



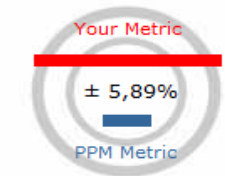
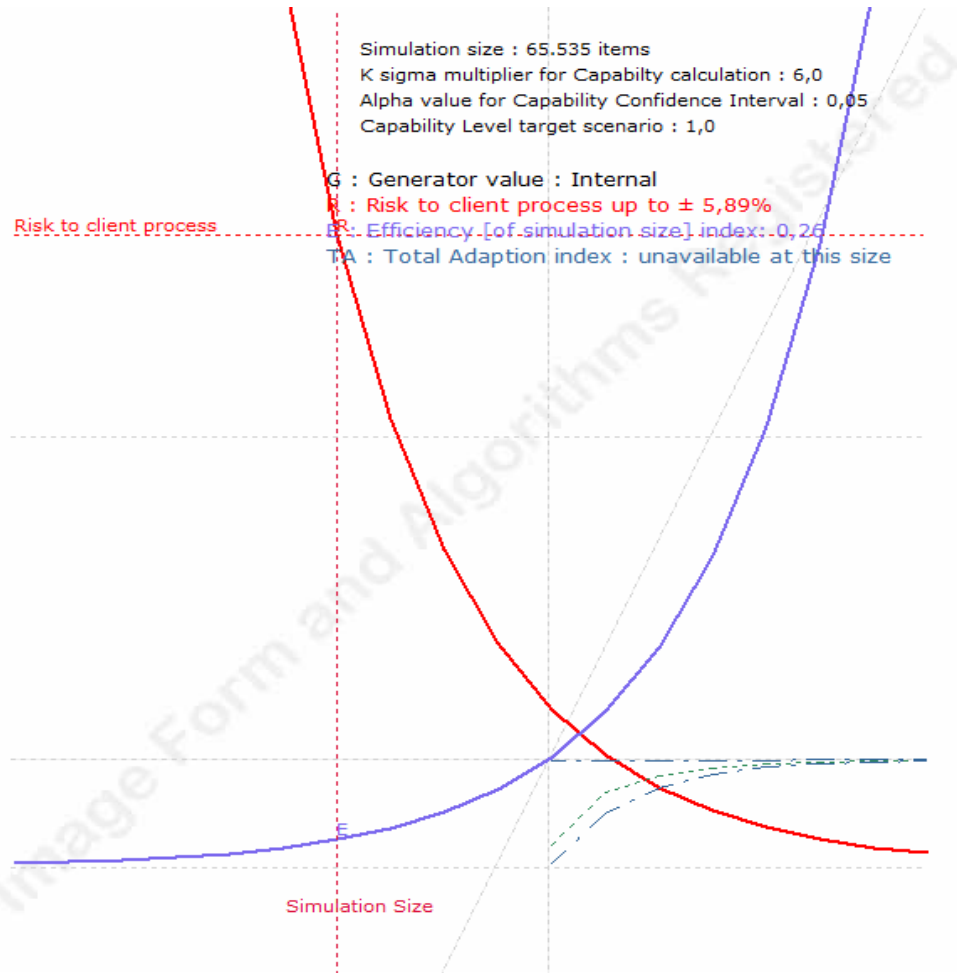
The Dalmatian Test version
Comparison Study
Data-File

1.00.04.18 [32 bit]
Weibull_64_kB
not saved

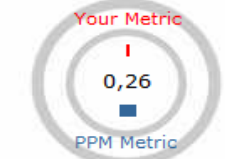
Registered pro edition

Is My Edition

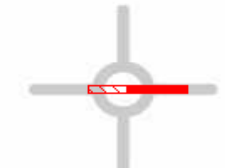
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



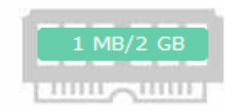
Unit Resolution Plot



Efficiency Plot



Expected Bias Value and Sundog event probability



Required Memory [32 bit]



| This Comparison Study | | Weibull Distribution |
|--|--------------------------|----------------------|
| Generator | Mersenne Twister 2002 | |
| Seed value | Internal | |
| Simulated Items | 65.535 | |
| K sigma multiplier for capability calculation | 6,00 | |
| Alpha value for Capability CI | 0,05 | |
| nearTrue extended range | disabled | |
| Unit In-Metric Test value [%] | auto CI | |
| Simulation size Efficiency index | 0,26 | |
| Total Adaption index | unavailable at this size | |
| Memory peak in this Win32 process [MB] | 1,00 | |
| Residual and available Win32 memory [%] | 99,95% | |
| Total Time for this Comparison calculation [s] | 0,07 | |

| Data Entry Summary | [A] | [B] | [C] | [D] | [E] | [F] |
|---------------------|----------|----------|----------|----------|----------|---------------|
| Data Distributed as | Weibull | Weibull | Weibull | Weibull | Weibull | d[0.5*x^2]/dx |
| 1* Par Value | 1,64181 | 1,64181 | 1,64181 | 1,64181 | 1,64181 | 1,64181 |
| 2* Par Value | 0,894284 | 0,894284 | 0,894284 | 0,894284 | 0,894284 | 0,894284 |
| 3* Par Value | | | | | | |
| 4* Par Value | | | | | | |
| Lower Spec Limit | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 |
| Upper Spec Limit | 2,1 | 2,1 | 2,1 | 2,1 | 2,1 | 2,1 |

| Moment Values | [A] | [B] | [C] | [D] | [E] | [F] |
|---------------------------------------|----------|--------------|----------|------------|------|---------------|
| Procedure | Master | Brute Normal | ISO D_ID | Bothe D_ID | LuLu | d[0.5*x^2]/dx |
| Moment 1 - [Mean] | 0,8 | 0,800604 | 0,800604 | 0,800604 | | 0,8 |
| Bias | | 0,000604 | 0,000604 | 0,000604 | | |
| Sqrt(Moment 2) - [Standard Deviation] | 0,5 | 0,500976 | 0,500976 | 0,500976 | | 0,5 |
| Bias | | 0,000976 | 0,000976 | 0,000976 | | |
| Moment 3 - [Skewness] | 0,919993 | 0,948961 | 0,948961 | 0,948961 | | 0,919993 |
| Bias | | 0,028968 | 0,028968 | 0,028968 | | |
| Moment 4 - [Kurtosis] | 0,922545 | 1,083836 | 1,083836 | 1,083836 | | 0,922545 |
| Bias | | 0,161291 | 0,161291 | 0,161291 | | |
| Moment 2 - [Variance] | 0,25 | 0,250977 | 0,250977 | 0,250977 | | 0,25 |
| Bias | | 0,000977 | 0,000977 | 0,000977 | | |
| Coefficient of Variability | 0,625 | 0,625747 | 0,625747 | 0,625747 | | 0,625 |
| Mean Standard Error | | 0,001957 | 0,001957 | 0,001957 | | |

| Distribution Identification Cycle | [A] | [B] | [C] | [D] | [E] | [F] |
|-----------------------------------|-----|----------|-----|---------|---------|-----|
| D(1)_ID - Kolmogorov-Smirnov | 0 | 0,005313 | | 0,00288 | 0,00288 | |

| Calculated parameters i.e. Output to Client Process Capability Algorithm | L | U | [A] Theo | [B] Normal | [C] ISO D_ID | [D] Bothe D_ID | [E] LuLu | [F] Normal |
|--|-------------|-------------|-------------|---------------|-----------------|-------------------|-------------|---------------|
| PpK | | | 0,340783 | 0,333086 | 0,593988 | 0,340528 | | 0,170785 |
| Bias | | | | -0,007697 | 0,253205 | -0,000255 | | -0,169998 |
| PpK - Metric Test | 0,339977 | 0,341589 | | false | false | true | | false |
| PpL | | | 0,340783 | 0,333086 | 0,593988 | 0,340528 | | 0,500143 |
| Bias | | | | -0,007697 | 0,253205 | -0,000255 | | 0,15936 |
| PpL - Metric Test | 0,339977 | 0,341589 | | false | false | true | | false |
| PpU | | | 0,704942 | 0,864576 | 0,654533 | 0,703358 | | 0,170785 |
| Bias | | | | 0,159635 | -0,050408 | -0,001583 | | -0,534157 |
| PpU - Metric Test | 0,703766 | 0,706117 | | false | false | false | | false |
| Pp | | | 0,522862 | 0,598831 | 0,639483 | 0,521943 | | 0,335464 |
| Bias | | | | 0,075969 | 0,116621 | -0,000919 | | -0,187398 |
| Pp - Metric Test | 0,522137 | 0,523587 | | false | false | false | | false |
| L-OofS | | | 153307,9491 | 158834,8923 | 37377,47738 | 153489,0584 | | 66751,61314 |
| Bias | | | | 5526,943246 | -115930,4717 | 181,109357 | | -86556,33593 |
| L-OofS - Metric Test [auto CI] | 152736,5335 | 153880,7793 | | false | false | true | | false |
| L-OofS - Metric % Variation [auto CI] | -0,37% | 0,37% | | 3,61% | -75,62% | 0,12% | | -56,46% |
| U-OofS | | | 17222,43844 | 4747,060845 | 24788,21988 | 17425,93825 | | 304201,4329 |
| Bias | | | | -12475,3776 | 7565,781441 | 203,499814 | | 286978,9944 |
| U-OofS - Metric Test [auto CI] | 17072,68662 | 17373,31108 | | false | false | false | | false |
| U-OofS - Metric % Variation [auto CI] | -0,87% | 0,88% | | -72,44% | 43,93% | 1,18% | | 1666,31% |
| OofS | | | 170530,3875 | 163581,9532 | 62165,69726 | 170914,9967 | | 370953,046 |
| Bias | | | | -6948,434349 | -108364,6903 | 384,609171 | | 200422,6585 |
| OofS - Metric Test [auto CI] | 169809,2201 | 171254,0903 | | false | false | true | | false |
| OofS - Metric % Variation [auto CI] | -0,42% | 0,42% | | -4,07% | -63,55% | 0,23% | | 117,53% |



| BenchMark of Procedures | [A] | [B] | [C] | [D] | [E] | [F] |
|---|--------|--------------|----------|------------|------|-----------------|
| Procedure | Master | Brute Normal | ISO D_ID | Bothe D_ID | LuLu | $d[0.5*x^2]/dx$ |
| Common statistical calculation [s] | | | | 0,013707 | | |
| 15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s] | | | | 0,589576 | | |
| Procedure Capability Algorithm [s] | | | | 0,000007 | | |
| Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz | | | | 0,60329 | | |

KS algorithm is used in this tool mainly to get the relative computing time in D_ID Cycle, without additional memory requirement.
 Note that if you use a different algorithm in the D_ID loop, the time and memory needed for GoF will increase significantly. (or alternatively the simulation size must be reduced)
 The absolute speed is instead a function of the performance and characteristics of used generator (NtRand © 3.3. in our case)

Procedure comparison at same Win32 memory

