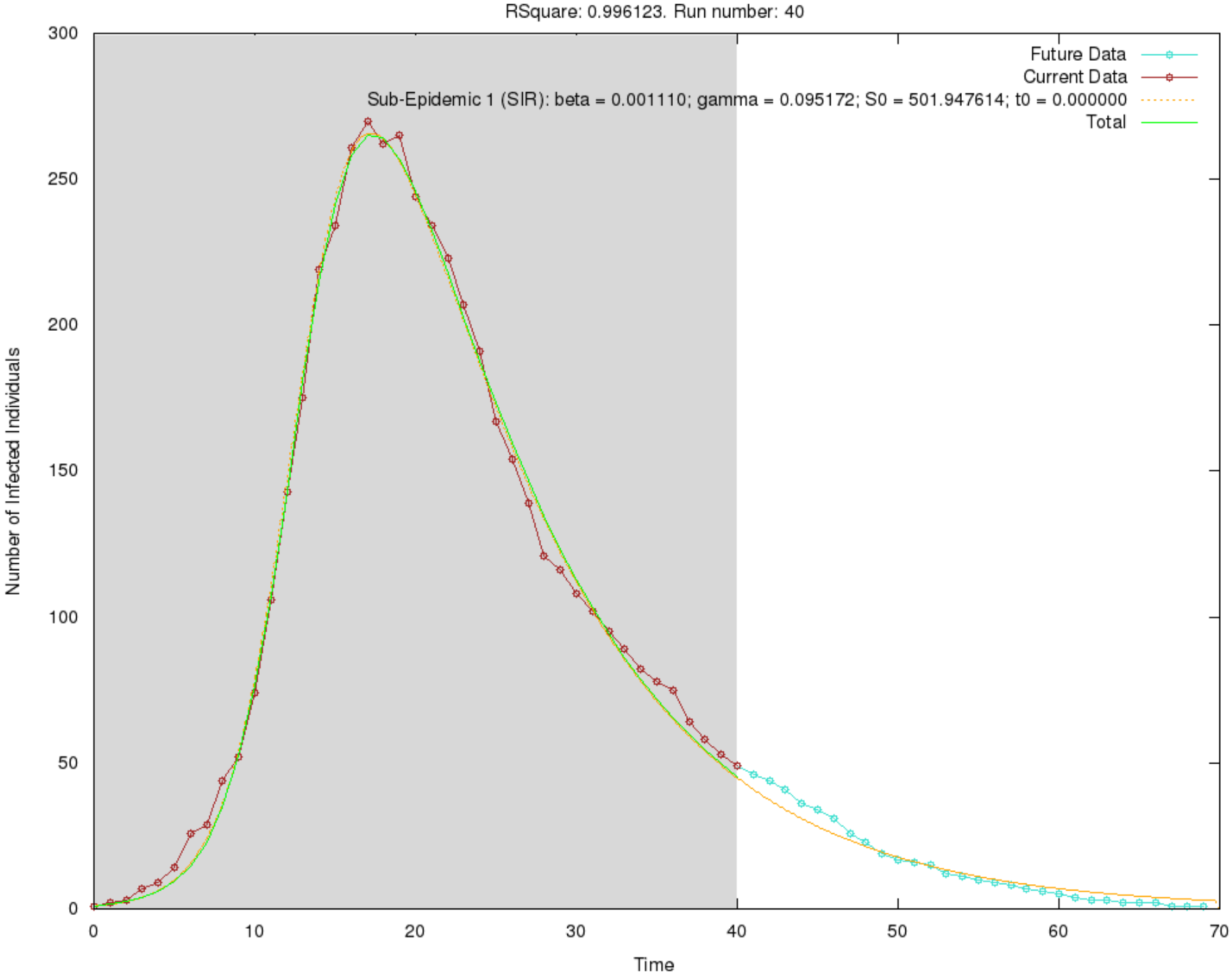

RSquare: 0.996570. Run number: 35
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001087; gamma = 0.098859; S0 = 514.523419; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

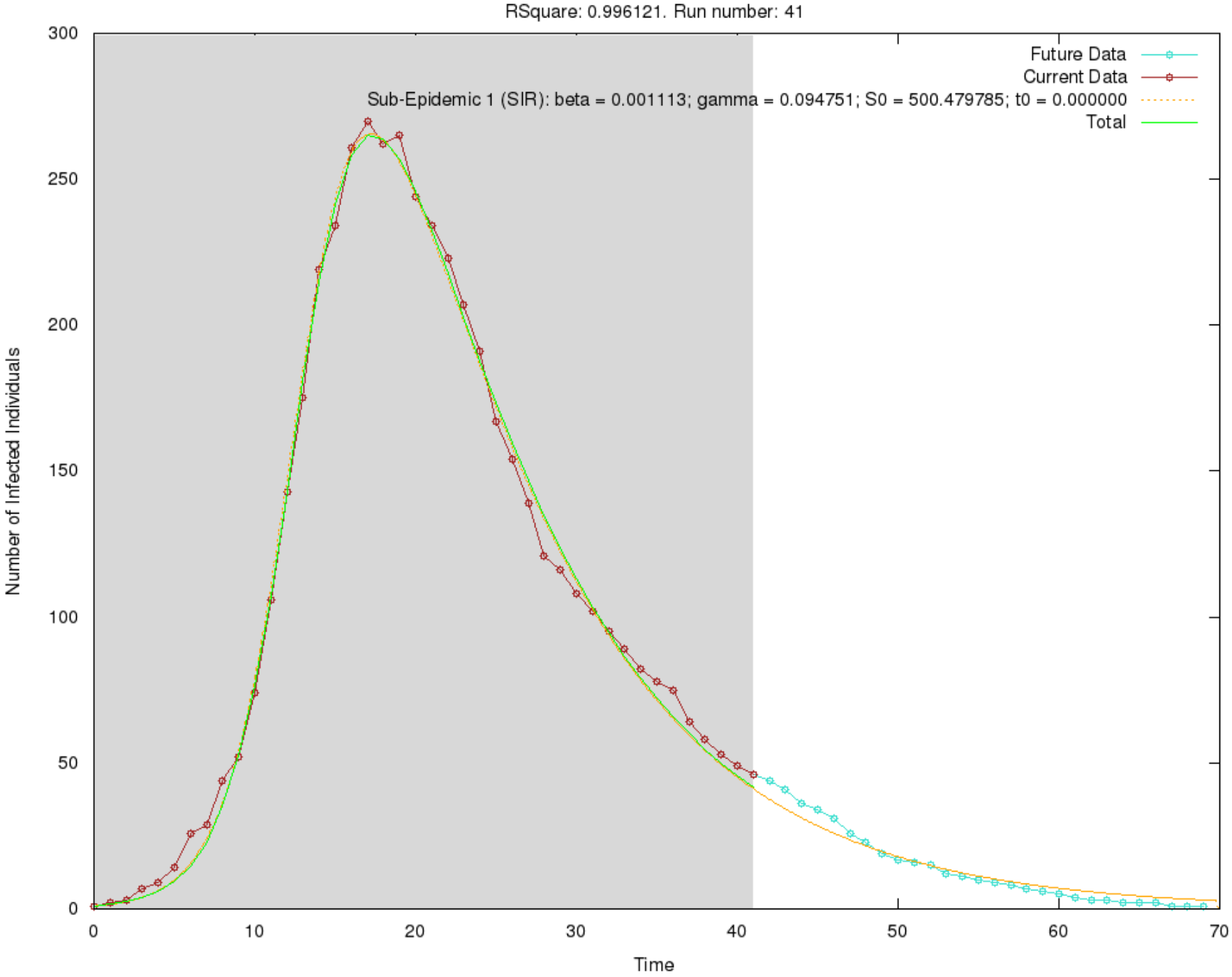

RSquare: 0.996141. Run number: 36
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001097; gamma = 0.097168; S0 = 508.791612; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

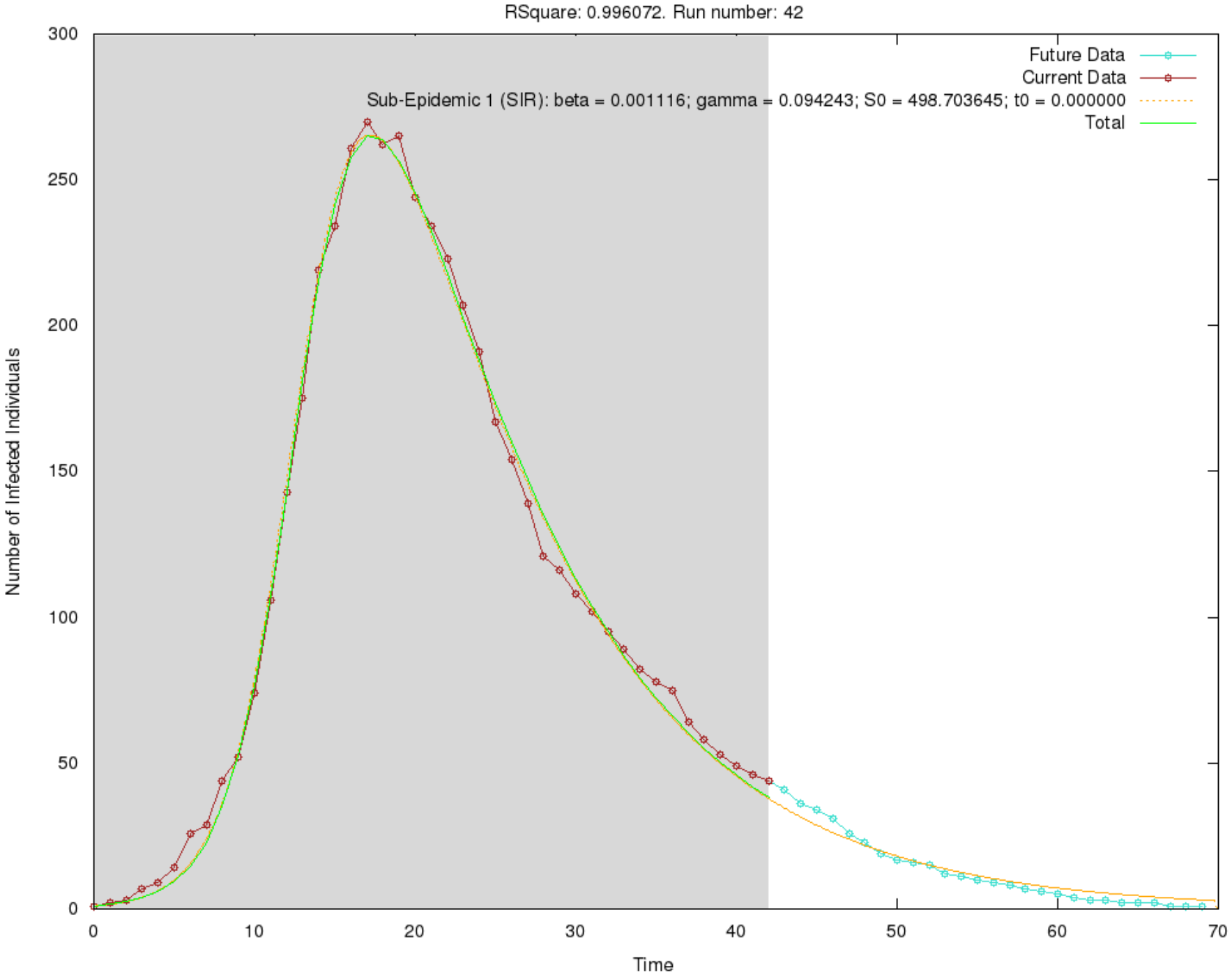

RSquare: 0.996092. Run number: 37
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001102; gamma = 0.096459; S0 = 506.376405; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

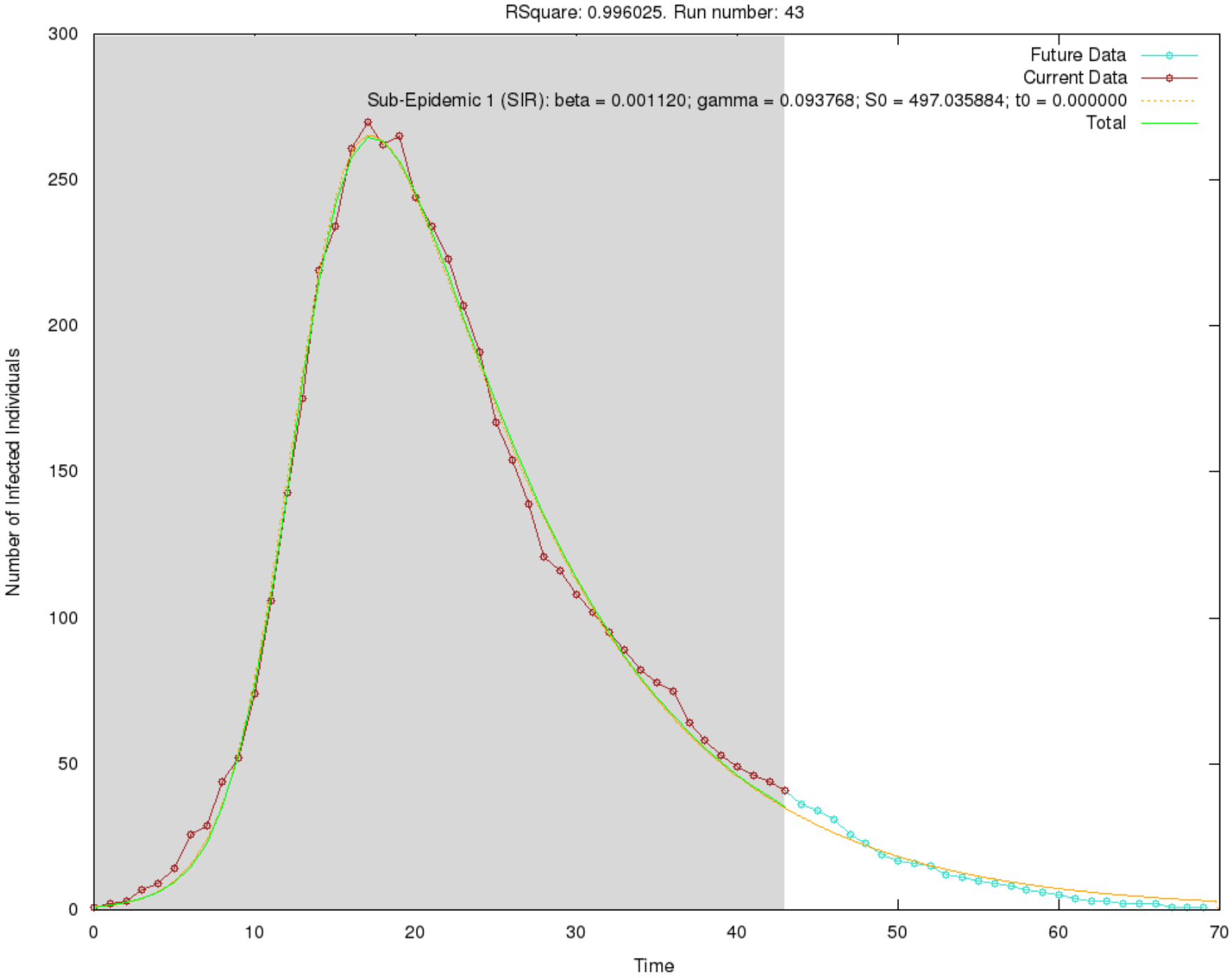

RSquare: 0.996090. Run number: 38
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001105; gamma = 0.095956; S0 = 504.655969; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

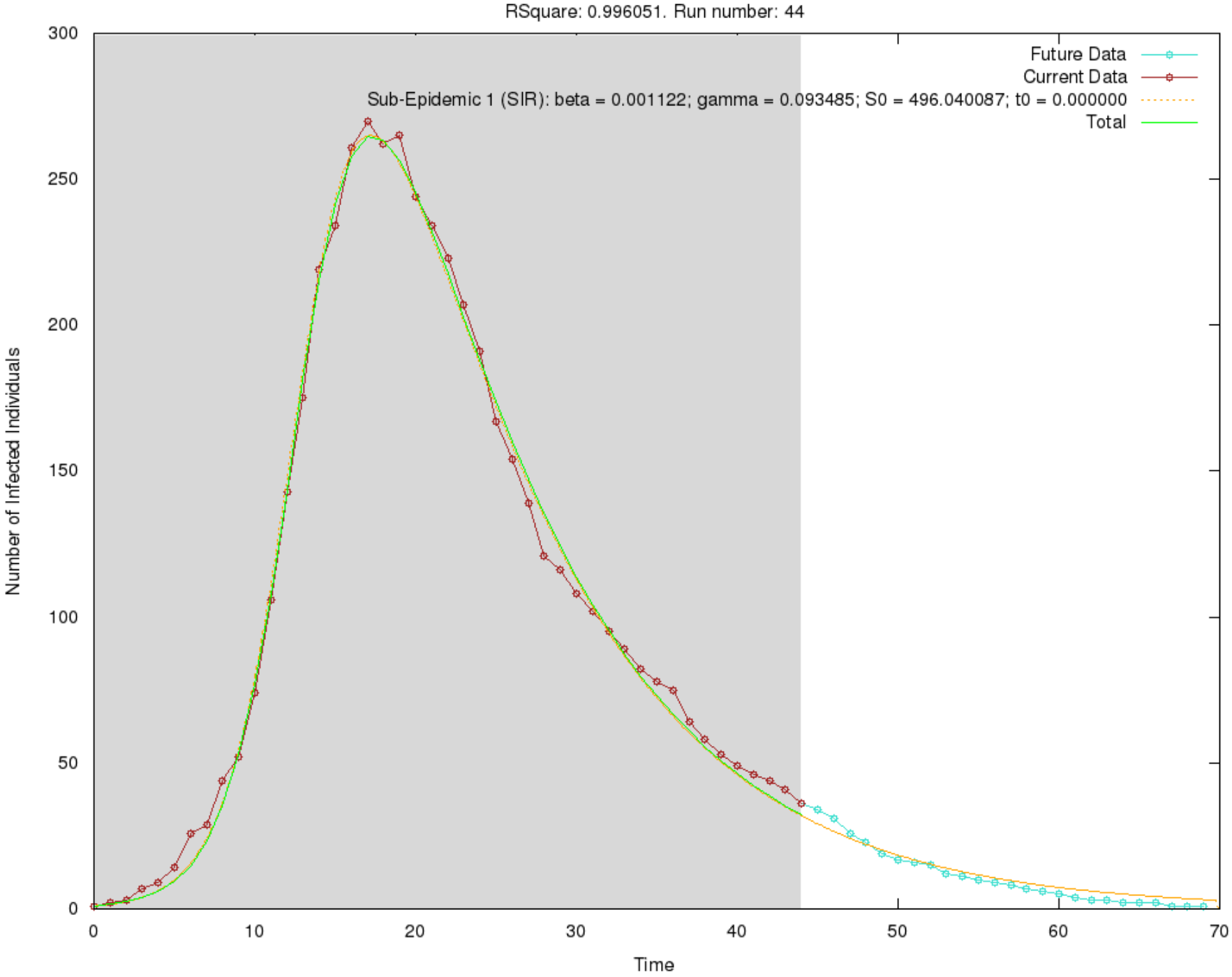

RSquare: 0.996106. Run number: 39
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001108; gamma = 0.095554; S0 = 503.270119; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

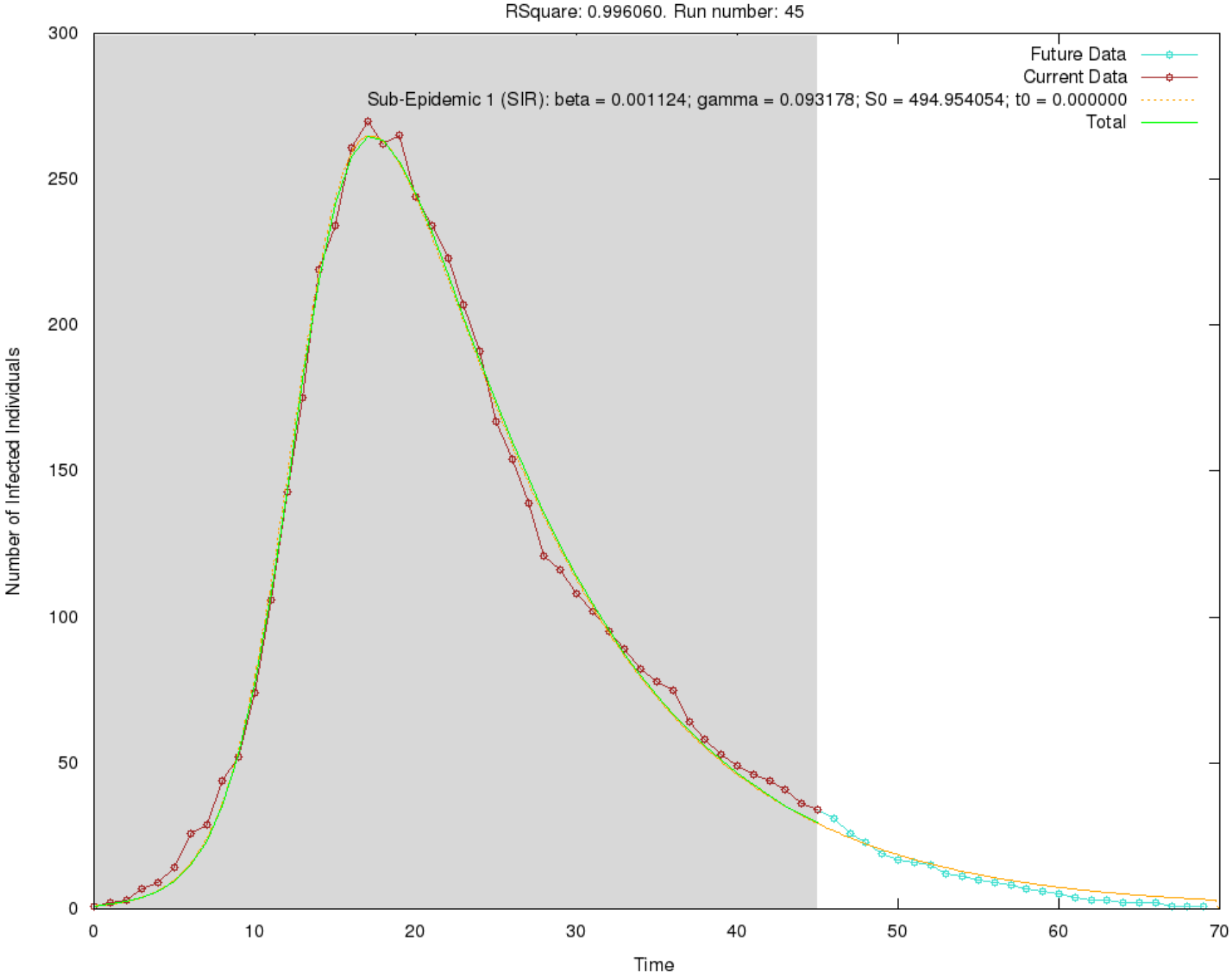

RSquare: 0.996123. Run number: 40
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001110; gamma = 0.095172; S0 = 501.947614; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

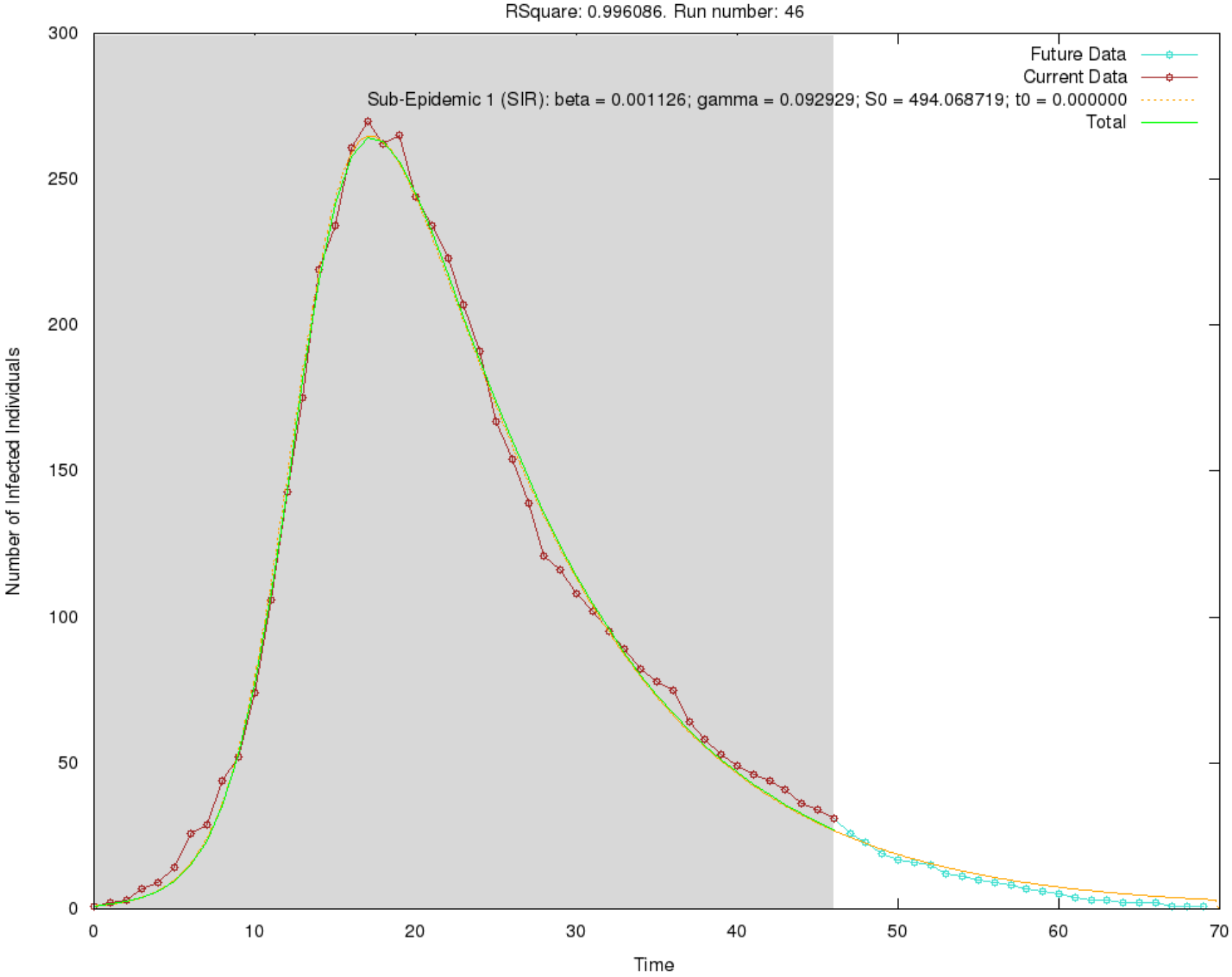

RSquare: 0.996121. Run number: 41
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001113; gamma = 0.094751; S0 = 500.479785; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

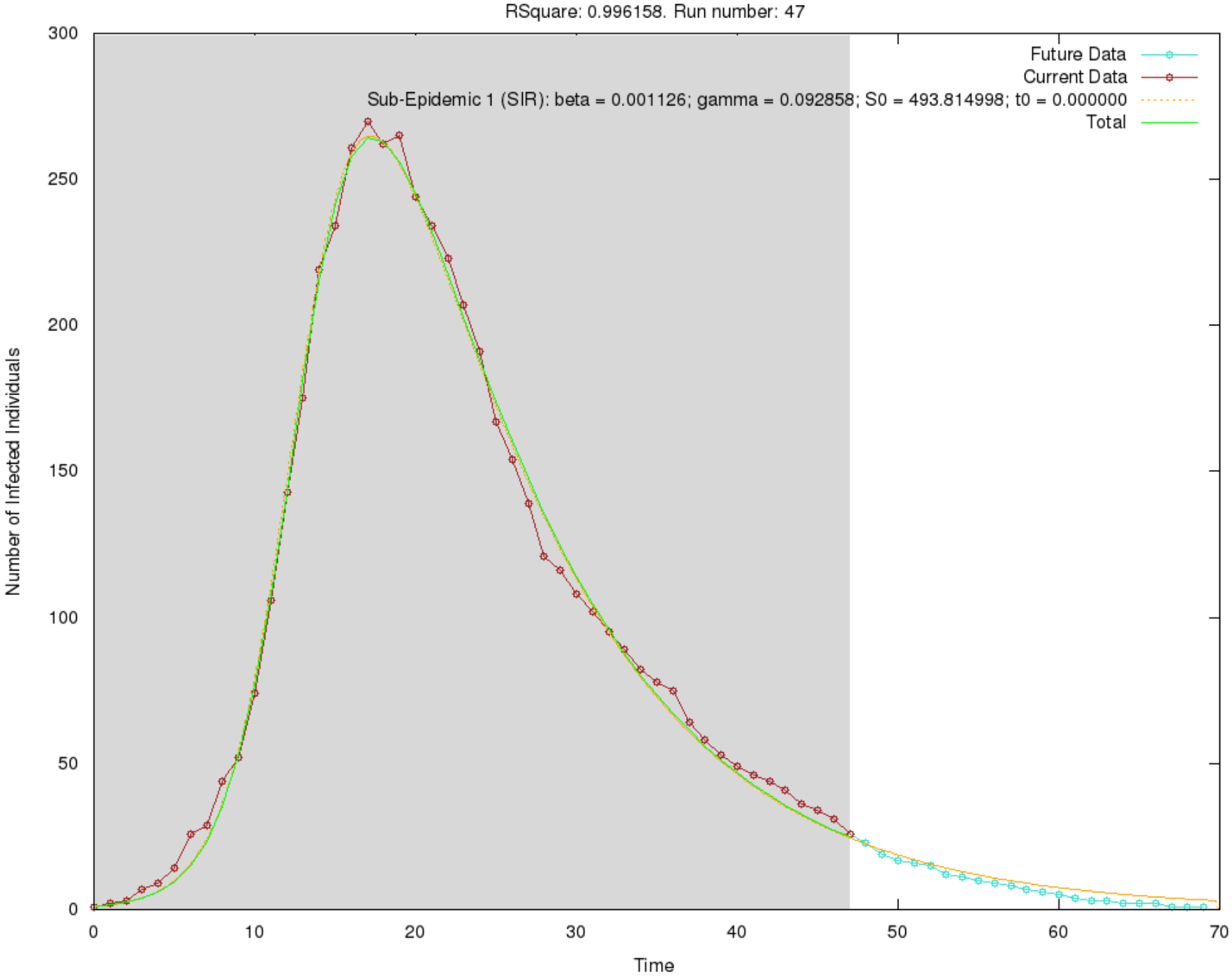

RSquare: 0.996072. Run number: 42
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001116; gamma = 0.094243; S0 = 498.703645; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

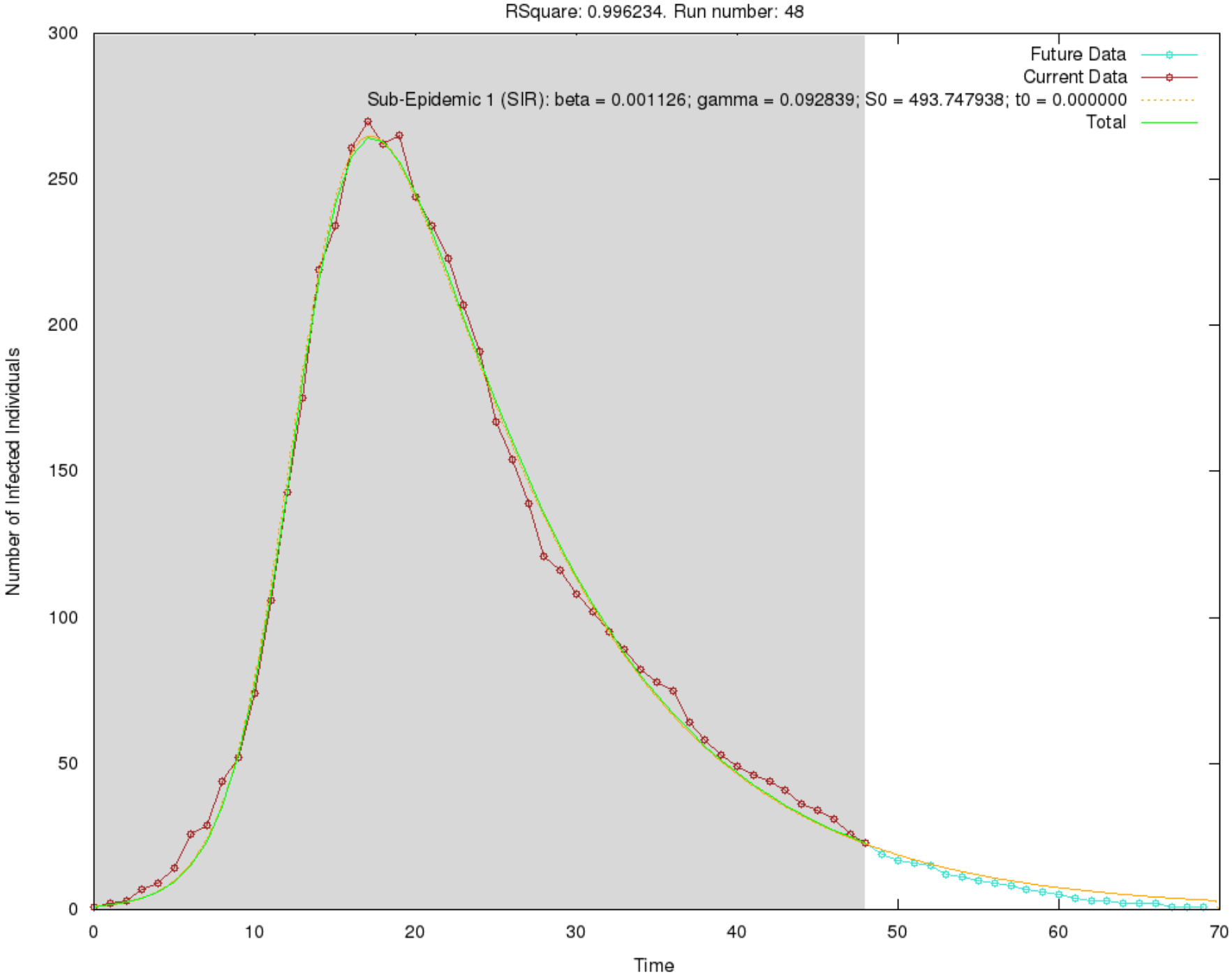

RSquare: 0.996025. Run number: 43
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001120; gamma = 0.093768; S0 = 497.035884; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

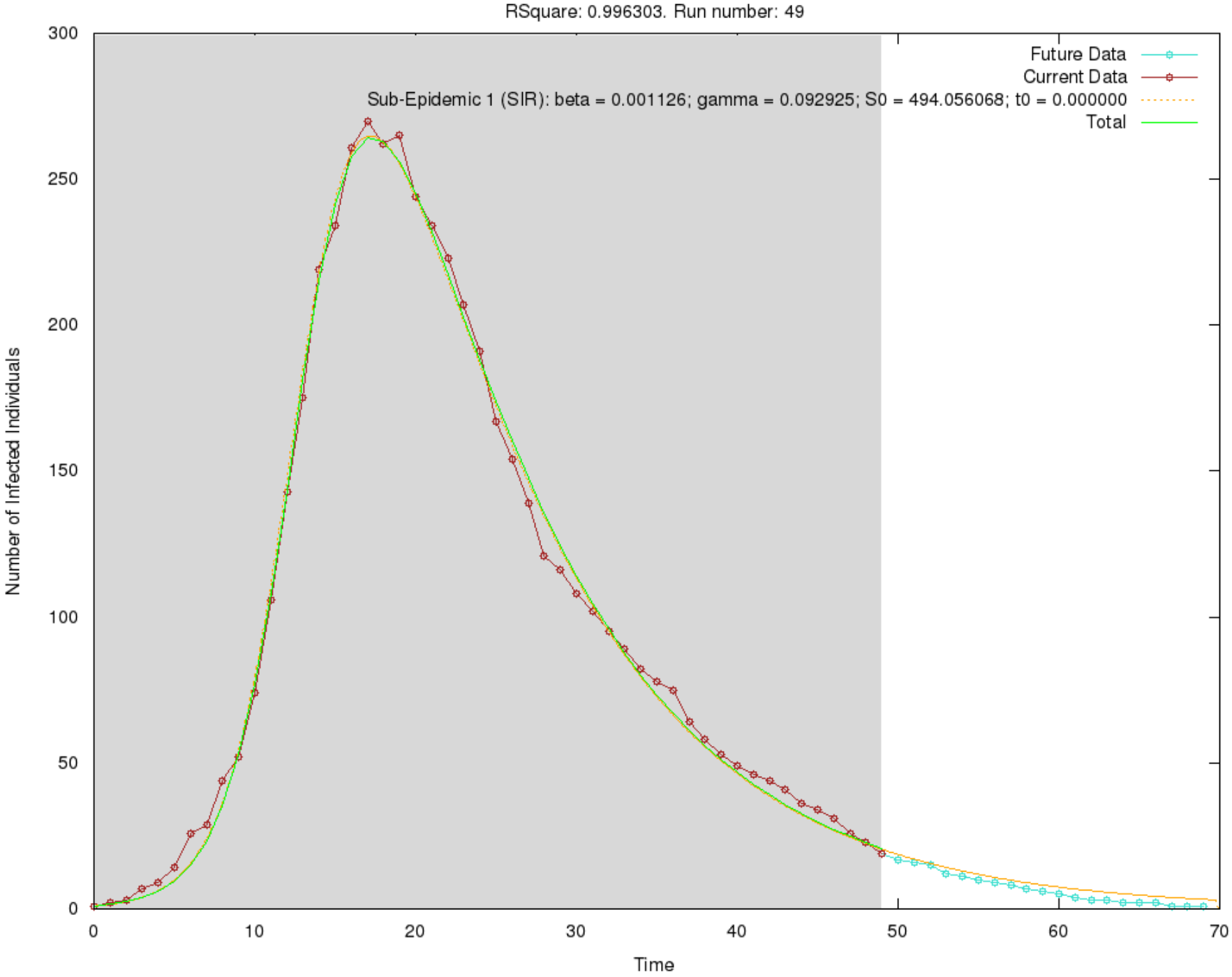

RSquare: 0.996051. Run number: 44
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001122; gamma = 0.093485; S0 = 496.040087; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

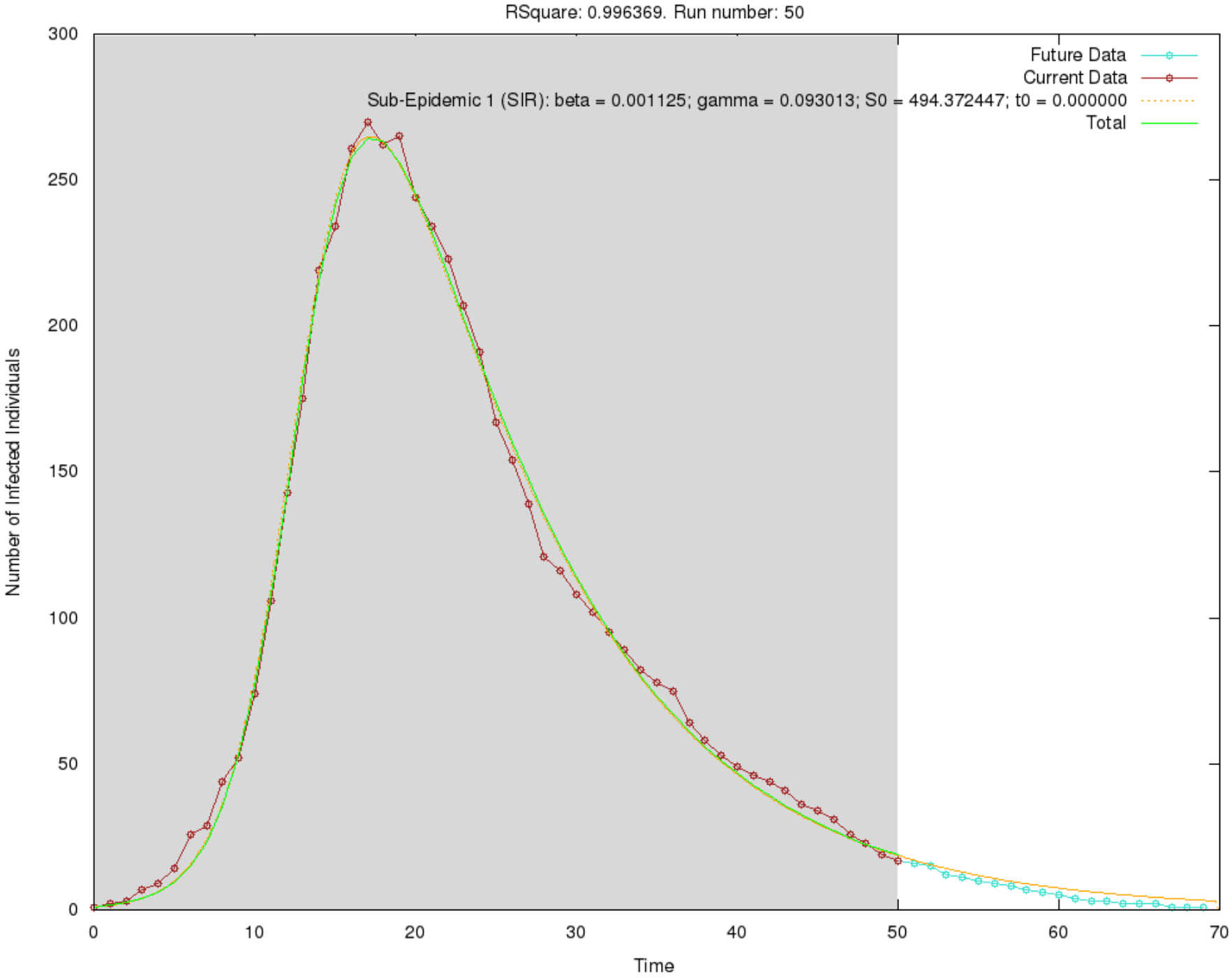

RSquare: 0.996060. Run number: 45
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001124; gamma = 0.093178; S0 = 494.954054; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

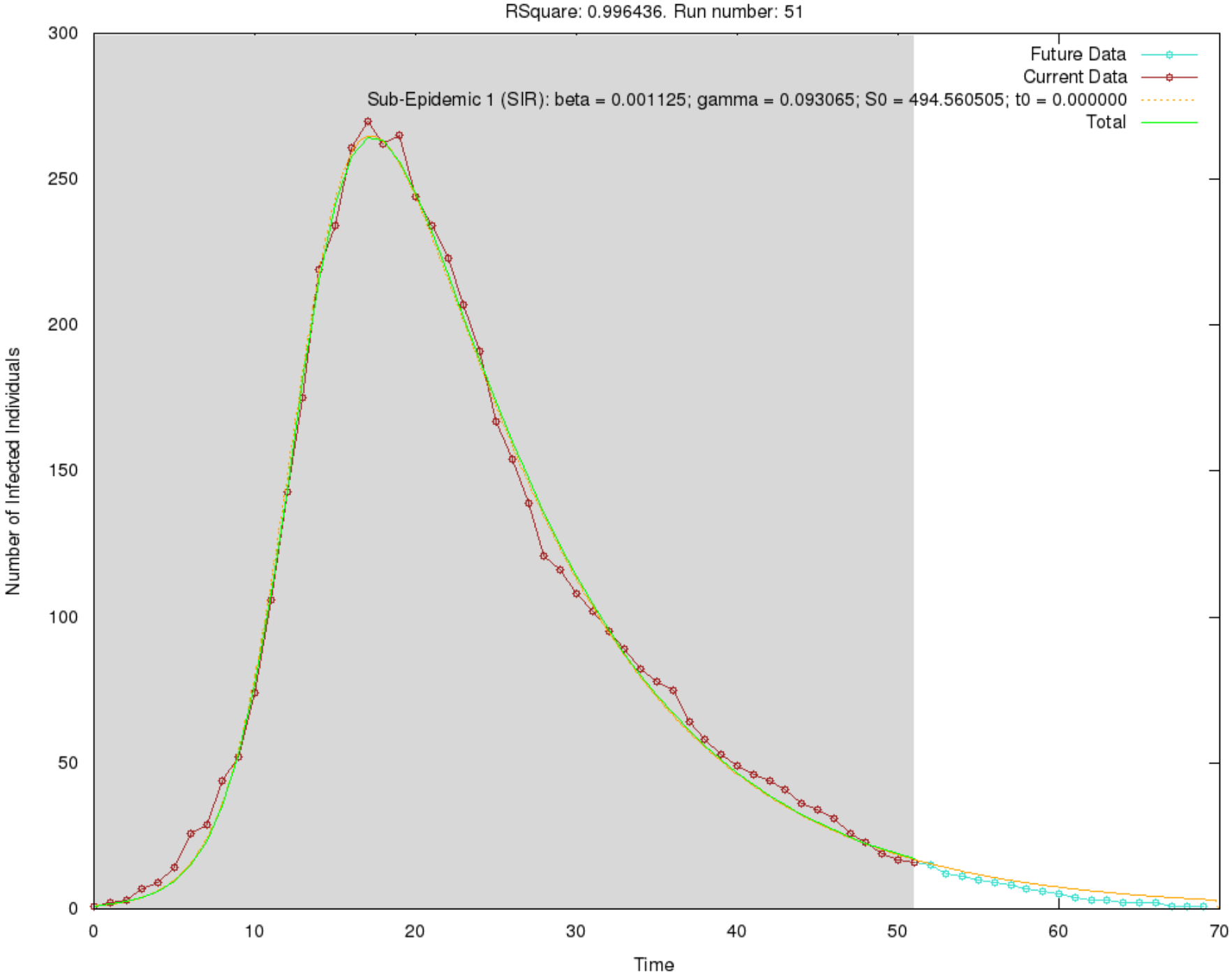

RSquare: 0.996086. Run number: 46
Sub-Epidemic 1 (SIR): beta = 0.001126; gamma = 0.092929; S0 = 494.068719; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

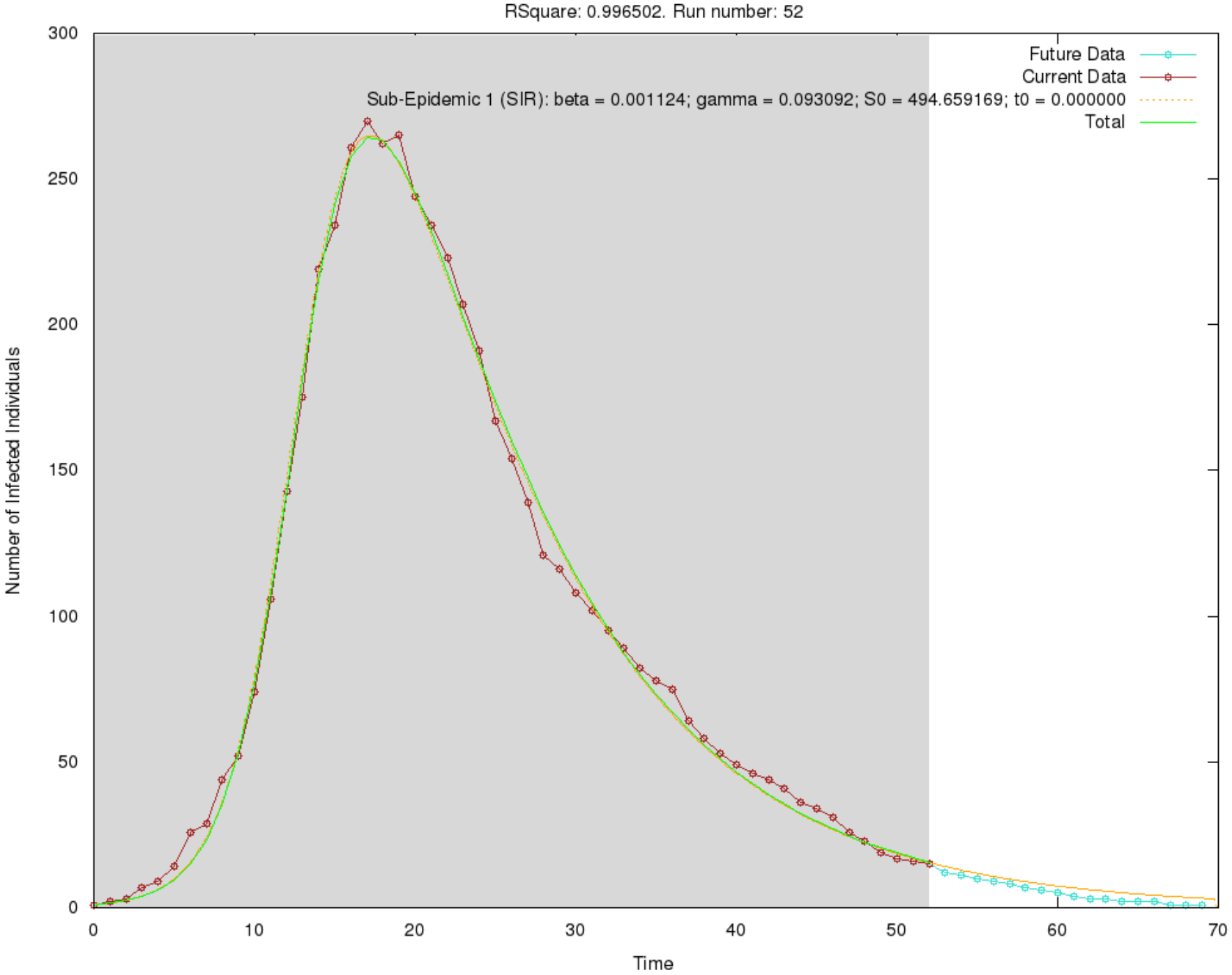

RSquare: 0.996158. Run number: 47
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001126; gamma = 0.092858; S0 = 493.814998; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

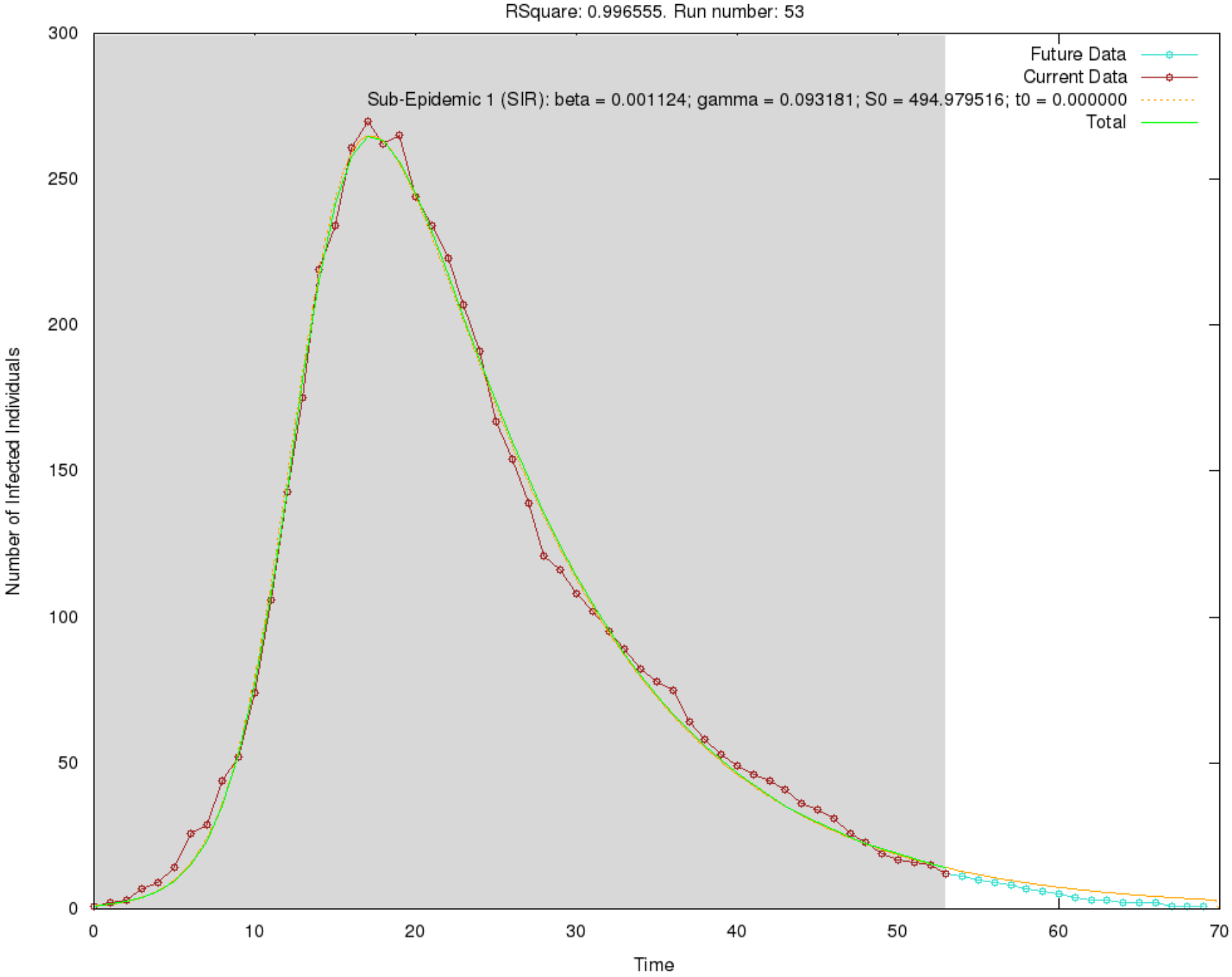

RSquare: 0.996234. Run number: 48
Sub-Epidemic 1 (SIR): beta = 0.001126; gamma = 0.092839; S0 = 493.747938; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

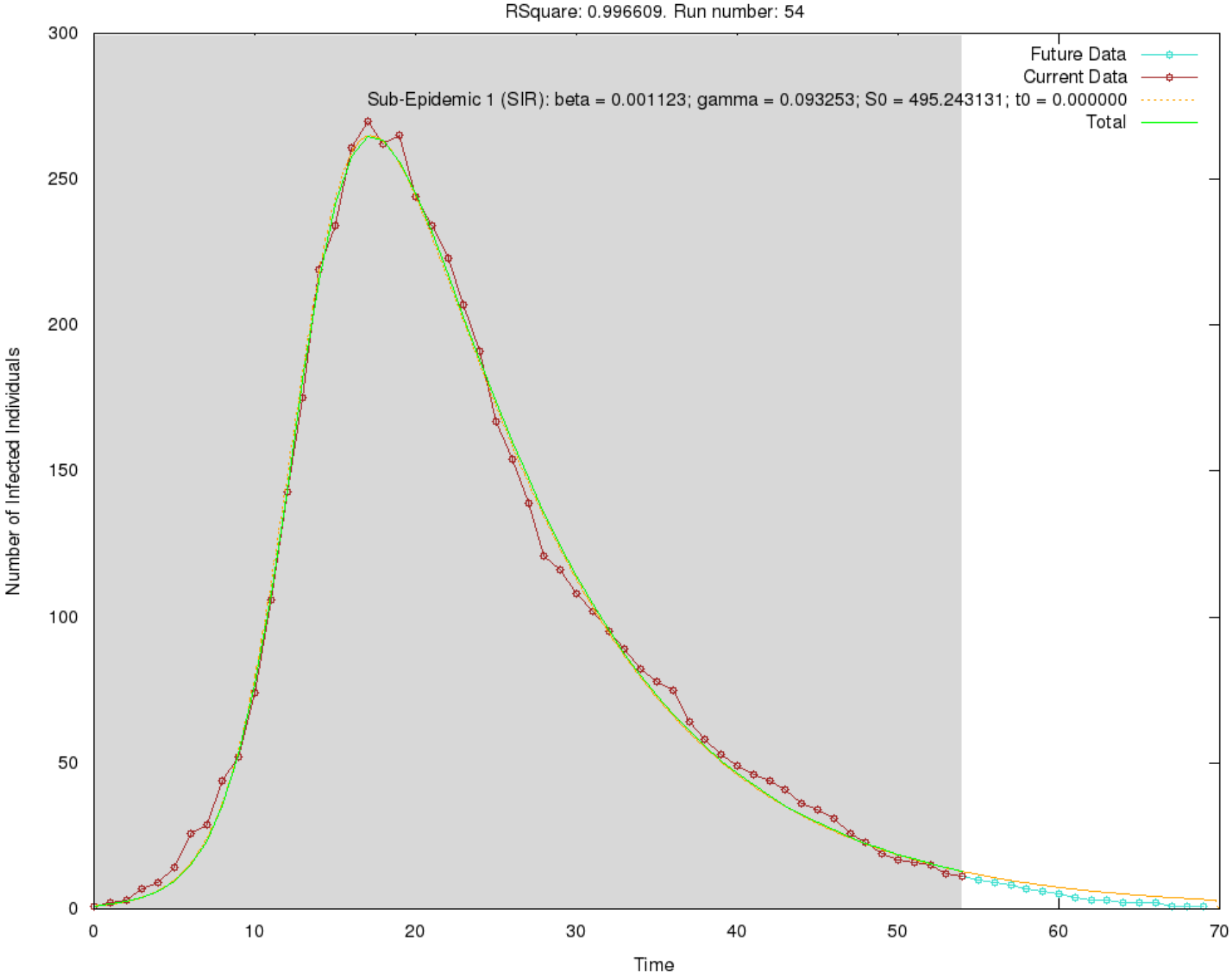

RSquare: 0.996303. Run number: 49
Sub-Epidemic 1 (SIR): beta = 0.001126; gamma = 0.092925; S0 = 494.056068; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

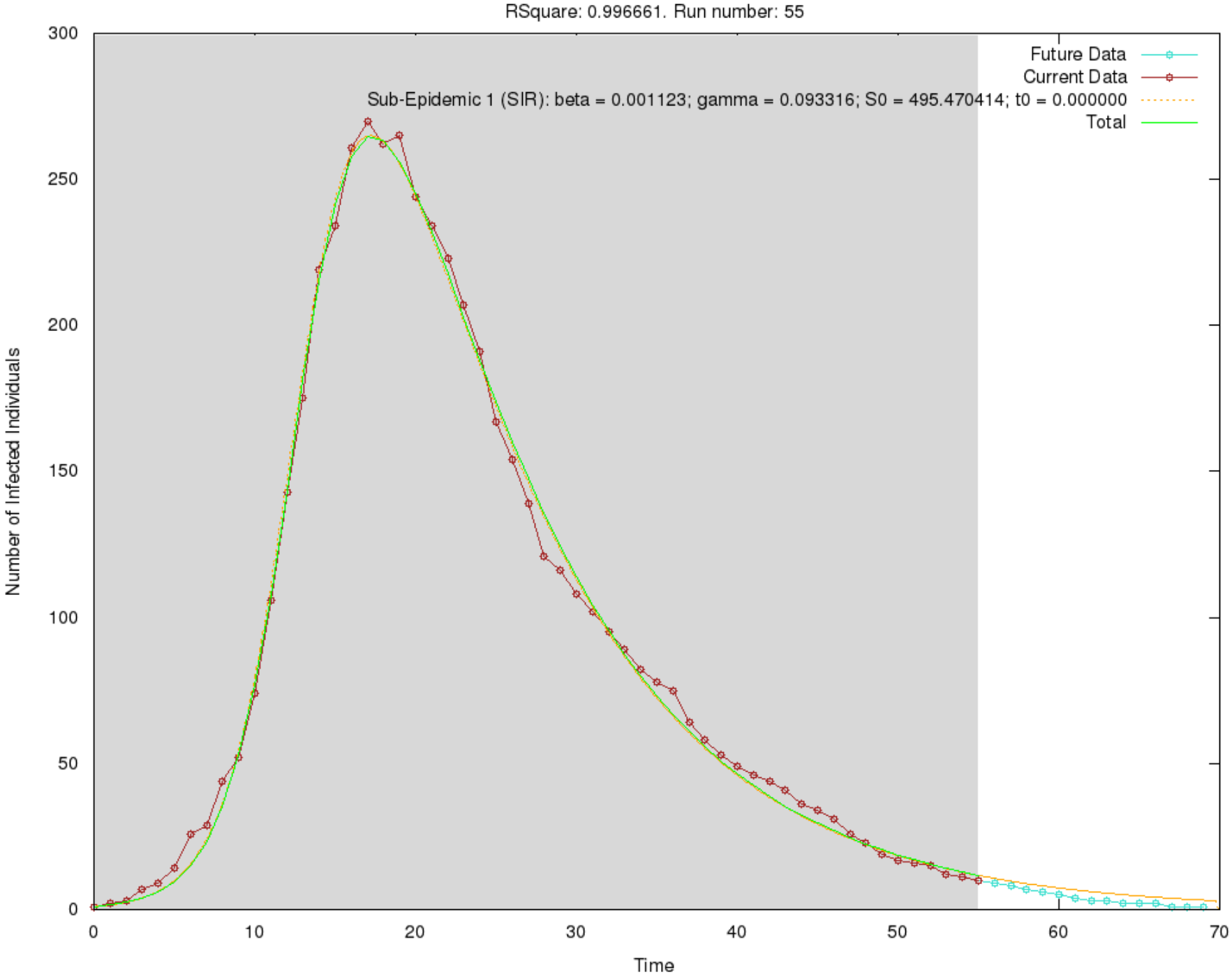

RSquare: 0.996369. Run number: 50
Sub-Epidemic 1 (SIR): beta = 0.001125; gamma = 0.093013; S0 = 494.372447; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

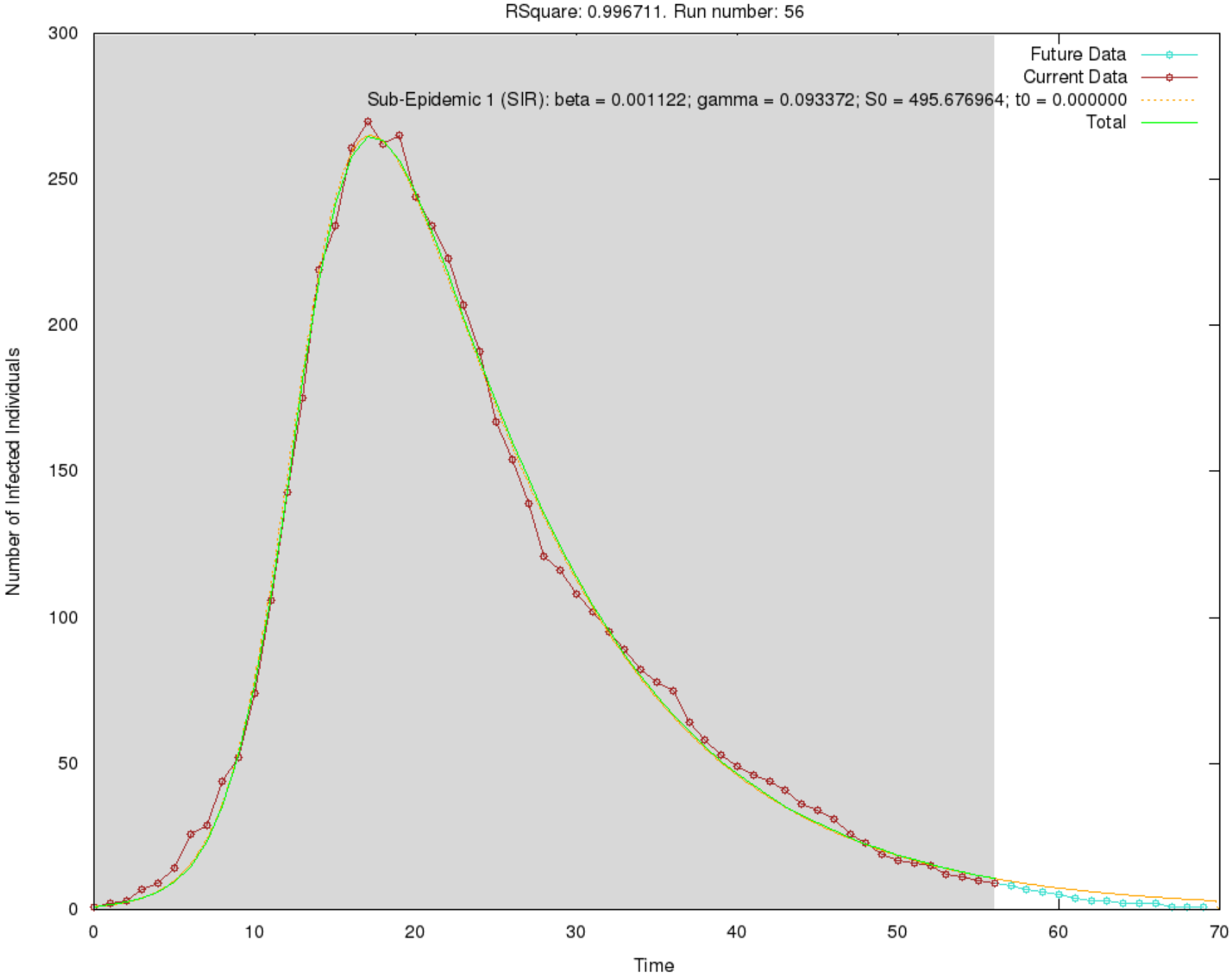

RSquare: 0.996436. Run number: 51
Sub-Epidemic 1 (SIR): beta = 0.001125; gamma = 0.093065; S0 = 494.560505; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

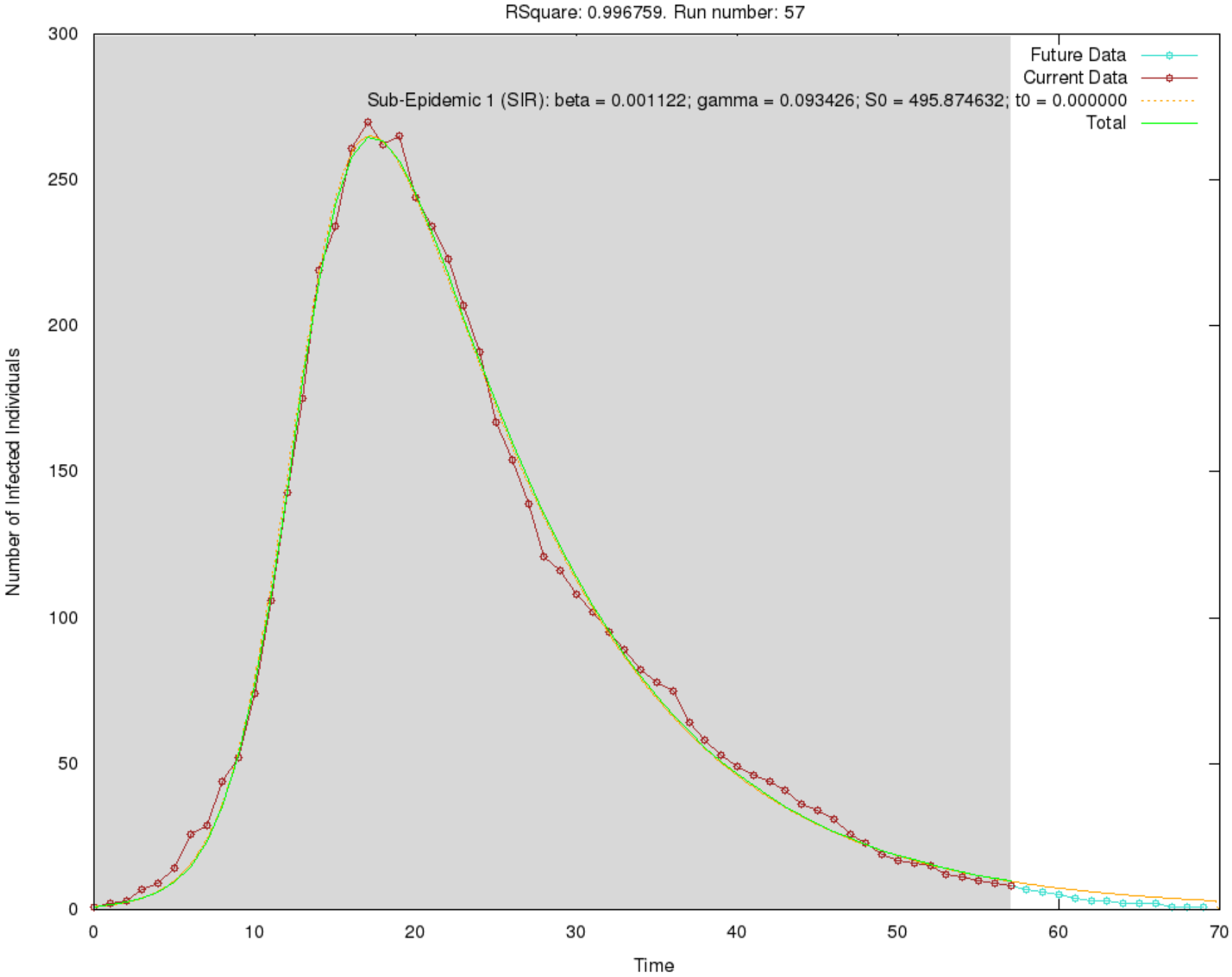

RSquare: 0.996502. Run number: 52
Sub-Epidemic 1 (SIR): beta = 0.001124; gamma = 0.093092; S0 = 494.659169; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

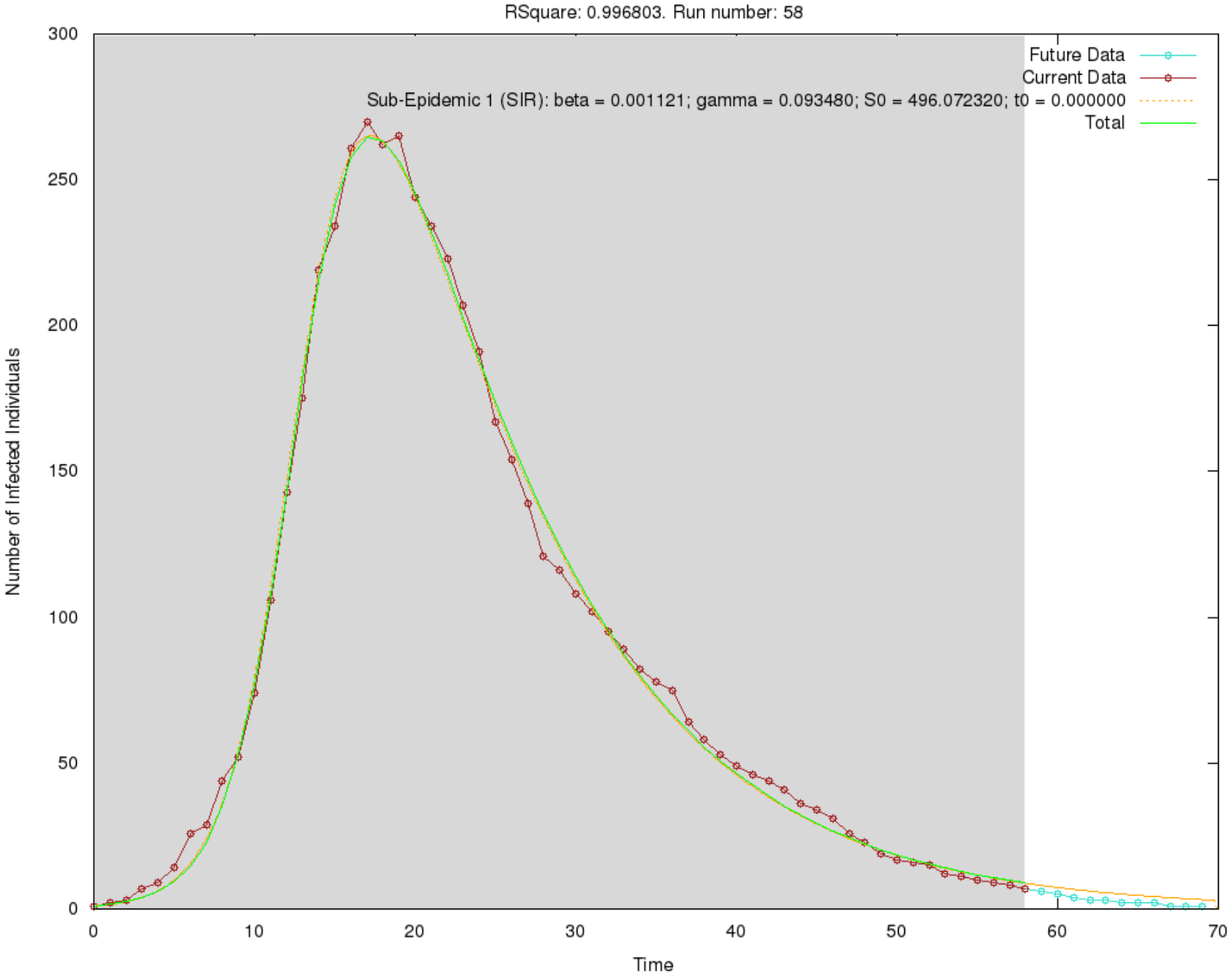

RSquare: 0.996555. Run number: 53
Sub-Epidemic 1 (SIR): beta = 0.001124; gamma = 0.093181; S0 = 494.979516; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

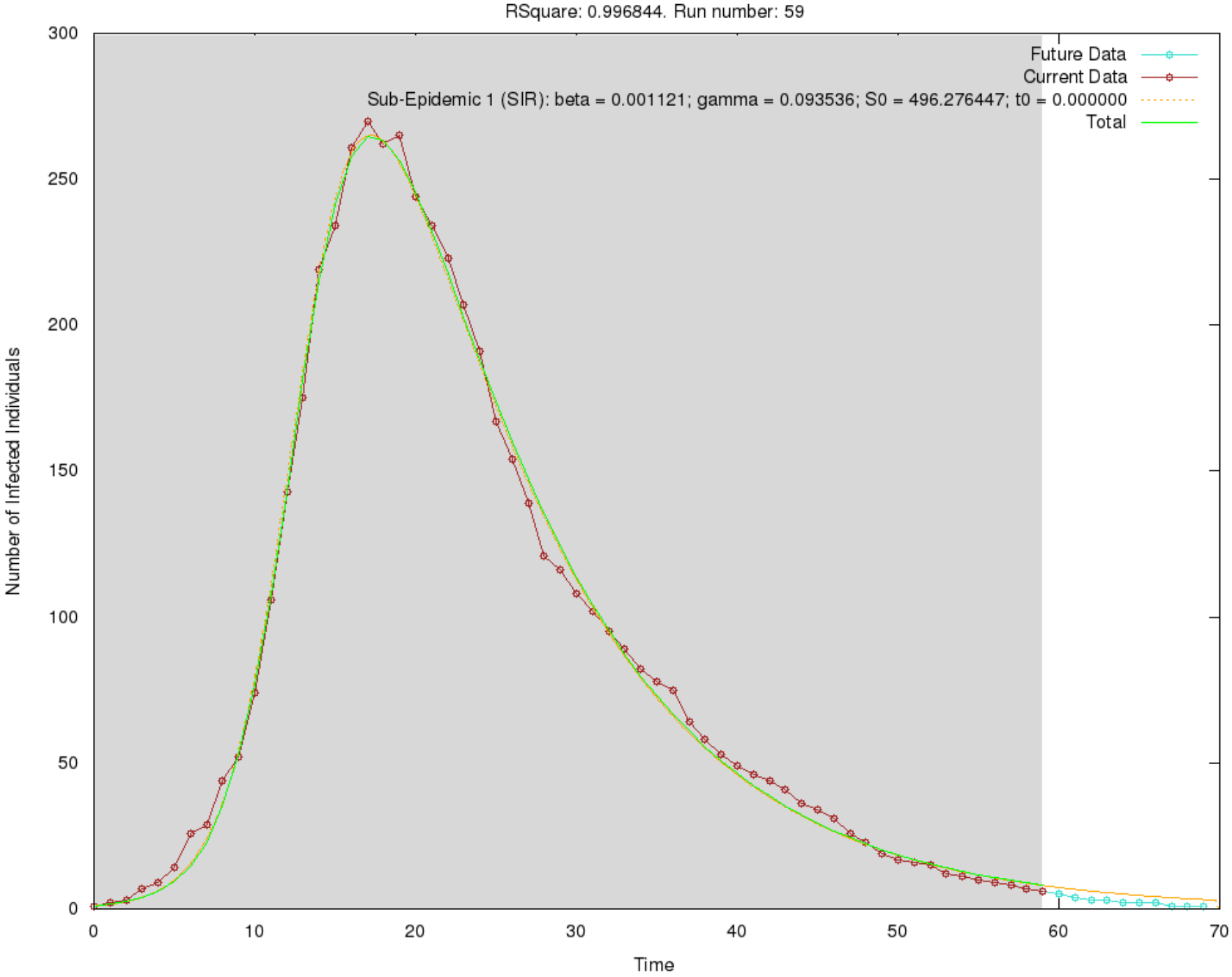

RSquare: 0.996609. Run number: 54
Sub-Epidemic 1 (SIR): beta = 0.001123; gamma = 0.093253; S0 = 495.243131; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

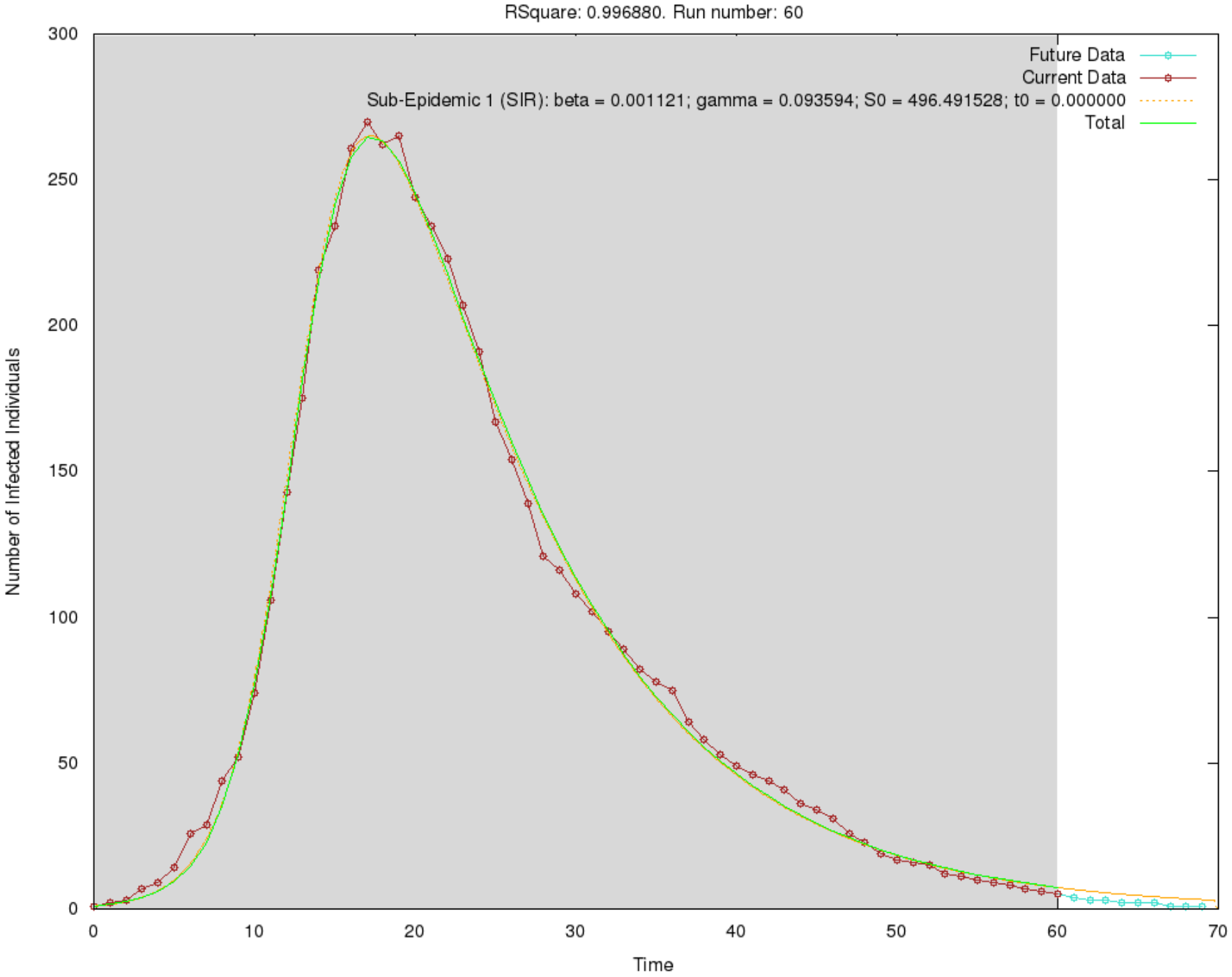

RSquare: 0.996661. Run number: 55
Sub-Epidemic 1 (SIR): beta = 0.001123; gamma = 0.093316; S0 = 495.470414; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

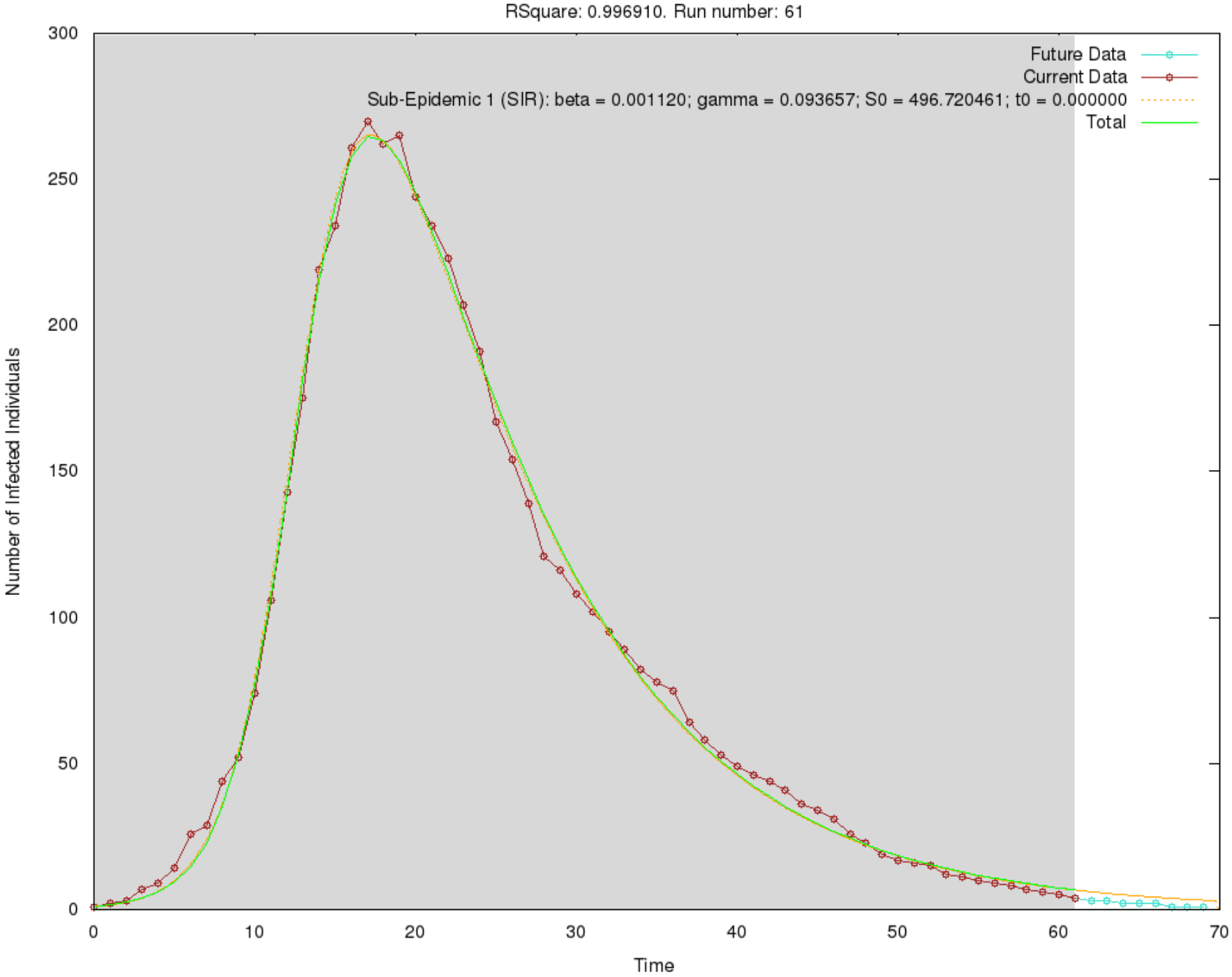

RSquare: 0.996711. Run number: 56
Sub-Epidemic 1 (SIR): beta = 0.001122; gamma = 0.093372; S0 = 495.676964; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

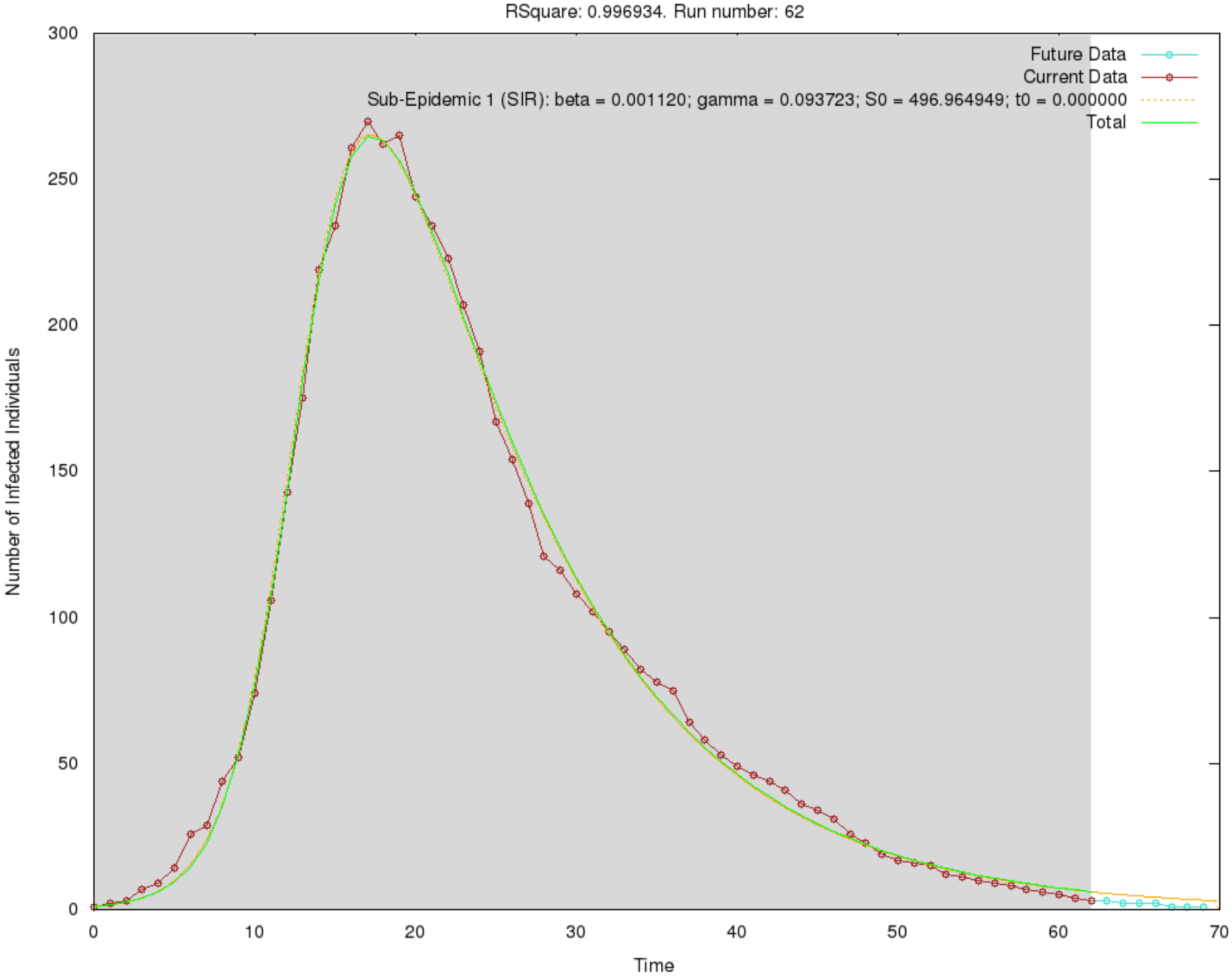

RSquare: 0.996759. Run number: 57
Sub-Epidemic 1 (SIR): beta = 0.001122; gamma = 0.093426; S0 = 495.874632; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

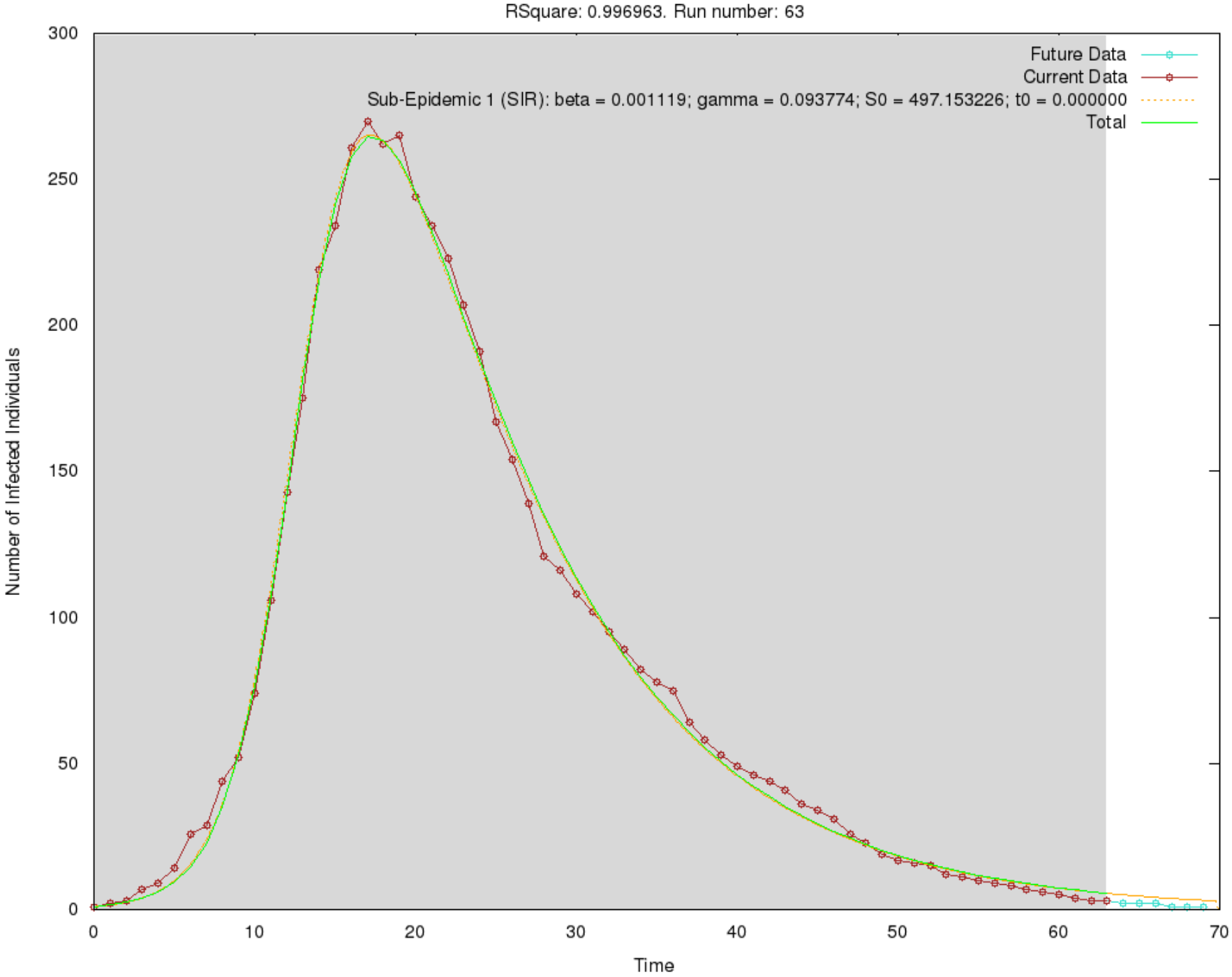

RSquare: 0.996803. Run number: 58
Sub-Epidemic 1 (SIR): beta = 0.001121; gamma = 0.093480; S0 = 496.072320; t0 = 0.000000
Future Data
Current Data
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

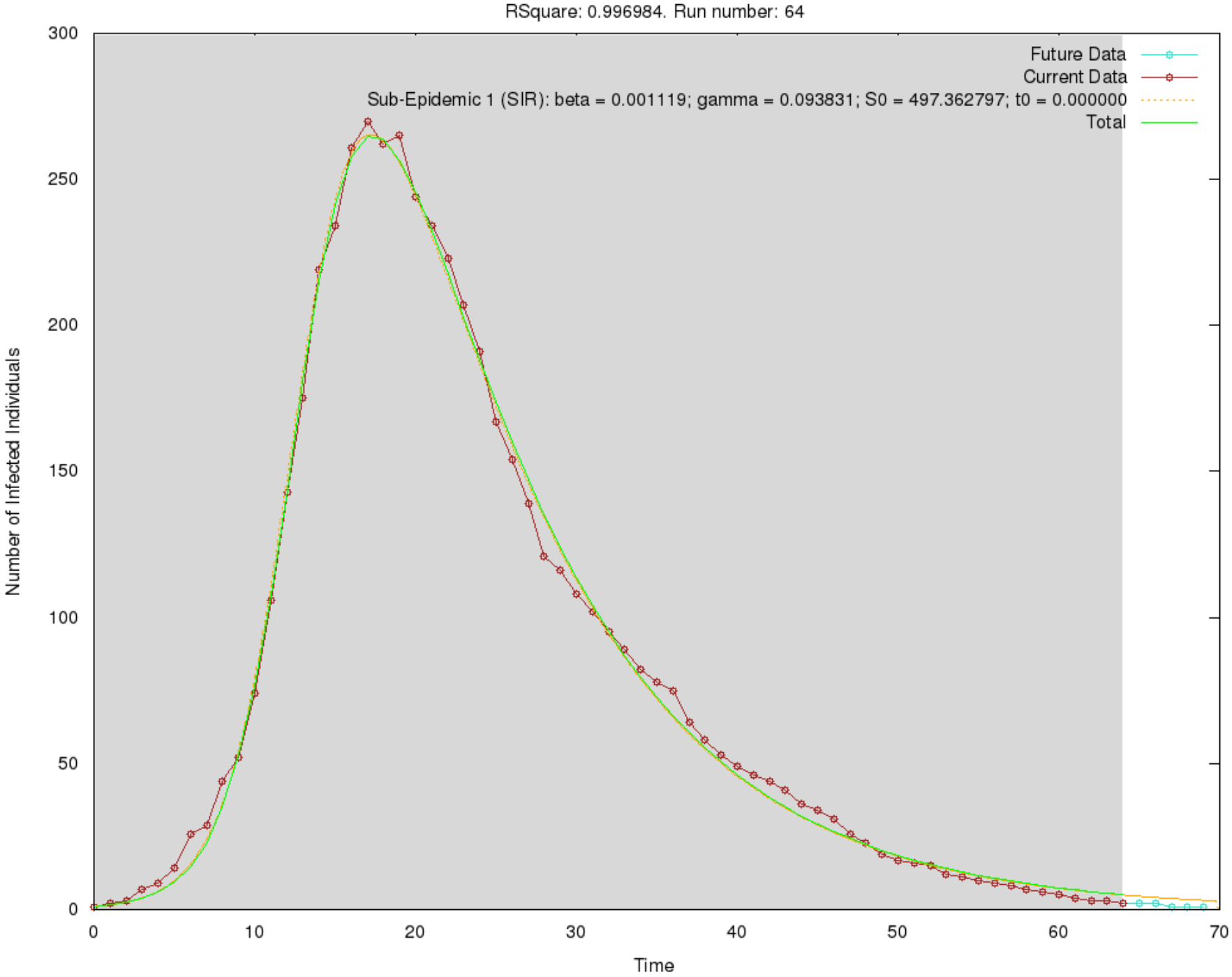

RSquare: 0.996844. Run number: 59
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001121; gamma = 0.093536; S0 = 496.276447; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

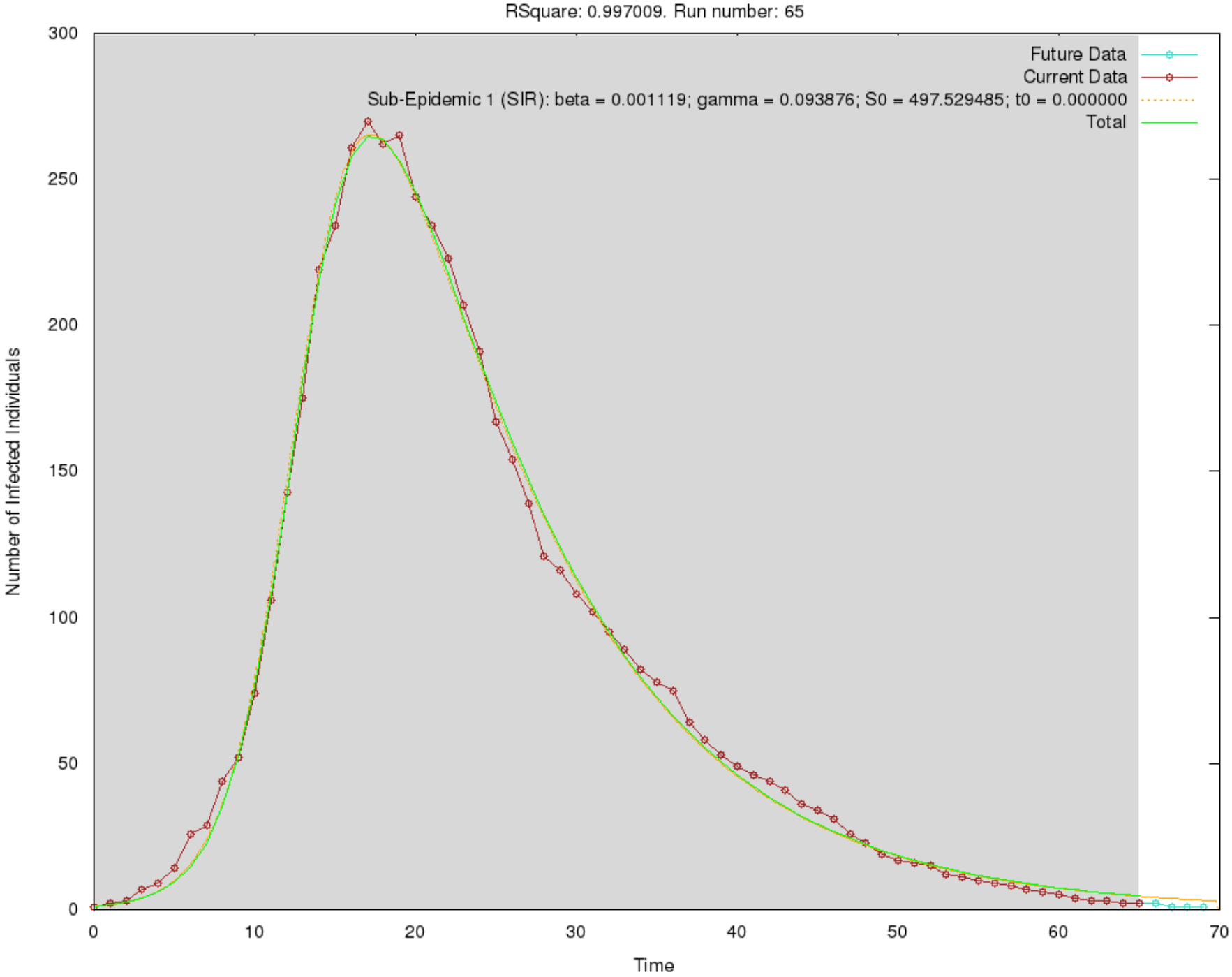

RSquare: 0.996880. Run number: 60
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001121; gamma = 0.093594; S0 = 496.491528; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

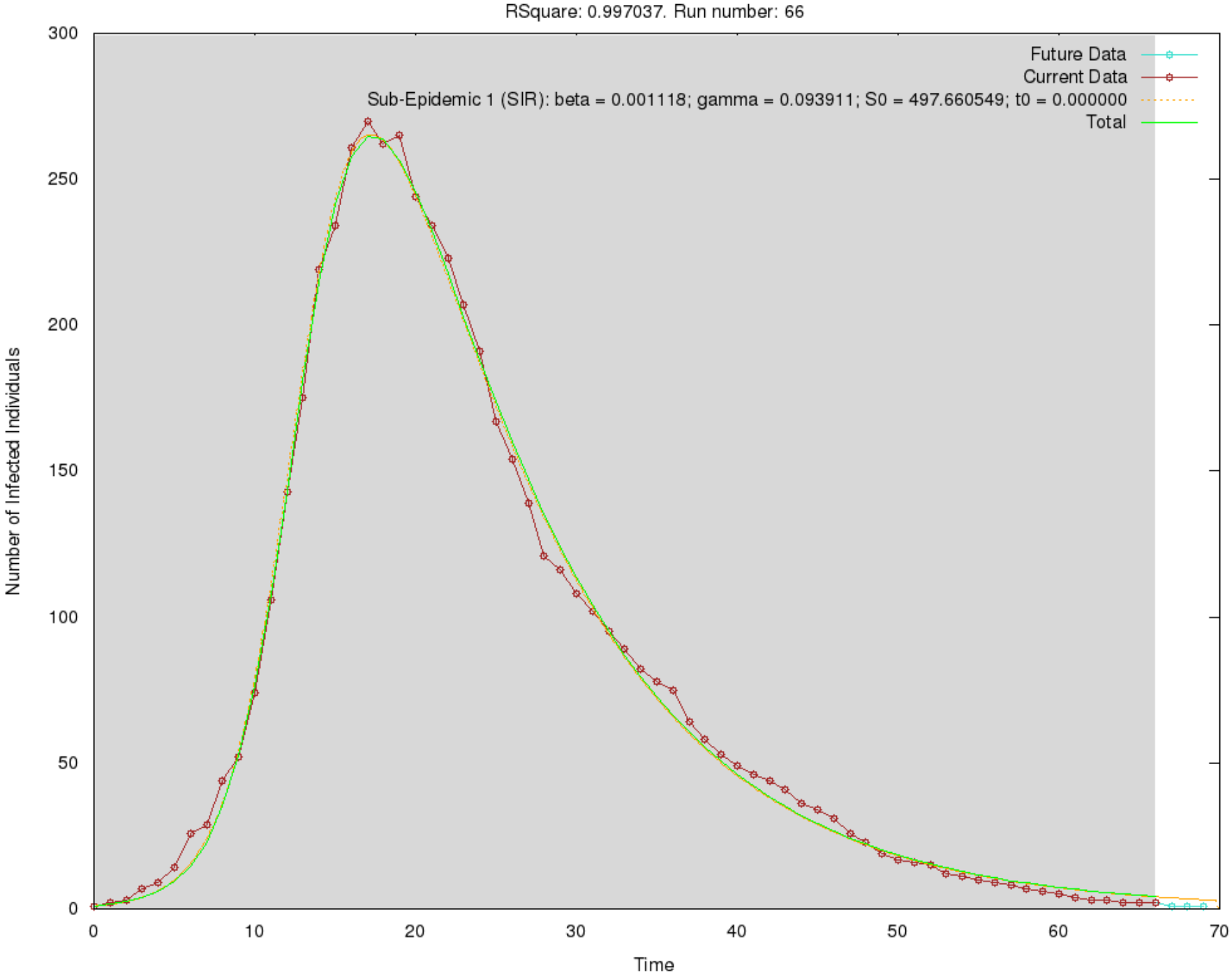

RSquare: 0.996910. Run number: 61
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001120; gamma = 0.093657; S0 = 496.720461; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

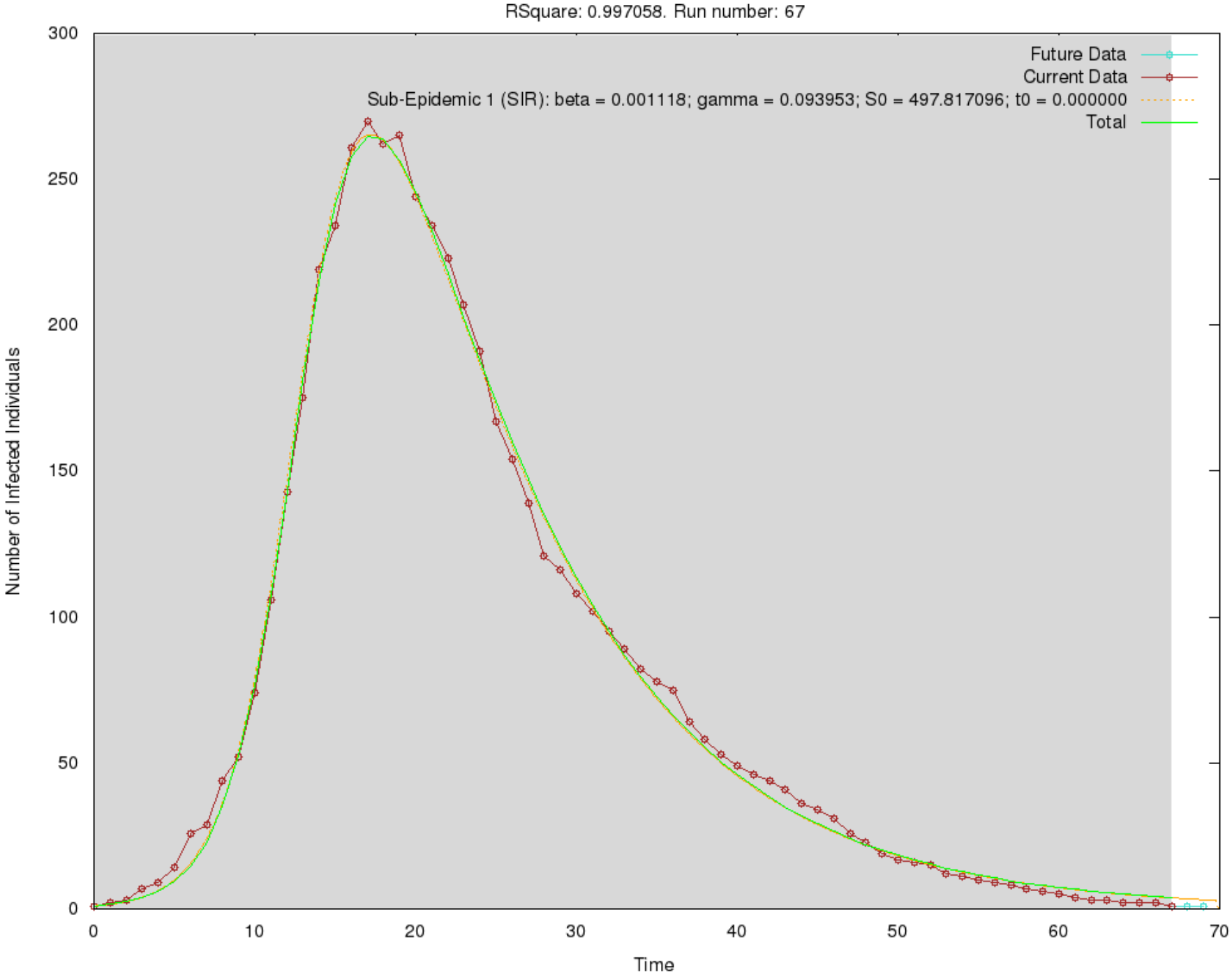

RSquare: 0.996934. Run number: 62
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001120; gamma = 0.093723; S0 = 496.964949; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70

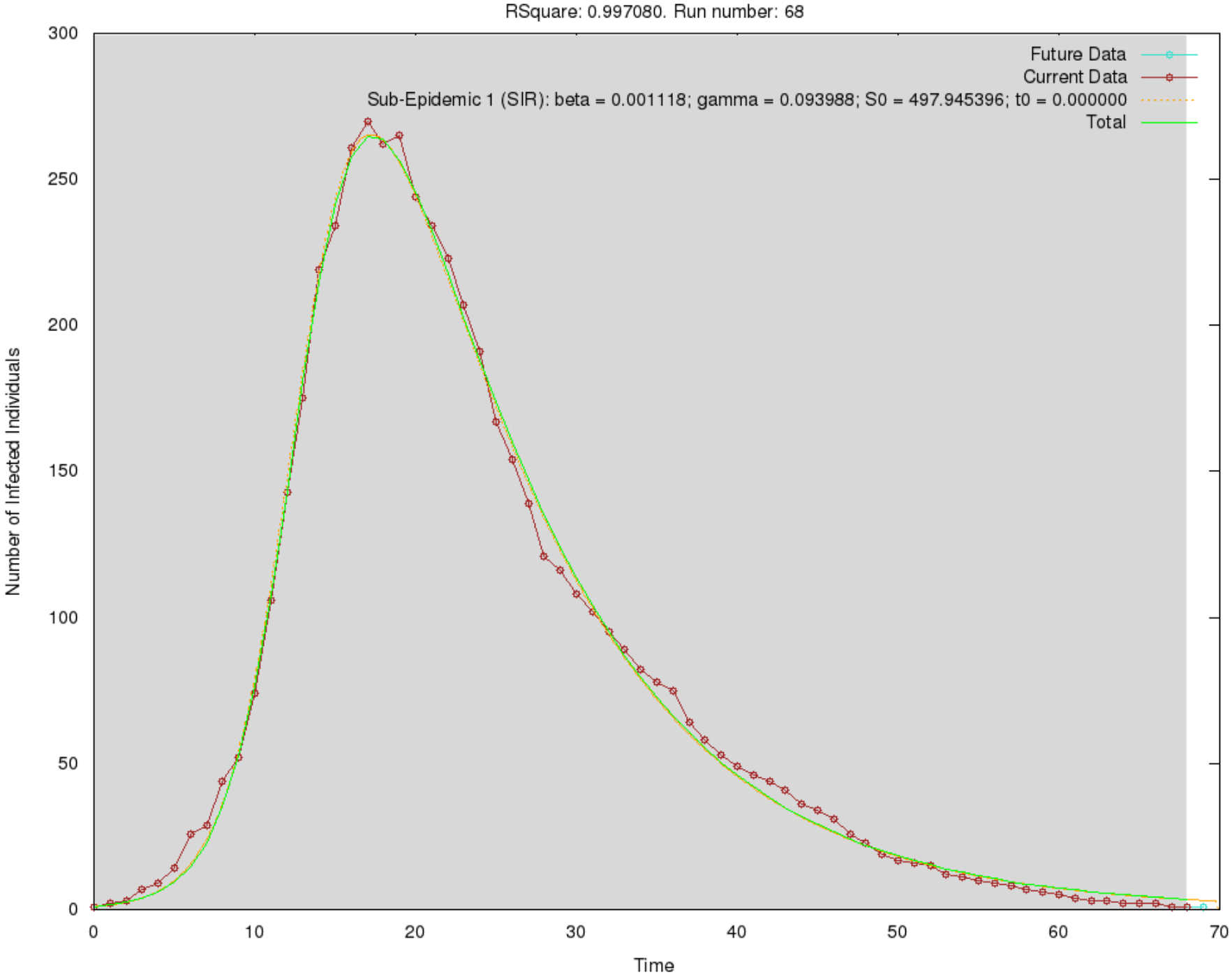

RSquare: 0.996963. Run number: 63
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001119; gamma = 0.093774; S0 = 497.153226; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70


RSquare: 0.996984. Run number: 64
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001119; gamma = 0.093831; S0 = 497.362797; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70


RSquare: 0.997009. Run number: 65
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001119; gamma = 0.093876; S0 = 497.529485; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70


RSquare: 0.997037. Run number: 66
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001118; gamma = 0.093911; S0 = 497.660549; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70


RSquare: 0.997058. Run number: 67
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001118; gamma = 0.093953; S0 = 497.817096; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70


RSquare: 0.997080. Run number: 68
Future Data
Current Data
Sub-Epidemic 1 (SIR): beta = 0.001118; gamma = 0.093988; S0 = 497.945396; t0 = 0.000000
Total
Number of Infected Individuals
Time
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70