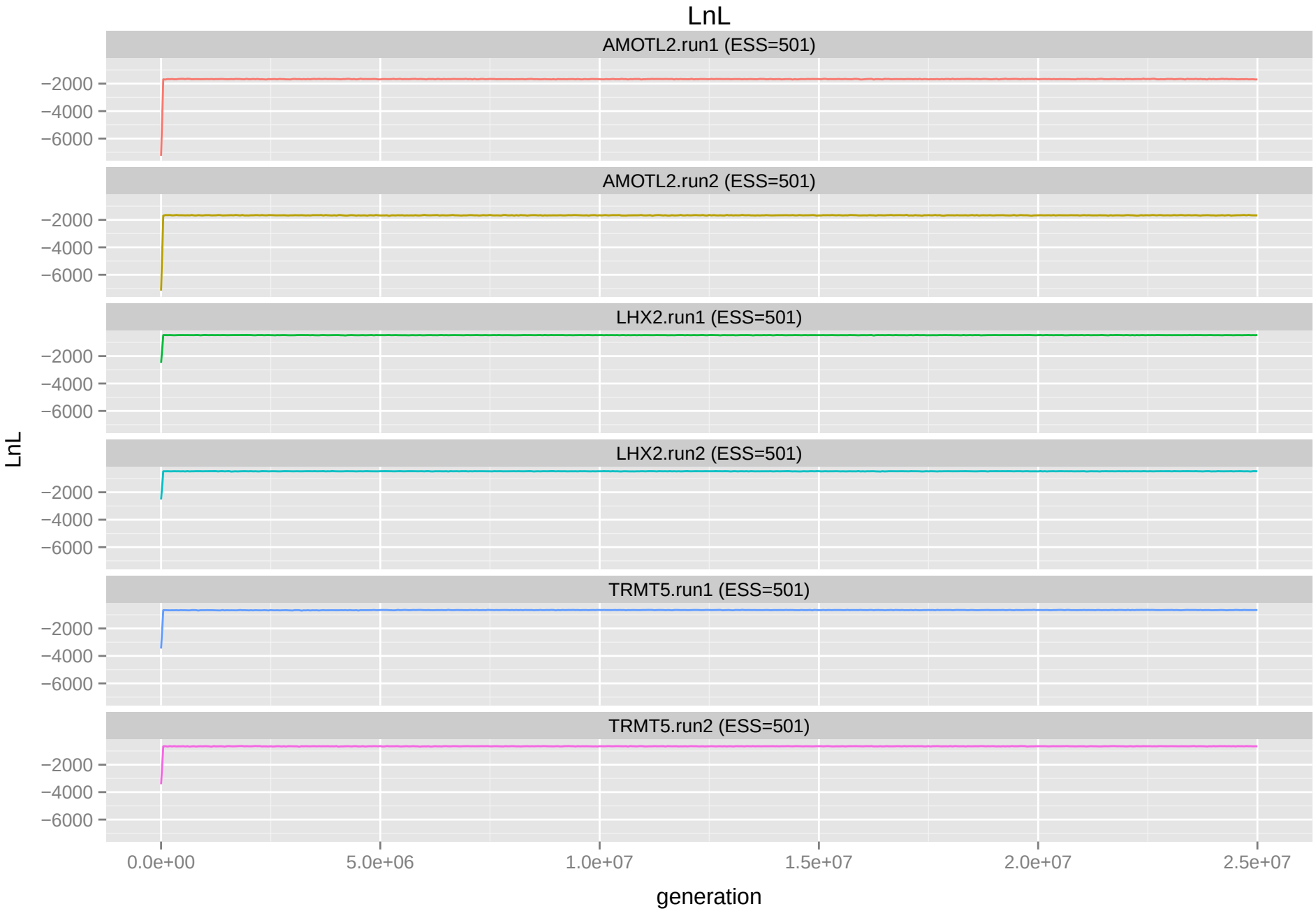
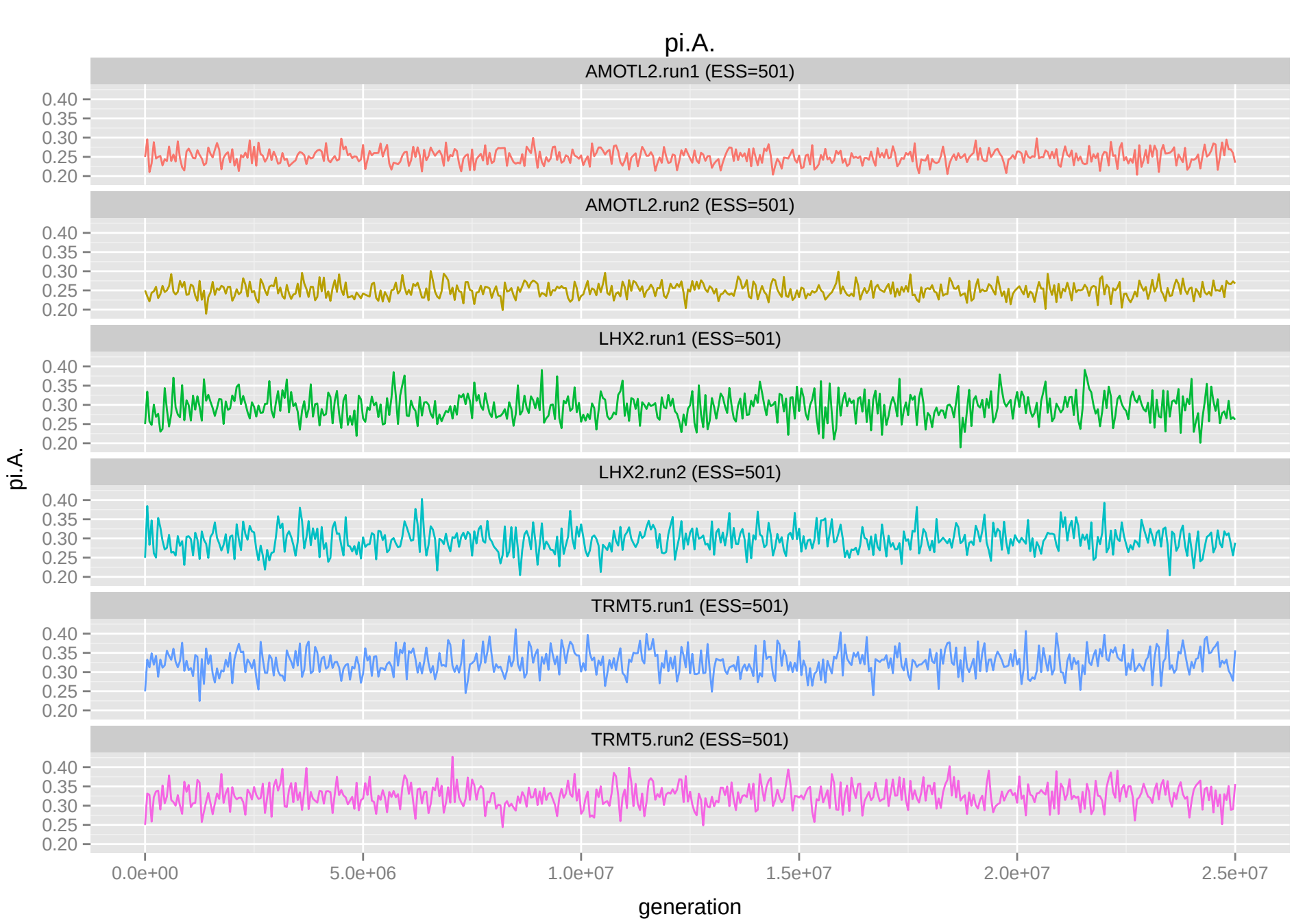
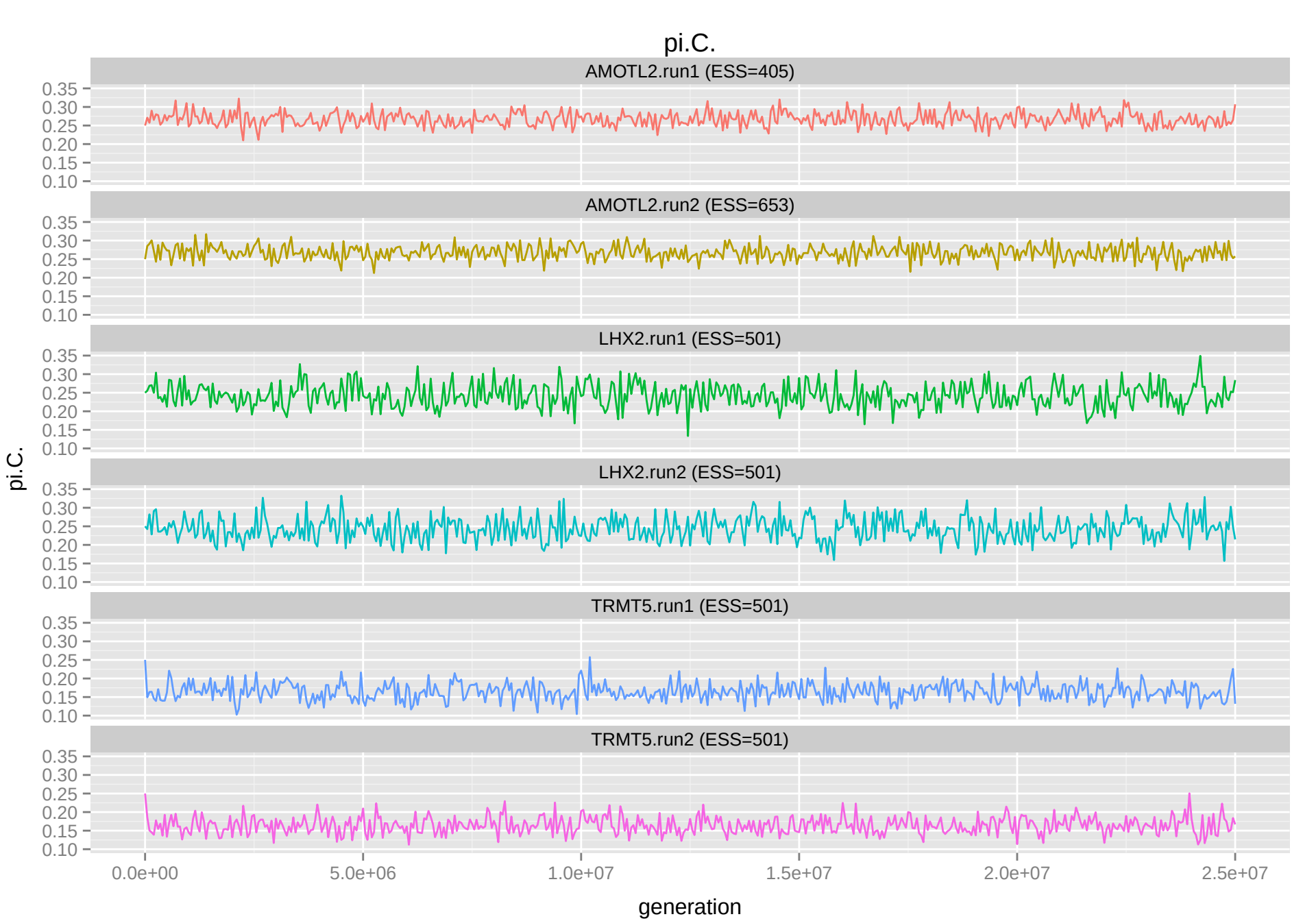
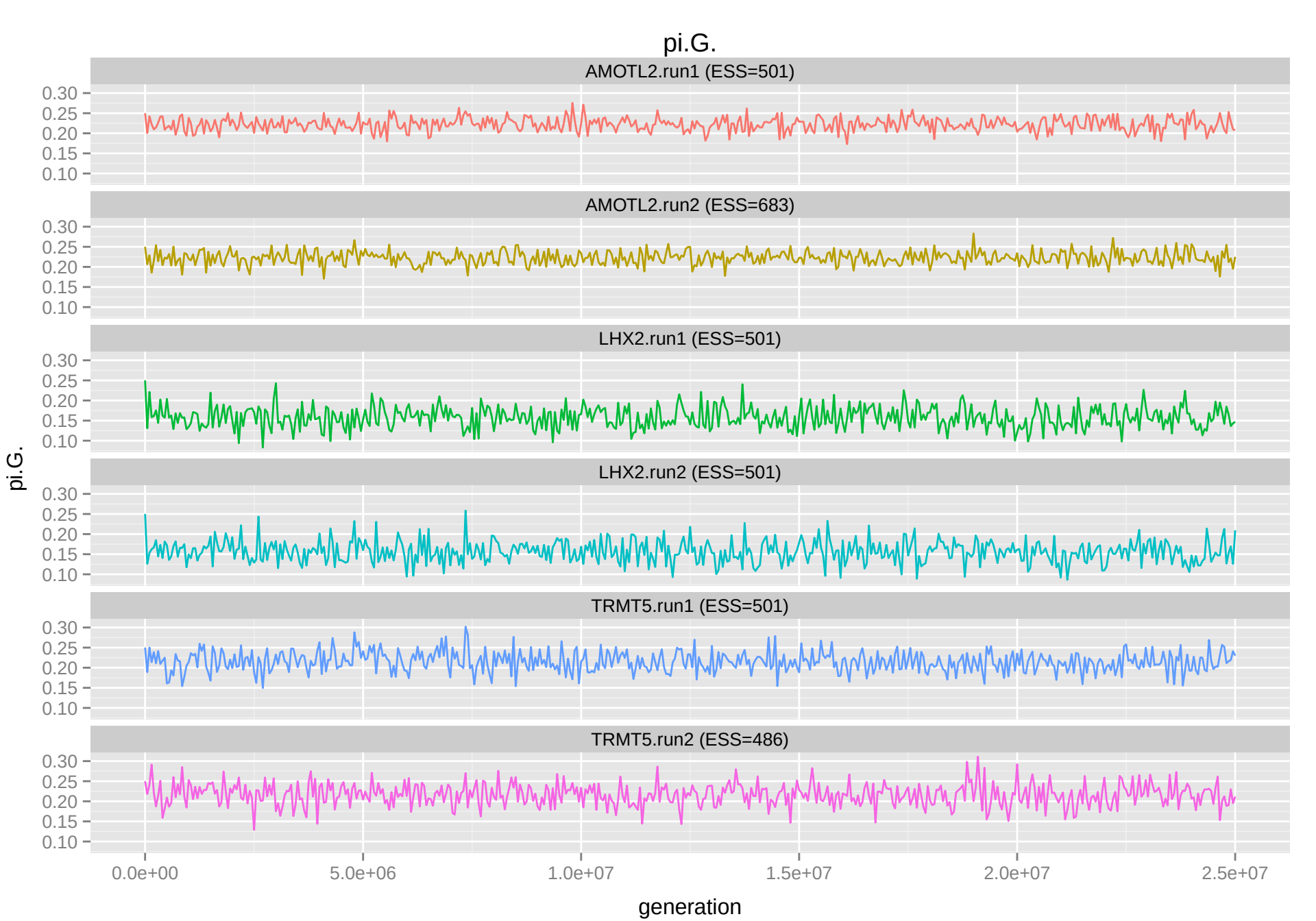
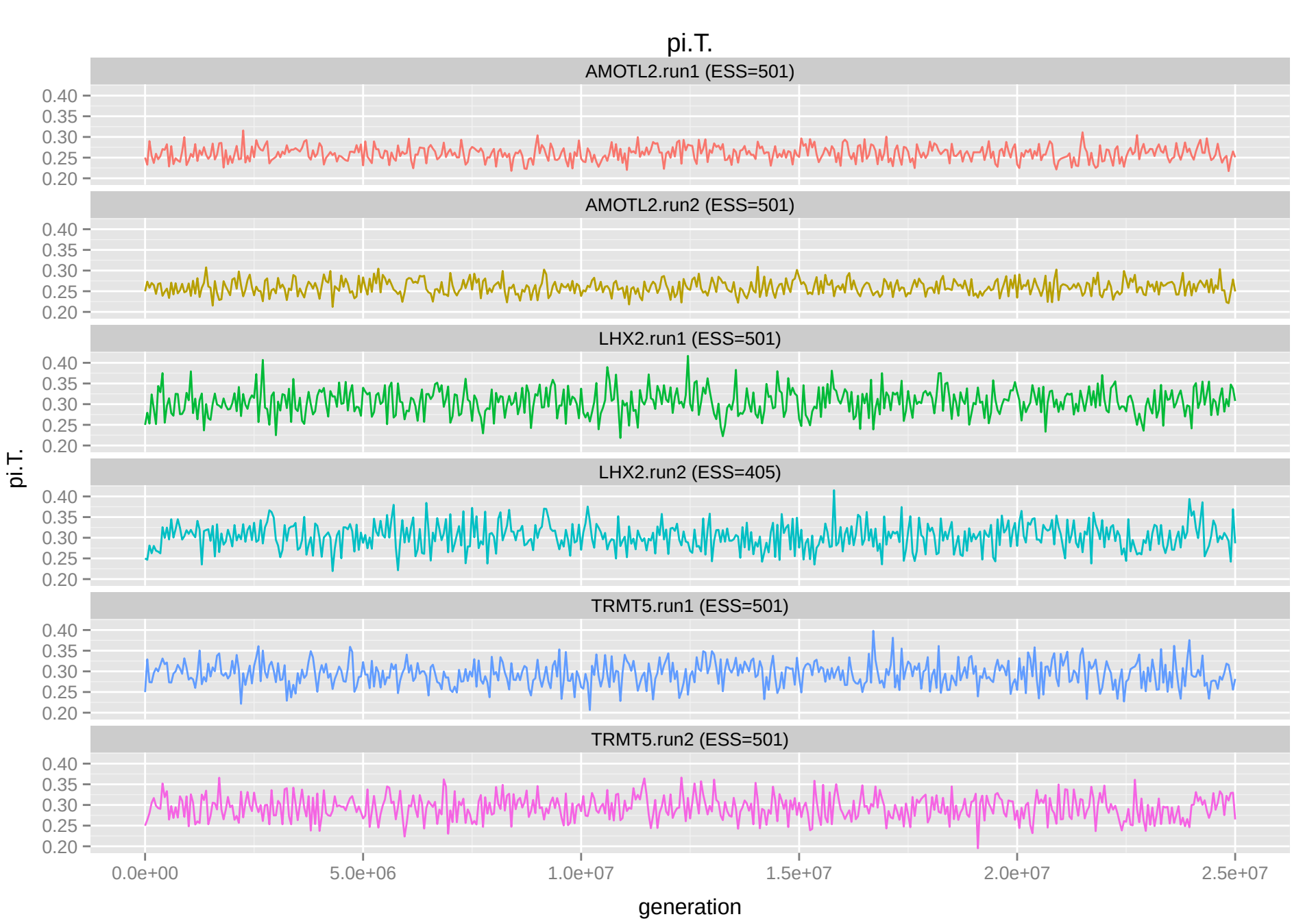

LnL
AMOTL2.run1 (ESS=501)
AMOTL2.run2 (ESS=501)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=501)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=501)
−2000
−4000
−6000
LnL
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

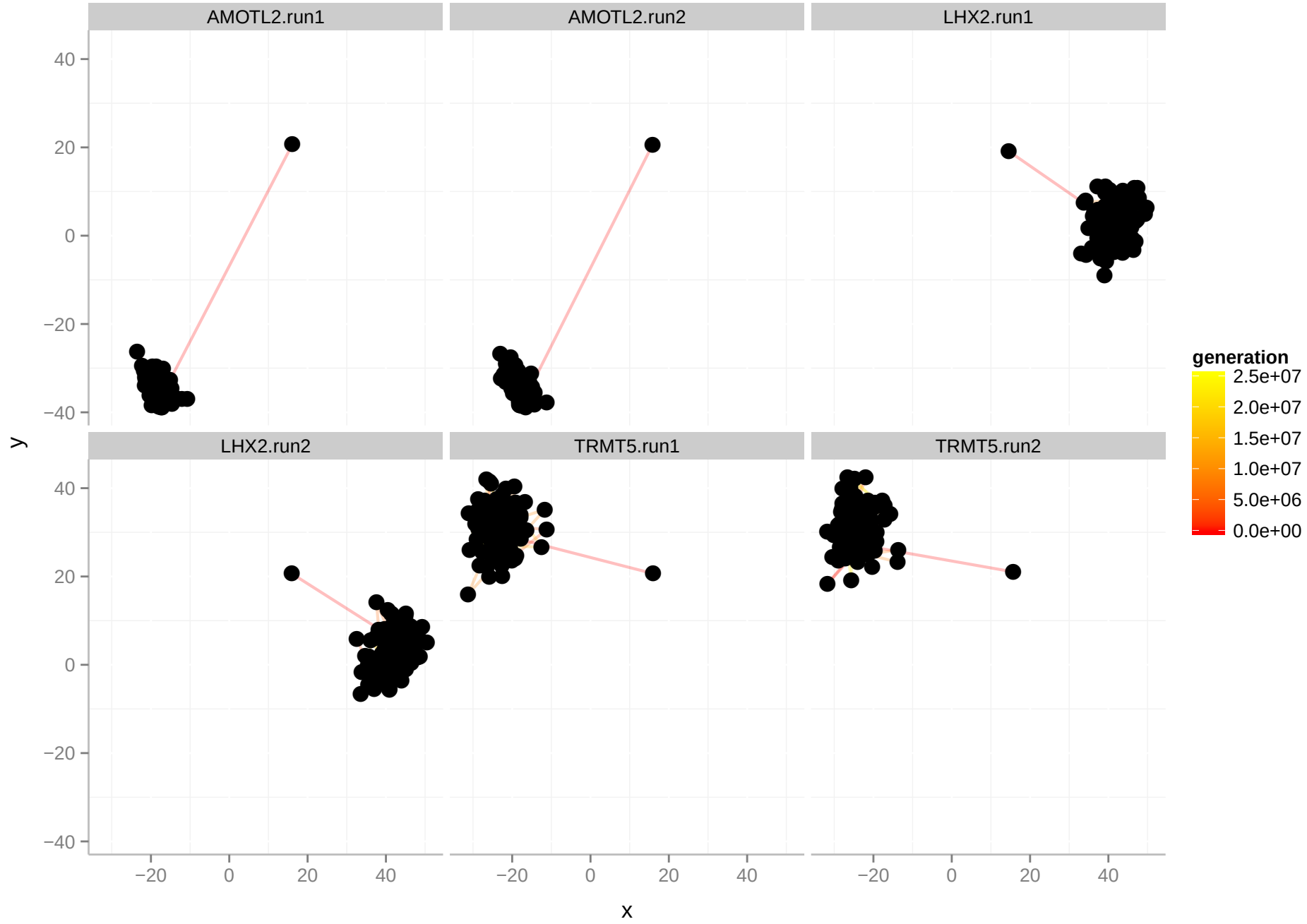
TL
AMOTL2.run1 (ESS=501)
AMOTL2.run2 (ESS=501)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=501)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=501)
15
10
5
TL
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

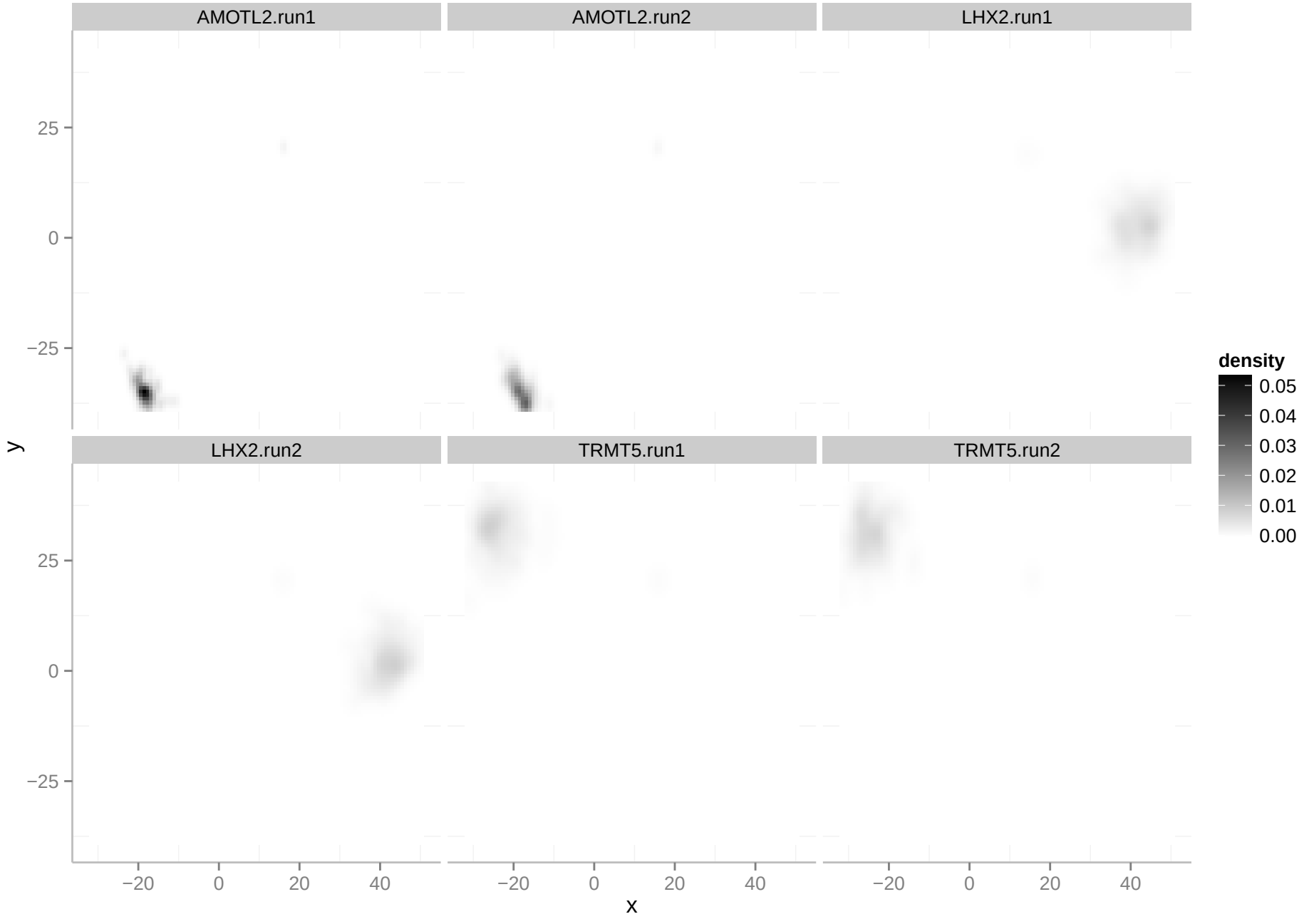

pi.A.
AMOTL2.run1 (ESS=501)
AMOTL2.run2 (ESS=501)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=501)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=501)
0.40
0.35
0.30
0.25
0.20
pi.A.
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

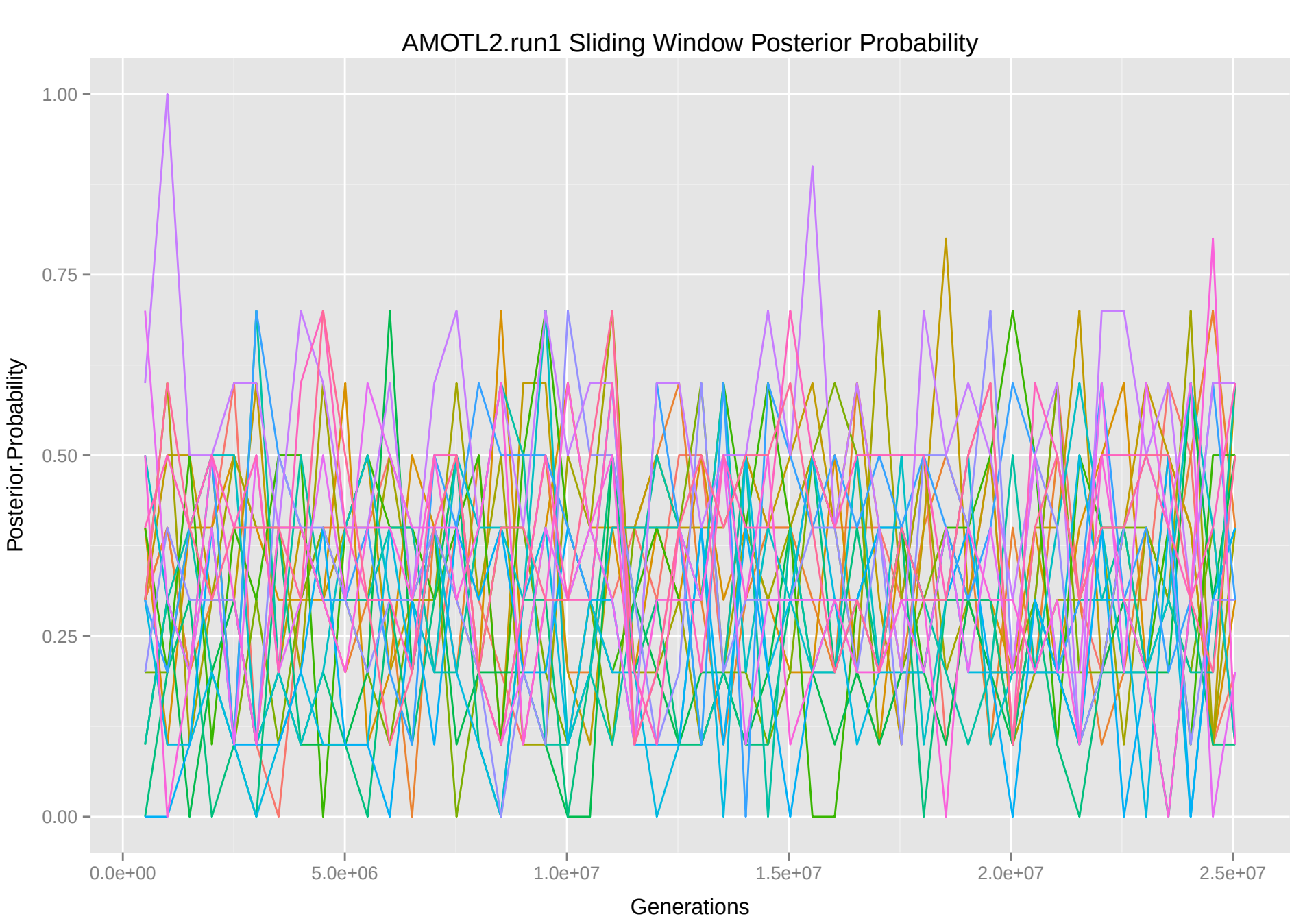

pi.C.
AMOTL2.run1 (ESS=405)
AMOTL2.run2 (ESS=653)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=501)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=501)
0.35
0.30
0.25
0.20
0.15
0.10
pi.C.
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

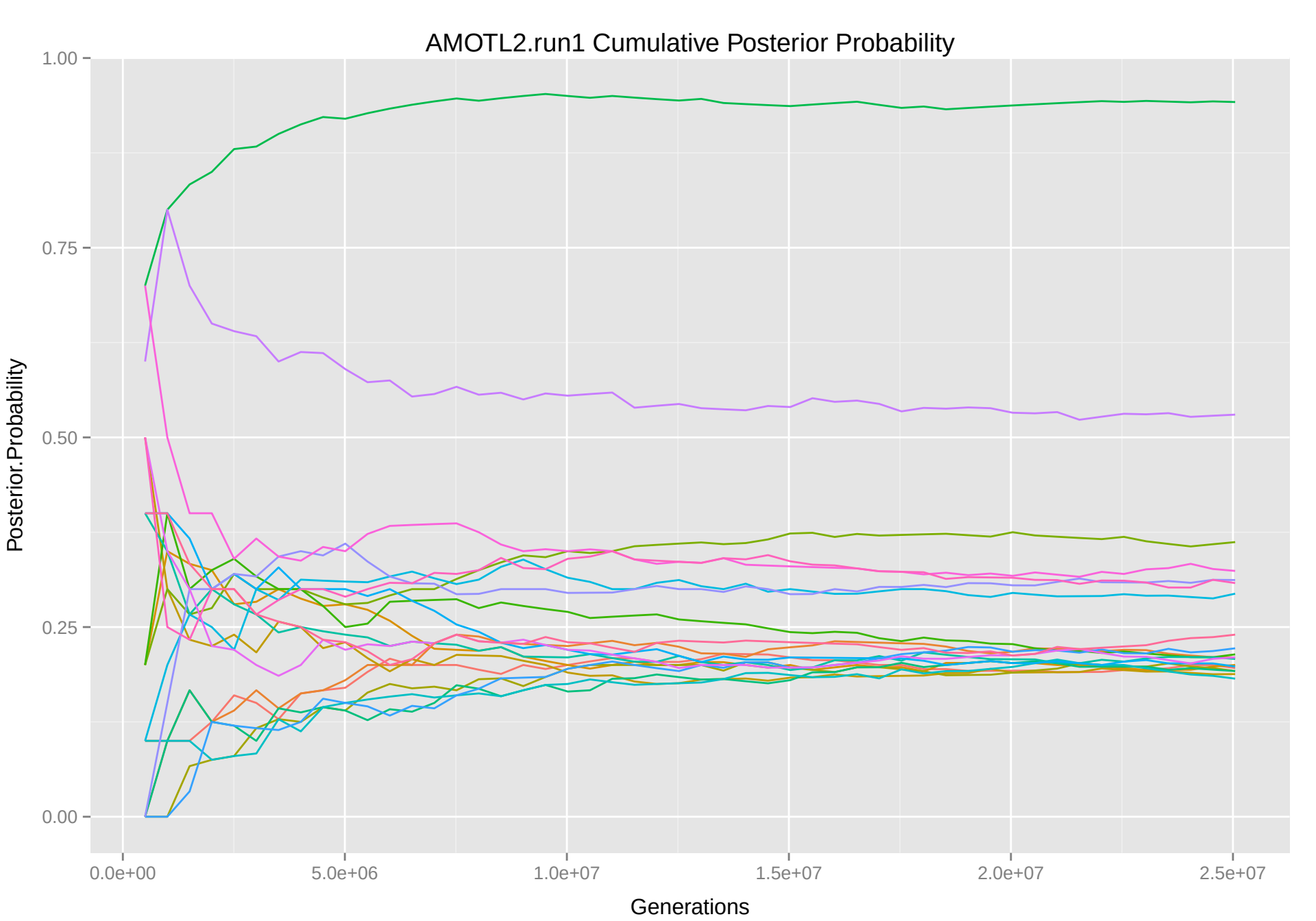

pi.G.
AMOTL2.run1 (ESS=501)
AMOTL2.run2 (ESS=683)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=501)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=486)
0.30
0.25
0.20
0.15
0.10
pi.G.
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

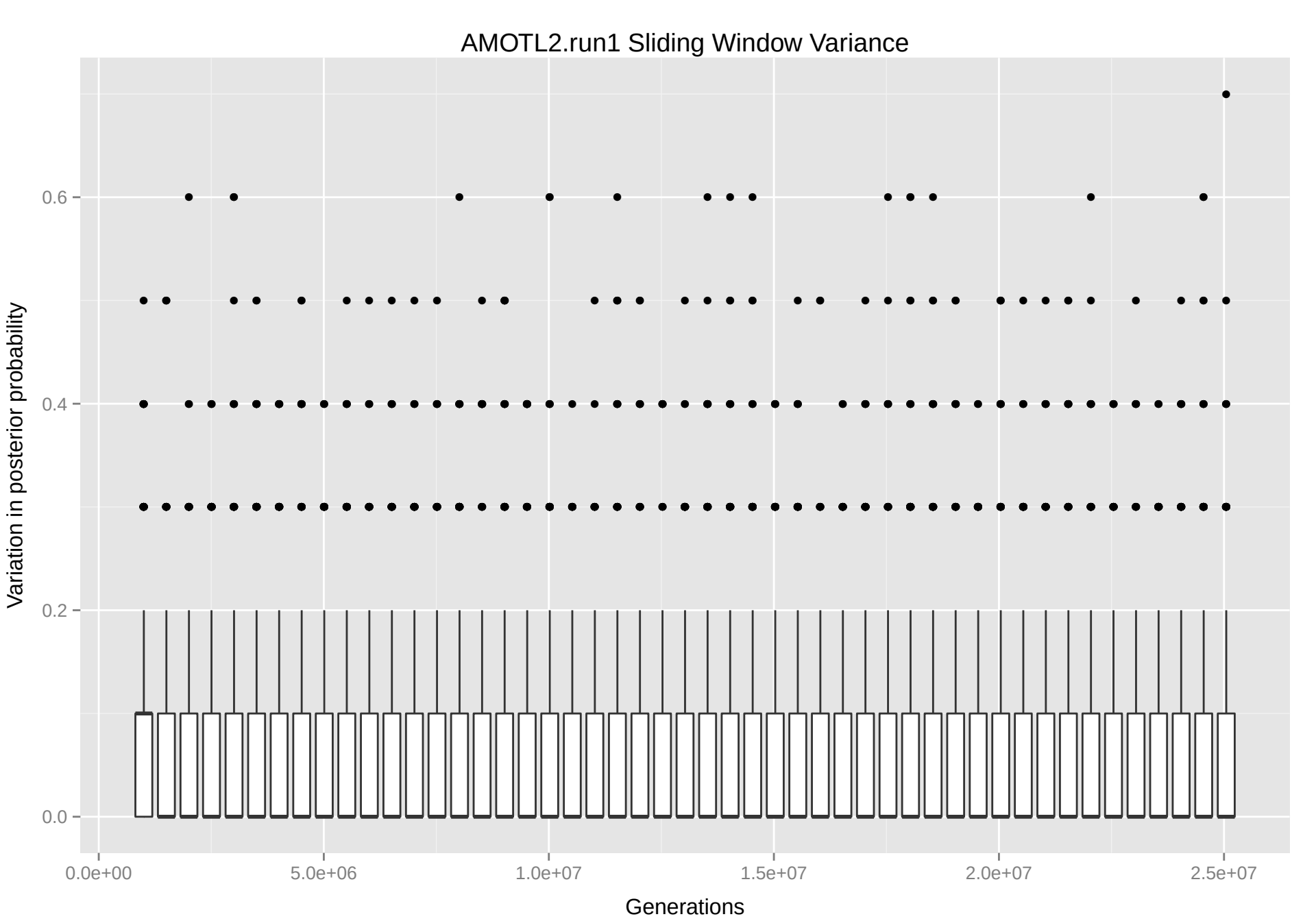

pi.T.
AMOTL2.run1 (ESS=501)
AMOTL2.run2 (ESS=501)
LHX2.run1 (ESS=501)
LHX2.run2 (ESS=405)
TRMT5.run1 (ESS=501)
TRMT5.run2 (ESS=501)
0.40
0.35
0.30
0.25
0.20
pi.T.
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
generation

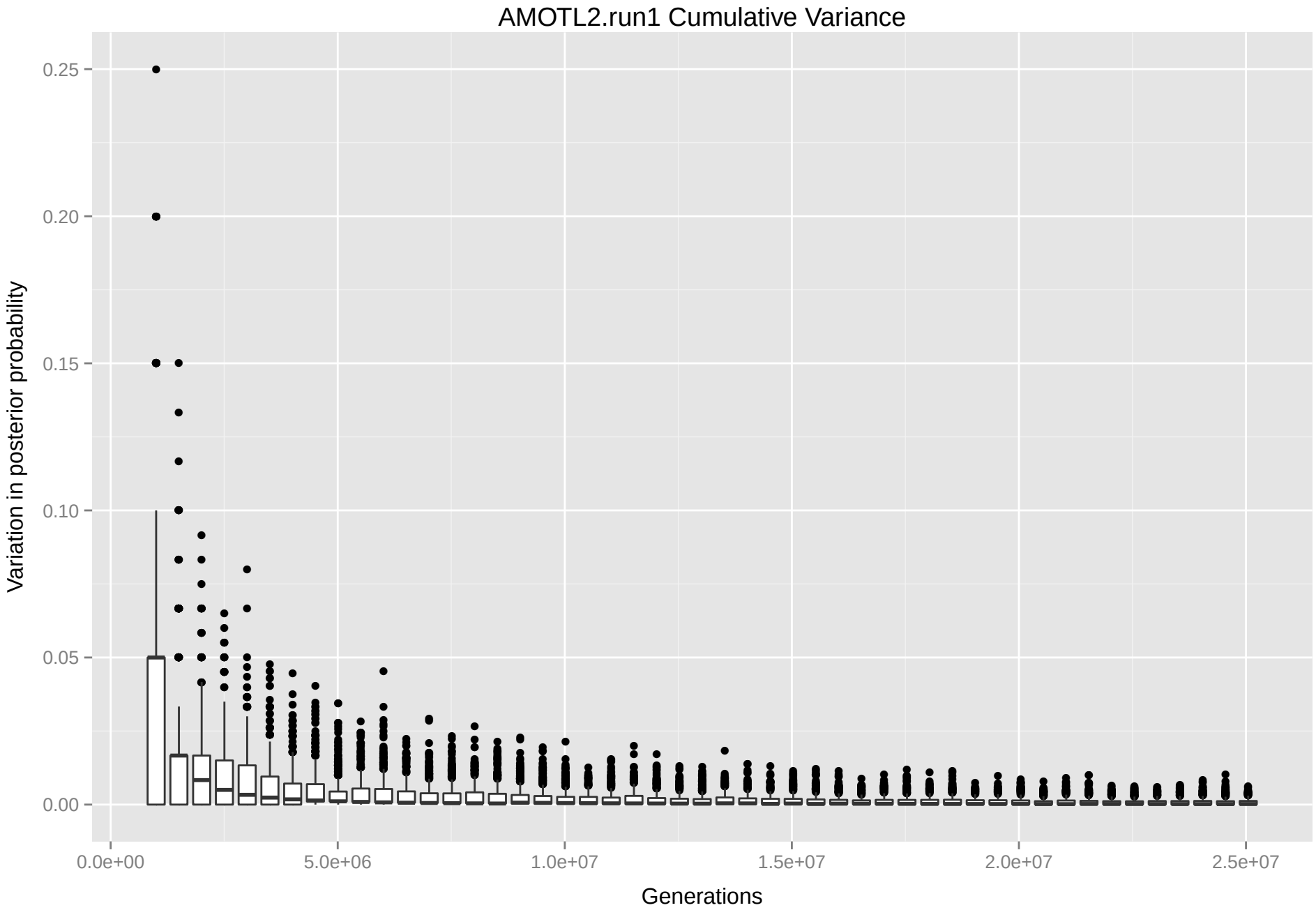

AMOTL2.run1
AMOTL2.run2
LHX2.run1
LHX2.run2
TRMT5.run1
TRMT5.run2
y
x
40
20
0
−20
−40
−20
0
20
40
generation
2.5e+07
2.0e+07
1.5e+07
1.0e+07
5.0e+06
0.0e+00

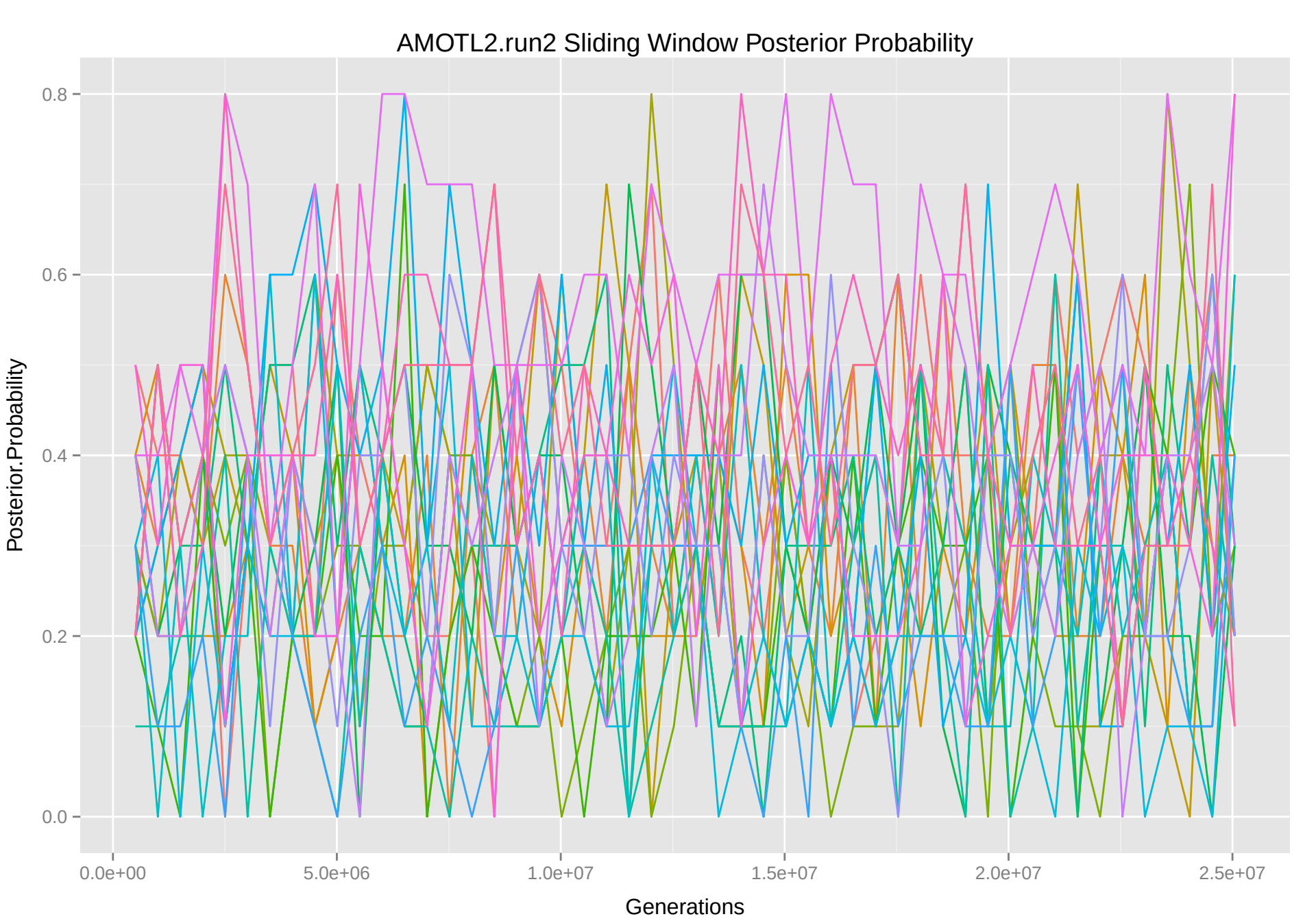

AMOTL2.run1
AMOTL2.run2
LHX2.run1
LHX2.run2
TRMT5.run1
TRMT5.run2
y
x
25
0
−25
−20
0
20
40
density
0.05
0.04
0.03
0.02
0.01
0.00

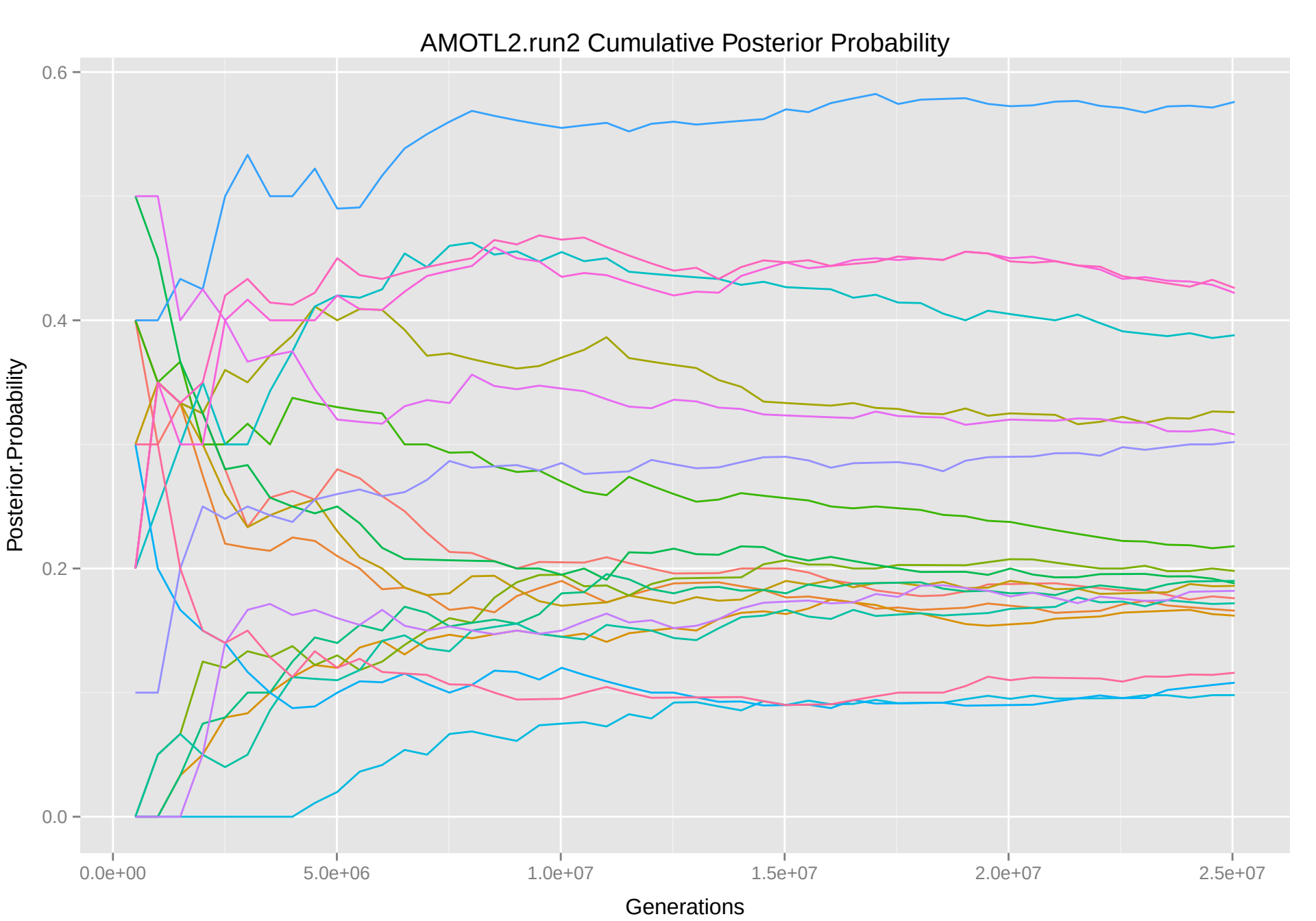

AMOTL2.run1 Sliding Window Posterior Probability
Posterior.Probability
1.00
0.75
0.50
0.25
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

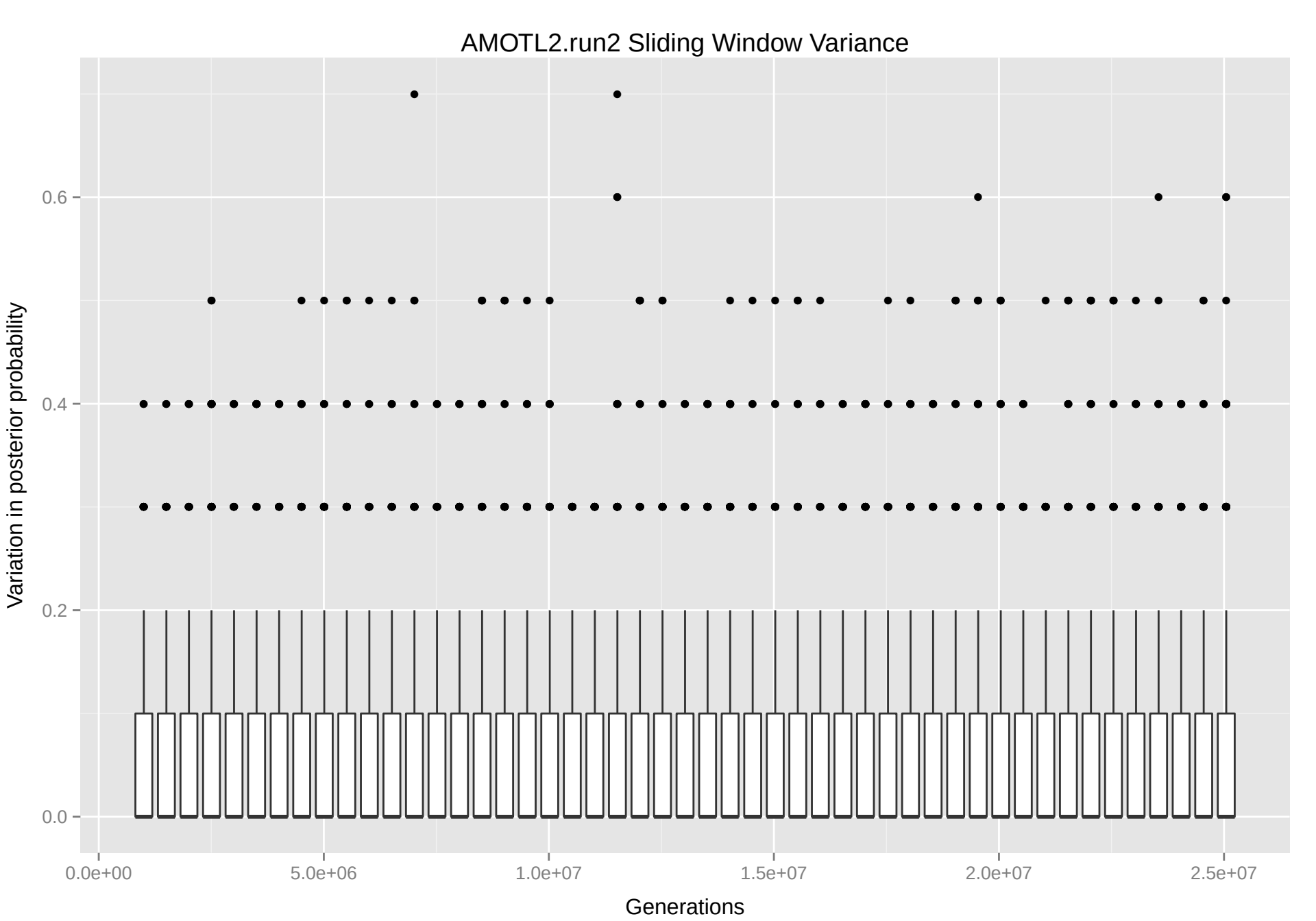

AMOTL2.run1 Cumulative Posterior Probability
Posterior.Probability
1.00
0.75
0.50
0.25
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

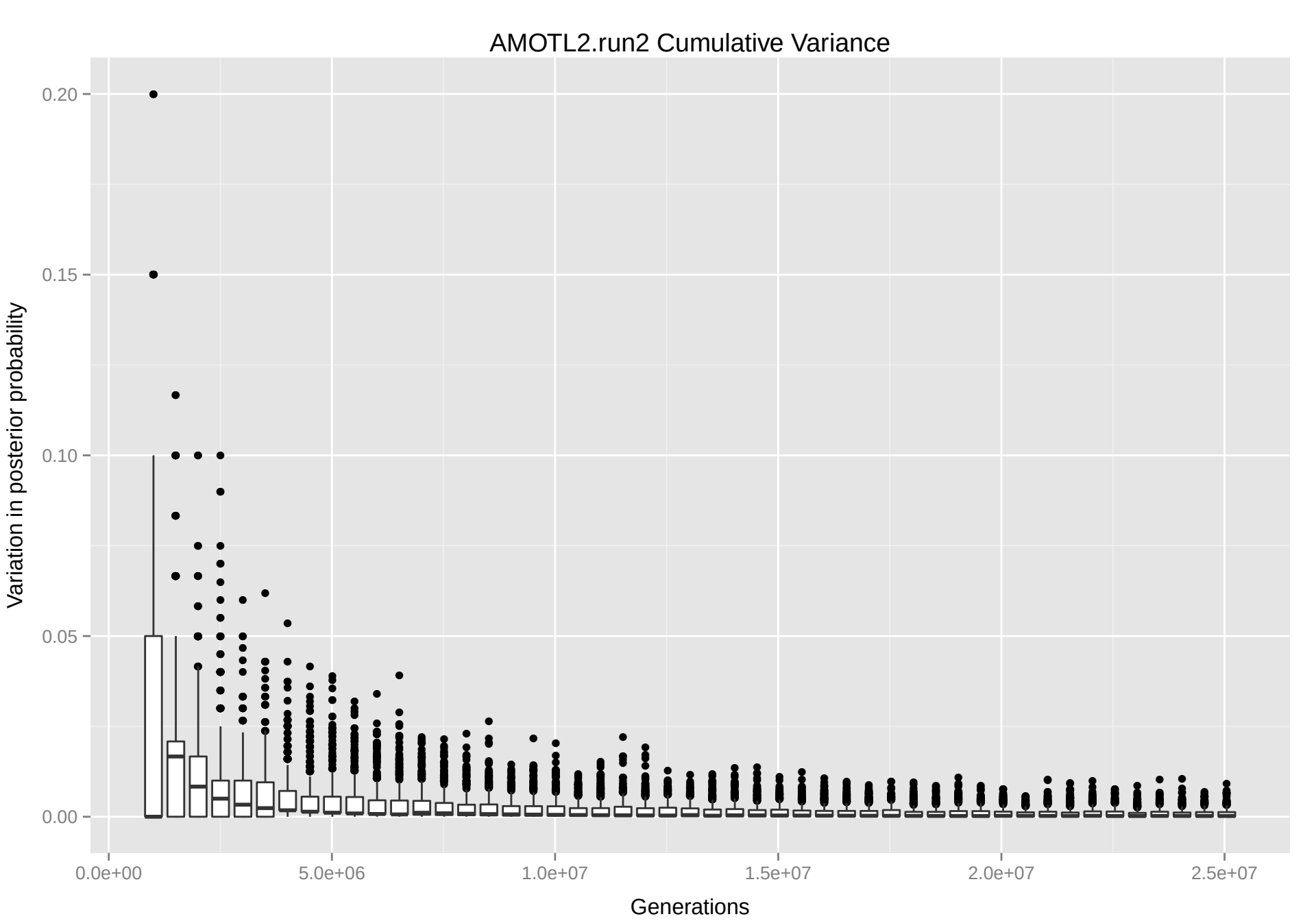

AMOTL2.run1 Sliding Window Variance
Variation in posterior probability
0.0
0.2
0.4
0.6
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

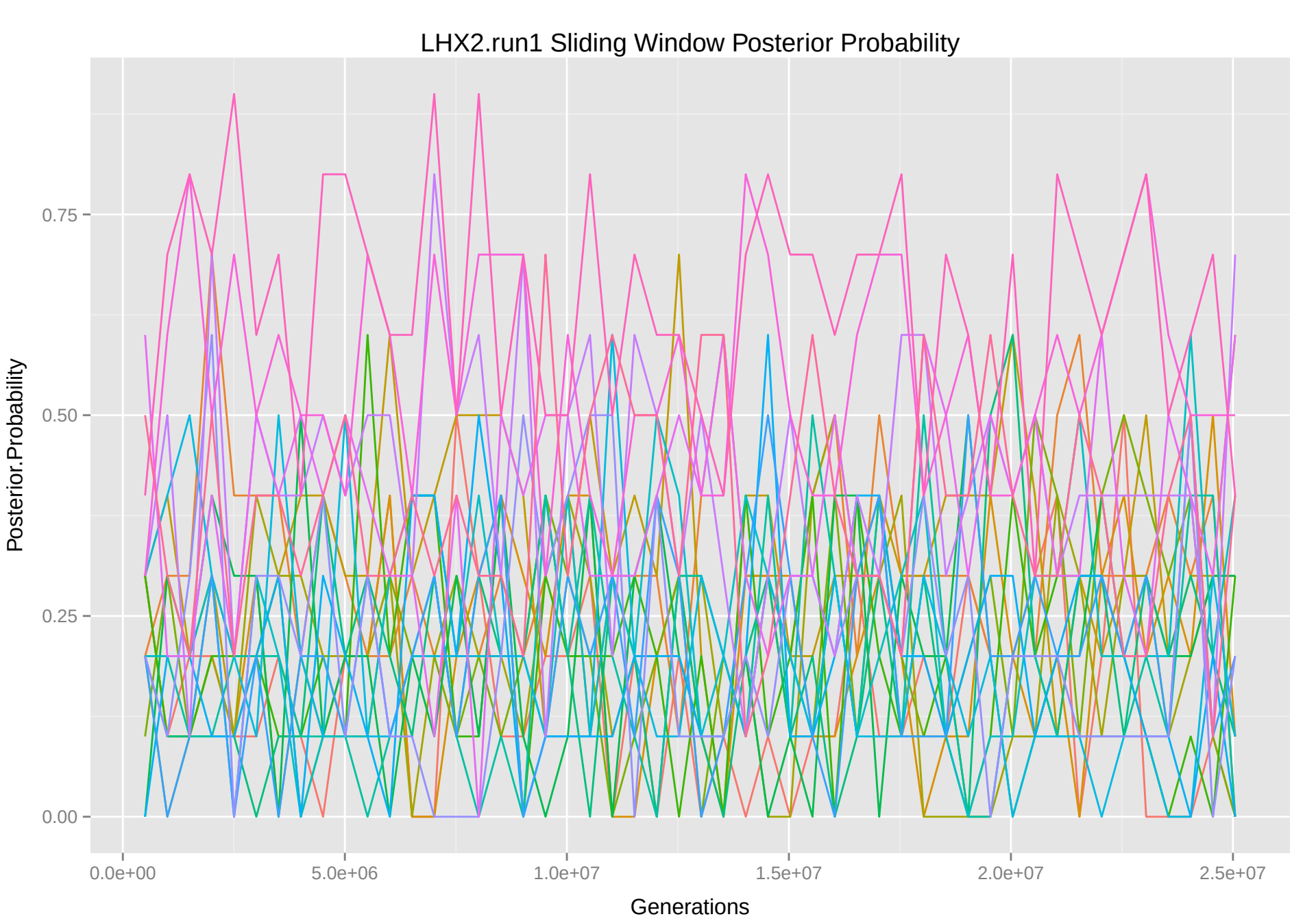

AMOTL2.run1 Cumulative Variance
Variation in posterior probability
0.25
0.20
0.15
0.10
0.05
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

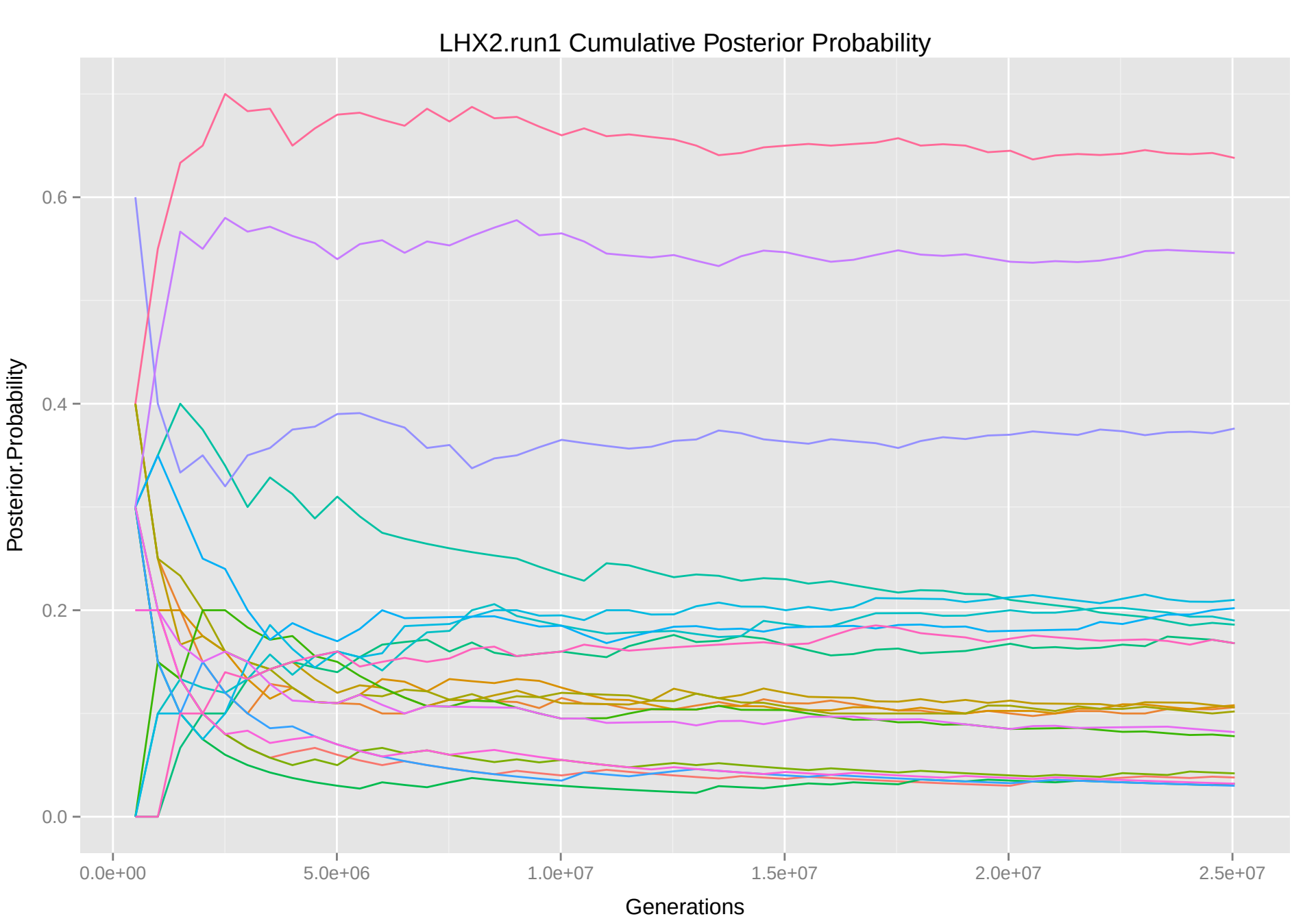

AMOTL2.run2 Sliding Window Posterior Probability
Posterior.Probability
0.0
0.2
0.4
0.6
0.8
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

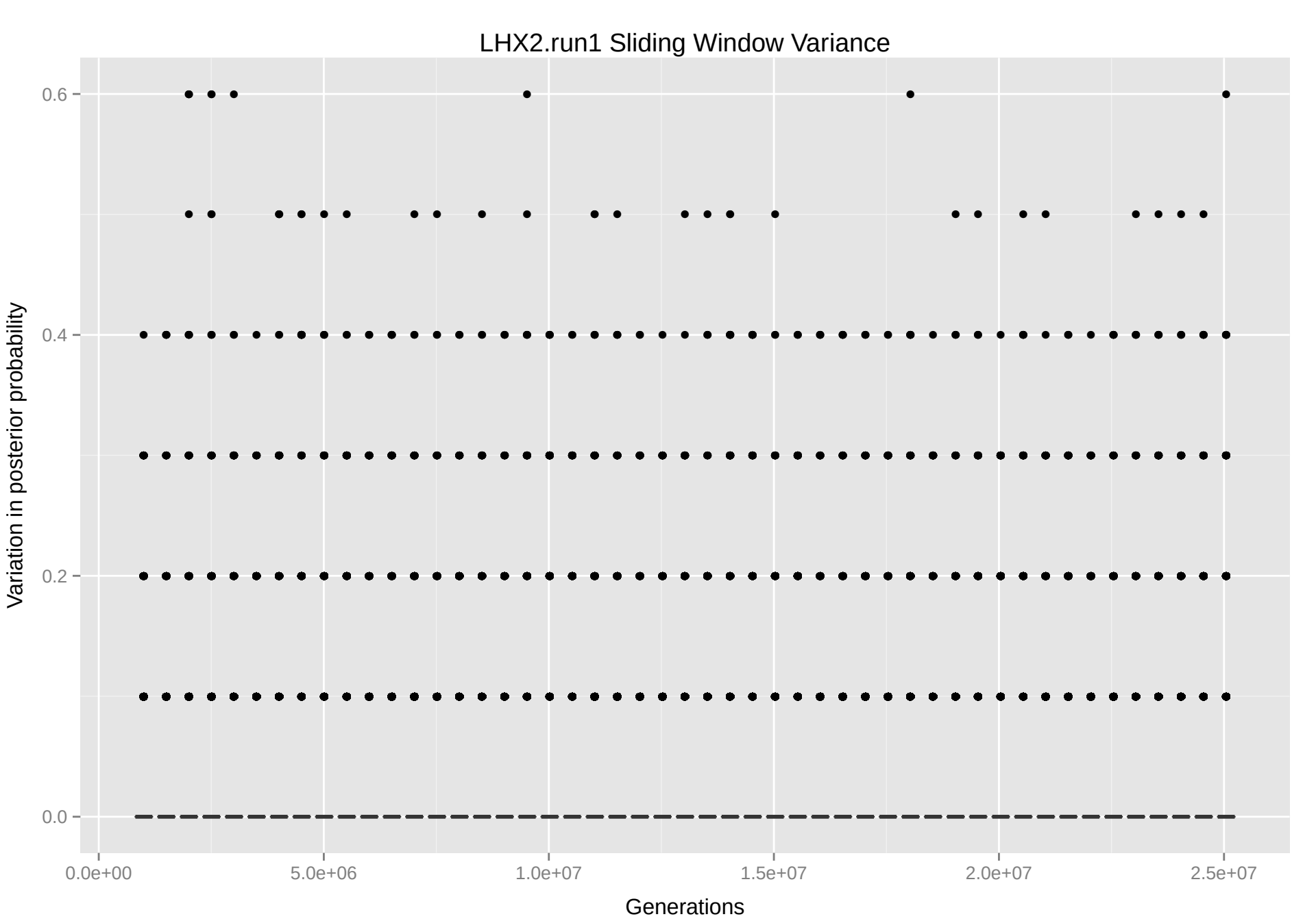

AMOTL2.run2 Cumulative Posterior Probability
Posterior.Probability
0.6
0.4
0.2
0.0
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

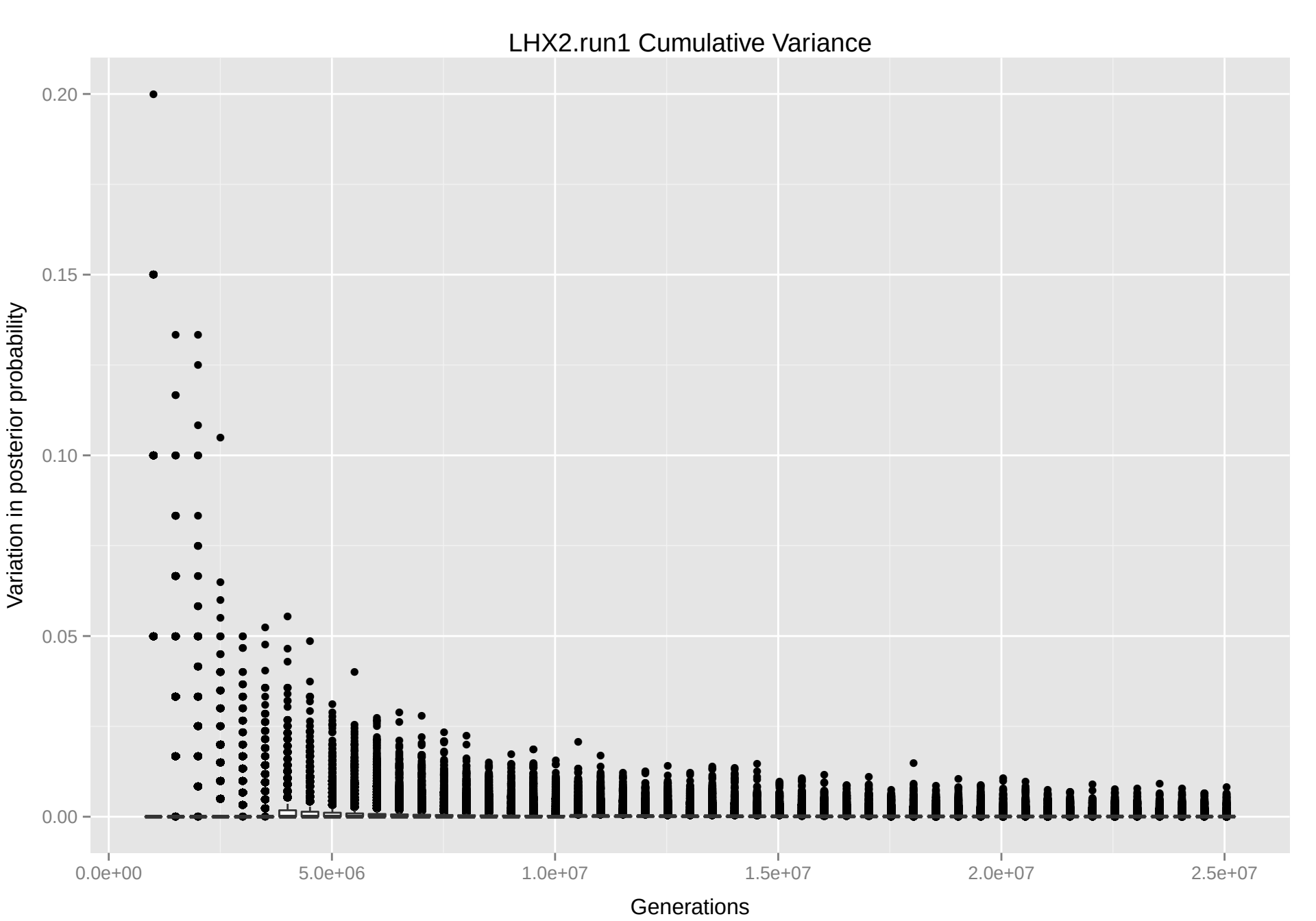

AMOTL2.run2 Sliding Window Variance
Variation in posterior probability
0.0
0.2
0.4
0.6
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

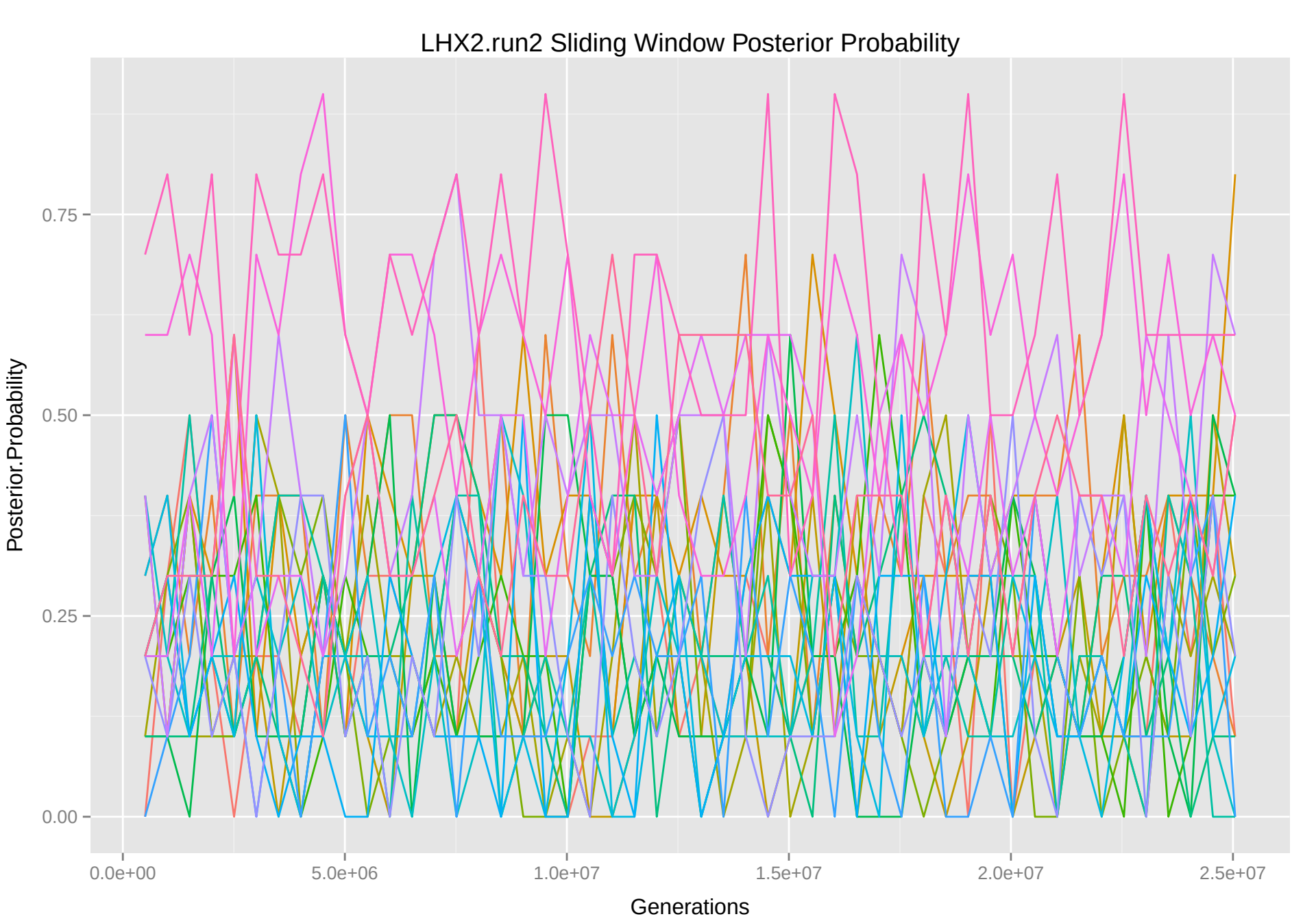

AMOTL2.run2 Cumulative Variance
Variation in posterior probability
0.20
0.15
0.10
0.05
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

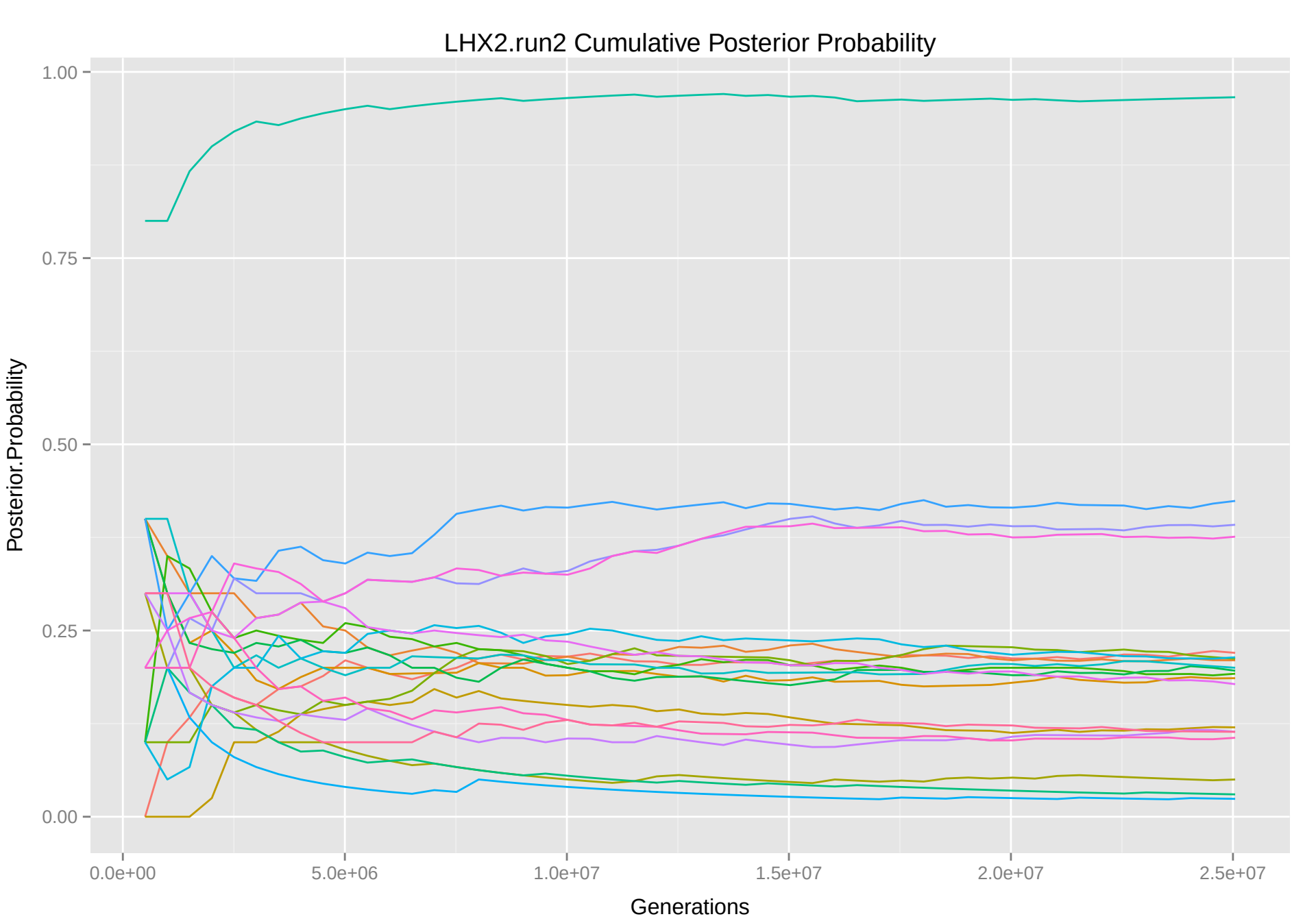

LHX2.run1 Sliding Window Posterior Probability
Posterior.Probability
0.00
0.25
0.50
0.75
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

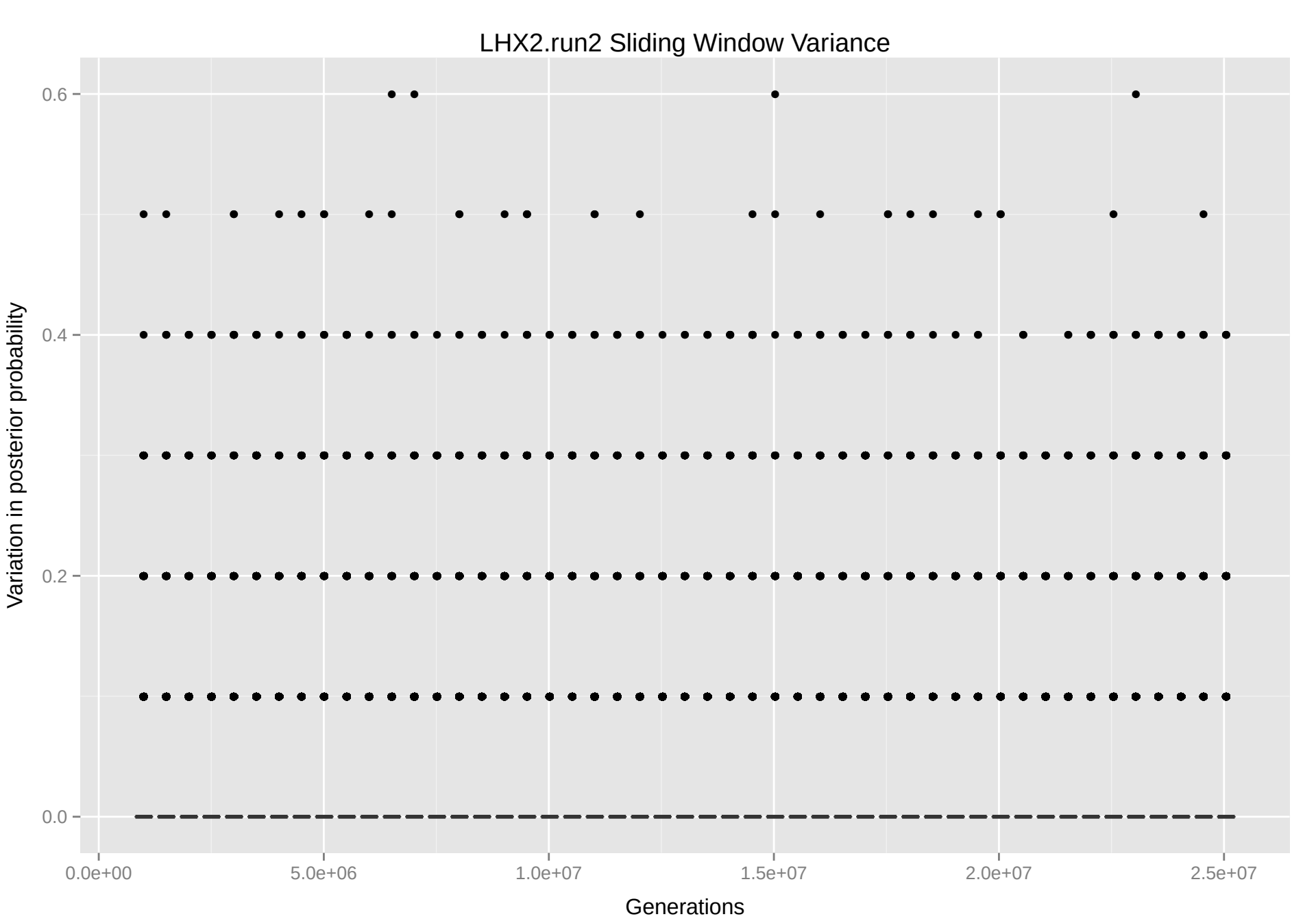

LHX2.run1 Cumulative Posterior Probability
Posterior.Probability
0.0
0.2
0.4
0.6
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

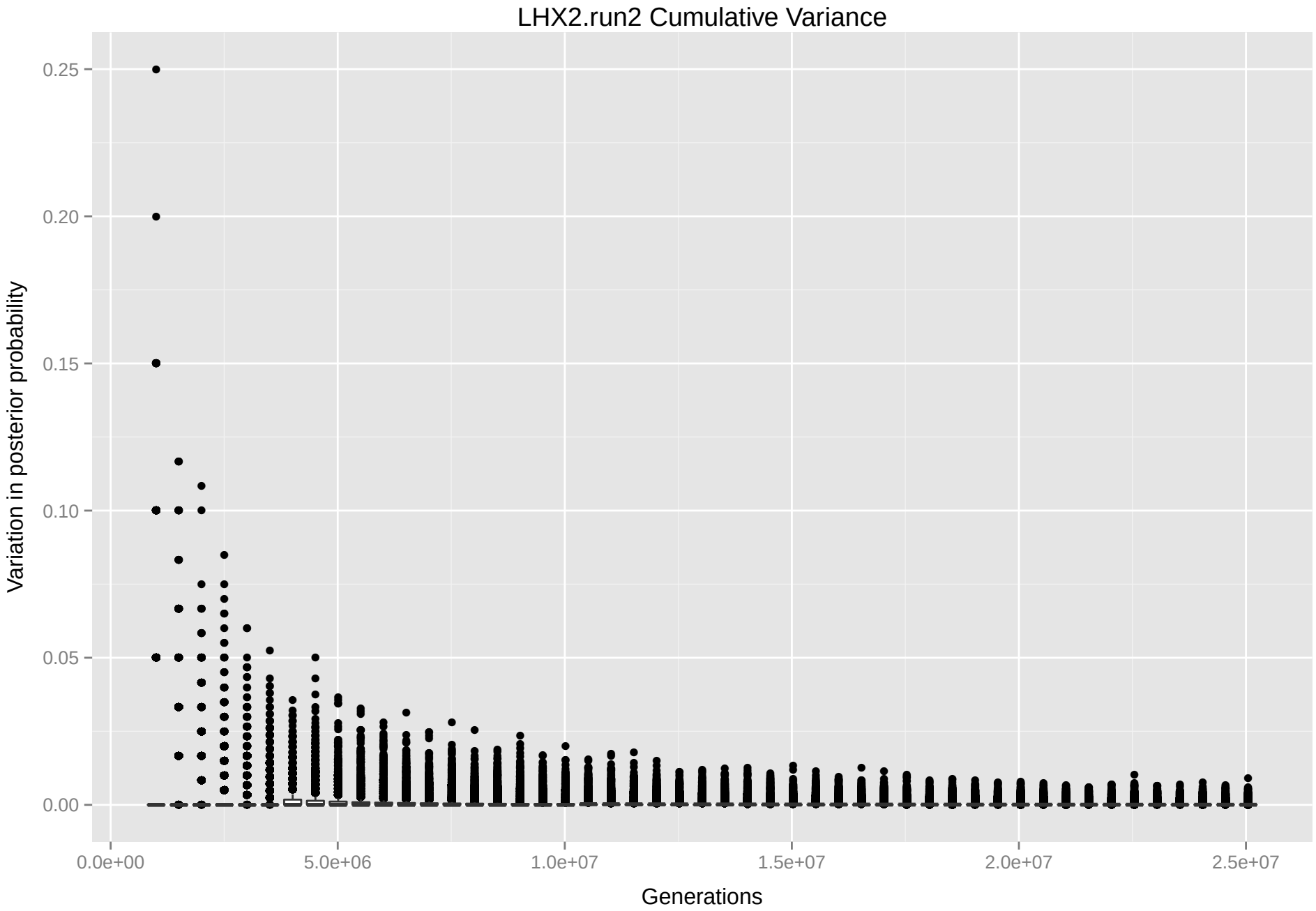

LHX2.run1 Sliding Window Variance
Variation in posterior probability
0.6
0.4
0.2
0.0
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

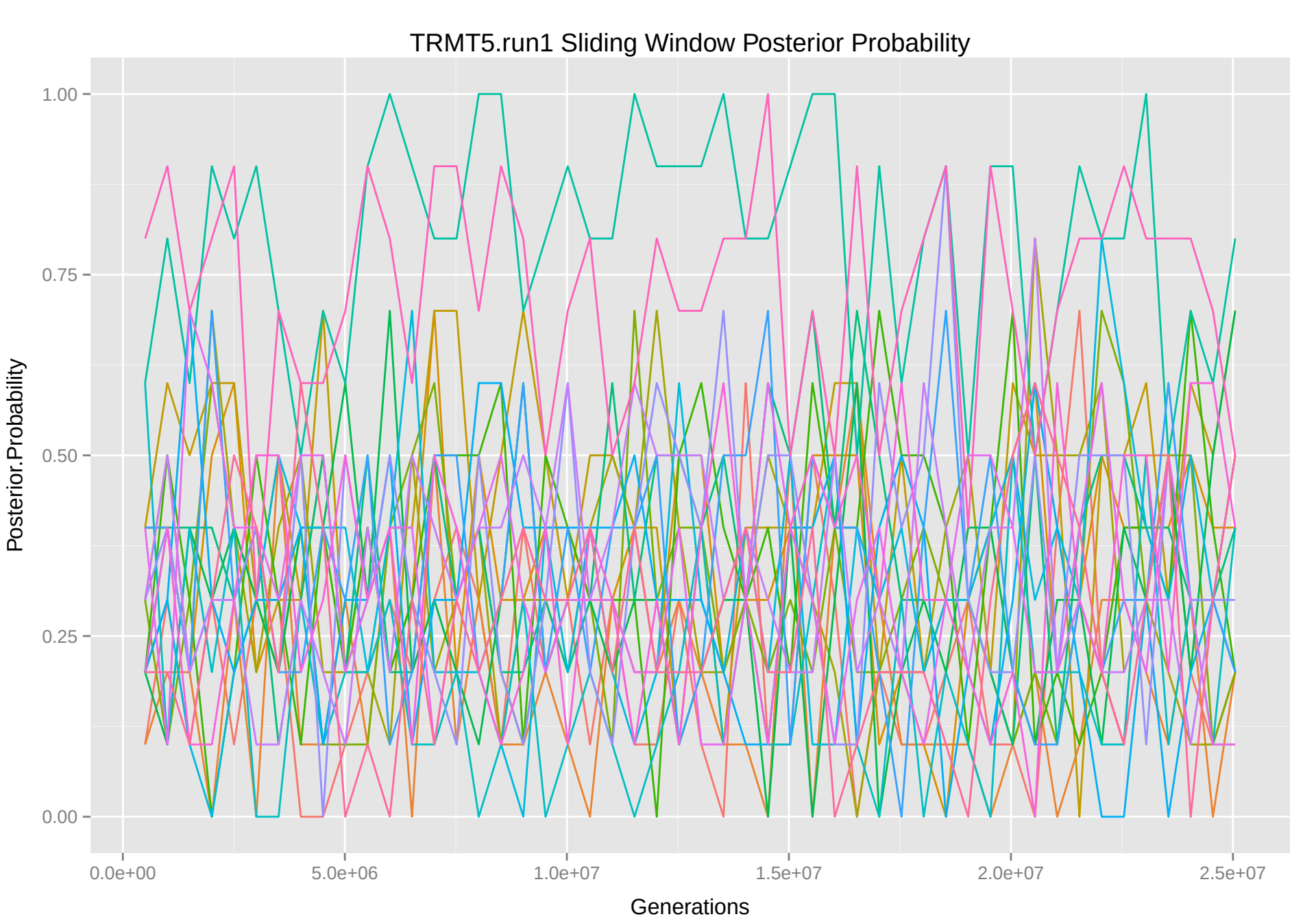

LHX2.run1 Cumulative Variance
Variation in posterior probability
0.20
0.15
0.10
0.05
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

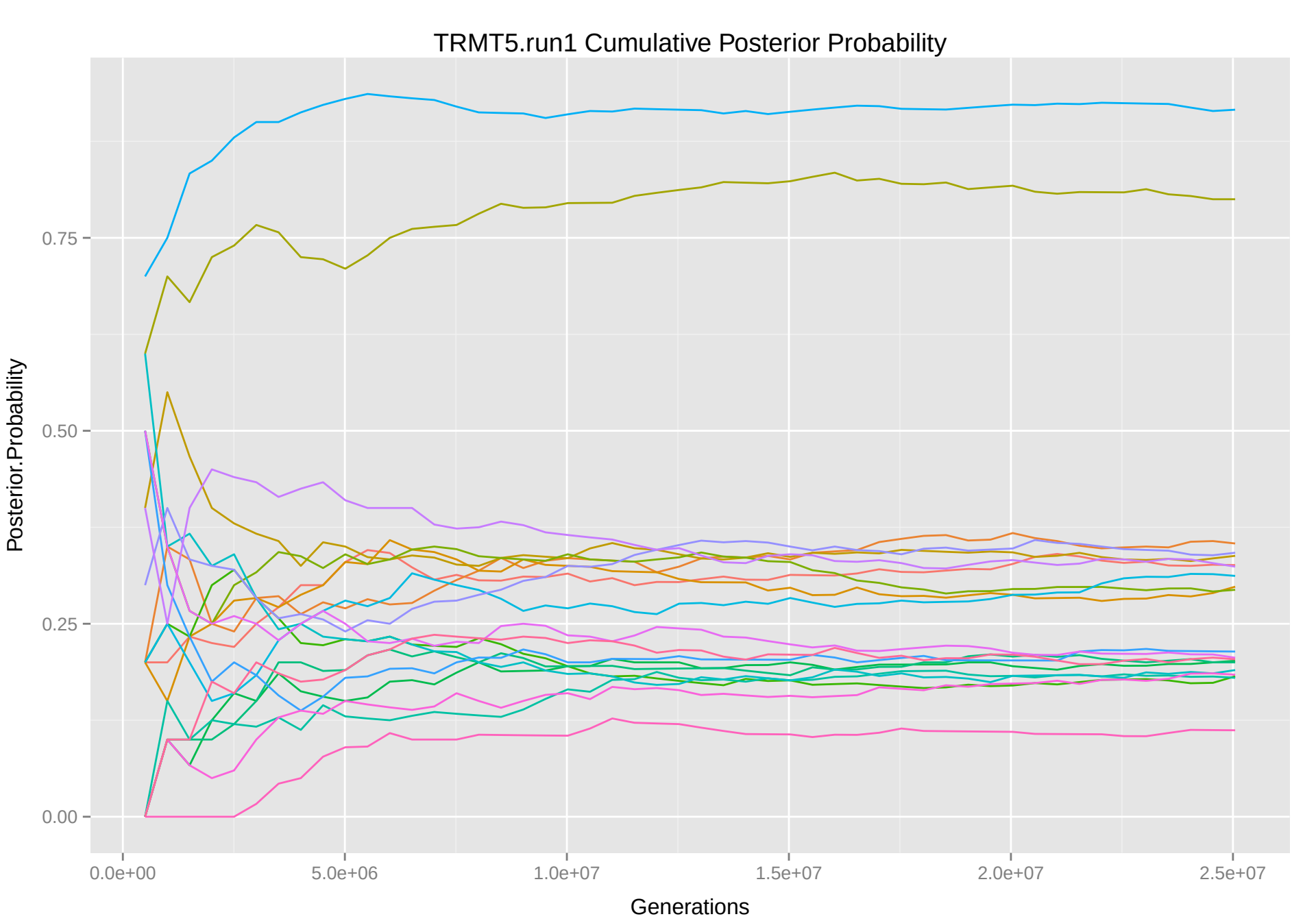

LHX2.run2 Sliding Window Posterior Probability
Posterior.Probability
0.00
0.25
0.50
0.75
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

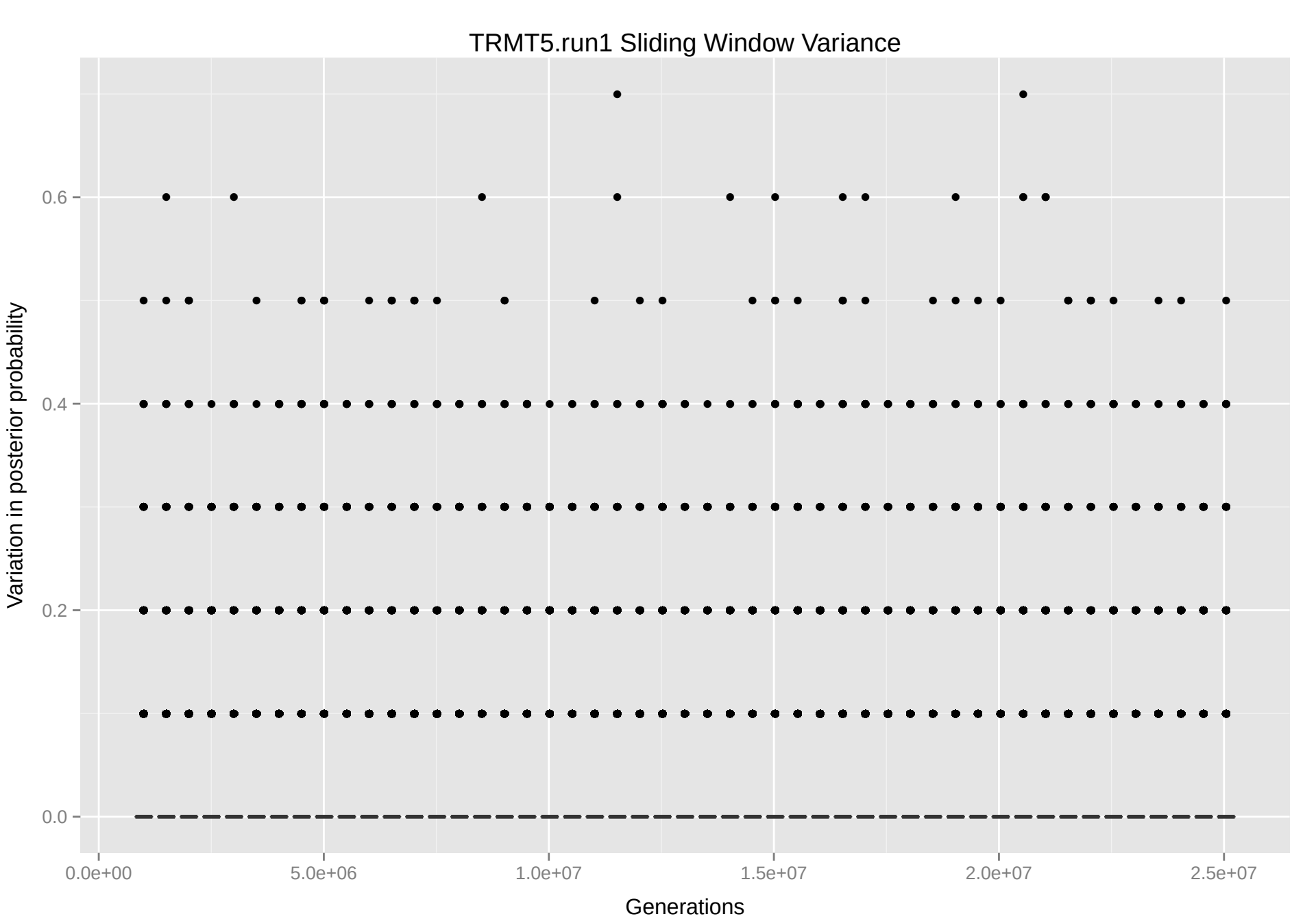

LHX2.run2 Cumulative Posterior Probability
Posterior.Probability
1.00
0.75
0.50
0.25
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

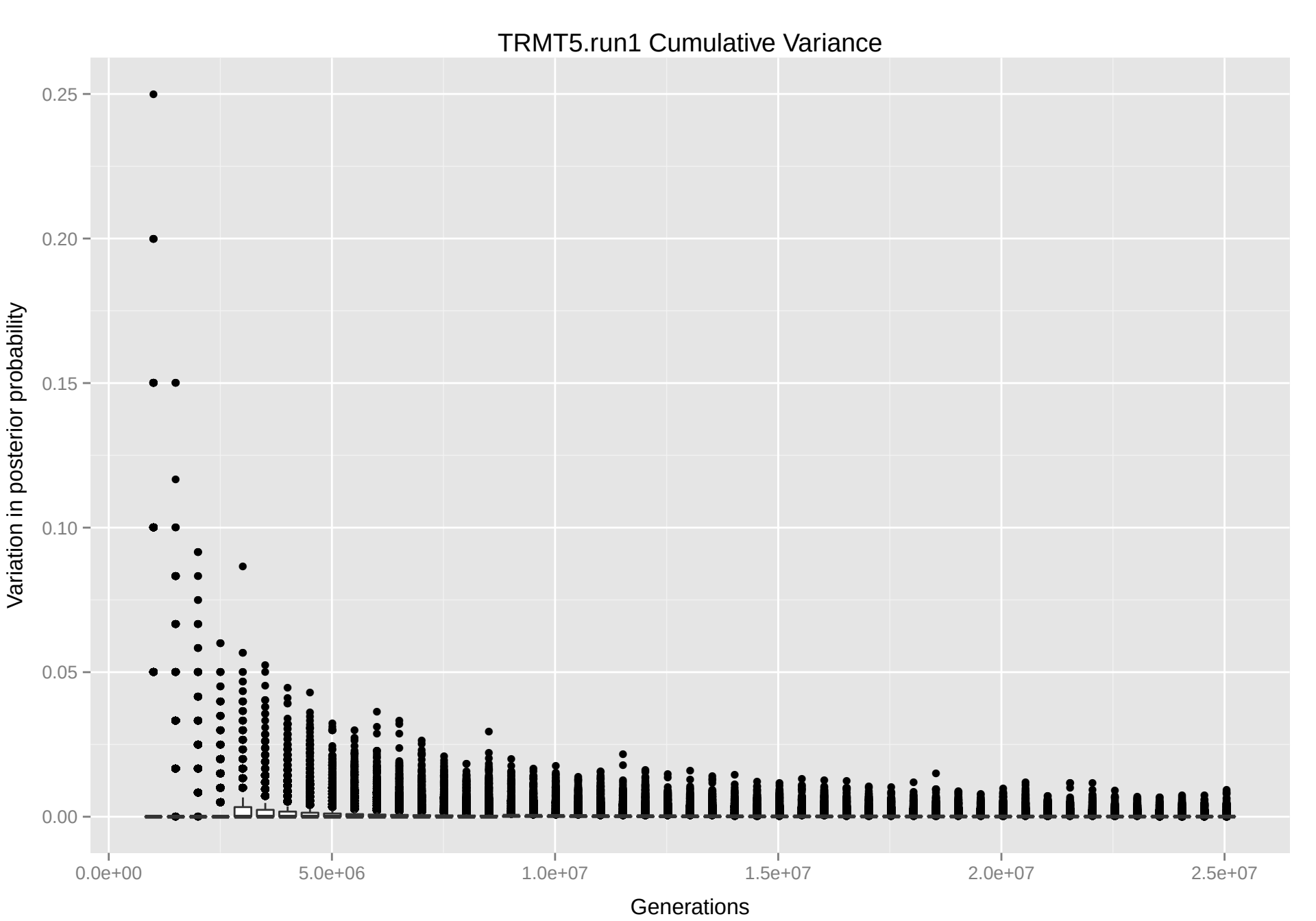

LHX2.run2 Sliding Window Variance
Variation in posterior probability
0.6
0.4
0.2
0.0
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

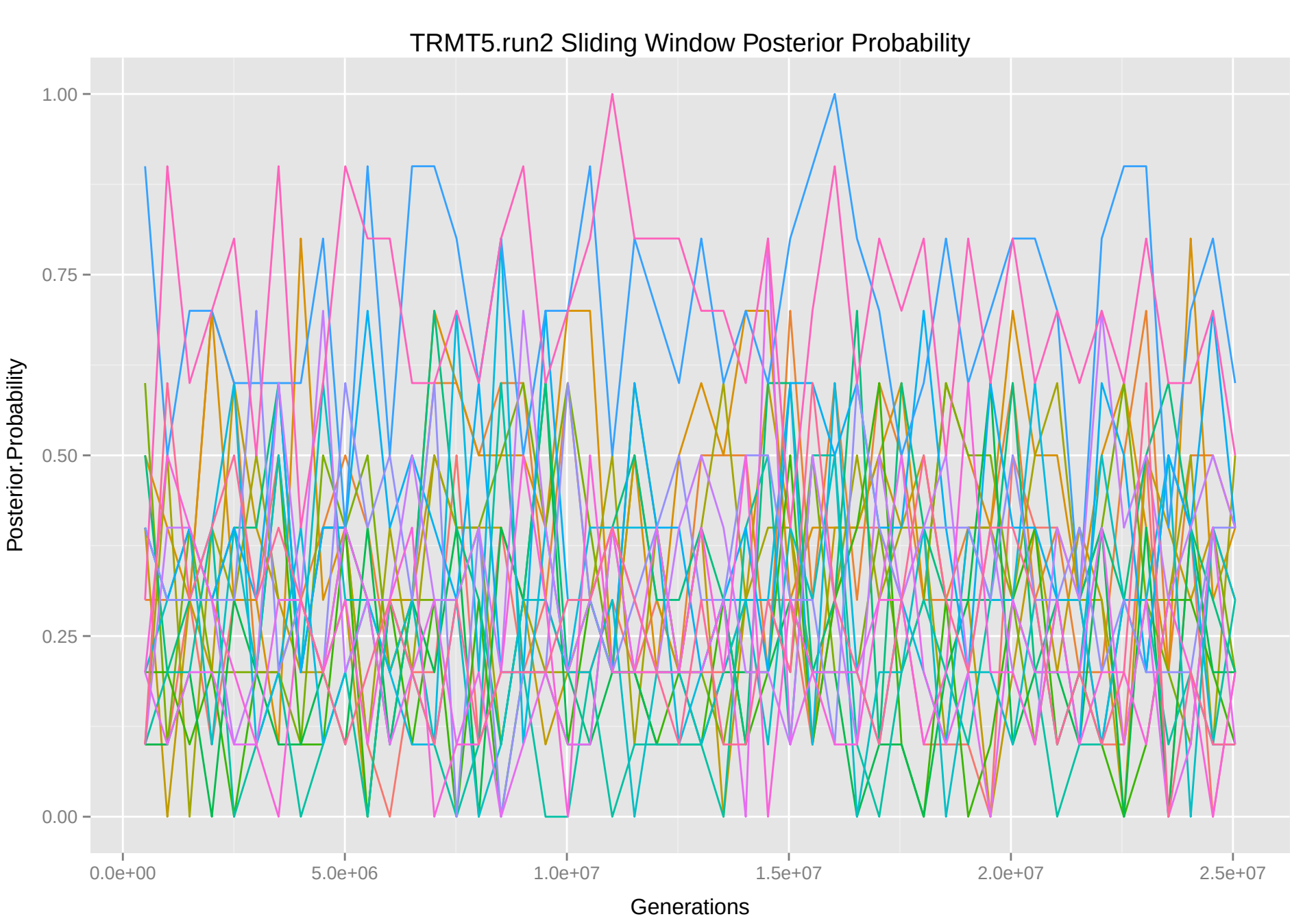

LHX2.run2 Cumulative Variance
Variation in posterior probability
0.25
0.20
0.15
0.10
0.05
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

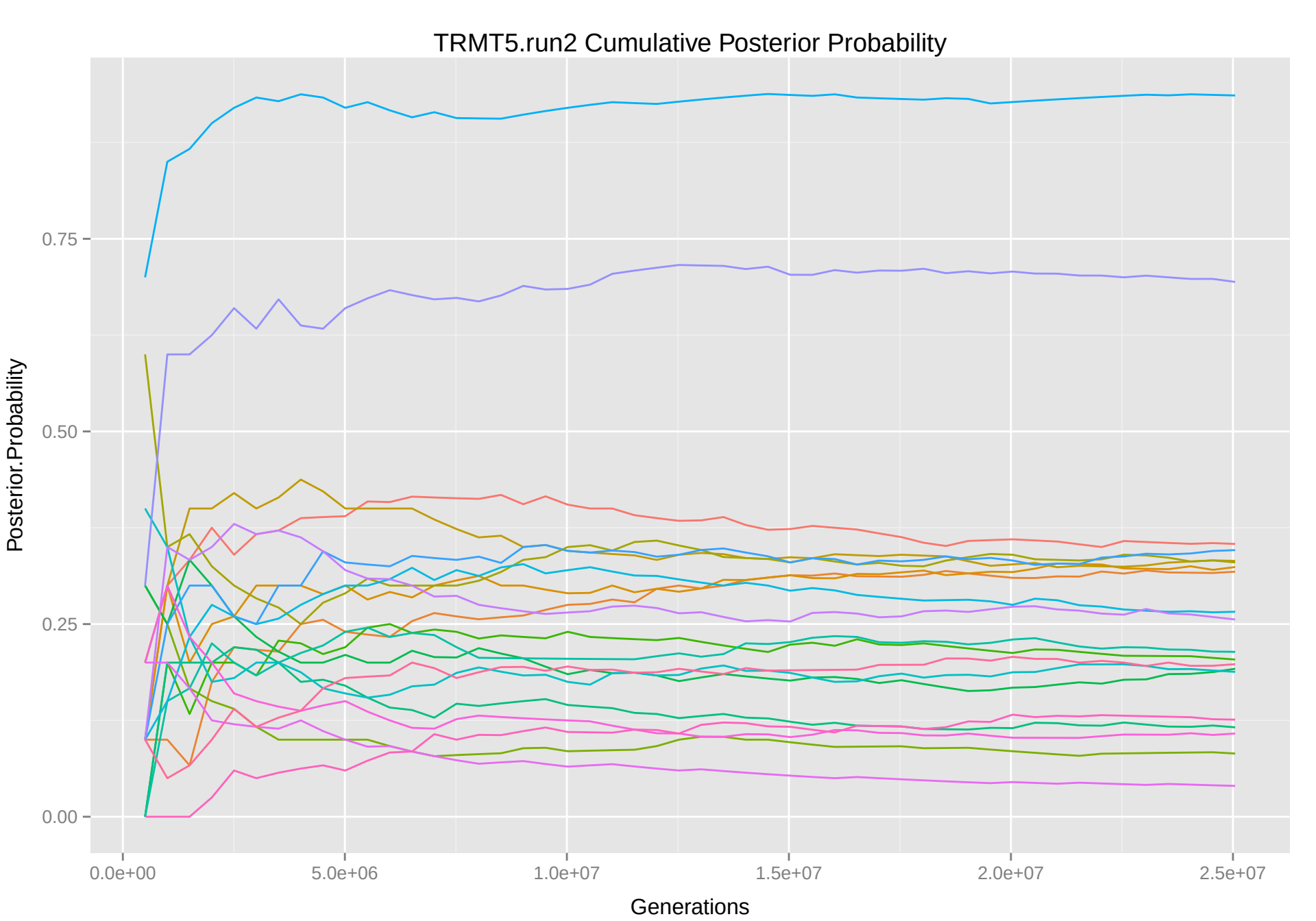

TRMT5.run1 Sliding Window Posterior Probability
Posterior.Probability
1.00
0.75
0.50
0.25
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

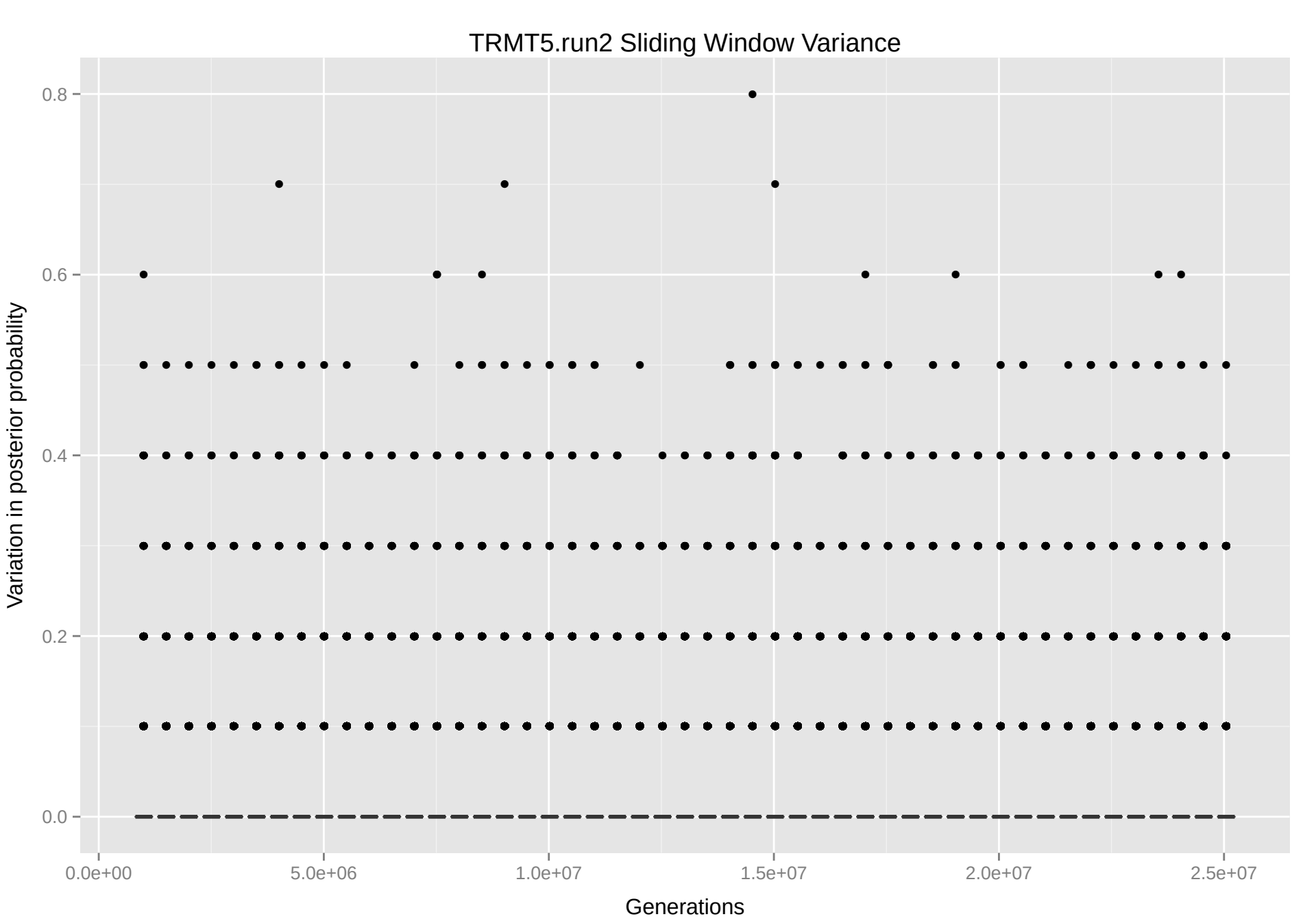

TRMT5.run1 Cumulative Posterior Probability
Posterior.Probability
0.00
0.25
0.50
0.75
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

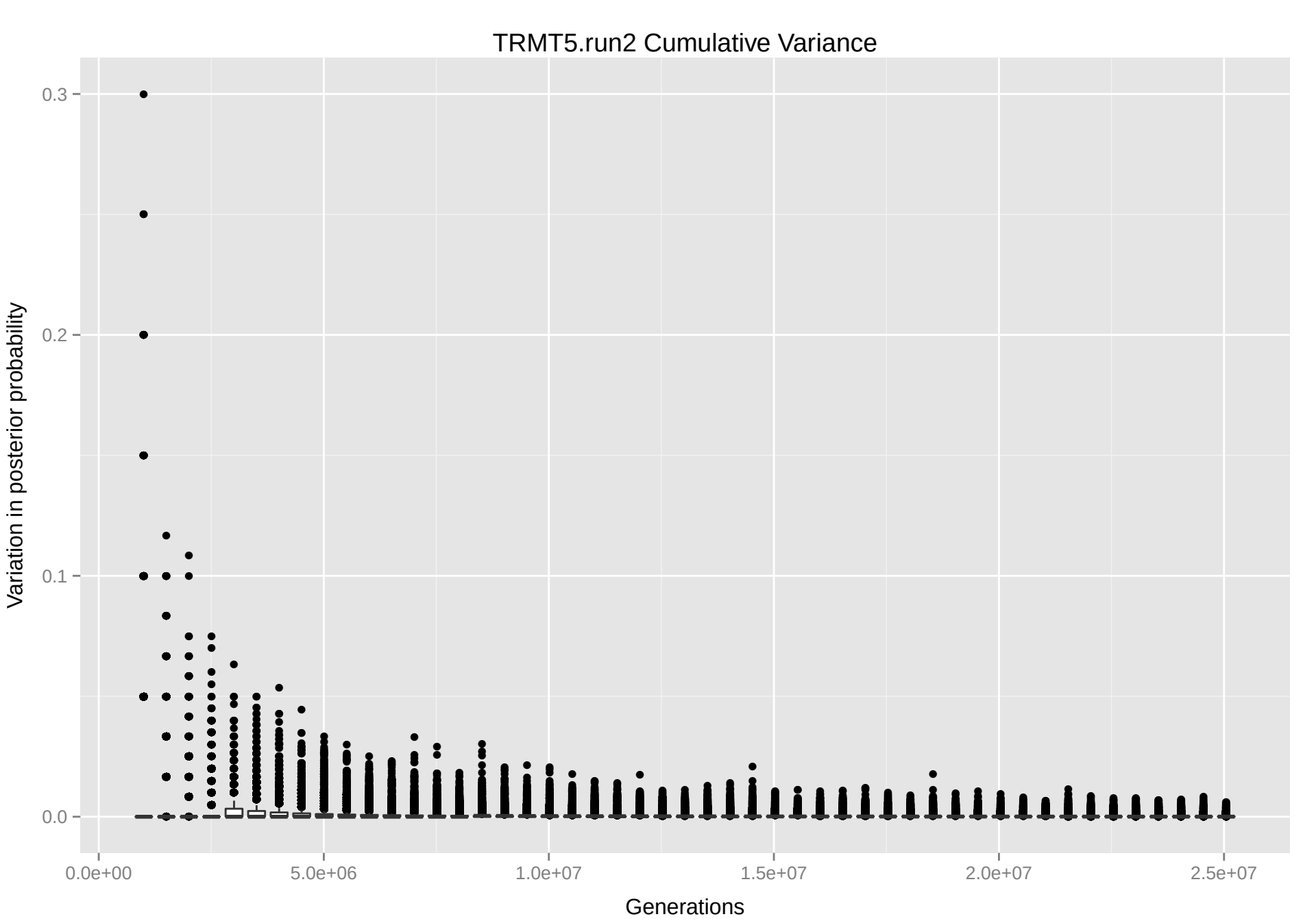

TRMT5.run1 Sliding Window Variance
Variation in posterior probability
0.0
0.2
0.4
0.6
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

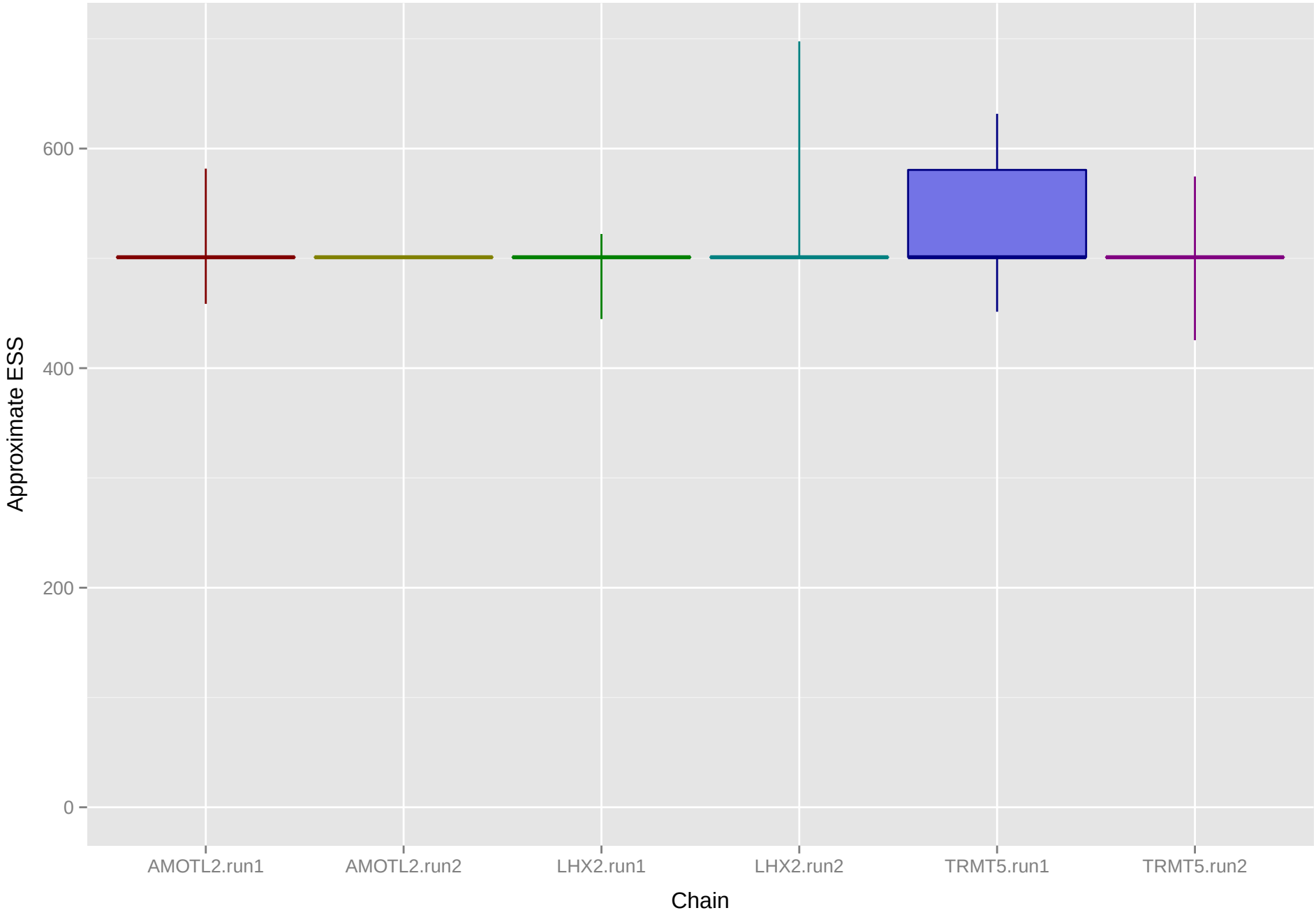

TRMT5.run1 Cumulative Variance
Variation in posterior probability
0.25
0.20
0.15
0.10
0.05
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

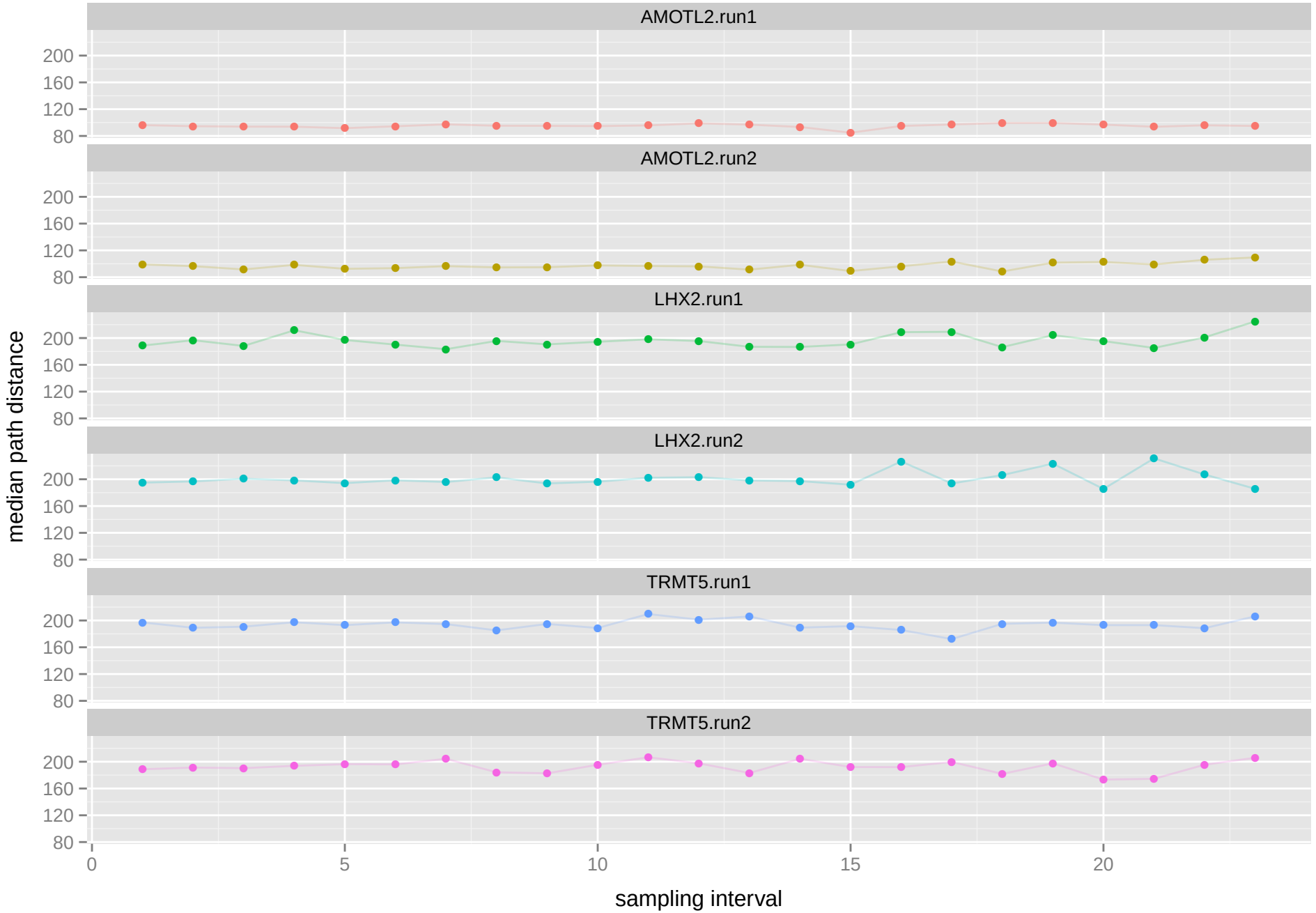

TRMT5.run2 Sliding Window Posterior Probability
Posterior.Probability
1.00
0.75
0.50
0.25
0.00
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

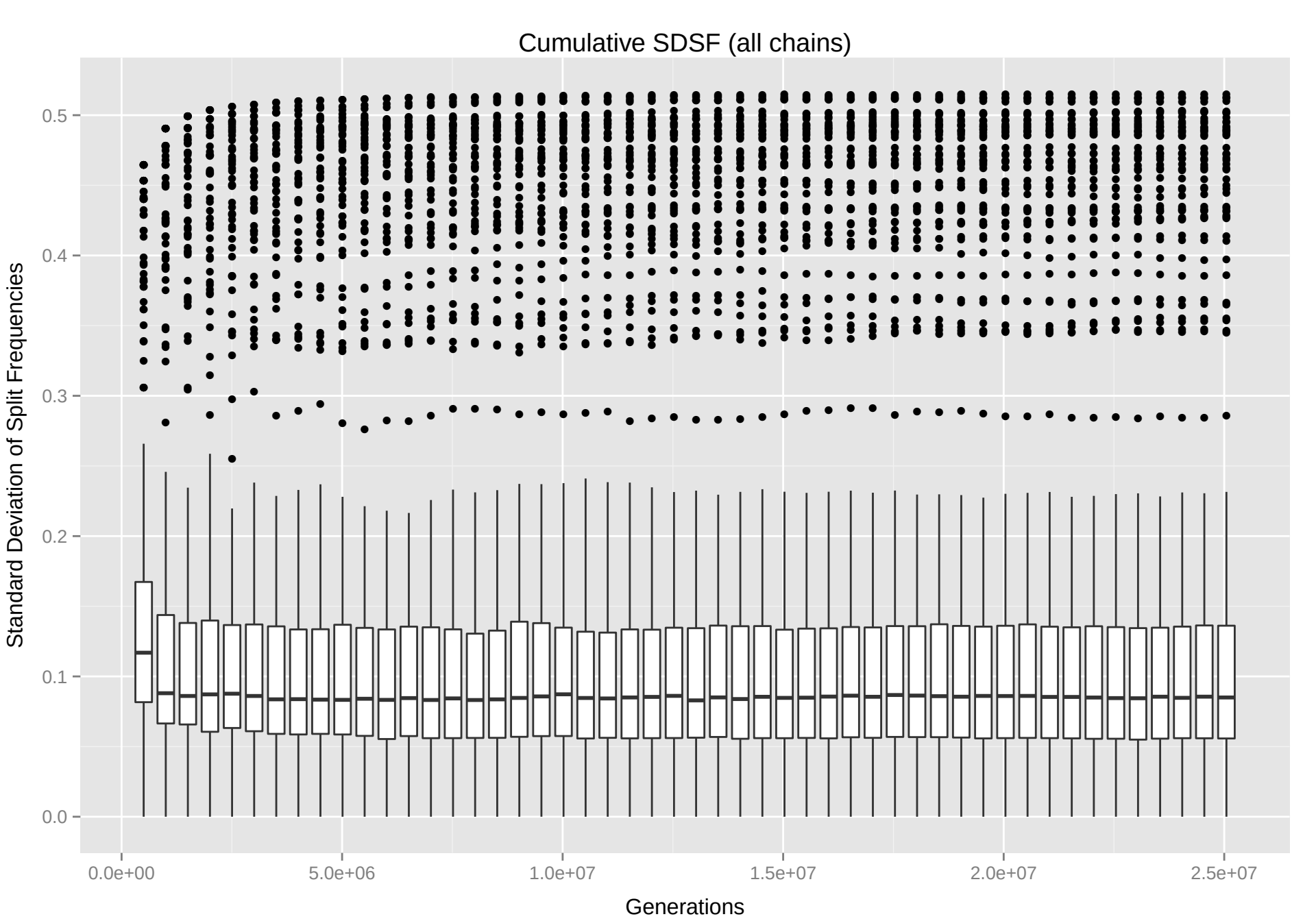

TRMT5.run2 Cumulative Posterior Probability
Posterior.Probability
0.00
0.25
0.50
0.75
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

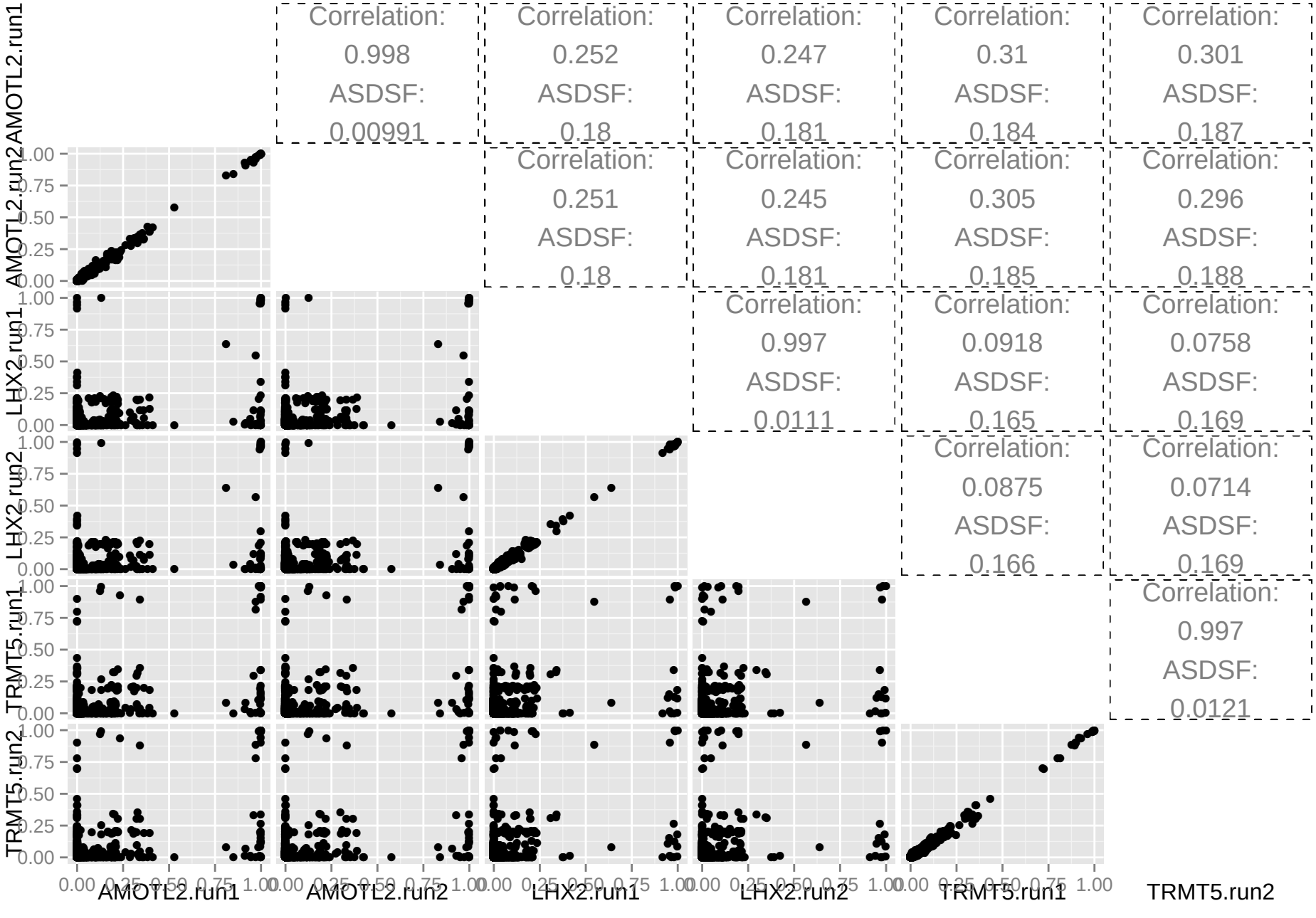

TRMT5.run2 Sliding Window Variance
Variation in posterior probability
0.0
0.2
0.4
0.6
0.8
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations

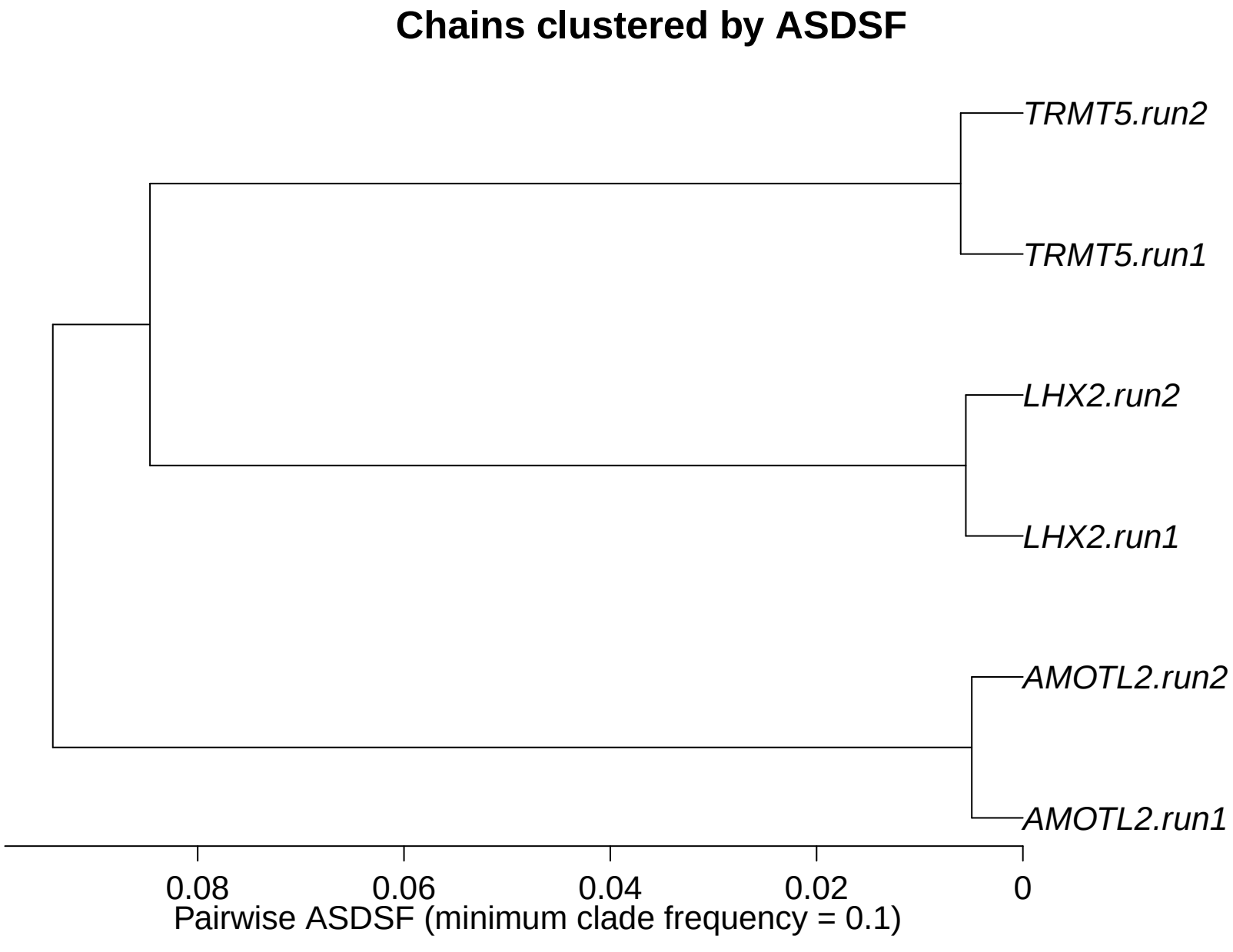

TRMT5.run2 Cumulative Variance
Variation in posterior probability
0.3
0.2
0.1
0.0
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations


Approximate ESS
600
400
200
0
AMOTL2.run1
AMOTL2.run2
LHX2.run1
LHX2.run2
TRMT5.run1
TRMT5.run2
Chain


AMOTL2.run1
AMOTL2.run2
LHX2.run1
LHX2.run2
TRMT5.run1
TRMT5.run2
median path distance
sampling interval
80
120
160
200
0
5
10
15
20


Cumulative SDSF (all chains)
Standard Deviation of Split Frequencies
0.0
0.1
0.2
0.3
0.4
0.5
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07
2.5e+07
Generations


AMOTL2.run1
AMOTL2.run2
LHX2.run1
LHX2.run2
TRMT5.run1
TRMT5.run2
Correlation: 0.998 ASDSF: 0.00991
Correlation: 0.252 ASDSF: 0.18
Correlation: 0.247 ASDSF: 0.181
Correlation: 0.31 ASDSF: 0.184
Correlation: 0.301 ASDSF: 0.187
Correlation: 0.251 ASDSF: 0.18
Correlation: 0.245 ASDSF: 0.181
Correlation: 0.305 ASDSF: 0.185
Correlation: 0.296 ASDSF: 0.188
Correlation: 0.997 ASDSF: 0.0111
Correlation: 0.0918 ASDSF: 0.165
Correlation: 0.0758 ASDSF: 0.169
Correlation: 0.0875 ASDSF: 0.166
Correlation: 0.0714 ASDSF: 0.169
Correlation: 0.997 ASDSF: 0.0121
0.00
0.25
0.50
0.75
1.00


Chains clustered by ASDSF
TRMT5.run2
TRMT5.run1
LHX2.run2
LHX2.run1
AMOTL2.run2
AMOTL2.run1
0.08
0.06
0.04
0.02
0
Pairwise ASDSF (minimum clade frequency = 0.1)