MoG model with d = 5, q = 3, and n = m = 10^5

	μ-deformation			Σ_{ii}-deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.02927^{+0.01}_{-0.0098}$	$0.04035^{+0.01}_{-0.0095}$	1681	$0.00935^{+0.0028}_{-0.0032}$	$0.01322^{+0.0026}_{-0.0027}$	1787
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.00146^{+0.00055}_{-0.00057}}$	$\mathbf{0.00202^{+0.00054}_{-0.00055}}$	**1351**	$\mathbf{0.00084^{+0.00023}_{-0.00026}}$	$\mathbf{0.0011^{+0.00023}_{-0.00023}}$	**1394**
t_{SKS}	$0.01762^{+0.0061}_{-0.0062}$	$0.0237^{+0.0059}_{-0.0059}$	1523	$0.00504^{+0.0012}_{-0.0016}$	$0.00694^{+0.0011}_{-0.0012}$	1591
t_{FGD}	$0.03532^{+0.019}_{-0.014}$	$0.04753^{+0.017}_{-0.013}$	2364	$0.01036^{+0.0034}_{-0.0037}$	$0.01442^{+0.0029}_{-0.003}$	2518
t_{MMD}	$0.01904^{+0.011}_{-0.0077}$	$0.02548^{+0.01}_{-0.0076}$	10489	$0.00456^{+0.0019}_{-0.0015}$	$0.00605^{+0.0017}_{-0.0014}$	11046
t_{LLR}	$0.00024^{+0.00014}_{-0.00013}$	$0.00033^{+0.00014}_{-0.00013}$	3539	$8e-05^{+6e-05}_{-5e-05}$	$0.00011^{+6e-05}_{-5e-05}$	3795

	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon^{\mathrm{pow}_+}_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.0087^{+0.0021}_{-0.0028}$	$0.01221^{+0.0017}_{-0.0021}$	1987	$0.00584^{+0.0017}_{-0.002}$	$0.00823^{+0.0016}_{-0.0016}$	1647
$t_{\overline{\mathrm{KS}}}$	$1.00067^{+0.00037}_{-6e-05}$	$1.00122^{+0.00018}_{-0.00046}$	**1922**	$\mathbf{0.00103^{+0.00032}_{-0.00034}}$	$\mathbf{0.00138^{+0.00031}_{-0.00031}}$	**1377**
t_{SKS}	$0.00791^{+0.0024}_{-0.0028}$	$0.01082^{+0.0022}_{-0.0024}$	2177	$0.00329^{+0.00072}_{-0.00091}$	$0.00446^{+0.0011}_{-0.0007}$	1992
t_{FGD}	$\mathbf{0.00381^{+0.00094}_{-0.0012}}$	$\mathbf{0.0052^{+0.00087}_{-0.00079}}$	3238	$0.00639^{+0.0021}_{-0.0024}$	$0.00883^{+0.0018}_{-0.0019}$	2503
t_{MMD}	$0.00739^{+0.0029}_{-0.0026}$	$0.00978^{+0.0026}_{-0.0023}$	11758	$0.00264^{+0.0011}_{-0.00089}$	$0.00349^{+0.001}_{-0.00085}$	14540
t_{LLR}	$0.02058^{+0.0067}_{-0.011}$	$0.02522^{+0.007}_{-0.007}$	4691	$0.00012^{+8e-05}_{-9e-05}$	$0.00017^{+8e-05}_{-9e-05}$	4452

	pow_--deformation			$\mathcal{N}$-deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon^{\mathrm{pow}_-}_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon^{\mathcal{N}}_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.00606^{+0.0017}_{-0.0021}$	$0.00856^{+0.0015}_{-0.0017}$	1649	$0.13773^{+0.017}_{-0.026}$	$0.16305^{+0.012}_{-0.016}$	1344
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.00098^{+0.00037}_{-0.00037}}$	$\mathbf{0.00133^{+0.00035}_{-0.00036}}$	**1366**	$\mathbf{0.00454^{+0.00072}_{-0.00082}}$	$\mathbf{0.00539^{+0.00062}_{-0.00069}}$	**1281**
t_{SKS}	$0.00333^{+0.00084}_{-0.001}$	$0.00446^{+0.00075}_{-0.00082}$	2034	$0.09534^{+0.015}_{-0.02}$	$0.11293^{+0.011}_{-0.014}$	1707
t_{FGD}	$0.00659^{+0.002}_{-0.0024}$	$0.00905^{+0.0017}_{-0.0017}$	2508	$0.16354^{+0.02}_{-0.031}$	$0.19223^{+0.014}_{-0.018}$	2022
t_{MMD}	$0.00267^{+0.0013}_{-0.0011}$	$0.00357^{+0.0012}_{-0.001}$	11378	$0.21459^{+0.027}_{-0.032}$	$0.24752^{+0.021}_{-0.025}$	8643
t_{LLR}	$0.00013^{+9e-05}_{-9e-05}$	$0.00018^{+9e-05}_{-8e-05}$	4419	-	-	-

	$\mathcal{U}$-deformation			Timing
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon^{\mathcal{U}}_{99\%\mathrm{CL}}$	t (s)	t^{null} (s)
t_{FGD}	$0.28233^{+0.035}_{-0.054}$	$0.33186^{+0.024}_{-0.03}$	1941	2259
t_{LLR}	-	-	-	-
t_{MMD}	$0.3715^{+0.045}_{-0.055}$	$0.42782^{+0.036}_{-0.043}$	7912	16290
t_{SKS}	$0.16389^{+0.025}_{-0.034}$	$0.19413^{+0.019}_{-0.025}$	1681	672
t_{SW}	$0.23671^{+0.03}_{-0.043}$	$0.28278^{+0.023}_{-0.028}$	1318	363
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.00774^{+0.0011}_{-0.0014}}$	$\mathbf{0.00915^{+0.001}_{-0.0012}}$	**1236**	**77**