

Air Monitoring Station Locations by City

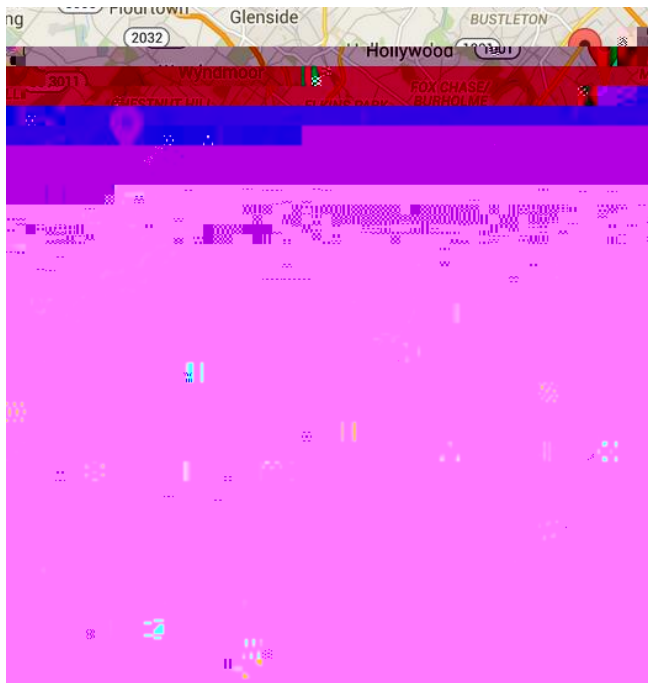
Chicago



Houston



Philadelphia



Seattle



(created online using MapCustomizer.com)

Apparent Temperature Equation

$$AT = T * (0.33 * e) - (0.7 * w) - 4$$

T= Temperature (C°)

$$e = 6.112 * 10^{((7.5 * T) / (237.7 + T))} * (H / 100)$$

w= wind speed (meters per second)

H= Humidity (C°)

(Meng et al, 2012; Steadman, 1984)

Humidex Equation

$$Hx = T + \left(\frac{5}{9}\right) * (e - 10)$$

T = Temperature (C°)

$$e = 6.112 * 10^{\left(\frac{7.5 * T}{237.7 + T}\right)} * \left(\frac{H}{100}\right)$$

H = Humidity (C°)

(Masterson and Richardson, 1979)

Calculation of Variance within and Between Cities

$$[(1/(1-c)) * (\beta_i - \beta)^2] + [(1/c)(se^2)]$$

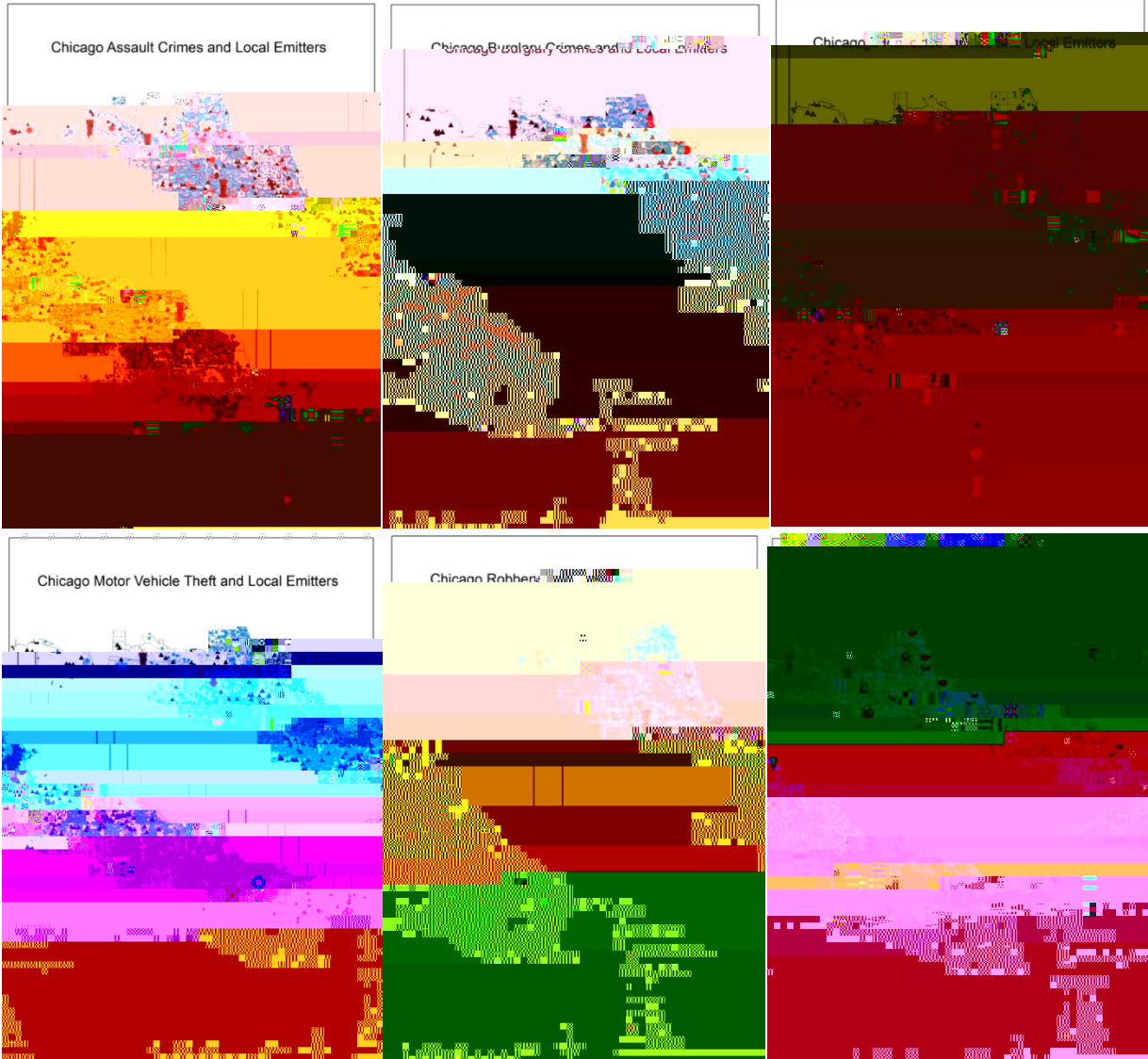
c = Number of cities

β_i = estimate for i th city

β = estimate across study cities

se = standard error of β_i

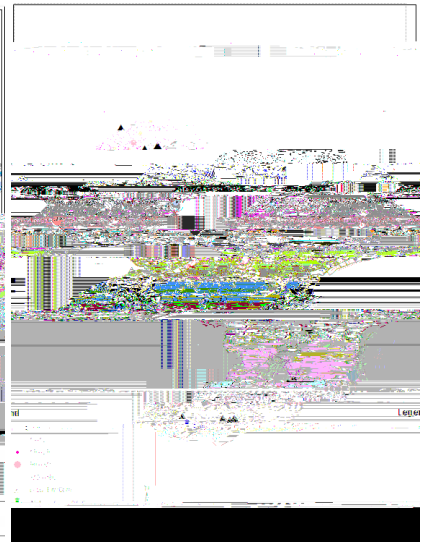
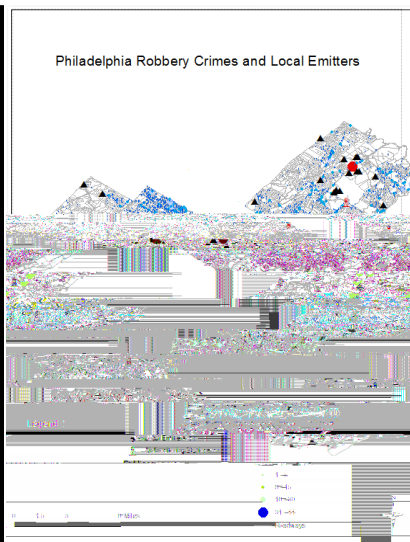
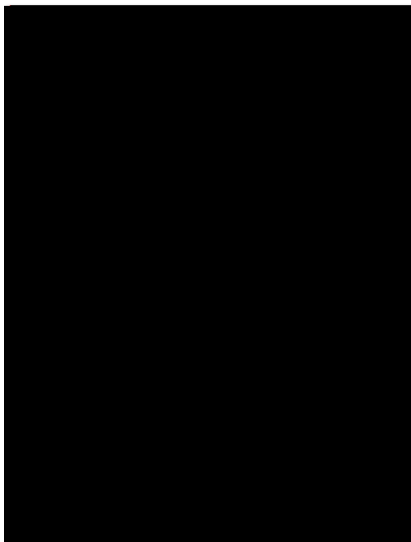
Chicago Crimes and Local Emitters



Houston Crimes and Local Emitters



Philadelphia Crimes and Local Emitters



Seattle Crimes and Local Emitters

