CG model with $\mathbf{d = 5}$ and $\mathbf{n = m = 10^5}$

	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}	$0.02998^{+0.014}_{-0.013}$	$0.0404^{+0.014}_{-0.012}$	628	$0.01242^{+0.004}_{-0.0038}$	$0.0167^{+0.0039}_{-0.0036}$	655
$t_{\overline{\text{KS}}}$	$\mathbf{0.02652^{+0.011}_{-0.011}}$	$\mathbf{0.03393^{+0.011}_{-0.011}}$	**412**	$0.02063^{+0.0065}_{-0.007}$	$0.02676^{+0.0059}_{-0.0065}$	**431**
t_{SKS}	$0.03198^{+0.014}_{-0.013}$	$0.04336^{+0.013}_{-0.013}$	762	$0.01678^{+0.0048}_{-0.005}$	$0.02286^{+0.0046}_{-0.0048}$	792
t_{FGD}	$0.02961^{+0.017}_{-0.012}$	$0.03908^{+0.016}_{-0.012}$	1484	$0.01067^{+0.0046}_{-0.0037}$	$\mathbf{0.01371^{+0.0043}_{-0.0035}}$	1498
t_{MMD}	$0.03647^{+0.027}_{-0.018}$	$0.05258^{+0.026}_{-0.018}$	9485	$\mathbf{0.01056^{+0.0079}_{-0.0051}}$	$0.01523^{+0.0074}_{-0.0052}$	10186
t_{LLR}	$0.00908^{+0.006}_{-0.0061}$	$0.01277^{+0.006}_{-0.0061}$	4974	$0.00198^{+0.0012}_{-0.0012}$	$0.00279^{+0.0012}_{-0.0012}$	6312

	$\Sigma_{i\neq j}$-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}	$0.0268^{+0.0063}_{-0.0071}$	$0.038^{+0.0053}_{-0.0059}$	737	$0.00308^{+0.0014}_{-0.0012}$	$0.00421^{+0.0013}_{-0.0012}$	697
$t_{\overline{\text{KS}}}$	$1.01714^{+0.0083}_{-0.0035}$	$1.02769^{+0.0015}_{-0.011}$	**574**	$0.00418^{+0.0016}_{-0.0015}$	$0.00528^{+0.0015}_{-0.0014}$	**462**
t_{SKS}	$0.03693^{+0.0089}_{-0.01}$	$0.05083^{+0.0081}_{-0.0088}$	869	$0.00345^{+0.0013}_{-0.0012}$	$0.00455^{+0.0013}_{-0.0012}$	846
t_{FGD}	$\mathbf{0.00711^{+0.0017}_{-0.002}}$	$\mathbf{0.00923^{+0.0015}_{-0.0016}}$	2029	$0.00278^{+0.0015}_{-0.0011}$	$0.00363^{+0.0014}_{-0.0011}$	1539
t_{MMD}	$0.04051^{+0.026}_{-0.02}$	$0.05706^{+0.023}_{-0.018}$	10010	$\mathbf{0.00199^{+0.0015}_{-0.00098}}$	$\mathbf{0.00286^{+0.0014}_{-0.00098}}$	10854
t_{LLR}	-	-	-	$0.00074^{+0.00046}_{-0.00046}$	$0.00103^{+0.00046}_{-0.00046}$	4937

	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}	$0.00299^{+5}_{-0.0011}$	$0.00411^{+5}_{-0.0011}$	681	$0.21417^{+0.031}_{-0.035}$	$0.25369^{+0.025}_{-0.026}$	639
$t_{\overline{\text{KS}}}$	$0.00408^{+0.0015}_{-0.0016}$	$0.00518^{+0.0015}_{-0.0015}$	**464**	$0.17628^{+0.029}_{-0.036}$	$0.20261^{+0.025}_{-0.027}$	**400**
t_{SKS}	$0.00339^{+0.0013}_{-0.0012}$	$0.00452^{+0.0012}_{-0.0012}$	855	$0.20906^{+0.03}_{-0.034}$	$0.24763^{+0.025}_{-0.026}$	695
t_{FGD}	$0.00265^{+0.0015}_{-0.0013}$	$0.0035^{+0.0014}_{-0.0012}$	1568	$\mathbf{0.15901^{+0.017}_{-0.022}}$	$\mathbf{0.18192^{+0.013}_{-0.015}}$	1177
t_{MMD}	$\mathbf{0.00216^{+0.0017}_{-0.0011}}$	$\mathbf{0.00308^{+0.0016}_{-0.0011}}$	13727	$0.43774^{+0.11}_{-0.11}$	$0.52451^{+0.09}_{-0.078}$	7791
t_{LLR}	$0.00074^{+0.00046}_{-0.00046}$	$0.00104^{+0.00045}_{-0.00046}$	4854	-	-	-

	$\mathcal{U}$-deformation			Timing
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{SW}	$0.37144^{+0.052}_{-0.061}$	$0.43998^{+0.044}_{-0.048}$	621	350
$t_{\overline{\text{KS}}}$	$0.30398^{+0.046}_{-0.065}$	$0.35106^{+0.039}_{-0.05}$	**380**	**68**
t_{SKS}	$0.3622^{+0.049}_{-0.063}$	$0.42903^{+0.043}_{-0.048}$	663	662
t_{FGD}	$\mathbf{0.27764^{+0.028}_{-0.04}}$	$\mathbf{0.31558^{+0.021}_{-0.026}}$	1125	1864
t_{MMD}	$0.75881^{+0.19}_{-0.19}$	$0.90445^{+0.16}_{-0.14}$	9541	16275
t_{LLR}	-	-	-	-