

$\mathbf{n} = \mathbf{m} = 10^4$						
$\mu$ -deformation				$\Sigma_{ii}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)
$t_{LLR}$	$0.00014^{+0.0001}_{-9e-05}$	$0.00021^{+0.0001}_{-9e-05}$	9361	$5e-05^{+4e-05}_{-3e-05}$	$7e-05^{+4e-05}_{-3e-05}$	7986
$\overline{D}$	$0.00336^{+0.00093}_{-0.0012}$	$0.00457^{+0.0008}_{-0.00092}$	3046	$0.00123^{+0.00035}_{-0.00047}$	$0.00169^{+0.00029}_{-0.00036}$	3162
$\widetilde{D}$	$0.02413^{+0.0082}_{-0.0095}$	$0.03295^{+0.0076}_{-0.0081}$	3088	$0.0094^{+0.002}_{-0.0029}$	$0.01256^{+0.0017}_{-0.002}$	3210
$d_{MMD_u^2}$	$0.03221^{+0.012}_{-0.011}$	$0.04404^{+0.011}_{-0.0098}$	11684	$0.00667^{+0.0033}_{-0.0027}$	$0.00928^{+0.0031}_{-0.0025}$	12636
$\widetilde{W}$	$0.03313^{+0.013}_{-0.014}$	$0.04474^{+0.012}_{-0.013}$	2948	$0.01198^{+0.0033}_{-0.0043}$	$0.01611^{+0.0031}_{-0.0034}$	3129
$d_{FGD_\infty}$	$0.03818^{+0.018}_{-0.016}$	$0.05241^{+0.017}_{-0.014}$	5729	$0.01349^{+0.004}_{-0.0047}$	$0.01827^{+0.0034}_{-0.0035}$	5971
$\Sigma_{i \neq j}$ -deformation				pow <sub>+</sub> -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)
$t_{LLR}$	$0.0^{+0}_{-0}$	$0.0^{+0}_{-0}$	9173	$1e-05^{+1e-05}_{-1e-05}$	$2e-05^{+0}_{-1e-05}$	8740
$\overline{D}$	$0.00025^{+7e-05}_{-9e-05}$	$0.00033^{+6e-05}_{-8e-05}$	2174	$0.00029^{+9e-05}_{-0.00012}$	$0.00041^{+9e-05}_{-0.0001}$	3553
$\widetilde{D}$	$0.00166^{+0.00051}_{-0.00066}$	$0.00226^{+0.00049}_{-0.00053}$	2254	$0.00306^{+0.00062}_{-0.00089}$	$0.00405^{+0.00049}_{-0.0006}$	3411
$d_{FGD_\infty}$	$0.00182^{+0.00045}_{-0.00059}$	$0.00249^{+0.00036}_{-0.0004}$	5216	$0.00494^{+0.0013}_{-0.0016}$	$0.00667^{+0.0011}_{-0.0011}$	5957
$\widetilde{W}$	$0.00261^{+0.00064}_{-0.00086}$	$0.00348^{+0.00058}_{-0.00064}$	2052	$0.00416^{+0.0012}_{-0.0015}$	$0.00561^{+0.001}_{-0.0012}$	3283
$d_{MMD_u^2}$	$0.00382^{+0.0012}_{-0.0012}$	$0.00525^{+0.0011}_{-0.001}$	11683	$0.00241^{+0.001}_{-0.00091}$	$0.00333^{+0.00094}_{-0.00082}$	13308
pow <sub>-</sub> -deformation				$\mathcal{N}$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)
$t_{LLR}$	$1e-05^{+1e-05}_{-1e-05}$	$2e-05^{+0}_{-1e-05}$	8856	NaN	NaN	NaN
$\overline{D}$	$0.00029^{+0.0001}_{-0.00012}$	$0.00041^{+0.0001}_{-0.0001}$	3548	$0.00593^{+0.0015}_{-0.0018}$	$0.00757^{+0.0014}_{-0.0015}$	3.1e+03
$d_{MMD_u^2}$	$0.00257^{+0.001}_{-0.00091}$	$0.00349^{+0.00096}_{-0.00081}$	13332	$0.37231^{+0.04}_{-0.061}$	$0.43454^{+0.03}_{-0.033}$	9.3e+03
$\widetilde{D}$	$0.00301^{+0.00067}_{-0.00097}$	$0.00398^{+0.00056}_{-0.00065}$	3447	$0.13104^{+0.019}_{-0.028}$	$0.15417^{+0.015}_{-0.02}$	2.8e+03
$\widetilde{W}$	$0.00419^{+0.0012}_{-0.0015}$	$0.00567^{+0.0011}_{-0.0012}$	3290	$0.16001^{+0.02}_{-0.031}$	$0.18547^{+0.016}_{-0.019}$	2.6e+03
$d_{FGD_\infty}$	$0.00488^{+0.0013}_{-0.0016}$	$0.00669^{+0.0011}_{-0.0011}$	5692	$0.15039^{+0.017}_{-0.027}$	$0.17553^{+0.012}_{-0.015}$	4.6e+03
$\mathcal{U}$ -deformation				Timing		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	$t$ (s)	$t^{\text{null}}$ (s)		
$d_{FGD_\infty}$	$0.26002^{+0.03}_{-0.046}$	$0.30348^{+0.021}_{-0.026}$	4.4e+03	5139		
$\overline{D}$	$0.00979^{+0.0023}_{-0.0028}$	$0.01236^{+0.0019}_{-0.0023}$	3e+03	321		
$d_{MMD_u^2}$	$0.64451^{+0.068}_{-0.094}$	$0.75224^{+0.053}_{-0.053}$	9e+03	16625		
$\widetilde{D}$	$0.22648^{+0.032}_{-0.049}$	$0.26646^{+0.026}_{-0.034}$	2.7e+03	721		
$\widetilde{W}$	$0.27854^{+0.033}_{-0.055}$	$0.32293^{+0.025}_{-0.035}$	2.5e+03	384		
$t_{LLR}$	NaN	NaN	NaN	-		