

$\mathbf{n} = \mathbf{m} = 10^4$						
μ -deformation				Σ_{ii} -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$0.02932^{+0.02}_{-0.02}$	$0.04099^{+0.02}_{-0.02}$	1068	$0.00622^{+0.0039}_{-0.0038}$	$0.00873^{+0.004}_{-0.0039}$	1401
\overline{D}	$0.08231^{+0.038}_{-0.038}$	$0.10549^{+0.037}_{-0.036}$	510	$0.06456^{+0.026}_{-0.027}$	$0.08369^{+0.025}_{-0.025}$	586
$d_{FGD\infty}$	$0.09501^{+0.057}_{-0.043}$	$0.12754^{+0.053}_{-0.04}$	521	$0.03069^{+0.013}_{-0.011}$	$0.04128^{+0.012}_{-0.01}$	525
\widetilde{W}	$0.09616^{+0.048}_{-0.044}$	$0.12994^{+0.048}_{-0.043}$	671	$0.03714^{+0.012}_{-0.013}$	$0.05073^{+0.012}_{-0.011}$	505
\widetilde{D}	$0.09964^{+0.046}_{-0.043}$	$0.1332^{+0.045}_{-0.043}$	926	$0.05119^{+0.017}_{-0.019}$	$0.06884^{+0.017}_{-0.017}$	1026
$d_{MMD^2_u}$	$0.11968^{+0.074}_{-0.05}$	$0.17104^{+0.069}_{-0.051}$	543	$0.03462^{+0.021}_{-0.015}$	$0.0492^{+0.02}_{-0.014}$	608
$\Sigma_{i \neq j}$ -deformation				pow $_+$ -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$0.00074^{+0.00043}_{-0.00041}$	$0.00102^{+0.00044}_{-0.00043}$	1425	$0.00249^{+0.0015}_{-0.0015}$	$0.00341^{+0.0015}_{-0.0015}$	1248
$d_{FGD\infty}$	$0.01157^{+0.0026}_{-0.0031}$	$0.01585^{+0.0022}_{-0.0024}$	539	$0.00829^{+0.0042}_{-0.0033}$	$0.01111^{+0.004}_{-0.0031}$	550
\widetilde{D}	$0.03395^{+0.012}_{-0.013}$	$0.04962^{+0.012}_{-0.012}$	1029	$0.01054^{+0.0041}_{-0.0041}$	$0.01378^{+0.004}_{-0.0038}$	1030
\widetilde{W}	$0.0358^{+0.0098}_{-0.012}$	$0.05261^{+0.0091}_{-0.0097}$	502	$0.00934^{+0.0041}_{-0.004}$	$0.01282^{+0.0041}_{-0.0038}$	537
$d_{MMD^2_u}$	$0.0612^{+0.034}_{-0.026}$	$0.0899^{+0.032}_{-0.025}$	599	$0.00651^{+0.0041}_{-0.0028}$	$0.00925^{+0.0038}_{-0.0028}$	649
\overline{D}	$1.03259^{+0.0075}_{-0.013}$	$1.03774^{+0.015}_{-0.0046}$	401	$0.01297^{+0.0051}_{-0.0053}$	$0.01644^{+0.0049}_{-0.0049}$	586
pow $_-$ -deformation				\mathcal{N} -deformation		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$0.00214^{+0.0015}_{-0.0015}$	$0.00306^{+0.0015}_{-0.0015}$	1284	NaN	NaN	NaN
$d_{MMD^2_u}$	$0.00689^{+0.0044}_{-0.0031}$	$0.01004^{+0.0041}_{-0.0032}$	671	$0.79385^{+0.17}_{-0.17}$	$0.94639^{+0.14}_{-0.12}$	5.6e+02
$d_{FGD\infty}$	$0.00888^{+0.0044}_{-0.0037}$	$0.01176^{+0.0041}_{-0.0033}$	552	$0.28641^{+0.029}_{-0.042}$	$0.32984^{+0.024}_{-0.023}$	4.5e+02
\widetilde{W}	$0.01009^{+10}_{-0.0039}$	$0.01378^{+10}_{-0.0038}$	489	$0.38044^{+0.058}_{-0.072}$	$0.45299^{+0.053}_{-0.053}$	4.6e+02
\widetilde{D}	$0.01086^{+0.0041}_{-0.0038}$	$0.01421^{+0.0039}_{-0.0037}$	1041	$0.37535^{+0.063}_{-0.076}$	$0.44166^{+0.055}_{-0.057}$	8.8e+02
\overline{D}	$0.01349^{+0.0049}_{-0.0052}$	$0.01681^{+0.0047}_{-0.0047}$	658	$0.31644^{+0.066}_{-0.079}$	$0.37026^{+0.051}_{-0.069}$	5.8e+02
\mathcal{U} -deformation				Timing		
Statistic	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
$d_{FGD\infty}$	$0.4938^{+0.051}_{-0.067}$	$0.57599^{+0.035}_{-0.044}$	4.2e+02	323		
\overline{D}	$0.54743^{+0.1}_{-0.13}$	$0.62772^{+0.085}_{-0.11}$	5.4e+02	29		
$d_{MMD^2_u}$	$1.36812^{+0.31}_{-0.28}$	$1.63622^{+0.25}_{-0.2}$	6.5e+02	207		
\widetilde{D}	$0.65034^{+0.1}_{-0.13}$	$0.76279^{+0.093}_{-0.1}$	8.6e+02	341		
\widetilde{W}	$0.65743^{+0.1}_{-0.13}$	$0.78411^{+0.081}_{-0.094}$	4.4e+02	253		
t_{LLR}	NaN	NaN	NaN	-		