MoG model with $d = 5$, $q = 3$, and $n = m = 2 \cdot 10^4$

	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}	$0.06429^{+0.021}_{-0.021}$	$0.08858^{+0.021}_{-0.02}$	1309	$0.02167^{+0.0065}_{-0.0076}$	$0.03029^{+0.0061}_{-0.0067}$	1429
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.00323^{+0.0012}_{-0.0013}}$	$\mathbf{0.00453^{+0.0011}_{-0.0012}}$	1306	$\mathbf{0.00187^{+0.00049}_{-0.00058}}$	$\mathbf{0.00247^{+0.00044}_{-0.00049}}$	1364
t_{SKS}	$0.03829^{+0.013}_{-0.013}$	$0.05211^{+0.013}_{-0.012}$	1567	$0.01144^{+0.0027}_{-0.0035}$	$0.01578^{+0.0024}_{-0.0026}$	1687
t_{FGD}	$0.07491^{+0.041}_{-0.029}$	$0.10089^{+0.039}_{-0.028}$	**1266**	$0.02357^{+0.0063}_{-0.007}$	$0.03187^{+0.0055}_{-0.0054}$	**1324**
t_{MMD}	$0.04409^{+0.023}_{-0.016}$	$0.05957^{+0.022}_{-0.016}$	1908	$0.01045^{+0.0043}_{-0.0036}$	$0.01406^{+0.004}_{-0.0033}$	2122
t_{NPLM}	$0.00669^{+0.002}_{-0.0022}$	$0.00806^{+0.0018}_{-0.0018}$	9080	$0.00152^{+0.0005}_{-0.00052}$	$0.00183^{+0.00047}_{-0.00045}$	9731
t_{LLR}	$0.00054^{+0.00031}_{-0.00031}$	$0.00074^{+0.00031}_{-0.00031}$	3525	$0.00017^{+0.00012}_{-0.00013}$	$0.00025^{+0.00012}_{-0.00012}$	3833

	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.04196^{+0.01}_{-0.013}$	$0.05788^{+0.0086}_{-0.0098}$	**1424**	$0.01344^{+0.0038}_{-0.0045}$	$0.01867^{+0.0035}_{-0.0038}$	1457
$t_{\overline{\mathrm{KS}}}$	$1.0022^{+0.00012}_{-0.00086}$	$1.00256^{+0.00025}_{-0.0003}$	1435	$\mathbf{0.00225^{+0.00067}_{-0.00076}}$	$\mathbf{0.00301^{+0.00069}_{-0.00066}}$	1387
t_{SKS}	$0.04004^{+0.012}_{-0.015}$	$0.05432^{+0.011}_{-0.013}$	1654	$0.00744^{+0.0016}_{-0.0021}$	$0.01008^{+0.0014}_{-0.0015}$	1731
t_{FGD}	$\mathbf{0.01634^{+0.0042}_{-0.005}}$	$\mathbf{0.02285^{+0.0041}_{-0.0037}}$	1797	$0.01441^{+0.004}_{-0.0041}$	$0.01943^{+0.0036}_{-0.0033}$	**1379**
t_{MMD}	$0.03119^{+0.015}_{-0.014}$	$0.04401^{+0.013}_{-0.012}$	2310	$0.00603^{+0.0027}_{-0.0021}$	$0.00804^{+0.0025}_{-0.002}$	2103
t_{NPLM}	$0.0024^{+0.00094}_{-0.0009}$	$0.00294^{+0.0009}_{-0.00077}$	13000	$0.00099^{+0.00033}_{-0.00033}$	$0.00121^{+0.00029}_{-0.0003}$	10454
t_{LLR}	-	-	-	$0.00029^{+0.00016}_{-0.00016}$	$0.00039^{+0.00017}_{-0.00016}$	3512

	pow_--deformation			$\mathcal{N}$-deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
t_{SW}	$0.01322^{+0.0042}_{-0.0048}$	$0.01865^{+0.0038}_{-0.0041}$	1443	$0.21144^{+0.028}_{-0.04}$	$0.25259^{+0.02}_{-0.027}$	1202
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.00223^{+0.00071}_{-0.00076}}$	$\mathbf{0.003^{+0.00065}_{-0.0007}}$	**1404**	$\mathbf{0.00728^{+0.0012}_{-0.0015}}$	$\mathbf{0.00877^{+0.0012}_{-0.0013}}$	1332
t_{SKS}	$0.00721^{+0.002}_{-0.0024}$	$0.00984^{+0.0017}_{-0.0019}$	1755	$0.14872^{+0.025}_{-0.032}$	$0.17799^{+0.019}_{-0.023}$	1488
t_{FGD}	$0.01351^{+0.0046}_{-0.0051}$	$0.01876^{+0.0042}_{-0.0041}$	**1404**	$0.24435^{+0.028}_{-0.04}$	$0.2852^{+0.02}_{-0.024}$	**1103**
t_{MMD}	$0.00523^{+0.0029}_{-0.0024}$	$0.00739^{+0.0027}_{-0.0023}$	3255	$0.3198^{+0.042}_{-0.053}$	$0.37039^{+0.037}_{-0.037}$	1712
t_{NPLM}	$0.00102^{+0.00035}_{-0.00035}$	$0.00123^{+0.00031}_{-0.00031}$	10343	$0.09097^{+0.015}_{-0.018}$	$0.1014^{+0.011}_{-0.014}$	7797
t_{LLR}	$0.00026^{+0.00016}_{-0.00017}$	$0.00039^{+0.00016}_{-0.00016}$	3594	-	-	-

	$\mathcal{U}$-deformation			Timing		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	t^{null} (s)		
t_{SW}	$0.3659^{+0.046}_{-0.07}$	$0.43228^{+0.037}_{-0.044}$	1169	289		
$t_{\overline{\mathrm{KS}}}$	$\mathbf{0.01199^{+0.002}_{-0.0022}}$	$\mathbf{0.0143^{+0.0019}_{-0.0019}}$	1313	**42**		
t_{SKS}	$0.2538^{+0.042}_{-0.054}$	$0.30376^{+0.032}_{-0.04}$	1434	392		
t_{FGD}	$0.4208^{+0.05}_{-0.07}$	$0.49461^{+0.036}_{-0.043}$	**1053**	637		
t_{MMD}	$0.55193^{+0.079}_{-0.085}$	$0.64396^{+0.059}_{-0.064}$	1542	1276		
t_{NPLM}	$0.15644^{+0.027}_{-0.031}$	$0.17438^{+0.019}_{-0.025}$	7672	11856		
t_{LLR}	-	-	-	-		