# Urbanization = Distance to City Center

ANOVA with all years of data

Model: Monarch\_Quantity\_Observed ~ Block + (1 | Population/Family) + Year + Sample + City\_dist

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Danaus plexippus abundance | Block | 10.005 | **0.019\*** |
| Year | 3.240 | 0.072 |
| Sample | 244.756 | **<0.001\*\*\*** |
| Distance to City Center | 0.624 | 0.43 |

ANOVA with one year of data

Model: Monarch\_Quantity\_Observed ~ Block + (1 | Population/Family) + Sample + City\_dist

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Danaus plexippus abundance | Block | 34.263 | **<0.001\*\*\*** |
| Sample | 311.673 | **<0.001\*\*\*** |
| Distance to City Center | 1.700 | 0.192 |

# Urbanization = Urbanization Score

ANOVA with all years of data

Model: Monarch\_Quantity\_Observed ~ Block + (1 | Population/Family) + Year + Sample + Urb\_score

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Danaus plexippus abundance | Block | 10.160 | **0.017\*** |
| Year | 3.234 | 0.072 |
| Sample | 244.686 | **<0.001\*\*\*** |
| Urbanization Score | 0.445 | 0.505 |

ANOVA with one year of data

Model: Monarch\_Quantity\_Observed ~ Block + (1 | Population/Family) + Sample + Urb\_score

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Danaus plexippus abundance | Block | 35.005 | **<0.001\*\*\*** |
| Sample | 311.528 | **<0.001\*\*\*** |
| Urbanization Score | 1.991 | 0.158 |