	MoG	\mathbf{a} model with $\mathbf{d} = \mathbf{c}$	$\mathbf{5, q} =$	3, and $n = m = 1$	0^4	
	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)
$t_{ m SW}$	$ \begin{array}{c c} 0.09192^{+0.035}_{-0.035} \\ \textbf{0.00496}^{+0.0017}_{-0.0017} \\ 0.05494^{+0.019}_{-0.019} \end{array} $	$\begin{array}{c} 0.12363^{+0.035}_{-0.032} \\ \textbf{0.00664}^{+0.0015}_{-0.0017} \\ 0.07242^{+0.018}_{-0.018} \\ 0.14117^{+0.056}_{-0.042} \\ 0.08544^{+0.033}_{-0.025} \\ 0.0011^{+0.00047}_{-0.00047} \end{array}$	1353	$0.03015^{+0.0085}_{-0.0099}$	$0.04164^{+0.0081}_{-0.0086}$	1531
$t_{\overline{ ext{KS}}}$	$0.00496^{+0.0017}_{-0.0017}$	$0.00664_{-0.0017}^{+0.0015}$	1539	$\begin{array}{c} \textbf{0.00274} \begin{array}{c} -0.00963 \\ \textbf{0.00274} \begin{array}{c} +0.00063 \\ -0.00069 \end{array} \\ 0.01644 \begin{array}{c} +0.0038 \\ -0.0045 \end{array} \\ 0.0327 \begin{array}{c} +0.0089 \\ -0.01 \end{array} \end{array}$	$0.00353^{+0.00059}_{-0.00064}$	1626
$t_{ m SKS}$	$0.05494^{+0.019}_{-0.019}$	$0.07242^{+0.018}_{-0.018}$	1748	$0.01644^{+0.0038}_{-0.0045}$	$0.02223^{+0.0033}_{-0.0038}$	1888
$t_{ m FGD}$	L O 100F (±U.U0	$0.14117^{+0.056}_{-0.042}$	1278	$0.0327^{+0.0089}_{-0.01}$	$0.0444^{+0.0077}_{-0.0077}$	1270
$t_{ m MMD}$	$0.06434_{-0.025}^{+0.035}$	$0.08544^{+0.03\overline{3}}_{-0.025}$	1344	$0.01392^{+0.0034}_{-0.0046}$	$0.0188^{+0.005}_{-0.0044}$	1497
$t_{ m LLR}$	$ \begin{array}{c} 0.10354_{-0.044}^{+0.034} \\ 0.06434_{-0.025}^{+0.00047} \\ 0.00078_{-0.00047}^{+0.00047} \end{array} $	$0.0011^{+0.00047}_{-0.00047}$	2810	$0.00027^{+0.00016}_{-0.00016}$	$\begin{array}{c} 0.04104_{-0.0086} \\ 0.00353_{-0.00064}^{+0.00059} \\ 0.02223_{-0.0038}^{+0.0038} \\ 0.0444_{-0.0077}^{+0.0077} \\ 0.0188_{-0.0044}^{+0.005} \\ 0.00037_{-0.00016}^{+0.00017} \end{array}$	3000
$\Sigma_{i \neq j}$ -deformation				pow - deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%{ m CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{+}}$	t (s)
$t_{ m SW}$	$0.02827^{+0.006}_{-0.0083}$	$0.03864^{+0.0056}_{-0.0063}$	1766	$0.01845^{+0.0052}_{-0.0061}$	$0.0255^{+0.0047}_{-0.0053}$	1259
$t_{\overline{ ext{KS}}}$	$1.00317^{+0}_{-0.0013}$	$1.00354^{+0.00012}_{-0.00043}$	1651	$0.00345^{+0.00099}_{-0.0011}$	$0.00444^{+0.00096}_{-0.00097}$	1612
$t_{ m SKS}$	$0.02595^{+0.0071}_{-0.0081}$	$0.0347^{+0.0062}_{-0.0073}$	1941	$0.0106^{+0.0024}_{-0.0027}$	$0.01405^{+0.0021}_{-0.0023}$	1807
$t_{ m FGD}$	$0.01229^{+0.0032}_{-0.0034}$	$0.01728^{+0.0027}_{-0.0028}$	2040	$\begin{array}{c} 0.0106^{+0.0024}_{-0.0027} \\ 0.01964^{+0.0054}_{-0.006} \end{array}$	$0.02668^{+0.0046}_{-0.0048}$	1294
$t_{ m MMD}$	± 0.0085	$0.03162^{+0.0081}_{-0.0076}$	2024	$0.00788^{+0.0032}_{-0.0027}$	$0.01064^{+0.003}_{-0.0024}$	1518
$t_{ m LLR}$	$\begin{array}{c c} 0.02322_{-0.008} \\ 0.04301_{-0.02}^{+0.016} \end{array}$	$0.0542^{+0.015}_{-0.015}$	4164	$0.00041^{+0.00025}_{-0.00025}$	$0.00057^{+0.00025}_{-0.00025}$	3017
$pow\deformation$				$\mathcal{N} ext{-deformation}$		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{-}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathcal{N}}$	t (s)
$t_{ m SW}$	$0.01989^{+0.0056}_{-0.0064}$	$0.0273^{+0.0052}_{-0.0055}$	$\boldsymbol{1221}$	$0.25306^{+0.031}_{-0.043}$	$0.29897^{+0.026}_{-0.029}$	1050
$t_{\overline{ ext{KS}}}$	$0.00317^{+0.0009}_{-0.00089}$	$0.00416^{+0.0009}_{-0.00083}$	1634	$\left[\begin{array}{c} 0.00921^{+0.0016}_{-0.0017} \end{array}\right]$	$0.01112^{+0.0016}_{-0.0016}$	1496
$t_{ m SKS}$	$0.01066^{+0.0023}_{-0.0027}$	$0.01407^{+0.0021}_{-0.0022}$	1804	$0.18137^{+0.025}_{-0.036}$	$0.21312^{+0.023}_{-0.025}$	1551
$t_{ m FGD}$	$0.02088^{+0.0059}_{-0.0061}$	$0.02847^{+0.005}_{-0.005}$	1300	L o ooo=o±0.029	$0.34516^{+0.022}_{-0.026}$	1080
$t_{ m MMD}$	$0.00858^{+0.0037}_{-0.0032}$	$0.01169^{+0.0034}_{-0.003}$	1550	$ \begin{array}{c c} 0.29378^{+0.025}_{-0.045} \\ 0.37502^{+0.046}_{-0.064} \end{array} $	$0.43162_{-0.039}^{-0.020}$	1240
$t_{ m LLR}$	$\begin{array}{c} -0.0037 \\ 0.00858 -0.0032 \\ 0.00036 +0.00025 \\ -0.00025 \end{array}$	$0.01169^{+0.0034}_{-0.003} \ 0.00053^{+0.00025}_{-0.00025}$	3139	-	-	-
$\mathcal{U} ext{-} ext{deformation}$			Timing			
Statistic	$\epsilon_{95\%{ m CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathcal{U}}$	t (s)	t^{null} (s)		
$t_{ m FGD}$	$0.50798^{+0.053}_{-0.076}$	$0.59684_{-0.049}^{+0.038}$	1030	368		
$t_{ m LLR}$	-	-	-	-		
$t_{ m MMD}$	$0.64544^{+0.087}_{-0.099}$	$0.7501^{+0.064}_{-0.067}$	1231	215		
$t_{ m SKS}$	$0.30846^{+0.044}_{-0.057}$	$0.36537^{+0.036}_{-0.045}$ $0.51675^{+0.039}$	1513	352		
$t_{ m SW}$	$0.4365^{+0.054}_{-0.078}$	$0.01010_{-0.053}$	988	261		
$t_{\overline{ ext{KS}}}$	$0.01504^{+0.0026}_{-0.0027}$	$0.01804_{-0.0026}^{+0.0022}$	1510	37		