| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Flowering start: 2021 | Block | 16.589 | **<0.001\*\*\*** |
| Urbanization Score | 1.009 | 0.315 |

Table 5: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering start: 2021 | Family | 0.062 | 92.451 | 36.960 | 1 | **<0.001** |
| Flowering start: 2021 | Population | 0.094 | 94.872 | 2.476 | 1 | 0.058 |

Model: Julian\_oldest\_inflor - 170 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Urb\_score

Urbanization = Urbanization Score

Table 4: Assess how much variance is explained by urbanization

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Flowering start: 2021 | Block | 17.259 | **<0.001\*\*\*** |
| Distance to City Center | 2.781 | 0.095 |

Table 3: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering start: 2021 | Family | 0.059 | 92.019 | 36.834 | 1 | **<0.001** |
| Flowering start: 2021 | Population | 0.093 | 94.820 | 2.927 | 1 | **0.0435** |

Model: Julian\_oldest\_inflor - 170 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + City\_dist

Urbanization = Distance to the City Center

Table 2: Assess how much variance is explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering start: 2021 | Family | 0.065 | 92.704 | 36.708 | 1 | **<0.001** |
| Flowering start: 2021 | Population | 0.097 | 95.016 | 3.083 | 1 | **0.0395** |

Model: Julian\_oldest\_inflor - 170 ~ Block + (1 | Population) + (1 | Population:Fam\_uniq)

Table 1: Test for variance among families and populations