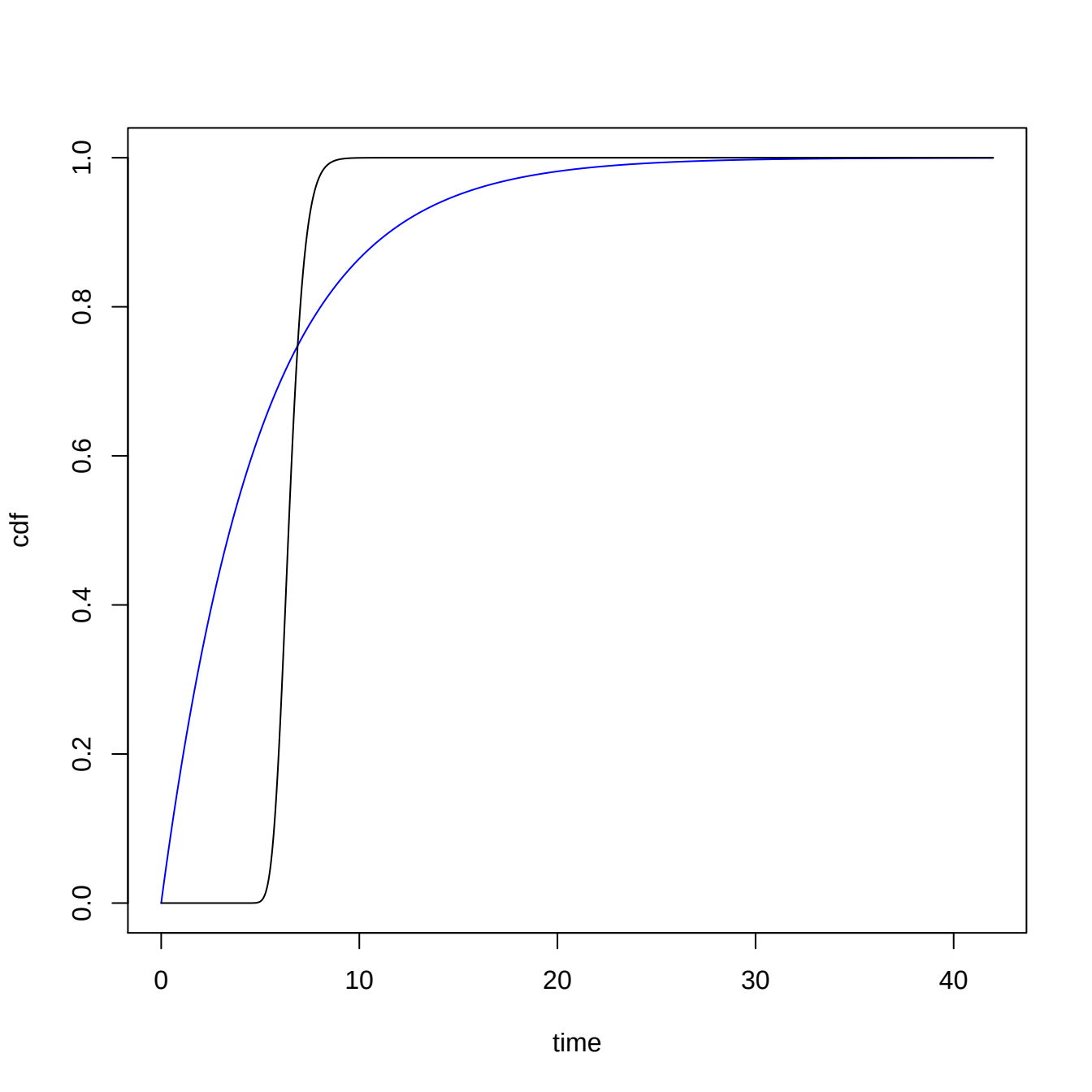
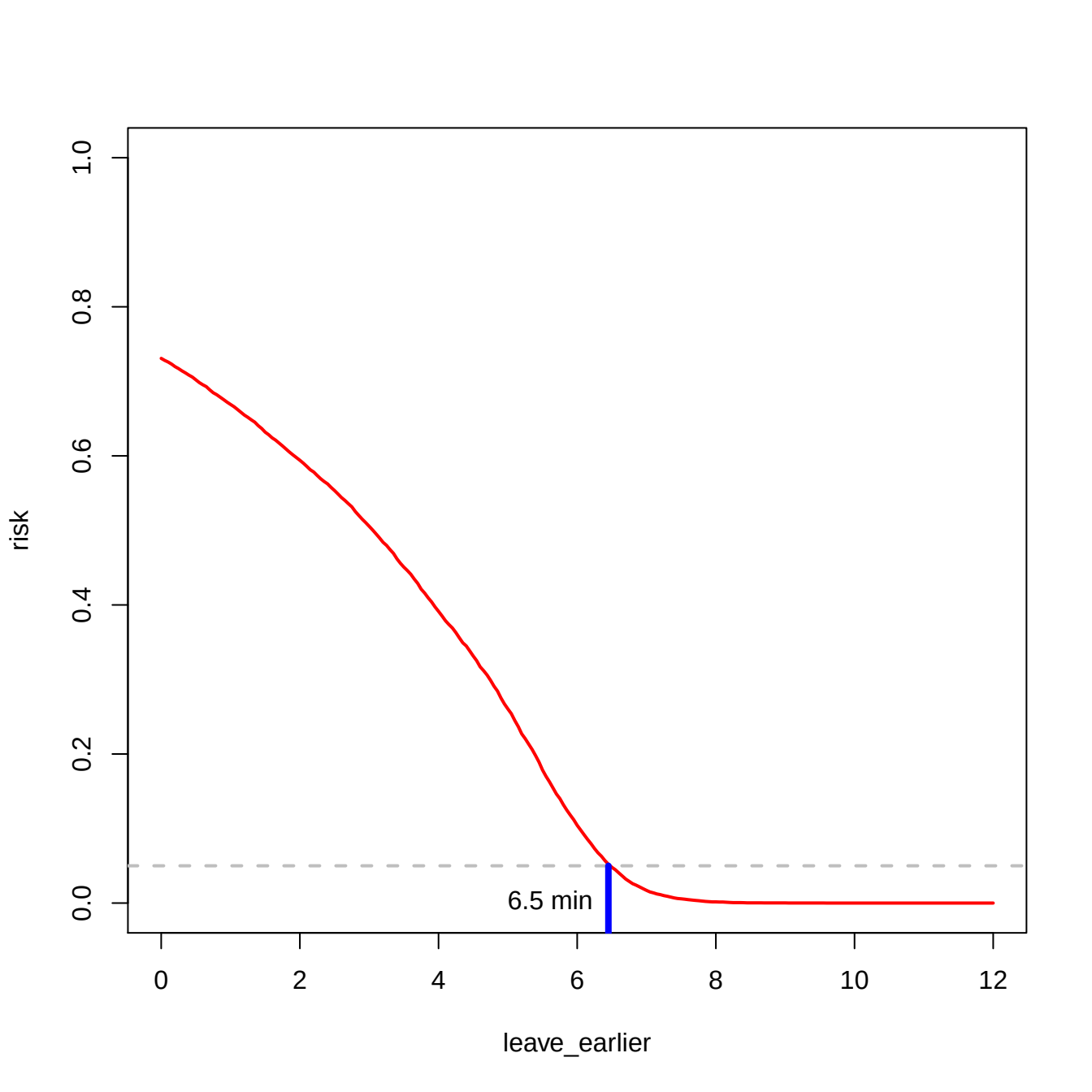
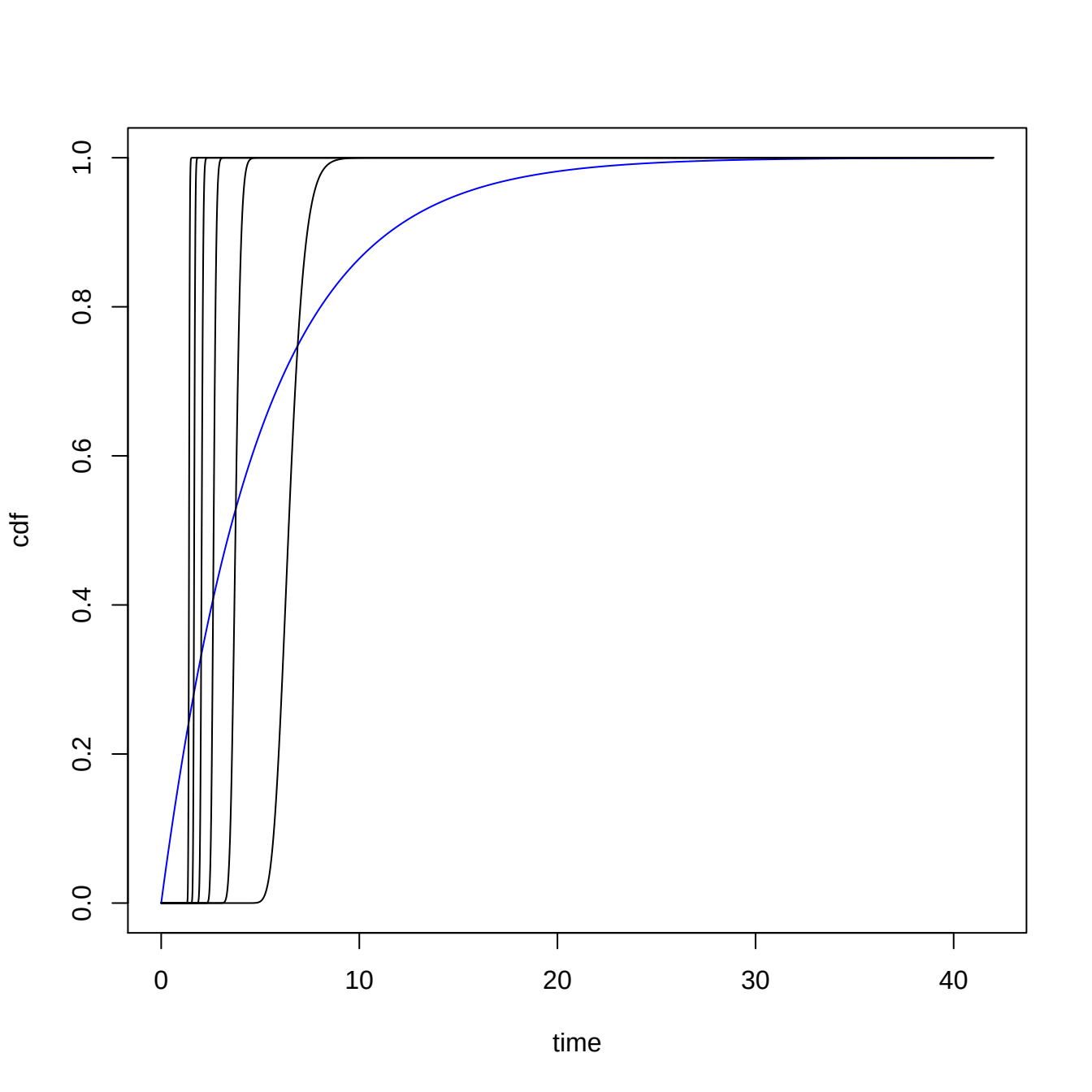
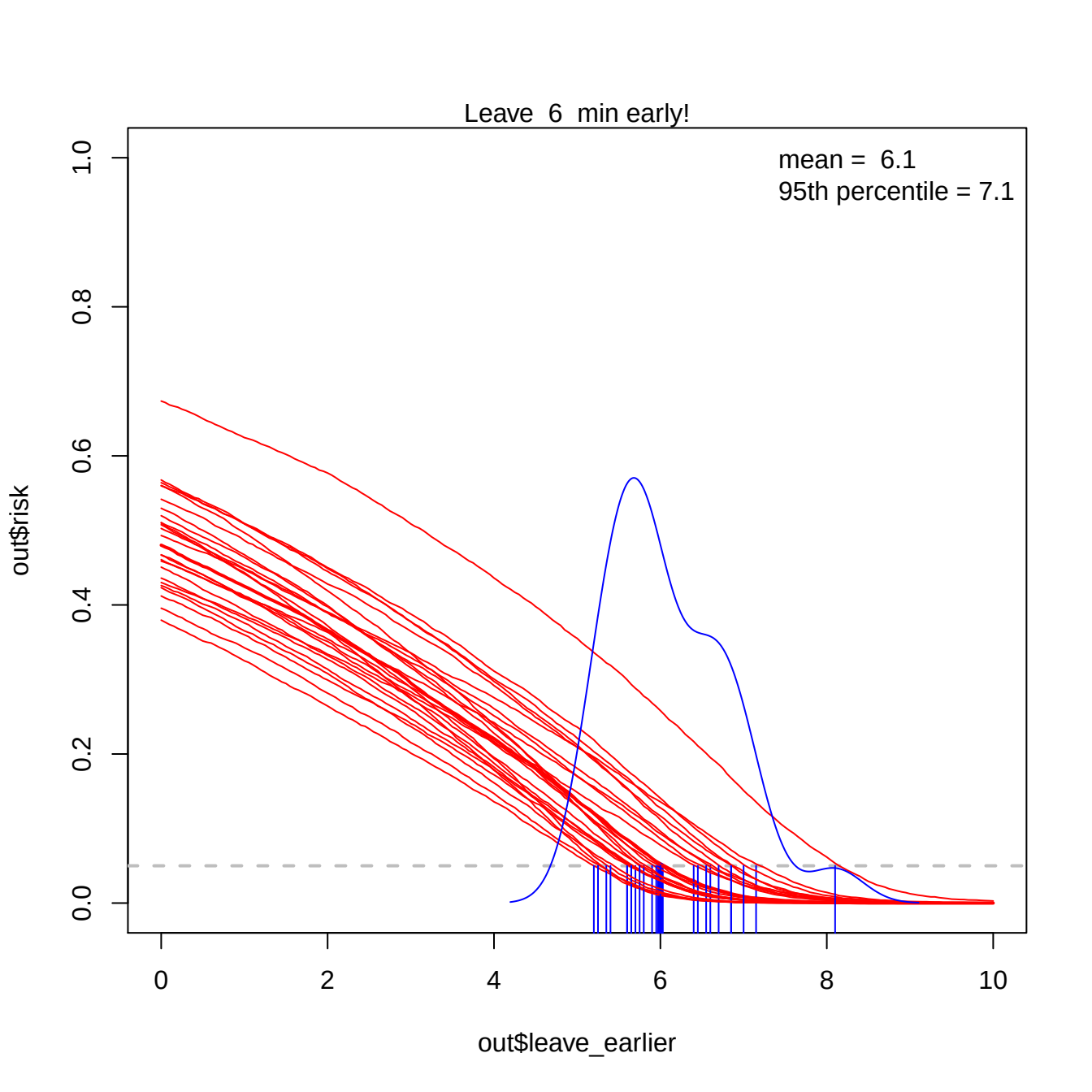
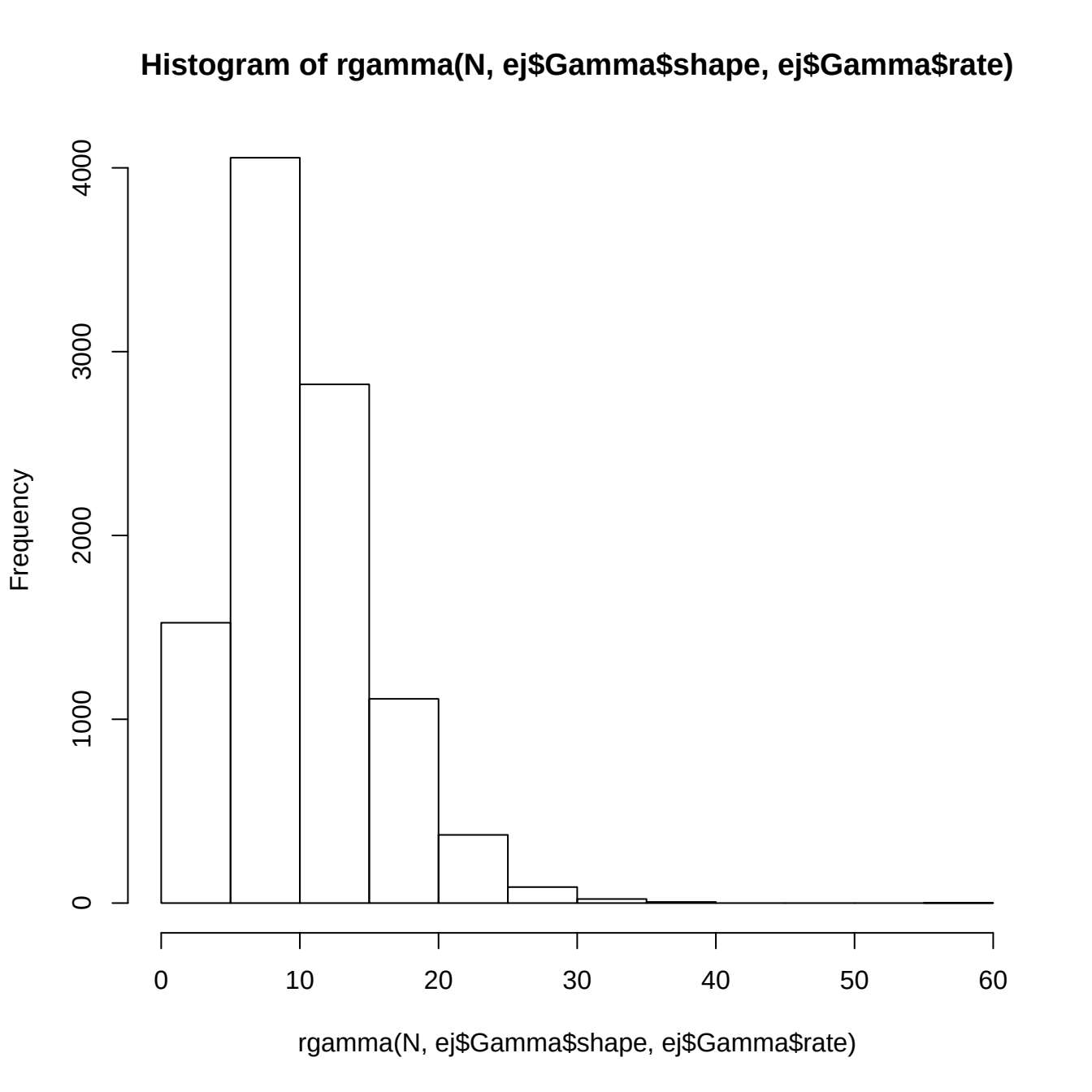
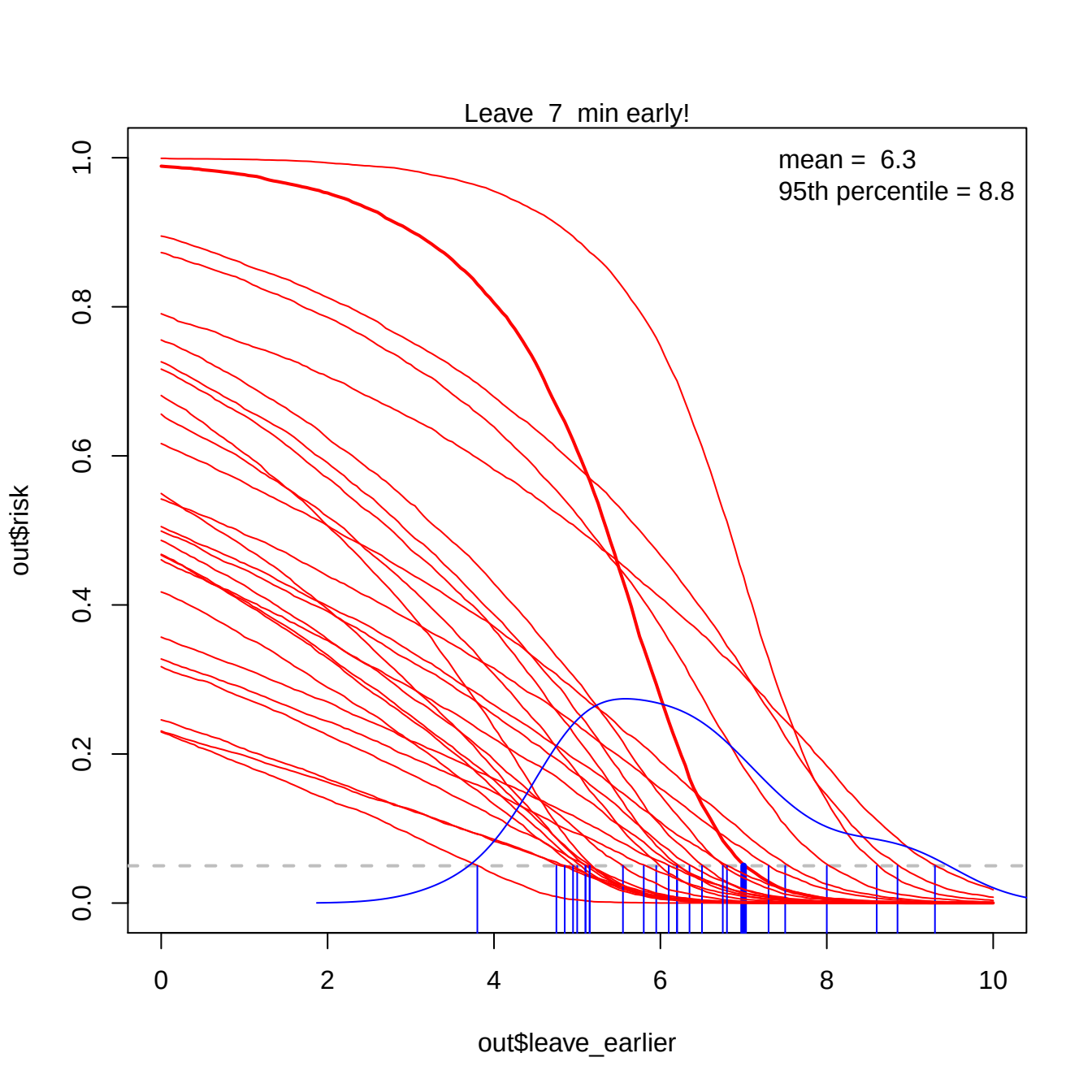

cdf
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
time

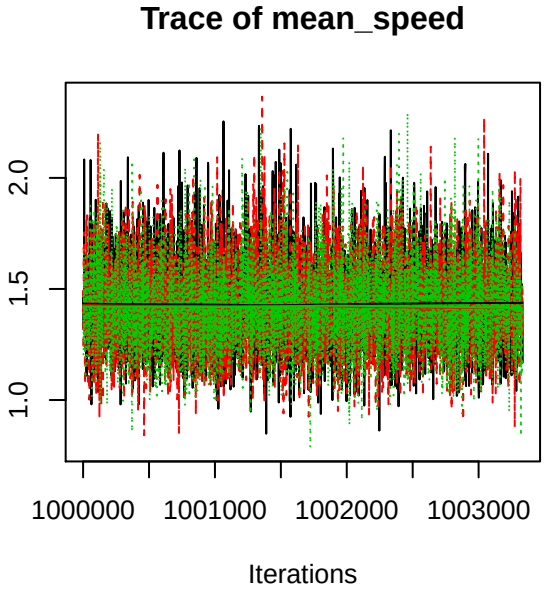

risk
1.0
0.8
0.6
0.4
0.2
0.0
0
2
4
6
8
10
12
leave_earlier
6.5 min

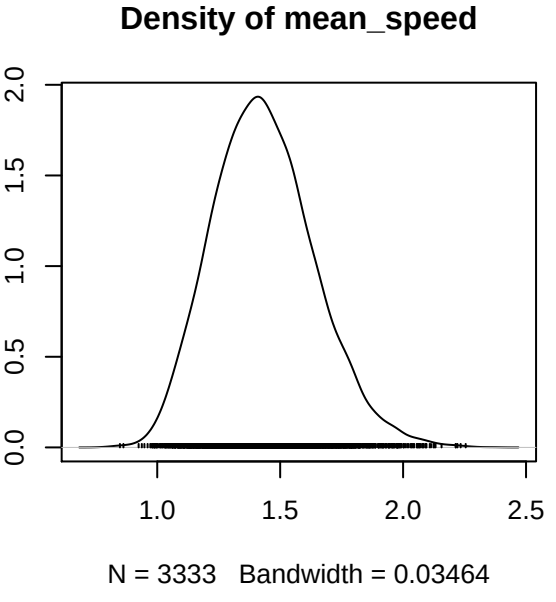

cdf
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
time

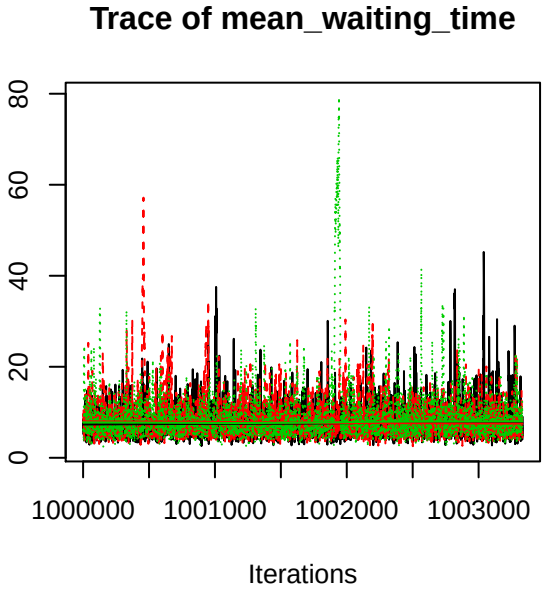

Leave 6 min early!
mean = 6.1
95th percentile = 7.1
out$risk
0.0
0.2
0.4
0.6
0.8
1.0
0
2
4
6
8
10
out$leave_earlier

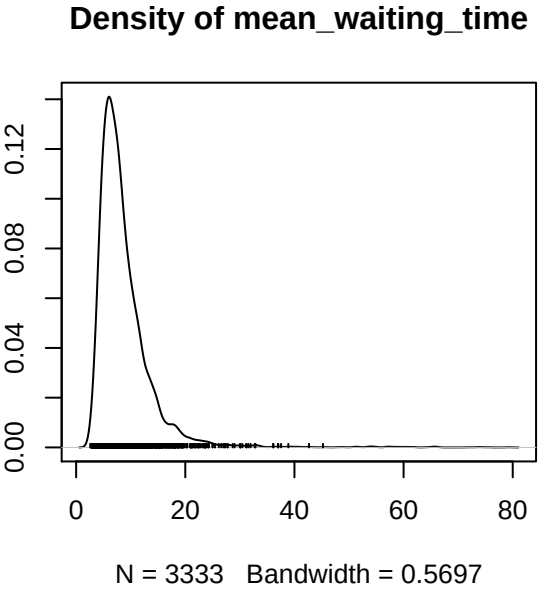

Histogram of rgamma(N, ej$Gamma$shape, ej$Gamma$rate)
Frequency
0
1000
2000
3000
4000
0
10
20
30
40
50
60
rgamma(N, ej$Gamma$shape, ej$Gamma$rate)

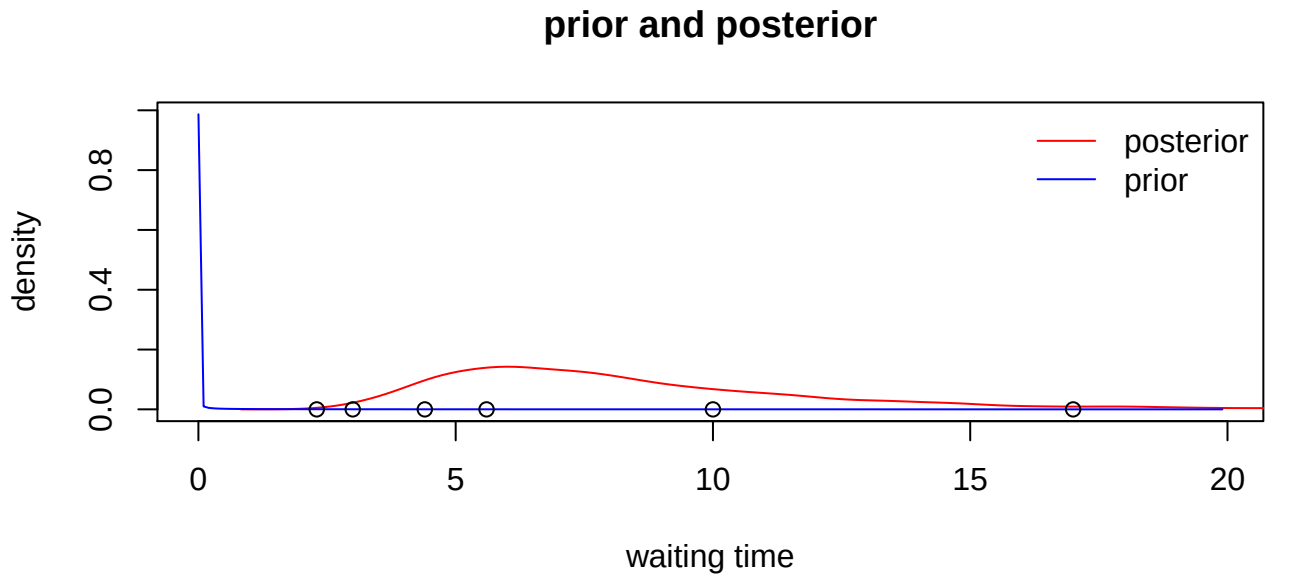

Leave 7 min early!
mean = 6.3
95th percentile = 8.8
out$risk
1.0
0.8
0.6
0.4
0.2
0.0
0
2
4
6
8
10
out$leave_earlier

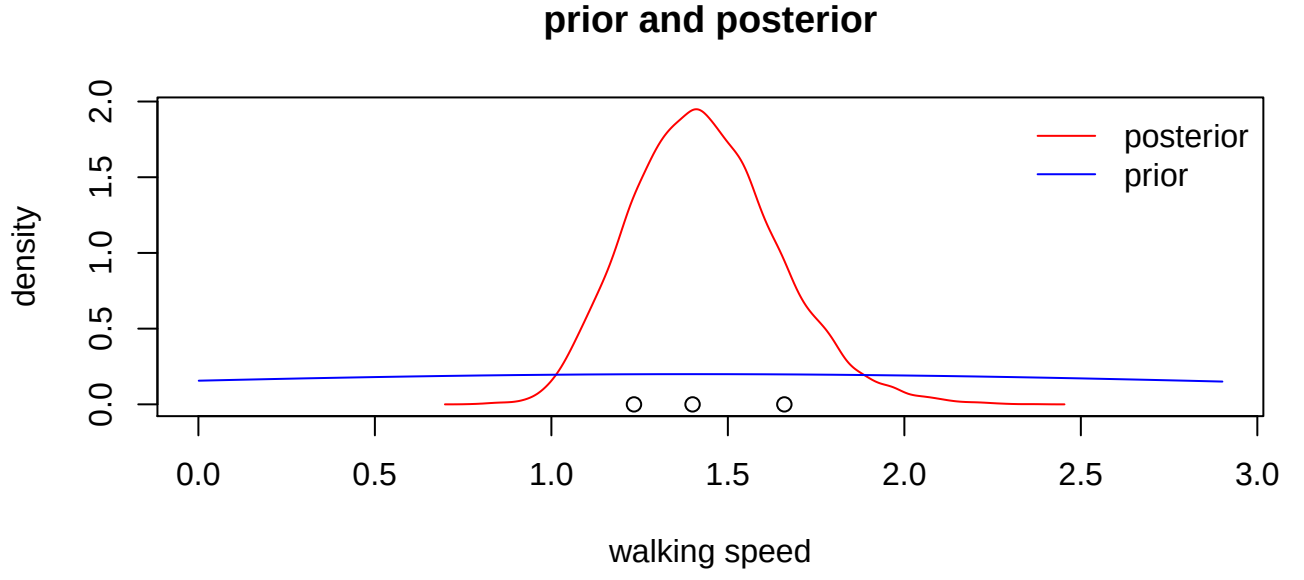

Trace of mean_speed
2.0
1.5
1.0
1000000
1001000
1002000
1003000
Iterations

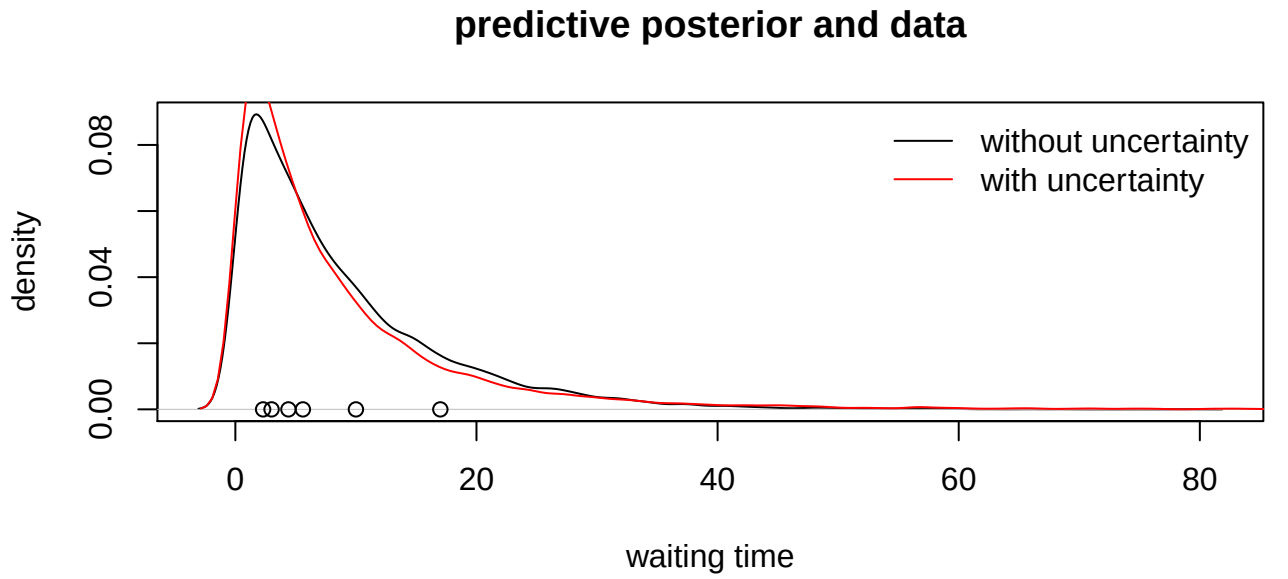

Density of mean_speed
2.0
1.5
1.0
0.5
0.0
1.0
1.5
2.0
2.5
N = 3333 Bandwidth = 0.03464

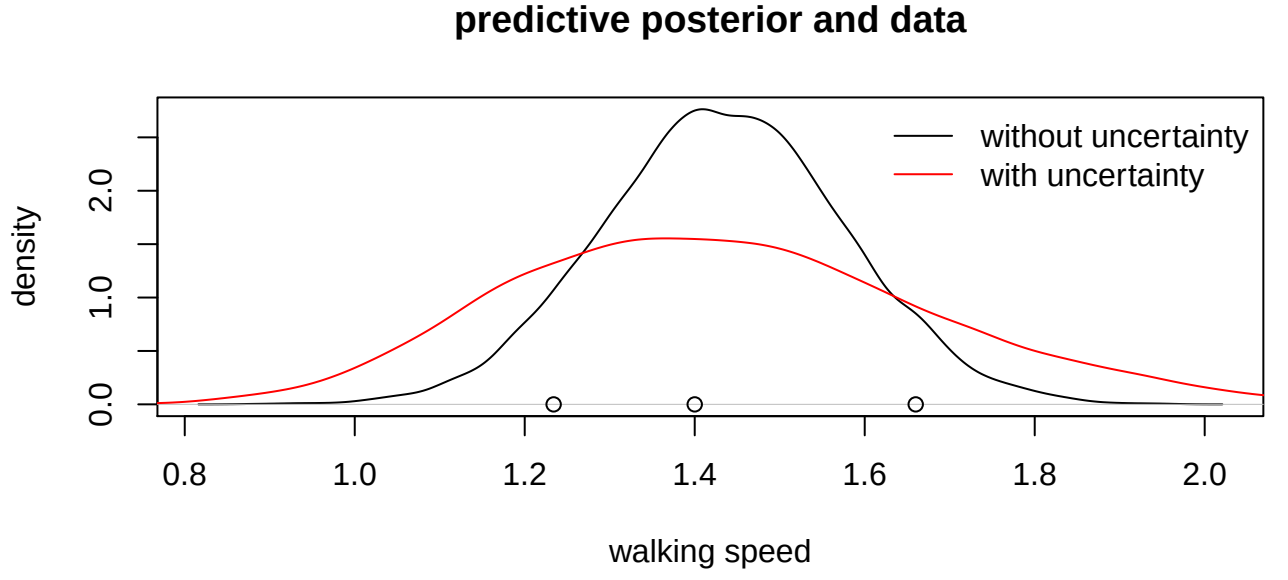

Trace of mean_waiting_time
80
60
40
20
0
1000000
1001000
1002000
1003000
Iterations

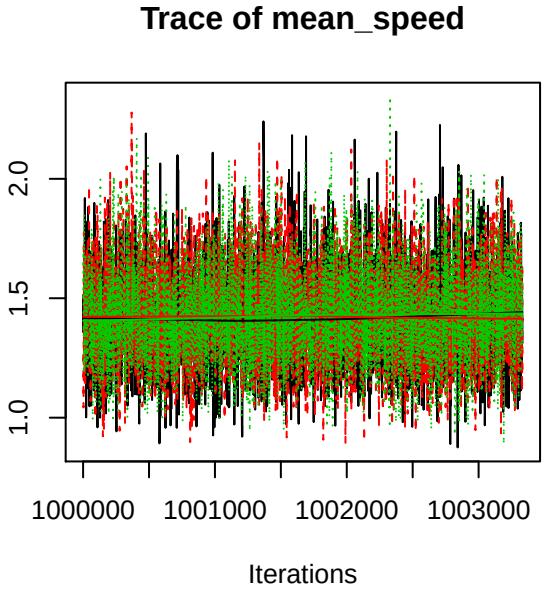

Density of mean_waiting_time
0.12
0.08
0.04
0.00
0
20
40
60
80
N = 3333 Bandwidth = 0.5697

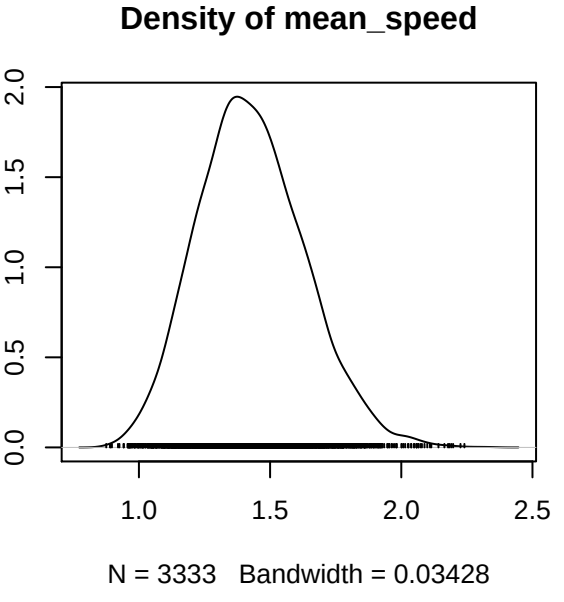

prior and posterior
density
0.0
0.4
0.8
0
5
10
15
20
waiting time
posterior
prior

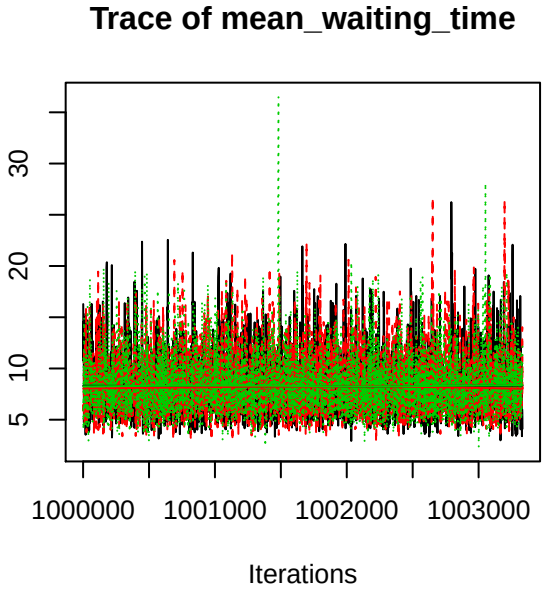

prior and posterior
density
0.0
0.5
1.0
1.5
2.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
walking speed
posterior
prior

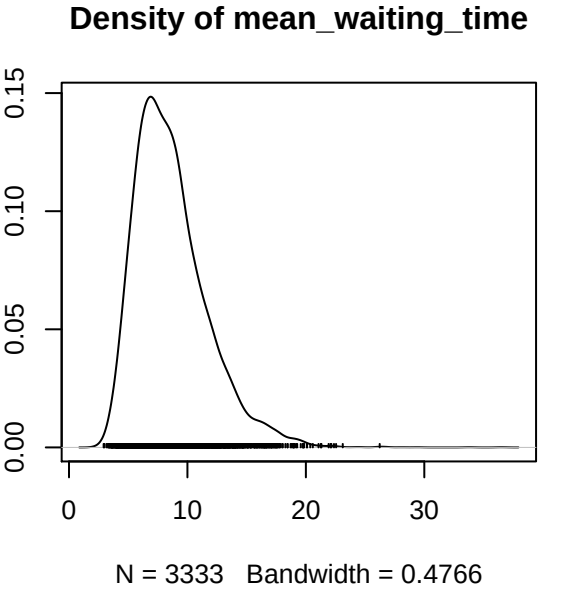

predictive posterior and data
density
0.00
0.04
0.08
0
20
40
60
80
waiting time
without uncertainty
with uncertainty

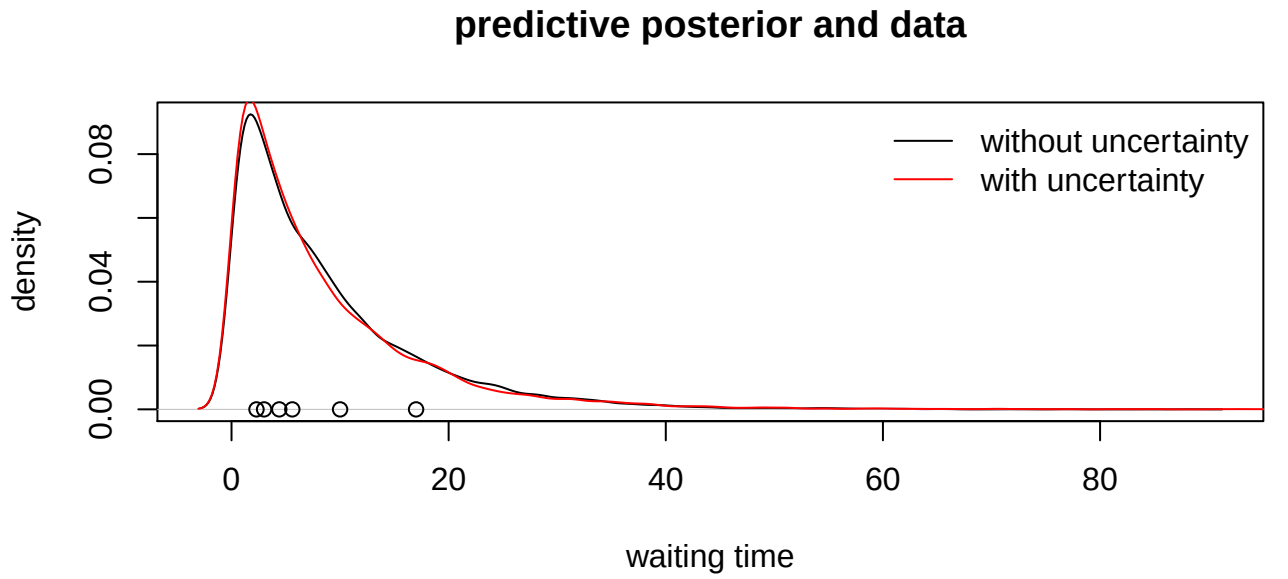

predictive posterior and data
density
0.0
1.0
2.0
0.8
1.0
1.2
1.4
1.6
1.8
2.0
walking speed
without uncertainty
with uncertainty

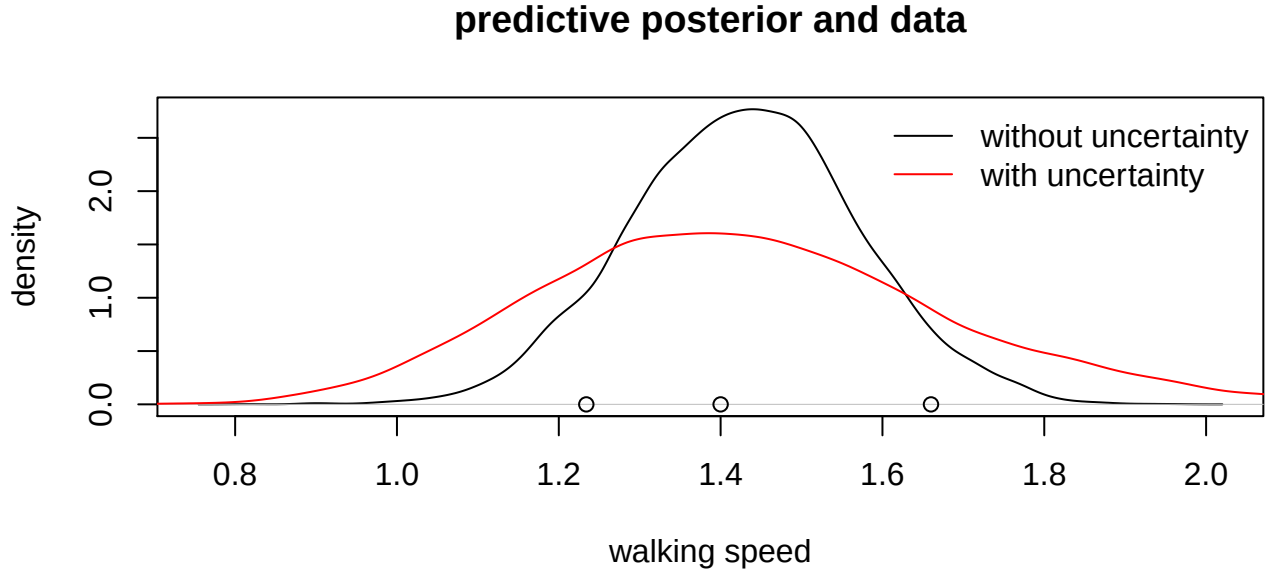

Trace of mean_speed
1.0
1.5
2.0
1000000
1001000
1002000
1003000
Iterations

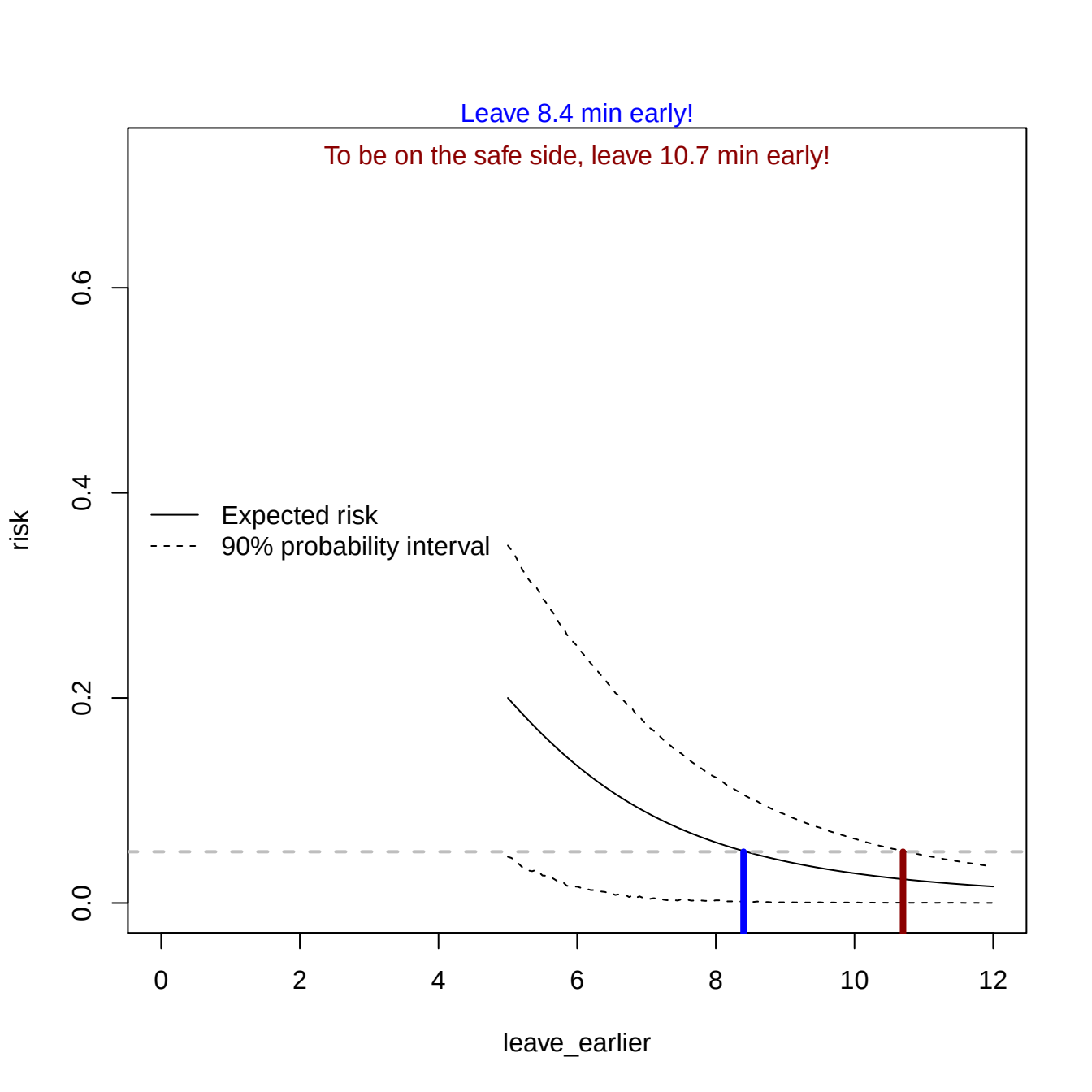

Density of mean_speed
0.0
0.5
1.0
1.5
2.0
1.0
1.5
2.0
2.5
N = 3333 Bandwidth = 0.03428


Trace of mean_waiting_time
5
10
20
30
1000000
1001000
1002000
1003000
Iterations


Density of mean_waiting_time
0.00
0.05
0.10
0.15
0
10
20
30
N = 3333 Bandwidth = 0.4766


predictive posterior and data
density
0.00
0.04
0.08
0
20
40
60
80
waiting time
without uncertainty
with uncertainty


predictive posterior and data
density
0.0
1.0
2.0
0.8
1.0
1.2
1.4
1.6
1.8
2.0
walking speed
without uncertainty
with uncertainty


Leave 8.4 min early!
To be on the safe side, leave 10.7 min early!
Expected risk
90% probability interval
risk
0.0
0.2
0.4
0.6
0
2
4
6
8
10
12
leave_earlier