	MoG n	nodel with d = 10	00, q =	10, and $n = m =$	$10^{5}$	
	$\mu$ -deformation			$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.02814^{+0.0099}_{-0.012}$	$0.03797^{+0.009}_{-0.01}$	950	$0.00918^{+0.0025}_{-0.0035}$	$0.01247^{+0.0022}_{-0.0026}$	1022
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} \textbf{0.00201}_{-0.012}^{+0.0027} \\ \textbf{0.00222}_{-0.00084}^{+0.0067} \\ 0.02341_{-0.0087}^{+0.0067} \end{array}$	$\begin{array}{c} -0.00073 \\ 0.00307 - 0.00077 \\ 0.03148 - 0.0069 \\ 0.05066 + 0.011 \\ -0.012 \\ \end{array}$	1541	$\begin{array}{c} \textbf{0.0035} -0.0035 \\ \textbf{0.00051} + 0.0002 \\ -0.0002 \\ 0.00812 + 0.0014 \\ 0.01263 + 0.0031 \\ 0.00722 + 0.0022 \\ 0.0024 \\ 0.018 + 0.0022 \\ 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.0024 \\ 0.00722 + 0.00$	$\begin{array}{c} \textbf{0.0023} & -0.0026 \\ \textbf{0.00073} & -0.0002 \\ -0.0002 \\ 0.01068 & -0.0016 \\ 0.01631 & -0.0024 \\ 0.00915 & -0.002 \\ 0.00915 & -0.002 \\ \end{array}$	1689
$t_{ m SKS}$	$0.02341^{+0.0067}_{-0.0087}$	$0.03148^{+0.0061}_{-0.0069}$	1475	$0.00812^{+0.0016}_{-0.0024}$	$0.01068^{+0.0013}_{-0.0016}$	1557
$t_{ m FGD}$	0 02070±0.013	$0.05066^{+0.011}_{-0.012}$	20712	$0.01263^{+0.0031}_{-0.0038}$	$0.01631^{+0.0024}_{-0.0029}$	18446
$t_{ m MMD}$	$0.03601_{-0.01}^{+0.0001}$	$0.04577^{+0.0003}_{-0.0076}$	10677	$0.00722^{+0.0022}_{-0.0024}$	$0.00915^{+0.0019}_{-0.002}$	11691
$t_{ m LLR}$	$2e - 05^{+2e-05}_{-1e-05}$	$4e - 05^{+1}_{-2e-05}^{+0.0076}$	24750	$0.0_{-0}^{+1e-05}$	$1e - 05^{+0}_{-1e-05}$	34527
$\Sigma_{i \neq j}$ -deformation				$pow_+$ -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.01697^{+0.0046}_{-0.0064}$	$0.02315^{+0.0036}_{-0.0045}$	3531	$0.00368^{+0.001}_{-0.0014}$	$0.00498^{+0.00086}_{-0.001}$	1026
$t_{\overline{ ext{KS}}}$	$1.00061^{+0.00012}_{-0.00012}$	$1.00073^{+0.0045}_{-0.00012}$	9908	$0.00018^{+8e-05}_{-7e-05}$	$0.00027^{+7\mathrm{e}-05}_{-8\mathrm{e}-05}$	1743
$t_{ m SKS}$	$0.01855^{+0.0049}_{-0.0066}$	$0.02508^{+0.0043}_{-0.0052}$	4171	$0.00331^{+0.0006}_{-0.00092}$	$0.0043^{+0.00047}_{-0.00058}$	1594
$t_{ m FGD}$	$\begin{array}{c} 0.01855^{+0.0049}_{-0.0066} \\ 0.00299^{+0.00073}_{-0.00088} \end{array}$	$0.00389^{+0.0006}_{-0.00068}$	25716	$0.00505^{+0.0012}_{-0.0016}$	$0.00652^{+0.00098}_{-0.0012}$	19149
$t_{ m MMD}$	$0.01259^{+0.0035}_{-0.0039}$	$0.00389^{+0.0006}_{-0.00068}$ $0.01586^{+0.0032}_{-0.0032}$	14405	$0.00263^{+0.00077}_{-0.00088}$	$0.0033^{+0.0007}_{-0.00071}$	12093
$t_{ m LLR}$	-	-	-	$0.0^{+0}_{-0}$	$0.0_{-0}^{+0}$	30414
$pow\deformation$				$\mathcal{N} ext{-} ext{deformation}$		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	0.00374 <sup>+5</sup> <sub>-0.0014</sub>	$0.00505^{+5}_{-0.0011}$	935	$0.17253^{+0.022}_{-0.036}$	$0.20139^{+0.016}_{-0.021}$	838
$t_{\overline{ ext{KS}}}$	$0.00018^{+80-05}$	$0.00027^{+8e-05}$	1753	$0.00606^{+0.0029}_{-0.0031}$	$0.00921^{+0.0027}_{-0.0003}$	1589
$t_{ m SKS}$	$0.00331_{-0.00098}^{+0.0004}$	$0.0043^{+0.00051}_{-0.00063}$	1605	$0.14876^{+0.02}_{-0.021}$	$0.17443^{+0.016}_{-0.021}$	1363
$t_{ m FGD}$	$0.00504_{-0.0016}^{+0.0012}$	$0.00655^{+0.001}_{-0.0012}$	19105	$0.15458^{+0.018}_{-0.027}$	$0.17576^{+0.014}_{-0.016}$	15222
$t_{ m MMD}$	$ \begin{array}{c} 0.00504^{+0.0012}_{-0.0016} \\ 0.00257^{+0.00071}_{-0.0008} \end{array} $	$0.00329^{+0.00064}_{-0.00066}$	12099	$0.67808^{+0.07}_{-0.11}$	$0.7615^{+0.053}_{-0.069}$	8142
$t_{ m LLR}$	$0.0^{+0}_{-0}$	$0.0_{-0}^{+0}$	39144	-	-	-
$\mathcal{U} ext{-} ext{deformation}$					Timing	
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$t^{\text{null}}$ (s)		
$t_{ m SW}$	$\begin{array}{c} 0.2996^{+0.036}_{-0.063} \\ \textbf{0.00925}^{+0.0047}_{-0.005} \\ 0.25702^{+0.037}_{-0.054} \\ 0.26668^{+0.031}_{-0.044} \\ \end{array}$	$0.34972^{+0.028}_{-0.038}$	665	476		
$t_{\overline{ ext{KS}}}$	$0.00925^{+0.0047}_{-0.005}$	$0.01423^{+0.0043}_{-0.0048}$	1590	1594		
$t_{ m SKS}$	$0.25702^{+0.037}_{-0.054}$	$0.30137^{+0.028}_{-0.036}$	1316	1753		
$t_{ m FGD}$	$0.26668^{+0.031}_{-0.044}$	$\begin{array}{c} -0.0048 \\ 0.30137^{+0.028}_{-0.036} \\ 0.3051^{+0.022}_{-0.03} \end{array}$	12103	39629		
$t_{ m MMD}$	$1.17598_{-0.19}^{+0.12}$	$1.32064_{-0.12}^{+0.093}$	9105	18930		
$t_{ m LLR}$	-	-	-	-		