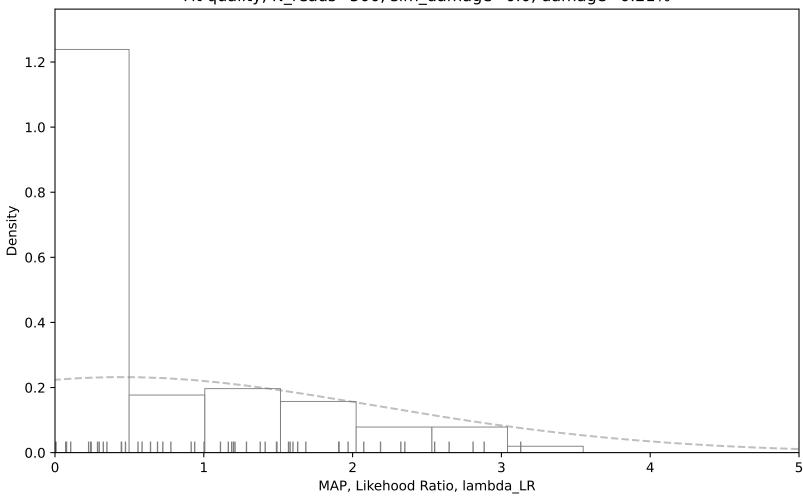
Fit quality, N\_reads=100, sim\_damage=0.0, damage=0.21% 1.4 1.2 1.0 -Density 0.0 8.0 0.6 0.4 0.2 0.0 ‡

Fit quality, N\_reads=200, sim\_damage=0.0, damage=0.21% 2.0 1.5 Density 1.0 0.5 0.0 #

Fit quality, N\_reads=300, sim\_damage=0.0, damage=0.21% 3.0 -2.5 2.0 Density 5.1 1.0 0.5 0.0 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=400, sim\_damage=0.0, damage=0.21% 1.4 1.2 1.0 -Density .0 0.6 0.4 0.2 0.0 #

Fit quality, N\_reads=500, sim\_damage=0.0, damage=0.21%



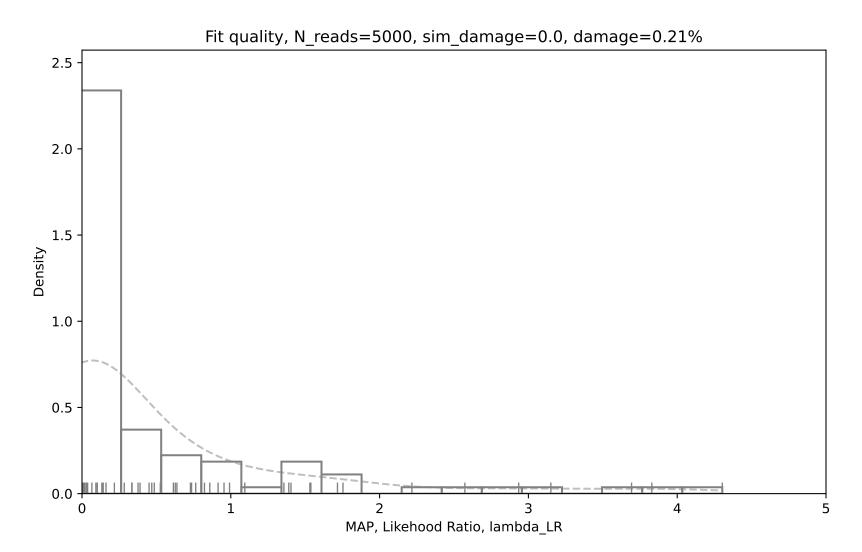
Fit quality, N\_reads=600, sim\_damage=0.0, damage=0.21% 1.4 1.2 1.0 Density
0 0.6 0.4 0.2 0.0 \$ 2 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=700, sim\_damage=0.0, damage=0.21% 2.00 1.75 1.50 1.25 -1.25 Density 0.75 0.50 0.25 0.00 ‡

Fit quality, N\_reads=800, sim\_damage=0.0, damage=0.21% 1.75 1.50 1.25 Density -0.75 0.50 0.25 0.00 + MAP, Likehood Ratio, lambda\_LR

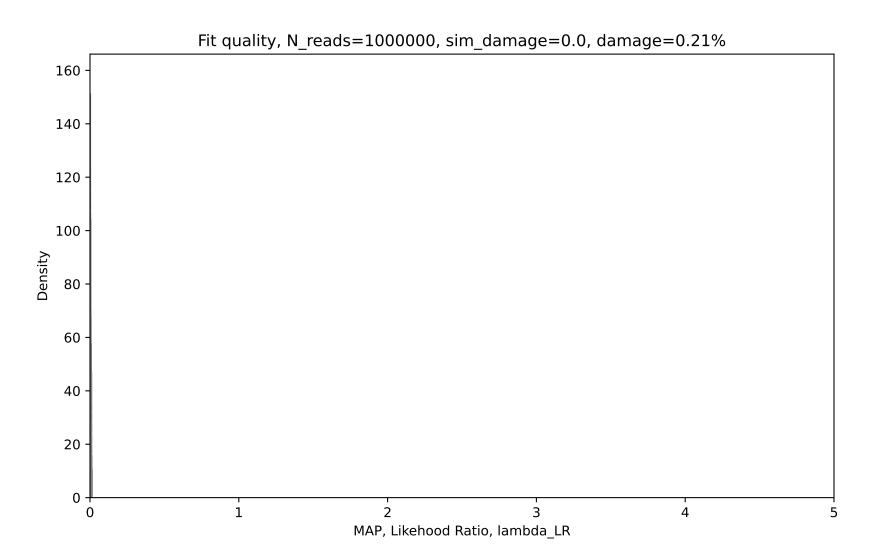
Fit quality, N\_reads=900, sim\_damage=0.0, damage=0.21% 1.75 1.50 1.25 Density 0.75 0.50 0.25 0.00 \$ MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=1000, sim\_damage=0.0, damage=0.21% 2.0 1.5 -Density 1.0 0.5 4 0.0 0 MAP, Likehood Ratio, lambda\_LR



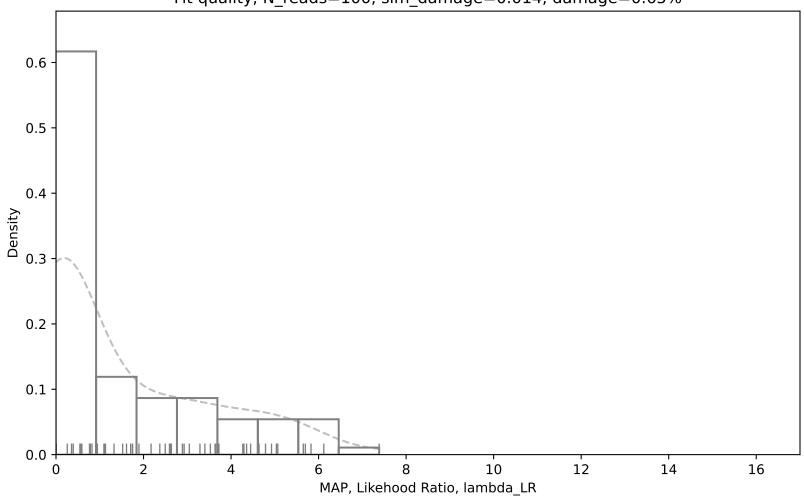
Fit quality, N\_reads=10000, sim\_damage=0.0, damage=0.21% 12 10 8 Density 2 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=100000, sim\_damage=0.0, damage=0.21% 100 80 -Density 60 40 20 2 MAP, Likehood Ratio, lambda\_LR



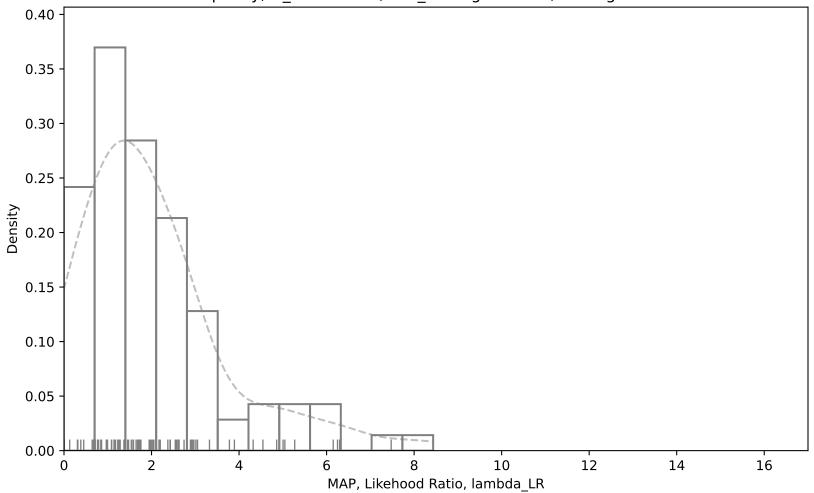
Fit quality, N\_reads=10000000, sim\_damage=0.0, damage=0.21% 175 150 125 Density 100 -75 50 25 0 ‡ 2 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=100, sim\_damage=0.014, damage=0.65%

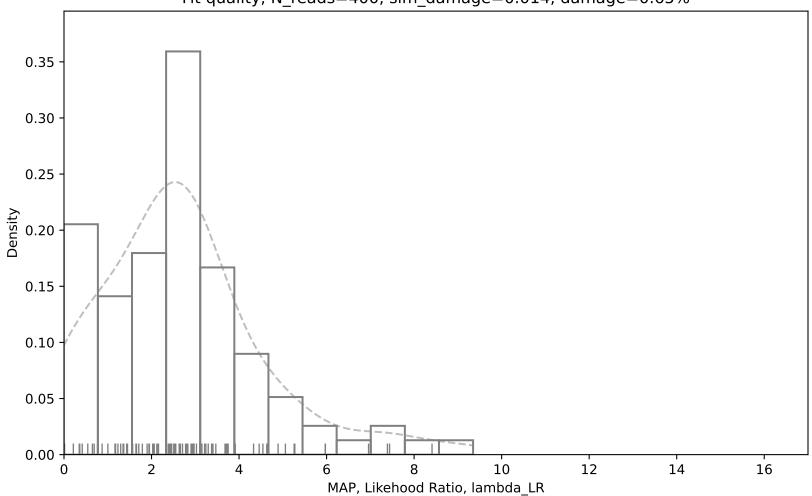


Fit quality, N\_reads=200, sim\_damage=0.014, damage=0.65% 0.5 0.4 0.3 -Density 0.2 0.1 0.0 ‡ 12 10 14 16 8 MAP, Likehood Ratio, lambda\_LR

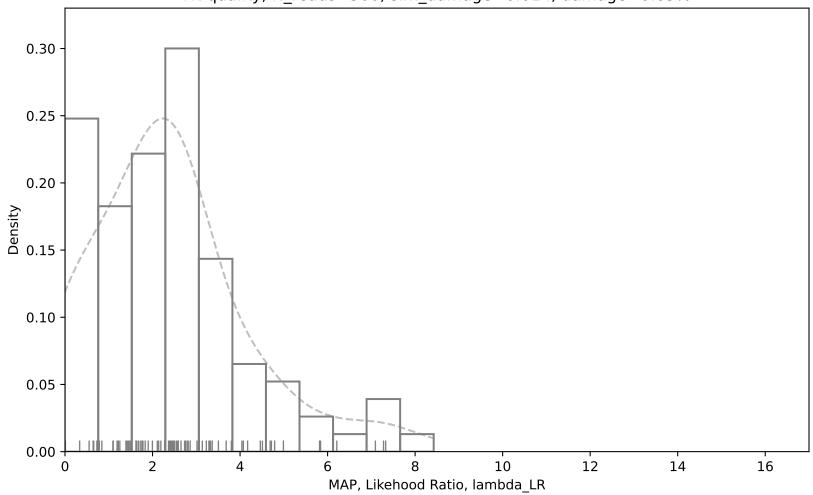
Fit quality, N\_reads=300, sim\_damage=0.014, damage=0.65%



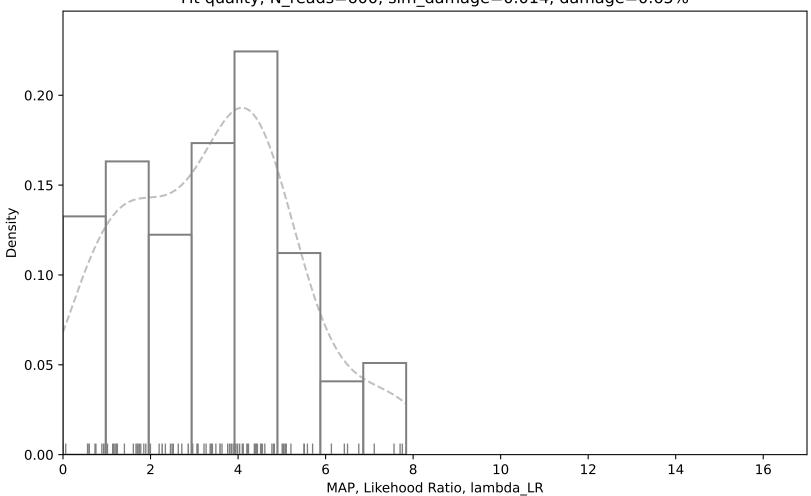
Fit quality, N\_reads=400, sim\_damage=0.014, damage=0.65%



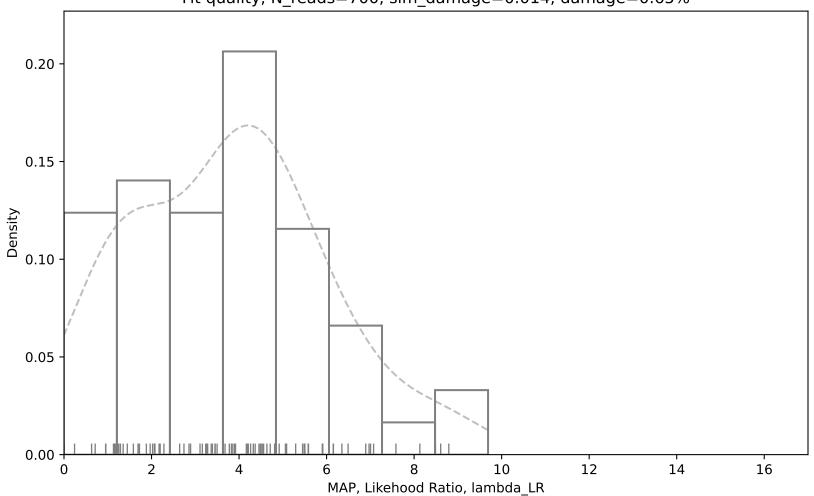
Fit quality, N\_reads=500, sim\_damage=0.014, damage=0.65%



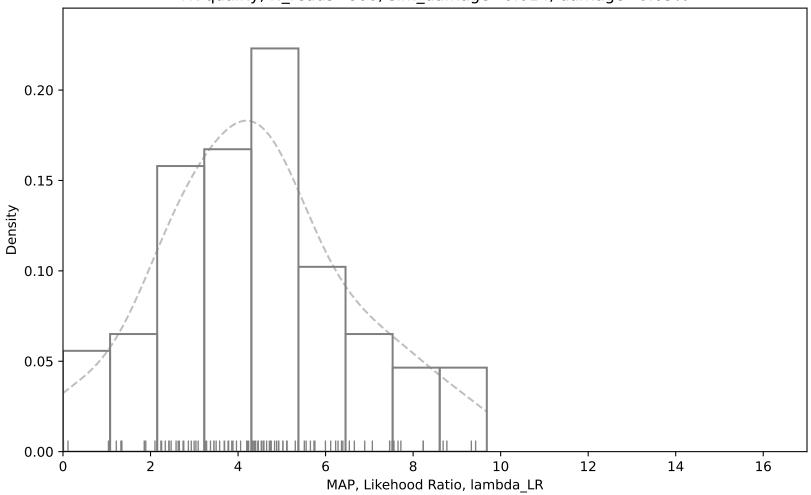
Fit quality, N\_reads=600, sim\_damage=0.014, damage=0.65%



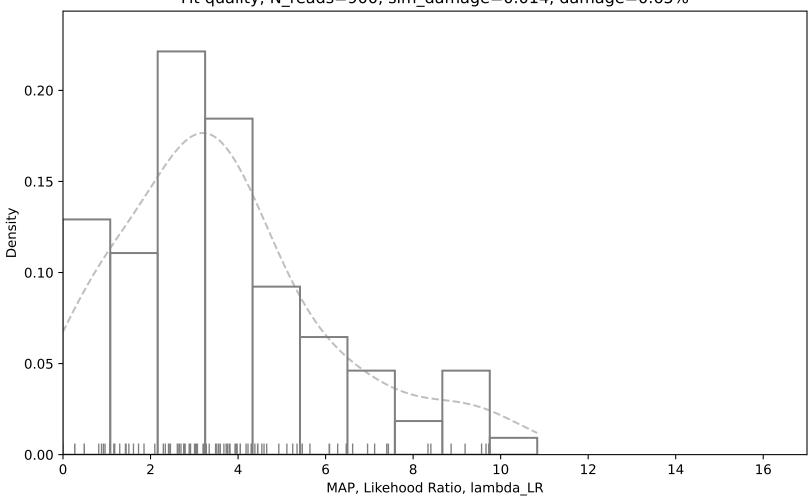
Fit quality, N\_reads=700, sim\_damage=0.014, damage=0.65%



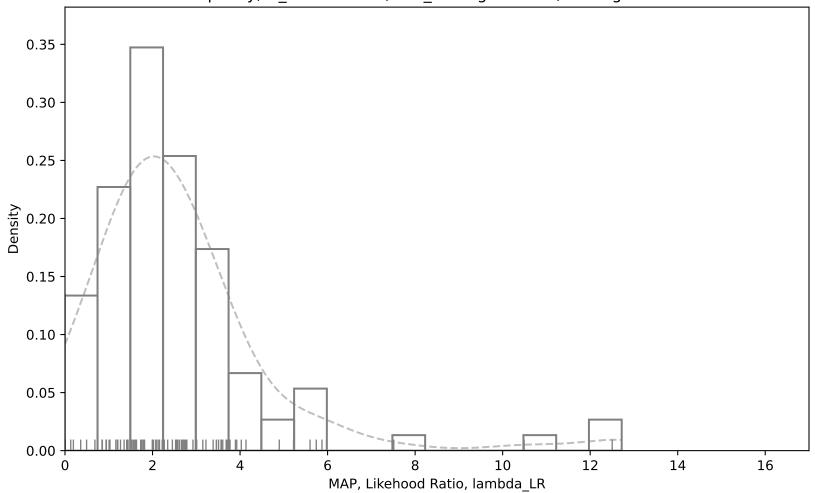
Fit quality, N\_reads=800, sim\_damage=0.014, damage=0.65%



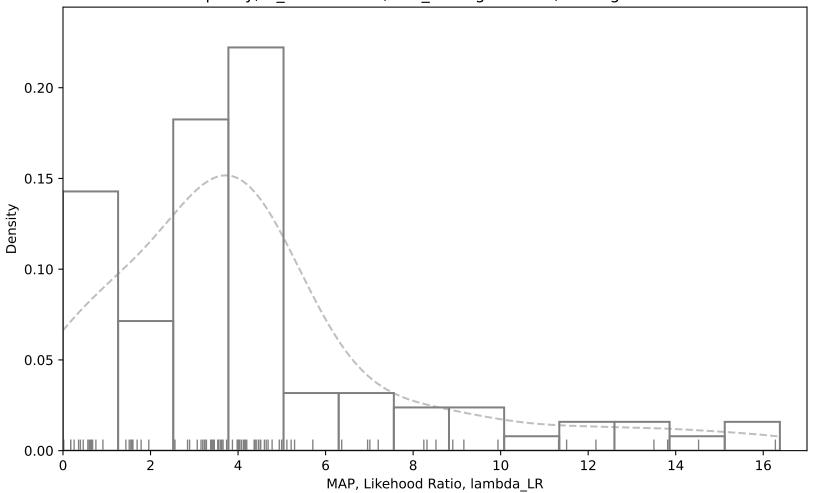
Fit quality, N\_reads=900, sim\_damage=0.014, damage=0.65%



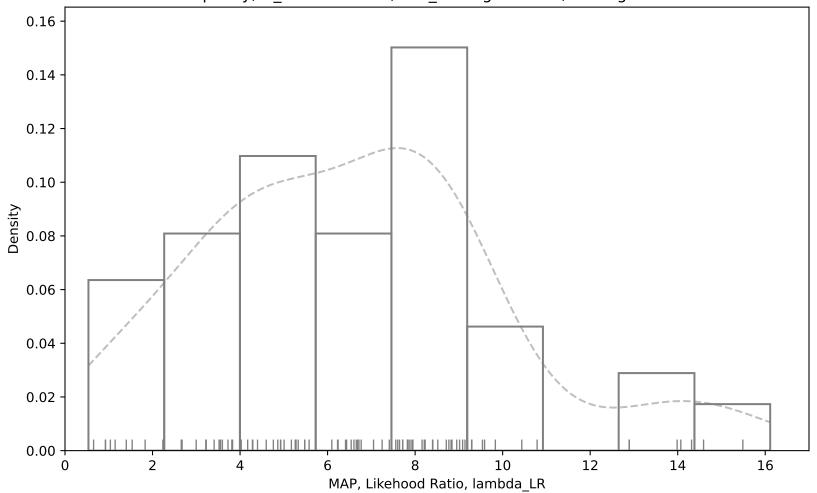
Fit quality, N\_reads=1000, sim\_damage=0.014, damage=0.65%



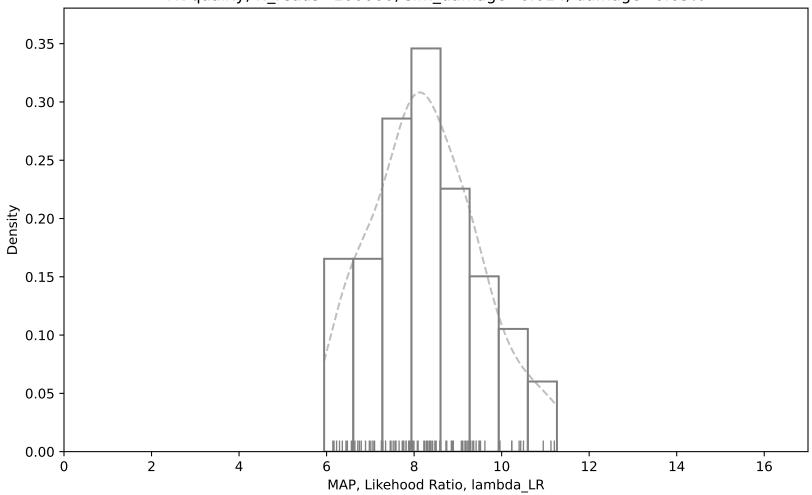
Fit quality, N\_reads=5000, sim\_damage=0.014, damage=0.65%



Fit quality, N\_reads=10000, sim\_damage=0.014, damage=0.65%



Fit quality, N\_reads=100000, sim\_damage=0.014, damage=0.65%



Fit quality, N\_reads=1000000, sim\_damage=0.014, damage=0.65% 1.0 8.0 0.6 Density 0.4 0.2 <del>↑</del> 0.0 0 14 12 16 2 8 10

Fit quality, N\_reads=10000000, sim\_damage=0.014, damage=0.65% 2.5 2.0 -1.5 -Density 1.0 0.5 -0.0 ‡ 14 12 10 16 2 8 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=100, sim\_damage=0.047, damage=1.69% 0.25 0.20 0.15 Density 0.10 0.05 0.00 + 10 20 30 40 50 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=200, sim\_damage=0.047, damage=1.69% 0.175 0.150 0.125 Density 0.100 0.075 0.050 0.025 0.000 10 20 30 40 50

Fit quality, N\_reads=300, sim\_damage=0.047, damage=1.69% 0.12 0.10 0.08 Density - 90.0 0.04 0.02 0.00 + 10 20 30 40 50

Fit quality, N\_reads=400, sim\_damage=0.047, damage=1.69% 0.175 -0.150 0.125 -Density 0.075 0.050 -0.025 0.000 10 20 30 40 50

Fit quality, N\_reads=500, sim\_damage=0.047, damage=1.69% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 + 10 20 30 40 50

Fit quality, N\_reads=600, sim\_damage=0.047, damage=1.69% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 + 10 20 30 40 50 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=700, sim\_damage=0.047, damage=1.69% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 + 10 20 30 40 50 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=800, sim\_damage=0.047, damage=1.69% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 10 20 30 40 50

Fit quality, N\_reads=900, sim\_damage=0.047, damage=1.69% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 10 20 30 40 50

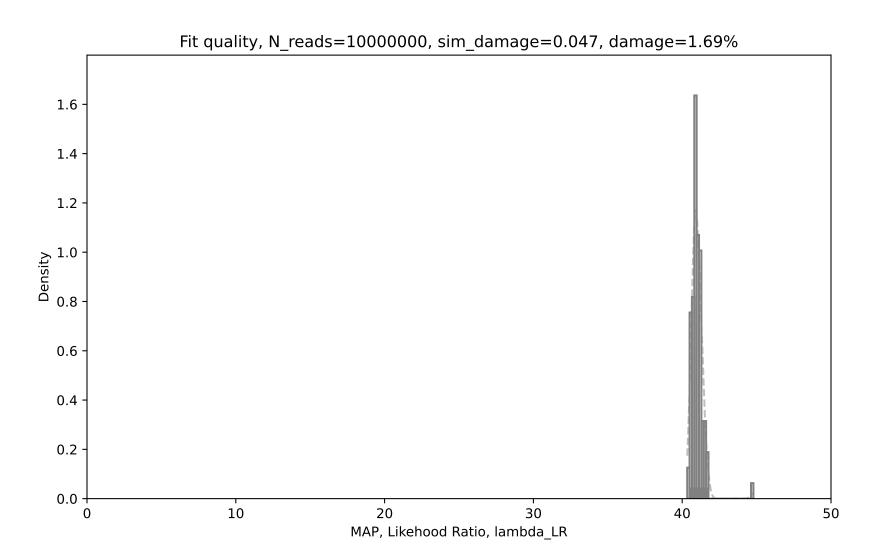
Fit quality, N\_reads=1000, sim\_damage=0.047, damage=1.69% 0.175 -0.150 0.125 Density 0.100 0.075 0.050 0.025 0.000 + 10 20 30 40 50

Fit quality, N\_reads=5000, sim\_damage=0.047, damage=1.69% 0.10 0.08 Density 90.0 0.04 0.02 0.00 + 10 20 30 40 50

Fit quality, N\_reads=10000, sim\_damage=0.047, damage=1.69% 0.08 0.07 0.06 0.05 -0.04 0.03 0.02 0.01 0.00 + 10 20 30 40 50 MAP, Likehood Ratio, lambda\_LR

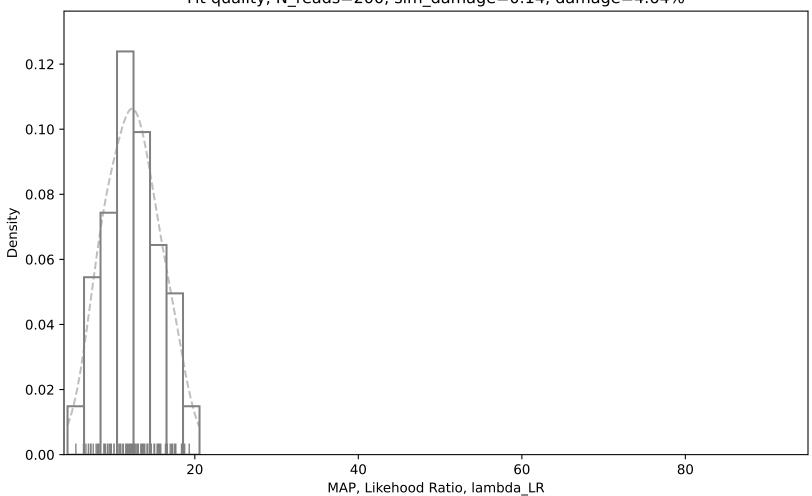
Fit quality, N\_reads=100000, sim\_damage=0.047, damage=1.69% 0.175 0.150 -0.125 Density 001.0 0.075 0.050 0.025 -0.000 10 20 30 40 50 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=1000000, sim\_damage=0.047, damage=1.69% 0.6 0.5 0.4 Density 0 0 0.2 0.1 0.0 + 20 10 30 40 50 MAP, Likehood Ratio, lambda\_LR



Fit quality, N\_reads=100, sim\_damage=0.14, damage=4.64% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 80 20 40 60

Fit quality, N\_reads=200, sim\_damage=0.14, damage=4.64%



Fit quality, N\_reads=300, sim\_damage=0.14, damage=4.64% 0.12 0.10 0.08 0.06 0.04 0.02

60

40

80

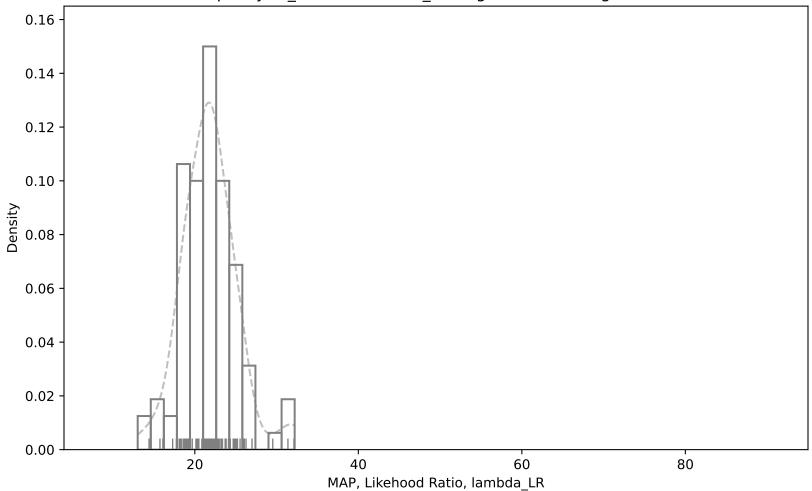
Density

0.00

20

Fit quality, N\_reads=400, sim\_damage=0.14, damage=4.64% 0.12 0.10 -0.08 Density 0.06 0.04 0.02 0.00 20 80 40 60 MAP, Likehood Ratio, lambda\_LR

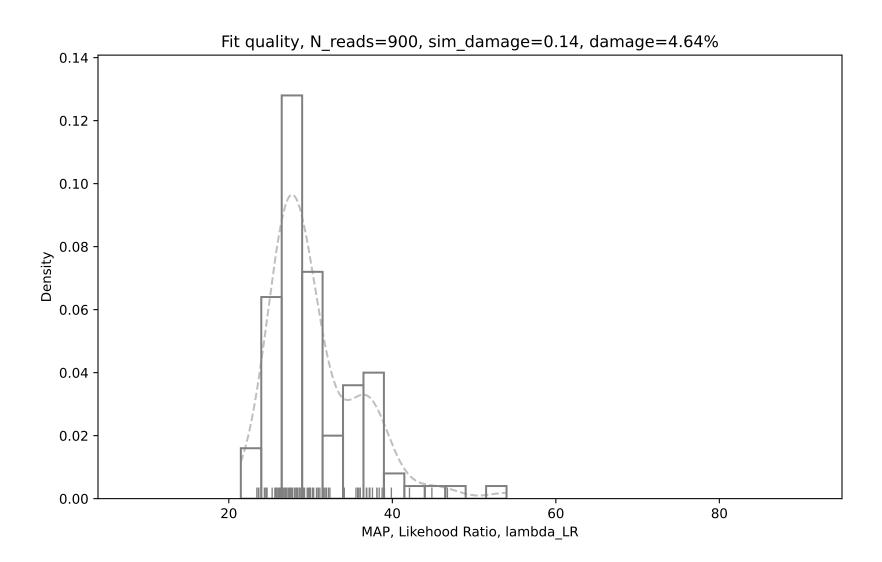
Fit quality, N\_reads=500, sim\_damage=0.14, damage=4.64%

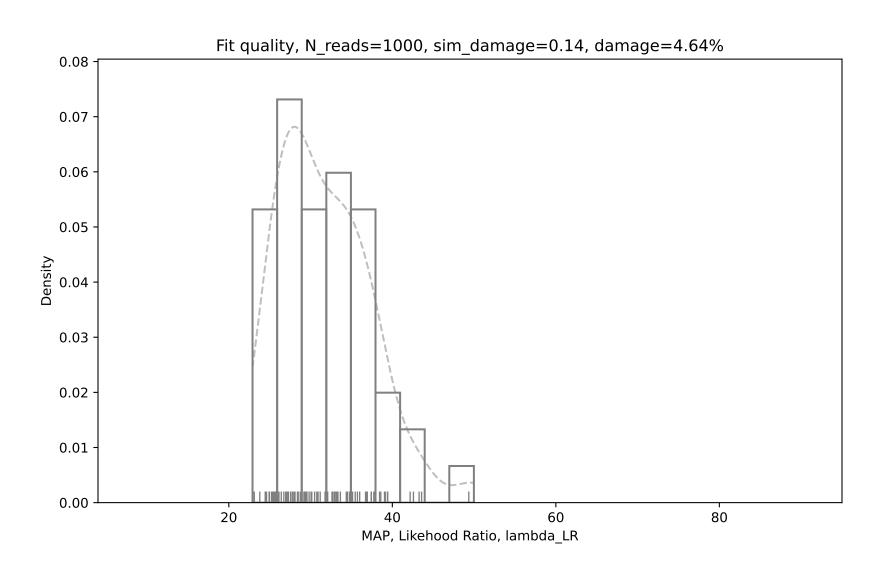


Fit quality, N\_reads=600, sim\_damage=0.14, damage=4.64% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 80 20 40 60

Fit quality, N\_reads=700, sim\_damage=0.14, damage=4.64% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 80 20 40 60

Fit quality, N\_reads=800, sim\_damage=0.14, damage=4.64% 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 80 20 40 60





Fit quality, N\_reads=5000, sim\_damage=0.14, damage=4.64% 0.08 0.06 Density 0.04 0.02 0.00 20 80 40 60 MAP, Likehood Ratio, lambda\_LR

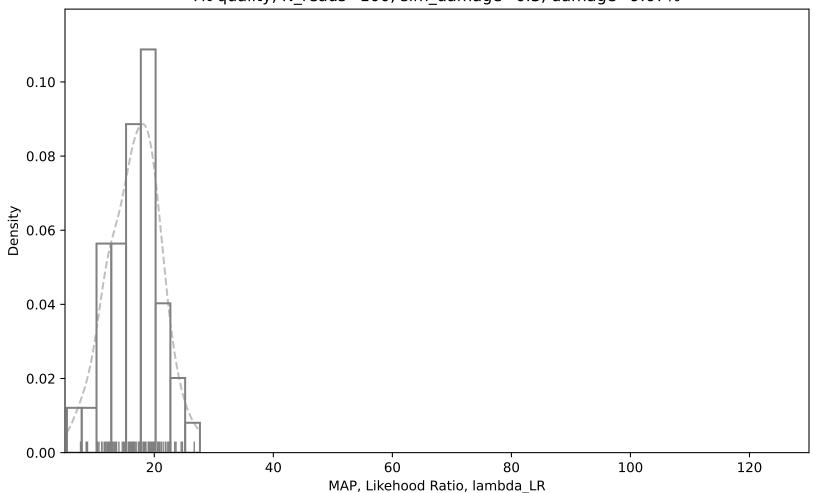
Fit quality, N\_reads=10000, sim\_damage=0.14, damage=4.64% 0.10 0.08 Density 0.04 0.02 0.00 20 40 60 80 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=100000, sim\_damage=0.14, damage=4.64% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 20 40 60 80

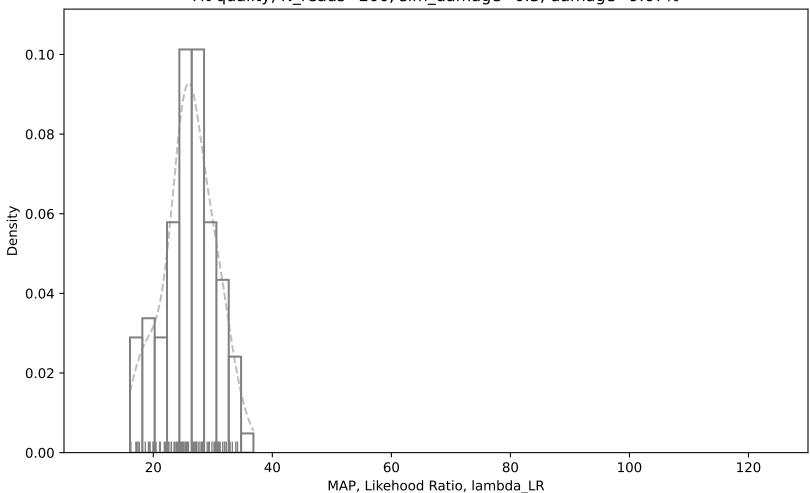
Fit quality, N\_reads=1000000, sim\_damage=0.14, damage=4.64% 0.5 0.4 0.3 Density 0.2 0.1 0.0 20 80 40 60 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=10000000, sim\_damage=0.14, damage=4.64% 1.2 1.0 0.8 -Density 0.6 0.4 0.2 0.0 80 20 40 60 MAP, Likehood Ratio, lambda\_LR

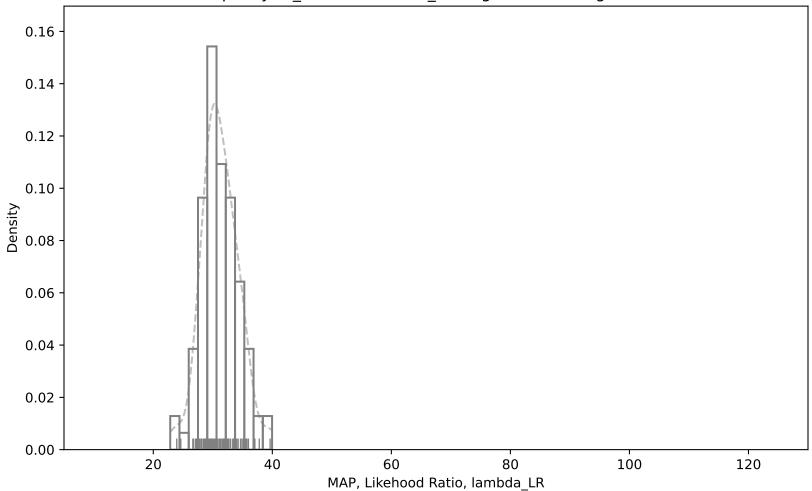
Fit quality, N\_reads=100, sim\_damage=0.3, damage=9.67%



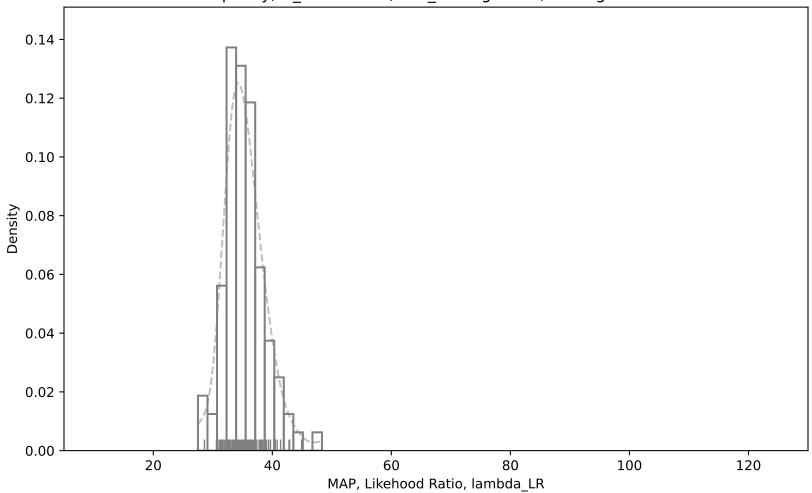
Fit quality, N\_reads=200, sim\_damage=0.3, damage=9.67%



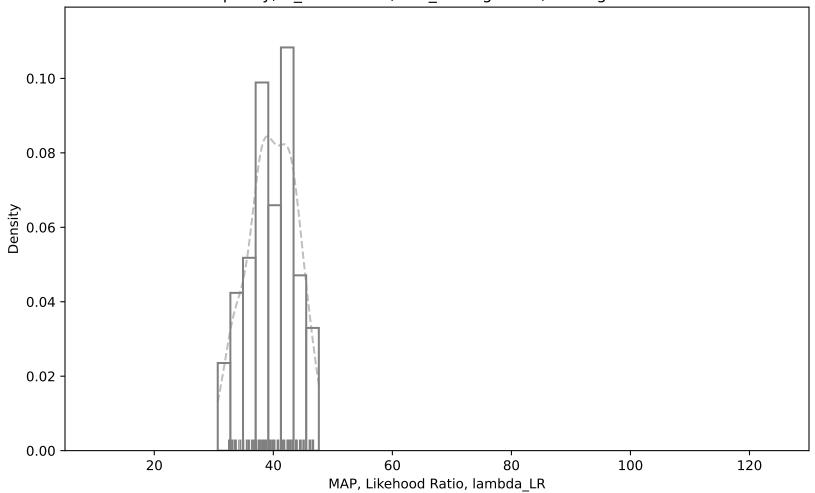
Fit quality, N\_reads=300, sim\_damage=0.3, damage=9.67%



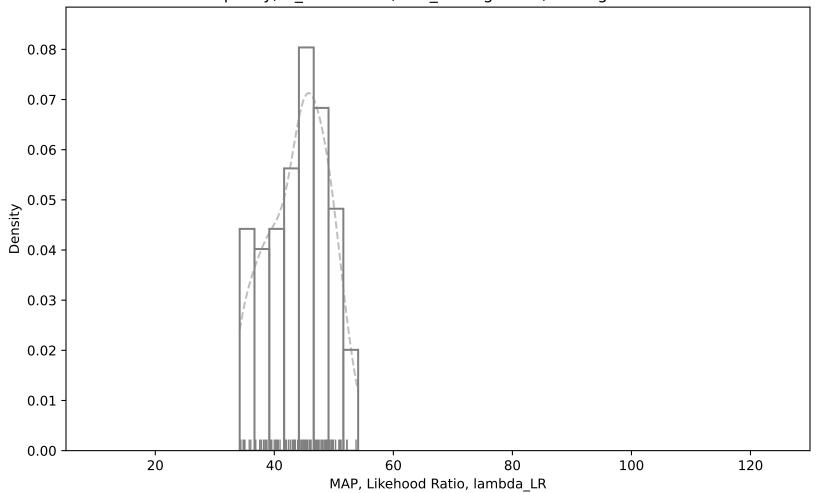
Fit quality, N\_reads=400, sim\_damage=0.3, damage=9.67%



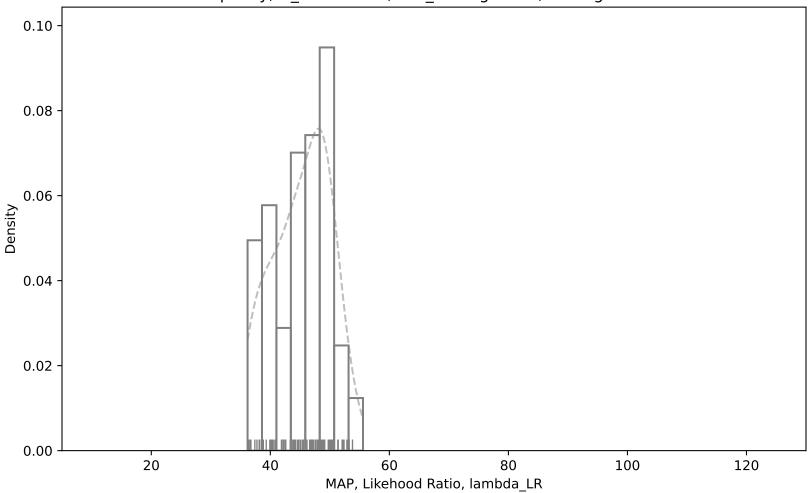
Fit quality, N\_reads=500, sim\_damage=0.3, damage=9.67%



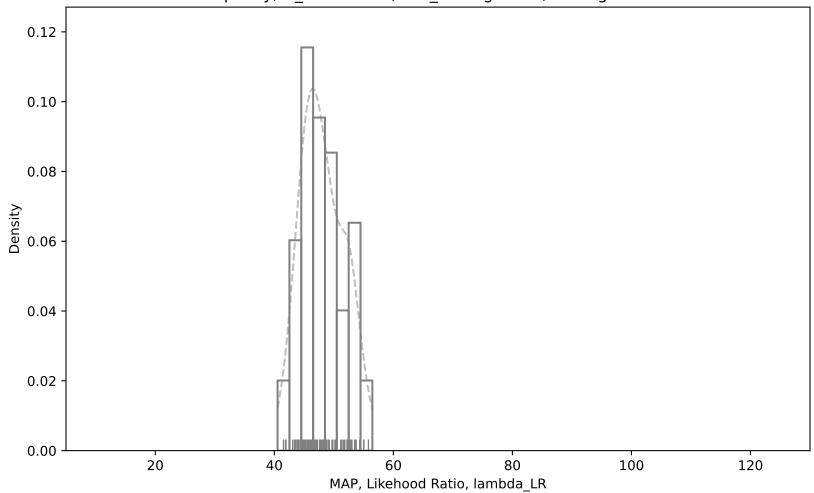
Fit quality, N\_reads=600, sim\_damage=0.3, damage=9.67%



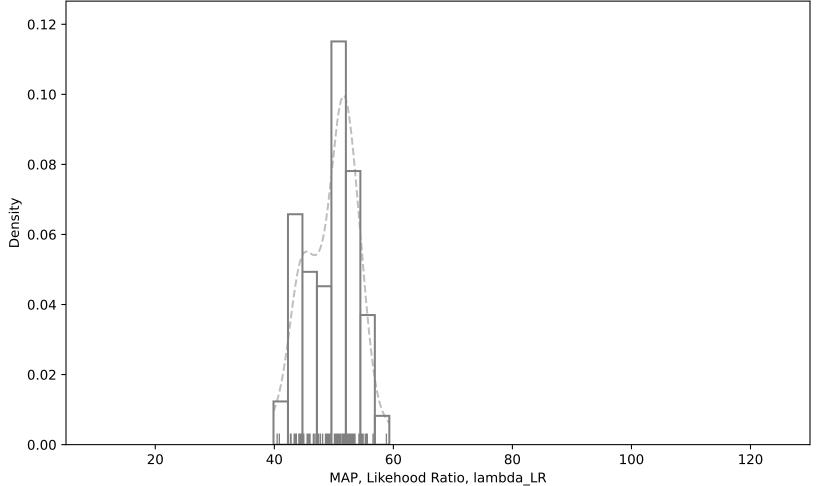
Fit quality, N\_reads=700, sim\_damage=0.3, damage=9.67%



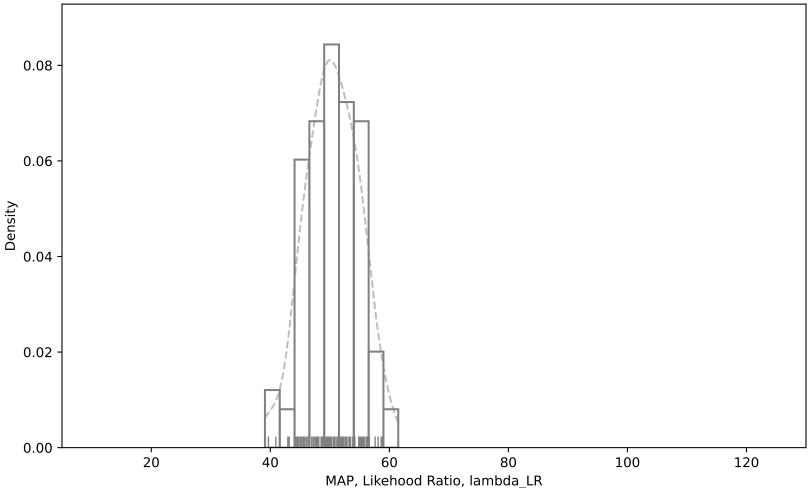
Fit quality, N\_reads=800, sim\_damage=0.3, damage=9.67%



Fit quality, N\_reads=900, sim\_damage=0.3, damage=9.67%

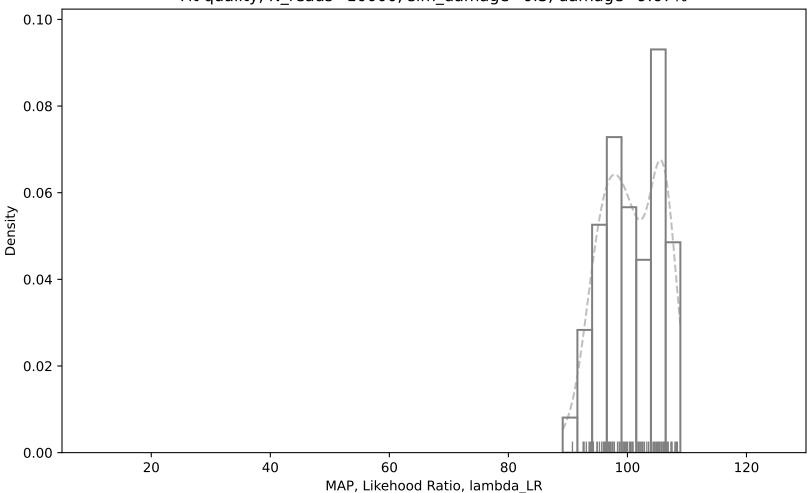


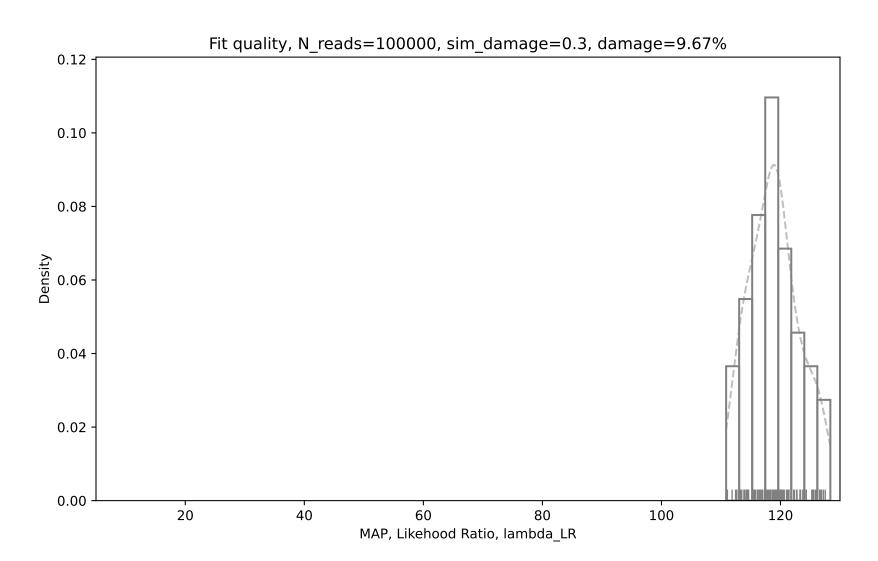
Fit quality, N\_reads=1000, sim\_damage=0.3, damage=9.67%



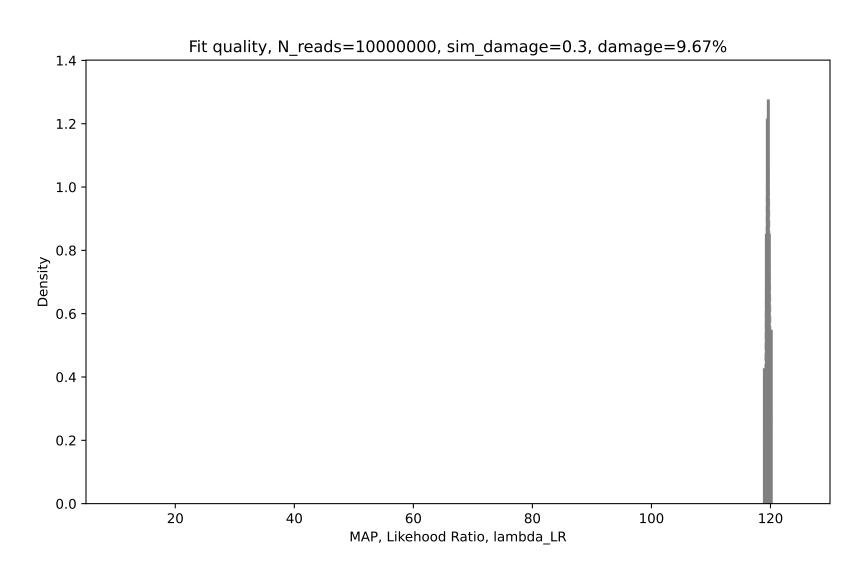
Fit quality, N\_reads=5000, sim\_damage=0.3, damage=9.67% 0.08 0.06 Density 70.0 0.02 0.00 20 40 60 80 100 120

Fit quality, N\_reads=10000, sim\_damage=0.3, damage=9.67%





Fit quality, N\_reads=1000000, sim\_damage=0.3, damage=9.67% 0.35 0.30 0.25 Density 02.0 0.15 0.10 -0.05 0.00 20 40 100 60 80 120



Fit quality, N\_reads=100, sim\_damage=0.46, damage=14.71% 0.10 0.08 Density 90.0 0.04 0.02

80

MAP, Likehood Ratio, lambda\_LR

120

140

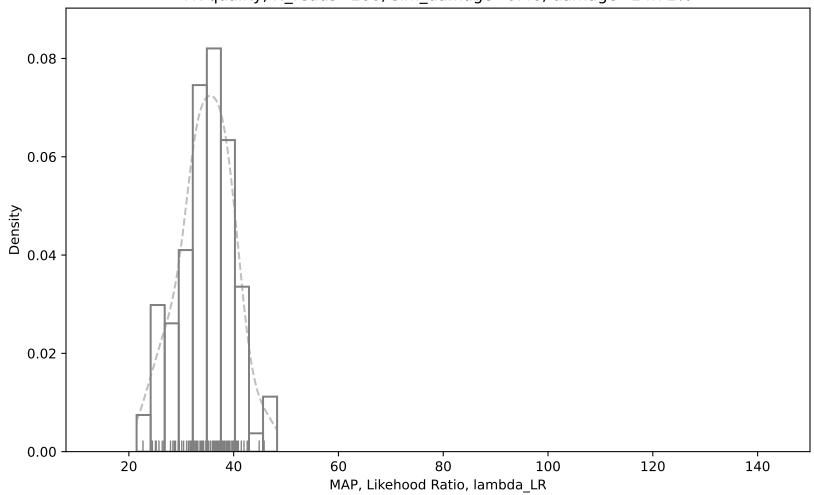
100

60

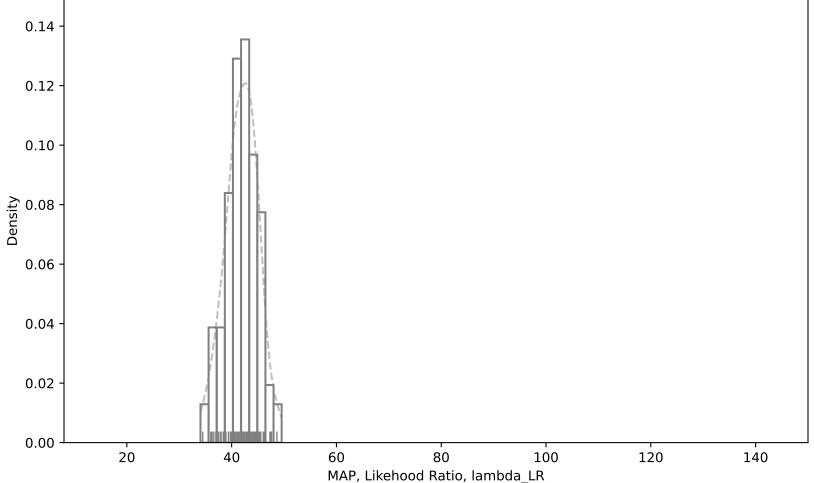
40

20

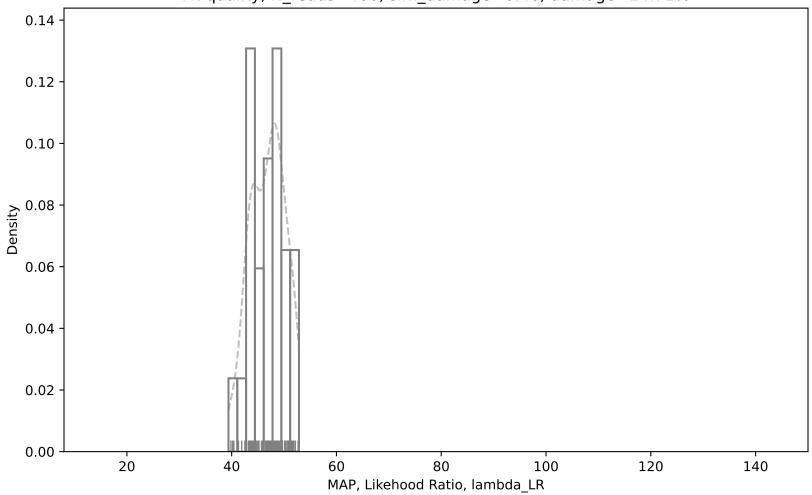
Fit quality, N\_reads=200, sim\_damage=0.46, damage=14.71%



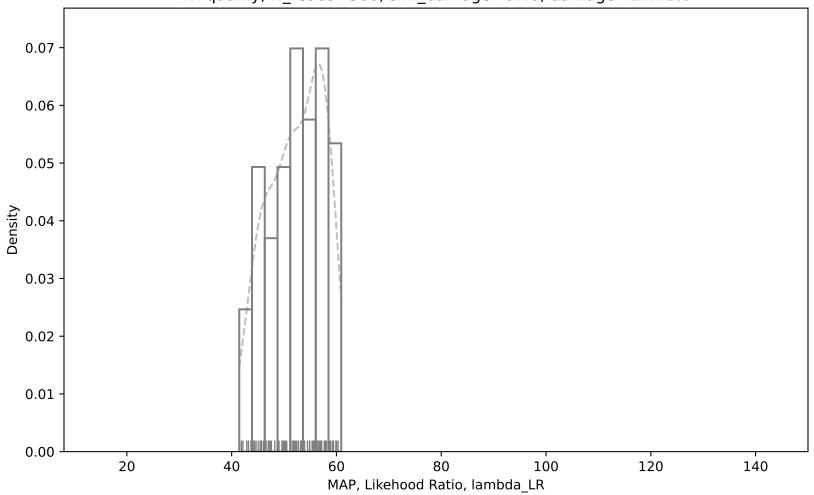
Fit quality, N\_reads=300, sim\_damage=0.46, damage=14.71%



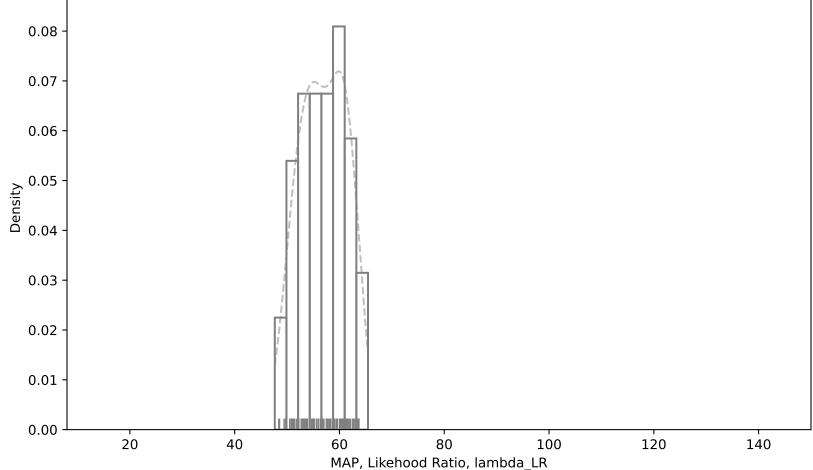
Fit quality, N\_reads=400, sim\_damage=0.46, damage=14.71%



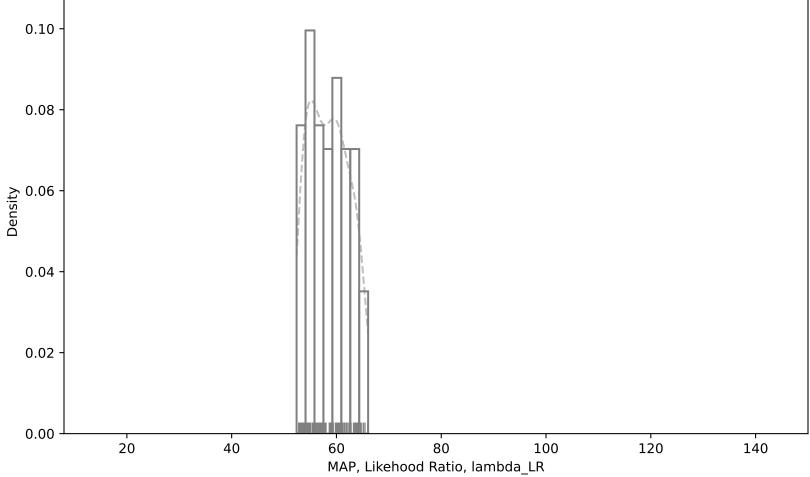
Fit quality, N\_reads=500, sim\_damage=0.46, damage=14.71%



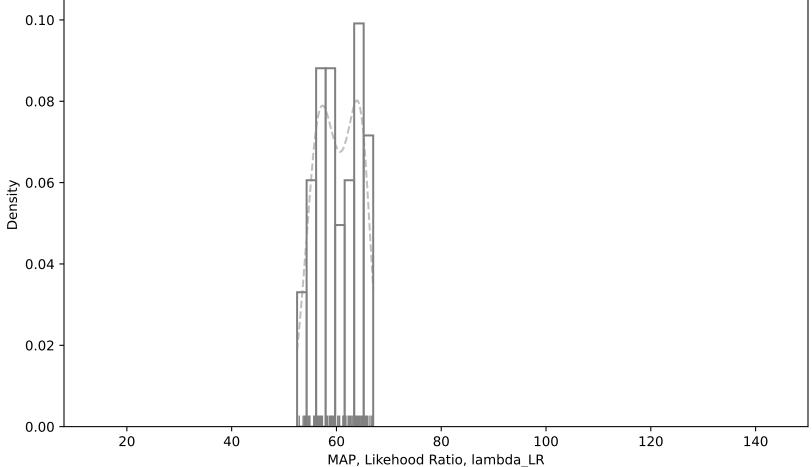
Fit quality, N\_reads=600, sim\_damage=0.46, damage=14.71%



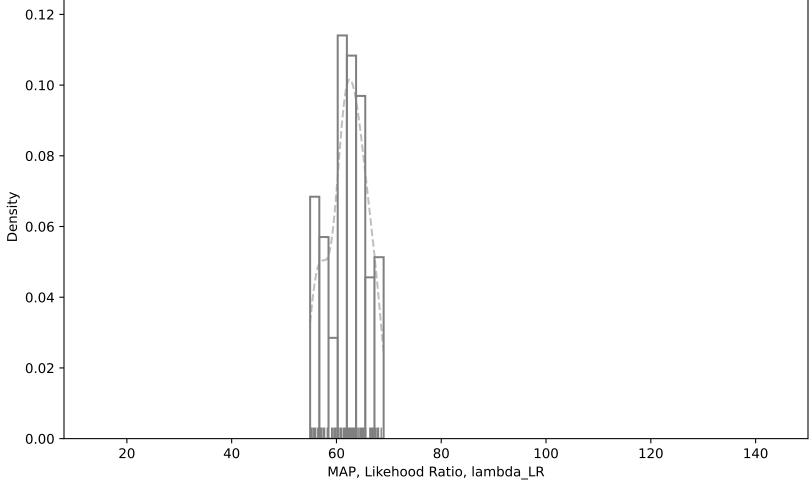
Fit quality, N\_reads=700, sim\_damage=0.46, damage=14.71%



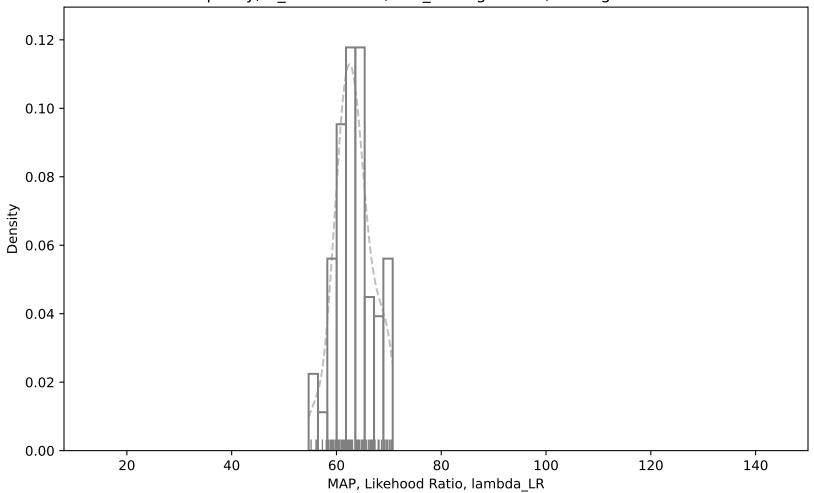
Fit quality, N\_reads=800, sim\_damage=0.46, damage=14.71%



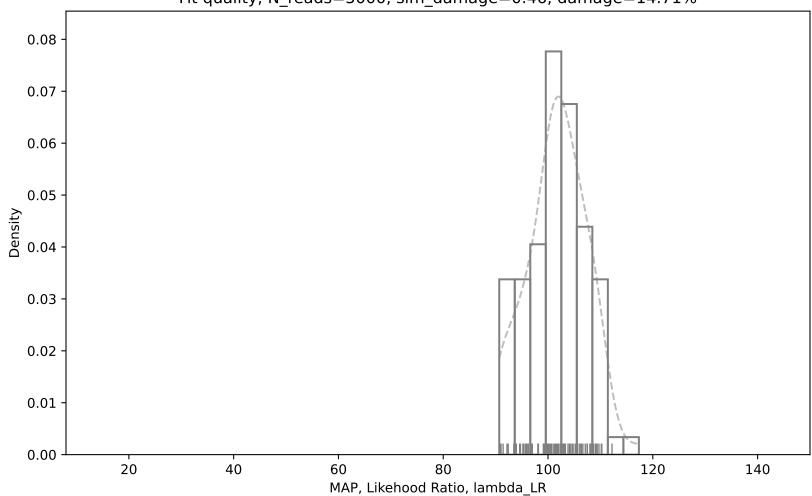
Fit quality, N\_reads=900, sim\_damage=0.46, damage=14.71%



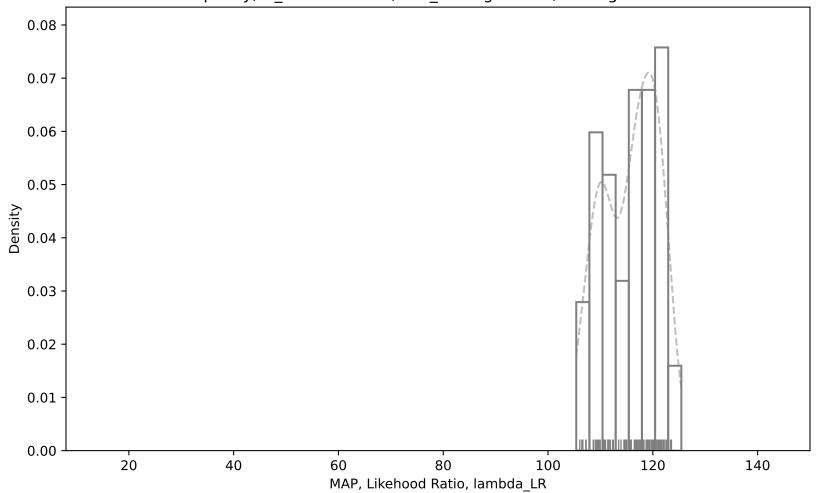
Fit quality, N\_reads=1000, sim\_damage=0.46, damage=14.71%



Fit quality, N\_reads=5000, sim\_damage=0.46, damage=14.71%

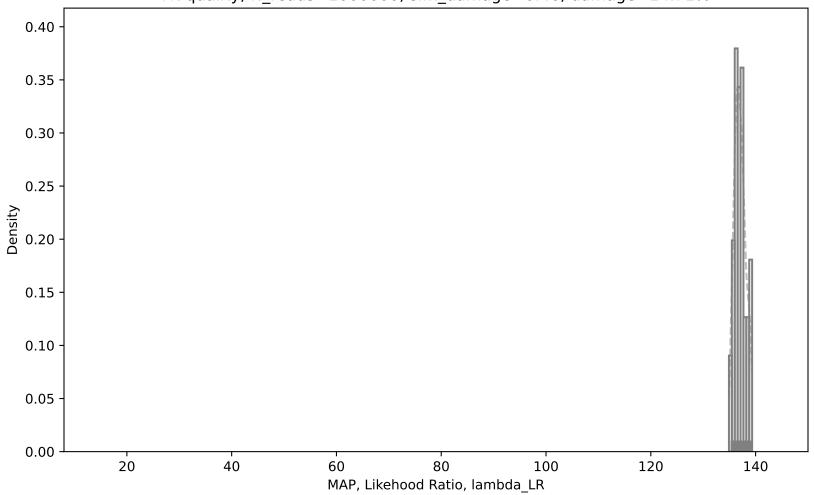


Fit quality, N\_reads=10000, sim\_damage=0.46, damage=14.71%



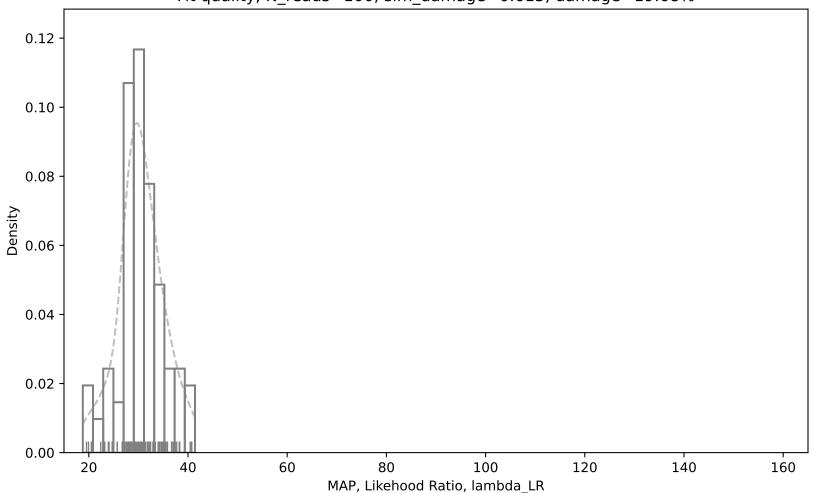
Fit quality, N\_reads=100000, sim\_damage=0.46, damage=14.71% 0.10 0.08 0.06 Density 0.04 0.02 0.00 60 80 20 40 100 120 140

Fit quality, N\_reads=1000000, sim\_damage=0.46, damage=14.71%

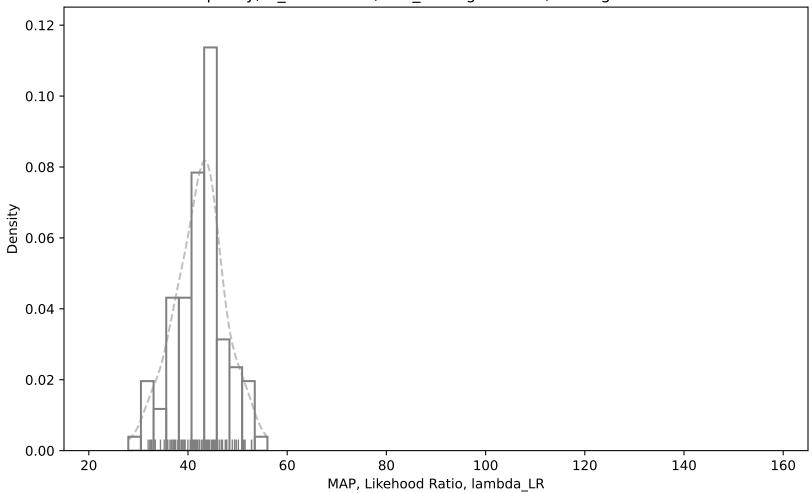


Fit quality, N\_reads=10000000, sim\_damage=0.46, damage=14.71% 1.4 1.2 1.0 Density 0 0.6 0.4 0.2 0.0 20 60 80 120 40 100 140 MAP, Likehood Ratio, lambda\_LR

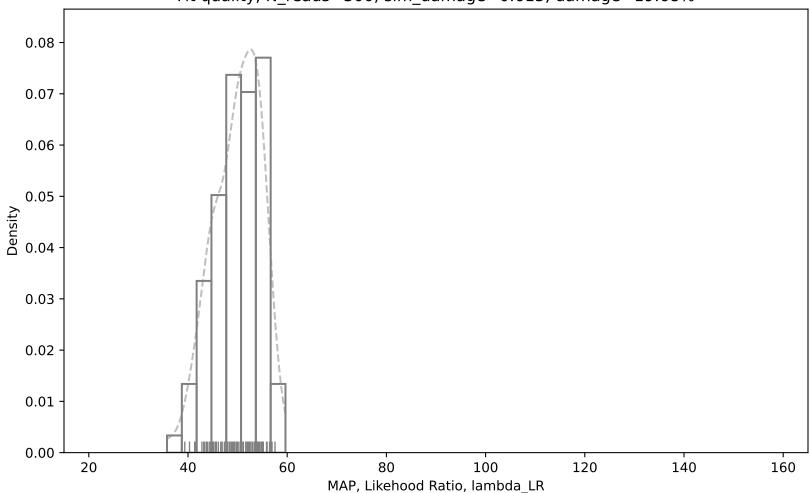
Fit quality, N\_reads=100, sim\_damage=0.615, damage=19.68%



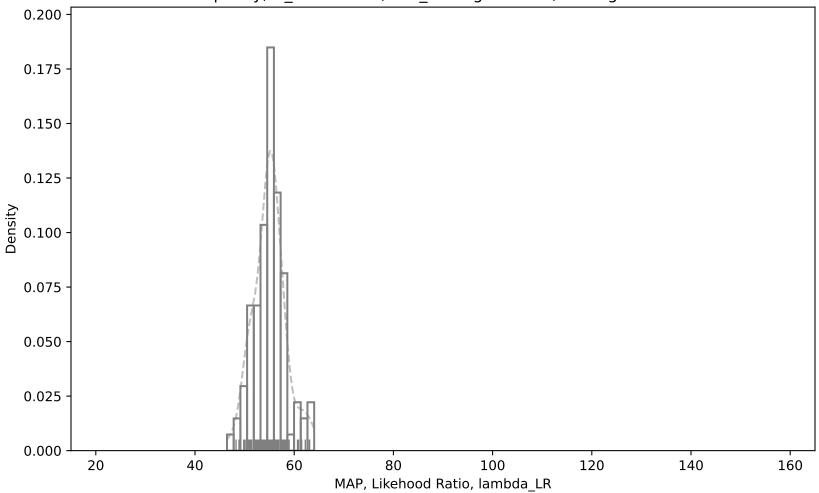
Fit quality, N\_reads=200, sim\_damage=0.615, damage=19.68%



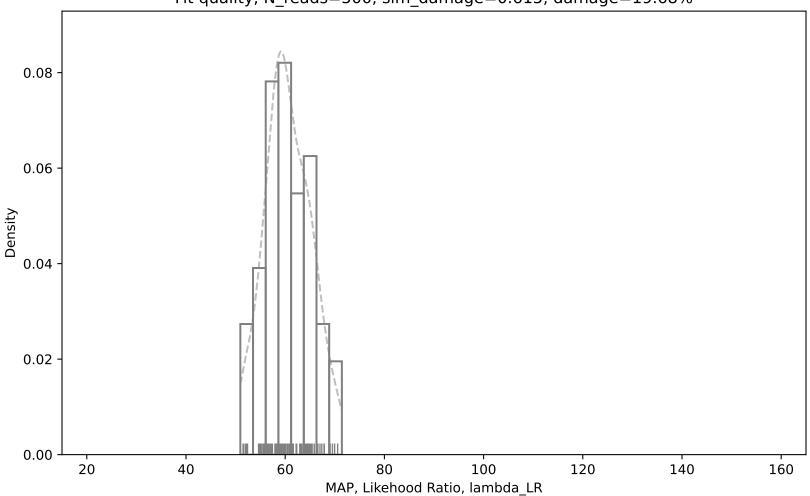
Fit quality, N\_reads=300, sim\_damage=0.615, damage=19.68%



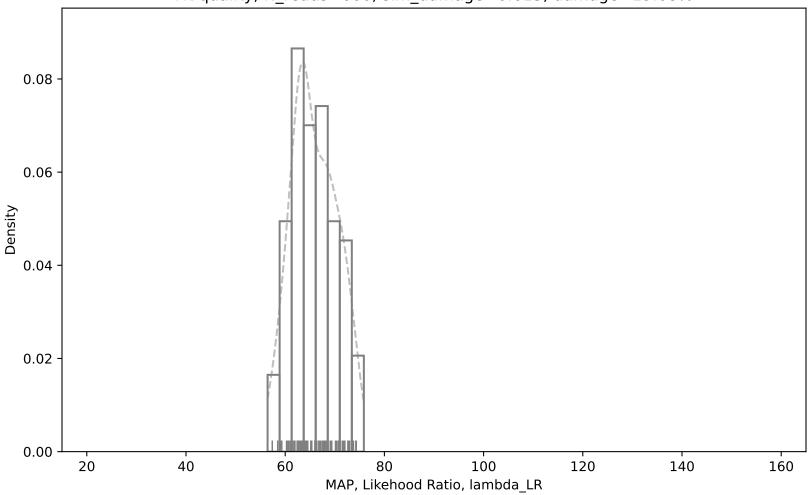
Fit quality, N\_reads=400, sim\_damage=0.615, damage=19.68%



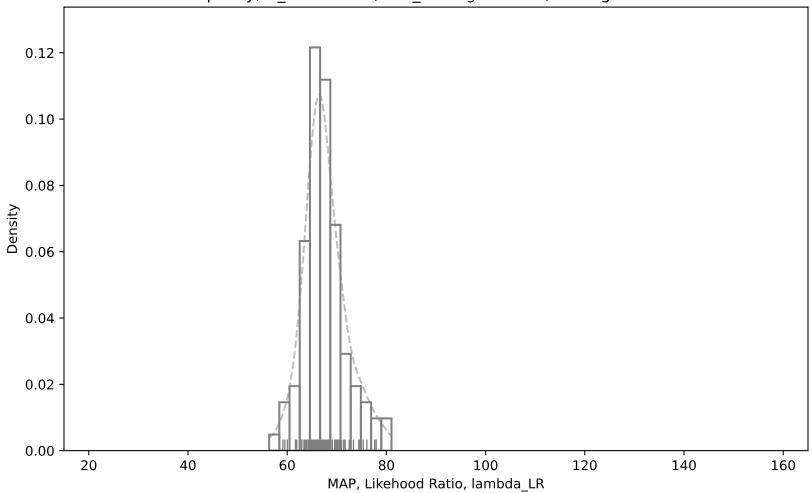
Fit quality, N\_reads=500, sim\_damage=0.615, damage=19.68%



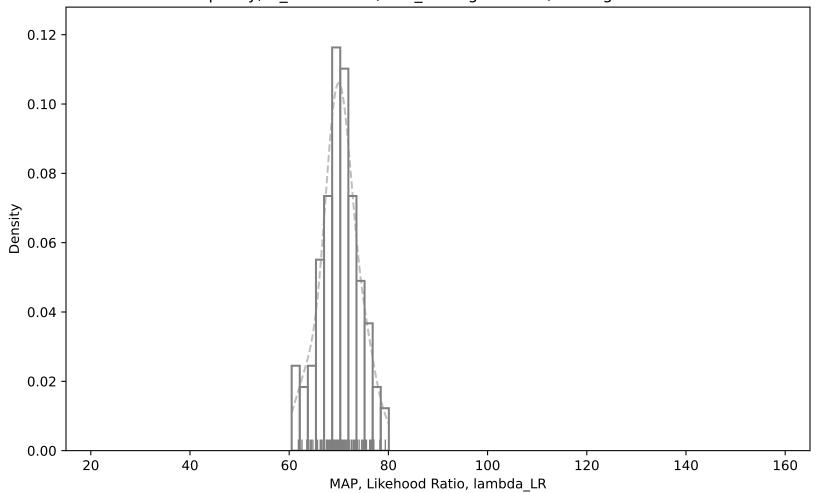
Fit quality, N\_reads=600, sim\_damage=0.615, damage=19.68%



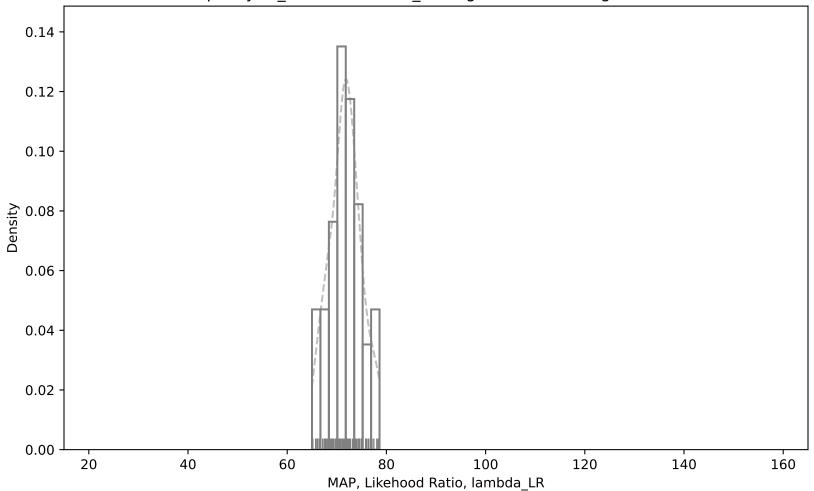
Fit quality, N\_reads=700, sim\_damage=0.615, damage=19.68%



Fit quality, N\_reads=800, sim\_damage=0.615, damage=19.68%



Fit quality, N\_reads=900, sim\_damage=0.615, damage=19.68%



Fit quality, N\_reads=1000, sim\_damage=0.615, damage=19.68% 0.200 0.175 0.150 -0.125 On Density 0.075 -0.050 -0.025 0.000 20 60 40 140 80 100 120 160

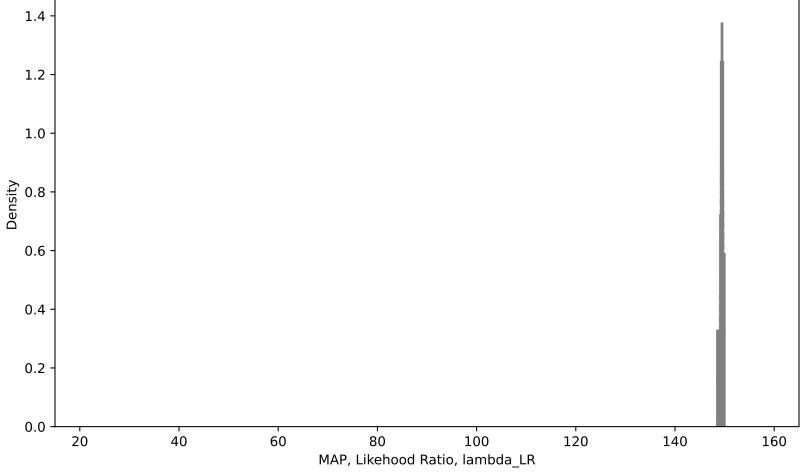
Fit quality, N\_reads=5000, sim\_damage=0.615, damage=19.68% 0.08 0.07 0.06 0.05 Density 40.0 0.03 0.02 0.01 0.00 20 60 80 40 100 120 140 160 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=10000, sim\_damage=0.615, damage=19.68% 0.08 0.07 0.06 0.05 Density 60.0 0.03 0.02 0.01 0.00 20 60 80 40 100 120 140 160

Fit quality, N\_reads=100000, sim\_damage=0.615, damage=19.68% 0.12 0.10 0.08 Density 0.04 0.02 0.00 20 60 80 40 100 120 140 160

Fit quality, N\_reads=1000000, sim\_damage=0.615, damage=19.68% 0.4 0.3 -Density 0.2 0.1 0.0 20 60 80 40 100 120 140 160 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=10000000, sim\_damage=0.615, damage=19.68%



Fit quality, N\_reads=100, sim\_damage=0.93, damage=29.65% 0.10 0.08 Density 90.0 0.04 0.02 0.00 60 80 40 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=200, sim\_damage=0.93, damage=29.65% 0.08 0.06 Density 0.04 0.02 0.00 80 40 60 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=300, sim\_damage=0.93, damage=29.65% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 80 40 60 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=400, sim\_damage=0.93, damage=29.65% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 40 60 80 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=500, sim\_damage=0.93, damage=29.65% 0.10 0.08 Density 90.00 0.04 0.02 0.00 40 60 80 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=600, sim\_damage=0.93, damage=29.65% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 60 40 80 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=700, sim\_damage=0.93, damage=29.65% 0.20 0.15 -Density 0.10 0.05 0.00 60 40 80 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=800, sim\_damage=0.93, damage=29.65% 0.16 0.14 0.12 0.10 Density 80.0 0.06 0.04 0.02 0.00 60 40 80 100 120 140 160 180 200

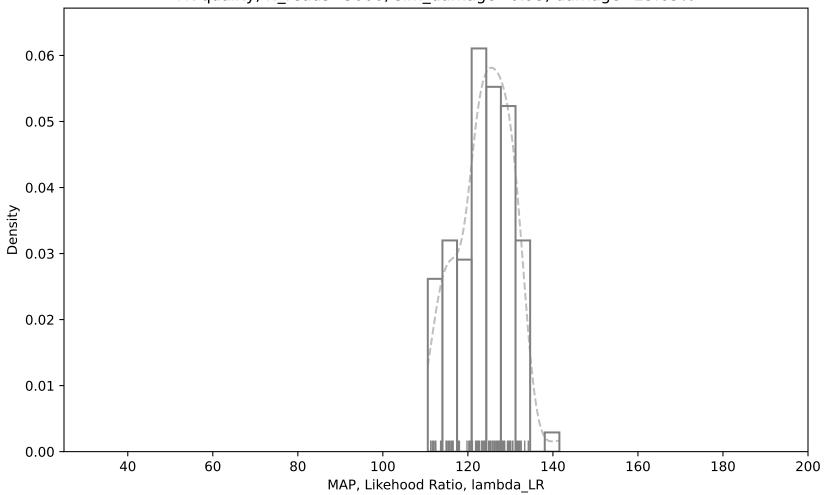
MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=900, sim\_damage=0.93, damage=29.65% 0.12 0.10 0.08 Density 90.0 0.04 0.02 0.00 60 40 80 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=1000, sim\_damage=0.93, damage=29.65% 0.10 0.08 Density 90.0 0.04 0.02 0.00 60 40 80 100 120 140 160 180 200

MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=5000, sim\_damage=0.93, damage=29.65%



Fit quality, N\_reads=10000, sim\_damage=0.93, damage=29.65% 0.08 0.07 0.06 Density 0.04 0.03 0.02 0.01 0.00 80 60 40 100 120 140 160 180 200

MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=100000, sim\_damage=0.93, damage=29.65% 0.08 0.06 -Density 0.04 0.02 0.00 80 60 40 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

Fit quality, N\_reads=1000000, sim\_damage=0.93, damage=29.65% 0.40 0.35 0.30 0.25 Density 0.20 0.15 0.10 0.05 0.00 60 80 40 100 120 140 160 180 200 MAP, Likehood Ratio, lambda\_LR

