**Table 2**

*R2 and Tree Size for ACT and ECLSK science datasets where generated data is Ngen = 10 times the size of the original dataset*

|  |  | ACT | | |  | ECLSK science | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Results |  | GLMM tree | PPD: N = 10 | Smearing: N = 10, palt = 0 |  | GLMM tree | PPD: N = 10 | Smearing: N = 10, palt = 0 |
| Mean R2 (SD) |  | 0.04 (0.16) | 0.05 (0.17) | 0.02 (0.16) |  | 0.53 (0.07) | 0.50 (0.07) | 0.50 (0.06) |
| Mean Tree Size (SD) |  | 5.12 (1.44) | 1.69 (0.90) | 1.88 (1.15) |  | 9.90 (1.50) | 5.35 (2.67) | 10.00 (2.67) |

*Note.* For Smearing-based BA GLMM trees, only the model with the highest R2 is displayed here. For the complete results see Appendix 1 and Appendix 2.