$\mathbf{n = m = 10^4}$

	μ-deformation			Σ_{ii}-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{LLR}	$0.00379^{+0.0026}_{-0.0026}$	$0.0055^{+0.0026}_{-0.0026}$	3816	$0.00074^{+0.00053}_{-0.00053}$	$0.00108^{+0.00052}_{-0.00053}$	4378
$d_{\text{MMD}_u^2}$	$0.04176^{+0.022}_{-0.018}$	$0.05326^{+0.021}_{-0.017}$	1932	$0.02689^{+0.012}_{-0.01}$	$0.03445^{+0.011}_{-0.0094}$	1958
$\overline{D}$	$0.05834^{+0.019}_{-0.022}$	$0.07252^{+0.019}_{-0.019}$	801	$0.02825^{+0.0094}_{-0.01}$	$0.03574^{+0.0088}_{-0.0095}$	861
$\widetilde{W}$	$0.05955^{+0.021}_{-0.023}$	$0.07615^{+0.019}_{-0.02}$	889	$0.0225^{+0.0073}_{-0.0082}$	$0.02867^{+0.0068}_{-0.0069}$	952
$\widetilde{D}$	$0.06195^{+0.021}_{-0.023}$	$0.07913^{+0.019}_{-0.021}$	1198	$0.02901^{+0.0093}_{-0.011}$	$0.03683^{+0.0086}_{-0.0092}$	1080
d_{FGD_∞}	$0.06396^{+0.025}_{-0.024}$	$0.07971^{+0.022}_{-0.021}$	5358	$0.02023^{+0.0075}_{-0.0082}$	$0.02523^{+0.0066}_{-0.0069}$	5466
	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{LLR}	$3e-05^{+2e-05}_{-2e-05}$	$4e-05^{+2e-05}_{-2e-05}$	5628	$0.00021^{+0.00015}_{-0.00015}$	$0.00032^{+0.00015}_{-0.00015}$	4340
d_{FGD_∞}	$0.00239^{+0.00064}_{-0.00081}$	$0.00299^{+0.00054}_{-0.00063}$	6362	$0.00494^{+0.0019}_{-0.002}$	$0.00613^{+0.0018}_{-0.0017}$	6350
$d_{\text{MMD}_u^2}$	$0.01597^{+0.0065}_{-0.0061}$	$0.02031^{+0.0061}_{-0.0054}$	1993	$0.00332^{+0.0018}_{-0.0014}$	$0.00423^{+0.0017}_{-0.0013}$	2150
$\widetilde{W}$	$0.02522^{+0.0067}_{-0.0084}$	$0.03331^{+0.0057}_{-0.0068}$	909	$0.00495^{+0.0017}_{-0.0019}$	$0.00629^{+0.0017}_{-0.0016}$	977
$\widetilde{D}$	$0.02906^{+0.0095}_{-0.011}$	$0.03857^{+0.0087}_{-0.0096}$	1090	$0.00572^{+0.0019}_{-0.0021}$	$0.00714^{+0.0018}_{-0.0018}$	1179
$\overline{D}$	$1.0119^{+0.0062}_{-0.003}$	$1.0209^{+0.003}_{-0.003}$	551	$0.00613^{+0.0019}_{-0.0022}$	$0.00754^{+0.0018}_{-0.0019}$	895
	pow_--deformation			$\mathcal{N}$-deformation		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{LLR}	$0.00028^{+0.00015}_{-0.00015}$	$0.00039^{+0.00015}_{-0.00015}$	4140	NaN	NaN	NaN
$d_{\text{MMD}_u^2}$	$0.00353^{+0.0019}_{-0.0016}$	$0.0045^{+0.0018}_{-0.0014}$	2115	$1.01973^{+0.13}_{-0.17}$	$1.1523^{+0.097}_{-0.11}$	1.6e+03
d_{FGD_∞}	$0.00508^{+0.0017}_{-0.0018}$	$0.00625^{+0.0016}_{-0.0015}$	6609	$0.1987^{+0.025}_{-0.037}$	$0.22055^{+0.021}_{-0.025}$	5.1e+03
$\widetilde{W}$	$0.00508^{+5}_{-0.0017}$	$0.00647^{+5}_{-0.0015}$	915	$0.41334^{+0.062}_{-0.084}$	$0.46898^{+0.052}_{-0.058}$	8e+02
$\widetilde{D}$	$0.00563^{+0.0017}_{-0.002}$	$0.00704^{+0.0016}_{-0.0017}$	1184	$0.44843^{+0.067}_{-0.096}$	$0.50879^{+0.057}_{-0.069}$	9.3e+02
$\overline{D}$	$0.00597^{+0.0019}_{-0.0021}$	$0.0074^{+0.0017}_{-0.0018}$	899	$0.46482^{+0.07}_{-0.097}$	$0.52444^{+0.056}_{-0.075}$	7.3e+02
	$\mathcal{U}$-deformation			Timing		
Statistic	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)		
d_{FGD_∞}	$0.34266^{+0.043}_{-0.065}$	$0.38262^{+0.033}_{-0.044}$	4.3e+03	7457		
$\overline{D}$	$0.80534^{+0.12}_{-0.17}$	$0.90238^{+0.1}_{-0.13}$	7.1e+02	527		
$d_{\text{MMD}_u^2}$	$1.76762^{+0.21}_{-0.3}$	$1.99743^{+0.17}_{-0.19}$	1.5e+03	2390		
$\widetilde{D}$	$0.77724^{+0.12}_{-0.16}$	$0.88187^{+0.098}_{-0.13}$	9.1e+02	592		
$\widetilde{W}$	$0.71388^{+0.11}_{-0.14}$	$0.81581^{+0.084}_{-0.1}$	7.7e+02	294		
t_{LLR}	NaN	NaN	NaN	-		