

$\mathbf{n} = \mathbf{m} = 10^4$						
Statistic	μ -deformation			Σ_{ii} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	$2e - 05^{+2e-05}_{-1e-05}$	$4e - 05^{+1e-05}_{-2e-05}$	24749	0.0^{+1e-05}_{-0}	$1e - 05^{+0}_{-1e-05}$	34526
\overline{D}	$0.00222^{+0.00077}_{-0.00084}$	$0.00307^{+0.00073}_{-0.00077}$	1541	$0.00051^{+0.0002}_{-0.0002}$	$0.00073^{+0.0002}_{-0.0002}$	1687
\widetilde{D}	$0.02341^{+0.0067}_{-0.0087}$	$0.03148^{+0.0061}_{-0.0069}$	1474	$0.00812^{+0.0016}_{-0.0024}$	$0.01068^{+0.0013}_{-0.0016}$	1556
\widetilde{W}	$0.02814^{+0.0099}_{-0.012}$	$0.03797^{+0.009}_{-0.01}$	949	$0.00918^{+0.0025}_{-0.0035}$	$0.01247^{+0.0022}_{-0.0026}$	1021
$d_{MMD^2_u}$	$0.03601^{+0.0081}_{-0.01}$	$0.04577^{+0.0065}_{-0.0076}$	10676	$0.00722^{+0.0022}_{-0.0024}$	$0.00915^{+0.0019}_{-0.002}$	11691
d_{FGD_∞}	$0.03878^{+0.013}_{-0.014}$	$0.05066^{+0.011}_{-0.012}$	20710	$0.01263^{+0.0031}_{-0.0038}$	$0.01631^{+0.0024}_{-0.0029}$	18445
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}	0.0^{+0}_{-0}	0.0^{+0}_{-0}	33811	0.0^{+0}_{-0}	0.0^{+0}_{-0}	30413
\overline{D}	$0.00017^{+7e-05}_{-8e-05}$	$0.00025^{+6e-05}_{-8e-05}$	1781	$0.00018^{+8e-05}_{-7e-05}$	$0.00027^{+7e-05}_{-8e-05}$	1742
\widetilde{D}	$0.00132^{+0.00039}_{-0.00049}$	$0.0018^{+0.00034}_{-0.0004}$	1730	$0.00331^{+0.0006}_{-0.00092}$	$0.0043^{+0.00047}_{-0.00058}$	1592
d_{FGD_∞}	$0.00144^{+0.00037}_{-0.00044}$	$0.00189^{+0.00029}_{-0.00036}$	20511	$0.00505^{+0.0012}_{-0.0016}$	$0.00652^{+0.00098}_{-0.0012}$	19148
\widetilde{W}	$0.00192^{+0.00045}_{-0.00066}$	$0.00257^{+0.00035}_{-0.00046}$	1078	$0.00368^{+0.001}_{-0.0014}$	$0.00498^{+0.00086}_{-0.001}$	1025
$d_{MMD^2_u}$	$0.00289^{+0.00067}_{-0.00084}$	$0.00366^{+0.00058}_{-0.00064}$	12092	$0.00263^{+0.00077}_{-0.00088}$	$0.0033^{+0.0007}_{-0.00071}$	12092
Statistic	pow ₋ -deformation			\mathcal{N} -deformation		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)
t_{LLR}	0.0^{+0}_{-0}	0.0^{+0}_{-0}	39143	NaN	NaN	NaN
\overline{D}	$0.00018^{+8e-05}_{-7e-05}$	$0.00027^{+8e-05}_{-8e-05}$	1752	$0.00606^{+0.0029}_{-0.0031}$	$0.00921^{+0.0027}_{-0.003}$	1.6e+03
$d_{MMD^2_u}$	$0.00257^{+0.00071}_{-0.0008}$	$0.00329^{+0.00064}_{-0.00066}$	12097	$0.67808^{+0.07}_{-0.11}$	$0.7615^{+0.053}_{-0.069}$	8.1e+03
\widetilde{D}	$0.00331^{+0.00064}_{-0.00098}$	$0.0043^{+0.00051}_{-0.00063}$	1605	$0.14876^{+0.02}_{-0.031}$	$0.17443^{+0.016}_{-0.021}$	1.4e+03
\widetilde{W}	$0.00374^{+5}_{-0.0014}$	$0.00505^{+5}_{-0.0011}$	934	$0.17253^{+0.022}_{-0.036}$	$0.20139^{+0.016}_{-0.021}$	8.4e+02
d_{FGD_∞}	$0.00504^{+0.0012}_{-0.0016}$	$0.00655^{+0.001}_{-0.0012}$	19104	$0.15458^{+0.018}_{-0.027}$	$0.17576^{+0.014}_{-0.016}$	1.5e+04
Statistic	\mathcal{U} -deformation			Timing		
	$\epsilon_{95\%CL}$	$\epsilon_{99\%CL}$	t (s)	t^{null} (s)		
d_{FGD_∞}	$0.26668^{+0.031}_{-0.044}$	$0.3051^{+0.022}_{-0.03}$	1.2e+04	39629		
\overline{D}	$0.00925^{+0.0047}_{-0.005}$	$0.01423^{+0.0043}_{-0.0048}$	1.6e+03	1594		
$d_{MMD^2_u}$	$1.17598^{+0.12}_{-0.19}$	$1.32064^{+0.093}_{-0.12}$	9.1e+03	18930		
\widetilde{D}	$0.25702^{+0.037}_{-0.054}$	$0.30137^{+0.028}_{-0.036}$	1.3e+03	1753		
\widetilde{W}	$0.2996^{+0.036}_{-0.063}$	$0.34972^{+0.028}_{-0.038}$	6.6e+02	476		
t_{LLR}	NaN	NaN	NaN	-		