



The Dalmatian Test version
Comparison Study
Data-File

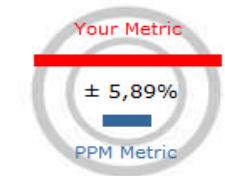
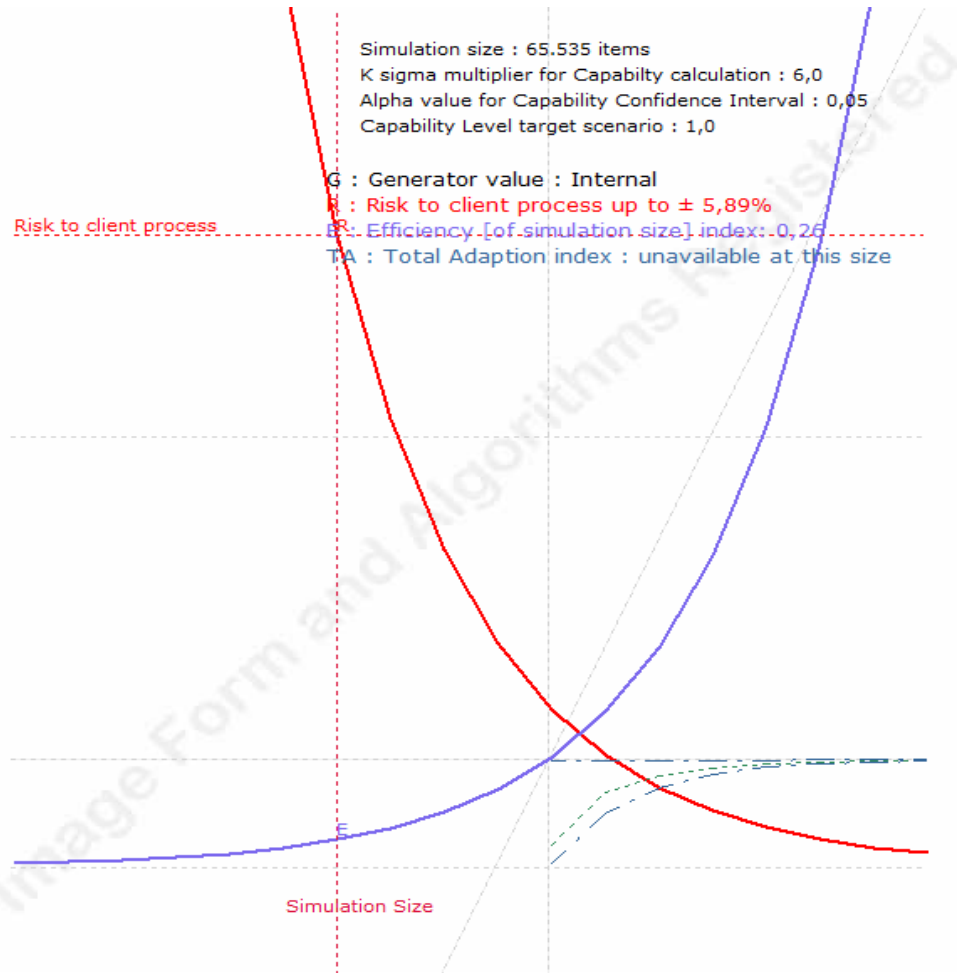
1.00.04.18
Beta_64_kB
not saved

[32 bit]

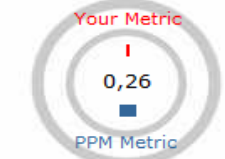
Registered pro edition

Is My Edition

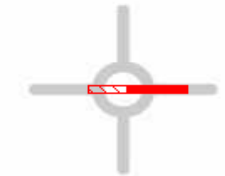
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



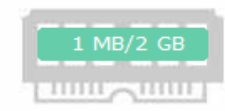
Unit Resolution Plot



Efficiency Plot



Expected Bias Value and Sundog event probability



Required Memory [32 bit]



This Comparison Study		Beta 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]		0,12	

Data Entry Summary	[A]	[B]	[C]	[D]	[E]	[F]
Data Distributed as	Beta	Beta	Beta	Beta	Beta	d[0.5*x^2]/dx
1* Par Value	2	2	2	2		2
2* Par Value	3	3	3	3		3
3* Par Value						
4* Par Value						
Lower Spec Limit	0,1	0,1	0,1	0,1		0,1
Upper Spec Limit	0,9	0,9	0,9	0,9		0,9

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]	0,4	0,400744	0,400744	0,400744		0,4
Bias		0,000744	0,000744	0,000744		
Sqrt(Moment 2) - [Standard Deviation]	0,2	0,200028	0,200028	0,200028		0,2
Bias		0,000028	0,000028	0,000028		
Moment 3 - [Skewness]	0,285714	0,27582	0,27582	0,27582		0,285714
Bias		-0,009894	-0,009894	-0,009894		
Moment 4 - [Kurtosis]	-0,642857	-0,643808	-0,643808	-0,643808		-0,642857
Bias		-0,00095	-0,00095	-0,00095		
Moment 2 - [Variance]	0,04	0,040011	0,040011	0,040011		0,04
Bias		0,000011	0,000011	0,000011		
Coefficient of Variability	0,5	0,499142	0,499142	0,499142		0,5
Mean Standard Error		0,000781	0,000781	0,000781		

Distribution Identification Cycle	[A]	[B]	[C]	[D]	[E]	[F]
D(1)_ID - Kolmogorov-Smirnov	0	0,005313		0,003269	0,003269	

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			0,540983	0,501169	0,771849	0,542481		-0,122222
Bias				-0,039814	0,230865	0,001498		-0,663206
PpK - Metric Test	0,539989	0,541978		false	false	false		false
PpL			0,540983	0,501169	0,771849	0,542481		0,211111
Bias				-0,039814	0,230865	0,001498		-0,329872
PpL - Metric Test	0,539989	0,541978		false	false	false		false
PpU			0,892762	0,831977	0,945917	0,891678		-0,122222
Bias				-0,060785	0,053155	-0,001084		-1,014984
PpU - Metric Test	0,891363	0,894161		false	false	true		false
Pp			0,716873	0,666573	0,87521	0,717079		0,044444
Bias				-0,050299	0,158338	0,000207		-0,672428
Pp - Metric Test	0,715879	0,717866		false	false	true		false
L-OofS			52300	66354,07893	10291,52378	51821,48686		263257,995
Bias				14054,07893	-42008,47623	-478,513143		210957,995
L-OofS - Metric Test [auto CI]	51981,8666	52619,6775		false	false	false		false
L-OofS - Metric % Variation [auto CI]	-0,61%	0,61%		26,87%	-80,32%	-0,91%		403,36%
U-OofS			3700	6281,329652	2271,637207	3736,092841		643066,1633
Bias				2581,329652	-1428,362793	36,092841		639366,1633
U-OofS - Metric Test [auto CI]	3653,88737	3746,633961		false	false	true		false
U-OofS - Metric % Variation [auto CI]	-1,25%	1,26%		69,77%	-38,60%	0,98%		17280,17%
OofS			56000	72635,40858	12563,16098	55557,5797		906324,1583
Bias				16635,40858	-43436,83902	-442,420302		850324,1583
OofS - Metric Test [auto CI]	55635,75397	56366,31146		false	false	false		false
OofS - Metric % Variation [auto CI]	-0,65%	0,65%		29,71%	-77,57%	-0,79%		1518,44%



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]				0,01351		
15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s]				1,279697		
Procedure Capability Algorithm [s]				0,00005		
Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz				1,293257		

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

