	C	G model with d	= 5 an	$nd n = m = 10^4$		
$\mu$ -deformation				$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m SW}$	$0.09616^{+0.048}_{-0.044}$	$0.12994^{+0.048}_{-0.043}$	672	$0.03714^{+0.012}_{-0.013}$	$0.05073^{+0.012}_{-0.011}$	506
$t_{\overline{ ext{KS}}}$	$0.08231^{+0.038}_{-0.038}$	$0.10549^{+0.037}_{-0.026}$	512	$0.06456^{+0.026}_{-0.027} \\ 0.05119^{+0.017}_{-0.019}$	$0.08369_{-0.025}^{+0.025} \\ 0.06884_{-0.017}^{+0.017}$	587
$t_{ m SKS}$	$0.09964^{+0.046}_{-0.043}$	$0.1332^{+0.045}_{-0.043}$	926	$0.05119^{+0.017}_{-0.019}$	$0.06884^{+0.017}_{-0.017}$	1027
$t_{ m FGD}$	$ \begin{array}{c c} -0.038 \\ 0.09964^{+0.046}_{-0.043} \\ 0.09501^{+0.057}_{-0.043} \end{array} $	$0.12754^{+0.053}_{-0.04}$	523	$\mid 0.03069^{+0.013}_{-0.011} \mid$	$0.04128^{+0.012}_{-0.01}$	526
$t_{ m MMD}$	$0.11968^{+0.074}_{-0.05}$	$0.17104_{-0.051}^{+0.069}$	544	$0.03462^{+0.021}_{-0.015}$	$0.0492^{+0.02}_{-0.014}$	608
$t_{ m LLR}$	$0.02932^{+0.02}_{-0.02}$	$0.04099^{+0.02}_{-0.02}$	1069	$0.00622^{+0.0039}_{-0.0038}$	$0.00873_{-0.0039}^{+0.004}$	1402
$\Sigma_{i\neq j}$ -deformation				pow <sub>+</sub> -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathrm{pow}_{+}}$	t (s)
$t_{ m SW}$	$0.0358^{+0.0098}_{-0.012}$	$0.05261^{+0.0091}_{-0.0097}$	503	$0.00934^{+0.0041}_{-0.004}$	$0.01282^{+0.0041}_{-0.0038}$	538
$t_{\overline{ ext{KS}}}$	1 000F0±0.0075	$1.03774^{+0.015}$	403	$0.01297^{+0.0051}_{-0.0053}$	$0.01644^{+0.0049}_{-0.0049}$	587
$t_{ m SKS}$	$ \begin{array}{c} 1.03259^{+}_{-0.013} \\ 0.03395^{+0.012}_{-0.013} \\ 0.01157^{+0.0026}_{-0.0031} \end{array} $	$0.04962^{+0.012}_{-0.012}$	1030	$0.01054^{+0.0041}_{-0.0041}$	$0.01378^{+0.004}_{-0.0038}$	1031
$t_{ m FGD}$	$0.01157^{+0.0026}_{-0.0031}$	$0.01585^{+0.0022}_{-0.0024}$	540	$0.00829^{+0.0042}_{-0.0033}$	$0.01111_{-0.0031}^{+0.004}$	550
$t_{ m MMD}$	$\begin{array}{c c} -0.0031 \\ 0.0612^{+0.034}_{-0.026} \end{array}$	$0.0899^{+0.032}_{-0.025}$	599	-0.000	$0.00925^{+0.0038}_{-0.0038}$	650
$t_{ m LLR}$	$ \begin{array}{c c} 0.0612^{+0.034}_{-0.026} \\ 0.00074^{+0.00043}_{-0.00041} \end{array} $	$0.0899^{+0.032}_{-0.025} \\ 0.00102^{+0.00044}_{-0.00043}$	1426	$\begin{array}{c} \textbf{0.00651}_{-0.0028}^{+0.0015} \\ 0.00249_{-0.0015}^{+0.0015} \end{array}$	$0.00341_{-0.0015}^{+0.0028}$	1249
$pow\deformation$				$\mathcal{N}$ -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)
$t_{ m SW}$	$0.01009^{+10}_{-0.0039}$	$0.01378^{+10}_{-0.0038}$	490	$0.38044^{+0.058}_{-0.072}$	$0.45299^{+0.053}_{-0.053}$	460
$t_{\overline{ ext{KS}}}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$0.01681^{+0.0047}_{-0.0047}$	660	$0.31644^{+0.066}_{-0.079}$	$0.37026^{+0.051}_{-0.069}$	587
$t_{ m SKS}$	$0.01086^{+0.0041}_{-0.0038}$	$0.01421_{-0.0037}^{-0.0047}$	1042	$0.37535^{+0.063}_{-0.076}$	$0.44166^{+0.055}_{-0.057}$	882
$t_{ m FGD}$	$0.00888^{+0.0044}_{-0.0037}$	$0.01176^{+0.0041}_{-0.0033}$	554	$0.28641^{+0.029}$	$0.32984\substack{+0.024 \ -0.023}$	447
$t_{ m MMD}$	$0.00689^{+0.0044}_{-0.0031}$	$0.01004^{+0.0041}$	672	$0.79385^{+0.17}_{-0.17}$	$0.94639_{-0.12}^{+0.14}$	565
$t_{ m LLR}$	$\begin{array}{c c} \textbf{0.00689} & +0.0044 \\ -0.0031 \\ 0.00214 & +0.0015 \\ -0.0015 \end{array}$	$0.00306^{+0.0015}_{-0.0015}$	1286	-	-	-
$\mathcal{U} ext{-} ext{deformation}$				Timing		
Statistic	$\mid \epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}^{\mathcal{U}}$	t (s)	$t^{\text{null}}$ (s)		
$t_{ m SW}$	$0.65743^{+0.1}_{-0.13}$	$0.78411^{+0.081}_{-0.094}$	446	253		
$t_{\overline{ ext{KS}}}$	$0.54743^{+0.1}_{-0.13}$	$0.62772^{+0.085}_{-0.11}$	544	29		
$t_{ m SKS}$	$0.65034^{+0.1}_{-0.13}$	$0.76279^{+0.093}_{-0.1}$	859	341		
$t_{ m FGD}$	$0.4938^{+0.051}_{-0.067}$	$0.57599^{+0.033}_{-0.044}$	$\boldsymbol{422}$	323		
$t_{ m MMD}$	$1.36812^{+0.31}_{-0.28}$	$1.63622^{+0.25}_{-0.2}$	648	207		
$t_{ m LLR}$	-	-	-	-		