

MoG model with $d = 100$, $q = 10$, and $n = m = 10^4$

μ -deformation							Σ_{ii} -deformation						
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.09504^{+0.024}_{-0.028}$	$0.12338^{+0.023}_{-0.024}$	648	$0.03044^{+0.0066}_{-0.0084}$	$0.03963^{+0.0061}_{-0.0067}$	711	t_{SW}	$0.00635^{+0.0011}_{-0.0015}$	$0.00825^{+0.00096}_{-0.0011}$	771	$0.01206^{+0.0028}_{-0.0033}$	$0.01579^{+0.0023}_{-0.0028}$	730
t_{KS}	$0.00787^{+0.0031}_{-0.0029}$	$0.01207^{+0.0034}_{-0.0032}$	1244	$0.00217^{+0.0011}_{-0.00099}$	$0.00375^{+0.0011}_{-0.0012}$	1389	t_{KS}	$0.00078^{+0.00027}_{-0.00031}$	$0.00117^{+0.00028}_{-0.00029}$	1428	$0.00084^{+0.00043}_{-0.00041}$	$0.00144^{+0.00041}_{-0.00045}$	1467
t_{SKS}	$0.07672^{+0.018}_{-0.021}$	$0.10153^{+0.016}_{-0.018}$	688	$0.02687^{+0.0041}_{-0.0056}$	$0.0345^{+0.0036}_{-0.004}$	736	t_{SKS}	$0.00444^{+0.0011}_{-0.0013}$	$0.00592^{+0.00098}_{-0.001}$	821	$0.01088^{+0.0016}_{-0.0021}$	$0.0139^{+0.0013}_{-0.0015}$	773
t_{FGD}	$0.13134^{+0.032}_{-0.034}$	$0.16599^{+0.028}_{-0.028}$	2715	$0.04142^{+0.0081}_{-0.01}$	$0.05232^{+0.0067}_{-0.0074}$	2955	t_{FGD}	$0.00505^{+0.00098}_{-0.0012}$	$0.00646^{+0.00087}_{-0.00098}$	3326	$0.01638^{+0.0032}_{-0.0039}$	$0.02069^{+0.0027}_{-0.003}$	2488
t_{MMD}	$0.10962^{+0.028}_{-0.035}$	$0.14183^{+0.023}_{-0.026}$	1350	$0.02117^{+0.007}_{-0.0078}$	$0.02757^{+0.0062}_{-0.0064}$	1536	t_{MMD}	$0.00903^{+0.0022}_{-0.0026}$	$0.01168^{+0.0019}_{-0.002}$	1525	$0.00761^{+0.0026}_{-0.0028}$	$0.00988^{+0.0023}_{-0.0023}$	1238
t_{LLR}	$9e - 05^{+6e-05}_{-6e-05}$	$0.00012^{+6e-05}_{-6e-05}$	3225	$2e - 05^{+1e-05}_{-1e-05}$	$2e - 05^{+2e-05}_{-1e-05}$	3499	t_{LLR}	0.0^{+0}_{-0}	0.0^{+0}_{-0}	4354	$1e - 05^{+0}_{-1e-05}$	$1e - 05^{+0}_{-1e-05}$	3842
$\Sigma_{i \neq j}$ -deformation							pow ₊ -deformation						
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.00635^{+0.0011}_{-0.0015}$	$0.00825^{+0.00096}_{-0.0011}$	771	$0.01206^{+0.0028}_{-0.0033}$	$0.01579^{+0.0023}_{-0.0028}$	730	t_{SW}	$0.01253^{+5}_{-0.0032}$	$0.0164^{+5}_{-0.0026}$	653	$0.32495^{+0.033}_{-0.046}$	$0.37663^{+0.025}_{-0.032}$	617
t_{KS}	$0.00078^{+0.00027}_{-0.00031}$	$0.00117^{+0.00028}_{-0.00029}$	1428	$0.00084^{+0.00043}_{-0.00041}$	$0.00144^{+0.00041}_{-0.00045}$	1467	t_{KS}	$0.00086^{+0.00044}_{-0.00043}$	$0.00147^{+0.00042}_{-0.00047}$	1542	$0.02563^{+0.0081}_{-0.0097}$	$0.03668^{+0.0078}_{-0.008}$	652
t_{SKS}	$0.00444^{+0.0011}_{-0.0013}$	$0.00592^{+0.00098}_{-0.001}$	821	$0.01088^{+0.0016}_{-0.0021}$	$0.0139^{+0.0013}_{-0.0015}$	773	t_{SKS}	$0.01077^{+0.0016}_{-0.0021}$	$0.01376^{+0.0013}_{-0.0015}$	786	$0.27956^{+0.034}_{-0.043}$	$0.32856^{+0.027}_{-0.033}$	657
t_{FGD}	$0.00505^{+0.00098}_{-0.0012}$	$0.00646^{+0.00087}_{-0.00098}$	3326	$0.01638^{+0.0032}_{-0.0039}$	$0.02069^{+0.0027}_{-0.003}$	2488	t_{FGD}	$0.01685^{+0.0032}_{-0.0038}$	$0.02139^{+0.0026}_{-0.0032}$	3221	$0.28803^{+0.027}_{-0.038}$	$0.32529^{+0.021}_{-0.025}$	2636
t_{MMD}	$0.00903^{+0.0022}_{-0.0026}$	$0.01168^{+0.0019}_{-0.002}$	1525	$0.00761^{+0.0026}_{-0.0028}$	$0.00988^{+0.0023}_{-0.0023}$	1238	t_{MMD}	$0.00834^{+0.0023}_{-0.0025}$	$0.01083^{+0.002}_{-0.0021}$	1257	$1.17867^{+0.13}_{-0.19}$	$1.33971^{+0.09}_{-0.12}$	731
t_{LLR}	0.0^{+0}_{-0}	0.0^{+0}_{-0}	4354	$1e - 05^{+0}_{-1e-05}$	$1e - 05^{+0}_{-1e-05}$	3842	t_{LLR}	$1e - 05^{+0}_{-1e-05}$	$1e - 05^{+0}_{-1e-05}$	4903	-	-	-
pow ₋ -deformation							\mathcal{N} -deformation						
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.01253^{+5}_{-0.0032}$	$0.0164^{+5}_{-0.0026}$	653	$0.32495^{+0.033}_{-0.046}$	$0.37663^{+0.025}_{-0.032}$	617	t_{SW}	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	588	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	285
t_{KS}	$0.00086^{+0.00044}_{-0.00043}$	$0.00147^{+0.00042}_{-0.00047}$	1542	$0.02563^{+0.0081}_{-0.0097}$	$0.03668^{+0.0078}_{-0.008}$	652	t_{KS}	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	644	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	511
t_{SKS}	$0.01077^{+0.0016}_{-0.0021}$	$0.01376^{+0.0013}_{-0.0015}$	786	$0.27956^{+0.034}_{-0.043}$	$0.32856^{+0.027}_{-0.033}$	657	t_{SKS}	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	631	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	456
t_{FGD}	$0.01685^{+0.0032}_{-0.0038}$	$0.02139^{+0.0026}_{-0.0032}$	3221	$0.28803^{+0.027}_{-0.038}$	$0.32529^{+0.021}_{-0.025}$	2636	t_{FGD}	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	2515	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	3225
t_{MMD}	$0.00834^{+0.0023}_{-0.0025}$	$0.01083^{+0.002}_{-0.0021}$	1257	$1.17867^{+0.13}_{-0.19}$	$1.33971^{+0.09}_{-0.12}$	731	t_{MMD}	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	1113	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	665
t_{LLR}	$1e - 05^{+0}_{-1e-05}$	$1e - 05^{+0}_{-1e-05}$	4903	-	-	-	t_{LLR}	-	-	-	-	-	-
\mathcal{U} -deformation							Timing						
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}^{\mathcal{U}}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{SW}	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	588	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	285	t_{SW}	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	588	$0.56347^{+0.054}_{-0.083}$	$0.65308^{+0.044}_{-0.056}$	285
t_{KS}	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	644	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	511	t_{KS}	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	644	$0.03885^{+0.012}_{-0.015}$	$0.0555^{+0.011}_{-0.012}$	511
t_{SKS}	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	631	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	456	t_{SKS}	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	631	$0.48383^{+0.061}_{-0.074}$	$0.56865^{+0.048}_{-0.057}$	456
t_{FGD}	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	2515	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	3225	t_{FGD}	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	2515	$0.49924^{+0.046}_{-0.066}$	$0.56381^{+0.036}_{-0.047}$	3225
t_{MMD}	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	1113	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	665	t_{MMD}	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	1113	$2.02548^{+0.23}_{-0.32}$	$2.31727^{+0.16}_{-0.2}$	665
t_{LLR}	-	-	-	-	-	-	t_{LLR}	-	-	-	-	-	-