| | MoG | \mathbf{model} with $\mathbf{d} =$ | 20, q = | 5, and $n = m = 1$ | 10^5 | |
|---------------------------------------|--|--|---------------------------------|--|---|-------|
| | 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) |
| $t_{ m SW}$ | $0.03313^{+0.013}_{-0.014}$ | $0.04474^{+0.012}_{-0.013}$ | 2949 | $0.01198^{+0.0033}_{-0.0043}$ | $0.01611^{+0.0031}_{-0.0034}$ | 3129 |
| $t_{\overline{	ext{KS}}}$ | $\begin{array}{c} 0.00313_{-0.014}^{+0.00093} \\ 0.00336_{-0.0012}^{+0.00092} \\ 0.02413_{-0.0095}^{+0.018} \\ 0.03818_{-0.016}^{+0.018} \end{array}$ | $\begin{array}{c} \textbf{0.0111} & \textbf{-0.013} \\ \textbf{0.00457} & \textbf{-0.00082} \\ \textbf{0.03295} & \textbf{-0.0081} \\ \textbf{0.05241} & \textbf{-0.014} \\ \end{array}$ | 3047 | $\begin{array}{c} \textbf{0.00123} = 0.0043 \\ \textbf{0.00123} = 0.00035 \\ 0.0094 = 0.0029 \\ 0.01349 = 0.0047 \\ 0.00667 = 0.0047 \\ 0.00667 = 0.0027 \\ \textbf{0.0027} \end{array}$ | $0.00169^{+0.00029}_{-0.00036}$ | 3163 |
| $t_{ m SKS}$ | $0.02413^{+0.0082}_{-0.0095}$ | $0.03295^{+0.0076}_{-0.0081}$ | 3089 | $0.0094^{+0.002}_{-0.0029}$ | $0.01256^{+0.0017}_{-0.002}$ | 3211 |
| $t_{ m FGD}$ | $0.03818^{+0.018}_{-0.016}$ | $0.05241^{+0.017}_{-0.014}$ | 5730 | $0.01349^{+0.004}_{-0.0047}$ | $0.01827^{+0.0034}_{-0.0035}$ | 5971 |
| $t_{ m MMD}$ | $0.03221^{+0.012}_{-0.011}$ | $0.04404^{+0.011}_{-0.000}$ | 11685 | $0.00667^{+0.0033}_{-0.0027}$ | $0.00928^{+0.0031}_{-0.0025}$ | 12637 |
| $t_{ m LLR}$ | $ \begin{array}{c} 0.03818_{-0.016}^{+0.016} \\ 0.03221_{-0.011}^{+0.012} \\ 0.00014_{-9e-05}^{+0.0001} \end{array} $ | $0.00021_{-9e-05}^{-0.0098}$ | 9362 | $5e - 05^{+4e - 05}_{-3e - 05}$ | $\begin{array}{c} \textbf{0.01611} - 0.0034 \\ \textbf{0.00169} + \textbf{0.000029} \\ -0.00036 \\ 0.01256 + 0.0017 \\ 0.01827 + 0.0034 \\ 0.00928 + 0.0031 \\ 0.00928 + 0.0025 \\ 7e - 05 + 4e - 05 \\ -3e - 05 \end{array}$ | 7986 |
| $\Sigma_{i \neq j}$ -deformation | | | pow_+ -deformation | | | |
| Statistic | $\epsilon_{95\%\mathrm{CL}}$ | $\epsilon_{99\%\mathrm{CL}}$ | t (s) | $\epsilon_{95\%\mathrm{CL}}$ | $\epsilon_{99\%\mathrm{CL}}$ | t (s) |
| $t_{ m SW}$ | $0.01488^{+0.0037}_{-0.0054}$ | $0.01998^{+0.0032}_{-0.0039}$ | 3497 | $0.00416^{+0.0012}_{-0.0015}$ | $0.00561^{+0.001}_{-0.0012}$ | 3284 |
| $t_{\overline{	ext{KS}}}$ | $1.00159_{-0.0012}^{+0.00012}$ | $1.00183^{+0.00024}_{-0.00055}$ | 3998 | $0.00029^{+9e-05}_{-0.00012}$ | $0.00041^{+9}_{-0.0001}^{-0.0012}$ | 3555 |
| $t_{ m SKS}$ | $0.0157^{+0.0051}_{-0.0064}$ | $0.02125^{+0.0048}_{-0.0052}$ | 3704 | $0.00306^{+0.00002}_{-0.00089}$ | $0.00405^{+0.00049}_{-0.006}$ | 3412 |
| $t_{ m FGD}$ | $0.0038^{+0.00091}_{-0.0012}$ | 0.00 $\pm 1 \pm 0.00081$ | 8033 | $0.00494^{+0.0013}$ | $0.00667^{+0.0011}_{-0.0011}$ | 5958 |
| $t_{ m MMD}$ | $0.01272_{-0.0044}^{-0.0012}$ | $0.0051_{-0.00081}$ $0.01711_{-0.004}^{+0.0048}$ | 13426 | 0.00011 ± 0.001 | $\begin{array}{c} -0.0001 \\ 0.00667^{+0.0011}_{-0.0011} \\ 0.00333^{+0.00094}_{-0.00082} \end{array}$ | 13310 |
| $t_{ m LLR}$ | - | - | - | $1e - 05^{+1e - 05}_{-1e - 05}$ | $2e - 05^{+0}_{-1e-05}$ | 8742 |
| $pow\deformation$ | | | $\mathcal{N}	ext{-deformation}$ | | | |
| Statistic | $\epsilon_{95\%\mathrm{CL}}$ | $\epsilon_{99\%\mathrm{CL}}$ | t (s) | $\epsilon_{95\%	ext{CL}}$ | $\epsilon_{99\%\mathrm{CL}}$ | t (s) |
| $t_{ m SW}$ | $0.00419^{+0.0012}_{-0.0015}$ | $0.00567^{+0.0011}_{-0.0012}$ | 3291 | $0.16001^{+0.02}_{-0.031}$ | $0.18547^{+0.016}_{-0.019}$ | 2607 |
| $t_{\overline{	ext{KS}}}$ | $0.00029^{+0.0001}_{-0.0012}$ | $0.00041^{+0.0001}$ | 3549 | $0.00593^{+0.0015}_{-0.0018}$ | $0.00757^{+0.0014}_{-0.0015}$ | 3131 |
| $t_{ m SKS}$ | $0.00301^{+0.00067}_{-0.00097}$ | $0.00398^{+0.00056}_{-0.00065}$ | 3447 | $0.13104^{+0.019}_{-0.028}$ | $0.15417^{+0.015}_{-0.02}$ | 2786 |
| $t_{ m FGD}$ | $0.00488^{+0.0013}_{-0.0016}$ | $0.00669^{+0.0011}_{-0.0011}$ | 5693 | $0.15039^{+0.017}_{-0.027}$ | $0.17553^{+0.012}_{-0.015}$ | 4625 |
| $t_{ m MMD}$ | $0.00257^{+0.001}_{-0.0001}$ | $0.00349^{+0.00096}_{-0.00081}$ | 13333 | $0.37231^{+0.04}_{-0.061}$ | $0.43454_{-0.033}^{+0.013}$ | 9278 |
| $t_{ m LLR}$ | $1e - 05^{+1}_{-1}e^{-05}_{-05}$ | $2e - 05^{+0}_{-1e-05}$ | 8857 | - | - | - |
| $\mathcal{U}	ext{-}	ext{deformation}$ | | | | Timing | | |
| Statistic | $\epsilon_{95\%\mathrm{CL}}$ | $\epsilon_{99\%\mathrm{CL}}$ | t (s) | t^{null} (s) | | |
| $t_{ m FGD}$ | $0.26002^{+0.03}_{-0.046}$ | $0.30348^{+0.021}_{-0.026}$ | 4428 | 5139 | | |
| $t_{ m LLR}$ | _ | _ | - | - | | |
| $t_{ m MMD}$ | $0.64451^{+0.068}_{-0.094}$ | $0.75224_{-0.053}^{+0.053}$ | 9043 | 16625 | | |
| $t_{ m SKS}$ | $0.22648^{+0.032}_{-0.049}$ | $0.26646^{+0.026}_{-0.034}$ | 2674 | 721 | | |
| t_{SW} | $\begin{array}{c} 0.64451^{+0.068}_{-0.094} \\ 0.22648^{+0.032}_{-0.049} \\ 0.27854^{+0.033}_{-0.055} \\ \textbf{0.00979}^{+0.0023}_{-0.0028} \end{array}$ | $\begin{array}{c} 0.75224^{+0.053}_{-0.053} \\ 0.26646^{+0.026}_{-0.034} \\ 0.32293^{+0.025}_{-0.035} \\ \textbf{0.01236}^{+0.0019}_{-0.0023} \end{array}$ | 2497 | 384 | | |
| $t_{\overline{	ext{KS}}}$ | $\mid 0.00979^{+0.0023}_{-0.0028}$ | $0.01236^{+0.0019}_{-0.0023}$ | 2980 | 321 | | |