$N,\ k \setminus n$	$n = 25$	$n = 100$	$n = 1,000$	$n = 10,000$	$n = 100,000$
$N = 10,\ k = 8$	$\sigma^2_{min} = 0.0085000$ $\sigma^2 = 0.0093824$ $\sigma = 0.0968630$ $bias = 0.0311427$	$\sigma^2_{min} = 0.0115000$ $\sigma^2 = 0.0120411$ $\sigma = 0.1097321$ $bias = 0.0164967$	$\sigma^2_{min} = 0.0124000$ $\sigma^2 = 0.0132953$ $\sigma = 0.1153054$ $bias = 0.0157728$	$\sigma^2_{min} = 0.0124900$ $\sigma^2 = 0.0130691$ $\sigma = 0.1143201$ $bias = 0.0137832$	$\sigma^2_{min} = 0.0124990$ $\sigma^2 = 0.0129597$ $\sigma = 0.1138406$ $bias = 0.0117763$
$N = 10,\ k = 20$	$\sigma^2_{min} = 0.0010000$ $\sigma^2 = 0.0011546$ $\sigma = 0.0339799$ $bias = 0.0235270$	$\sigma^2_{min} = 0.0040000$ $\sigma^2 = 0.0040888$ $\sigma = 0.0639438$ $bias = 0.0085761$	$\sigma^2_{min} = 0.0049000$ $\sigma^2 = 0.0051264$ $\sigma = 0.0715989$ $bias = 0.0054482$	$\sigma^2_{min} = 0.0049900$ $\sigma^2 = 0.0051315$ $\sigma = 0.0716342$ $bias = 0.0056440$	$\sigma^2_{min} = 0.0049990$ $\sigma^2 = 0.0050839$ $\sigma = 0.0713017$ $bias = 0.0053531$
$N = 25,\ k = 8$	$\sigma^2_{min} = 0.0034000$ $\sigma^2 = 0.0035917$ $\sigma = 0.0599312$ $bias = 0.0243128$	$\sigma^2_{min} = 0.0046000$ $\sigma^2 = 0.0047326$ $\sigma = 0.0687940$ $bias = 0.0094167$	$\sigma^2_{min} = 0.0049600$ $\sigma^2 = 0.0051705$ $\sigma = 0.0719064$ $bias = 0.0053594$	$\sigma^2_{min} = 0.0049960$ $\sigma^2 = 0.0051424$ $\sigma = 0.0717106$ $bias = 0.0052871$	$\sigma^2_{min} = 0.0049996$ $\sigma^2 = 0.0050815$ $\sigma = 0.0712848$ $bias = 0.0043617$
$N = 25,\ k = 20$	$\sigma^2_{min} = 0.0004000$ $\sigma^2 = 0.0004593$ $\sigma = 0.0214317$ $bias = 0.0216920$	$\sigma^2_{min} = 0.0016000$ $\sigma^2 = 0.0016225$ $\sigma = 0.0402800$ $bias = 0.0072931$	$\sigma^2_{min} = 0.0019600$ $\sigma^2 = 0.0019559$ $\sigma = 0.0442256$ $bias = 0.0021189$	$\sigma^2_{min} = 0.0019960$ $\sigma^2 = 0.0020773$ $\sigma = 0.0455779$ $bias = 0.0023715$	$\sigma^2_{min} = 0.0019996$ $\sigma^2 = 0.0020285$ $\sigma = 0.0450394$ $bias = 0.0021467$
$N = 50,\ k = 8$	$\sigma^2_{min} = 0.0017000$ $\sigma^2 = 0.0018190$ $\sigma = 0.0426496$ $bias = 0.0227596$	$\sigma^2_{min} = 0.0023000$ $\sigma^2 = 0.0023500$ $\sigma = 0.0484771$ $bias = 0.0080022$	$\sigma^2_{min} = 0.0024800$ $\sigma^2 = 0.0025156$ $\sigma = 0.0501555$ $bias = 0.0034917$	$\sigma^2_{min} = 0.0024980$ $\sigma^2 = 0.0025394$ $\sigma = 0.0503928$ $bias = 0.0025221$	$\sigma^2_{min} = 0.0024998$ $\sigma^2 = 0.0025245$ $\sigma = 0.0502445$ $bias = 0.0018834$
	$\sigma^2_{min} = 0.0002000$ $\sigma^2 =$	$\sigma^2_{min} = 0.0008000$ $\sigma^2 =$	$\sigma^2_{min} = 0.0009800$ $\sigma^2 =$	$\sigma^2_{min} = 0.0009980$ $\sigma^2 =$	$\sigma^2_{min} = 0.0009998$ $\sigma^2 =$

$N = 50,\ k = 20$	$\sigma^2_{min} = 0.0002000$ $\sigma^2 = 0.0002201$ $\sigma = 0.0148343$ $bias = 0.0211769$	$\sigma^2_{min} = 0.0008000$ $\sigma^2 = 0.0008131$ $\sigma = 0.0285147$ $bias = 0.0054468$	$\sigma^2_{min} = 0.0009800$ $\sigma^2 = 0.0009943$ $\sigma = 0.0315330$ $bias = 0.0013239$	$\sigma^2_{min} = 0.0009980$ $\sigma^2 = 0.0010184$ $\sigma = 0.0319125$ $bias = 0.0010915$	$\sigma^2_{min} = 0.0009998$ $\sigma^2 = 0.0010138$ $\sigma = 0.0318400$ $bias = 0.0006501$

$$\hat{n} = \frac{k}{1-\exp(\overline{L}_u)} \quad \overline{L}_u = \frac{1}{N}\sum_{i=1}^{N}\ln(1-x_i)$$

$$\sigma^2_{min} = \mathrm{Var}\left(\frac{\hat{n}}{n}\right)_{\min} \approx \frac{1}{N}\left(\frac{1}{k} - \frac{1}{n}\right)$$

$$N_{samples} = 10,000$$