CG model with d = 100 and n = m = 10^5

	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}	$0.02667^{+0.0083}_{-0.0098}$	$0.03433^{+0.0074}_{-0.008}$	**725**	$0.01065^{+0.0031}_{-0.0038}$	$0.01351^{+0.0028}_{-0.003}$	**753**
$t_{\overline{\text{KS}}}$	$0.02531^{+0.0078}_{-0.0089}$	$0.03236^{+0.0073}_{-0.0079}$	1179	$0.0127^{+0.0042}_{-0.0049}$	$0.01612^{+0.004}_{-0.0042}$	1267
t_{SKS}	$0.02742^{+0.0084}_{-0.01}$	$0.03493^{+0.0077}_{-0.0086}$	1219	$0.01323^{+0.0042}_{-0.0052}$	$0.01674^{+0.0038}_{-0.0043}$	1311
t_{FGD}	$0.0292^{+0.01}_{-0.011}$	$0.03631^{+0.0089}_{-0.0088}$	18261	$\mathbf{0.0095^{+0.0028}_{-0.0031}}$	$\mathbf{0.01169^{+0.0026}_{-0.0026}}$	18550
t_{MMD}	$\mathbf{0.0207^{+0.0092}_{-0.0077}}$	$\mathbf{0.02578^{+0.0087}_{-0.0071}}$	13097	$0.01289^{+0.005}_{-0.0045}$	$0.01617^{+0.0047}_{-0.004}$	11384
t_{LLR}	$0.00164^{+0.0012}_{-0.0012}$	$0.00237^{+0.0012}_{-0.0012}$	15370	$0.00031^{+0.00021}_{-0.00022}$	$0.00045^{+0.00022}_{-0.00022}$	16289

	$\Sigma_{i\neq j}$-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}	$0.02377^{+0.0066}_{-0.0087}$	$0.03118^{+0.0056}_{-0.0069}$	**3290**	$0.00229^{+0.00068}_{-0.00082}$	$0.00293^{+0.00062}_{-0.00067}$	**797**
$t_{\overline{\text{KS}}}$	$1.01551^{+0.0021}_{-0.012}$	$1.01751^{+0.002}_{-0.0019}$	7986	$0.0027^{+0.0008}_{-0.00094}$	$0.0034^{+0.00073}_{-0.0008}$	1351
t_{SKS}	$0.03165^{+0.01}_{-0.014}$	$0.04062^{+0.0099}_{-0.011}$	3941	$0.00254^{+0.00073}_{-0.00093}$	$0.00319^{+0.00067}_{-0.00074}$	1405
t_{FGD}	$\mathbf{0.0023^{+0.0005}_{-0.0008}}$	$\mathbf{0.00279^{+0.0005}_{-0.0006}}$	27911	$0.00232^{+0.00071}_{-0.0008}$	$0.00286^{+0.00064}_{-0.00066}$	19919
t_{MMD}	$0.0153^{+0.0067}_{-0.0062}$	$0.01957^{+0.0065}_{-0.0054}$	14216	$\mathbf{0.00163^{+0.00076}_{-0.0006}}$	$\mathbf{0.00205^{+0.00071}_{-0.00058}}$	12499
t_{LLR}	-	-	-	0.0001^{+7e-05}_{-7e-05}	$0.00015^{+7e-05}_{-7e-05}$	21800

	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}	$0.00229^{+5}_{-0.00096}$	$0.00293^{+5}_{-0.00079}$	**717**	$0.28179^{+0.039}_{-0.054}$	$0.32012^{+0.032}_{-0.037}$	**619**
$t_{\overline{\text{KS}}}$	$0.0027^{+0.00084}_{-0.001}$	$0.0034^{+0.00073}_{-0.00085}$	1373	$0.3116^{+0.049}_{-0.067}$	$0.35101^{+0.042}_{-0.049}$	1063
t_{SKS}	$0.00253^{+0.00087}_{-0.0011}$	$0.00316^{+0.0008}_{-0.00092}$	1404	$0.30315^{+0.045}_{-0.07}$	$0.34204^{+0.037}_{-0.05}$	1102
t_{FGD}	$0.00225^{+0.00076}_{-0.00086}$	$0.00278^{+0.00071}_{-0.0007}$	20138	$\mathbf{0.13244^{+0.016}_{-0.023}}$	$\mathbf{0.1479^{+0.011}_{-0.016}}$	15260
t_{MMD}	$\mathbf{0.00143^{+0.00077}_{-0.00064}}$	$\mathbf{0.00185^{+0.00073}_{-0.0006}}$	12506	$0.68952^{+0.078}_{-0.098}$	$0.77914^{+0.057}_{-0.067}$	8037
t_{LLR}	$0.00012^{+7e-05}_{-7e-05}$	$0.00017^{+7e-05}_{-7e-05}$	17336	-	-	-

	$\mathcal{U}$-deformation			Timing
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{FGD}	$\mathbf{0.22963^{+0.025}_{-0.04}}$	$\mathbf{0.25498^{+0.021}_{-0.028}}$	14613	51866
t_{LLR}	-	-	-	-
t_{MMD}	$1.19904^{+0.13}_{-0.18}$	$1.34688^{+0.11}_{-0.12}$	8790	18801
t_{SKS}	$0.52074^{+0.082}_{-0.12}$	$0.59085^{+0.066}_{-0.087}$	1039	1603
t_{SW}	$0.4924^{+0.067}_{-0.098}$	$0.55614^{+0.053}_{-0.064}$	**588**	**394**
$t_{\overline{\text{KS}}}$	$0.54132^{+0.081}_{-0.12}$	$0.60655^{+0.069}_{-0.083}$	1034	1499