

| Jet features with $n = m = 5 \cdot 10^4$ |   |   |             |  |  |             |
|--|---|---|-------------|--|--|-------------|
| Statistic                                | $\mu$ -deformation                              |   |             | $\Sigma_{ii}$ -deformation                     |  |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}$                             | $t$ (s)     | $\epsilon_{95\%CL}$                            | $\epsilon_{99\%CL}$                            | $t$ (s)     |
| $t_{SW}$                                 | $0.03049^{+0.019}_{-0.013}$                     | $0.04713^{+0.015}_{-0.015}$                     | <b>1108</b> | $0.04623^{+0.017}_{-0.025}$                    | $0.06323^{+0.019}_{-0.015}$                    | <b>1141</b> |
| $t_{\overline{KS}}$                      | <b><math>0.01585^{+0.0043}_{-0.0063}</math></b> | <b><math>0.01927^{+0.0043}_{-0.0056}</math></b> | 17004       | <b><math>0.02085^{+0.0064}_{-0.008}</math></b> | <b><math>0.02567^{+0.006}_{-0.0075}</math></b> | 21589       |
| $t_{SKS}$                                | $0.02815^{+0.013}_{-0.014}$                     | $0.03444^{+0.012}_{-0.014}$                     | 35328       | $0.04838^{+0.018}_{-0.019}$                    | $0.06304^{+0.016}_{-0.02}$                     | 27128       |
| $t_{FGD}$                                | $0.03986^{+0.025}_{-0.013}$                     | $0.06157^{+0.019}_{-0.017}$                     | 11779       | $0.04333^{+0.028}_{-0.023}$                    | $0.05934^{+0.027}_{-0.022}$                    | 18470       |
| $t_{MMD}$                                | $0.04941^{+0.034}_{-0.021}$                     | $0.0712^{+0.03}_{-0.022}$                       | 78077       | $0.07669^{+0.072}_{-0.035}$                    | $0.11237^{+0.068}_{-0.035}$                    | 71427       |
| Statistic                                | $\Sigma_{i \neq j}$ -deformation                |   |             | pow <sub>+</sub> -deformation                  |  |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}$                             | $t$ (s)     | $\epsilon_{95\%CL}$                            | $\epsilon_{99\%CL}^{pow+}$                     | $t$ (s)     |
| $t_{SW}$                                 | $0.15583^{+0.056}_{-0.058}$                     | $0.24931^{+0.047}_{-0.038}$                     | <b>1122</b> | $0.02535^{+0.0077}_{-0.011}$                   | $0.03745^{+0.0066}_{-0.0084}$                  | <b>1028</b> |
| $t_{\overline{KS}}$                      | <b><math>0.01792^{+0.0058}_{-0.0055}</math></b> | <b><math>0.02183^{+0.0059}_{-0.0057}</math></b> | 16370       | <b><math>0.0232^{+0.0074}_{-0.011}</math></b>  | <b><math>0.02698^{+0.01}_{-0.0092}</math></b>  | 35049       |
| $t_{SKS}$                                | $0.14675^{+0.042}_{-0.062}$                     | $0.19109^{+0.043}_{-0.062}$                     | 42851       | $0.02709^{+0.014}_{-0.012}$                    | $0.03452^{+0.017}_{-0.012}$                    | 28409       |
| $t_{FGD}$                                | $0.1134^{+0.036}_{-0.04}$                       | $0.15736^{+0.036}_{-0.02}$                      | 17504       | $0.02454^{+0.015}_{-0.014}$                    | $0.0321^{+0.017}_{-0.012}$                     | 11640       |
| $t_{MMD}$                                | $0.59961^{+0.42}_{-0.21}$                       | $1.01945^{+0.022}_{-0.12}$                      | 30653       | $0.02933^{+0.019}_{-0.015}$                    | $0.03749^{+0.021}_{-0.016}$                    | 54684       |
| Statistic                                | pow <sub>-</sub> -deformation                   |   |             | $\mathcal{N}$ -deformation                     |  |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}^{pow-}$                      | $t$ (s)     | $\epsilon_{95\%CL}$                            | $\epsilon_{99\%CL}^{\mathcal{N}}$              | $t$ (s)     |
| $t_{SW}$                                 | $0.02553^{+0.0078}_{-0.0088}$                   | $0.03665^{+0.0074}_{-0.0068}$                   | <b>1080</b> | $0.12904^{+0.029}_{-0.034}$                    | $0.16235^{+0.02}_{-0.025}$                     | <b>981</b>  |
| $t_{\overline{KS}}$                      | <b><math>0.02125^{+0.01}_{-0.0092}</math></b>   | <b><math>0.02649^{+0.0074}_{-0.009}</math></b>  | 15925       | <b><math>0.10579^{+0.014}_{-0.019}</math></b>  | <b><math>0.11672^{+0.012}_{-0.016}</math></b>  | 28786       |
| $t_{SKS}$                                | $0.02682^{+0.012}_{-0.012}$                     | $0.03607^{+0.01}_{-0.012}$                      | 47622       | $0.11163^{+0.022}_{-0.023}$                    | $0.12765^{+0.017}_{-0.023}$                    | 38615       |
| $t_{FGD}$                                | $0.02511^{+0.017}_{-0.012}$                     | $0.03353^{+0.016}_{-0.01}$                      | 18451       | $0.16887^{+0.046}_{-0.052}$                    | $0.19783^{+0.043}_{-0.036}$                    | 13634       |
| $t_{MMD}$                                | $0.03^{+0.02}_{-0.014}$                         | $0.04112^{+0.021}_{-0.012}$                     | 39156       | $0.25305^{+0.085}_{-0.11}$                     | $0.29551^{+0.081}_{-0.073}$                    | 52861       |
| Statistic                                | $\mathcal{U}$ -deformation                      |   |             | Timing   |  |             |
|  | $\epsilon_{95\%CL}$                             | $\epsilon_{99\%CL}^{\mathcal{U}}$               | $t$ (s)     | $t^{\text{null}}$ (s)                          |  |             |
| $t_{SW}$                                 | $0.22631^{+0.05}_{-0.064}$                      | $0.27734^{+0.044}_{-0.039}$                     | <b>916</b>  | <b>129</b>                                     |  |             |
| $t_{\overline{KS}}$                      | <b><math>0.18246^{+0.022}_{-0.032}</math></b>   | <b><math>0.19931^{+0.018}_{-0.027}</math></b>   | 32276       | 1907   |  |             |
| $t_{SKS}$                                | $0.18837^{+0.033}_{-0.048}$                     | $0.21334^{+0.027}_{-0.029}$                     | 38491       | 4382   |  |             |
| $t_{FGD}$                                | $0.27796^{+0.1}_{-0.074}$                       | $0.34469^{+0.068}_{-0.062}$                     | 19098       | 1794   |  |             |
| $t_{MMD}$                                | $0.49303^{+0.16}_{-0.18}$                       | $0.57279^{+0.12}_{-0.11}$                       | 55838       | 3504   |  |             |
| $t_{LLR}$                                | -   | -   | -           | -  |  |             |