

CG model with d = 20 and n = m = 10⁴

Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.10922^{+0.046}_{-0.042}$	$0.14806^{+0.045}_{-0.041}$	839	$0.04571^{+0.015}_{-0.017}$	$0.0619^{+0.014}_{-0.014}$	886
$t_{\overline{KS}}$	$0.10878^{+0.041}_{-0.041}$	$0.1457^{+0.038}_{-0.039}$	395	$0.06569^{+0.022}_{-0.024}$	$0.08903^{+0.021}_{-0.021}$	439
t_{SKS}	$0.11095^{+0.042}_{-0.041}$	$0.14448^{+0.042}_{-0.039}$	754	$0.0585^{+0.02}_{-0.021}$	$0.07738^{+0.018}_{-0.019}$	794
t_{FGD}	$0.10722^{+0.053}_{-0.044}$	$0.14391^{+0.049}_{-0.04}$	675	$0.03724^{+0.015}_{-0.014}$	$0.04968^{+0.014}_{-0.012}$	719
t_{MMD}	$0.13235^{+0.087}_{-0.058}$	$0.18033^{+0.081}_{-0.057}$	482	$0.05044^{+0.038}_{-0.023}$	$0.06855^{+0.035}_{-0.023}$	527
t_{LLR}	$0.01214^{+0.0077}_{-0.0077}$	$0.0172^{+0.0078}_{-0.0077}$	948	$0.00388^{+0.0021}_{-0.0021}$	$0.00519^{+0.0021}_{-0.0021}$	1025
Statistic	$\Sigma_{i \neq j}$ -deformation			pow ₊ -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.06146^{+0.017}_{-0.021}$	$0.08828^{+0.014}_{-0.016}$	1046	$0.01011^{+0.0037}_{-0.0037}$	$0.01382^{+0.0034}_{-0.0034}$	1007
$t_{\overline{KS}}$	$1.06868^{+0.021}_{-0.023}$	$1.09302^{+0.015}_{-0.026}$	1523	$0.01342^{+0.0044}_{-0.0046}$	$0.01781^{+0.004}_{-0.004}$	463
t_{SKS}	$0.08431^{+0.026}_{-0.027}$	$0.11388^{+0.022}_{-0.023}$	1122	$0.01131^{+0.0038}_{-0.0039}$	$0.01462^{+0.0034}_{-0.0036}$	856
t_{FGD}	$0.01073^{+0.0029}_{-0.0036}$	$0.01457^{+0.0025}_{-0.0027}$	1959	$0.00904^{+0.004}_{-0.0035}$	$0.01206^{+0.0035}_{-0.0031}$	767
t_{MMD}	$0.05682^{+0.056}_{-0.038}$	$0.08384^{+0.049}_{-0.037}$	1598	$0.00794^{+0.0059}_{-0.0037}$	$0.01072^{+0.0056}_{-0.0036}$	564
t_{LLR}	-	-	-	$0.00097^{+0.00057}_{-0.00057}$	$0.00133^{+0.00058}_{-0.00057}$	1265
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.00994^{+10}_{-0.0041}$	$0.0137^{+10}_{-0.0037}$	479	$0.42914^{+0.071}_{-0.094}$	$0.50927^{+0.058}_{-0.064}$	437
$t_{\overline{KS}}$	$0.01288^{+0.0046}_{-0.0051}$	$0.01711^{+0.0041}_{-0.0045}$	569	$0.48722^{+0.077}_{-0.11}$	$0.58312^{+0.061}_{-0.08}$	461
t_{SKS}	$0.01084^{+0.0039}_{-0.0043}$	$0.01413^{+0.0036}_{-0.0039}$	875	$0.42867^{+0.072}_{-0.09}$	$0.49965^{+0.059}_{-0.072}$	865
t_{FGD}	$0.00894^{+0.0043}_{-0.0037}$	$0.01218^{+0.0038}_{-0.0034}$	767	$0.25332^{+0.031}_{-0.044}$	$0.29566^{+0.021}_{-0.028}$	622
t_{MMD}	$0.00626^{+0.0064}_{-0.0042}$	$0.00942^{+0.0059}_{-0.0042}$	591	$1.07127^{+0.17}_{-0.21}$	$1.26293^{+0.14}_{-0.14}$	450
t_{LLR}	$0.0009^{+0.00057}_{-0.00058}$	$0.00129^{+0.00057}_{-0.00058}$	1055	-	-	-
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
t_{FGD}	$0.4427^{+0.051}_{-0.077}$	$0.50983^{+0.038}_{-0.043}$	555	596		
t_{LLR}	-	-	-	-		
t_{MMD}	$1.84547^{+0.31}_{-0.37}$	$2.19008^{+0.25}_{-0.22}$	500	210		
t_{SKS}	$0.73953^{+0.12}_{-0.16}$	$0.86741^{+0.11}_{-0.13}$	847	338		
t_{SW}	$0.74247^{+0.12}_{-0.16}$	$0.88112^{+0.1}_{-0.11}$	427	255		
$t_{\overline{KS}}$	$0.82685^{+0.14}_{-0.16}$	$0.98617^{+0.1}_{-0.13}$	472	91		