MoG model with d = 5, q = 3, and n = m = $5 \cdot 10^4$

Statistic	μ-deformation			Σ_{ii}-deformation		
	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.03867^{+0.015}_{-0.015}$	$0.05335^{+0.015}_{-0.015}$	1312	$0.01366^{+0.0039}_{-0.0044}$	$0.01898^{+0.0035}_{-0.0039}$	1415
$t_{\overline{\text{KS}}}$	$\mathbf{0.002^{+0.00077}_{-0.00083}}$	$\mathbf{0.00277^{+0.00075}_{-0.00076}}$	**1308**	$\mathbf{0.00121^{+0.00032}_{-0.00039}}$	$\mathbf{0.00157^{+0.00031}_{-0.00033}}$	**1315**
t_{SKS}	$0.02325^{+0.0079}_{-0.0085}$	$0.03165^{+0.0076}_{-0.0076}$	1439	$0.00731^{+0.0018}_{-0.0022}$	$0.00993^{+0.0015}_{-0.0017}$	1539
t_{FGD}	$0.04381^{+0.026}_{-0.019}$	$0.06082^{+0.024}_{-0.018}$	1536	$0.0147^{+0.004}_{-0.0043}$	$0.02005^{+0.0035}_{-0.0035}$	1610
t_{MMD}	$0.02669^{+0.014}_{-0.011}$	$0.03545^{+0.014}_{-0.011}$	8990	$0.00629^{+0.0031}_{-0.0025}$	$0.00833^{+0.0029}_{-0.0023}$	9570
t_{LLR}	$0.00036^{+0.00019}_{-0.0002}$	$0.0005^{+0.0002}_{-0.0002}$	2776	$0.00011^{+7e-05}_{-8e-05}$	$0.00016^{+8e-05}_{-8e-05}$	3063

Statistic	$\Sigma_{i\neq j}$-deformation			pow_+-deformation		
	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.02657^{+0.0058}_{-0.0077}$	$0.03639^{+0.005}_{-0.0059}$	1508	$0.00841^{+0.0024}_{-0.0028}$	$0.01169^{+0.0022}_{-0.0023}$	1462
$t_{\overline{\text{KS}}}$	$1.00116^{+0.00055}_{-6e-05}$	$1.00165^{+0.00018}_{-0.00025}$	**1404**	$\mathbf{0.00142^{+0.00043}_{-0.00049}}$	$\mathbf{0.00189^{+0.00041}_{-0.00043}}$	**1326**
t_{SKS}	$0.02533^{+0.0073}_{-0.0088}$	$0.03416^{+0.0062}_{-0.0074}$	1630	$0.00467^{+0.001}_{-0.0013}$	$0.0063^{+0.00088}_{-0.001}$	1552
t_{FGD}	$\mathbf{0.01034^{+0.0023}_{-0.0025}}$	$\mathbf{0.01443^{+0.0017}_{-0.0022}}$	2060	$0.0089^{+0.0026}_{-0.0027}$	$0.01216^{+0.0023}_{-0.0023}$	1790
t_{MMD}	$0.02201^{+0.0099}_{-0.0084}$	$0.02908^{+0.0094}_{-0.0079}$	9396	$0.00361^{+0.0019}_{-0.0014}$	$0.00478^{+0.0018}_{-0.0014}$	9705
t_{LLR}	-	-	-	$0.00017^{+0.0001}_{-9e-05}$	$0.00025^{+0.0001}_{-0.0001}$	2854

Statistic	pow_--deformation			$\mathcal{N}$-deformation		
	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)
t_{SW}	$0.00858^{+0.0024}_{-0.0029}$	$0.01188^{+0.0023}_{-0.0024}$	1466	$0.16467^{+0.02}_{-0.029}$	$0.19494^{+0.015}_{-0.019}$	**1187**
$t_{\overline{\text{KS}}}$	$\mathbf{0.00142^{+0.00045}_{-0.0005}}$	$\mathbf{0.00188^{+0.00042}_{-0.00044}}$	**1320**	$\mathbf{0.00546^{+0.00092}_{-0.0012}}$	$\mathbf{0.00651^{+0.00087}_{-0.0009}}$	1226
t_{SKS}	$0.0048^{+0.001}_{-0.0014}$	$0.00642^{+0.001}_{-0.0011}$	1562	$0.11614^{+0.016}_{-0.024}$	$0.1371^{+0.013}_{-0.017}$	1321
t_{FGD}	$0.0091^{+0.0025}_{-0.0026}$	$0.01247^{+0.0022}_{-0.0022}$	1789	$0.1925^{+0.019}_{-0.027}$	$0.22617^{+0.014}_{-0.016}$	1452
t_{MMD}	$0.00374^{+0.0019}_{-0.0016}$	$0.00492^{+0.0019}_{-0.0015}$	9724	$0.25293^{+0.036}_{-0.048}$	$0.28868^{+0.032}_{-0.032}$	8612
t_{LLR}	$0.00018^{+0.0001}_{-0.0001}$	$0.00025^{+0.0001}_{-0.0001}$	2850	-	-	-

Statistic	$\mathcal{U}$-deformation			Timing
	$\epsilon_{95\%\text{CL}}$	$\epsilon_{99\%\text{CL}}$	t (s)	t^{null} (s)
t_{SW}	$0.28418^{+0.035}_{-0.05}$	$0.33591^{+0.027}_{-0.033}$	1344	319
$t_{\overline{\text{KS}}}$	$\mathbf{0.00924^{+0.0015}_{-0.0019}}$	$\mathbf{0.01096^{+0.0013}_{-0.0015}}$	**1208**	**49**
t_{SKS}	$0.19824^{+0.029}_{-0.04}$	$0.23402^{+0.023}_{-0.029}$	1271	484
t_{FGD}	$0.33191^{+0.034}_{-0.044}$	$0.39255^{+0.022}_{-0.028}$	1433	1150
t_{MMD}	$0.43535^{+0.067}_{-0.079}$	$0.5005^{+0.054}_{-0.057}$	7010	13839
t_{LLR}	-	-	-	-