$ \begin{array}{c} \textbf{CMoG model with d} = 100, \ \textbf{q} = 10, \ \textbf{and} \ \ \textbf{n} = \textbf{m} = 5 \cdot 10^4 \end{array} $						
	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)
$t_{ m SW}$	$0.03998^{+0.011}_{-0.013}$	$0.05217^{+0.01}_{-0.012}$	836	$0.01323^{+0.0032}_{-0.0041}$	$0.01718^{+0.0028}_{-0.0032}$	907
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} \textbf{0.00299} \begin{array}{l} \textbf{-0.013} \\ \textbf{0.00299} \begin{array}{l} \textbf{-0.0011} \\ \textbf{-0.00011} \\ \textbf{0.0331} \begin{array}{l} \textbf{-0.0083} \\ \textbf{-0.0097} \\ \textbf{0.05672} \begin{array}{l} \textbf{-0.018} \\ \textbf{-0.013} \\ \textbf{0.05034} \begin{array}{l} \textbf{-0.013} \\ \textbf{-0.013} \\ \textbf{0.05034} \end{array} \end{array}$	$\begin{array}{c} \textbf{0.00425} \begin{array}{l} \textbf{-0.012} \\ \textbf{0.00425} \begin{array}{l} \textbf{-0.001} \\ \textbf{-0.001} \\ \textbf{0.04324} \begin{array}{l} \textbf{-0.0082} \\ \textbf{-0.0082} \\ \textbf{0.07296} \begin{array}{l} \textbf{-0.015} \\ \textbf{-0.015} \\ \textbf{0.06423} \begin{array}{l} \textbf{-0.0092} \\ \textbf{-0.01} \end{array} \end{array}$	915	$\begin{array}{c} 0.01628_{-0.0041}^{+0.00029} \\ 0.00071_{-0.00028}^{+0.00028} \\ 0.01187_{-0.0028}^{+0.0042} \\ 0.01849_{-0.0051}^{+0.0042} \end{array}$	$\begin{array}{c} \textbf{0.0011} = 0.0032 \\ \textbf{0.00105} = 0.00031 \\ -0.00029 \\ 0.0151 = 0.002 \\ -0.002 \end{array}$	1002
$t_{ m SKS}$	$0.0331^{+0.0083}_{-0.0097}$	$0.04324^{+0.0076}_{-0.0082}$	1012	$0.01187^{+0.002}_{-0.0028}$	$0.0151^{+0.0016}_{-0.002}$	1099
$t_{ m FGD}$	$0.05672^{+0.017}_{-0.018}$	$0.07296^{+0.015}_{-0.015}$	10126	$0.01849^{+0.0042}_{-0.0051}$	$0.0235^{+0.0033}_{-0.0039}$	8804
$t_{ m MMD}$	$0.05034^{+0.011}_{-0.013}$	$0.06423^{+0.0092}_{-0.01}$	9640	$\begin{array}{c} 0.01849^{+0.0051}_{-0.0051} \\ 0.0101^{+0.0028}_{-0.003} \\ 1e - 05^{+0}_{-1e-05} \end{array}$	$0.01277^{+0.0020}_{-0.0026}$	9030
$t_{ m LLR}$	$4e - 05^{+2e-05}_{-3e-05}$	$5e - 05^{+3e - 05}_{-2e - 05}$	12683	$1e - 05^{+0}_{-1e-05}$	$1e - 05^{+1}_{-0} = 0.0026$	13707
$\Sigma_{i \neq j}$ -deformation				pow_+ -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{+}}$	t (s)
$t_{ m SW}$	$0.00274^{+0.00055}_{-0.00076}$	$0.00353^{+0.00047}_{-0.00057}$	988	$0.00526^{+0.0013}_{-0.0016}$	$0.00684^{+0.0011}_{-0.0013}$	$\boldsymbol{921}$
$t_{\overline{ ext{KS}}}$	0.00025^{+9e-05}	$0.00037^{+9e-05}_{-0.0001}$	1092	$0.00026^{+0.00011}_{-0.00011}$	$0.00039^{+0.00013}_{-0.00012}$	1081
$t_{ m SKS}$	$0.00188^{+0.00049}_{-0.00059}$	$0.00249^{+0.00043}_{-0.0005}$	1202	$0.00478^{+0.00081}_{-0.0011}$	$0.00605^{+0.00062}_{-0.00075}$	1123
$t_{ m FGD}$	$0.00212^{+0.0005}_{-0.00059}$	$0.00274^{+0.00041}_{-0.00046}$	9777	$0.00731^{+0.0016}_{-0.0019}$	$\begin{array}{c} 0.00605^{+0.00062}_{-0.00075} \\ 0.00933^{+0.0013}_{-0.0015} \end{array}$	9507
$t_{ m MMD}$	$\begin{array}{c} -0.0011\\ 0.00188^{+0.00049}_{-0.00059}\\ 0.00212^{+0.0005}_{-0.00059}\\ 0.00408^{+0.00088}_{-0.001} \end{array}$	$0.0052^{+0.00075}_{-0.00082}$	9701	$0.00365^{+0.001}_{-0.0011}$	$0.00462^{+0.00093}_{-0.00092}$	9688
$t_{ m LLR}$	0.0^{+0}_{-0}	0.0^{+0}_{-0}	17315	0.0^{+0}_{-0}	0.0_{-0}^{+1e-05}	16259
$pow\deformation$				$\mathcal{N} ext{-} ext{deformation}$		
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)
$t_{ m SW}$	$0.00536^{+5}_{-0.0016}$	$0.00698^{+5}_{-0.0013}$	717	$0.20881^{+0.023}_{-0.035}$	$0.2389^{+0.017}_{-0.023}$	634
$t_{\overline{ ext{KS}}}$	$\mid 0.00026^{+0.00011}_{-0.00011}$	$0.00039^{+0.00013}_{-0.00011}$	1096	$0.0089^{+0.0037}_{-0.0043}$	$0.01341^{+0.0034}_{-0.0038}$	969
$t_{ m SKS}$	$0.0047^{+0.00077}_{-0.0011}$	$0.00595^{+0.00061}_{-0.0007}$	1128	$0.18004^{+0.021}_{-0.031}$	$0.20733^{+0.018}_{-0.023}$	942
$t_{ m FGD}$	$0.00731^{+0.0016}_{-0.002}$	$0.00937^{+0.0014}_{-0.0015}$	9183	$0.18738^{+0.021}_{-0.029}$	$0.21173^{+0.016}_{-0.017}$	7138
$t_{ m MMD}$	$0.00367^{+0.00095}_{-0.001}$	$0.00469_{-0.00084}^{+0.00086}$ 0.0_{-0}^{+1e-05}	9701	$0.80488^{+0.074}_{-0.11}$	$0.90321_{-0.068}^{+0.055}$	6223
$t_{ m LLR}$	0.0^{+0}_{-0}	0.0^{+1e-05}_{-0}	15658	-	-	
$\mathcal{U} ext{-} ext{deformation}$				Timing		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathcal{U}}$	t (s)	t^{null} (s)		
$t_{ m SW}$	$\begin{array}{c} 0.36179^{+0.04}_{-0.06} \\ 0.01367^{+0.0059}_{-0.0069} \end{array}$	$0.41391^{+0.029}_{-0.04} \ 0.02063^{+0.0056}_{-0.0059}$	622	381		
$t_{\overline{ ext{KS}}}$	$0.01367^{+0.0059}_{-0.0069}$	$0.02063^{+0.0056}_{-0.0059}$	953	731		
$t_{ m SKS}$	$0.31042^{+0.037}_{-0.056}$	$0.35749^{+0.03}_{-0.038}$ $0.36745^{+0.025}_{-0.033}$	929	903		
$t_{ m FGD}$	$\begin{array}{c} 0.31042^{+0.0069}_{-0.056} \\ 0.31042^{+0.037}_{-0.056} \\ 0.32329^{+0.035}_{-0.048} \end{array}$		6909	13787		
$t_{ m MMD}$	$1.39527^{+0.12}_{-0.19}$	$1.56573_{-0.12}^{+0.096}$	6920	14553		
$t_{ m LLR}$	-	-	_	_		