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: 2021 | Family | 0.035 | 44.321 | 7.800 | 1 | **0.0025** |
| First follicle: 2021 | Population | 0.067 | 59.985 | 0.645 | 1 | 0.211 |

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: 2021 | Family | 0.028 | 38.813 | 8.107 | 1 | **0.002** |
| First follicle: 2021 | Population | 0.059 | 56.882 | 0.152 | 1 | 0.3485 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| First follicle: 2021 | Block | 6.048 | 0.109 |
| Distance to City Center | 2.476 | 0.116 |

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: 2021 | Family | 0.03 | 40.627 | 8.075 | 1 | **0.002** |
| First follicle: 2021 | Population | 0.06 | 57.659 | 0.167 | 1 | 0.3415 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| First follicle: 2021 | Block | 5.729 | 0.126 |
| Urbanization Score | 1.660 | 0.198 |