	MoC	\mathbf{G} model with $\mathbf{d} =$	5, q =	3, and $n = m = 1$	0^5	
	μ -deformation			Σ_{ii} -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.02927^{+0.01}_{-0.0098}$	$0.04035^{+0.01}_{-0.0095}$	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
$t_{\overline{ ext{KS}}}$	$0.00146^{+0.00055}_{-0.00057}$	$\begin{array}{c} -0.00354 \\ \textbf{0.00202} & -0.00054 \\ -0.0055 \\ 0.0237 & -0.0059 \\ 0.04753 & -0.013 \\ \end{array}$	1351	$\begin{array}{c} \textbf{0.0030} = 0.0032\\ \textbf{0.00084} + 0.00023\\ -0.00026\\ 0.00504 + 0.0012\\ -0.0016\\ \end{array}$	$0.0011^{+0.00023}_{-0.00023}$	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
$t_{ m LLR}$	$\begin{array}{c} \textbf{0.02321} - 0.0098 \\ \textbf{0.00146} - 0.00055 \\ \hline \textbf{0.01762} + 0.0065 \\ 0.01762 - 0.0062 \\ 0.03532 + 0.019 \\ 0.01904 + 0.011 \\ 0.00024 + 0.00014 \\ -0.00013 \\ \end{array}$	$0.00033^{+0.00014}_{-0.00013}$	3539	$8e - 05^{+6e - 05}_{-5e - 05}$	$0.00011^{+6e-05}_{-5e-05}$	3795
$\Sigma_{i \neq j}$ -deformation			pow_+ -deformation			
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.0184^{+0.0045}_{-0.006}$	$0.02579_{-0.0045}^{+0.0037}$	1548	$0.00584^{+0.0017}_{-0.002}$	$0.00823^{+0.0016}_{-0.0016}$	1647
$t_{\overline{ ext{KS}}}$	$1.00067^{+0.00037}_{-6e-05}$	$1.00122_{-0.00046}^{+0.00018}$	1612	$0.00103^{+0.00032}_{-0.00034}$	$0.00138^{+0.00031}_{-0.00031}$	1377
$t_{ m SKS}$	$0.01735^{+0.0055}_{-0.0064}$	$0.02357^{+0.0054}_{-0.0054} \ 0.01031^{+0.0017}_{-0.0017}$	1731	$0.00329^{+0.00072}$	$0.00446^{+0.00063}_{-0.0007}$ $0.00883^{+0.0018}_{-0.0019}$	1992
$t_{ m FGD}$	$0.00739^{+0.002}_{-0.0024}$	$0.01031^{+0.0017}_{-0.0017}$	2799	$0.00639^{+0.0021}_{-0.0024}$	$0.00883^{+0.0018}_{-0.0019}$	2503
$t_{ m MMD}$	$0.0159^{+0.0065}_{-0.0056}$	$0.02113^{+0.0057}_{-0.0051}$	11026	$0.00264^{+0.0011}_{-0.00089}$	$0.00349^{+0.001}_{-0.00085}$	14540
$t_{ m LLR}$	-	-	-	$\begin{array}{c} 0.00639^{+0.0021}_{-0.0024} \\ 0.00639^{+0.0024}_{-0.0024} \\ 0.00264^{+0.0011}_{-0.00089} \\ 0.00012^{+8e-05}_{-9e-05} \end{array}$	$0.00017^{+8e-05}_{-9e-05}$	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)
$t_{ m SW}$	$\begin{array}{c} 0.00606^{+0.0017}_{-0.0021} \\ \textbf{0.00098}^{+0.00037}_{-0.00037} \\ 0.00333^{+0.00084}_{-0.002} \end{array}$	$0.00856^{+0.0015}_{-0.0017}$	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	$0.00454^{+0.00072}_{-0.00082}$	$0.00539^{+0.00062}_{-0.00069}$	$\boldsymbol{1281}$
$t_{ m SKS}$	$0.00333^{+0.00084}_{-0.001}$	$0.00446^{+0.00075}_{-0.00082}$	2034	$0.09534_{-0.02}^{+0.013}$	$0.11293^{+0.011}_{-0.014}$	1707
$t_{ m FGD}$	$ \begin{array}{c} 0.00659^{+0.002}_{-0.0024} \\ 0.00267^{+0.0013}_{-0.0011} \end{array} $	$0.00905^{+0.0017}_{-0.0017}$	2508	$0.16354^{+0.02}_{-0.031}$	$0.19223^{+0.014}_{-0.018}$	2022
$t_{ m MMD}$	$0.00267^{+0.0013}_{-0.0011}$	$0.00357^{+0.0012}_{-0.001}$	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	$\epsilon_{95\%{ m CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	t^{null} (s)		
$t_{ m SW}$	$0.23671^{+0.03}_{-0.043}$	$0.28278^{+0.023}_{-0.028}$	1318	363		
$t_{\overline{ ext{KS}}}$	$\begin{array}{c} \textbf{0.00774} \!$	$0.00915^{+0.001}_{-0.001}$	1236	77		
$t_{ m SKS}$	$0.16389^{+0.025}_{-0.034}$	$0.19413^{+0.019}_{-0.025}$	1681	672		
$t_{ m FGD}$	$0.28233^{+0.035}_{-0.054}$	$0.33186^{+0.024}_{-0.03}$	1941	2259		
$t_{ m MMD}$	$0.3715^{+0.045}_{-0.055}$	$\begin{array}{c} 0.19413^{+0.019}_{-0.025} \\ 0.39413^{+0.019}_{-0.025} \\ 0.33186^{+0.024}_{-0.03} \\ 0.42782^{+0.036}_{-0.043} \end{array}$	7912	16290		
$t_{ m LLR}$	-	-	-	-		