	MoC	$\mathbf{G}$ model with $\mathbf{d} =$	5, q =	3, and $n = m = 1$	$0^5$	
	$\mu$ -deformation			$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.02927^{+0.01}_{-0.0098}$	$0.04035^{+0.01}_{-0.0095}$	1681	$0.00935^{+0.0028}_{-0.0032}$	$\begin{array}{c} 0.01322^{+0.0026}_{-0.0027} \\ \textbf{0.0011}^{+0.00023}_{-0.00023} \\ 0.00694^{+0.0011}_{-0.0012} \\ 0.01442^{+0.0029}_{-0.003} \end{array}$	1787
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} \textbf{0.0252} - 0.0098 \\ \textbf{0.00146} + 0.00055 \\ -0.00057 \\ 0.01762 + 0.0061 \\ -0.0062 \end{array}$	$\begin{array}{c} -0.00354 \\ \textbf{0.00202} & -0.00054 \\ -0.0055 \\ 0.0237 & -0.0059 \\ 0.04753 & -0.013 \\ \end{array}$	1351	$\begin{array}{c} \textbf{0.0032} \\ \textbf{0.00084} \\ \textbf{-0.00023} \\ 0.00504 \\ \textbf{-0.0012} \\ \textbf{-0.0016} \\ \end{array}$	$0.0011^{+0.00023}_{-0.00023}$	1394
$t_{ m SKS}$	$0.01762^{+0.0061}_{-0.0062}$	$0.0237^{+0.0059}_{-0.0059}$	1523	$0.00504^{+0.0012}_{-0.0016}$	$0.00694^{+0.0011}_{-0.0012}$	1591
$t_{ m FGD}$	$0.03532^{+0.019}_{-0.014}$	$0.04753^{+0.017}_{-0.013}$	2364	$ \begin{array}{c} 0.00504 \begin{array}{c} -0.0016 \\ 0.01036 \begin{array}{c} +0.0034 \\ -0.0037 \\ 0.00456 \begin{array}{c} +0.0037 \\ -0.0015 \end{array} \end{array} $	$0.01442^{+0.0029}_{-0.003}$	2518
$t_{ m MMD}$	$0.01904^{+0.011}_{-0.0077}$	$0.02548^{+0.01}_{-0.0076}$	10489	$0.00456^{+0.0019}_{-0.0015}$	$0.00605^{+0.0017}_{-0.0014}$	11046
$t_{ m LLR}$	$\begin{array}{c} 0.01762^{+0.0061}_{-0.0062} \\ 0.03532^{+0.019}_{-0.014} \\ 0.01904^{+0.011}_{-0.0077} \\ 0.00024^{+0.00014}_{-0.00013} \end{array}$	$0.00033^{+0.00014}_{-0.00013}$	3539	$8e - 05^{+6e - 05}_{-5e - 05}$	$0.00011^{+6e-05}_{-5e-05}$	3795
$\Sigma_{i \neq j}$ -deformation				$pow_+$ -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.0087^{+0.0021}_{-0.0028}$	$0.01221_{-0.0021}^{+0.0017}$	1987	$0.00584^{+0.0017}_{-0.002}$	$0.00823^{+0.0016}_{-0.0016}$	1647
$t_{\overline{ ext{KS}}}$	$1.00067^{+0.00037}_{-6e-05}$	$1.00122^{+0.00018}_{-0.00046}$	$\boldsymbol{1922}$	$0.00103^{+0.00032}_{-0.00034}$	$0.00138^{+0.00031}_{-0.00031}$	1377
$t_{ m SKS}$	$0.00791^{+0.0024}_{-0.0028}$	$0.01082^{+0.0022}_{-0.0024}$	2177	$0.00329^{+0.00072}_{-0.0001}$	$0.00446^{+0.00063}_{-0.0007}$ $0.00883^{+0.0018}_{-0.0019}$	1992
$t_{ m FGD}$	$0.00381^{+0.00094}_{-0.0012}$	$0.0052^{+0.0024}_{-0.00079}$ $0.0057^{+0.0026}_{-0.0026}$ $0.00978^{+0.0026}_{-0.0023}$	3238	$0.00639^{+0.0021}_{-0.0024}$	$0.00883^{+0.0018}_{-0.0019}$	2503
$t_{ m MMD}$	$0.00739^{+0.0029}_{-0.0026}$	$0.00978^{+0.0026}_{-0.0023}$	11758	$\begin{array}{c} -0.00091 \\ 0.00639^{+0.0021}_{-0.0024} \\ 0.00264^{+0.0011}_{-0.00089} \end{array}$	$0.00349^{+0.001}_{-0.00085}$	14540
$t_{ m LLR}$	$\begin{array}{c} 0.00739^{+0.0029}_{-0.0026} \\ 0.02058^{+0.0067}_{-0.011} \end{array}$	$0.00978_{-0.0023} \\ 0.02522_{-0.007}^{+0.007}$	4691	$0.00012_{-9e-05}^{+8e-05}$	$0.00017^{+8e-05}_{-9e-05}$	4452
$pow\deformation$				$\mathcal{N} ext{-deformation}$		
Statistic	$\epsilon_{95\%{ m CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.00606^{+0.0017}_{-0.0021}$	$0.00856^{+0.0015}_{-0.0017}$	1649	$0.13773^{+0.017}_{-0.026}$	$0.16305^{+0.012}_{-0.016}$	1344
$t_{\overline{ ext{KS}}}$	$0.00098^{+0.00037}_{-0.00037}$	$0.00133^{+0.00035}_{-0.00036}$	1366	$0.00454^{+0.00072}_{-0.00082}$	$0.00539^{+0.00062}_{-0.00069}$	1281
$t_{ m SKS}$	$0.00098^{+0.00037}_{-0.00037}\\0.00333^{+0.00084}_{-0.001}$	$0.00446^{+0.00075}_{-0.00082}$	2034	$0.09534_{-0.02}^{+0.013}$	$0.11293^{+0.011}_{-0.014}$	1707
$t_{ m FGD}$	$0.00659_{-0.0024}^{+0.002}$	$0.00905^{+0.0017}_{-0.0017}$	2508	$0.16354^{+0.02}_{-0.031}$	$0.19223^{+0.014}_{-0.018}$	2022
$t_{ m MMD}$	$\begin{array}{c} 0.00659^{+0.002}_{-0.0024} \\ 0.00267^{+0.0013}_{-0.0011} \end{array}$	$0.00357^{+0.0012}_{-0.001}$	11378	$0.21459_{-0.032}^{+0.027}$	$0.24752_{-0.025}^{+0.021}$	8643
$t_{ m LLR}$	$0.00013^{+9e-05}_{-9e-05}$	$0.00357_{-0.001}^{+0.0012} \\ 0.00018_{-8e-05}^{+9e-05}$	4419	-	-	-
$\mathcal{U} ext{-} ext{deformation}$					Timing	
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$t^{\text{null}}$ (s)		
$t_{ m SW}$	$0.23671^{+0.03}_{-0.043}$	$0.28278^{+0.023}_{-0.028}$	1318	363		
$t_{\overline{ ext{KS}}}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$0.00915^{+0.001}_{-0.001}$	1236	77		
$t_{ m SKS}$	$0.16389^{+0.025}_{-0.034}$	$0.19413^{+0.019}_{-0.025}$	1681	672		
$t_{ m FGD}$	$\begin{array}{c} \textbf{0.00774} \begin{array}{c} -0.043 \\ \textbf{0.00774} \begin{array}{c} +0.0011 \\ -0.0014 \\ \end{array} \\ 0.16389 \begin{array}{c} +0.025 \\ -0.034 \\ 0.28233 \begin{array}{c} +0.035 \\ -0.054 \\ \end{array} \\ \end{array}$	$0.33186^{+0.024}_{-0.03}$	1941	2259		
$t_{ m MMD}$	$0.3715^{+0.045}_{-0.055}$	$\begin{array}{c} 0.19413^{+0.019}_{-0.025} \\ 0.19413^{+0.019}_{-0.025} \\ 0.33186^{+0.024}_{-0.03} \\ 0.42782^{+0.036}_{-0.043} \end{array}$	7912	16290		
$t_{ m LLR}$	_	-	-	-		