

$\mathbf{n} = \mathbf{m} = 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$0.00045^{+0.00029}_{-0.0003}$	$0.00063^{+0.0003}_{-0.00029}$	4506	$0.00019^{+0.00011}_{-0.00011}$	$0.00025^{+0.00011}_{-0.00011}$	4774
\overline{D}	$0.01015^{+0.0036}_{-0.0047}$	$0.01446^{+0.003}_{-0.0037}$	2985	$0.00383^{+0.0013}_{-0.0018}$	$0.00553^{+0.0011}_{-0.0014}$	4098
\widetilde{D}	$0.077^{+0.028}_{-0.035}$	$0.10525^{+0.026}_{-0.028}$	2893	$0.02882^{+0.0073}_{-0.011}$	$0.03931^{+0.0061}_{-0.0077}$	3083
$d_{MMD_u^2}$	$0.09451^{+0.053}_{-0.049}$	$0.13746^{+0.048}_{-0.041}$	2986	$0.01941^{+0.014}_{-0.011}$	$0.02836^{+0.013}_{-0.0099}$	3317
\widetilde{W}	$0.10336^{+0.043}_{-0.05}$	$0.14324^{+0.041}_{-0.042}$	2856	$0.03566^{+0.012}_{-0.016}$	$0.05015^{+0.011}_{-0.012}$	3008
d_{FGD_∞}	$0.11749^{+0.064}_{-0.065}$	$0.16099^{+0.058}_{-0.051}$	2647	$0.03943^{+0.015}_{-0.02}$	$0.05428^{+0.012}_{-0.013}$	2800
Statistic	$\Sigma_{i \neq j}$ -deformation			pow ₊ -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$1e-05^{+0}_{-1e-05}$	$1e-05^{+1e-05}_{-0}$	5487	$4e-05^{+2e-05}_{-2e-05}$	$5e-05^{+3e-05}_{-2e-05}$	5089
\overline{D}	$0.0007^{+0.00033}_{-0.00035}$	$0.00107^{+0.00031}_{-0.00033}$	1985	$0.0009^{+0.00037}_{-0.00045}$	$0.00135^{+0.00036}_{-0.0004}$	3352
\widetilde{D}	$0.00523^{+0.002}_{-0.0025}$	$0.00738^{+0.0018}_{-0.0021}$	2127	$0.00964^{+0.0022}_{-0.0036}$	$0.0128^{+0.0018}_{-0.0023}$	3234
d_{FGD_∞}	$0.00585^{+0.0019}_{-0.0028}$	$0.00813^{+0.0016}_{-0.0018}$	2073	$0.01467^{+0.0048}_{-0.0071}$	$0.02004^{+0.0038}_{-0.0045}$	3052
\widetilde{W}	$0.00818^{+0.0025}_{-0.0036}$	$0.01152^{+0.0022}_{-0.0026}$	2000	$0.01246^{+0.0042}_{-0.0056}$	$0.01744^{+0.0037}_{-0.0043}$	3164
$d_{MMD_u^2}$	$0.01137^{+0.0057}_{-0.0056}$	$0.01659^{+0.0051}_{-0.0045}$	2167	$0.00694^{+0.0043}_{-0.0038}$	$0.01013^{+0.0039}_{-0.0032}$	3483
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$3e-05^{+2e-05}_{-2e-05}$	$4e-05^{+3e-05}_{-2e-05}$	5061	NaN	NaN	NaN
\overline{D}	$0.00086^{+0.00038}_{-0.00044}$	$0.00131^{+0.00036}_{-0.0004}$	3365	$0.01343^{+0.0054}_{-0.0059}$	$0.01949^{+0.0055}_{-0.0056}$	3e+03
$d_{MMD_u^2}$	$0.00757^{+0.0046}_{-0.004}$	$0.01111^{+0.0041}_{-0.0034}$	3433	$0.63143^{+0.1}_{-0.17}$	$0.75933^{+0.072}_{-0.081}$	2.4e+03
\widetilde{D}	$0.00941^{+0.0025}_{-0.0038}$	$0.01264^{+0.002}_{-0.0026}$	3293	$0.23623^{+0.041}_{-0.066}$	$0.28319^{+0.034}_{-0.043}$	2.7e+03
\widetilde{W}	$0.01291^{+5}_{-0.0058}$	$0.01815^{+5}_{-0.0044}$	2867	$0.28537^{+0.045}_{-0.078}$	$0.34154^{+0.036}_{-0.047}$	2.7e+03
d_{FGD_∞}	$0.01513^{+0.005}_{-0.0072}$	$0.02076^{+0.004}_{-0.0046}$	3177	$0.26462^{+0.041}_{-0.074}$	$0.31263^{+0.027}_{-0.037}$	2.6e+03
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
d_{FGD_∞}	$0.45746^{+0.072}_{-0.13}$	$0.54235^{+0.048}_{-0.065}$	2.6e+03	550		
\overline{D}	$0.02061^{+0.0077}_{-0.0085}$	$0.02948^{+0.0081}_{-0.008}$	2.9e+03	109		
$d_{MMD_u^2}$	$1.09848^{+0.17}_{-0.28}$	$1.32688^{+0.11}_{-0.15}$	2.4e+03	272		
\widetilde{D}	$0.40577^{+0.074}_{-0.11}$	$0.48809^{+0.06}_{-0.075}$	2.6e+03	351		
\widetilde{W}	$0.49337^{+0.08}_{-0.13}$	$0.58844^{+0.061}_{-0.077}$	2.6e+03	276		
t_{LLR}	NaN	NaN	NaN	-		