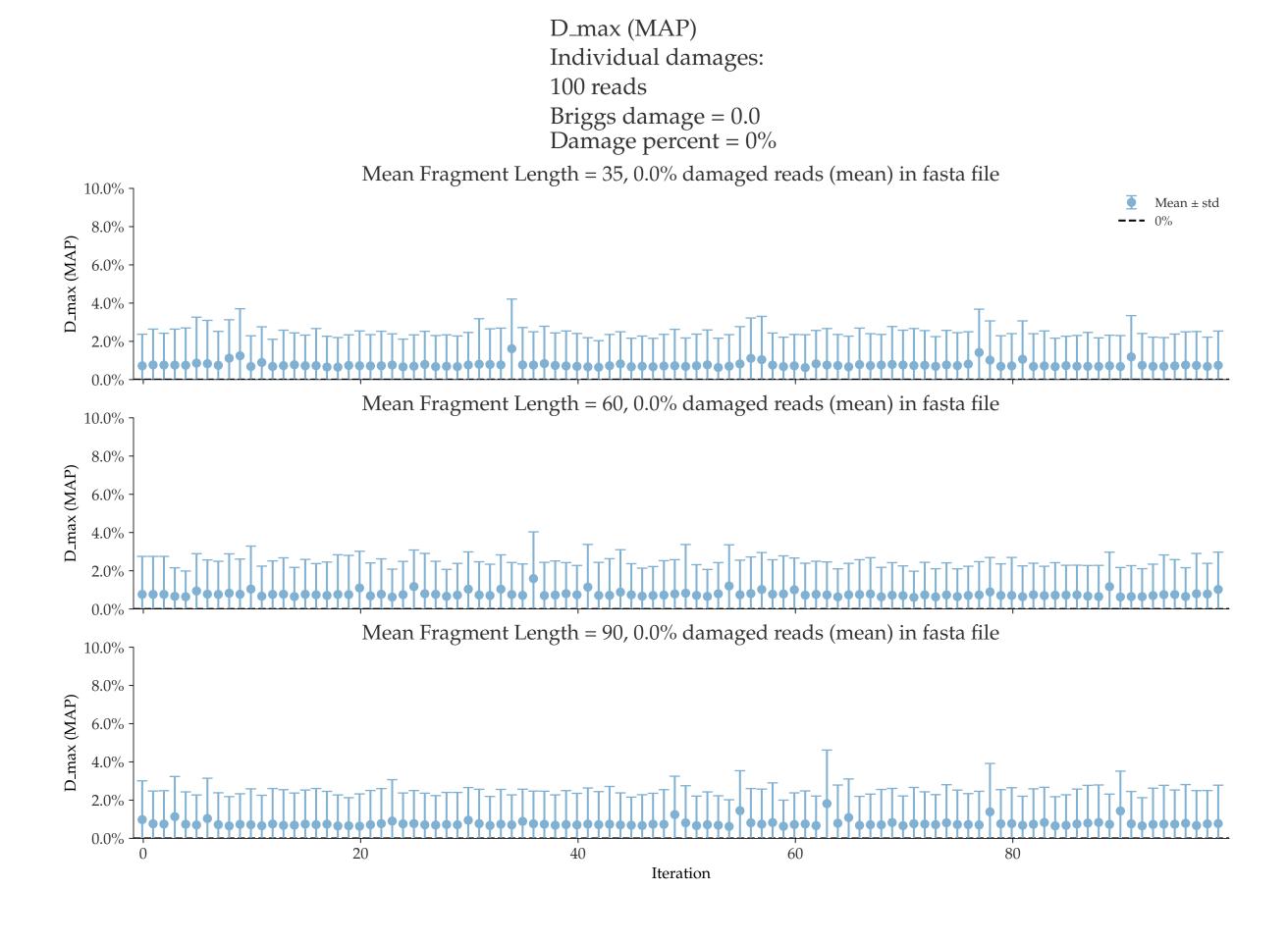
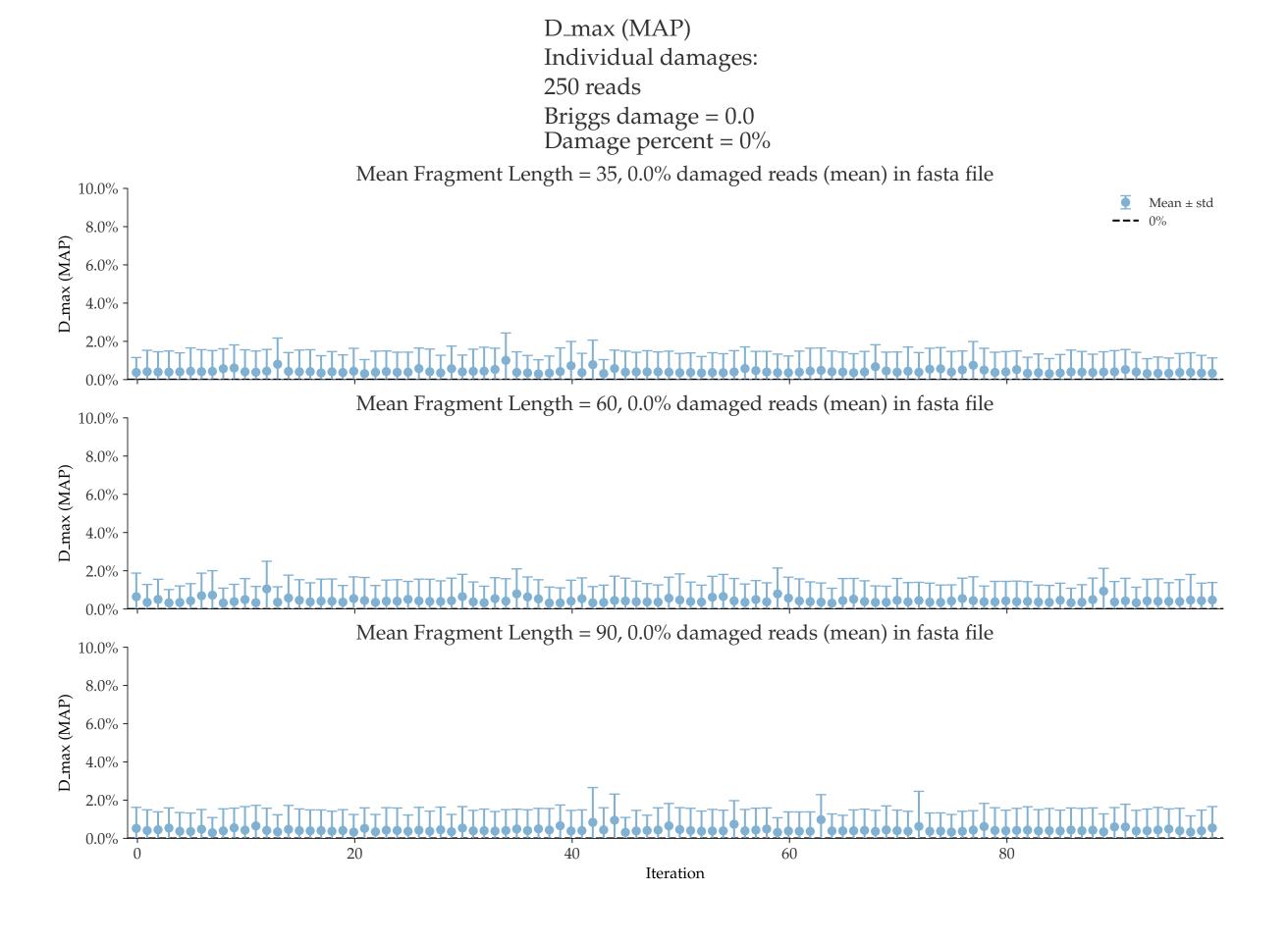
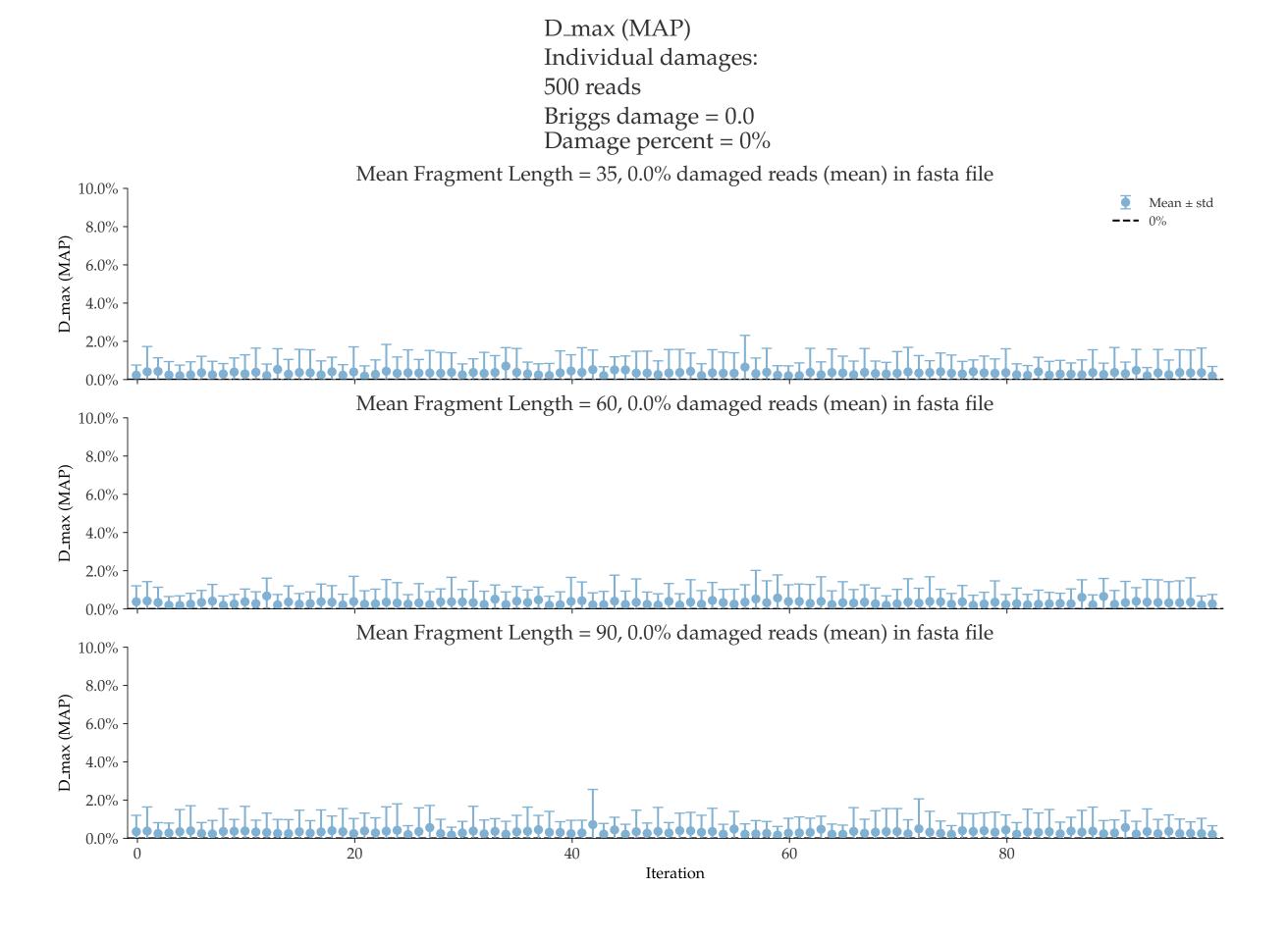
Individual damages: 10 reads Briggs damage = 0.0 Damage percent = 0% Mean Fragment Length = 35, 0.0% damaged reads (mean) in fasta file 10.0% Mean ± std 8.0% D_max (MAP) 6.0% 2.0% 0.0% Mean Fragment Length = 60, 0.0% damaged reads (mean) in fasta file 10.0% 8.0% D_max (MAP) 6.0% 2.0% 0.0% Mean Fragment Length = 90, 0.0% damaged reads (mean) in fasta file 10.0% 8.0% D_max (MAP) 6.0% 2.0% 0.0% 20 40 60 80 0 Iteration

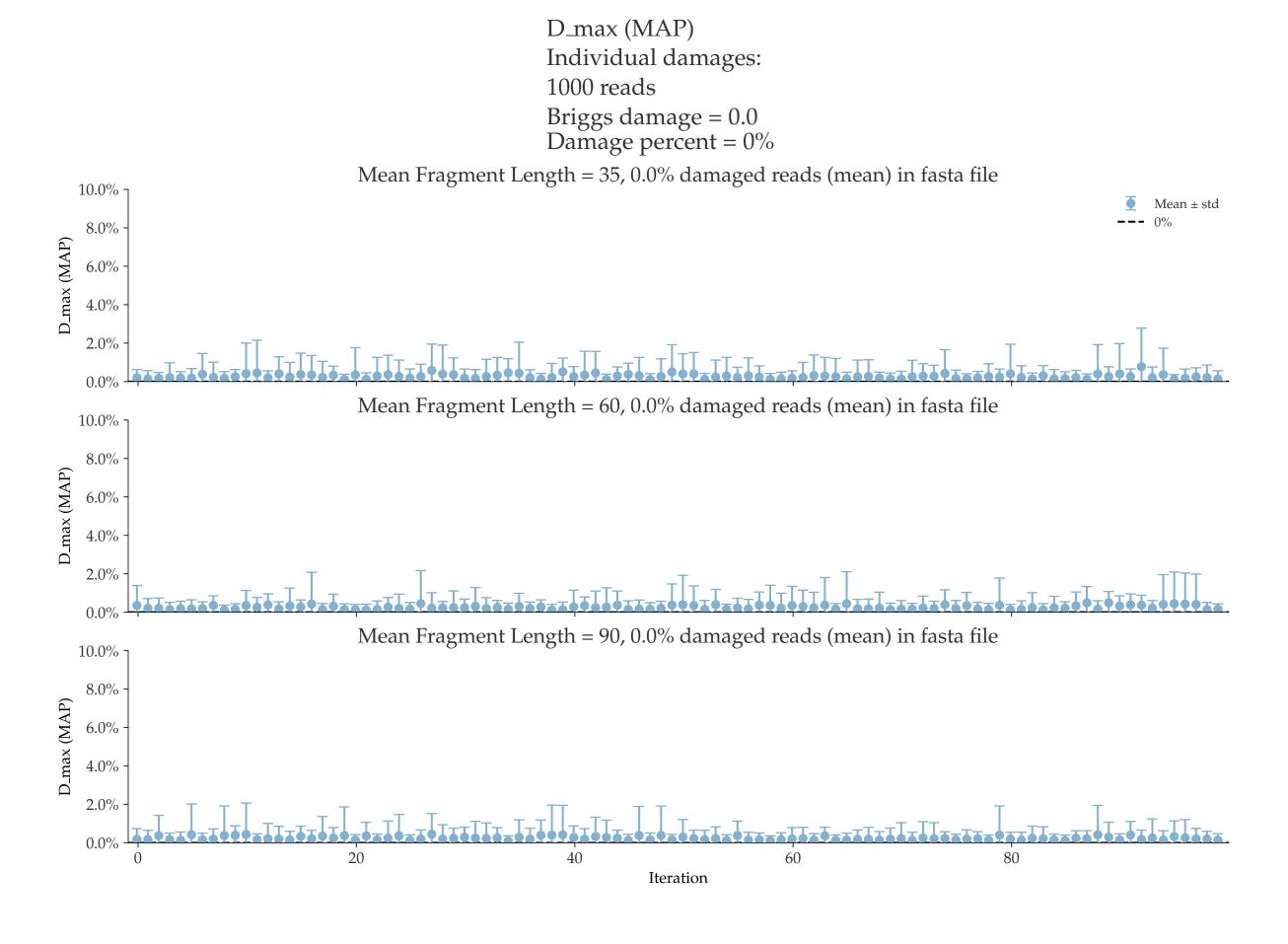
Individual damages: 25 reads Briggs damage = 0.0Damage percent = 0% Mean Fragment Length = 35, 0.0% damaged reads (mean) in fasta file 10.0% -8.0% D_max (MAP) Mean ± stc 2.0% 0.0% Mean Fragment Length = 60, 0.0% damaged reads (mean) in fasta file 10.0% -8.0% D_max (MAP) 2.0% 0.0% Mean Fragment Length = 90, 0.0% damaged reads (mean) in fasta file 10.0% -8.0% D_max (MAP) 2.0% 0.0% 20 60 40 80 Iteration

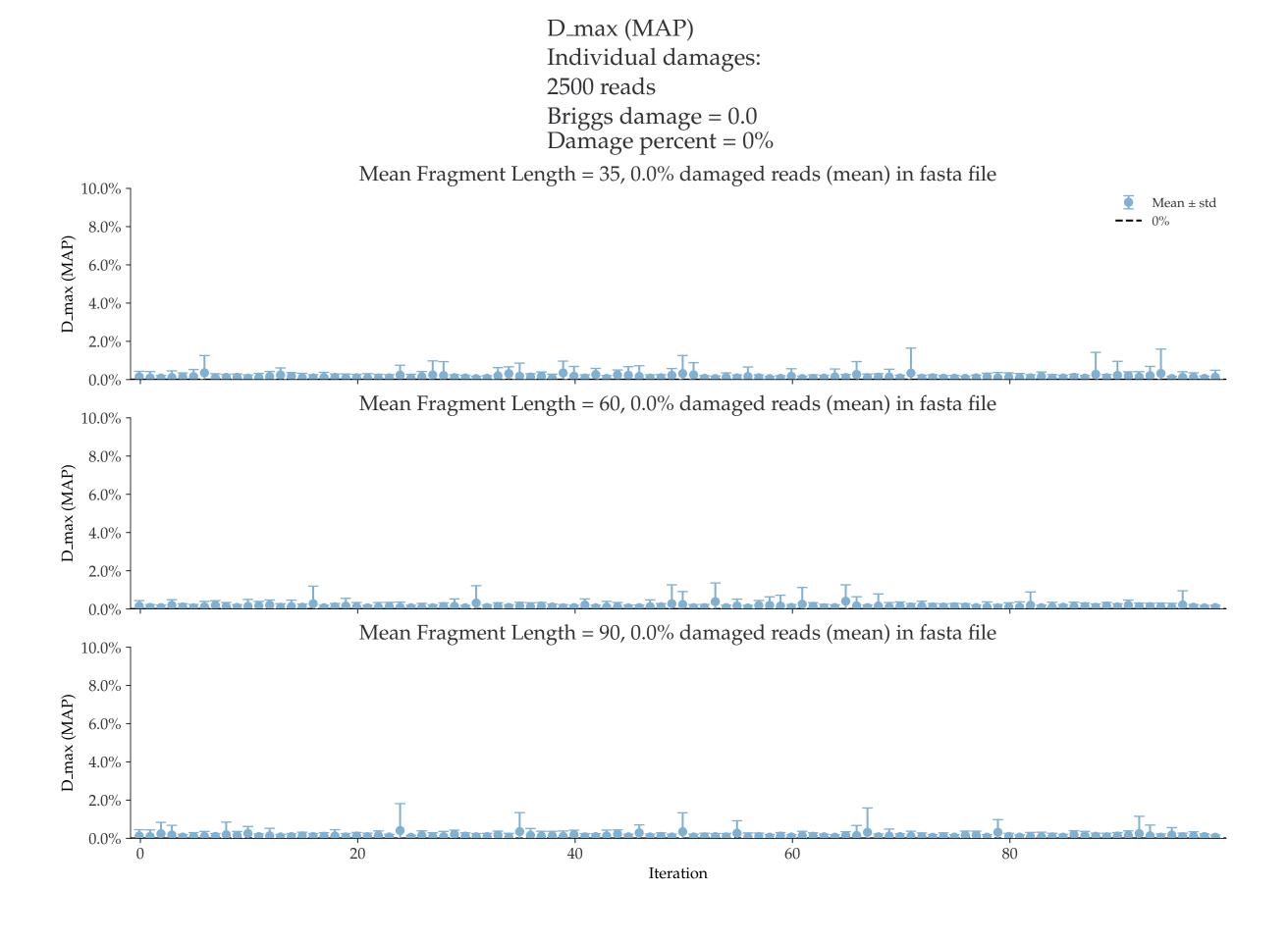
Individual damages: 50 reads Briggs damage = 0.0 Damage percent = 0% Mean Fragment Length = 35, 0.0% damaged reads (mean) in fasta file 10.0% -Mean \pm std 8.0% D_max (MAP) 6.0% 2.0% 0.0% Mean Fragment Length = 60, 0.0% damaged reads (mean) in fasta file 10.0% 8.0% D_max (MAP) 6.0% 2.0% 0.0% Mean Fragment Length = 90, 0.0% damaged reads (mean) in fasta file 10.0% 8.0% D_max (MAP) 6.0% 2.0% 0.0% 20 40 60 80 Iteration

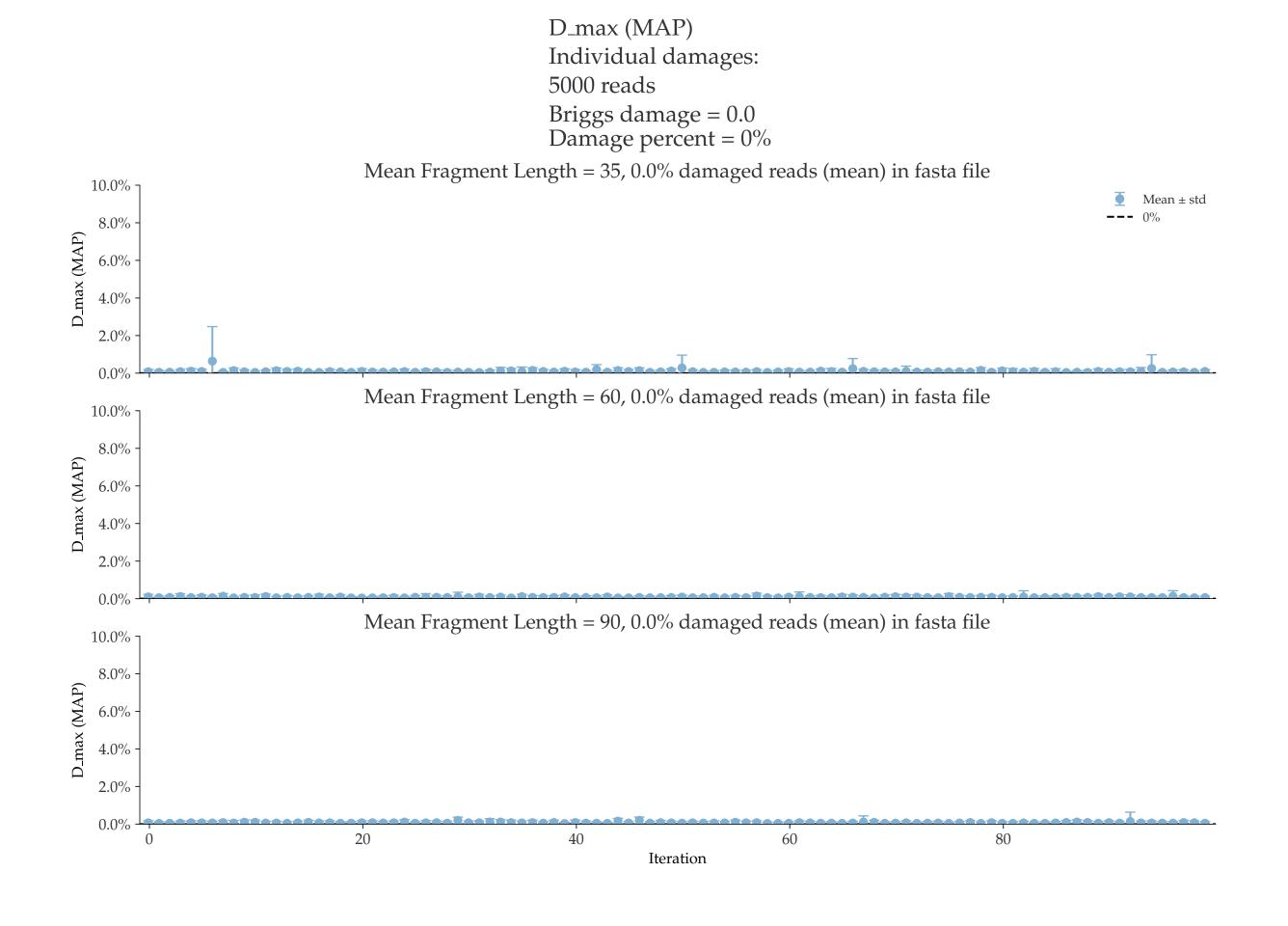


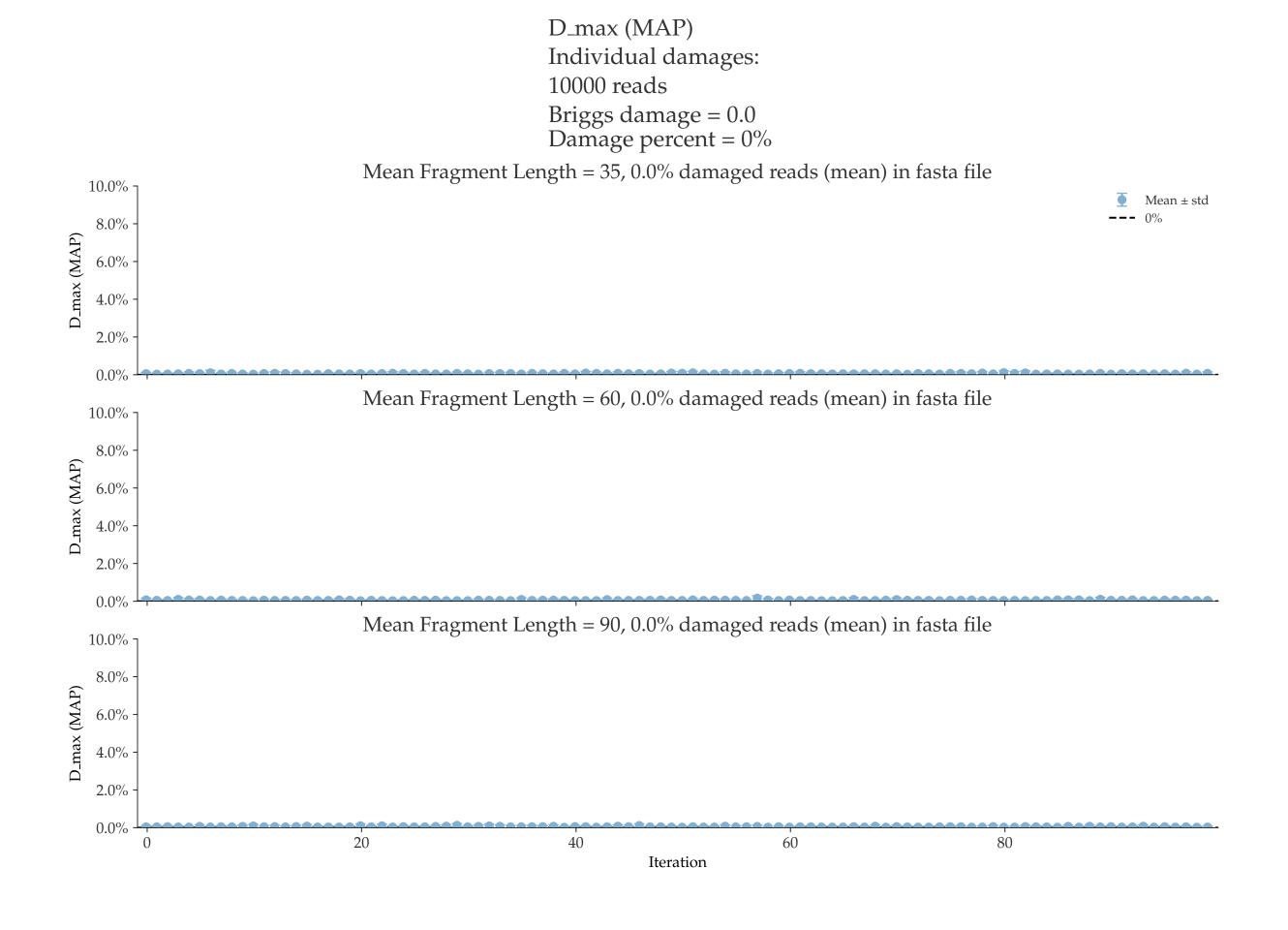


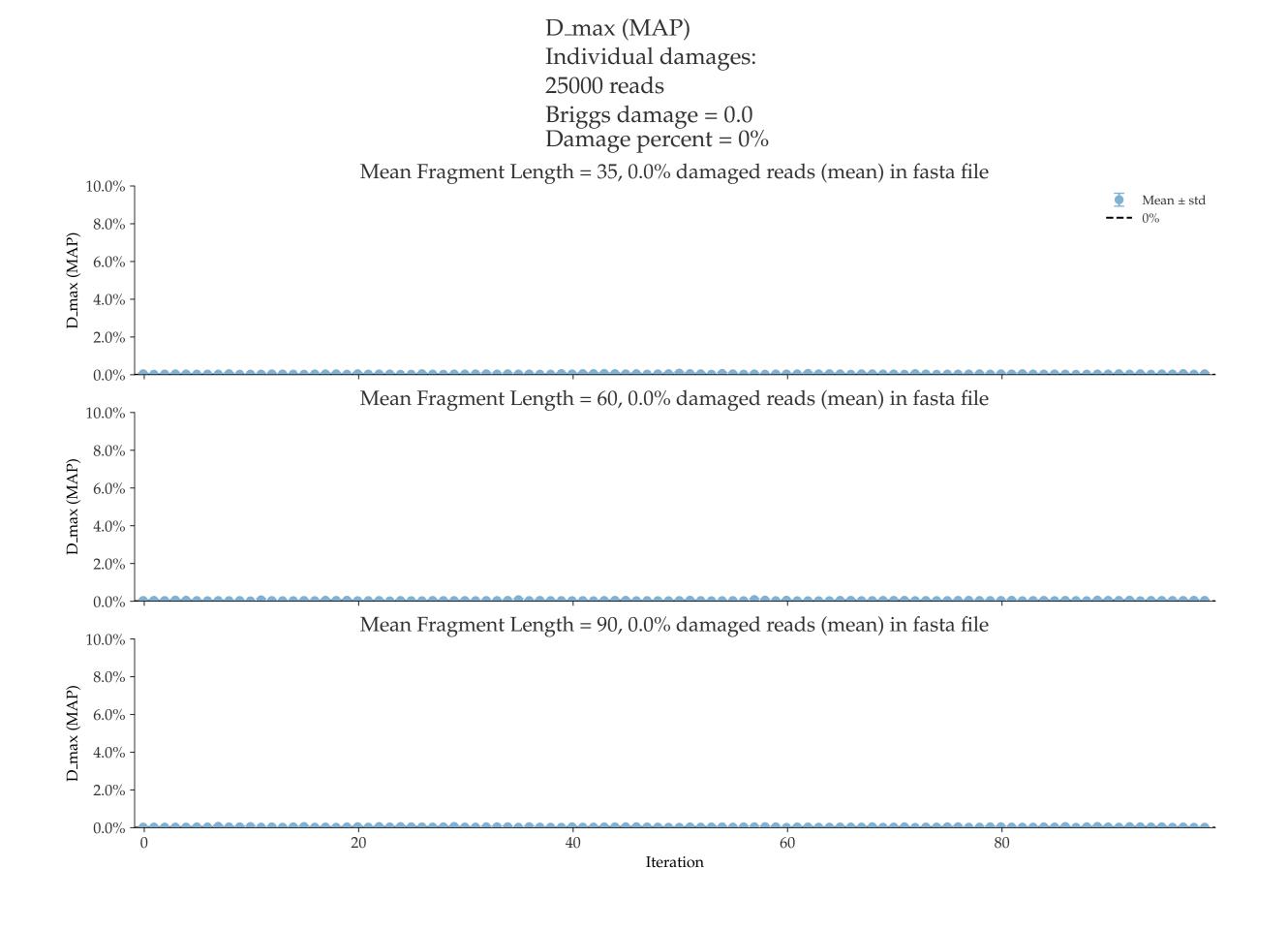


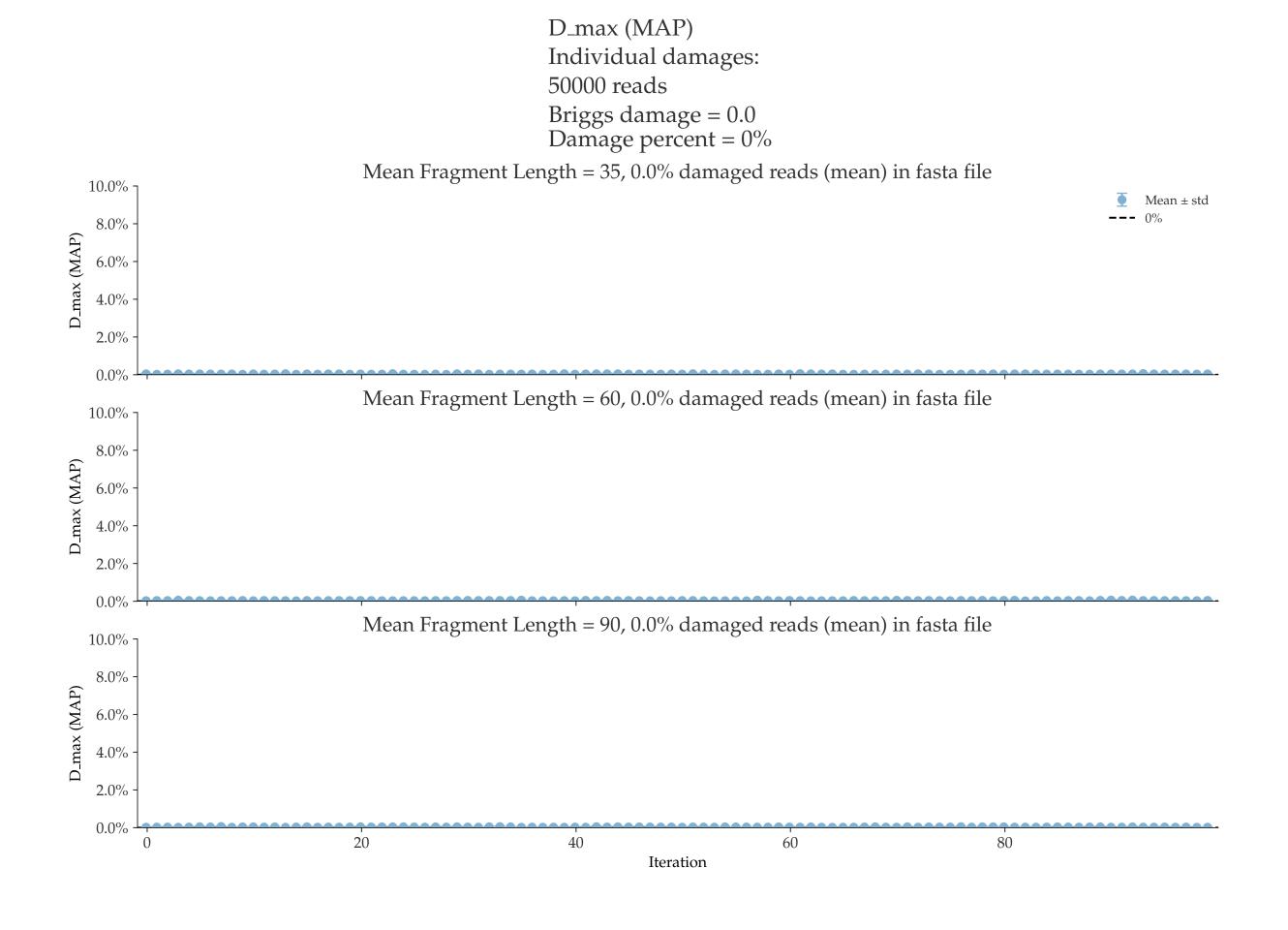


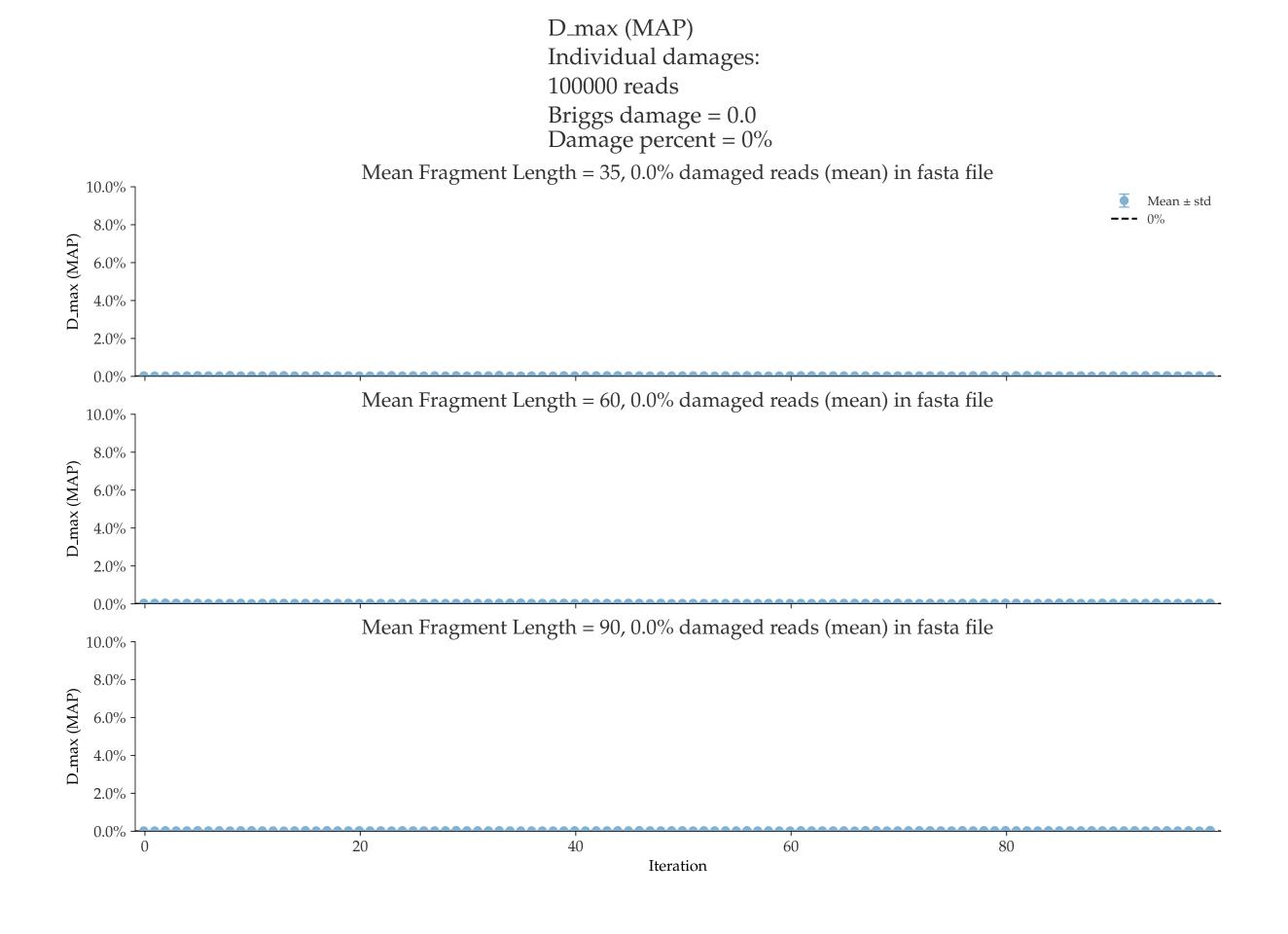










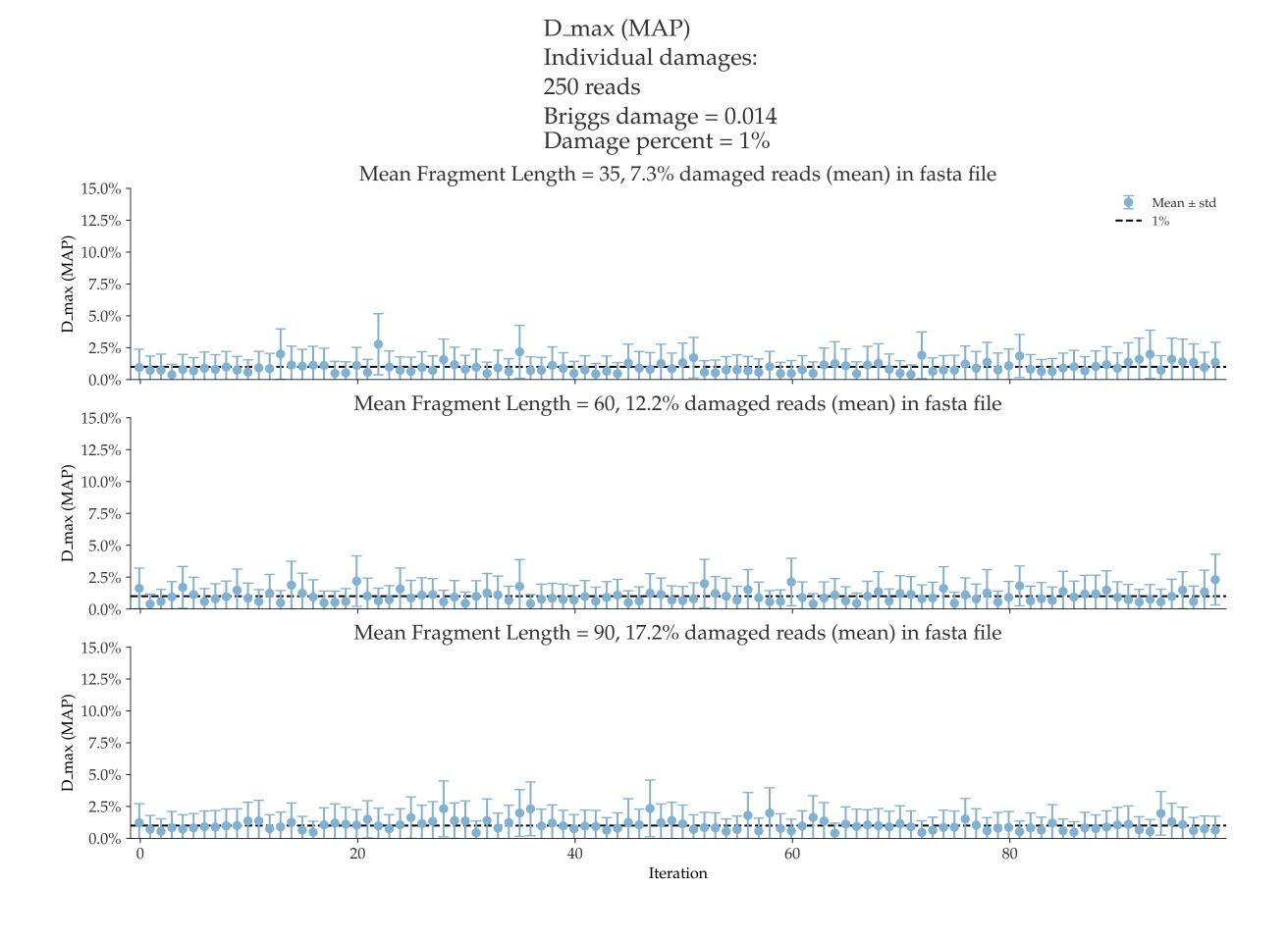


Individual damages: 10 reads Briggs damage = 0.014 Damage percent = 1% Mean Fragment Length = 35, 7.6% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% Mean ± 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 13.6% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 18.6% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

Individual damages: 25 reads Briggs damage = 0.014 Damage percent = 1% Mean Fragment Length = 35, 7.2% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 11.9% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 17.8% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

Individual damages: 50 reads Briggs damage = 0.014 Damage percent = 1% Mean Fragment Length = 35, 7.3% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **---** 1% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 11.8% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 17.6% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 60 80 40 Iteration

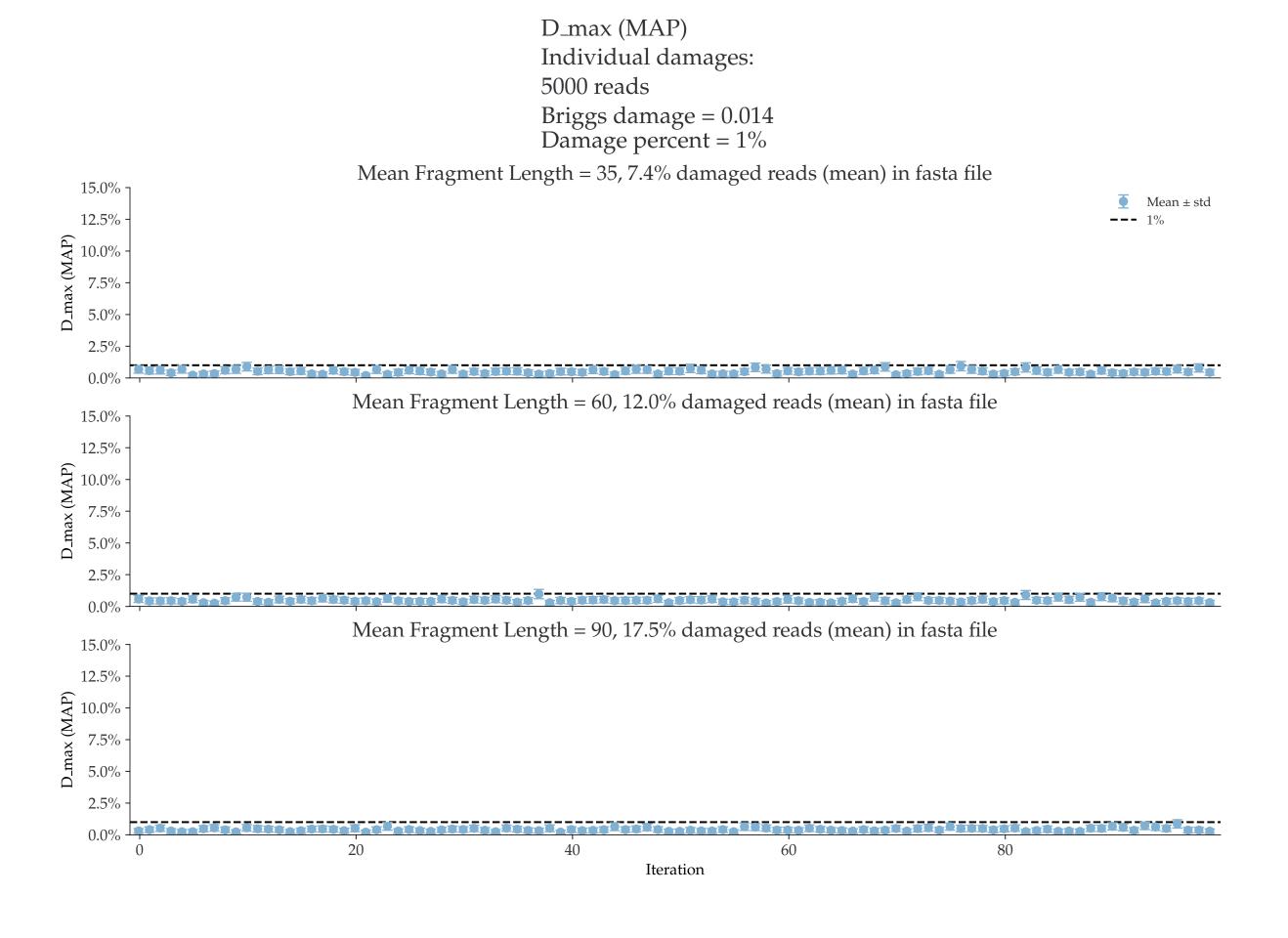
Individual damages: 100 reads Briggs damage = 0.014 Damage percent = 1% Mean Fragment Length = 35, 7.0% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **--** 1% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 11.8% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 17.2% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

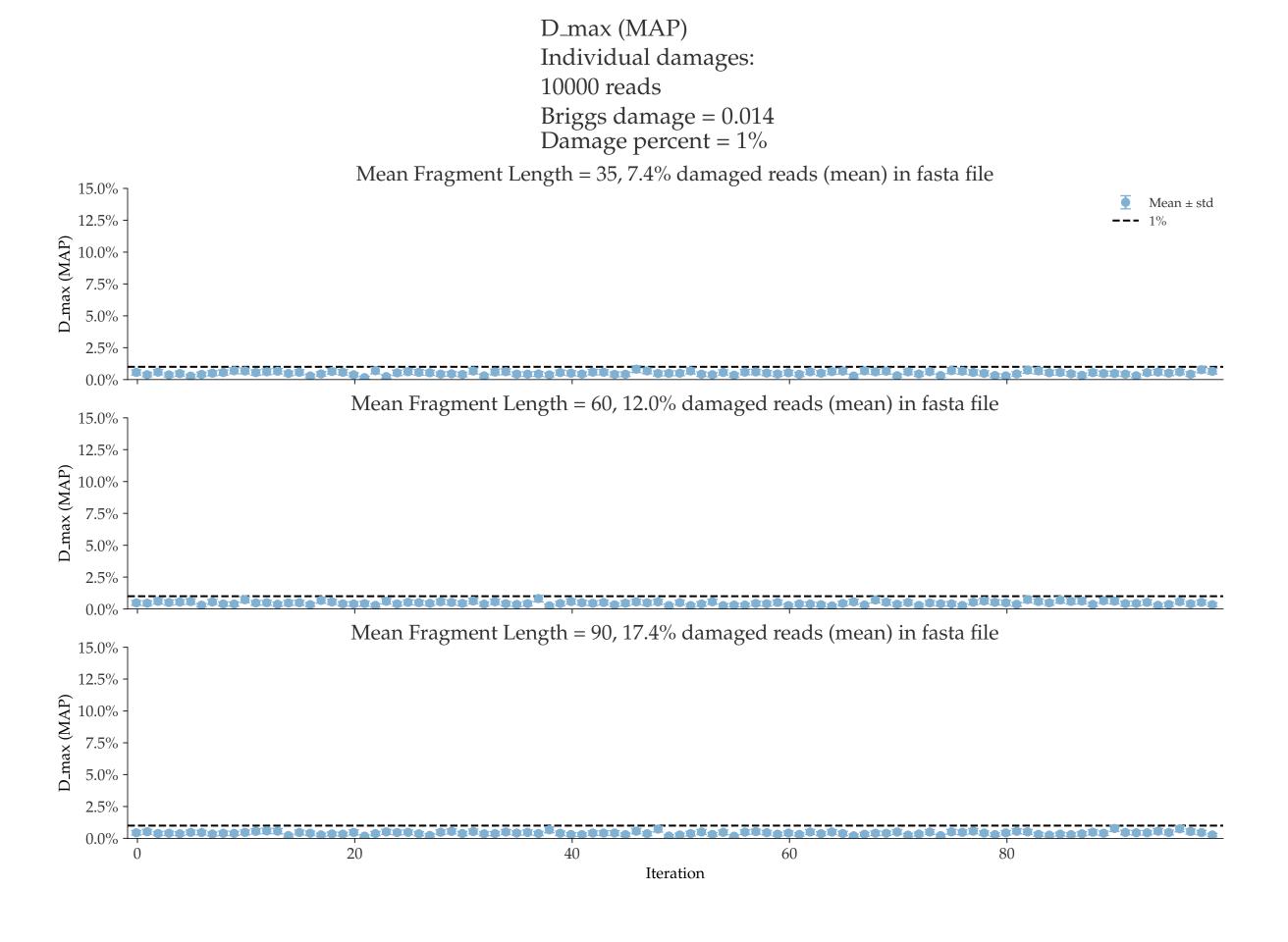


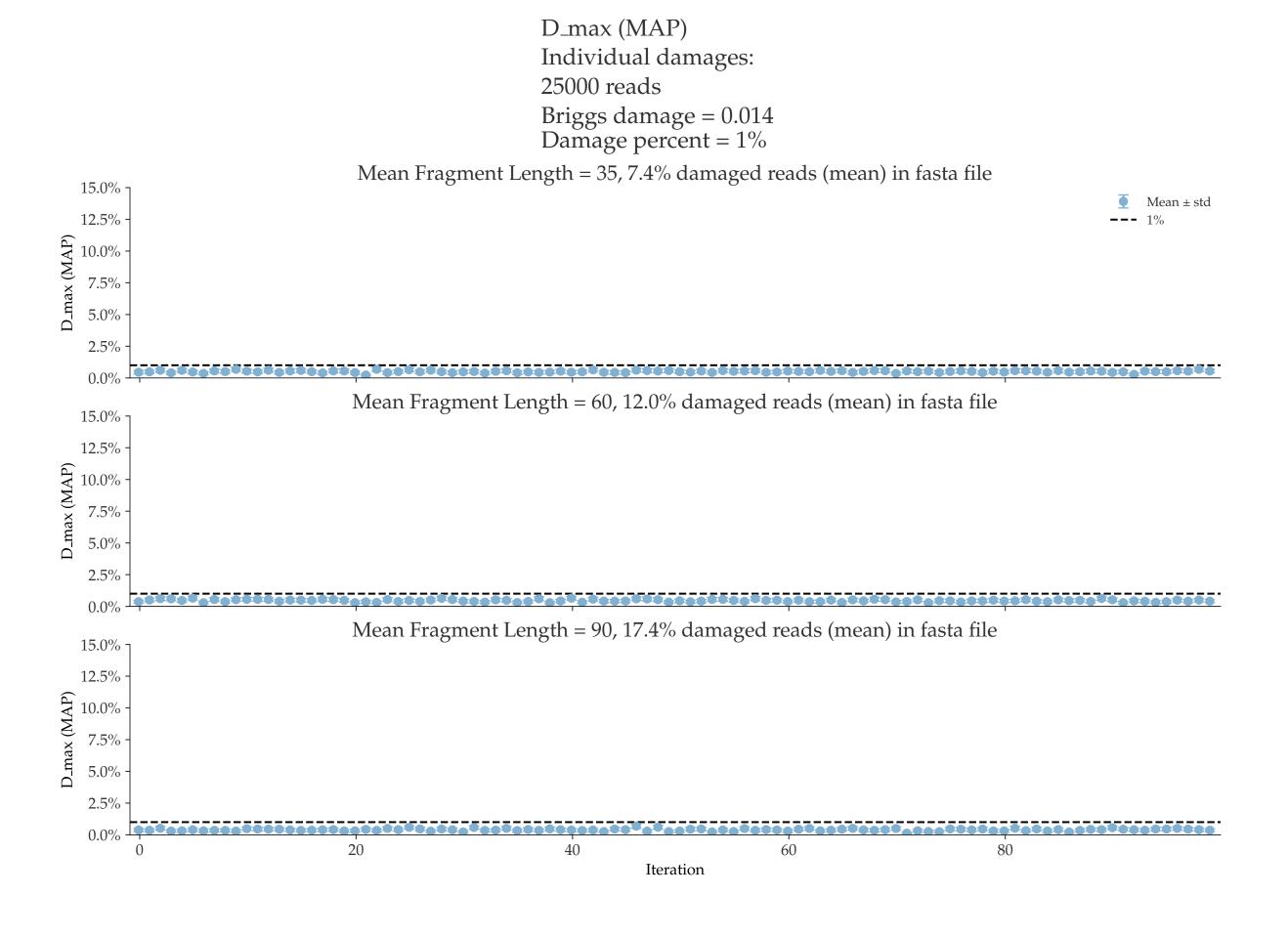


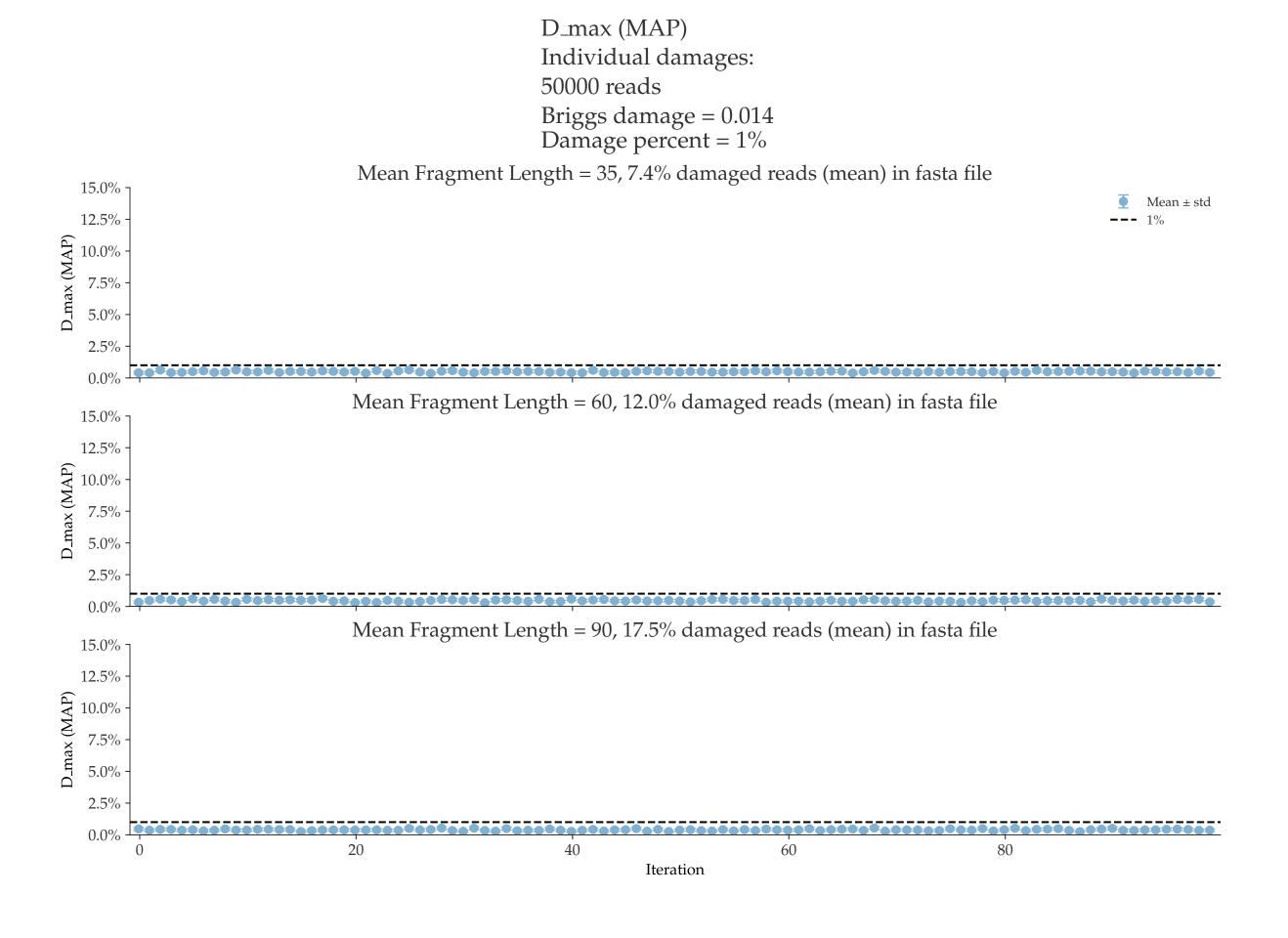


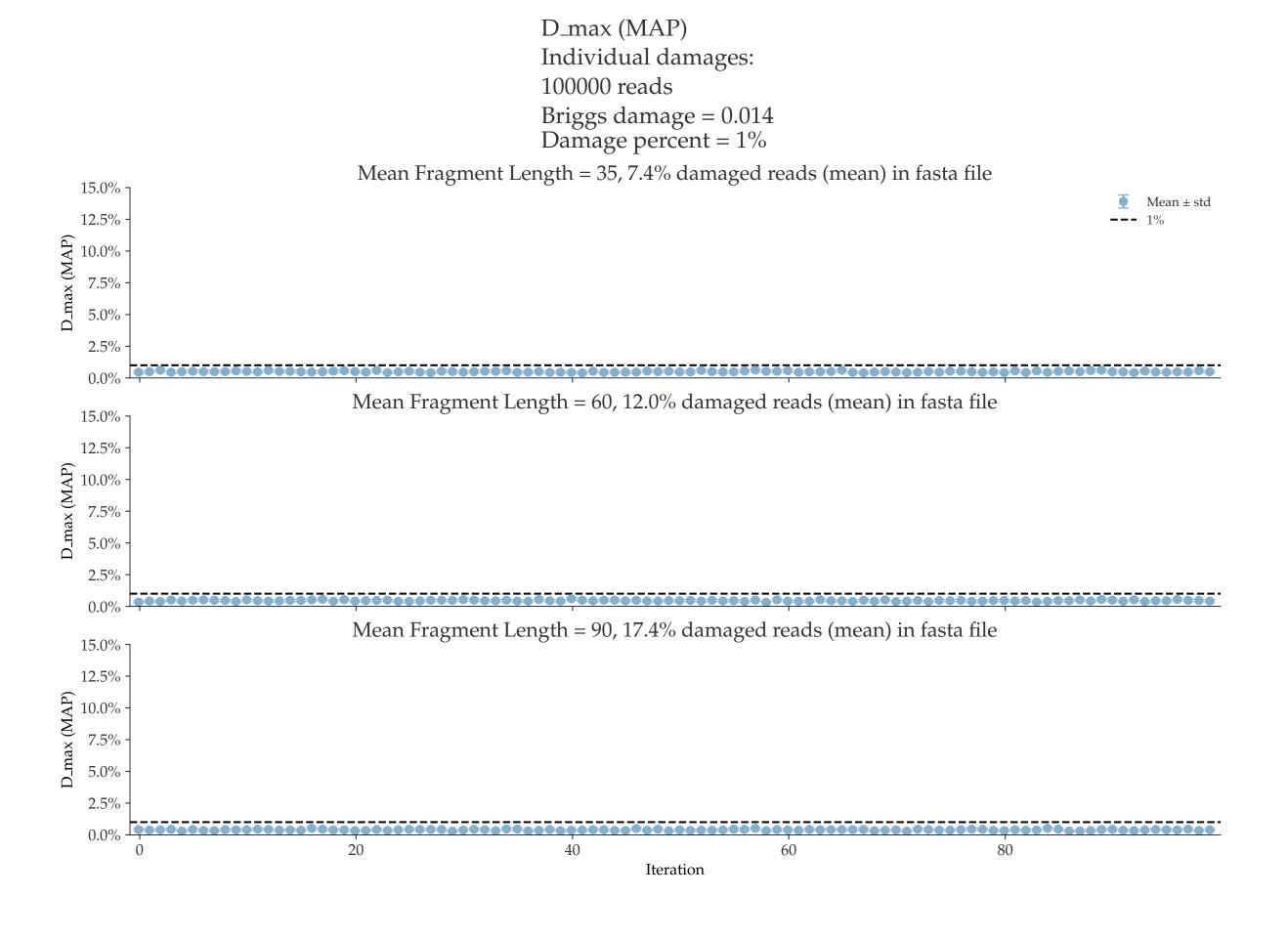










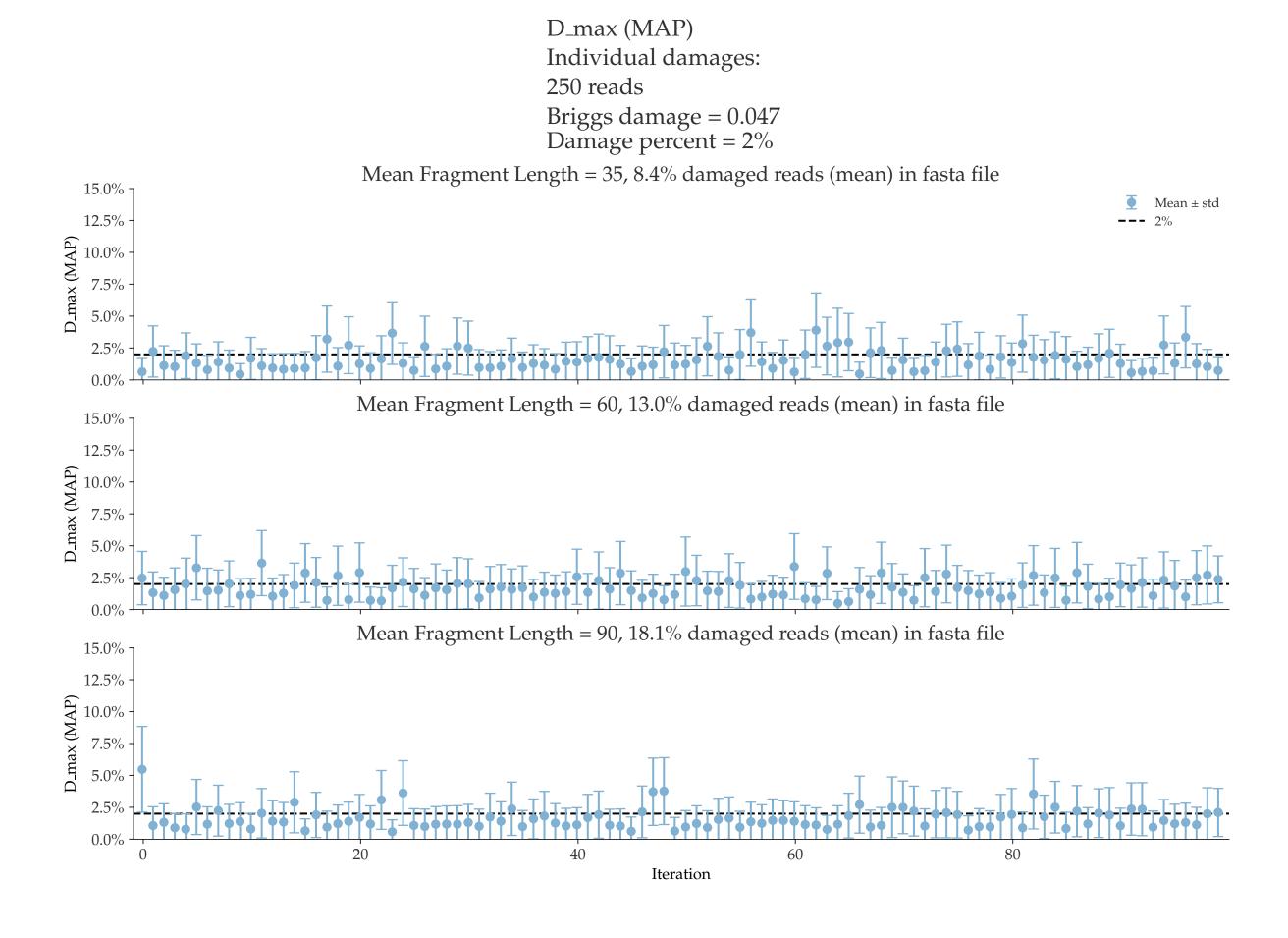


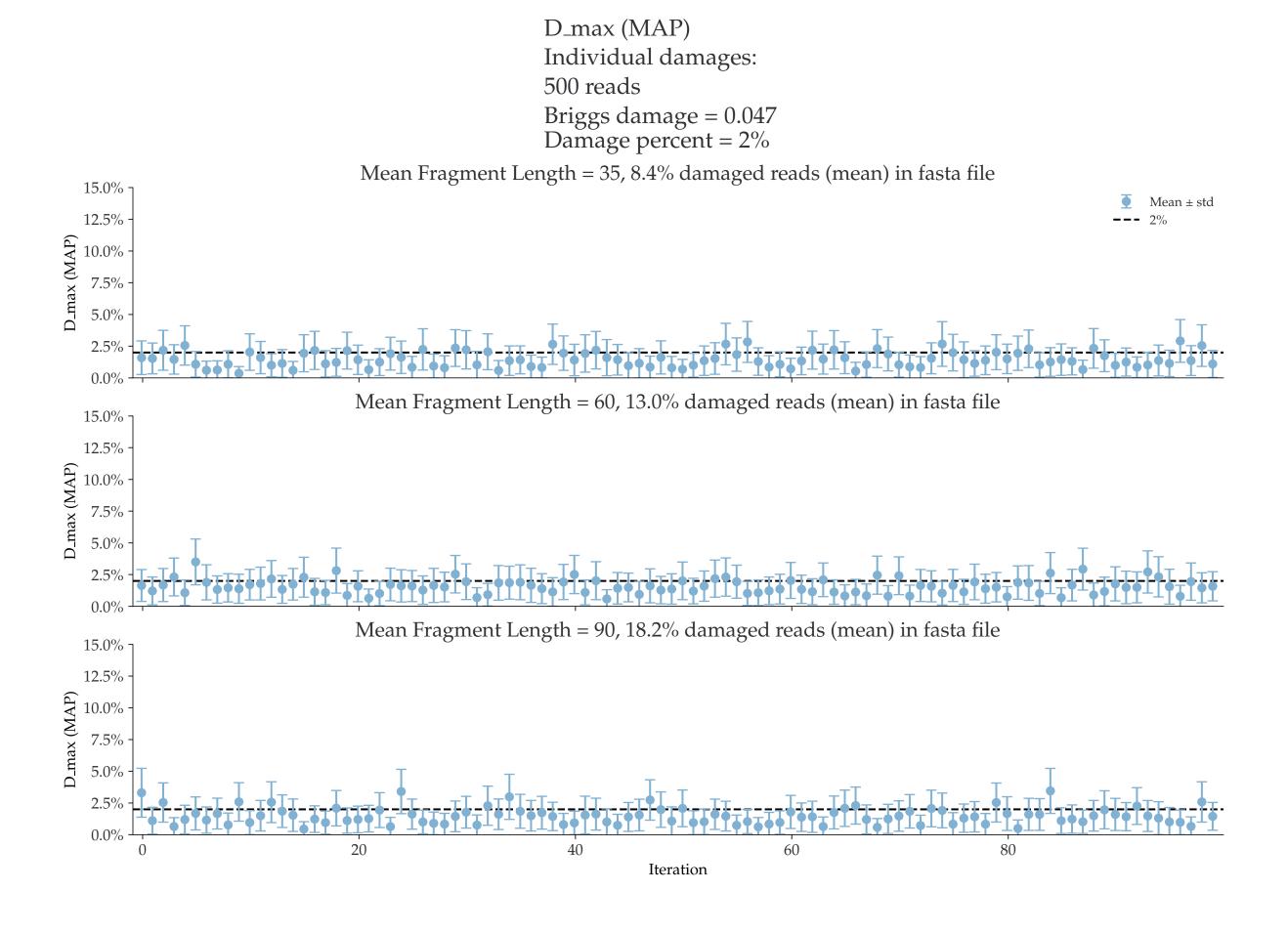
Individual damages: 10 reads Briggs damage = 0.047Damage percent = 2% Mean Fragment Length = 35, 9.0% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% Mean ± std 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 13.0% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 17.0% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 0 Iteration

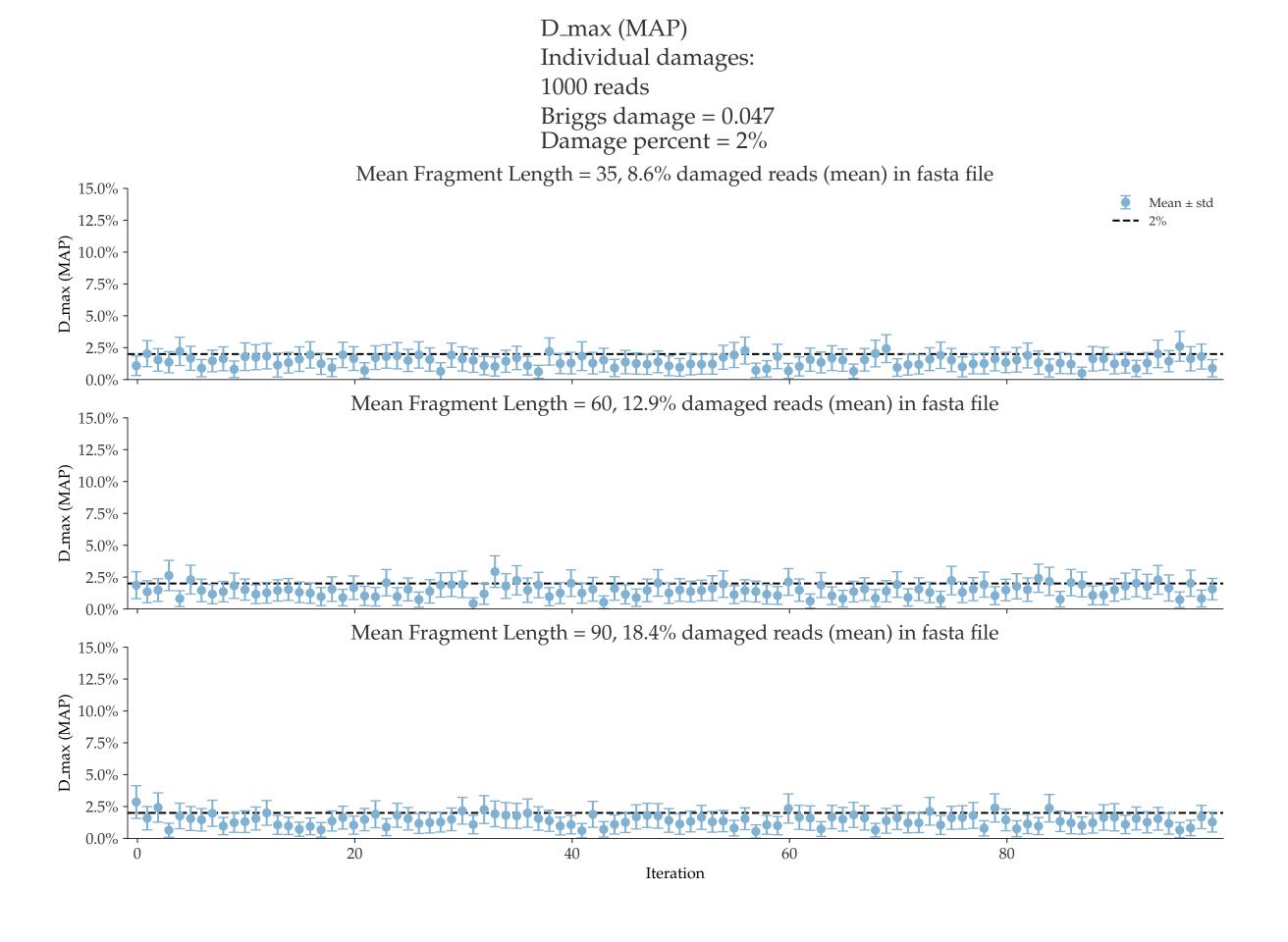
Individual damages: 25 reads Briggs damage = 0.047Damage percent = 2% Mean Fragment Length = 35, 9.1% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 13.1% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 18.1% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

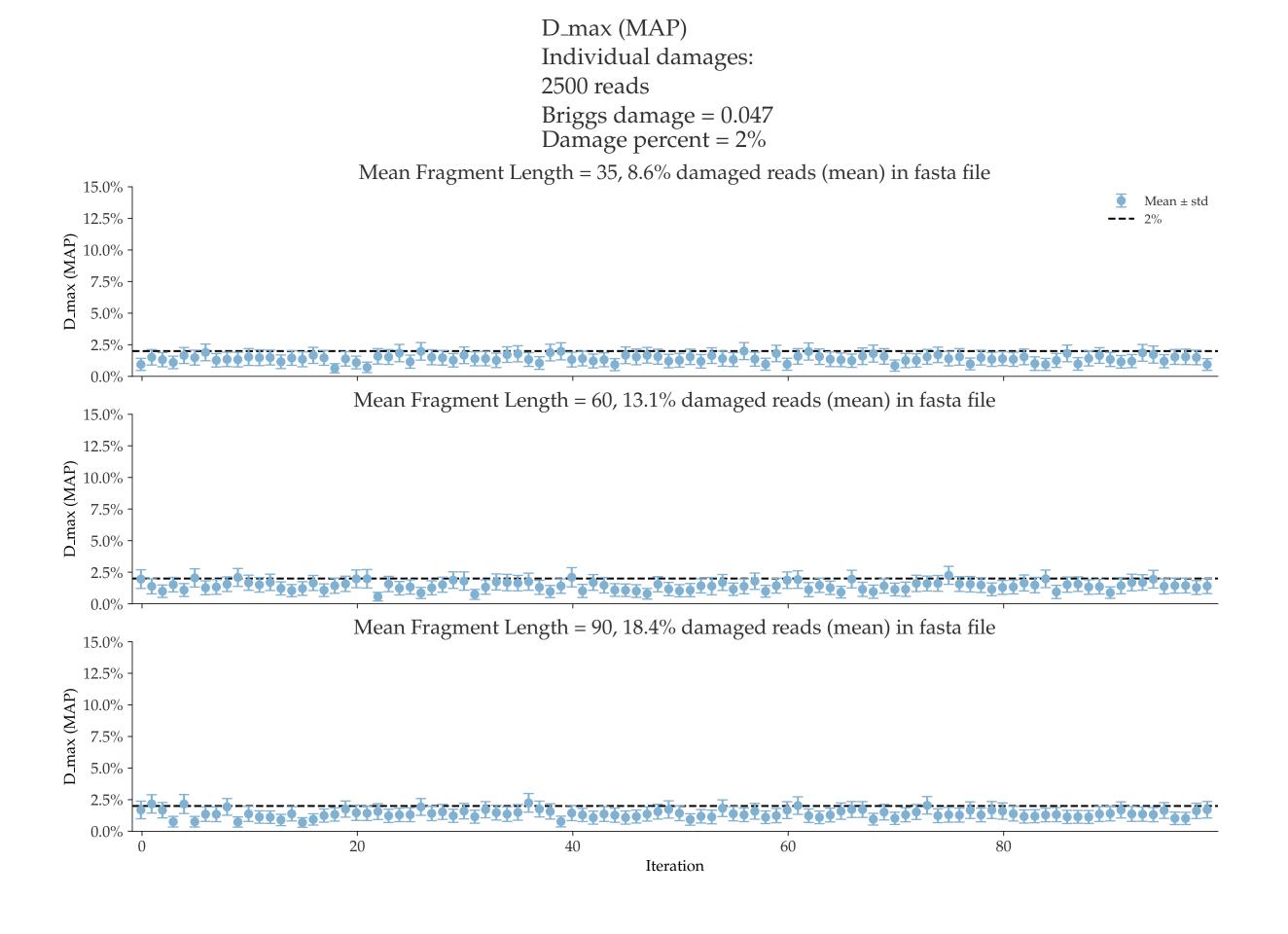
Individual damages: 50 reads Briggs damage = 0.047Damage percent = 2% Mean Fragment Length = 35, 8.5% damaged reads (mean) in fasta file 15.0% Mean \pm std 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 12.6% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 18.2% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0%7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

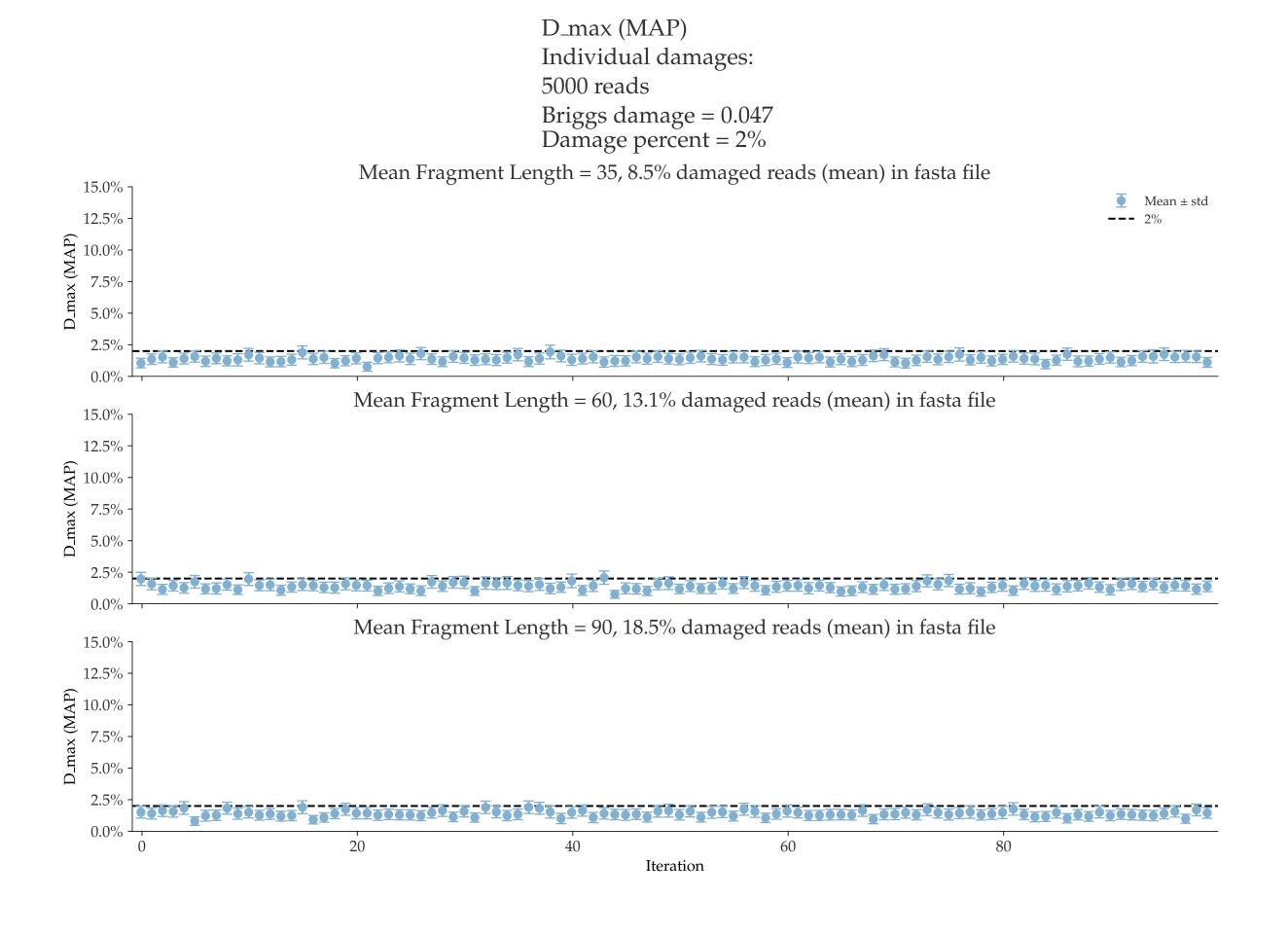
Individual damages: 100 reads Briggs damage = 0.047Damage percent = 2% Mean Fragment Length = 35, 8.4% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **--** 2% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 12.6% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 90, 17.8% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

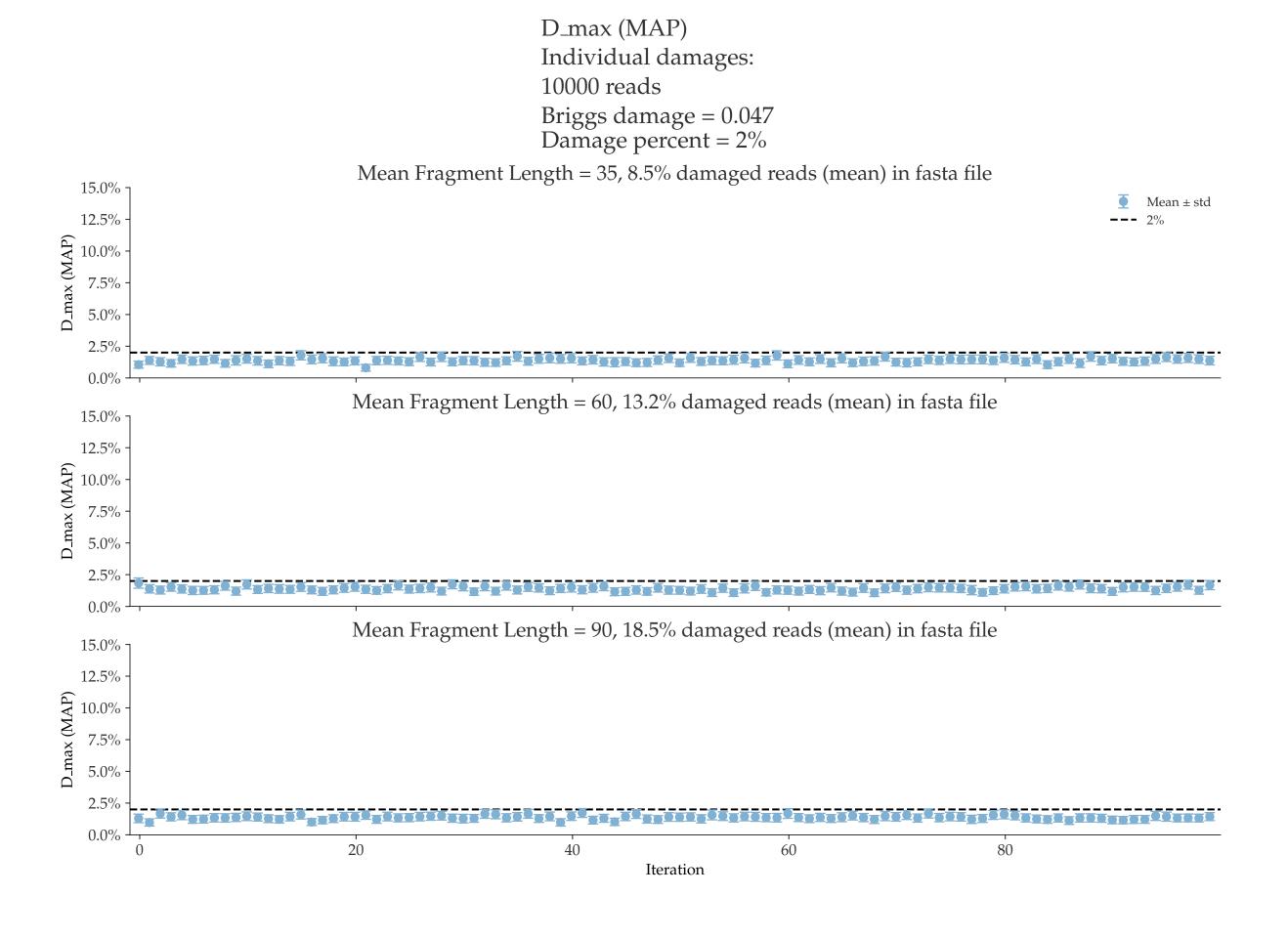


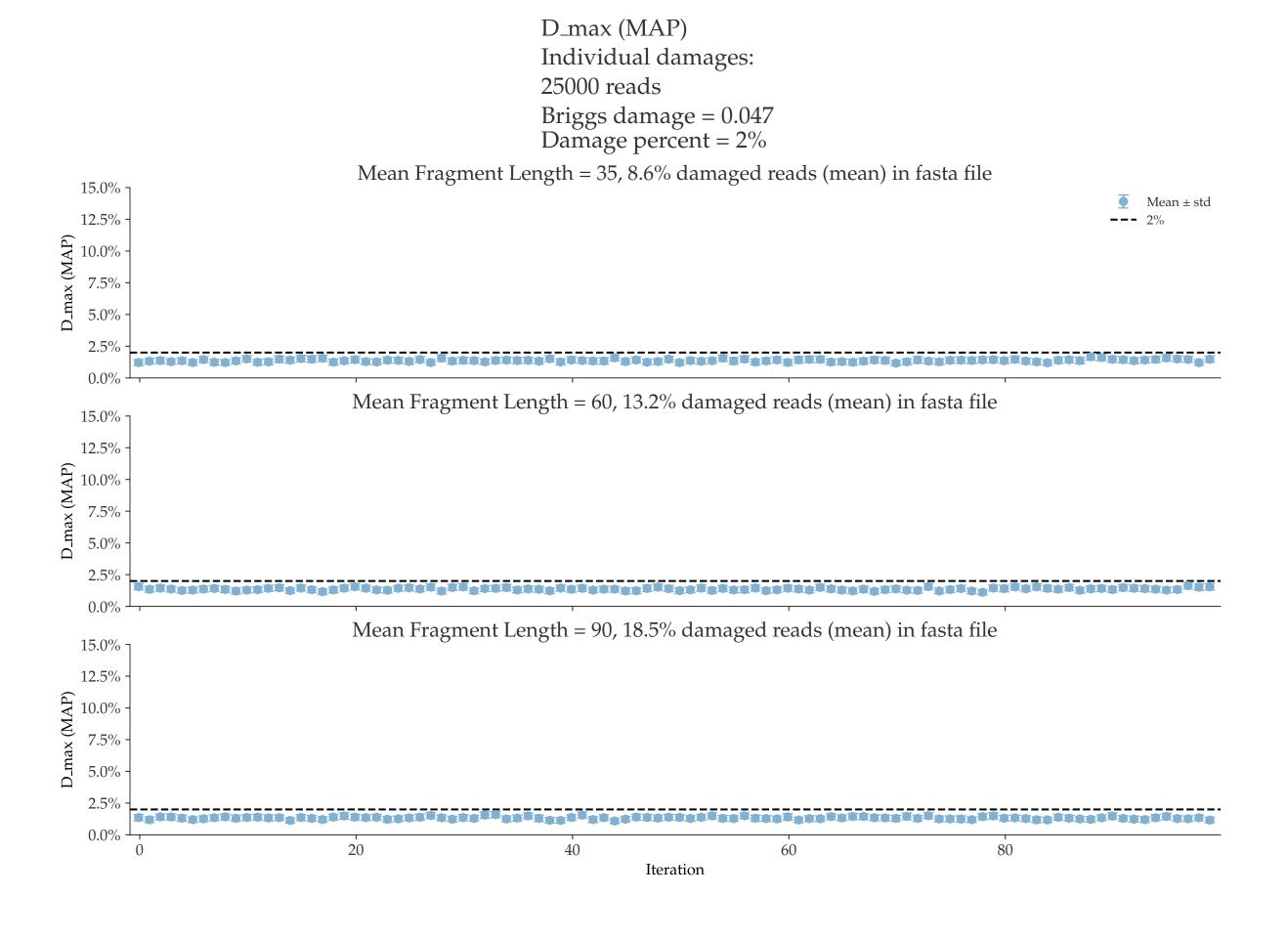


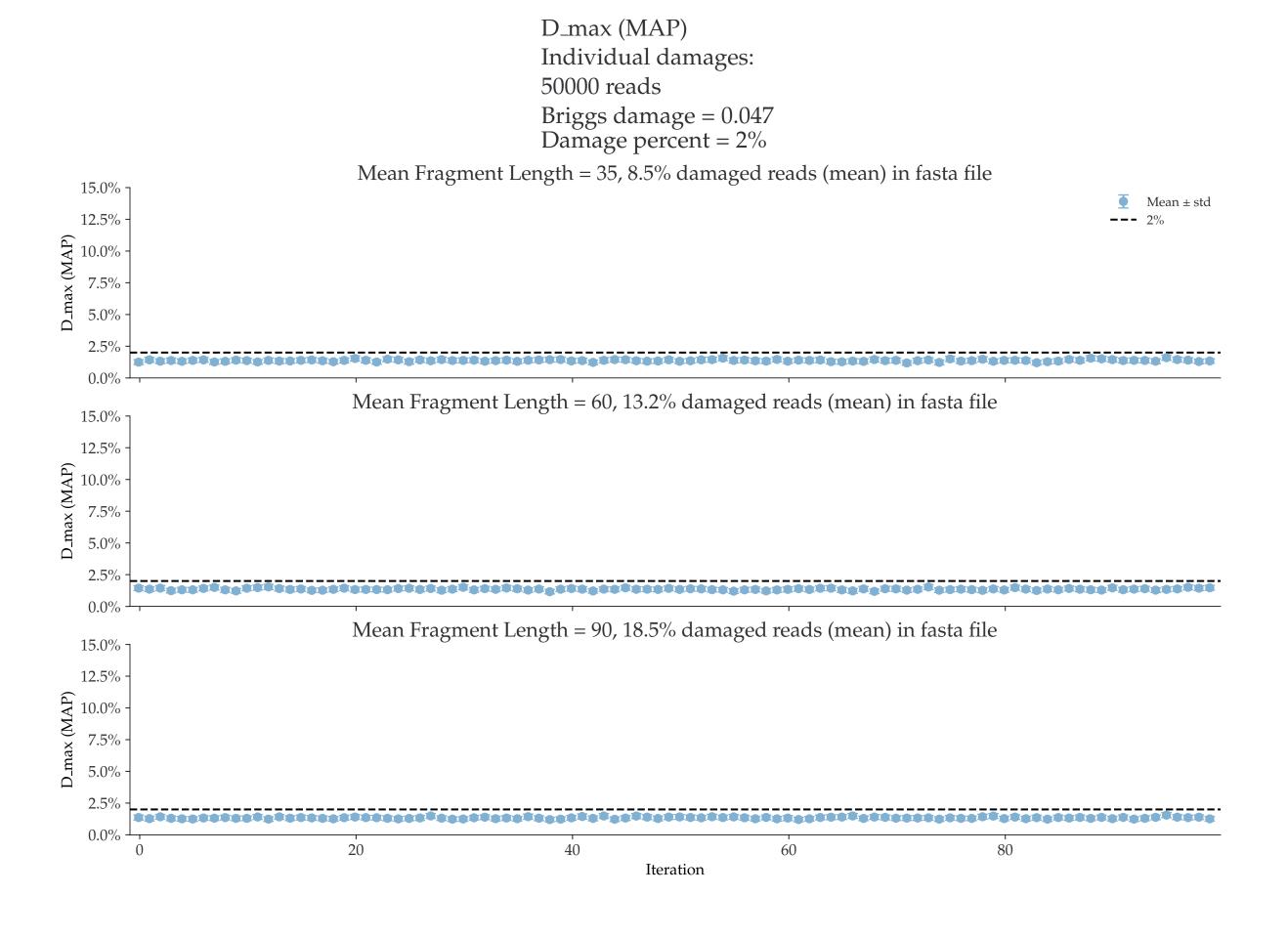


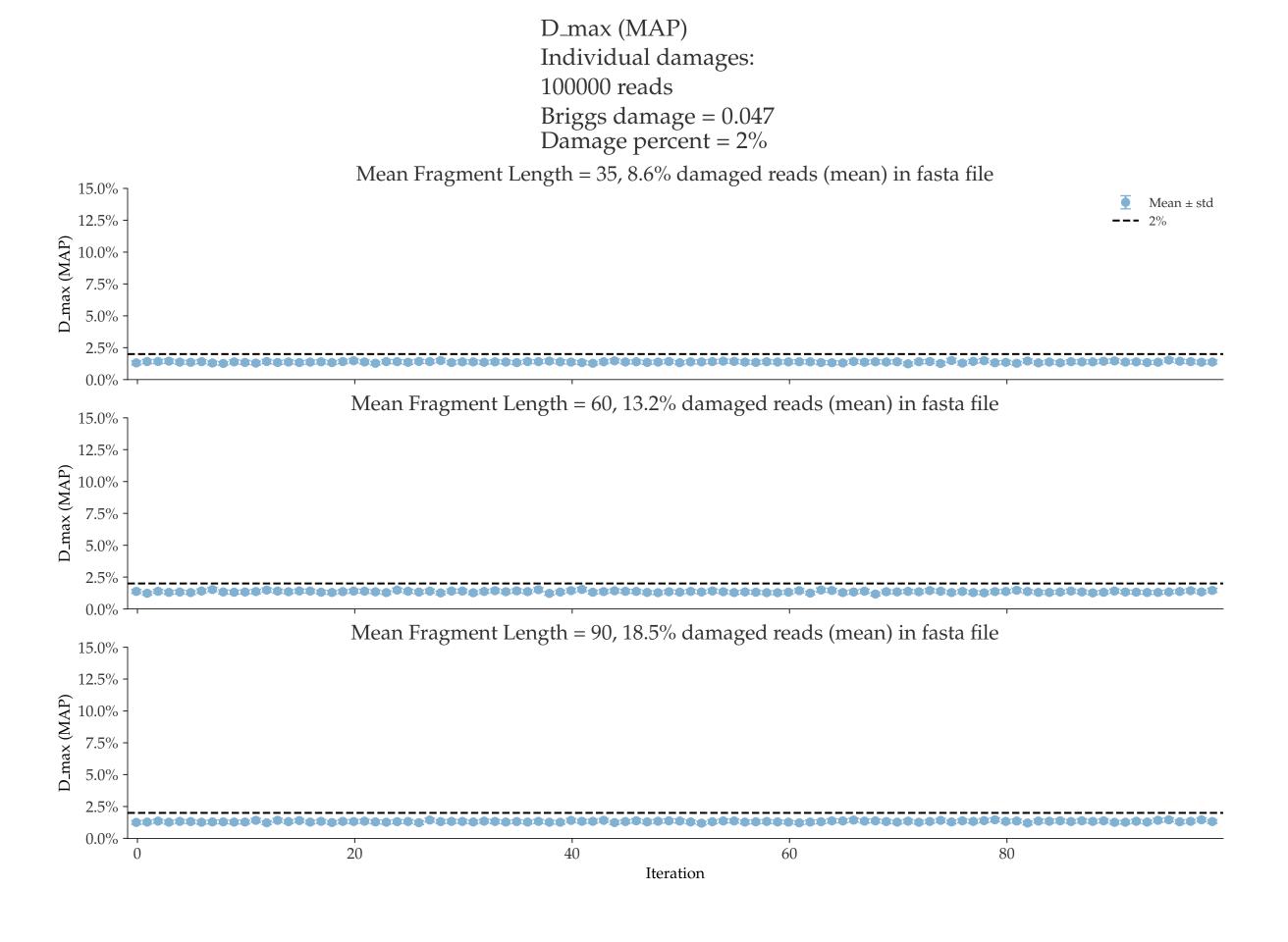




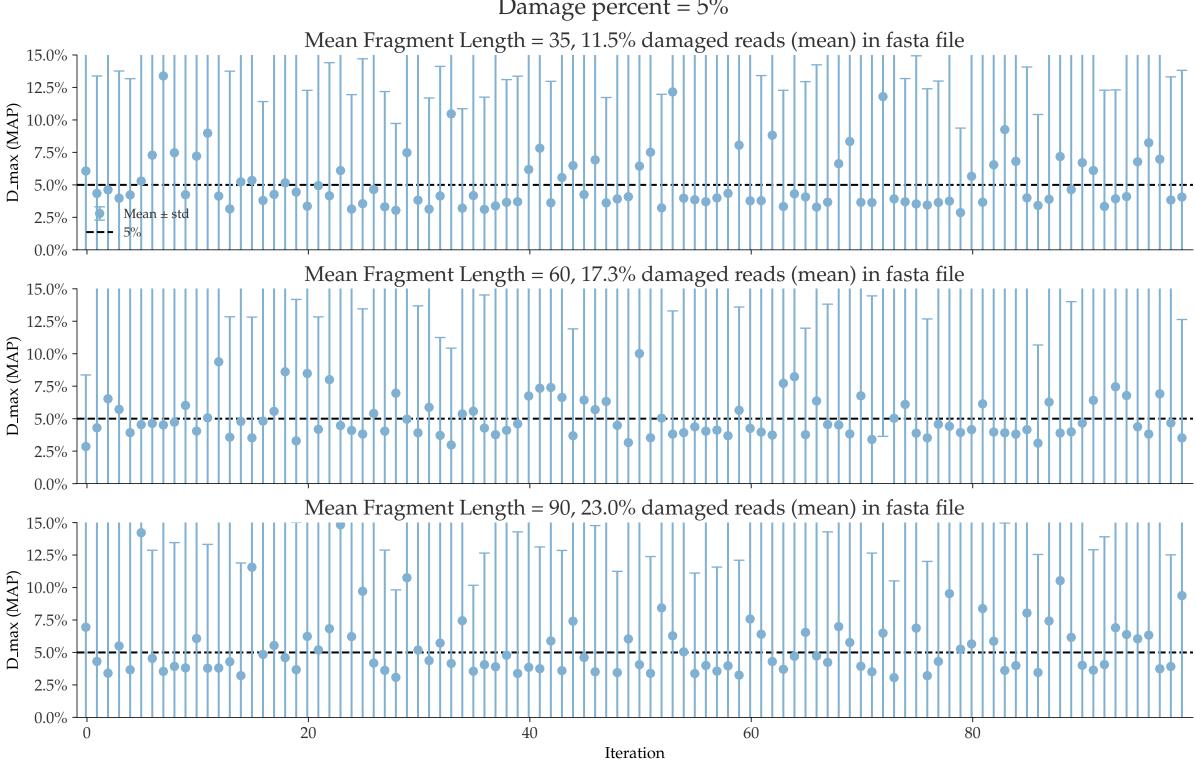








D_max (MAP)
Individual damages:
10 reads
Briggs damage = 0.138
Damage percent = 5%



Individual damages: 25 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 10.3% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% Mean **±** std 5.0% 2.5% 0.0% Mean Fragment Length = 60, 17.1% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 22.1% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 0 Iteration

Individual damages: 50 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 10.9% damaged reads (mean) in fasta file 15.0% -Mean ± std 12.5% **-** 5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.3% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.8% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

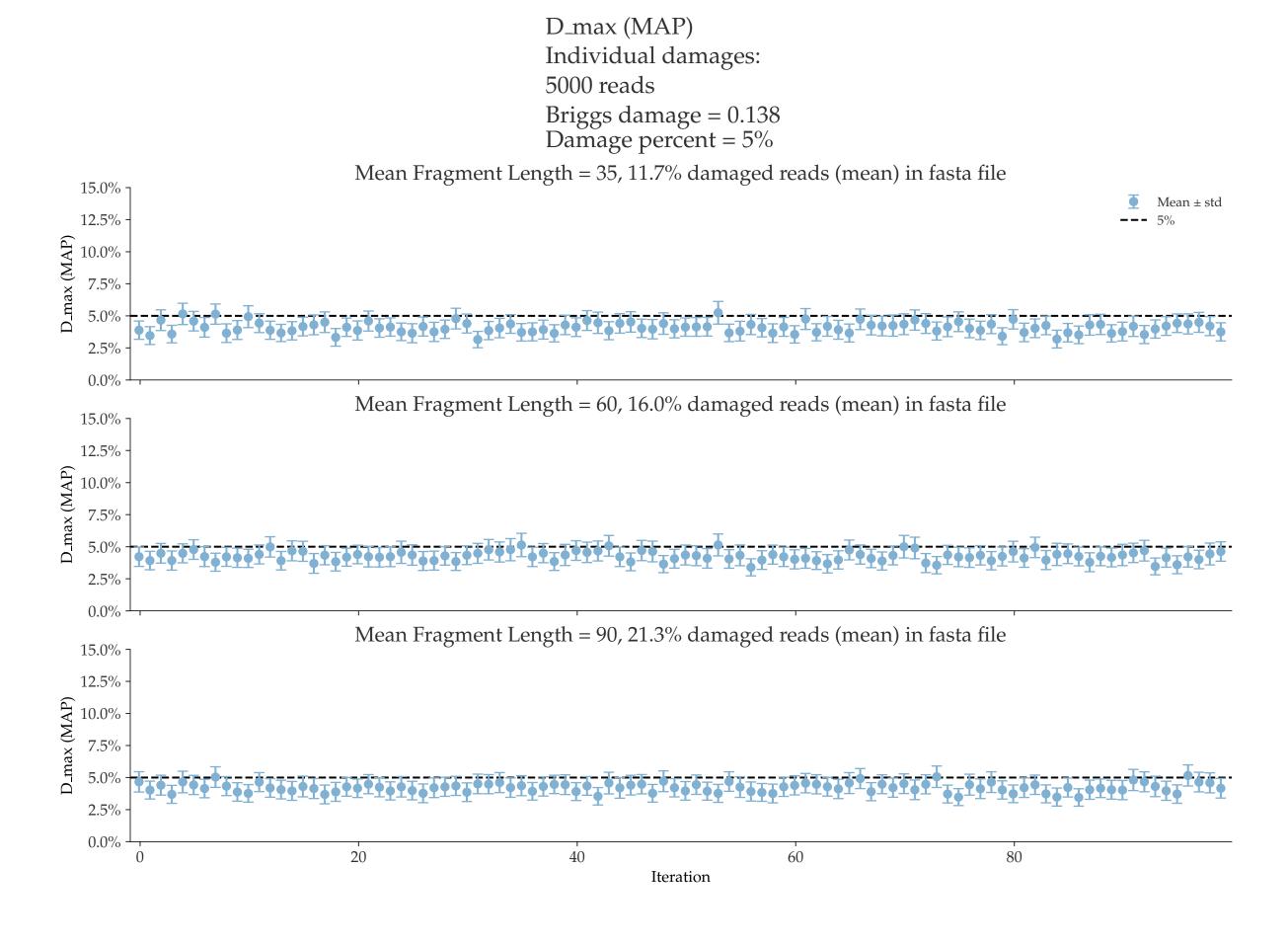
Individual damages: 100 reads Briggs damage = 0.138Damage percent = 5% Mean Fragment Length = 35, 11.7% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **---** 5%T D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.5% damaged reads (mean) in fasta file 15.0% ¬ 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.8% damaged reads (mean) in fasta file 15.0% ¬ 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% 20 40 60 80 Iteration

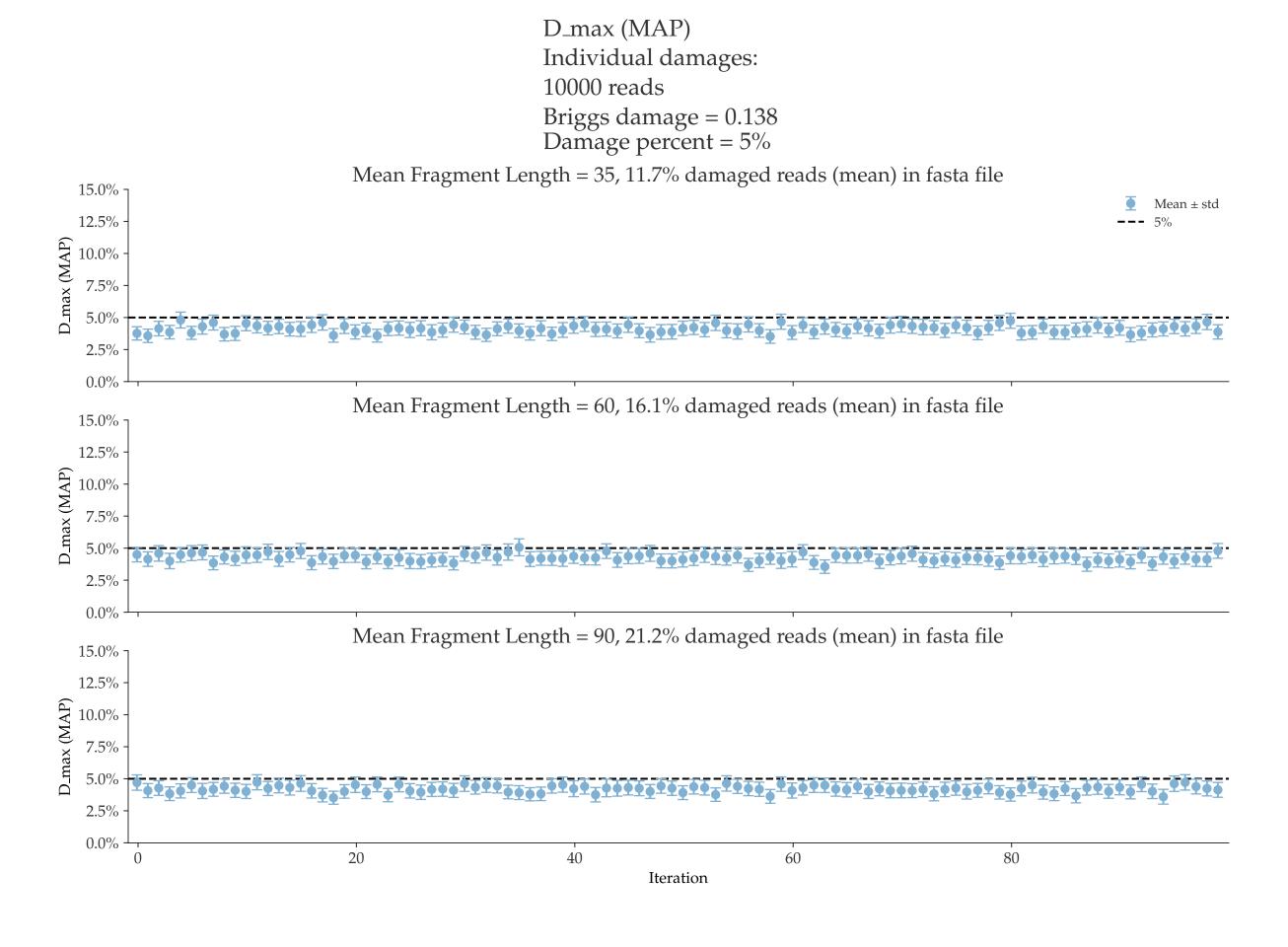
Individual damages: 250 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 11.7% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **---** 5% D_max (MAP) 10.0% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.0% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.2% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% 80 20 40 60 Iteration

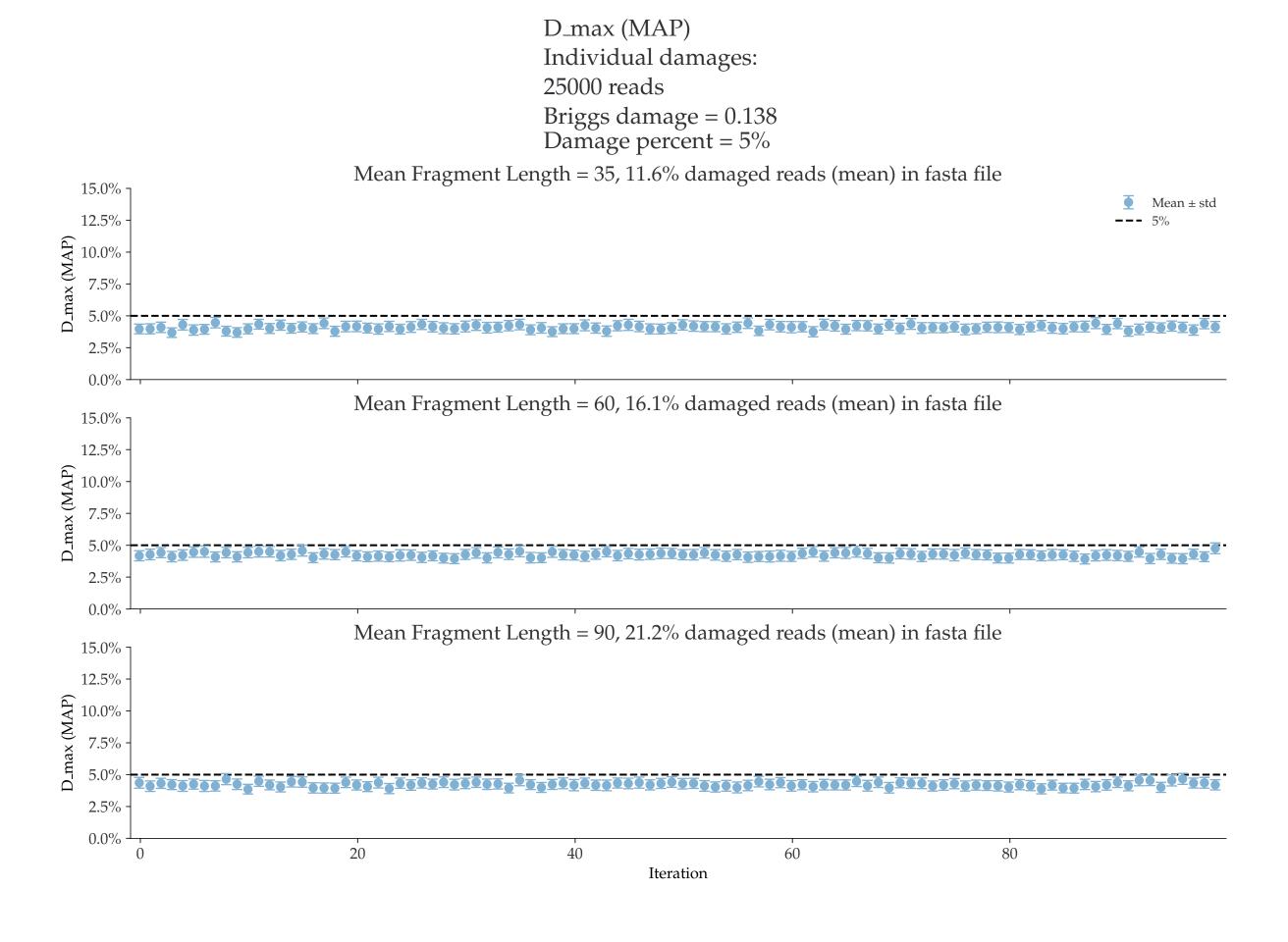
Individual damages: 500 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 11.5% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **--** 5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.2% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.3% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% 20 40 80 60 0 Iteration

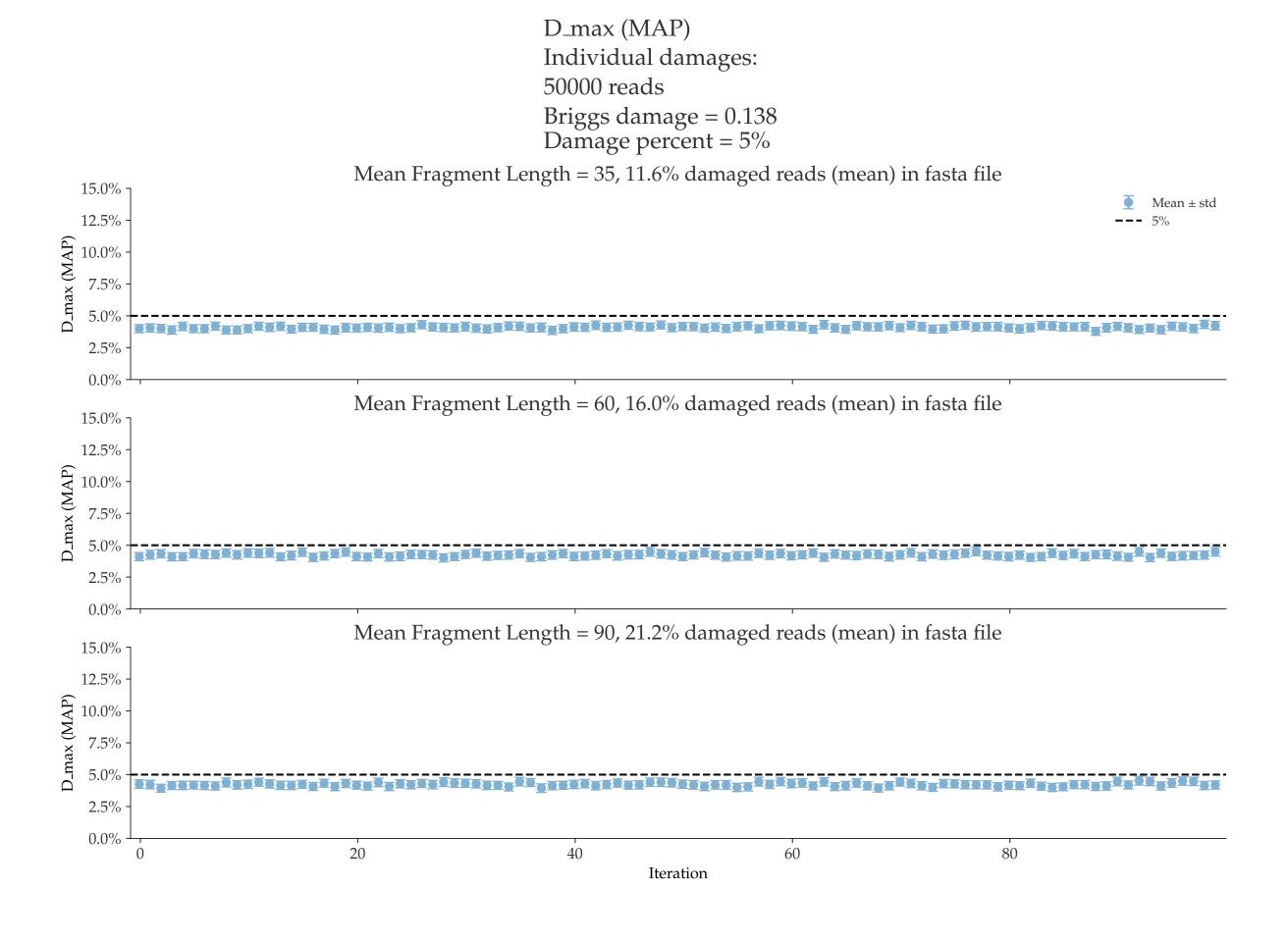
Individual damages: 1000 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 11.5% damaged reads (mean) in fasta file 15.0% -Mean \pm std 12.5% **--** 5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.1% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.4% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% 20 40 60 80 0 Iteration

Individual damages: 2500 reads Briggs damage = 0.138 Damage percent = 5% Mean Fragment Length = 35, 11.7% damaged reads (mean) in fasta file 15.0% Mean \pm std 12.5% **-** 5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 60, 16.1% damaged reads (mean) in fasta file 15.0% -12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.3% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% 20 40 60 80 0 Iteration









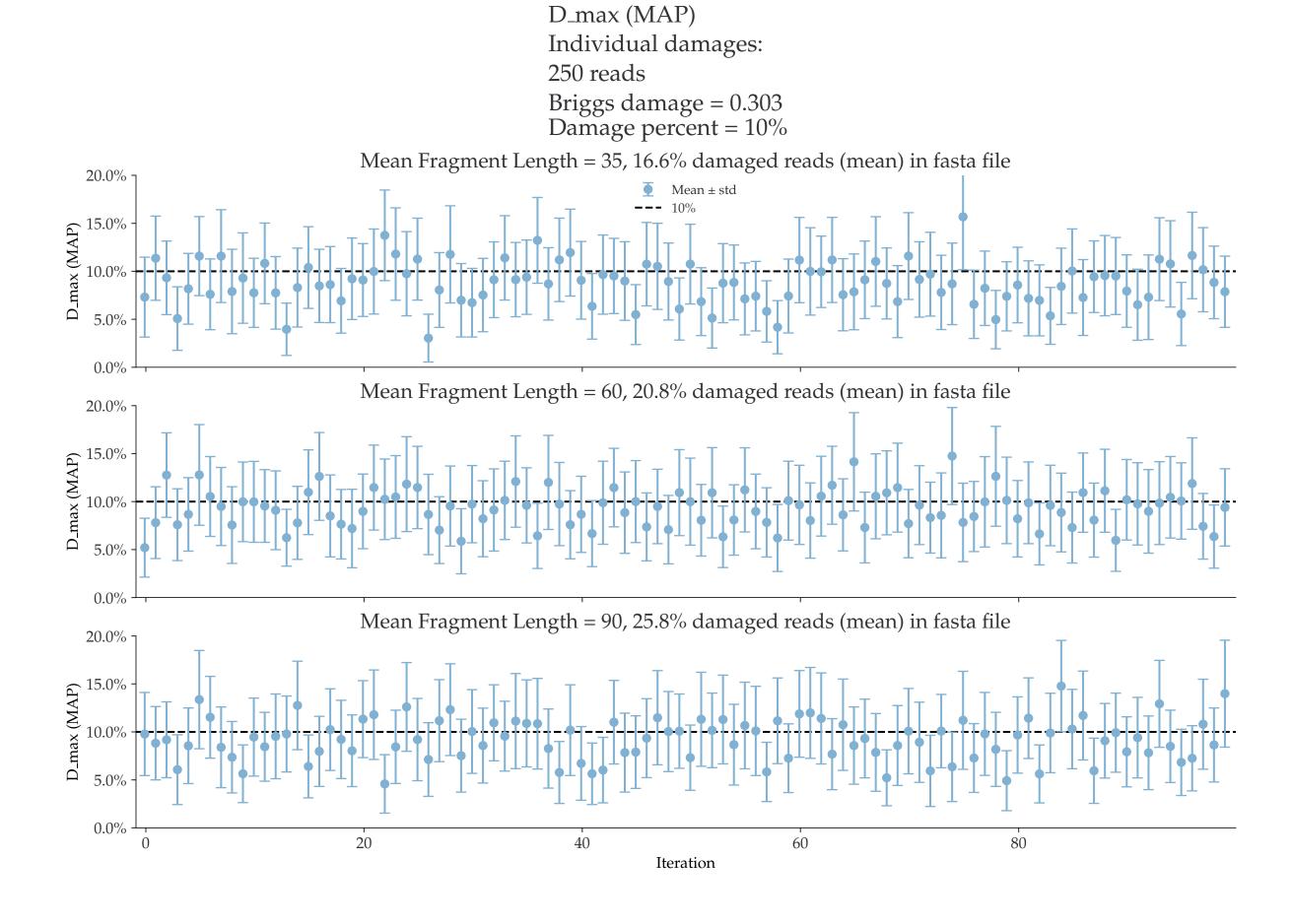
Individual damages: 100000 reads Briggs damage = 0.138Damage percent = 5% Mean Fragment Length = 35, 11.6% damaged reads (mean) in fasta file 15.0% Mean \pm std 12.5% D_max (MAP) 10.0% 7.5% 5.0% 2.5% 0.0% Mean Fragment Length = 60, 16.0% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% Mean Fragment Length = 90, 21.2% damaged reads (mean) in fasta file 15.0% 12.5% D_max (MAP) 10.0% 7.5% 2.5% 0.0% 20 40 60 80 Iteration

Individual damages: 10 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 17.2% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 21.2% damaged reads (mean) in fasta file 20.0% Omax (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.2% damaged reads (mean) in fasta file 20.0% O Towax (MAP) 10.0% 5.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 25 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 17.0% damaged reads (mean) in fasta file 20.0% -Mean ± std ₫ O Towax (MAP) 10.0% 10.0% 5.0% 0.0% Mean Fragment Length = 60, 22.0% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 24.4% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 50 reads Briggs damage = 0.303Damage percent = 10% Mean Fragment Length = 35, 17.2% damaged reads (mean) in fasta file 20.0% Mean \pm std O-max (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 60, 21.8% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 24.9% damaged reads (mean) in fasta file 20.0% O To.0% (MAP) 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 100 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.9% damaged reads (mean) in fasta file 20.0% -Mean \pm std 10% O-max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 20.8% damaged reads (mean) in fasta file 20.0% O Towax (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.2% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 0.0% 20 40 60 80 Iteration



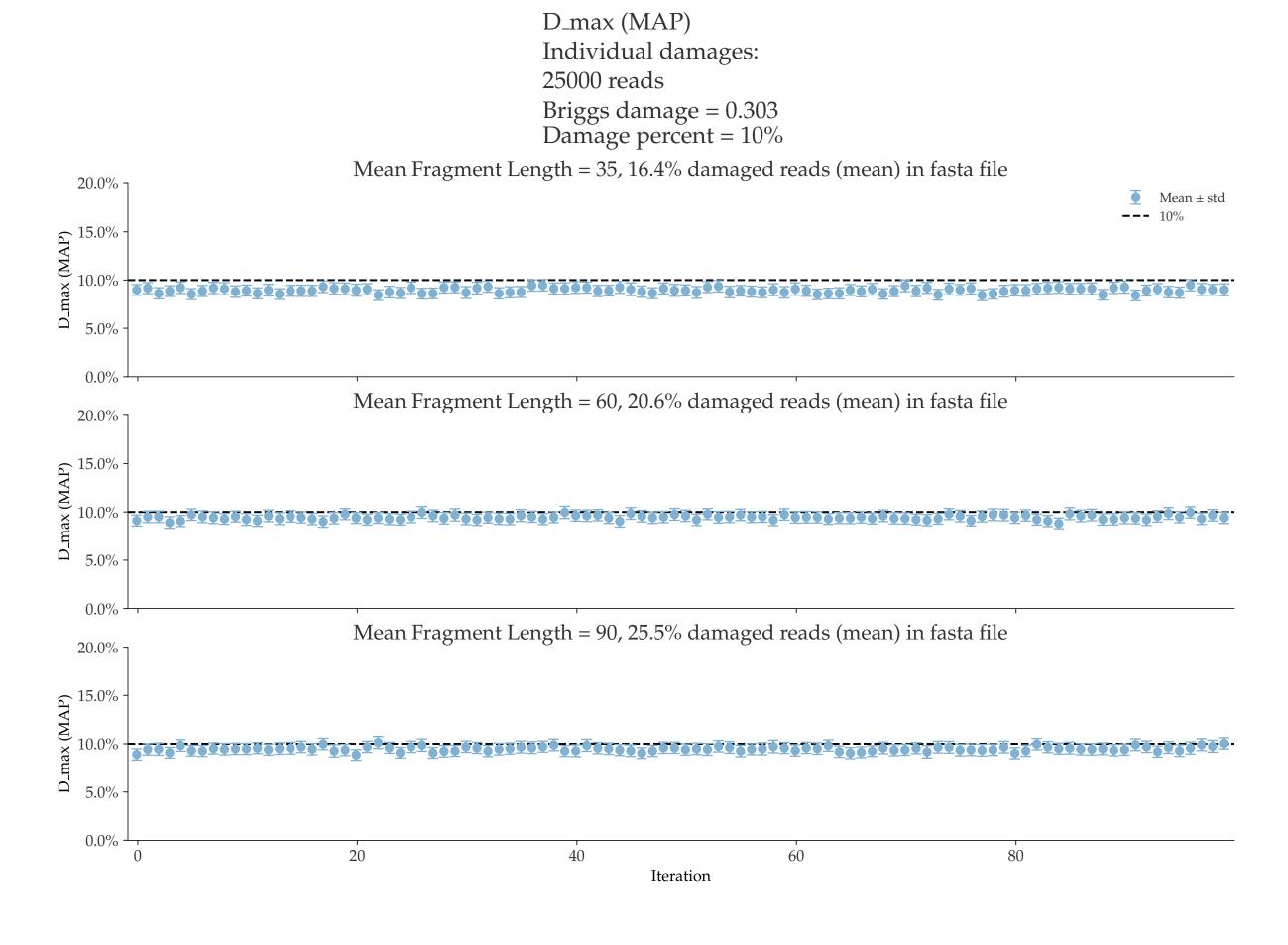
Individual damages: 500 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.6% damaged reads (mean) in fasta file 20.0% Mean \pm std Omax (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 20.8% damaged reads (mean) in fasta file 20.0% Omax (MAP) 10.0% 10.0% 0.0% Mean Fragment Length = 90, 25.7% damaged reads (mean) in fasta file 20.0% O T5.0% 10.0% 10.0% 0.0% 20 40 60 80 Iteration

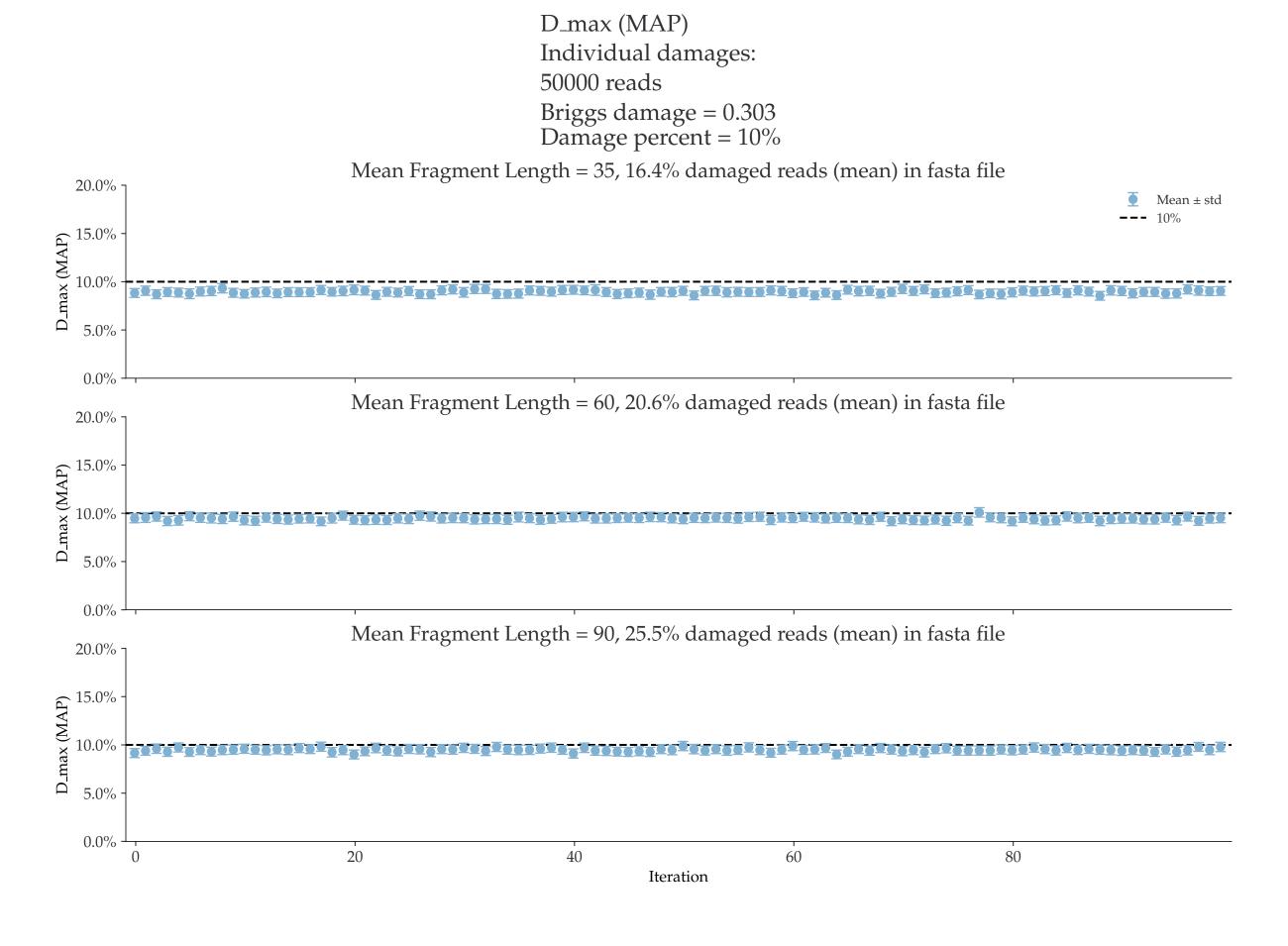
Individual damages: 1000 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.4% damaged reads (mean) in fasta file 20.0% Mean \pm std 10% 15.0% (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 20.8% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 25.7% damaged reads (mean) in fasta file 20.0% O Toward MAP) 10.0% 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 2500 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.4% damaged reads (mean) in fasta file 20.0% Mean \pm std **-** 10% Omax (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 20.7% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.6% damaged reads (mean) in fasta file 20.0% O Towax (MAP) 10.0% 5.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 5000 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.5% damaged reads (mean) in fasta file 20.0% Mean \pm std 10% O-max (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 60, 20.6% damaged reads (mean) in fasta file 20.0% O Towax (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.6% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 10000 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.4% damaged reads (mean) in fasta file 20.0% Mean \pm std 10% O-max (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 60, 20.6% damaged reads (mean) in fasta file 20.0% O Towax (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.6% damaged reads (mean) in fasta file 20.0% O-max (MAP) 10.0% 5.0% 5.0% 0.0% 20 40 60 80 Iteration





Individual damages: 100000 reads Briggs damage = 0.303 Damage percent = 10% Mean Fragment Length = 35, 16.4% damaged reads (mean) in fasta file 20.0% Mean \pm std O-max (MAP) 10.0% 5.0% 5.0% Mean Fragment Length = 60, 20.6% damaged reads (mean) in fasta file 20.0% Omax (MAP) 10.0% 5.0% 5.0% 0.0% Mean Fragment Length = 90, 25.5% damaged reads (mean) in fasta file 20.0% 15.0% D_max (MAP) 5.0% 20 60 80 40 Iteration

Individual damages: 10 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 19.5% damaged reads (mean) in fasta file 25.0% ¬ 20.0% D_max (MAP) 15.0% Mean ± std 10.0% 5.0% 0.0% Mean Fragment Length = 60, 23.4% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.8% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 25 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 19.4% damaged reads (mean) in fasta file 25.0% -Mean ± std ₫ 15% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.6% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0%5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 50 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.7% damaged reads (mean) in fasta file 25.0% \overline{M} ean \pm std 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.9% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0%5.0% 0.0% Mean Fragment Length = 90, 30.2% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 100 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.1% damaged reads (mean) in fasta file 25.0% \overline{M} ean \pm std 20.0% D_max (MAP) 15.0% 5.0% 0.0% Mean Fragment Length = 60, 24.7% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 5.0% 0.0% Mean Fragment Length = 90, 29.4% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 5.0% 0.0% 20 40 60 80 0 Iteration

Individual damages: 250 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 20.0% D_max (MAP) 15.0% 5.0% 0.0% Mean Fragment Length = 60, 24.6% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 5.0% 0.0% Mean Fragment Length = 90, 29.3% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 5.0% 0.0% 20 40 60 80 0 Iteration

Individual damages: 500 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 15.0% 5.0% 0.0% Mean Fragment Length = 60, 24.5% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 5.0% 0.0% Mean Fragment Length = 90, 29.2% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 1000 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.3% damaged reads (mean) in fasta file 25.0% Mean \pm std 20.0% D_max (MAP) 15.0% 5.0% 0.0% Mean Fragment Length = 60, 24.7% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 5.0% 0.0% Mean Fragment Length = 90, 28.9% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0° 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 2500 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.3% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.7% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0° 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 5000 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.6% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 10000 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.5% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% -20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 40 60 80 Iteration

Individual damages: 25000 reads Briggs damage = 0.466Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.5% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0%5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 60 80 40 Iteration

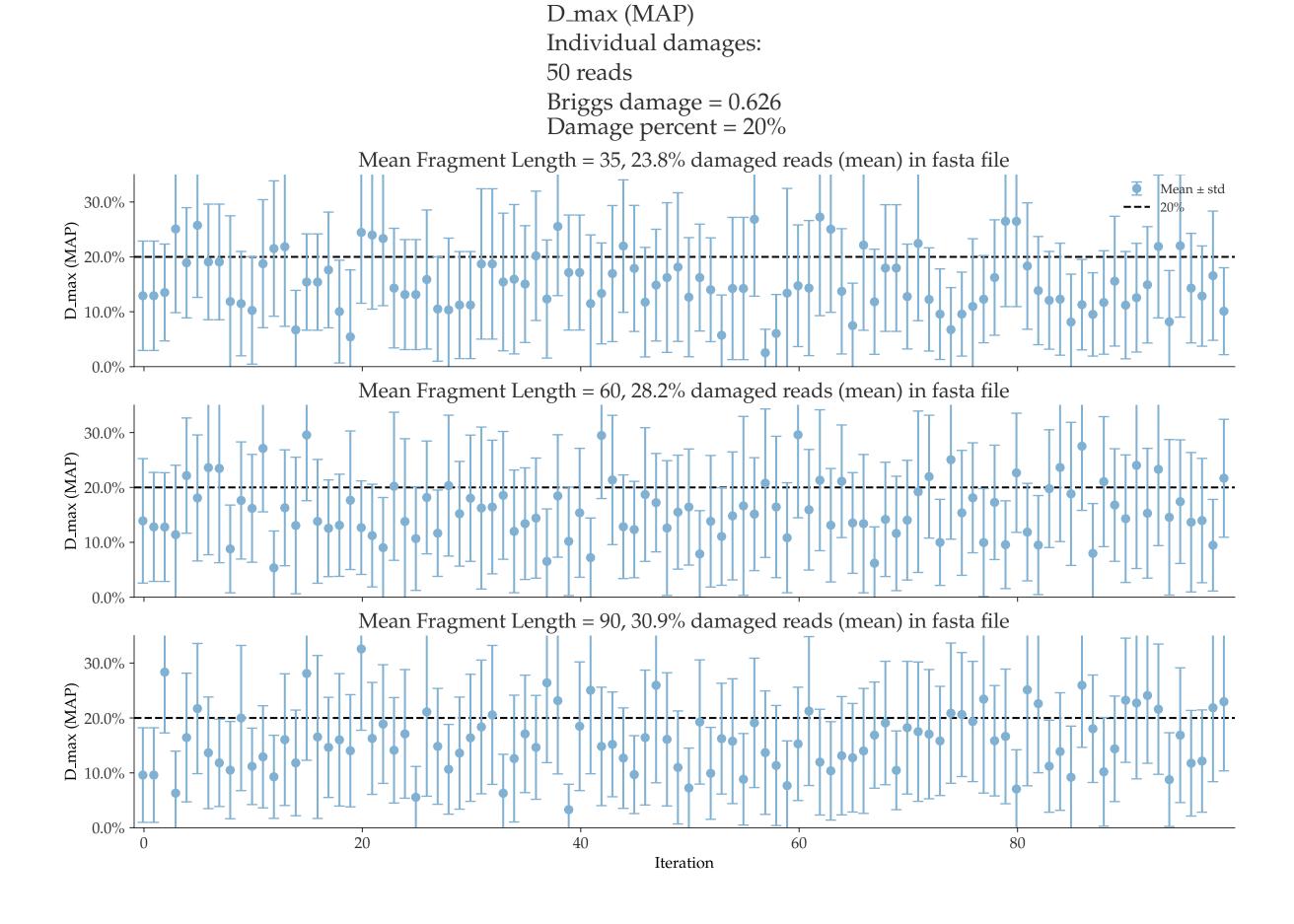
Individual damages: 50000 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.5% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 15.0% 10.0% 5.0% 0.0% 20 80 40 60 Iteration

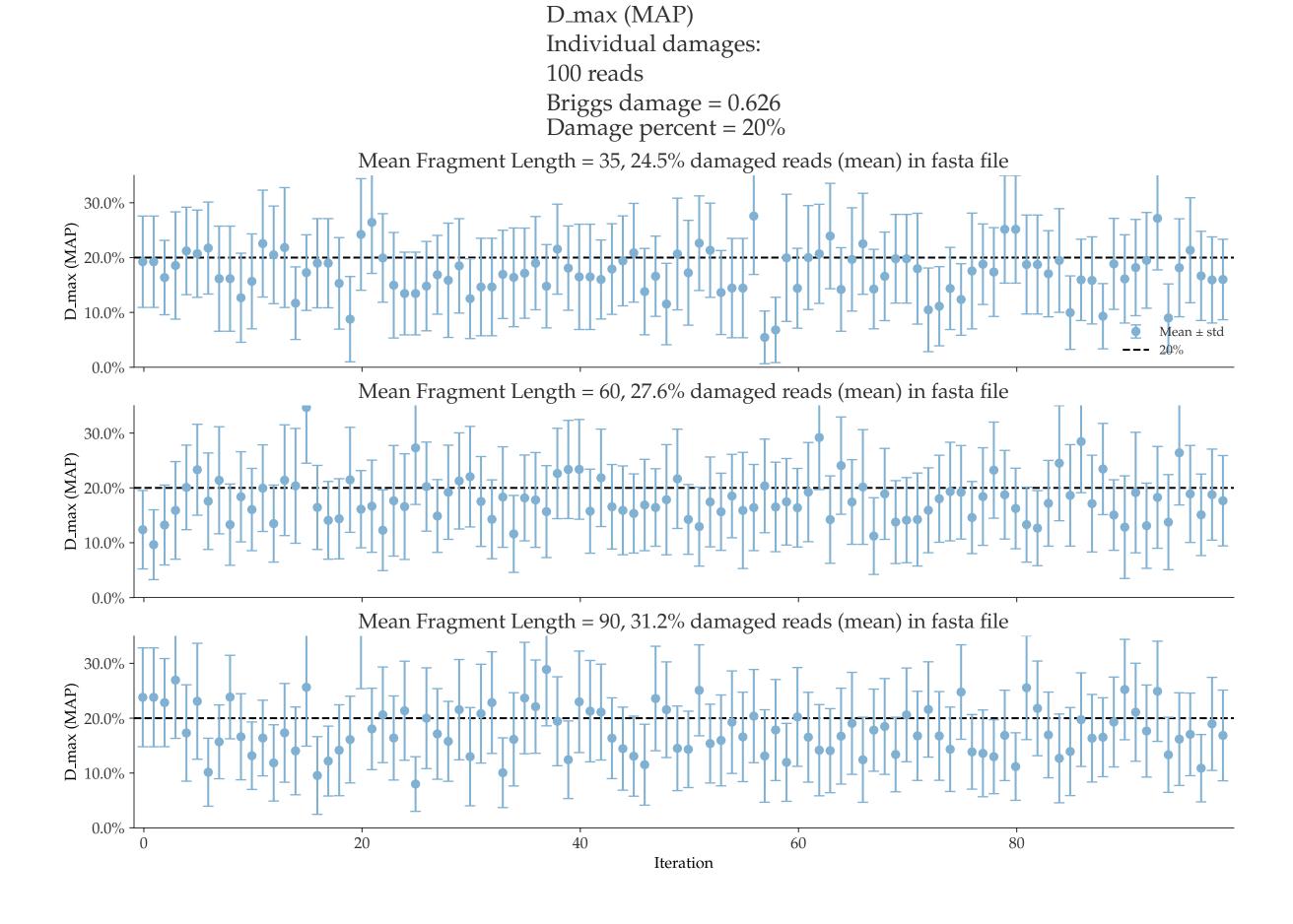
D_{max} (MAP)

Individual damages: 100000 reads Briggs damage = 0.466 Damage percent = 15% Mean Fragment Length = 35, 20.4% damaged reads (mean) in fasta file 25.0% Mean \pm std 15% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 60, 24.5% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% Mean Fragment Length = 90, 29.1% damaged reads (mean) in fasta file 25.0% 20.0% D_max (MAP) 10.0% 5.0% 0.0% 20 80 40 60 Iteration

Individual damages: 10 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 22.0% damaged reads (mean) in fasta file Mean ± std 30.0% O-max (MAP) 20.0% 0.0% Mean Fragment Length = 60, 28.5% damaged reads (mean) in fasta file 30.0% O max (MAP) 20.0% 0.0% Mean Fragment Length = 90, 31.0% damaged reads (mean) in fasta file 30.0% O max (MAP) 20.0% - 10.0% -0.0% 20 40 60 80 Iteration

Individual damages: 25 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.2% damaged reads (mean) in fasta file Mean ± std 30.0% O_max (MAP) 20.0% 0.0% Mean Fragment Length = 60, 27.6% damaged reads (mean) in fasta file 30.0% O max (MAP) 20.0% - 10.0% -0.0% Mean Fragment Length = 90, 31.3% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% -0.0% 20 40 60 80 Iteration





D_max (MAP) Individual damages: 250 reads Briggs damage = 0.626 Damage percent = 20% 80 40 60 Iteration

Mean Fragment Length = 35, 24.0% damaged reads (mean) in fasta file Mean \pm std 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.6% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 31.7% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% 20 0

Individual damages: 500 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 24.0% damaged reads (mean) in fasta file Mean \pm std 30.0% 20% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.8% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 32.0% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% 20 80 40 60 Iteration

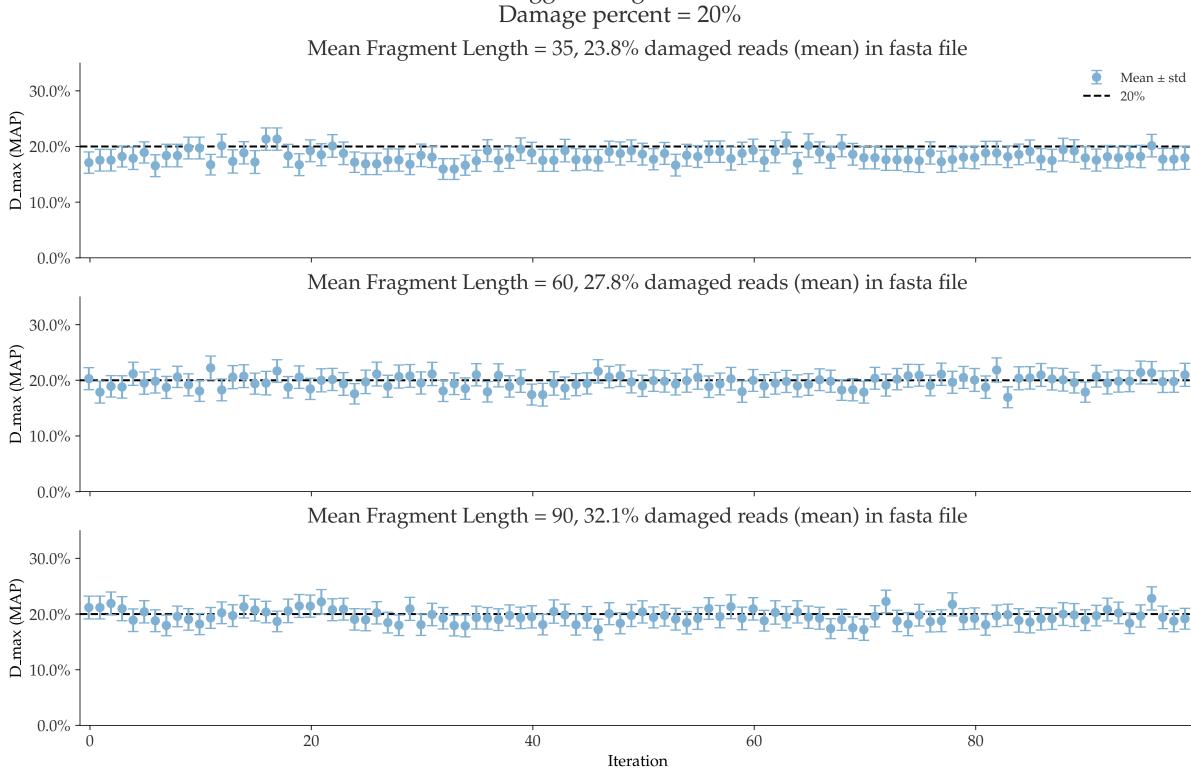
1000 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.9% damaged reads (mean) in fasta file Mean \pm std 30.0% **---** 20% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.8% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 31.9% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% 20 40 60 80 Iteration

D_max (MAP)

Individual damages:

D_max (MAP)
Individual damages:
2500 reads
Briggs damage = 0.626
Damage percent = 20%

ngth = 35, 23.8% damaged reads (mean) in fa



Individual damages: 5000 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.9% damaged reads (mean) in fasta file Mean \pm std 30.0% 20% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.8% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 32.2% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% 20 40 60 80

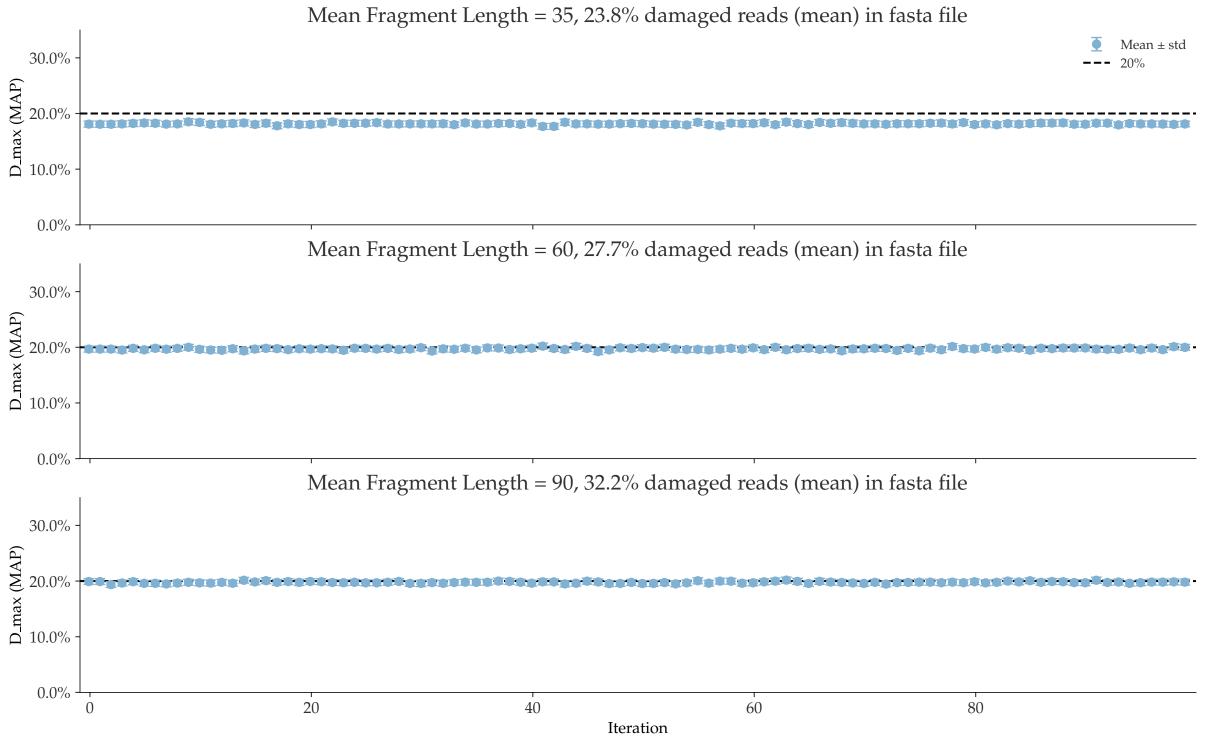
Iteration

Individual damages: 10000 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.8% damaged reads (mean) in fasta file Mean \pm std 30.0% 20% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.7% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 32.2% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 0.0% 20 40 60 80 Iteration

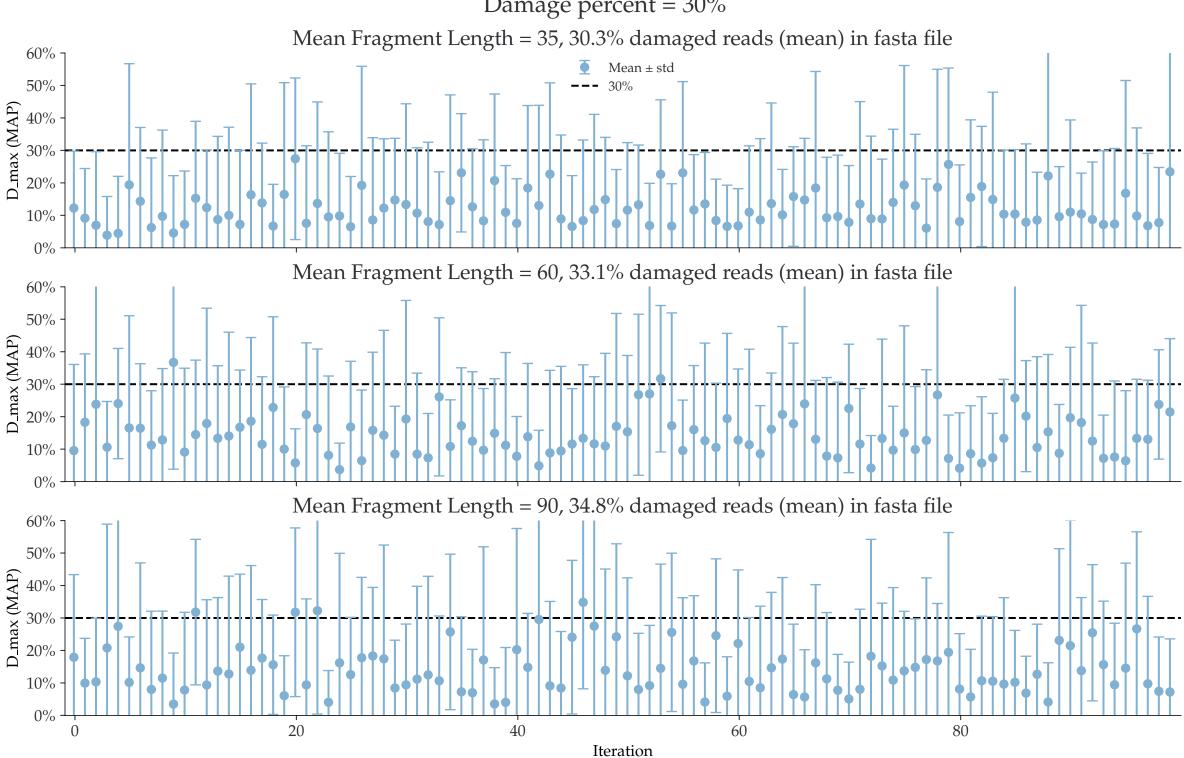
Individual damages: 25000 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.8% damaged reads (mean) in fasta file Mean \pm std 30.0% 20% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 60, 27.7% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 32.2% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 0.0% 20 60 80 40 Iteration

Individual damages: 50000 reads Briggs damage = 0.626 Damage percent = 20% Mean Fragment Length = 35, 23.8% damaged reads (mean) in fasta file Mean \pm std 30.0% 20% O-max (MAP) 20.0% 10.0% Mean Fragment Length = 60, 27.7% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 10.0% 0.0% Mean Fragment Length = 90, 32.1% damaged reads (mean) in fasta file 30.0% O-max (MAP) 20.0% 0.0% 20 80 40 60 Iteration

D_max (MAP)
Individual damages:
100000 reads
Briggs damage = 0.626
Damage percent = 20%



D_max (MAP)
Individual damages:
10 reads
Briggs damage = 0.96
Damage percent = 30%



Individual damages: 25 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.9% damaged reads (mean) in fasta file 60% 7 Mean \pm std 50% **---** 30% D_max (MAP) 40% 20% 10% 0% Mean Fragment Length = 60, 33.5% damaged reads (mean) in fasta file 60% ₇ 50% 0 40% 30% 20% 10% 0% Mean Fragment Length = 90, 35.0% damaged reads (mean) in fasta file 60% -50% D-max (MAP) 10% 0% 20 60 80 0 40 Iteration

Individual damages: 50 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.0% damaged reads (mean) in fasta file 60% -Mean \pm std 50% **---** 30% D_max (MAP) 10% 0% Mean Fragment Length = 60, 33.4% damaged reads (mean) in fasta file 60% -50% D-max (MAP) 10% 0% Mean Fragment Length = 90, 37.1% damaged reads (mean) in fasta file 60% -50% D-max (MAP) 10% 0% 20 40 60 80 0 Iteration

Individual damages: 100 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.3% damaged reads (mean) in fasta file 60% -Mean \pm std 50% 30% D_max (MAP) 10% 0% Mean Fragment Length = 60, 32.9% damaged reads (mean) in fasta file 60% -50% D-max (MAP) 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 10% 0% 20 40 60 80 0 Iteration

Individual damages: 250 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.4% damaged reads (mean) in fasta file 60% Mean \pm std 50% 30% D_max (MAP) 10% 0% Mean Fragment Length = 60, 33.2% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 10% 0% 20 40 60 80 0 Iteration

Individual damages: 500 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.5% damaged reads (mean) in fasta file 60% Mean \pm std 50% **--** 30% D_max (MAP) 10% 0% Mean Fragment Length = 60, 33.2% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 10% Mean Fragment Length = 90, 37.5% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 10% 0% 20 40 60 80 0 Iteration

D_max (MAP) Individual damages: 1000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.4% damaged reads (mean) in fasta file Mean \pm std 30% Mean Fragment Length = 60, 33.3% damaged reads (mean) in fasta file Mean Fragment Length = 90, 37.5% damaged reads (mean) in fasta file 40 60 80

Iteration

60%

50%

20%

10%

0%

60% -

50%

10%

60% -

50%

10%

0%

0

20

D_max (MAP)

D_max (MAP)

Individual damages: 2500 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.6% damaged reads (mean) in fasta file 60% -Mean \pm std 50% 30% D_max (MAP) 40% 20% 10% 0% Mean Fragment Length = 60, 33.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 40% 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 10% 0% 20 40 60 80 Iteration

Individual damages: 5000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.7% damaged reads (mean) in fasta file 60% Mean \pm std 50% 30% D_max (MAP) 40% 20% 10% 0% Mean Fragment Length = 60, 33.3% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 40% 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 20% 10% 20 60 80 40 Iteration

Individual damages: 10000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.7% damaged reads (mean) in fasta file 60% Mean \pm std 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 60, 33.3% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% 20 60 80 40 Iteration

25000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.7% damaged reads (mean) in fasta file 60% Mean \pm std 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 60, 33.3% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 90, 37.3% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% 20 80 40 60 Iteration

D_max (MAP)

Individual damages:

50000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.7% damaged reads (mean) in fasta file 60% Mean \pm std 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 60, 33.3% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 90, 37.3% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% 20 40 60 80 Iteration

D_max (MAP)

Individual damages:

Individual damages: 100000 reads Briggs damage = 0.96 Damage percent = 30% Mean Fragment Length = 35, 29.7% damaged reads (mean) in fasta file 60% Mean \pm std 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 60, 33.2% damaged reads (mean) in fasta file 60% 50% D_max (MAP) 40% 20% 10% Mean Fragment Length = 90, 37.4% damaged reads (mean) in fasta file 60% -50% D_max (MAP) 40% 20% 10% 20 40 60 80 Iteration