CG model with d = 5 and n = m = $2 \cdot 10^4$

	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}	$0.06637^{+0.032}_{-0.029}$	$0.09067^{+0.03}_{-0.029}$	**508**	$0.02563^{+0.0081}_{-0.0084}$	$0.03543^{+0.0079}_{-0.0076}$	**547**
$t_{\overline{\text{KS}}}$	$\mathbf{0.0604^{+0.028}_{-0.028}}$	$\mathbf{0.0788^{+0.026}_{-0.027}}$	536	$0.04739^{+0.014}_{-0.016}$	$0.0626^{+0.013}_{-0.014}$	572
t_{SKS}	$0.06935^{+0.033}_{-0.032}$	$0.09308^{+0.032}_{-0.032}$	982	$0.03556^{+0.011}_{-0.012}$	$0.0483^{+0.01}_{-0.01}$	1062
t_{FGD}	$0.06444^{+0.04}_{-0.03}$	$0.08946^{+0.036}_{-0.028}$	533	$\mathbf{0.02066^{+0.0095}_{-0.0076}}$	$\mathbf{0.02862^{+0.0088}_{-0.0074}}$	565
t_{MMD}	$0.08197^{+0.055}_{-0.036}$	$0.11263^{+0.052}_{-0.036}$	1114	$0.02366^{+0.016}_{-0.011}$	$0.03246^{+0.015}_{-0.011}$	1212
t_{NPLM}	$0.07812^{+0.025}_{-0.027}$	$0.09345^{+0.023}_{-0.023}$	1490	$0.01504^{+0.0054}_{-0.0055}$	$0.01805^{+0.0052}_{-0.0048}$	1739
t_{LLR}	$0.01986^{+0.013}_{-0.013}$	$0.02935^{+0.013}_{-0.013}$	1465	$0.0044^{+0.0026}_{-0.0026}$	$0.00639^{+0.0026}_{-0.0025}$	1357

	$\Sigma_{i\neq j}$-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}	$0.06084^{+0.013}_{-0.017}$	$0.08671^{+0.012}_{-0.013}$	652	$0.00648^{+0.003}_{-0.0027}$	$0.0091^{+0.0029}_{-0.0028}$	**581**
$t_{\overline{\text{KS}}}$	$1.04761^{+0.013}_{-0.015}$	$1.06418^{+0.013}_{-0.014}$	**615**	$0.00947^{+0.0033}_{-0.0037}$	$0.01206^{+0.0032}_{-0.0033}$	607
t_{SKS}	$0.08062^{+0.021}_{-0.025}$	$0.11072^{+0.019}_{-0.023}$	809	$0.00731^{+0.003}_{-0.0031}$	$0.00962^{+0.0029}_{-0.0029}$	1091
t_{FGD}	$\mathbf{0.01582^{+0.0038}_{-0.0046}}$	$\mathbf{0.02169^{+0.0032}_{-0.0038}}$	962	$0.00554^{+0.0034}_{-0.0025}$	$0.00773^{+0.0031}_{-0.0024}$	614
t_{MMD}	$0.09539^{+0.051}_{-0.041}$	$0.12764^{+0.049}_{-0.038}$	1405	$\mathbf{0.00446^{+0.003}_{-0.002}}$	$\mathbf{0.00612^{+0.0029}_{-0.002}}$	1308
t_{NPLM}	$0.00411^{+0.0019}_{-0.0018}$	$0.00511^{+0.0017}_{-0.0016}$	2018	$0.00569^{+0.0021}_{-0.0021}$	$0.00692^{+0.002}_{-0.0019}$	1916
t_{LLR}	-	-	-	$0.00161^{+0.001}_{-0.001}$	$0.00228^{+0.001}_{-0.001}$	1490

	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}	$0.00714^{+10}_{-0.0025}$	$0.00976^{+10}_{-0.0025}$	**526**	$0.31414^{+0.046}_{-0.054}$	$0.37729^{+0.04}_{-0.039}$	488
$t_{\overline{\text{KS}}}$	$0.00938^{+0.0036}_{-0.0035}$	$0.01208^{+0.0034}_{-0.0033}$	649	$0.2711^{+0.038}_{-0.059}$	$0.31549^{+0.032}_{-0.043}$	577
t_{SKS}	$0.00773^{+0.0029}_{-0.0028}$	$0.01011^{+0.0028}_{-0.0027}$	1089	$0.31014^{+0.045}_{-0.057}$	$0.3699^{+0.038}_{-0.047}$	965
t_{FGD}	$0.00626^{+0.0033}_{-0.0024}$	$0.00846^{+0.0031}_{-0.0023}$	608	$\mathbf{0.23539^{+0.025}_{-0.034}}$	$\mathbf{0.27474^{+0.019}_{-0.02}}$	**468**
t_{MMD}	$\mathbf{0.00517^{+0.0035}_{-0.0024}}$	$\mathbf{0.00699^{+0.0033}_{-0.0024}}$	1321	$0.65882^{+0.16}_{-0.15}$	$0.77006^{+0.13}_{-0.11}$	964
t_{NPLM}	$0.00699^{+0.0024}_{-0.0025}$	$0.00822^{+0.0023}_{-0.0022}$	1814	$0.11419^{+0.02}_{-0.026}$	$0.12676^{+0.017}_{-0.019}$	1488
t_{LLR}	$0.00174^{+0.001}_{-0.001}$	$0.00235^{+0.001}_{-0.001}$	1478	-	-	-

	$\mathcal{U}$-deformation			Timing
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{SW}	$0.54152^{+0.081}_{-0.091}$	$0.65357^{+0.063}_{-0.071}$	470	279
$t_{\overline{\text{KS}}}$	$0.45812^{+0.072}_{-0.096}$	$0.53398^{+0.063}_{-0.071}$	557	**32**
t_{SKS}	$0.53293^{+0.085}_{-0.096}$	$0.63342^{+0.064}_{-0.075}$	601	375
t_{FGD}	$\mathbf{0.40466^{+0.047}_{-0.058}}$	$\mathbf{0.47806^{+0.031}_{-0.035}}$	**455**	465
t_{MMD}	$1.13409^{+0.27}_{-0.25}$	$1.33277^{+0.23}_{-0.2}$	1057	1267
t_{NPLM}	$0.19841^{+0.033}_{-0.046}$	$0.21864^{+0.032}_{-0.033}$	1392	2798
t_{LLR}	-	-	-	-