|  |  |  | First-Order↙ |  |
|---|---|---|---|---|
| Norm of |  |  |  |  |
| Iteration | Func-count | Residual | optimality | Lambda↙ |
| step |  |  |  |  |
| 0 | 4 | 0.0692469 | 0.311 | 0.01 |
| 1 | 8 | 5.52396e-05 | 0.0158 | 0.001↙ |
| 0.243724 |  |  |  |  |
| 2 | 12 | 3.08449e-10 | 3.26e-05 | 0.0001↙ |
| 0.00570555 |  |  |  |  |
| 3 | 16 | 2.5348e-18 | 1.2e-09 | 1e-05↙ |
| 1.51444e-05 |  |  |  |  |
| 4 | 20 | 3.18543e-28 | 1.24e-14 | 1e-06↙ |
| 1.68842e-09 |  |  |  |  |

Equation solved.

fsolve completed because the vector of function values is near zero
as measured by the value of the function tolerance, and
the problem appears regular as measured by the gradient.

<stopping criteria details>
Max. abs. error in calibration targets:1.4017e-14


pis1 =

   7.8408e-08


pis2 =

   1.2442e-04


pis3 =

    0.3902


RnotSIR =

    1.5035

|            |            |          | First-Order↙ |          |
| Norm of    |            |          |              |          |
| Iteration  | Func-count | Residual | optimality   | Lambda↙  |
| step       |            |          |              |          |
| 0          | 1751       | 0.00188012 | 2.93e-05   | 0.01     |
| 1          | 3502       | 0.00187734 | 2.89e-05   | 0.001↙   |
| 0.011796   |            |          |              |          |
| 2          | 5253       | 0.0018498 | 2.87e-05    | 0.0001↙  |
| 0.117098   |            |          |              |          |
| 3          | 7004       | 0.00160207 | 2.69e-05   | 1e-05↙   |
| 1.09061    |            |          |              |          |
| 4          | 8755       | 0.000503013 | 1.57e-05  | 1e-06↙   |
| 6.26026    |            |          |              |          |
| 5          | 10506      | 3.51369e-06 | 1.23e-06  | 1e-07↙   |
| 6.9729     |            |          |              |          |
| 6          | 12257      | 2.90443e-10 | 9.28e-09  | 1e-08↙   |
| 0.62563    |            |          |              |          |
| 7          | 14008      | 4.15003e-16 | 7.23e-11  | 1e-09↙   |
| 0.00594812 |            |          |              |          |
| 8          | 15759      | 1.10849e-23 | 7.24e-11  | 1e-10↙   |
| 7.35174e-06 |           |          |              |          |

Equation solved, solver stalled.

fsolve stopped because the relative size of the current step is less↙
than the
value of the step size tolerance and the vector of function values
is near zero as measured by the value of the function tolerance.

<stopping criteria details>
Equation solved. The magnitude of the search direction is less than↙
the specified tolerance
Max. abs. error in equilib. equations:4.4489e-13


aggCons_trough_percent =

   -9.7656


aggCons_avg_first_year_percent =

   -4.6662

terminal_one_minus_susceptibles_percent =

    53.5795


peak_infection_percent =

    5.2329


terminal_death_share_percent =

    0.2679


terminal_number_deaths_US_millions =

    0.8841

Elapsed time is 49.904665 seconds.
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