${\rm MoG\ model\ with\ d=20,\ q=5,\ and\ n=m=10^4}$						
	μ -deformation			Σ_{ii} -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.10336^{+0.043}_{-0.05}$	$0.14324^{+0.041}_{-0.042}$	2857	$0.03566^{+0.012}_{-0.016}$	$0.05015^{+0.011}_{-0.012}$	3009
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} 0.10336^{+0.043}_{-0.05} \\ 0.01015^{+0.0036}_{-0.0047} \end{array}$	$0.01446^{+0.003}_{-0.0037}$	2986	$\begin{array}{c} \textbf{0.09300} - 0.016 \\ \textbf{0.00383} + 0.0013 \\ 0.02882 + 0.0018 \\ 0.03943 + 0.015 \\ 0.01941 + 0.014 \\ -0.011 \\ 0.00141 + 0.0011 \\ \end{array}$	$\begin{array}{c} \textbf{0.00513} \begin{array}{c} -0.012 \\ \textbf{0.00553} \begin{array}{c} +0.0011 \\ -0.0014 \end{array} \\ 0.03931 \begin{array}{c} +0.0061 \\ -0.0077 \end{array} \\ 0.05428 \begin{array}{c} +0.012 \\ -0.013 \end{array} \end{array}$	4100
$t_{ m SKS}$	$0.077^{+0.028}_{-0.035}$	$0.10525^{+0.026}_{-0.028}$	2895	$0.02882^{+0.0073}_{-0.011}$	$0.03931^{+0.0061}_{-0.0077}$	3084
$t_{ m FGD}$	$0.11749^{+0.064}_{-0.065}$	$0.16099^{+0.058}_{-0.051}$	2648	$0.03943^{+0.015}_{-0.02}$	$0.05428^{+0.012}_{-0.013}$	2802
$t_{ m MMD}$	$\begin{array}{c} -0.0047 \\ 0.077^{+0.028}_{-0.035} \\ 0.11749^{+0.064}_{-0.065} \\ 0.09451^{+0.053}_{-0.049} \end{array}$	$0.13746^{+0.048}_{-0.041}$	2986	$0.01941^{+0.014}_{-0.011}$	$0.02836^{+0.013}_{-0.0099}$	3318
$t_{ m LLR}$	$\begin{array}{c} 0.09451_{-0.049} \\ 0.00045_{-0.0003}^{+0.00029} \end{array}$	$\begin{array}{c} \textbf{0.11624}_{-0.042}^{+0.003} \\ \textbf{0.01446}_{-0.0037}^{+0.003} \\ \textbf{0.10525}_{-0.028}^{+0.026} \\ \textbf{0.16099}_{-0.051}^{+0.058} \\ \textbf{0.13746}_{-0.041}^{+0.004} \\ \textbf{0.00063}_{-0.00029}^{+0.0003} \end{array}$	4508	$0.00019_{-0.00011}^{+0.00011}$	$\begin{array}{c} 0.05428_{-0.013}^{+0.013} \\ 0.02836_{-0.0099}^{+0.00011} \\ 0.00025_{-0.00011}^{+0.00011} \end{array}$	4775
$\Sigma_{i \neq j}$ -deformation			pow_{\perp} -deformation			
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{+}}$	t (s)
$t_{ m SW}$	$0.01359^{+0.004}_{-0.0061}$	$0.01919_{-0.0042}^{+0.0035}$	5172	$0.01246^{+0.0042}_{-0.0056}$	$0.01744^{+0.0037}_{-0.0043}$	3165
$t_{\overline{ ext{KS}}}$	$1.00339^{+0.002}_{-0.0033}$	$1.00597^{+0.00086}_{-0.0022}$	4737	$\mid 0.0009^{+0.00037}_{-0.00045} \mid$	$0.00135^{+0.00036}_{-0.0004}$	3352
$t_{ m SKS}$	$0.01109^{+0.0042}$	$0.01556^{+0.0038}_{-0.0045}$	5291	$0.00964^{+0.0022}_{-0.0036}$	$0.0128^{+0.0018}_{-0.0023}$	3235
$t_{ m FGD}$	$0.006^{+0.0034}_{-0.0028}$	$0.00827^{+0.0016}_{-0.0018}$	6427	$0.01467^{+0.0048}_{-0.0071}$	$0.02004^{+0.0038}_{-0.0045}$	3053
$t_{ m MMD}$	$0.01275^{+0.0083}_{-0.0067}$	$0.01849^{+0.0077}_{-0.006}$	5682	$0.00694^{+0.0043}_{-0.0038}$	$0.01013^{+0.0039}_{-0.0032}$	3484
$t_{ m LLR}$	$0.04149^{+0.017}_{-0.019}$	$0.01849^{+0.0077}_{-0.006} \\ 0.05133^{+0.015}_{-0.015}$	6816	$\begin{array}{c} 0.00694^{+0.0043}_{-0.0038} \\ 4e - 05^{+2e-05}_{-2e-05} \end{array}$	$0.01013_{-0.0032}^{+0.0039} 5e - 05_{-2e-05}^{+3e-05}$	5090
powdeformation			$\mathcal{N} ext{-} ext{deformation}$			
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{-}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathcal{N}}$	t (s)
$t_{ m SW}$	$0.01291^{+5}_{-0.0058}$	$0.01815^{+5}_{-0.0044}$	2868	$\begin{array}{c} 0.28537^{+0.045}_{-0.078} \\ \textbf{0.01343}^{+0.0054}_{-0.0059} \end{array}$	$0.34154^{+0.036}_{-0.047}$	2665
$t_{\overline{ ext{KS}}}$	$\mid 0.00086^{+0.00038}_{-0.00044}$	$0.00131^{+0.00030}_{-0.0004}$	3366	$0.01343^{+0.0054}_{-0.0059}$	$0.01949^{+0.0055}_{-0.0056}$	2995
$t_{ m SKS}$	$0.00941^{+0.0025}_{-0.0038}$	$0.01264^{+0.002}_{-0.0026}$	3294	$0.23623^{+0.041}_{-0.066}$	$0.28319^{+0.034}_{-0.043}$	2697
$t_{ m FGD}$	$0.01513^{+0.005}_{-0.0072}$	$0.02076^{+0.004}_{-0.0046}$	3177	$0.26462^{+0.041}_{-0.074}$	$0.31263^{+0.027}_{-0.037}$	2633
$t_{ m MMD}$	$0.00757^{+0.0046}_{-0.004}$	$0.01111^{+0.0041}_{-0.0034}$	3434	$0.63143_{-0.17}^{+0.1}$	$0.75933_{-0.081}^{+0.072}$	2412
$t_{ m LLR}$	$3e - 05^{+2e - 05}_{-2e - 05}$	$4e - 05^{+3e - 05}_{-2e - 05}$	5062	_	-	_
$\mathcal{U} ext{-deformation}$				Timing		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%{ m CL}}^{\cal U}$	t (s)	t^{null} (s)		
$t_{ m FGD}$	$0.45746^{+0.072}_{-0.13}$	$0.54235^{+0.048}_{-0.065}$	2641	550		
$t_{ m LLR}$	-	-	-	-		
$t_{ m MMD}$	$1.09848^{+0.17}_{-0.28}$	$1.32688^{+0.11}_{-0.15}$	2438	272		
$t_{ m SKS}$	$0.40577^{+0.074}_{-0.11}$	$0.48809^{+0.06}_{-0.075}$ $0.58844^{+0.061}_{-0.077}$	2643	351		
$t_{ m SW}$	$0.49337^{+0.08}_{-0.13}$	$0.58844^{+0.061}_{-0.077}$	2579	276		
$t_{\overline{ ext{KS}}}$	$0.02061^{+0.0077}_{-0.0085}$	$0.02948^{+0.0081}_{-0.008}$	2893	109		