${\rm MoG\ model\ with\ d=20,\ q=5,\ and\ n=m=10^5}$						
	μ -deformation			Σ_{ii} -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$\begin{array}{c} 0.03313^{+0.013}_{-0.014} \\ \textbf{0.00336}^{+0.00093}_{-0.00012} \end{array}$	$0.04474^{+0.012}_{-0.013}$	2949	$0.01198^{+0.0033}_{-0.0043}$	$0.01611^{+0.0031}_{-0.0034}$	3129
$t_{\overline{ ext{KS}}}$	$0.00336^{+0.00093}_{-0.0012}$	$0.00457^{+0.0008}_{-0.00092}$	3047	$0.00123^{+0.00035}_{-0.00047}$	$0.00169^{+0.00029}_{-0.00036}$	3163
$t_{ m SKS}$	$0.02413^{+0.0082}_{-0.005}$	$0.03295^{+0.0076}_{-0.0081}$	3089	$0.0094^{+0.002}_{-0.0029}$	$0.01256^{+0.0017}$	3211
$t_{ m FGD}$		$0.05241^{+0.017}_{-0.014}$	5730	$ \begin{array}{c} 0.01349^{+0.004}_{-0.0047} \\ 0.00667^{+0.0033}_{-0.0027} \end{array} $	0.01007 ± 0.0034	5971
$t_{ m MMD}$	$ \begin{array}{c} 0.03818^{+0.018}_{-0.016} \\ 0.03221^{+0.012}_{-0.011} \\ \end{array} $	$0.04404_{-0.0098}^{+0.014}$	11685	$0.00667^{+0.0033}_{-0.0027}$	$0.00928^{+0.0031}_{-0.0035}$	12637
$t_{ m LLR}$	$0.00014^{+0.0001}_{-9e-05}$	$0.00021^{+0.0001}_{-9e-05}$	9362	$5e - 05^{+4}_{-3e-05}^{-0.0027}$	$7e - 05_{-3e-05}^{-0.0023}$	7986
$\Sigma_{i \neq j}$ -deformation				pow_+ -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$\begin{array}{c} 0.00449^{+0.001}_{-0.0015} \\ 1.00159^{+0.00012}_{-0.0012} \end{array}$	$0.00589^{+0.00093}_{-0.00097}$	5465	$0.00416^{+0.0012}_{-0.0015}$	$0.00561^{+0.001}_{-0.0012}$	3284
$t_{\overline{ ext{KS}}}$	$1.00159_{-0.0012}^{+0.00012}$	$1.00183^{+0.00024}_{-0.00055}$	5678	0.00029^{+9e-05}	$0.00041^{+9e-05}_{-0.001}$	3555
$t_{ m SKS}$	$0.00359^{+0.0012}_{-0.0014}$	$0.00491^{+0.00098}_{-0.0012}$	7629	$\begin{array}{c} -0.00012 \\ 0.00306^{+0.00062}_{-0.00089} \\ 0.00494^{+0.0013}_{-0.0016} \end{array}$	$\begin{array}{c} -0.001 \\ 0.00405^{+0.00049} \\ 0.00667^{+0.0011} \\ 0.00333^{+0.00094} \\ 0.00332^{+0.00094} \end{array}$	3412
$t_{ m FGD}$	$\begin{array}{c} 0.002^{+0.0004}_{-0.0006} \\ 0.00444^{+0.0019}_{-0.0016} \end{array}$	0.0000 ± 0.0004	9911	$0.00494^{+0.0013}_{-0.0016}$	$0.00667^{+0.0011}_{-0.0011}$	5958
$t_{ m MMD}$	$0.00444^{+0.0019}_{-0.0016}$	$0.00599^{+0.0018}_{-0.0015}$	15617	$ \begin{array}{c c} 0.00494^{+0.0013}_{-0.0016} \\ 0.00241^{+0.001}_{-0.00091} \end{array} $	$0.00333^{+0.00094}_{-0.00082}$	13310
$t_{ m LLR}$	$\begin{array}{c} 0.00444_{-0.0016} \\ 0.01853_{-0.0079}^{+0.0072} \end{array}$	$\begin{array}{c} 0.0026_{-0.0004}^{+0.0014} \\ 0.00599_{-0.0015}^{+0.0018} \\ 0.02418_{-0.008}^{+0.0048} \end{array}$	11580	$\begin{array}{c} 0.00241^{+0.001}_{-0.00091} \\ 1e - 05^{+1e-05}_{-1e-05} \end{array}$	$2e - 05^{+0}_{-1e-05}$	8742
$pow\deformation$			$\mathcal{N} ext{-deformation}$			
Statistic	$\epsilon_{95\%{ m CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.00419^{+0.0012}_{-0.0015}$	$0.00567^{+0.0011}_{-0.0012}$	3291	$0.16001^{+0.02}_{-0.031}$	$0.18547^{+0.016}_{-0.019}$	2607
$t_{\overline{ ext{KS}}}$	$0.00029^{+0.0013}_{-0.00012}$	$0.00041^{+0.0001}_{-0.0001}$	3549	$0.00593^{+0.0015}_{-0.0018}$	$0.00757_{-0.0015}^{+0.0014}$	3131
$t_{ m SKS}$	$0.00301^{+0.00067}_{-0.00097}$	$0.00398^{+0.00056}_{-0.00065}$	3447	$0.13104^{+0.019}_{-0.028}$	$0.15417^{+0.015}_{-0.02}$	2786
$t_{ m FGD}$	$0.00488^{+0.0013}_{-0.0016}$	$0.00669^{+0.0011}_{-0.0011}$	5693	$0.15039^{+0.017}$	$0.17553^{+0.012}_{-0.015}$	4625
$t_{ m MMD}$	$0.00257^{+0.001}_{-0.00091}$	$0.00349^{+0.00096}_{-0.00081}$	13333	$\begin{array}{c} 0.37231^{+0.027}_{-0.061} \end{array}$	$0.43454_{-0.033}^{+0.03}$	9278
$t_{ m LLR}$	$1e - 05^{+1}_{-1}e^{-05}$	$2e - 05^{+0}_{-1e-05}$	8857	-	-	-
$\mathcal{U} ext{-} ext{deformation}$				Timing		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	t^{null} (s)		
$t_{ m SW}$	$0.27854^{+0.033}_{-0.055}$	$0.32293^{+0.025}_{-0.035}$	2497	384		
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} -0.053 \\ \textbf{0.00979} \\ +0.0023 \\ 0.22648 \\ -0.049 \\ 0.26002 \\ +0.03 \\ 0.26002 \\ +0.03 \\ 0.26002 \\ -0.046 \end{array}$	$\begin{array}{c} -0.033 \\ \textbf{0.01236} \\ -0.0023 \\ 0.26646 \\ -0.034 \\ 0.30348 \\ -0.026 \\ -0.052 \\ \end{array}$	2980	321		
$t_{ m SKS}$	$0.22648^{+0.032}_{-0.049}$	$0.26646^{+0.026}_{-0.034}$	2674	721		
$t_{ m FGD}$	$0.26002^{+0.03}_{-0.046}$	$0.30348^{+0.021}_{-0.026}$	4428	5139		
$t_{ m MMD}$	$0.64451^{+0.068}_{-0.094}$	$0.75224_{-0.053}^{+0.023}$	9043	16625		
$t_{ m LLR}$	-	-	-	-		