$n=m=10^4$						
	$\mu$ -deformation			$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{ m 95\%CL}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\mid \epsilon_{95\% ext{CL}} \mid$	$\epsilon_{99\% ext{CL}}$	t (s)
$t_{ m LLR}$	$6e - 05^{+4e-05}_{-4e-05}$	$9e - 05^{+4e - 05}_{-4e - 05}$	5633	$1e - 05^{+1e-05}_{-1e-05}$	$2e - 05^{+1e-05}_{-1e-05}$	6763
$\overline{\overline{D}}$ $\widetilde{D}$	$0.0052^{+0.0021}_{-0.0021}$	$0.00766^{+0.0022}_{-0.0023}$	1312	$0.00132^{+0.00073}_{-0.00062}$	$0.00216^{+0.00083}_{-0.00078}$	1446
$\widetilde{D}$	$0.05483_{-0.017}^{+0.014}$	$0.07079_{-0.014}^{+0.012}$	735	$0.01903^{+0.0038}_{-0.0051}$	$0.02404^{+0.0031}_{-0.0037}$	812
$\widetilde{W}$	$0.06686^{+0.019}_{-0.023}$	$0.08691^{+0.017}_{-0.019}$	696	$0.02176^{+0.0058}_{-0.0075}$	$0.02825^{+0.0052}_{-0.006}$	764
$d_{\mathrm{MMD}_u^2}$	$0.08171^{+0.015}_{-0.010}$	$0.10334_{-0.014}^{+0.013}$	1992	$0.01681^{+0.0034}_{-0.0038}$	$0.02112^{+0.0029}_{-0.0031}$	2245
$d_{\mathrm{FGD}_{\infty}}$	$0.0917_{-0.025}^{+0.019}$	$0.11605^{+0.021}_{-0.022}$	5211	$0.02962^{+0.0062}_{-0.0077}$	$0.03721^{+0.005}_{-0.0056}$	5271
	$\Sigma_{i \neq j}$ -deformation			$pow_+$ -deformation		
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\% ext{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m LLR}$	$0.0^{+0}_{-0}$	$0.0_{-0}^{+0}$	11000	$0.0^{+1e-05}_{-0}$	$1e - 05^{+0}_{-1e-05}$	5651
$\overline{D}$	$0.00048^{+0.00021}_{-0.00023}$	$0.00072^{+0.00021}_{-0.00022}$	1525	$0.00049^{+0.0003}_{-0.00024}$	$0.00084^{+0.00031}_{-0.00032}$	1621
$\widetilde{D}$	$0.0031^{+0.00092}_{-0.0011}$	$0.00406^{+0.00082}_{-0.00095}$	880	$0.0077^{+0.0013}_{-0.002}$	$0.00961^{+0.0011}_{-0.0013}$	822
$\widetilde{d}_{\mathrm{FGD}_{\infty}}$	$0.00349_{-0.00093}^{+0.00074}$	$0.00444^{+0.00062}_{-0.00072}$	5911	$0.01177^{+0.0023}_{-0.0029}$	$0.01473^{+0.002}_{-0.0023}$	4101
$\widetilde{W}$	$0.00445^{+0.001}_{-0.0014}$	$0.00576^{+0.00088}_{-0.001}$	824	$0.00863^{+0.0022}_{-0.0029}$	$0.01123^{+0.002}_{-0.0024}$	782
$d_{\mathrm{MMD}_u^2}$	$0.00637^{+0.0015}_{-0.0018}$	$0.00812^{+0.0013}_{-0.0014}$	2292	$0.00608^{+0.00\overline{12}}_{-0.0014}$	$0.00762^{+0.0011}_{-0.0011}$	2405
$pow\deformation$			$\mathcal{N} ext{-deformation}$			
Statistic	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$\epsilon_{95\% ext{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)
$t_{ m LLR}$	$0.0^{+1e-05}_{-0}$	$1e - 05^{+0}_{-1e-05}$	7344	NaN	NaN	NaN
$\overline{D}$	$0.0005^{+0.00031}_{-0.00025}$	$0.00085^{+0.00033}_{-0.00034}$	831	$0.01686^{+0.0067}_{-0.0081}$	$0.02454^{+0.0062}_{-0.0071}$	7.3e + 02
$d_{\mathrm{MMD}_{u}^{2}}$	$0.00568^{+0.0017}_{-0.0018}$	$0.00733^{+0.0015}_{-0.0015}$	2582	$1.01706^{+0.091}_{-0.13}$	$1.14737_{-0.077}^{+0.064}$	1.7e + 03
$\widetilde{\widetilde{D}}$	$0.00767^{+0.0014}_{-0.0021}$	$0.00962^{+0.0011}_{-0.0015}$	839	$0.23297^{+0.032}_{-0.049}$	$0.26623^{+0.028}_{-0.034}$	7e + 02
$\widetilde{W}$	$0.00879^{+5}_{-0.003}$	$0.01149^{+5}_{-0.0025}$	702	$0.27003^{+0.034}_{-0.053}$	$0.31096^{+0.026}_{-0.036}$	6.6e + 02
$d_{\mathrm{FGD}_{\infty}}$	$0.0118^{+0.0024}_{-0.003}$	$0.01489^{+0.002}_{-0.0023}$	4174	$0.23954_{-0.034}^{+0.023}$	$0.26901^{+0.019}_{-0.021}$	3.4e + 03
$\mathcal{U} ext{-} ext{deformation}$				Timing		
Statistic	$\epsilon_{95\%\mathrm{CL}}$	$\epsilon_{99\%\mathrm{CL}}$	t (s)	$t^{\text{null}}$ (s)		
$d_{\mathrm{FGD}_{\infty}}$	$0.41583^{+0.039}_{-0.059}$	$0.46699^{+0.033}_{-0.04}$	3e + 03	7869		
$\overline{D}$	$0.02575^{+0.01}_{-0.012}$	$0.03716^{+0.0098}_{-0.01}$	7.2e + 02	545		
$\begin{array}{c} d_{\mathrm{MMD}_{u}^{2}} \\ \widetilde{D} \\ \widetilde{W} \end{array}$	$1.75184_{-0.22}^{+0.17}$	$1.9784_{-0.15}^{+0.13}$	1.9e + 03	2411		
$\widetilde{D}$	$0.40136^{+0.059}_{-0.083}$	$0.46142^{+0.05}_{-0.057}$	6.9e + 02	618		
	$0.46758^{+0.057}_{-0.092}$	$0.53846^{+0.045}_{-0.062}$	6.3e + 02	313		
$t_{ m LLR}$	NaN	NaN	NaN	-		