CG model with d = 100 and n = m = 10^4

	μ-deformation			Σ_{ii}-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.08359^{+0.028}_{-0.034}$	$0.10651^{+0.025}_{-0.028}$	846	$0.03133^{+0.012}_{-0.014}$	$0.03977^{+0.011}_{-0.012}$	889
$t_{\overline{\text{KS}}}$	$0.08229^{+0.027}_{-0.033}$	$0.10339^{+0.025}_{-0.028}$	**653**	$0.03958^{+0.015}_{-0.018}$	$0.05039^{+0.014}_{-0.016}$	**689**
t_{SKS}	$0.08589^{+0.029}_{-0.037}$	$0.10945^{+0.026}_{-0.03}$	942	$0.04009^{+0.015}_{-0.019}$	$0.05107^{+0.014}_{-0.016}$	1027
t_{FGD}	$0.09233^{+0.032}_{-0.033}$	$0.11682^{+0.029}_{-0.027}$	3410	$\mathbf{0.02875^{+0.01}_{-0.011}}$	$\mathbf{0.03664^{+0.0092}_{-0.0087}}$	3739
t_{MMD}	$\mathbf{0.05661^{+0.03}_{-0.026}}$	$\mathbf{0.07172^{+0.028}_{-0.024}}$	1163	$0.0369^{+0.016}_{-0.016}$	$0.04633^{+0.015}_{-0.014}$	1257
t_{LLR}	$0.00541^{+0.0033}_{-0.0032}$	$0.00768^{+0.0033}_{-0.0032}$	2277	$0.00101^{+0.00073}_{-0.00071}$	$0.0015^{+0.00073}_{-0.00071}$	2566

	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.07237^{+0.022}_{-0.032}$	$0.09344^{+0.019}_{-0.024}$	**3523**	$0.00693^{+0.0024}_{-0.003}$	$0.0088^{+0.0022}_{-0.0024}$	944
$t_{\overline{\text{KS}}}$	$1.04152^{+0.017}_{-0.023}$	$1.04671^{+0.016}_{-0.011}$	9020	$0.00853^{+0.0028}_{-0.0035}$	$0.01068^{+0.0025}_{-0.0029}$	**878**
t_{SKS}	$0.09506^{+0.034}_{-0.043}$	$0.12339^{+0.031}_{-0.035}$	4982	$0.00784^{+0.0026}_{-0.0034}$	$0.00985^{+0.0024}_{-0.0026}$	1109
t_{FGD}	$\mathbf{0.00627^{+0.002}_{-0.0025}}$	$\mathbf{0.00822^{+0.0018}_{-0.0019}}$	8086	$0.00707^{+0.0025}_{-0.0025}$	$0.00898^{+0.0022}_{-0.0021}$	4281
t_{MMD}	$0.05362^{+0.019}_{-0.018}$	$0.0671^{+0.018}_{-0.017}$	6414	$\mathbf{0.00447^{+0.0024}_{-0.0021}}$	$\mathbf{0.00569^{+0.0022}_{-0.0019}}$	1027
t_{LLR}	-	-	-	$0.00038^{+0.00019}_{-0.0002}$	$0.00052^{+0.00019}_{-0.00019}$	2640

	pow_-deformation			$\mathcal{N}$-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.00702^{+5}_{-0.0032}$	$0.00889^{+5}_{-0.0026}$	**863**	$0.4895^{+0.084}_{-0.13}$	$0.55438^{+0.069}_{-0.087}$	761
$t_{\overline{\text{KS}}}$	$0.00823^{+0.0028}_{-0.0035}$	$0.01034^{+0.0025}_{-0.0029}$	879	$0.55303^{+0.094}_{-0.14}$	$0.6216^{+0.083}_{-0.098}$	**705**
t_{SKS}	$0.00765^{+0.0027}_{-0.0036}$	$0.00961^{+0.0024}_{-0.0028}$	1120	$0.53076^{+0.092}_{-0.16}$	$0.60111^{+0.075}_{-0.1}$	898
t_{FGD}	$0.00686^{+0.0026}_{-0.0026}$	$0.00886^{+0.0023}_{-0.0023}$	4380	$\mathbf{0.23754^{+0.029}_{-0.045}}$	$\mathbf{0.26842^{+0.023}_{-0.03}}$	3350
t_{MMD}	$\mathbf{0.00537^{+0.0023}_{-0.002}}$	$\mathbf{0.00664^{+0.0022}_{-0.0018}}$	1039	$1.21562^{+0.16}_{-0.25}$	$1.35657^{+0.13}_{-0.16}$	803
t_{LLR}	$0.00033^{+0.00019}_{-0.0002}$	$0.00047^{+0.00019}_{-0.0002}$	2712	-	-	-

	$\mathcal{U}$-deformation			Timing
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{FGD}	$\mathbf{0.41168^{+0.048}_{-0.076}}$	$\mathbf{0.4652^{+0.039}_{-0.051}}$	3227	5381
t_{LLR}	-	-	-	-
t_{MMD}	$2.08745^{+0.3}_{-0.41}$	$2.34223^{+0.24}_{-0.27}$	747	633
t_{SKS}	$0.91554^{+0.16}_{-0.25}$	$1.04113^{+0.13}_{-0.19}$	879	468
t_{SW}	$0.84895^{+0.14}_{-0.22}$	$0.96147^{+0.12}_{-0.15}$	715	**275**
$t_{\overline{\text{KS}}}$	$0.95234^{+0.17}_{-0.24}$	$1.07042^{+0.14}_{-0.17}$	**680**	491