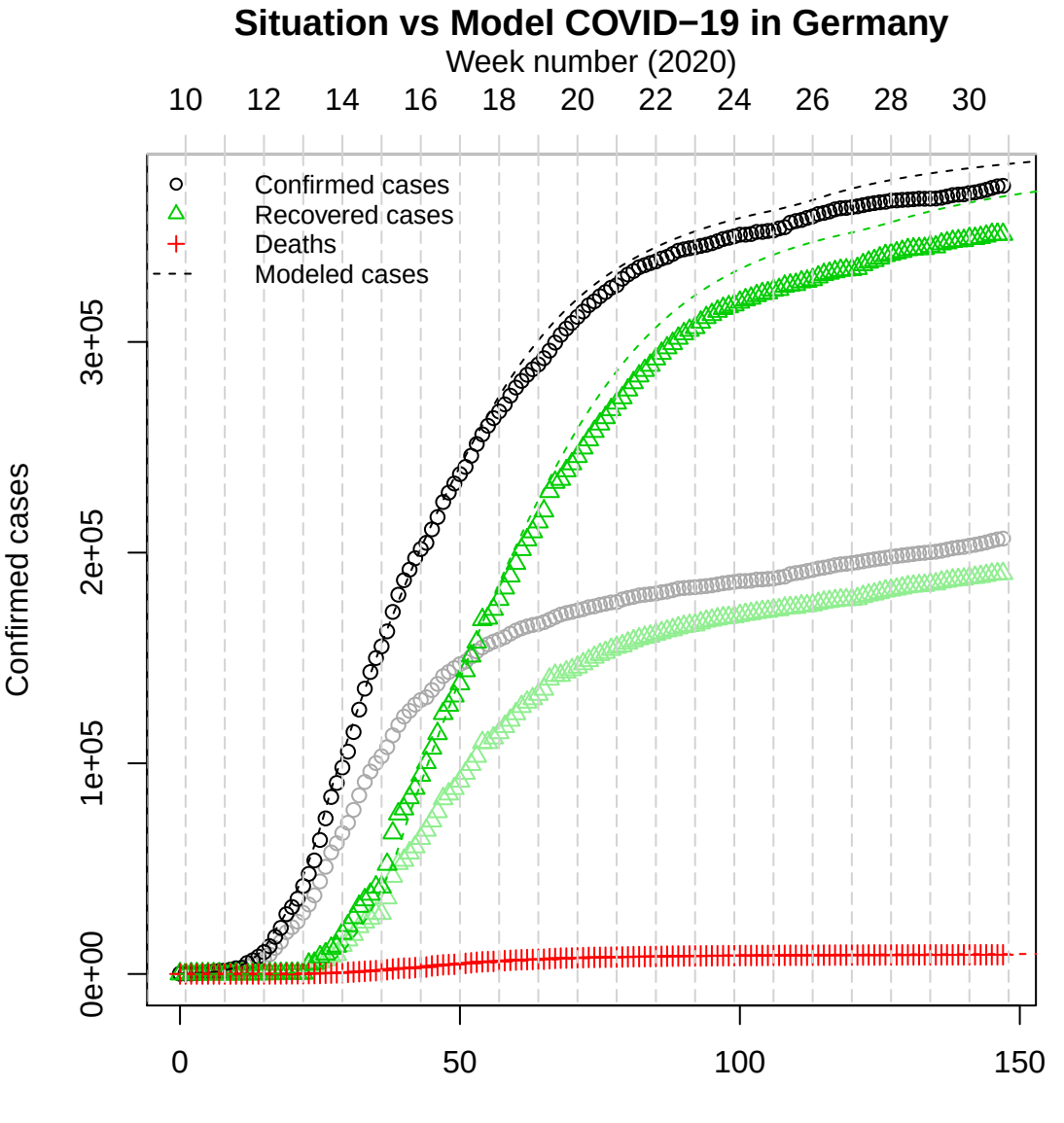
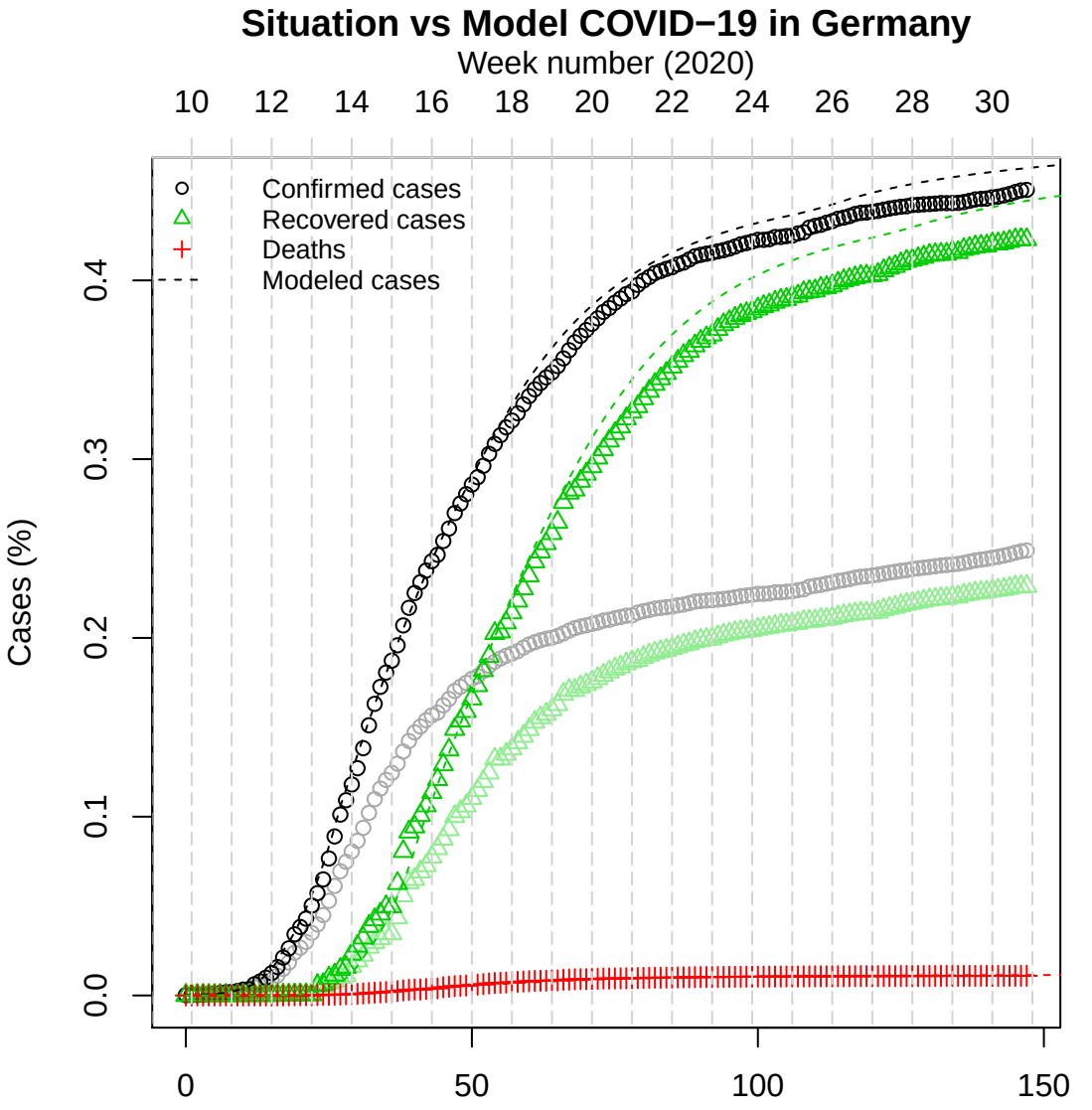

Situation vs Model COVID−19 in Germany
Week number (2020)
10
12
14
16
18
20
22
24
26
28
30
Confirmed cases
Recovered cases
Deaths
Modeled cases
Confirmed cases
0e+00
1e+05
2e+05
3e+05
0
50
100
150
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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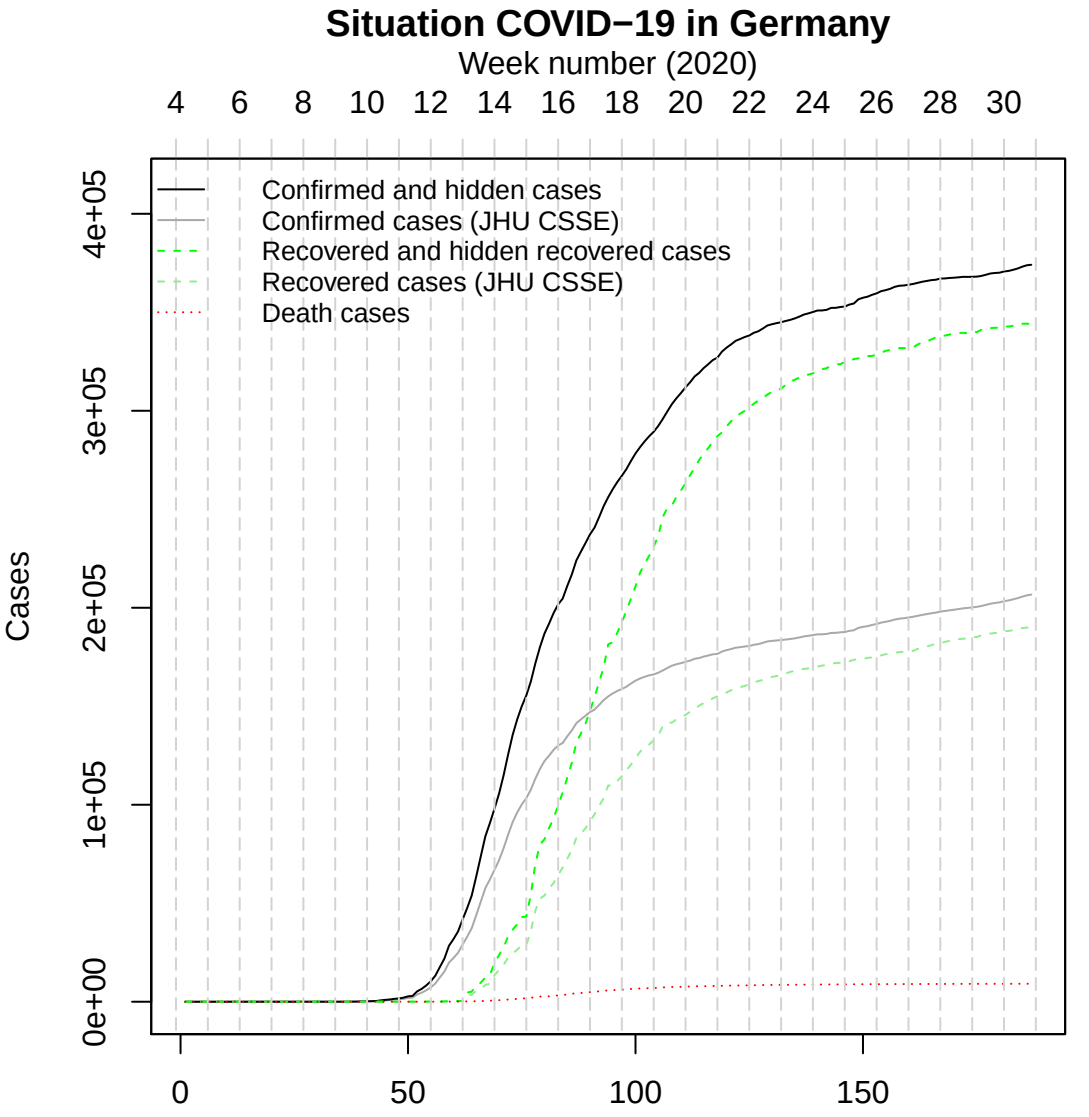

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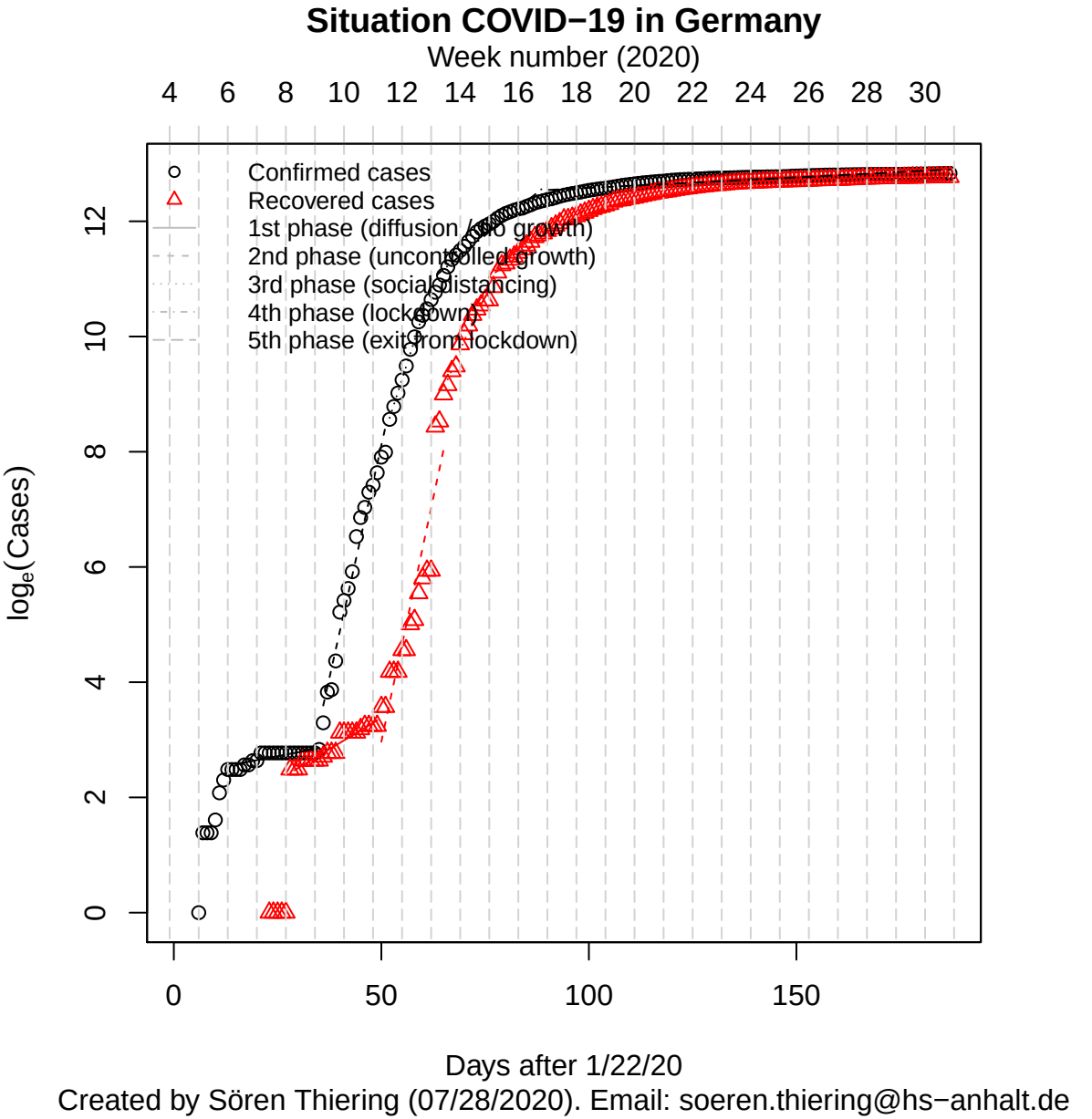
Situation COVID−19 in Germany
Week number (2020)
4 6 8 10 12 14 16 18 20 22 24 26 28 30
Confirmed cases
Recovered cases
1st phase (diffusion / no growth)
2nd phase (uncontrolled growth)
3rd phase (social distancing)
4th phase (lockdown)
5th phase (exit from lockdown)
log_e(Cases)
0 2 4 6 8 10 12
0 50 100 150
Days after 1/22/20
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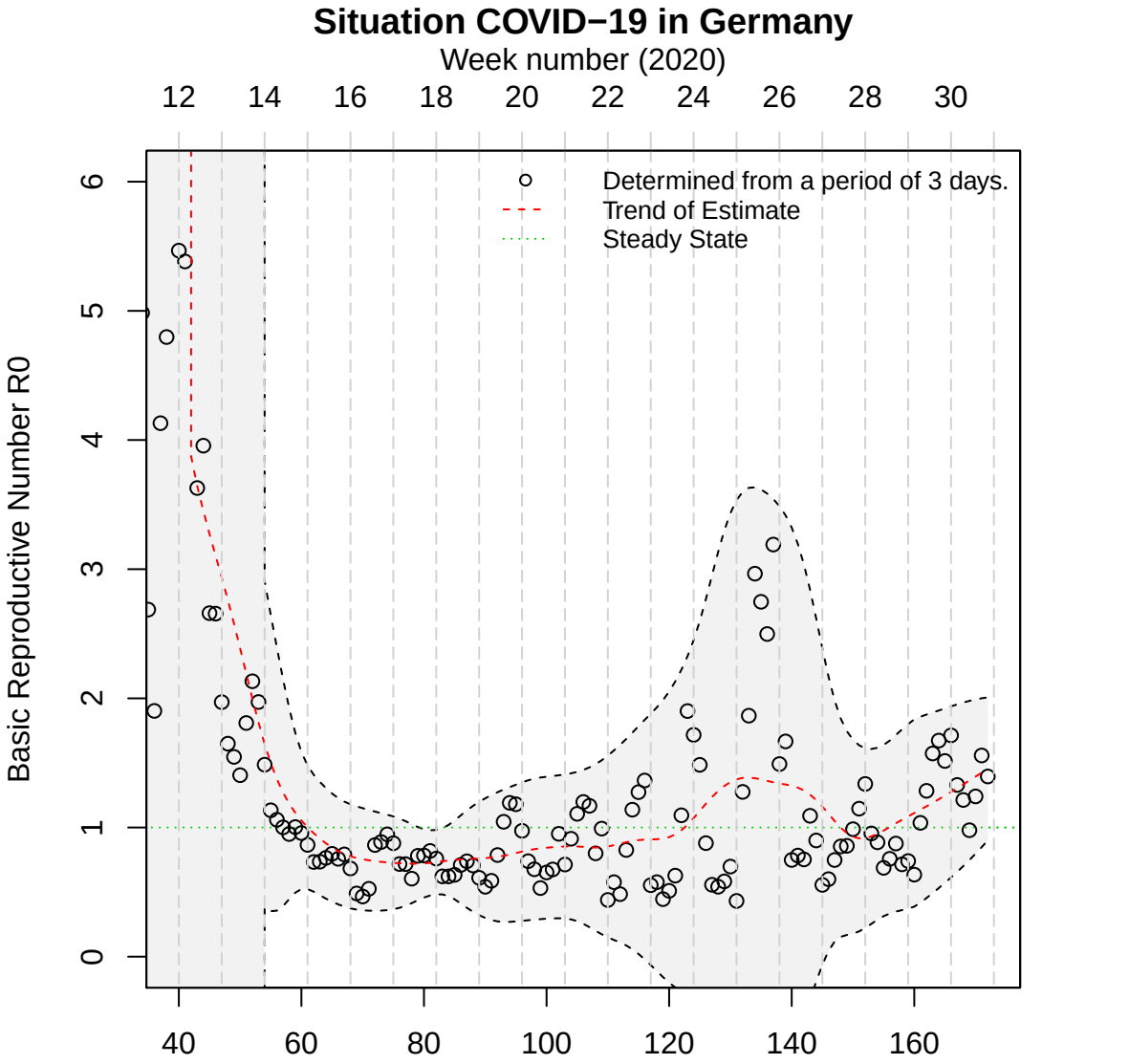

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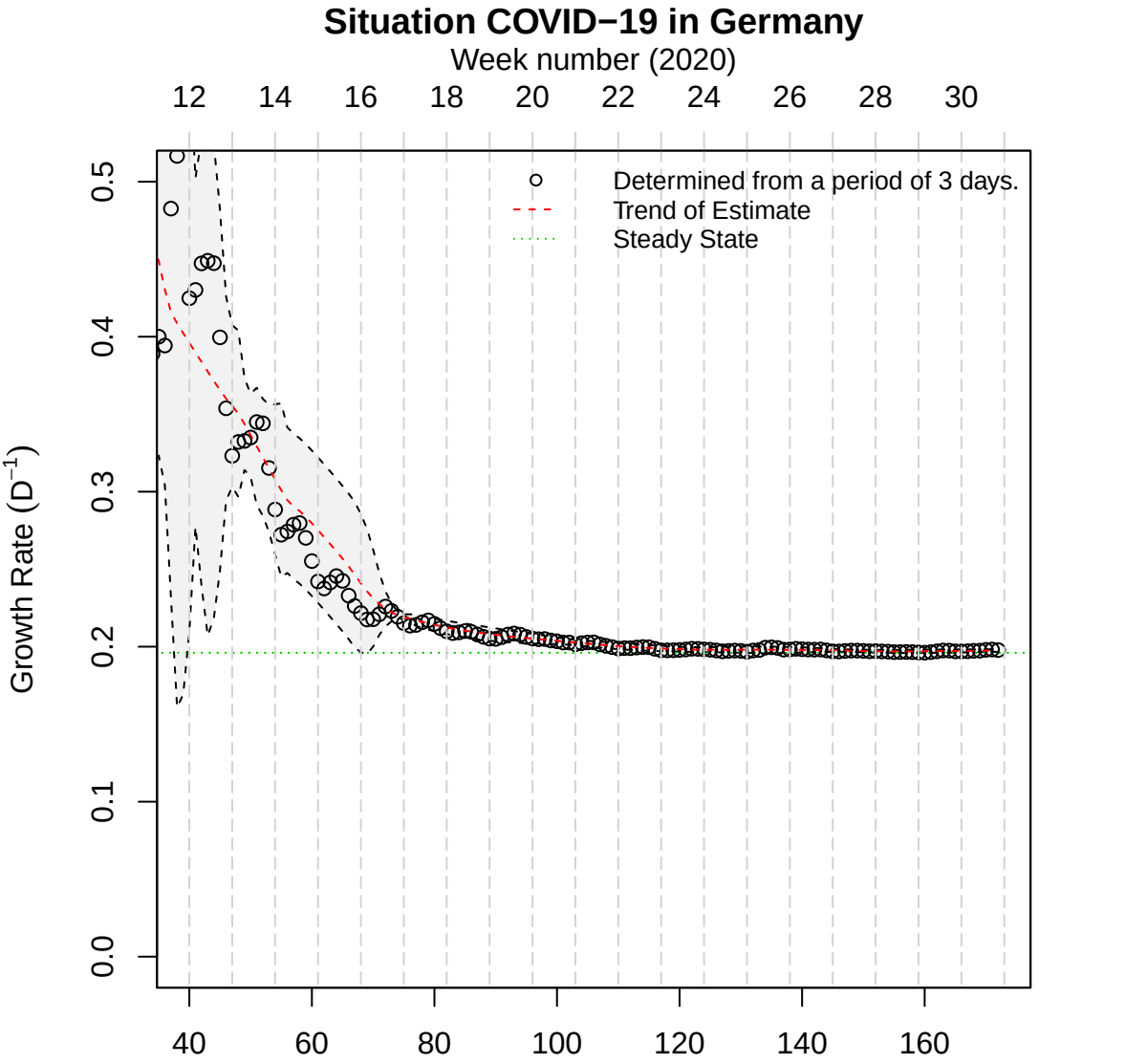
Situation COVID−19 in Germany
Week number (2020)
12
14
16
18
20
22
24
26
28
30
Determined from a period of 3 days.
Trend of Estimate
Steady State
Growth Rate (D−1)
0.0
0.1
0.2
0.3
0.4
0.5
40
60
80
100
120
140
160
Days after 2/5/20
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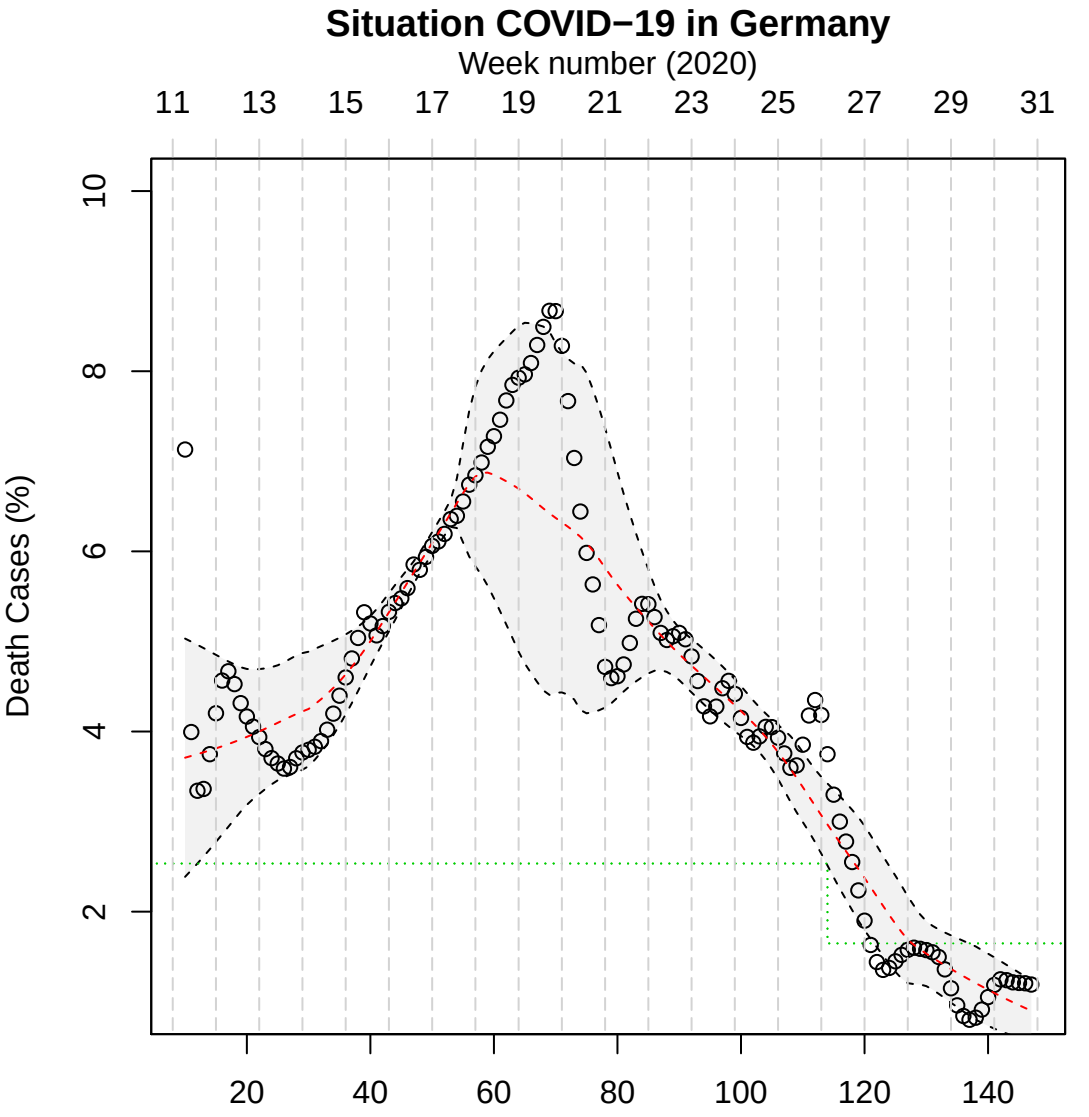

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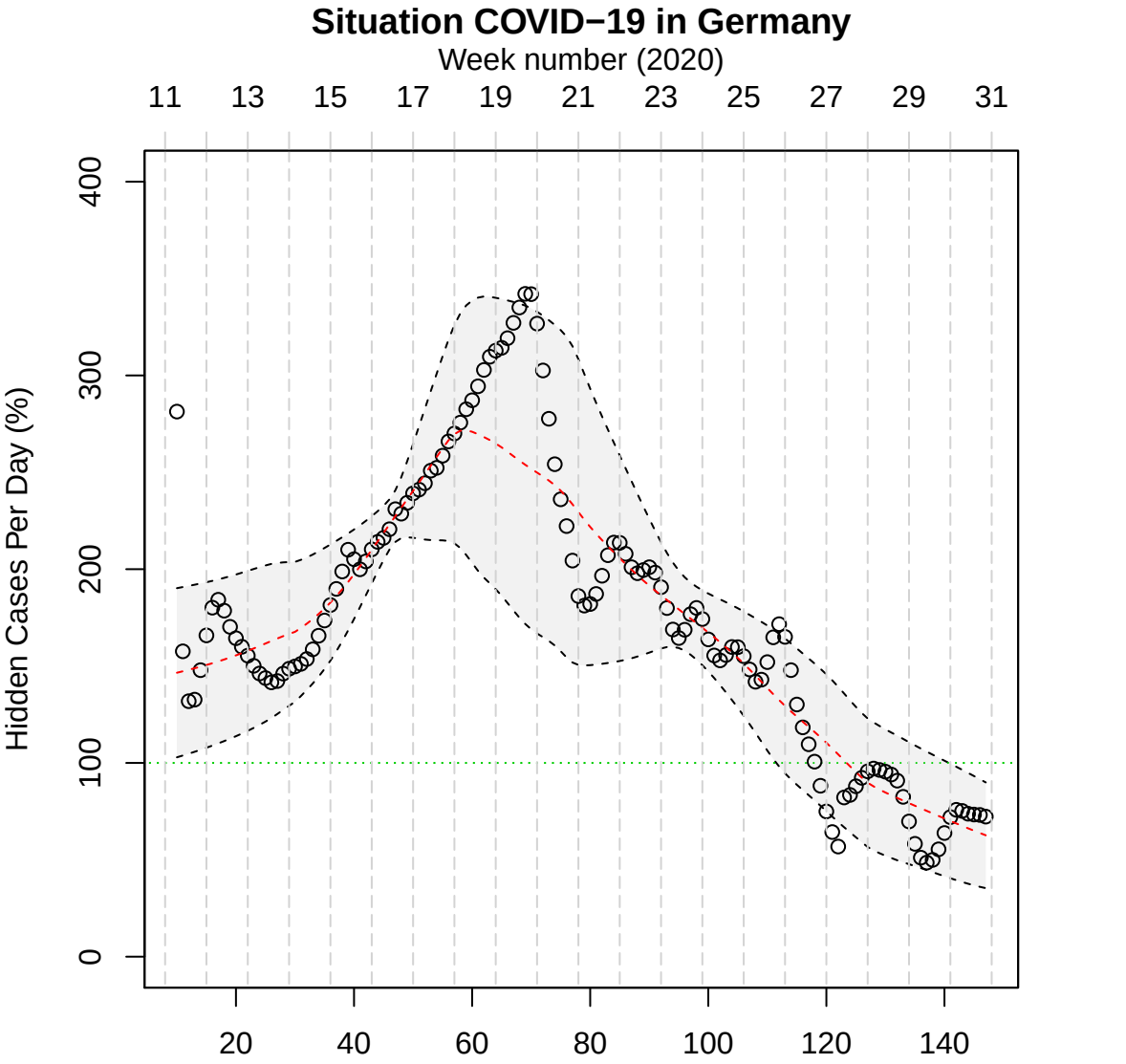

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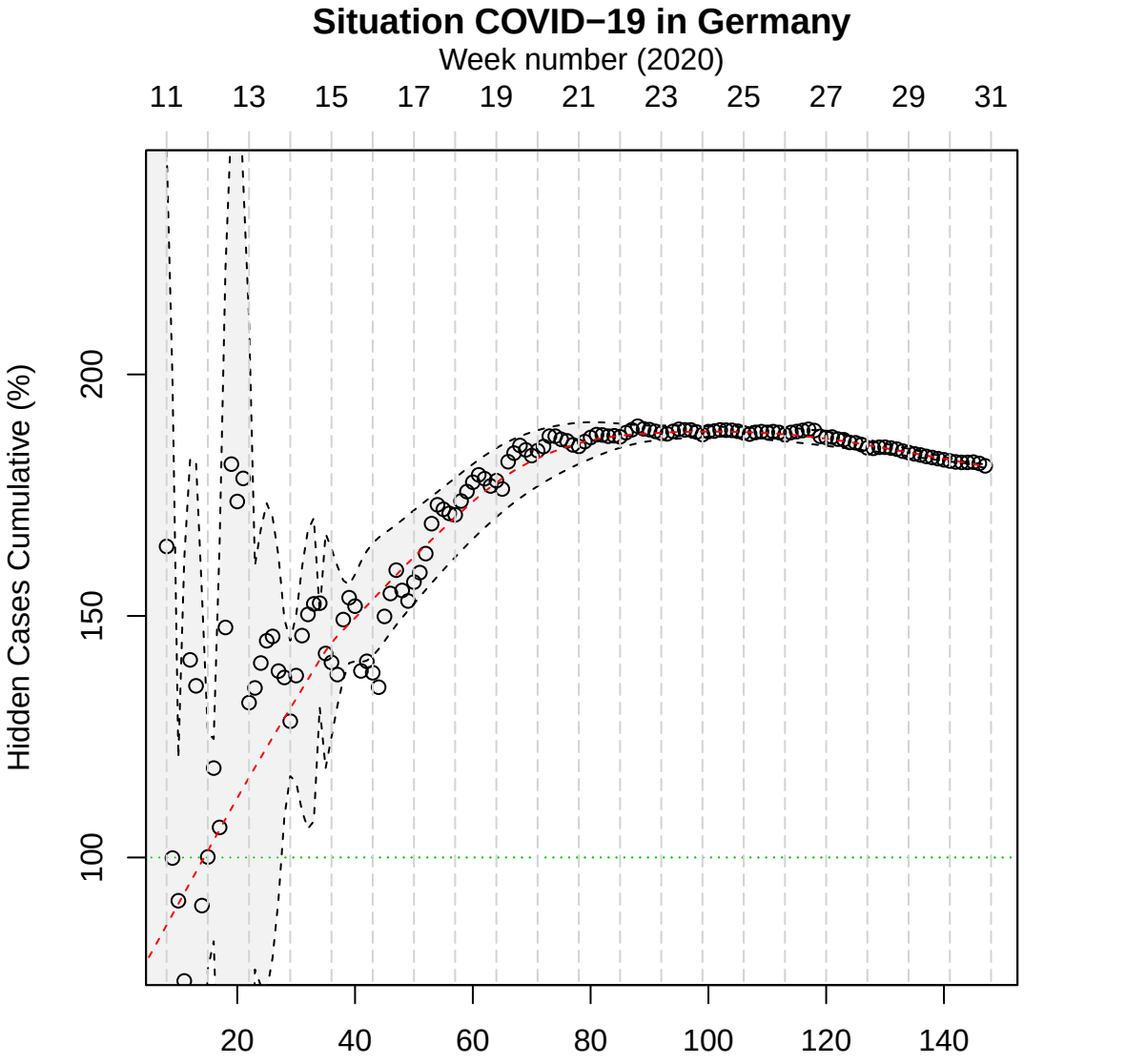
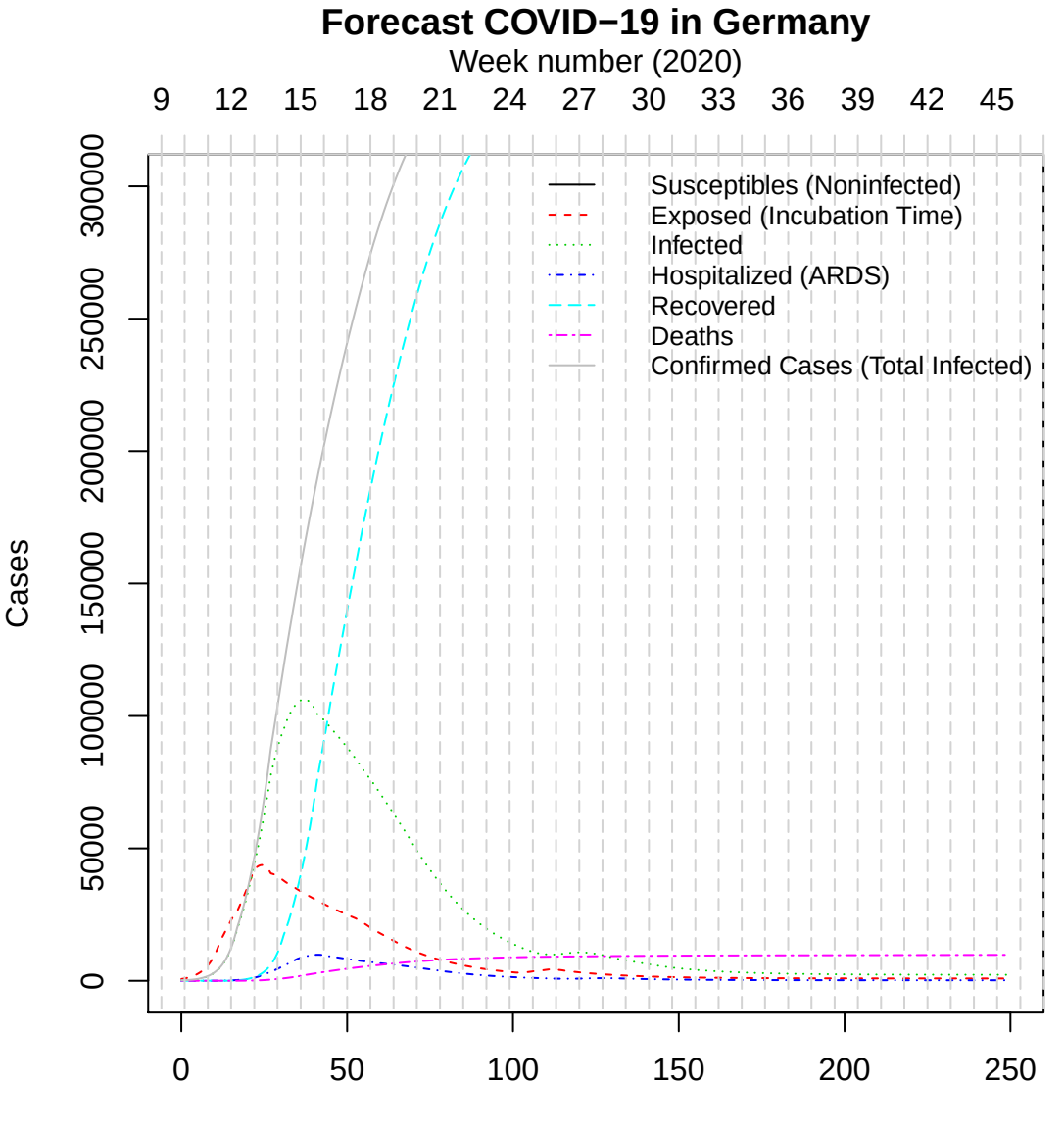
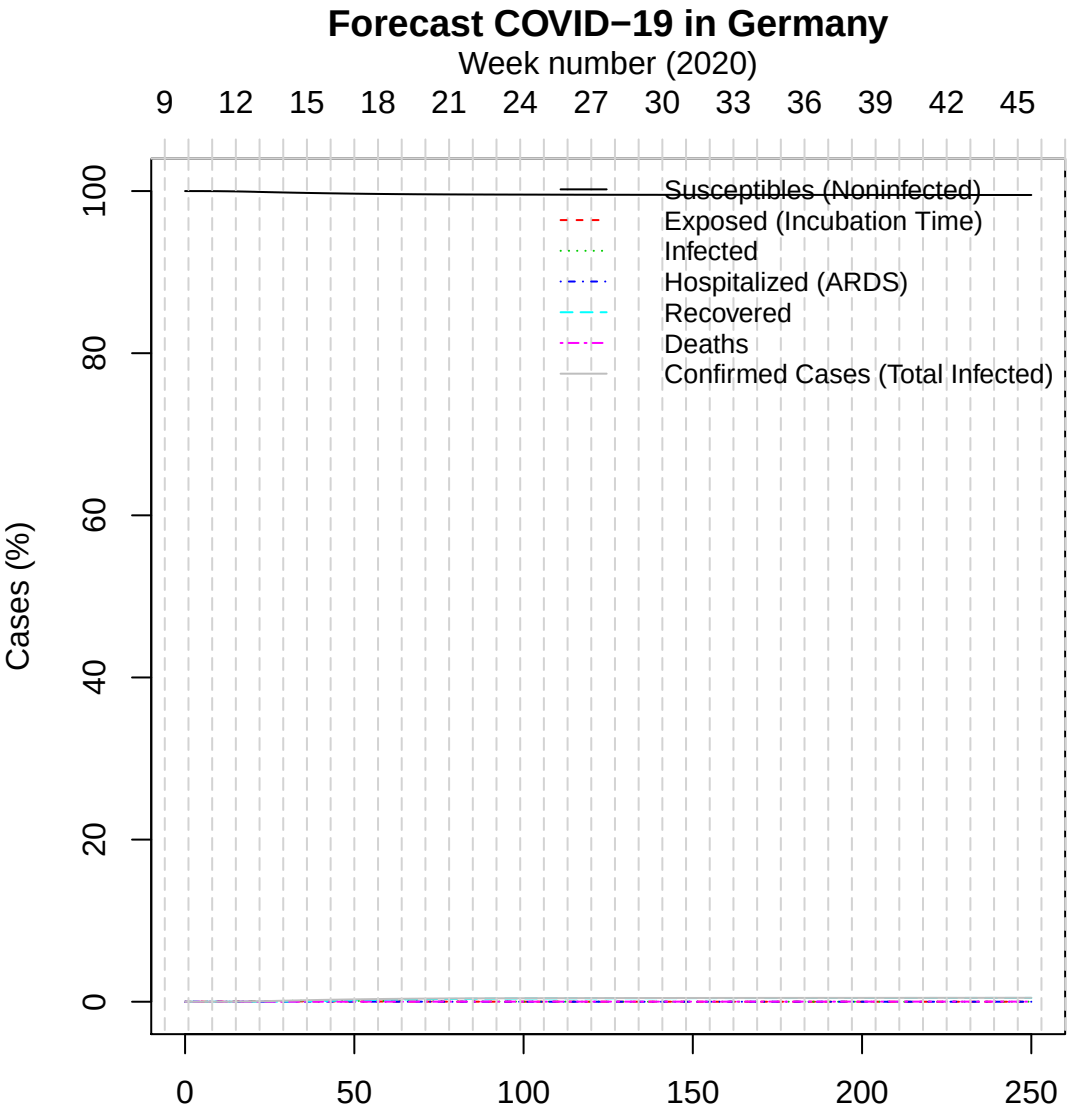

Situation COVID−19 in Germany
Week number (2020)
11
13
15
17
19
21
23
25
27
29
31
Hidden Cases Cumulative (%)
100
150
200
20
40
60
80
100
120
140
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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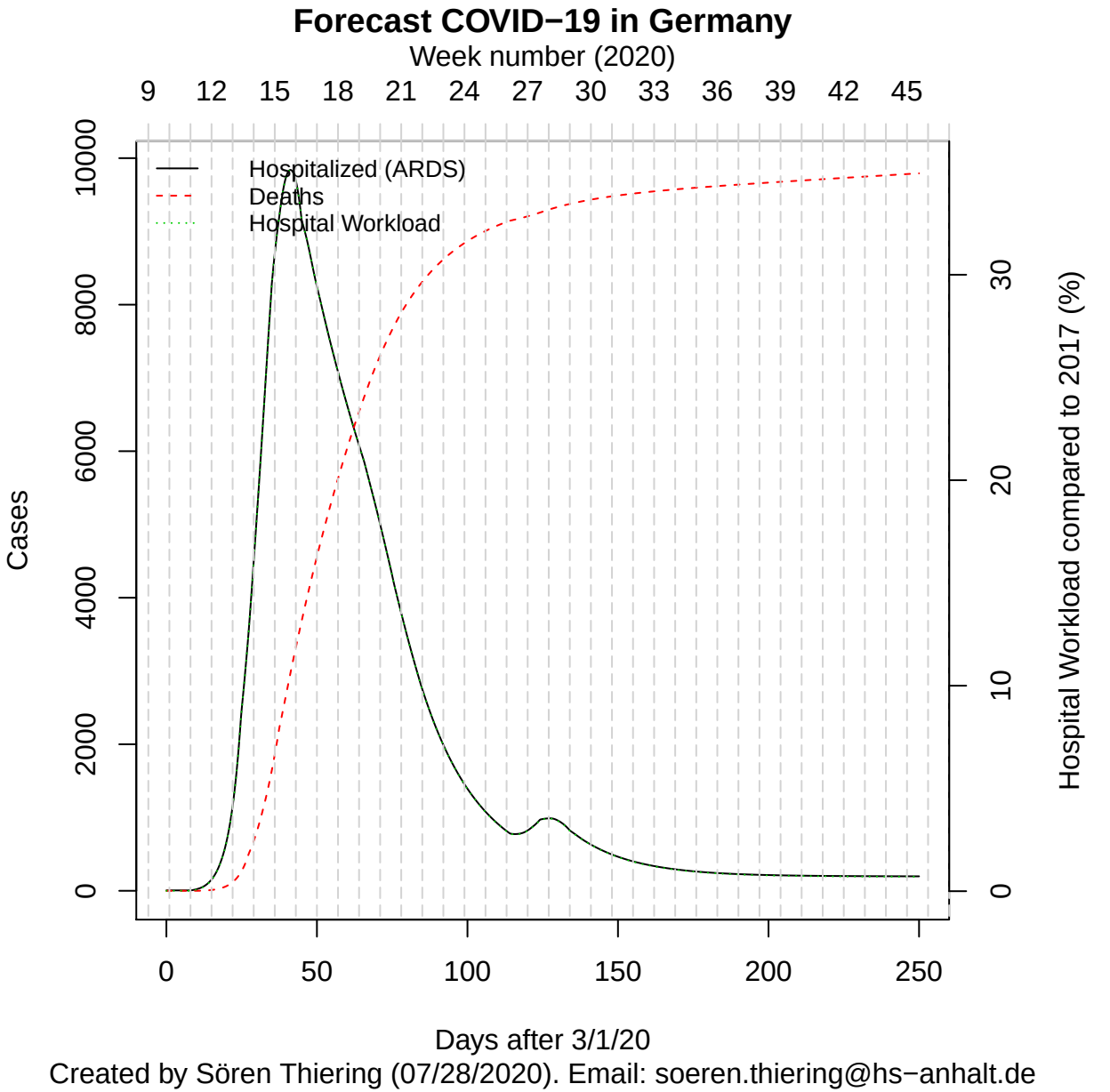
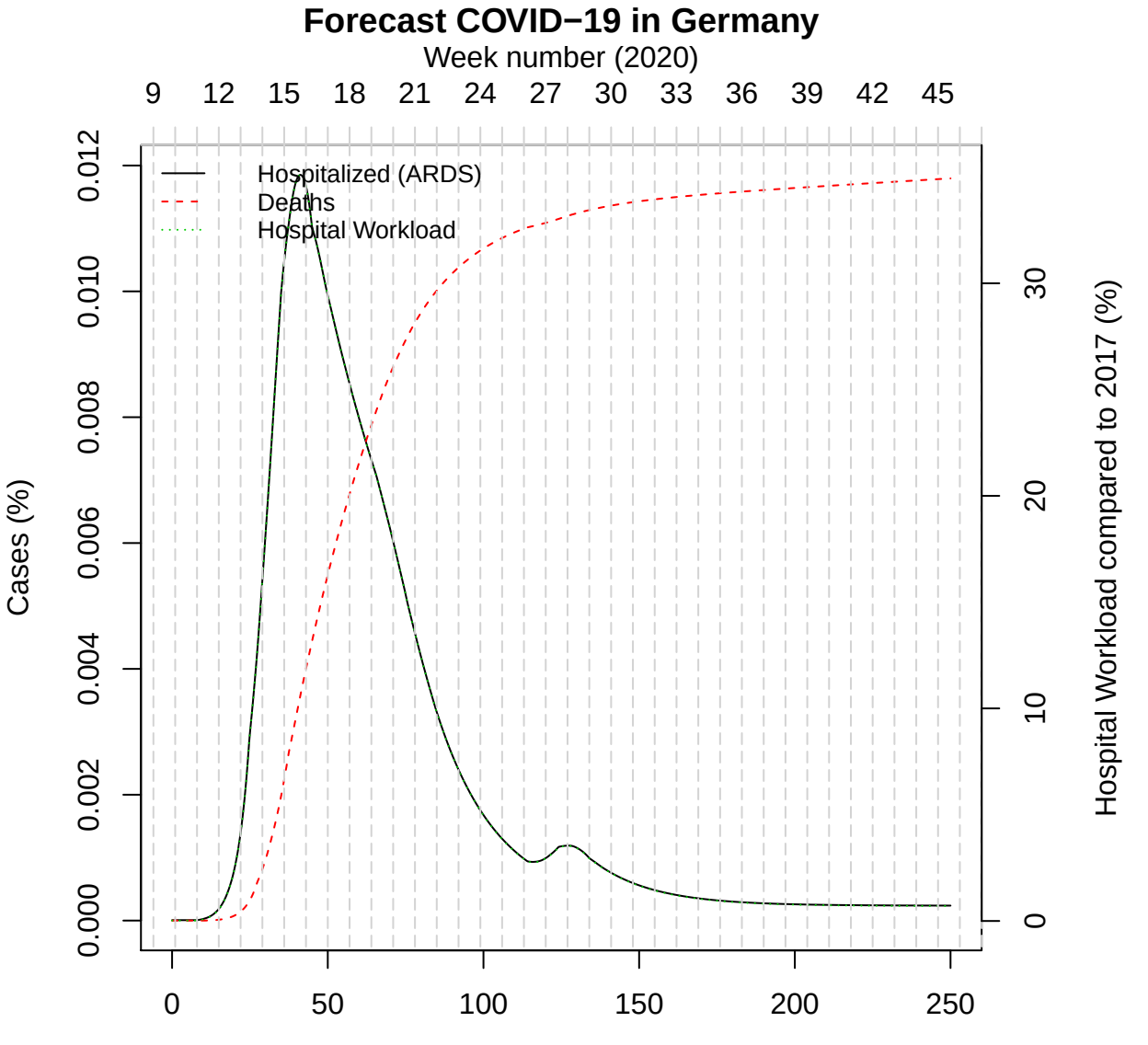
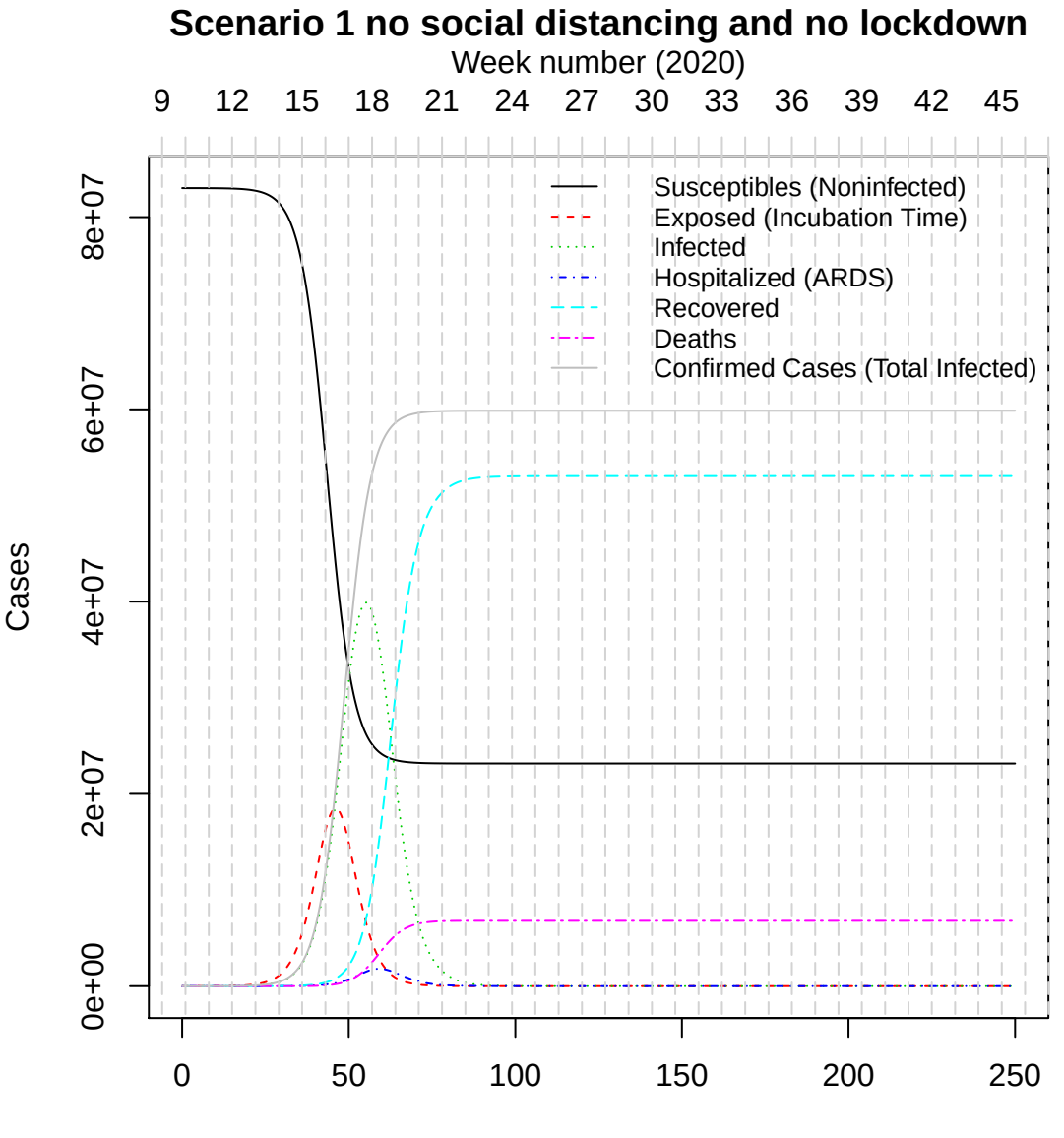


Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de


Forecast COVID−19 in Germany
Week number (2020)
9
12
15
18
21
24
27
30
33
36
39
42
45
Hospitalized (ARDS)
Deaths
Hospital Workload
Cases (%)
0.000
0.002
0.004
0.006
0.008
0.010
0.012
Hospital Workload compared to 2017 (%)
0
10
20
30
0
50
100
150
200
250
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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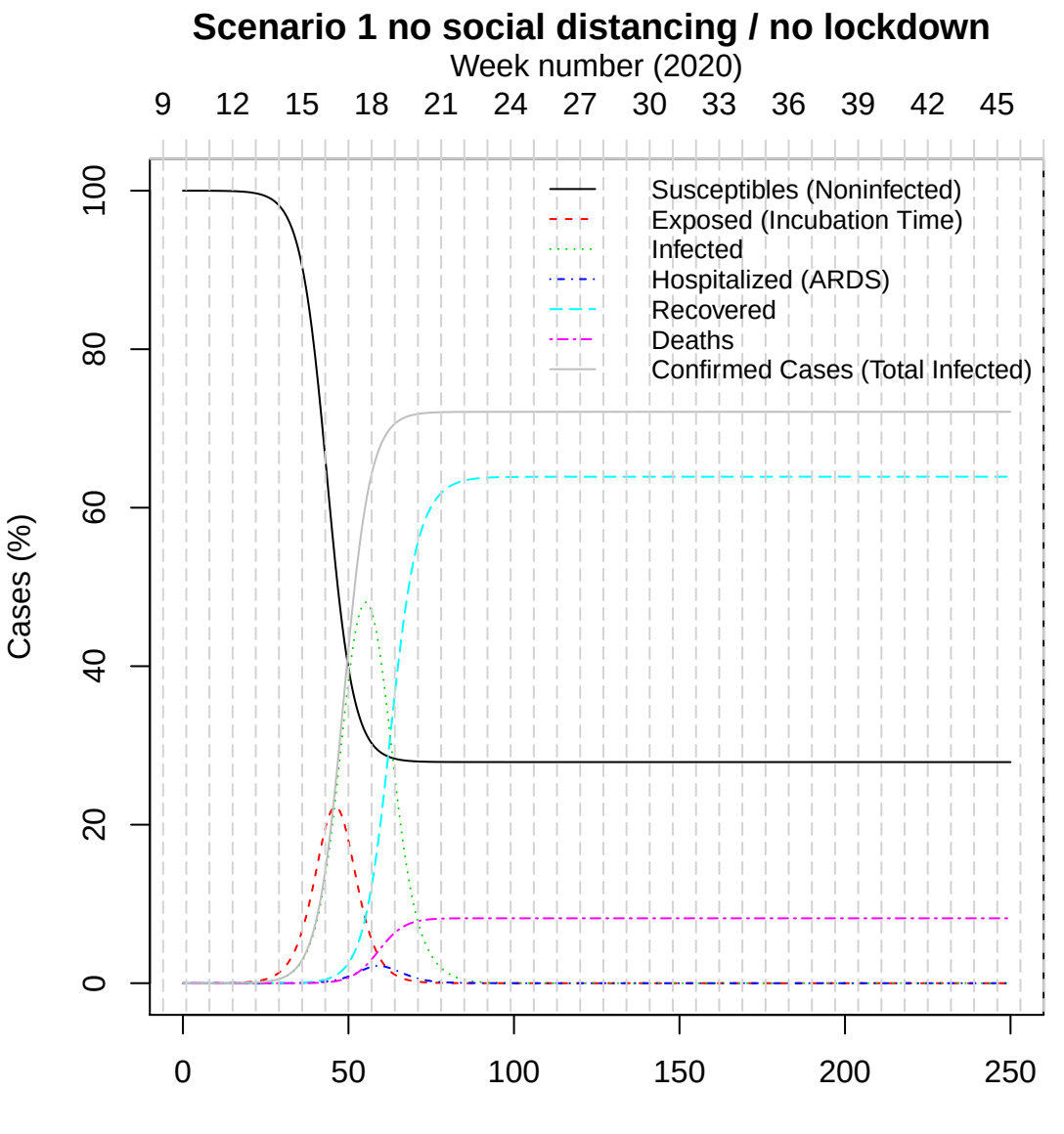
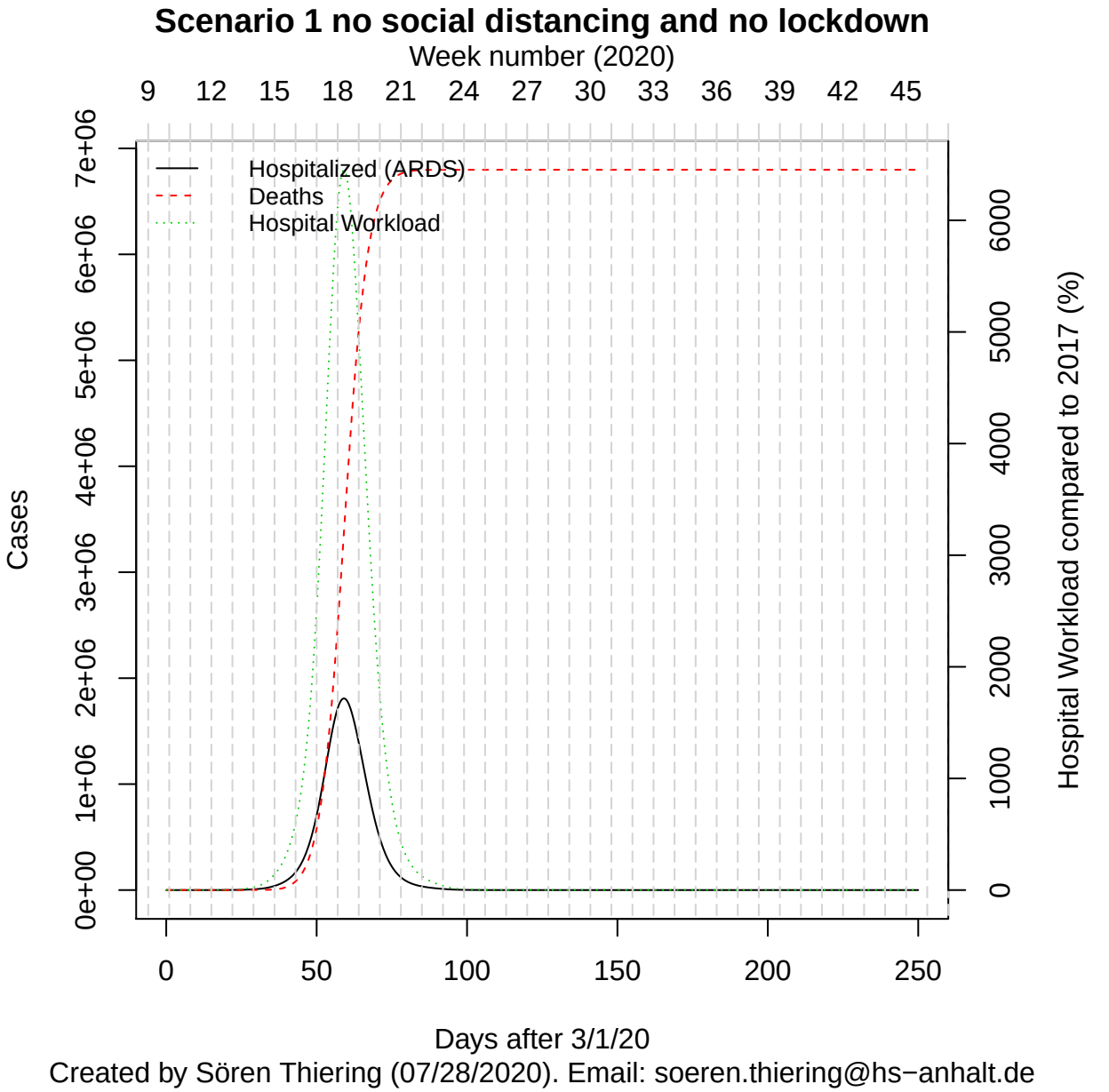
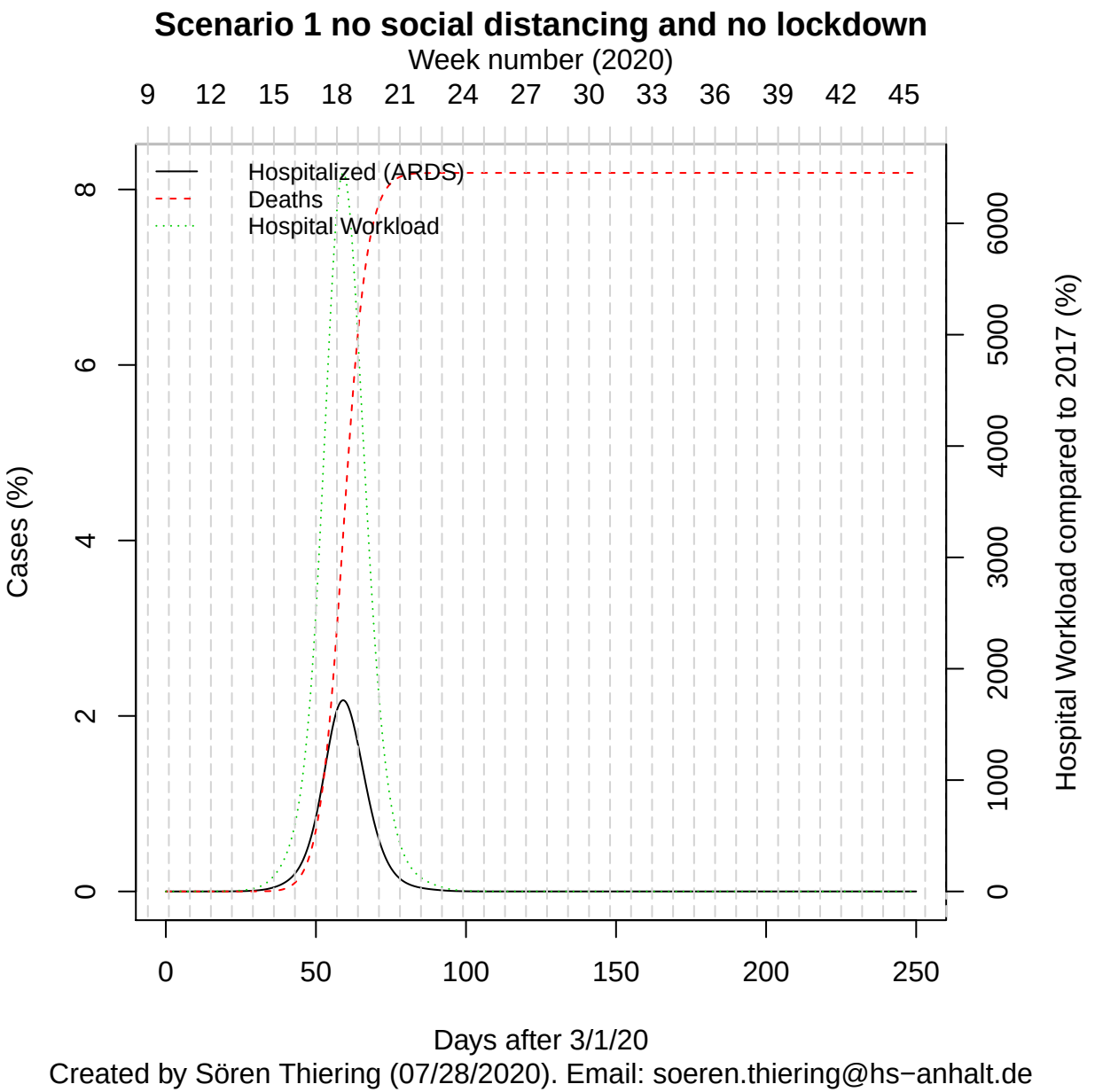
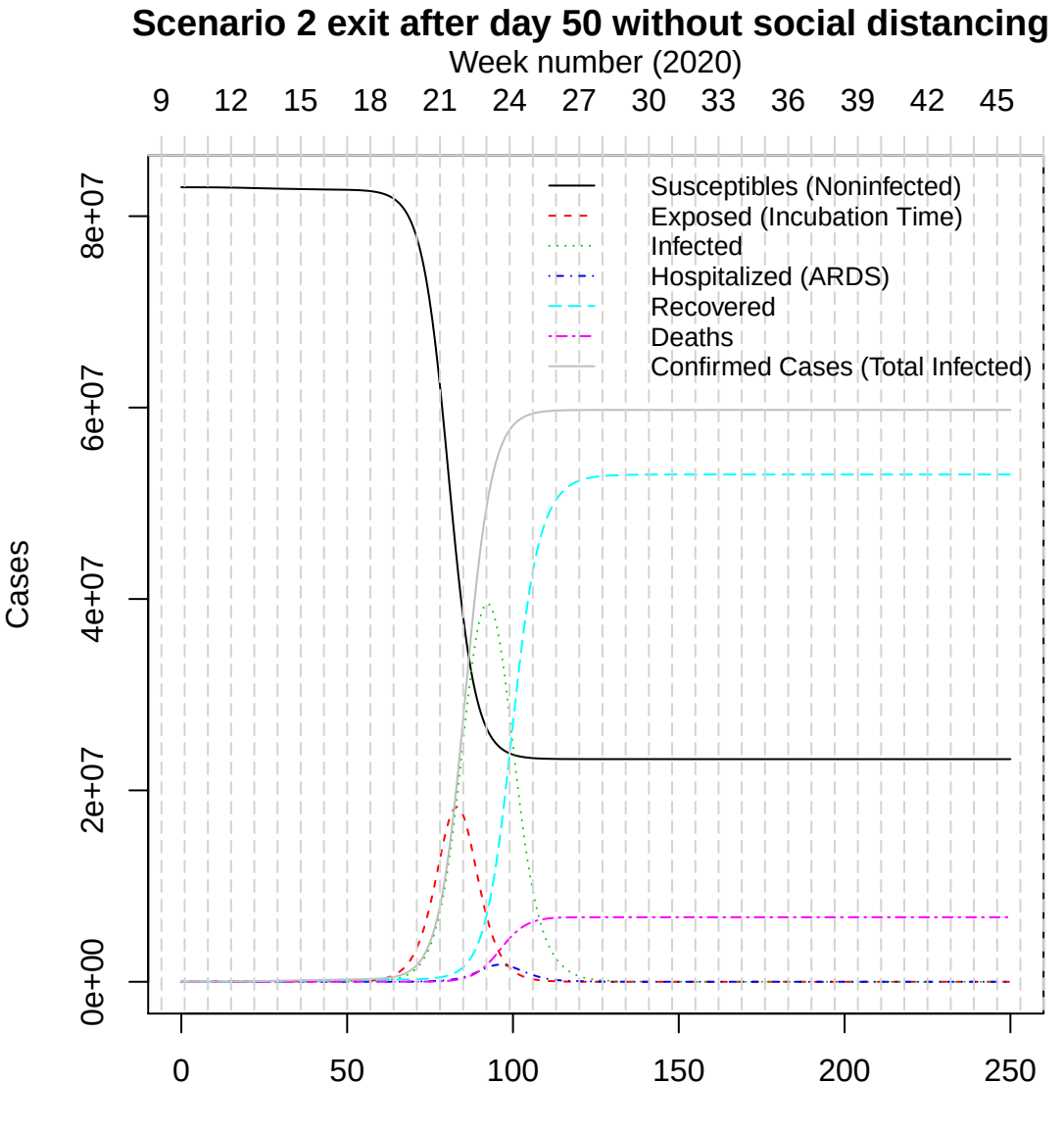


Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de


Scenario 1 no social distancing and no lockdown
Week number (2020)
9
12
15
18
21
24
27
30
33
36
39
42
45
Hospitalized (ARDS)
Deaths
Hospital Workload
Cases
0e+00
1e+06
2e+06
3e+06
4e+06
5e+06
6e+06
7e+06
Hospital Workload compared to 2017 (%)
0
1000
2000
3000
4000
5000
6000
0
50
100
150
200
250
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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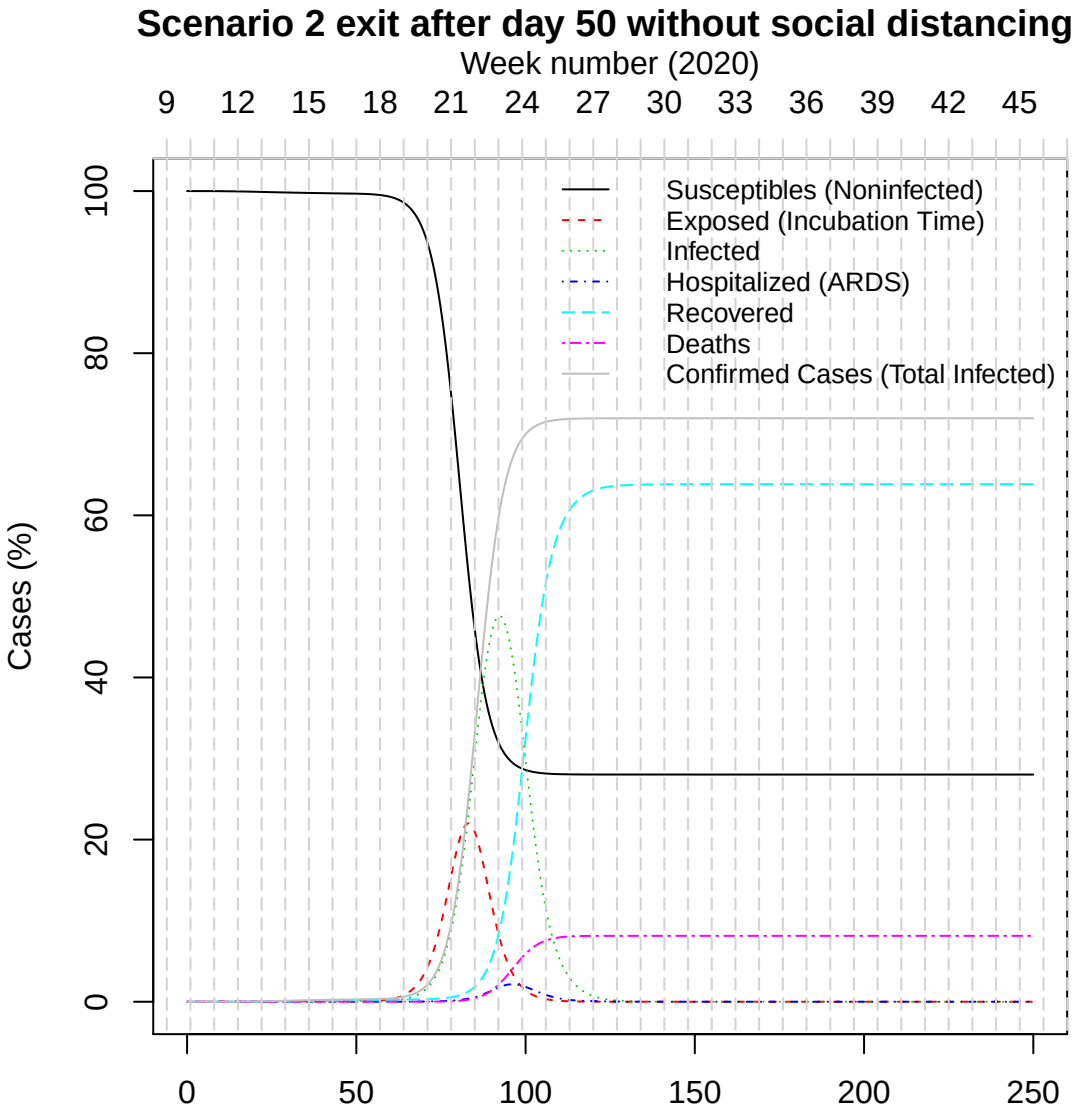

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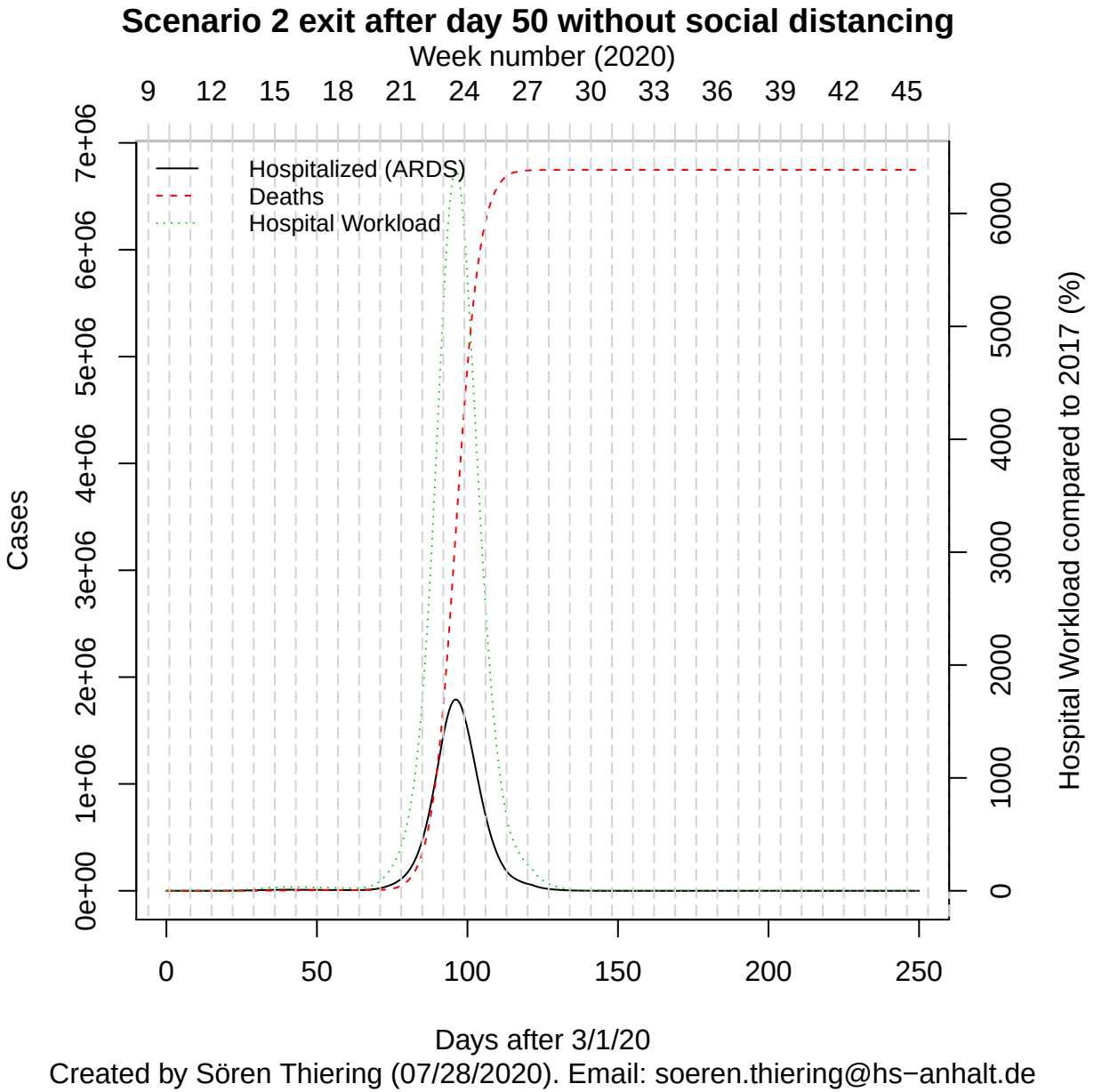
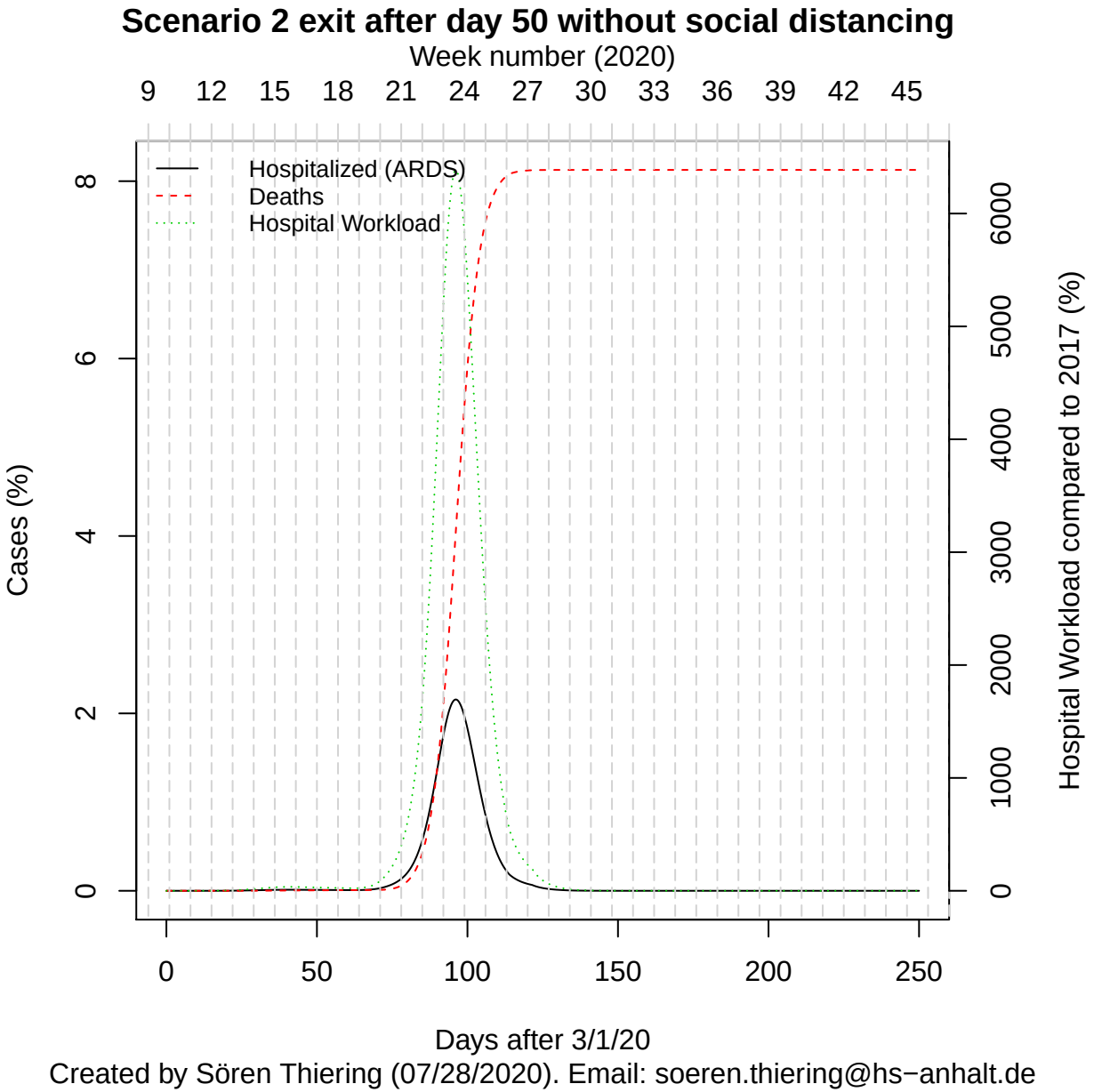

Scenario 2 exit after day 50 without social distancing
Week number (2020)
9
12
15
18
21
24
27
30
33
36
39
42
45
Hospitalized (ARDS)
Deaths
Hospital Workload
Cases
0e+00
1e+06
2e+06
3e+06
4e+06
5e+06
6e+06
7e+06
Hospital Workload compared to 2017 (%)
0
1000
2000
3000
4000
5000
6000
0
50
100
150
200
250
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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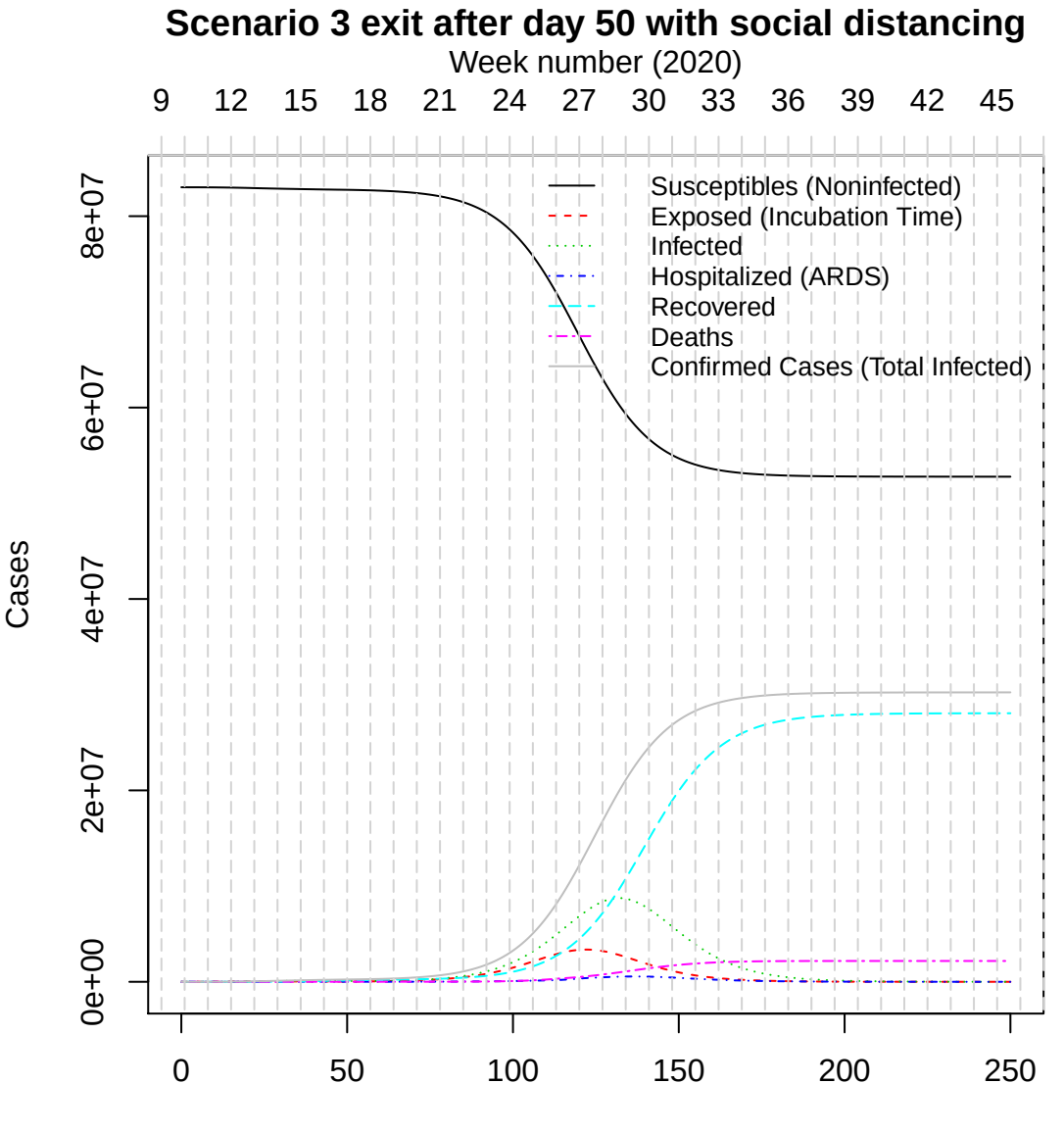

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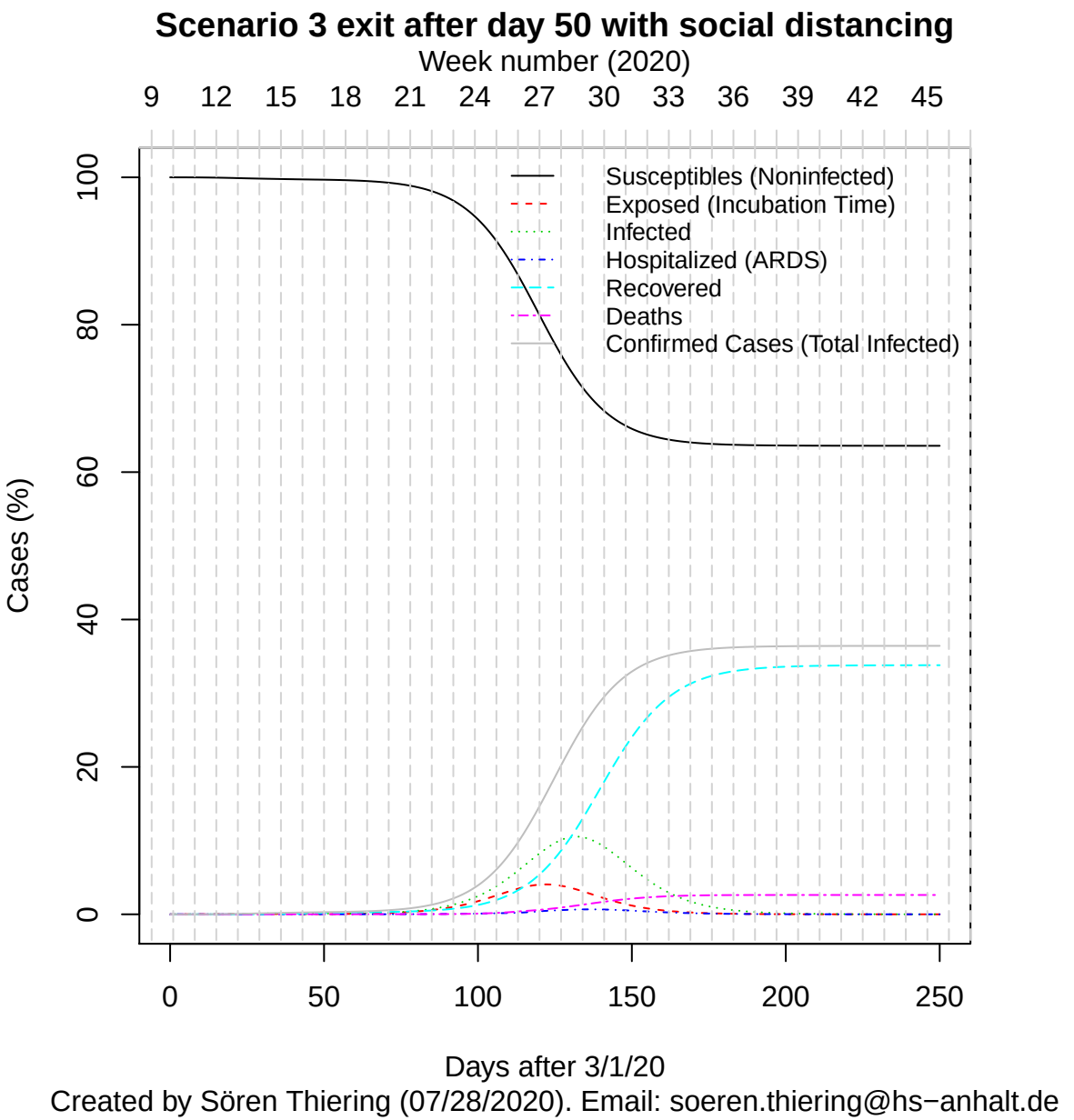
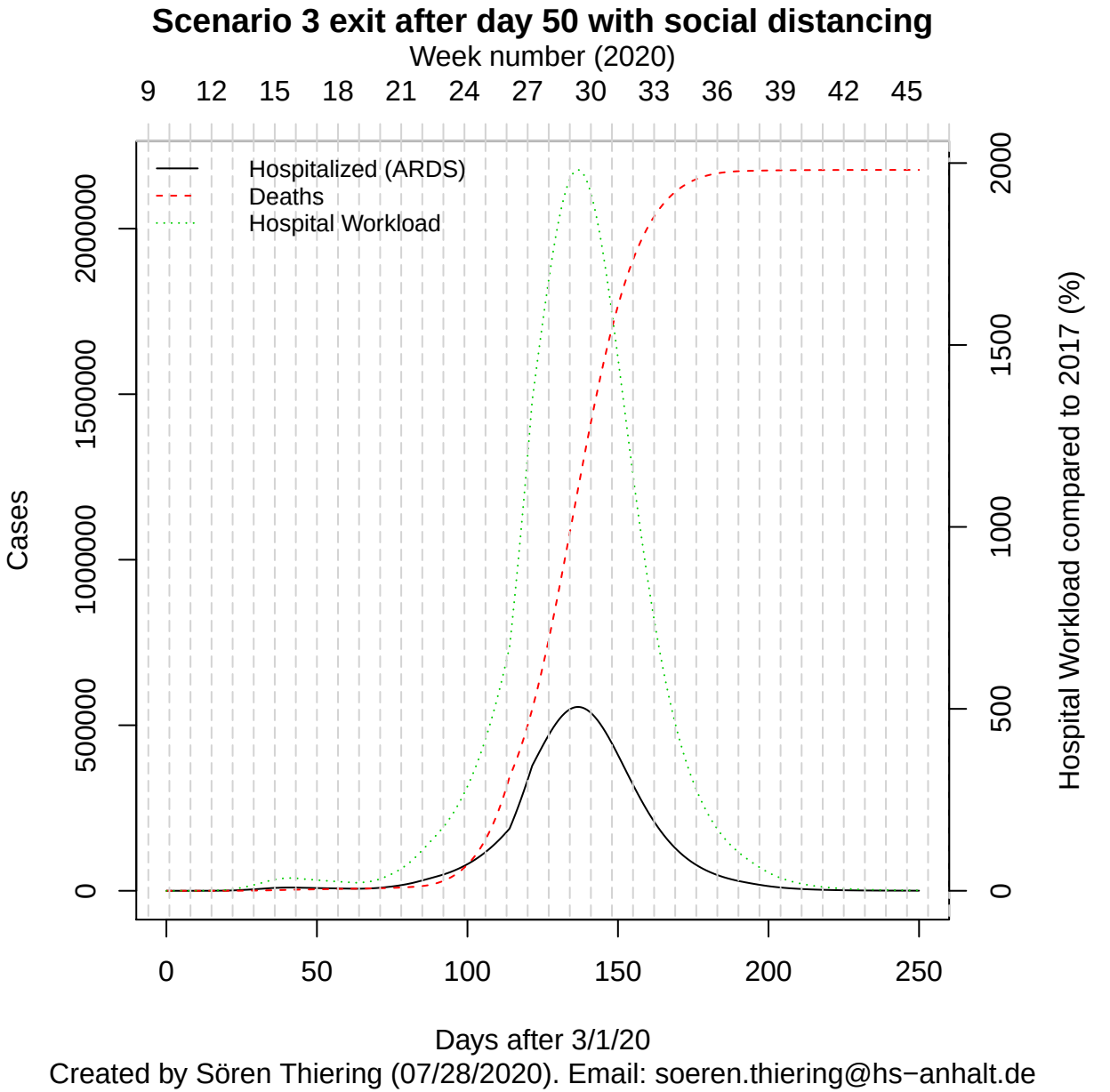

Scenario 3 exit after day 50 with social distancing
Week number (2020)
9
12
15
18
21
24
27
30
33
36
39
42
45
Cases (%)
0
20
40
60
80
100
Susceptibles (Noninfected)
Exposed (Incubation Time)
Infected
Hospitalized (ARDS)
Recovered
Deaths
Confirmed Cases (Total Infected)
0
50
100
150
200
250
Days after 3/1/20
Created by Sören Thiering (07/28/2020). Email: soeren.thiering@hs−anhalt.de



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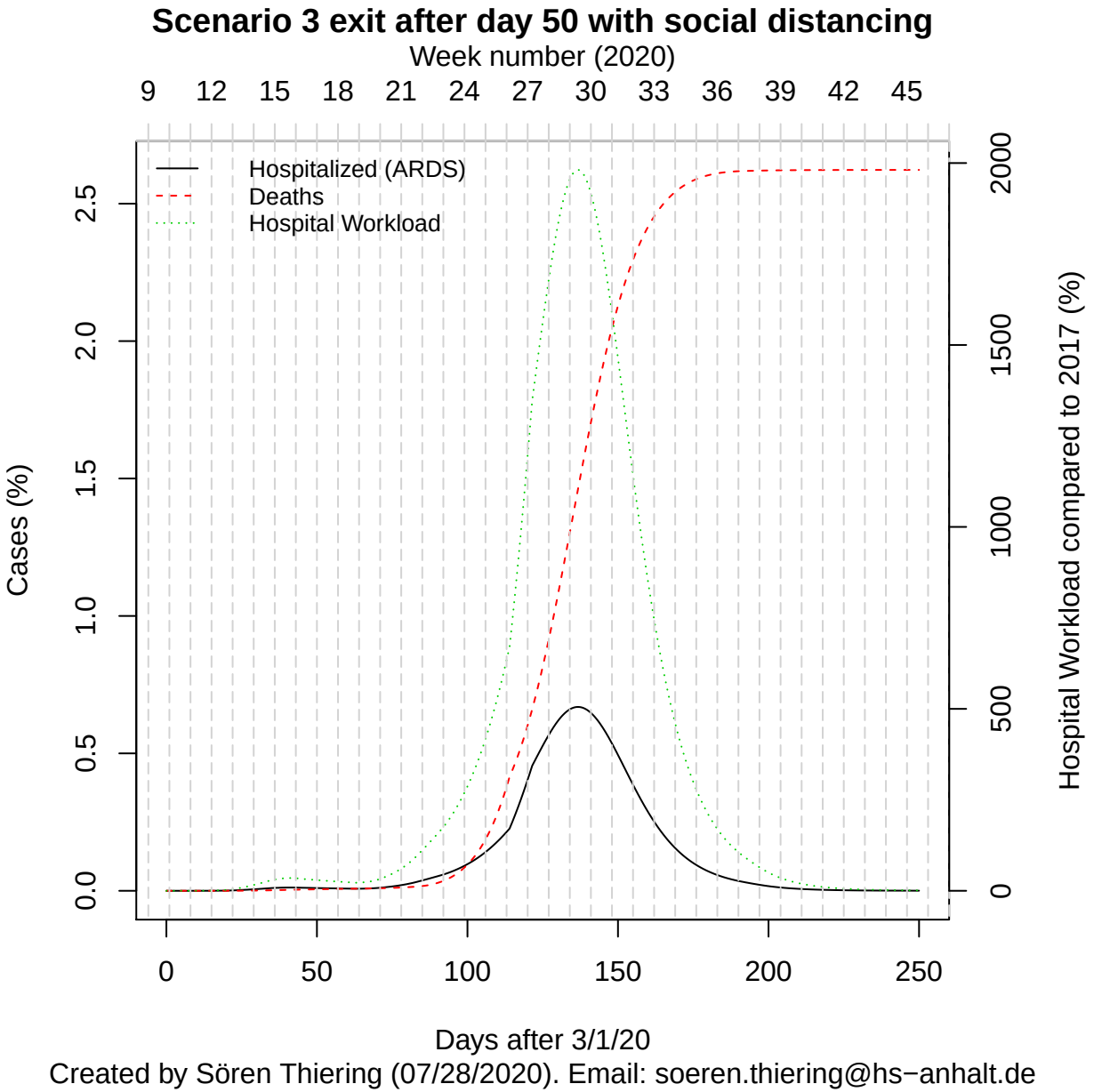

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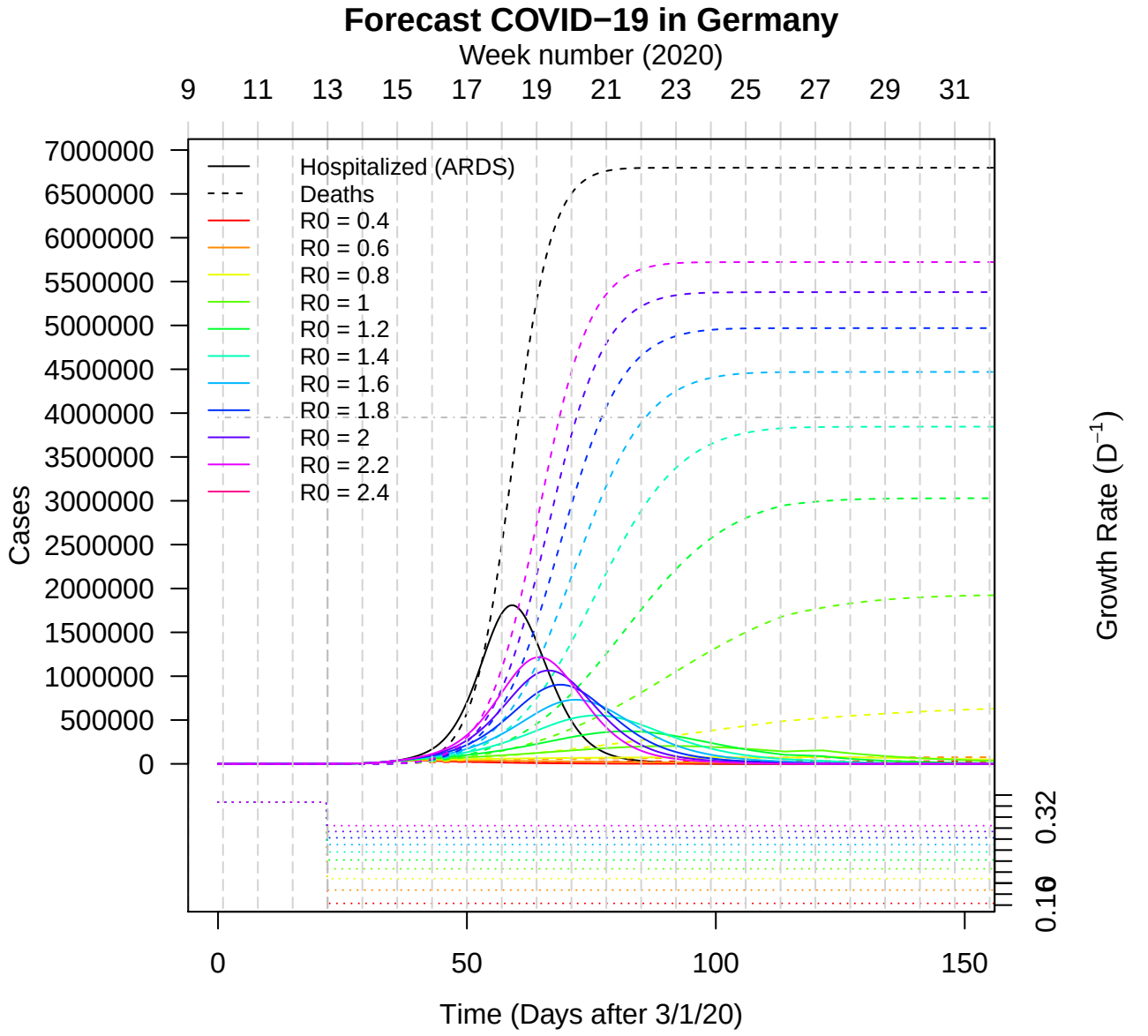

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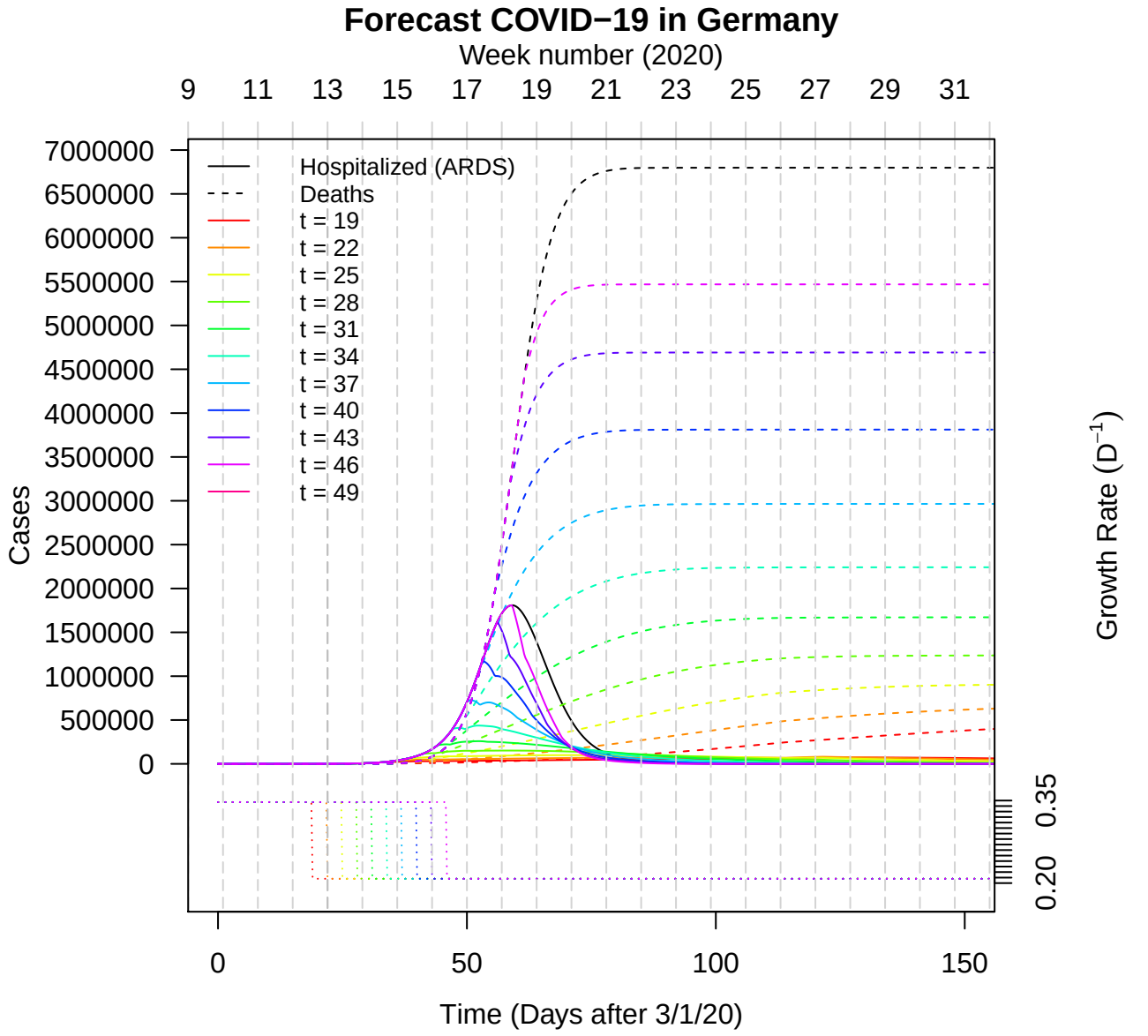

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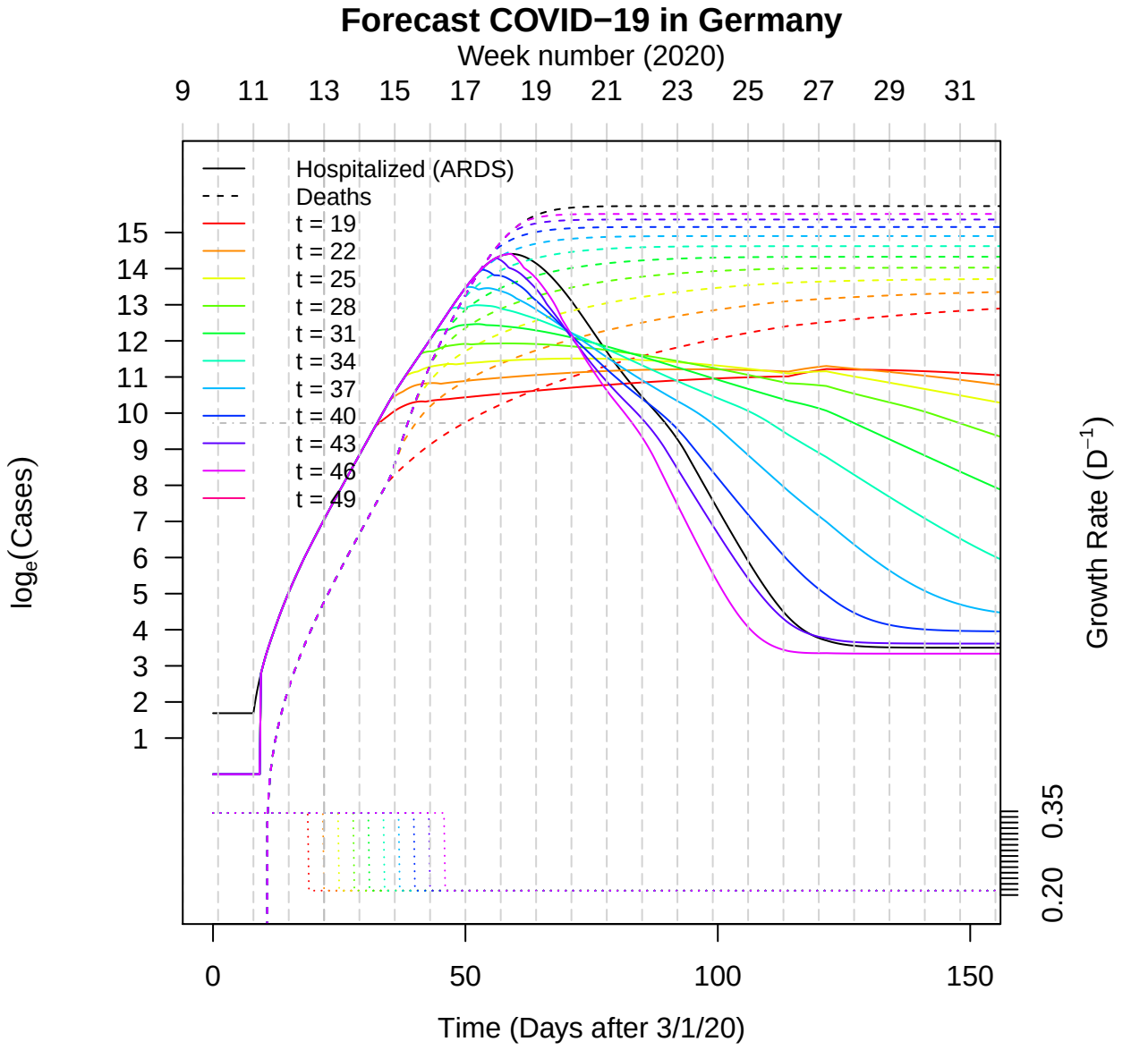

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