| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Flowering start: 2022 | Block | 22.719 | **<0.001\*\*\*** |
| Urbanization Score | 0.413 | 0.521 |

Table 5: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering start: 2022 | Family | 0.035 | 86.997 | 85.034 | 1 | **<0.001** |
| Flowering start: 2022 | Population | 0.076 | 93.537 | 0.000 | 1 | 0.5 |

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: 2022 | Block | 22.699 | **<0.001\*\*\*** |
| Distance to City Center | 0.115 | 0.735 |

Table 3: Quantify variance explained by urbanization

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Flowering start: 2022 | Family | 0.036 | 87.136 | 84.846 | 1 | **<0.001** |
| Flowering start: 2022 | Population | 0.076 | 93.559 | 0.000 | 1 | 0.5 |

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: 2022 | Family | 0.036 | 87.114 | 84.743 | 1 | **<0.001** |
| Flowering start: 2022 | Population | 0.076 | 93.563 | 0.000 | 1 | 0.5 |

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

Table 1: Test for variance among families and populations