MoG model with d = 100, q = 10, and n = m = 2 · 10⁴

Statistic	μ-deformation			Σ_{ii}-deformation		
	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.06686^{+0.019}_{-0.023}$	$0.08691^{+0.017}_{-0.019}$	**698**	$0.02176^{+0.0058}_{-0.0075}$	$0.02825^{+0.0052}_{-0.006}$	**766**
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.0052^{+0.0021}_{-0.0021}}$	$\mathbf{0.00766^{+0.0022}_{-0.0023}}$	1312	$\mathbf{0.00132^{+0.00073}_{-0.00062}}$	$\mathbf{0.00216^{+0.00083}_{-0.00078}}$	1447
t_{SKS}	$0.05483^{+0.014}_{-0.017}$	$0.07079^{+0.012}_{-0.014}$	737	$0.01903^{+0.0038}_{-0.0051}$	$0.02404^{+0.0031}_{-0.0037}$	813
t_{FGD}	$0.0917^{+0.024}_{-0.025}$	$0.11605^{+0.021}_{-0.022}$	5212	$0.02962^{+0.0062}_{-0.0077}$	$0.03721^{+0.005}_{-0.0056}$	5272
t_{MMD}	$0.08171^{+0.015}_{-0.019}$	$0.10334^{+0.013}_{-0.014}$	1992	$0.01681^{+0.0034}_{-0.0038}$	$0.02112^{+0.0029}_{-0.0031}$	2247
t_{NPLM}	$0.00673^{+0.0019}_{-0.0024}$	$0.00815^{+0.0017}_{-0.0019}$	3189	$0.00208^{+0.0006}_{-0.00078}$	$0.00253^{+0.00053}_{-0.006}$	3371
t_{LLR}	$6e-05^{+4e-05}_{-4e-05}$	$9e-05^{+4e-05}_{-4e-05}$	5633	$1e-05^{+1e-05}_{-1e-05}$	$2e-05^{+1e-05}_{-1e-05}$	6765

Statistic	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.03936^{+0.01}_{-0.014}$	$0.05165^{+0.0081}_{-0.01}$	**3389**	$0.00863^{+0.0022}_{-0.0029}$	$0.01123^{+0.002}_{-0.0024}$	**784**
$t_{\overline{\mathrm{KS}}}$	$1.00219^{+0.0003}_{-0.0017}$	$1.00219^{+0.00098}_{-0.00042}$	10626	$\mathbf{0.00049^{+0.0003}_{-0.00024}}$	$\mathbf{0.00084^{+0.00031}_{-0.00032}}$	1622
t_{SKS}	$0.04286^{+0.011}_{-0.015}$	$0.0552^{+0.0099}_{-0.012}$	3693	$0.0077^{+0.0013}_{-0.002}$	$0.00961^{+0.0011}_{-0.0013}$	822
t_{FGD}	$\mathbf{0.0069^{+0.0015}_{-0.0018}}$	$\mathbf{0.00879^{+0.0013}_{-0.0014}}$	9386	$0.01177^{+0.0023}_{-0.0029}$	$0.01473^{+0.002}_{-0.0023}$	4103
t_{MMD}	$0.02739^{+0.0079}_{-0.0088}$	$0.0351^{+0.007}_{-0.0078}$	6531	$0.00608^{+0.0012}_{-0.0014}$	$0.00762^{+0.0011}_{-0.0011}$	2406
t_{NPLM}	$0.0033^{+0.0013}_{-0.0014}$	$0.0042^{+0.0012}_{-0.0012}$	6951	$0.00079^{+0.00023}_{-0.0003}$	$0.00097^{+0.00019}_{-0.00024}$	3566
t_{LLR}	-	-	-	0.0^{+1e-05}_{-0}	$1e-05^{+0}_{-1e-05}$	5652

Statistic	pow_--deformation			$\mathcal{N}$-deformation		
	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.00879^{+5}_{-0.003}$	$0.01149^{+5}_{-0.0025}$	**703**	$0.27003^{+0.034}_{-0.053}$	$0.31096^{+0.026}_{-0.036}$	**659**
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.0005^{+0.00031}_{-0.00025}}$	$\mathbf{0.00085^{+0.00033}_{-0.00034}}$	832	$\mathbf{0.01686^{+0.0067}_{-0.0081}}$	$\mathbf{0.02454^{+0.0062}_{-0.0071}}$	730
t_{SKS}	$0.00767^{+0.0014}_{-0.0021}$	$0.00962^{+0.0011}_{-0.0015}$	840	$0.23297^{+0.032}_{-0.049}$	$0.26623^{+0.028}_{-0.034}$	705
t_{FGD}	$0.0118^{+0.0024}_{-0.003}$	$0.01489^{+0.002}_{-0.0023}$	4175	$0.23954^{+0.023}_{-0.034}$	$0.26901^{+0.019}_{-0.021}$	3372
t_{MMD}	$0.00568^{+0.0017}_{-0.0018}$	$0.00733^{+0.0015}_{-0.0015}$	2584	$1.01706^{+0.091}_{-0.13}$	$1.14737^{+0.064}_{-0.077}$	1740
t_{NPLM}	$0.00087^{+0.00026}_{-0.00033}$	$0.00105^{+0.00022}_{-0.00027}$	3517	$0.16947^{+0.04}_{-0.057}$	$0.20016^{+0.034}_{-0.041}$	2558
t_{LLR}	0.0^{+1e-05}_{-0}	$1e-05^{+0}_{-1e-05}$	7345	-	-	-

Statistic	$\mathcal{U}$-deformation			Timing
	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	t^{null} (s)
t_{SW}	$0.46758^{+0.057}_{-0.092}$	$0.53846^{+0.045}_{-0.062}$	**626**	**313**
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.02575^{+0.01}_{-0.012}}$	$\mathbf{0.03716^{+0.0098}_{-0.01}}$	716	545
t_{SKS}	$0.40136^{+0.059}_{-0.083}$	$0.46142^{+0.05}_{-0.057}$	687	618
t_{FGD}	$0.41583^{+0.039}_{-0.059}$	$0.46699^{+0.033}_{-0.04}$	3032	7869
t_{MMD}	$1.75184^{+0.17}_{-0.22}$	$1.9784^{+0.13}_{-0.15}$	1931	2411
t_{NPLM}	$0.29536^{+0.073}_{-0.1}$	$0.34557^{+0.053}_{-0.066}$	2439	4682
t_{LLR}	-	-	-	-