Table 1: Test for variance among families and populations

Model: Julian\_first\_follicle - 200 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| First follicle: 2022 | Family | 0.070 | 50.784 | 47.484 | 1 | **<0.001** |
| First follicle: 2022 | Population | 0.129 | 65.423 | 0.000 | 1 | 0.5 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Julian\_first\_follicle - 200 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| First follicle: 2022 | Family | 0.066 | 49.603 | 45.814 | 1 | **<0.001** |
| First follicle: 2022 | Population | 0.127 | 65.209 | 0.003 | 1 | 0.4765 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| First follicle: 2022 | Block | 10.608 | **0.014\*** |
| Distance to City Center | 0.369 | 0.544 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Julian\_first\_follicle - 200 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| First follicle: 2022 | Family | 0.069 | 50.523 | 47.014 | 1 | **<0.001** |
| First follicle: 2022 | Population | 0.129 | 65.421 | 0.000 | 1 | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| First follicle: 2022 | Block | 10.125 | **0.018\*** |
| Urbanization Score | 0.001 | 0.981 |