**Table 1**

*R2 and Tree Size for ACT and ECLSK science datasets*

|  |  | ACT | | | |  | ECLSK science | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Results |  | GLMM tree | M-BART | PPD: N = 5 | Smearing: N = 1, palt = 0 |  | GLMM tree | M-BART | PPD: N = 1 | Smearing: N = 1, palt = 0 |
| Mean R2 (SD) |  | 0.04 (0.16) | 0.14 (0.16) | 0.07 (0.16) | 0.08 (0.16) |  | 0.53 (0.07) | 0.68 (0.04) | 0.59 (0.06) | 0.57 (0.06) |
| Mean Tree Size (SD) |  | 5.12 (1.44) | - | 4.36 (0.90) | 10.49 (3.27) |  | 9.90 (1.50) | - | 25.73 (2.55) | 35.70 (3.21) |

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