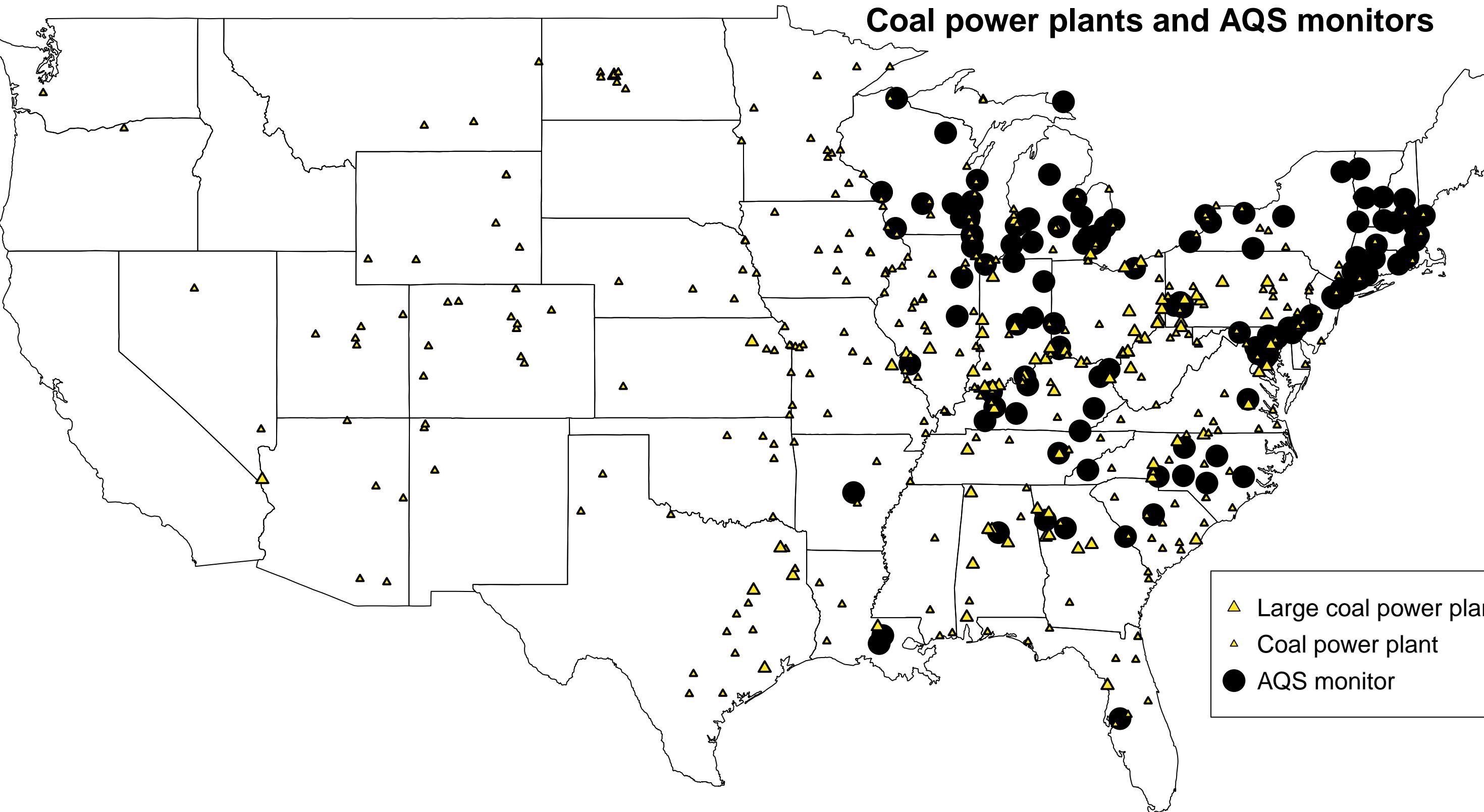
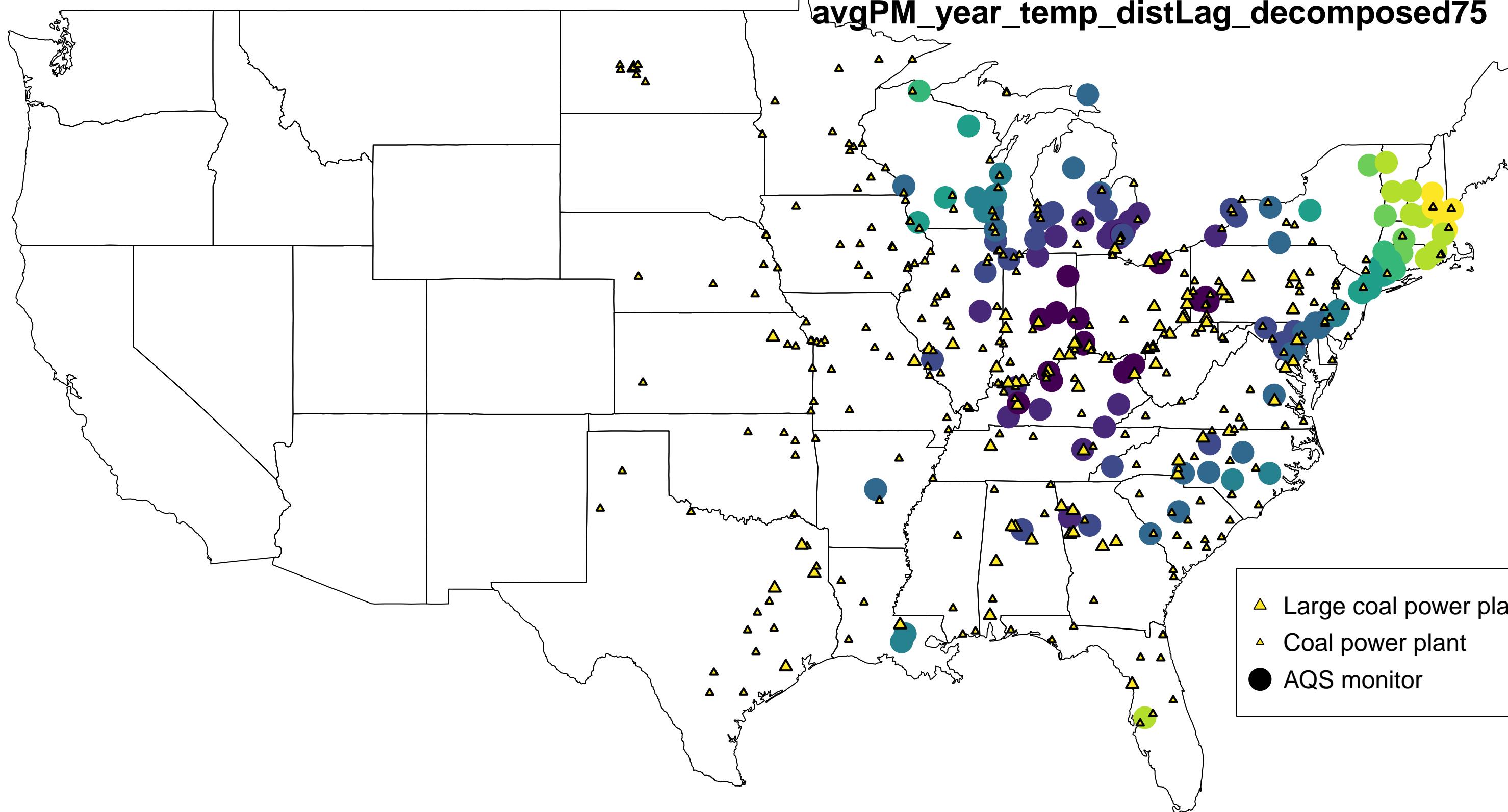


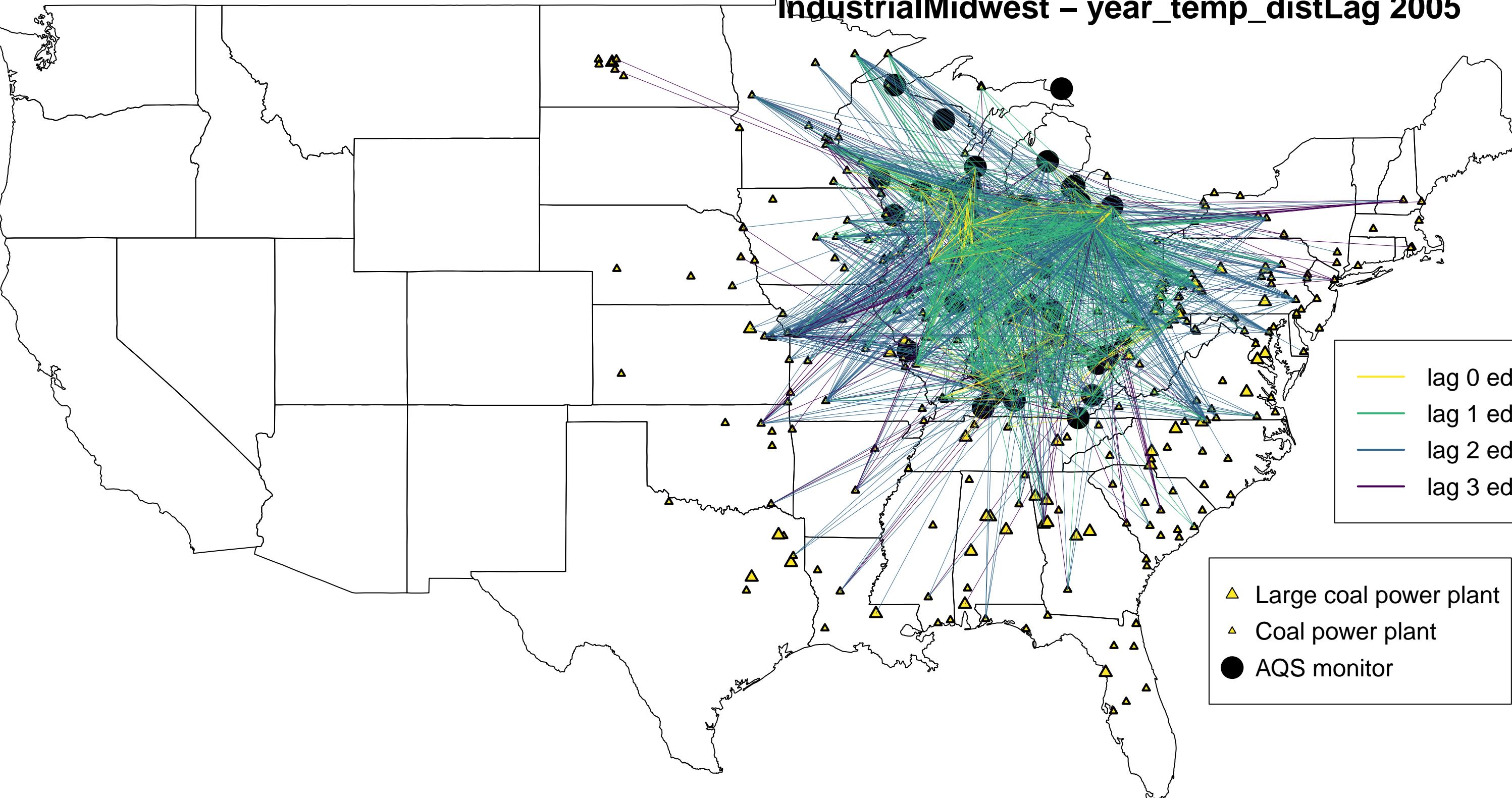
Coal power plants and AQS monitors



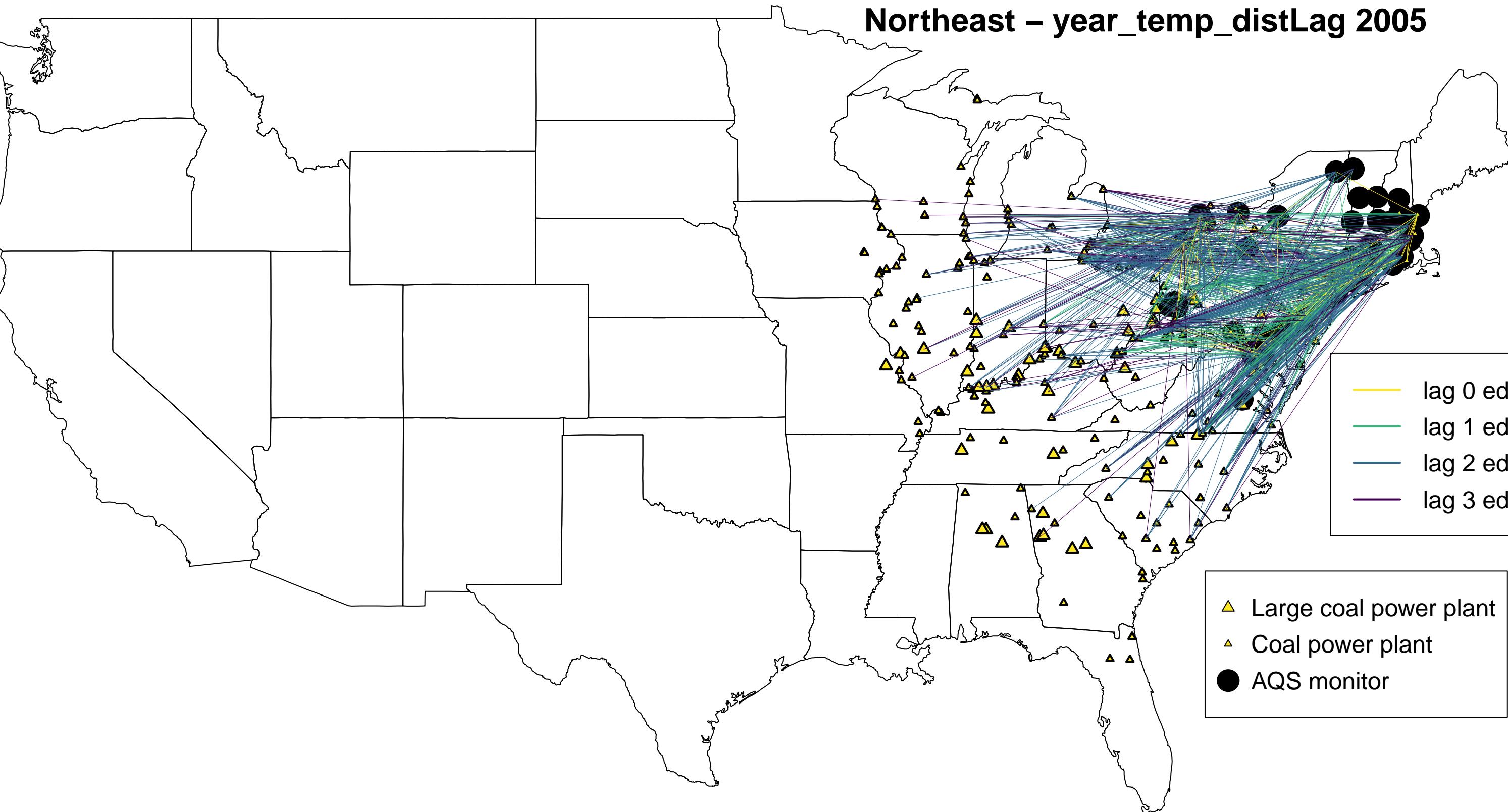
avgPM_year_temp_distLag_decomposed75



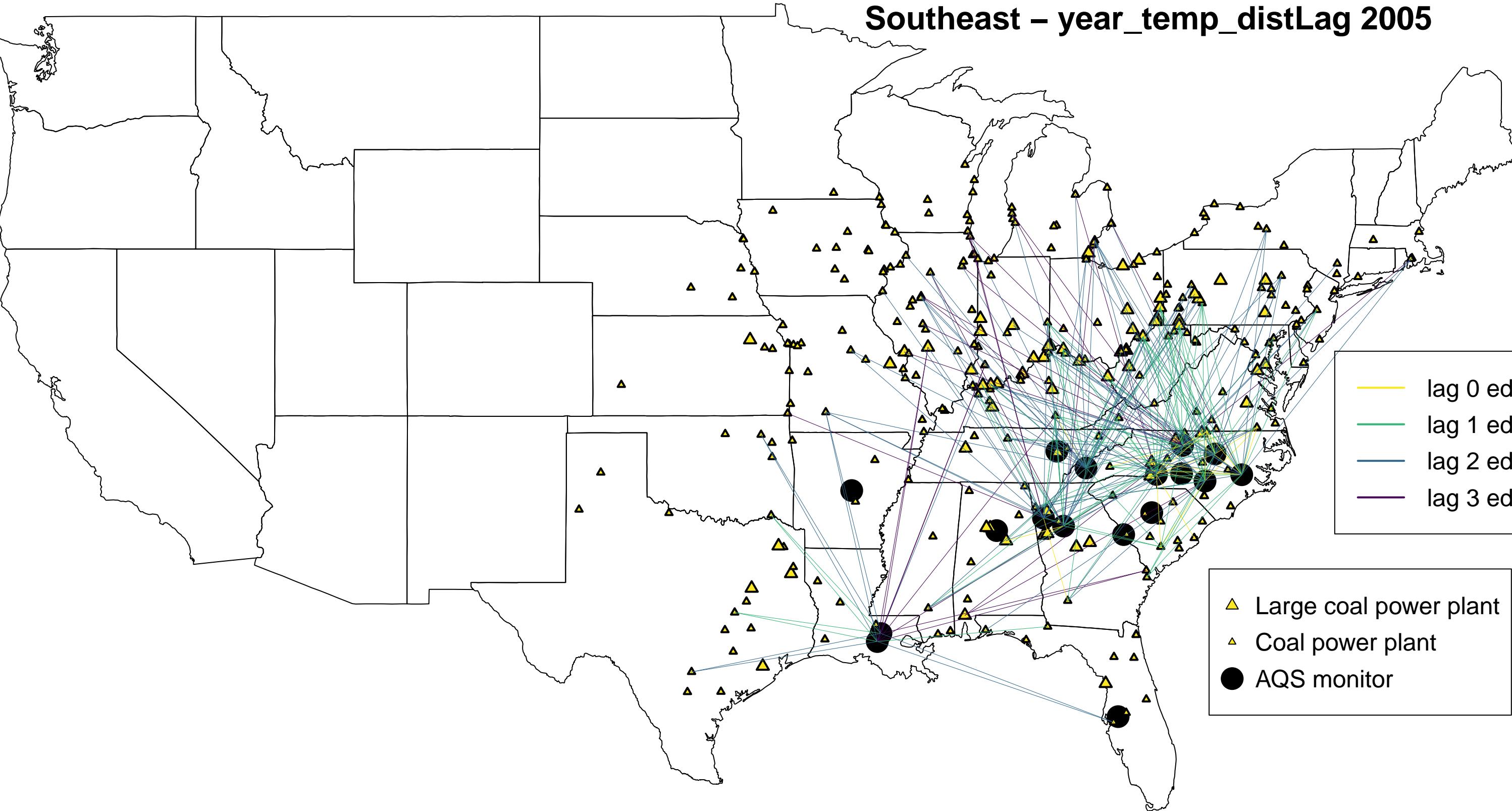
IndustrialMidwest – year_temp_distLag 2005



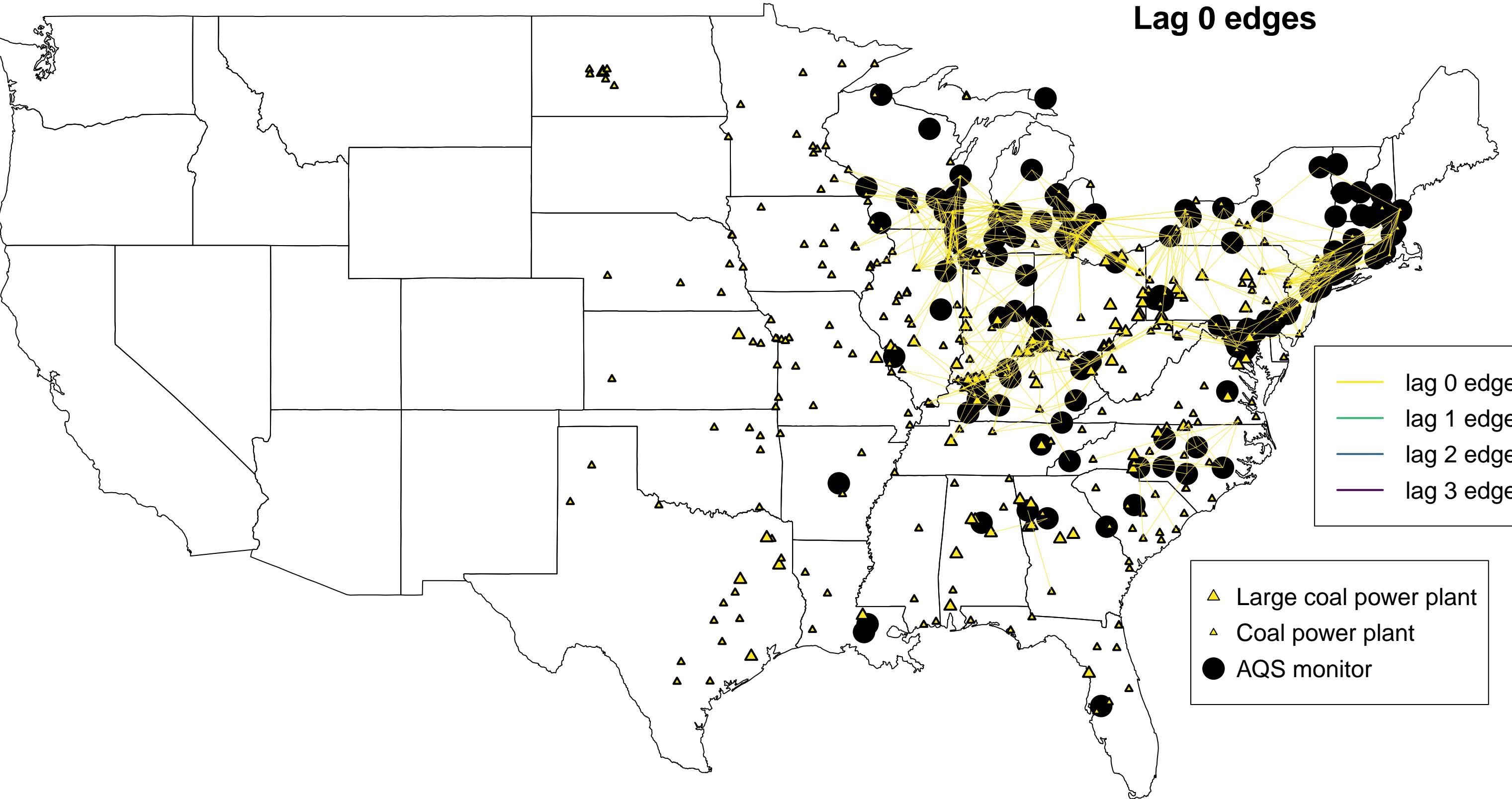
Northeast – year_temp_distLag 2005



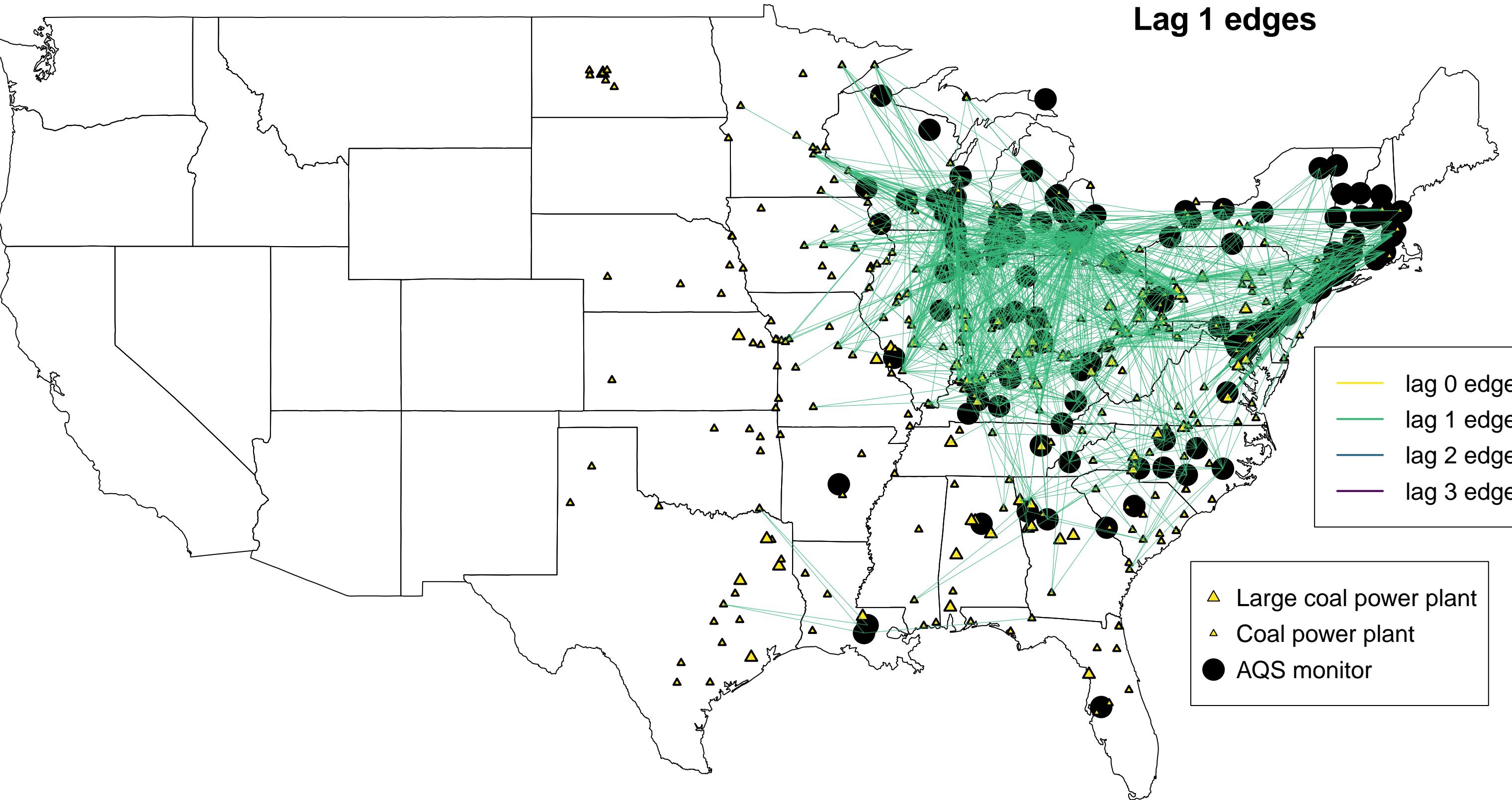
Southeast – year_temp_distLag 2005



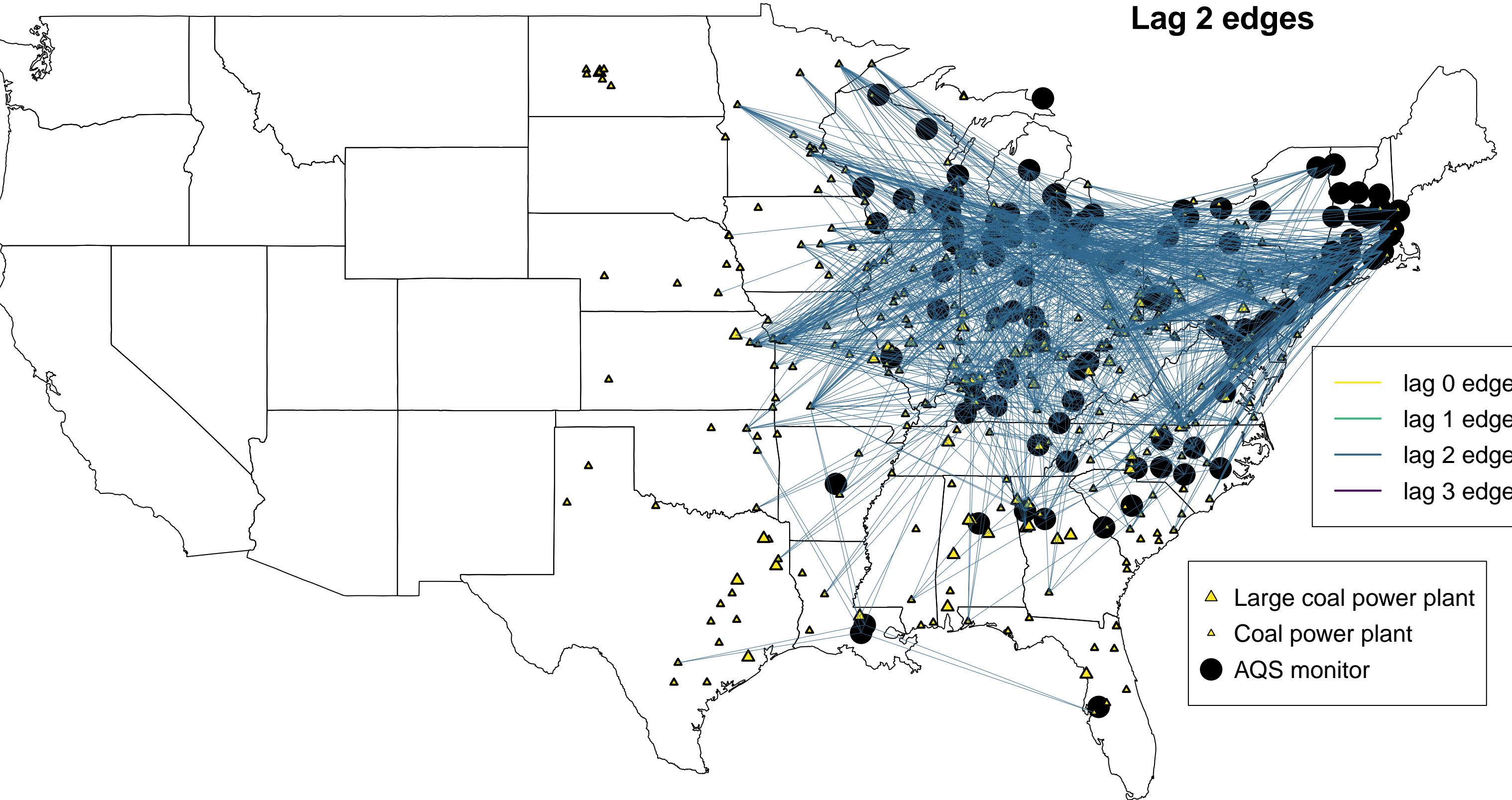
Lag 0 edges



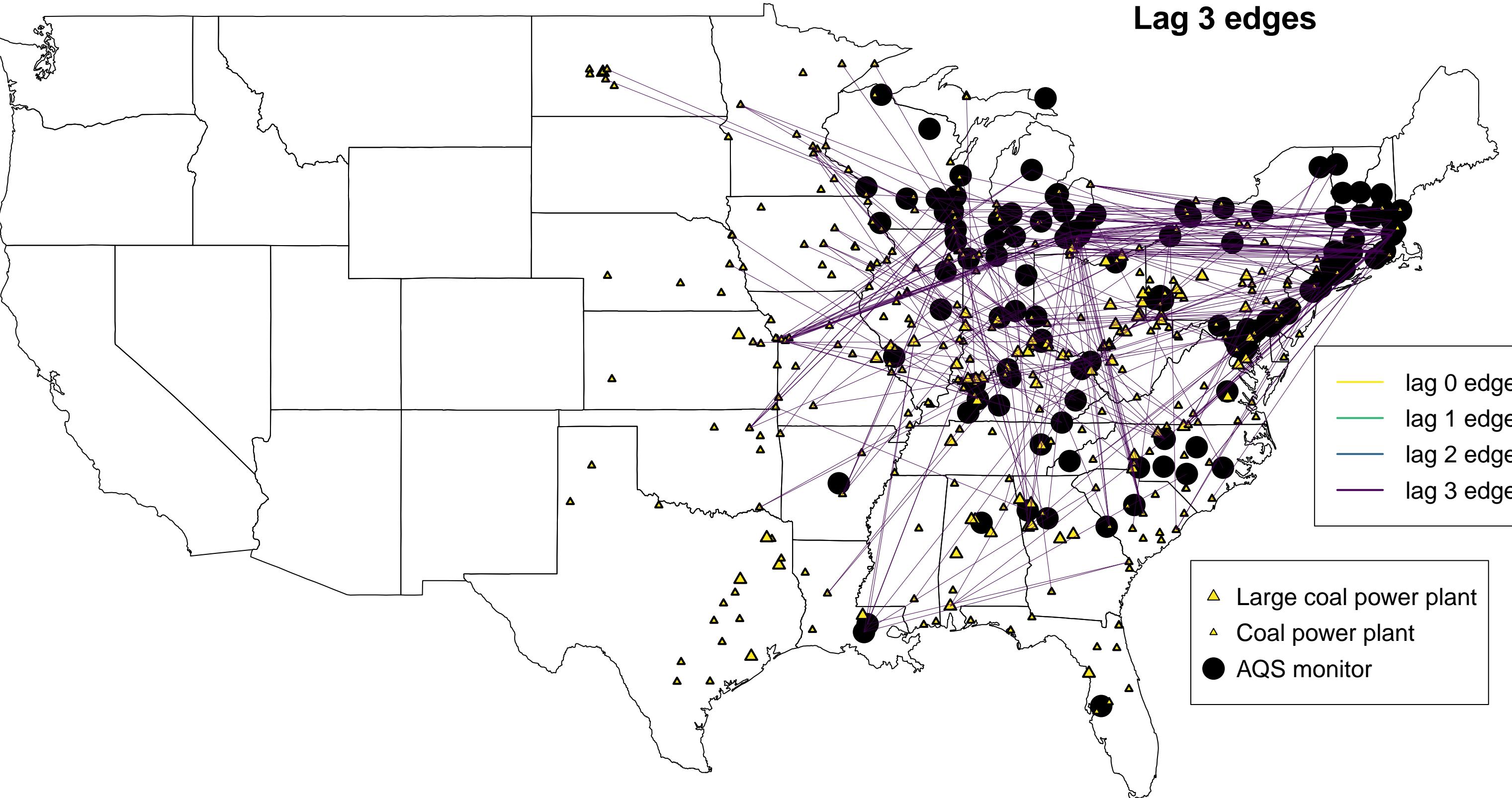
Lag 1 edges

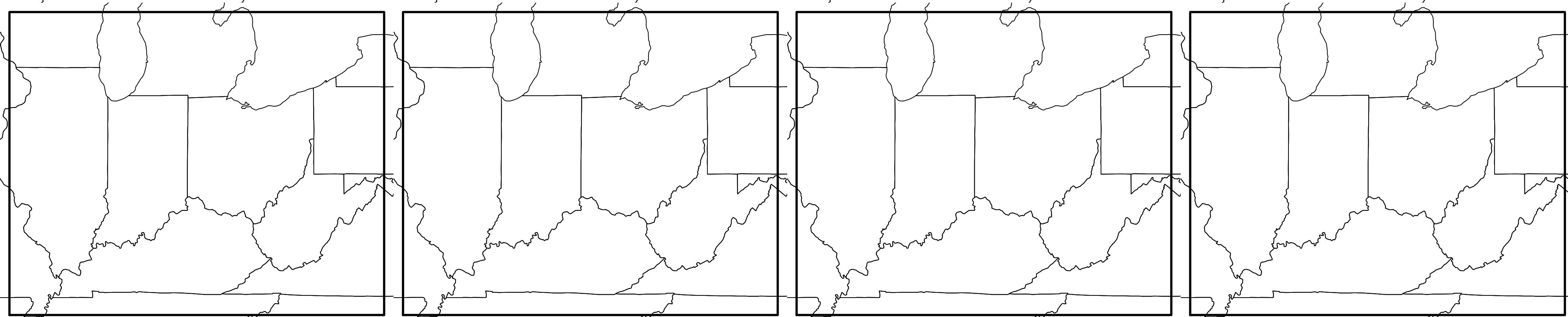
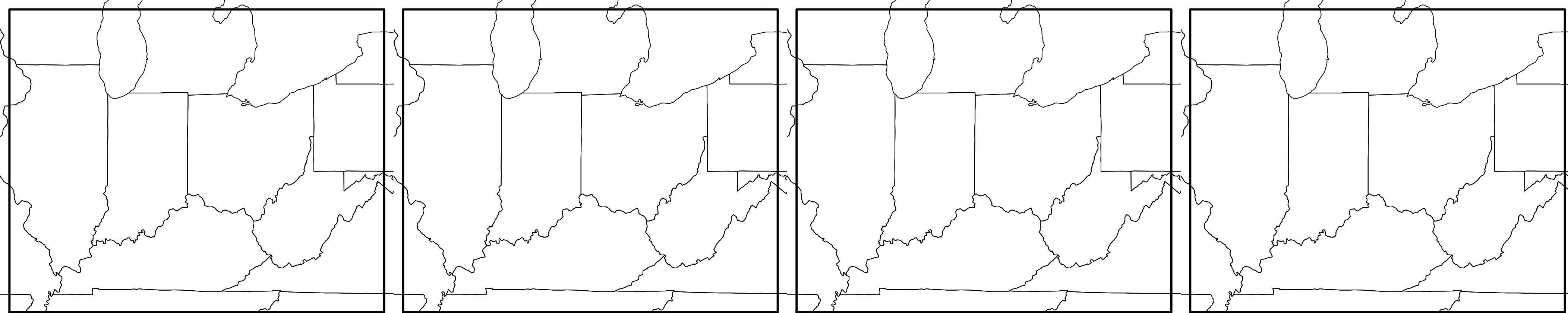


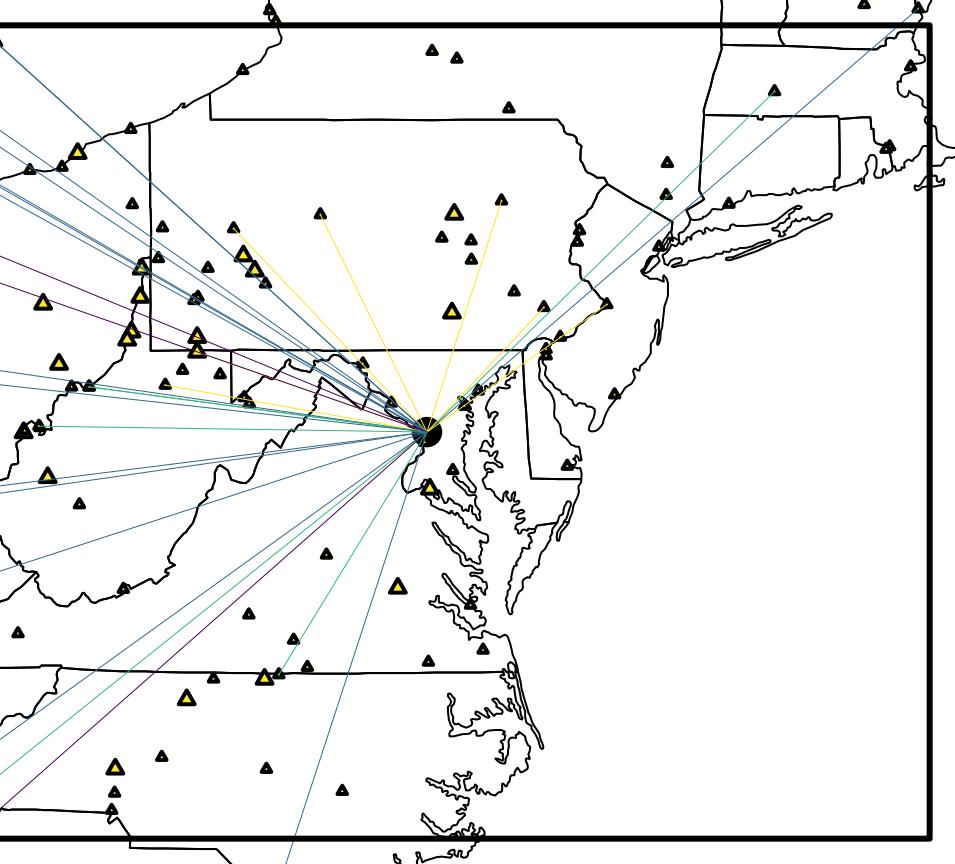
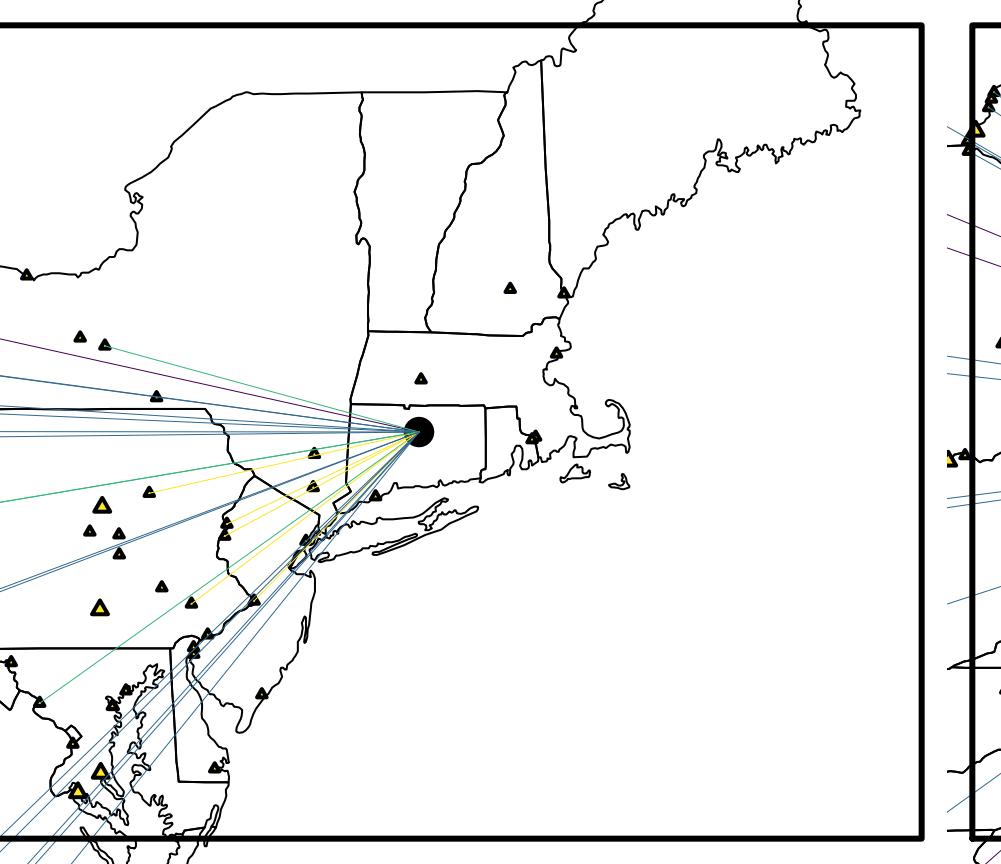
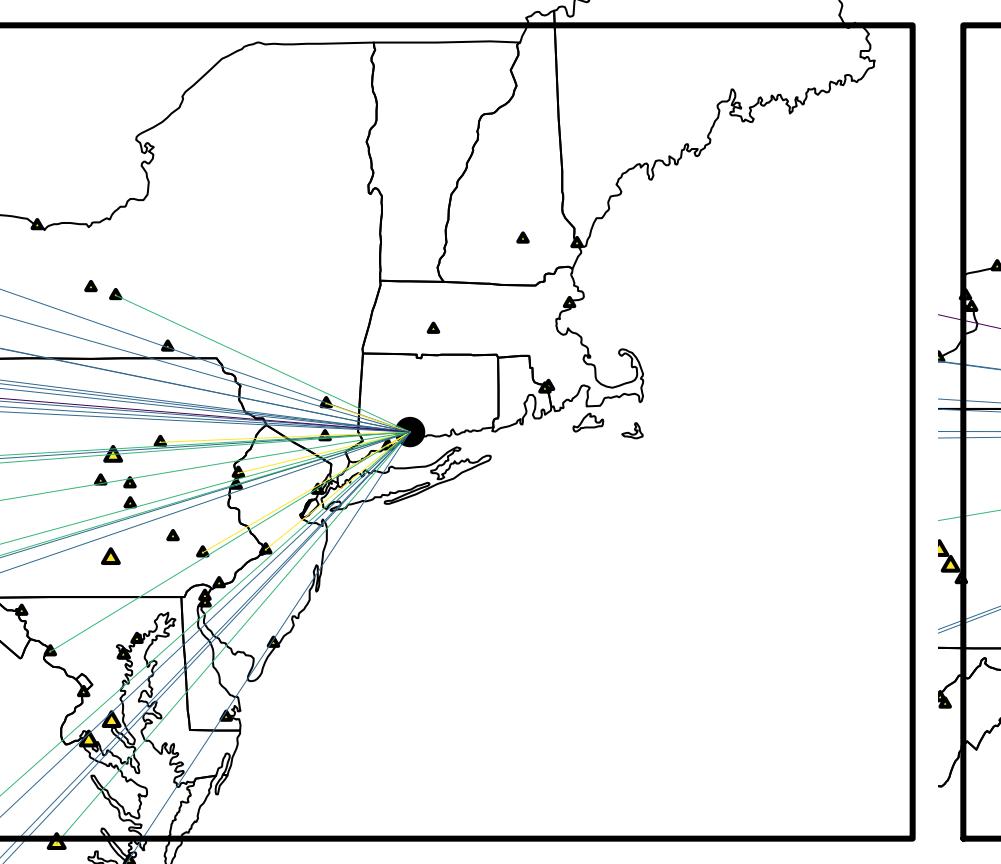
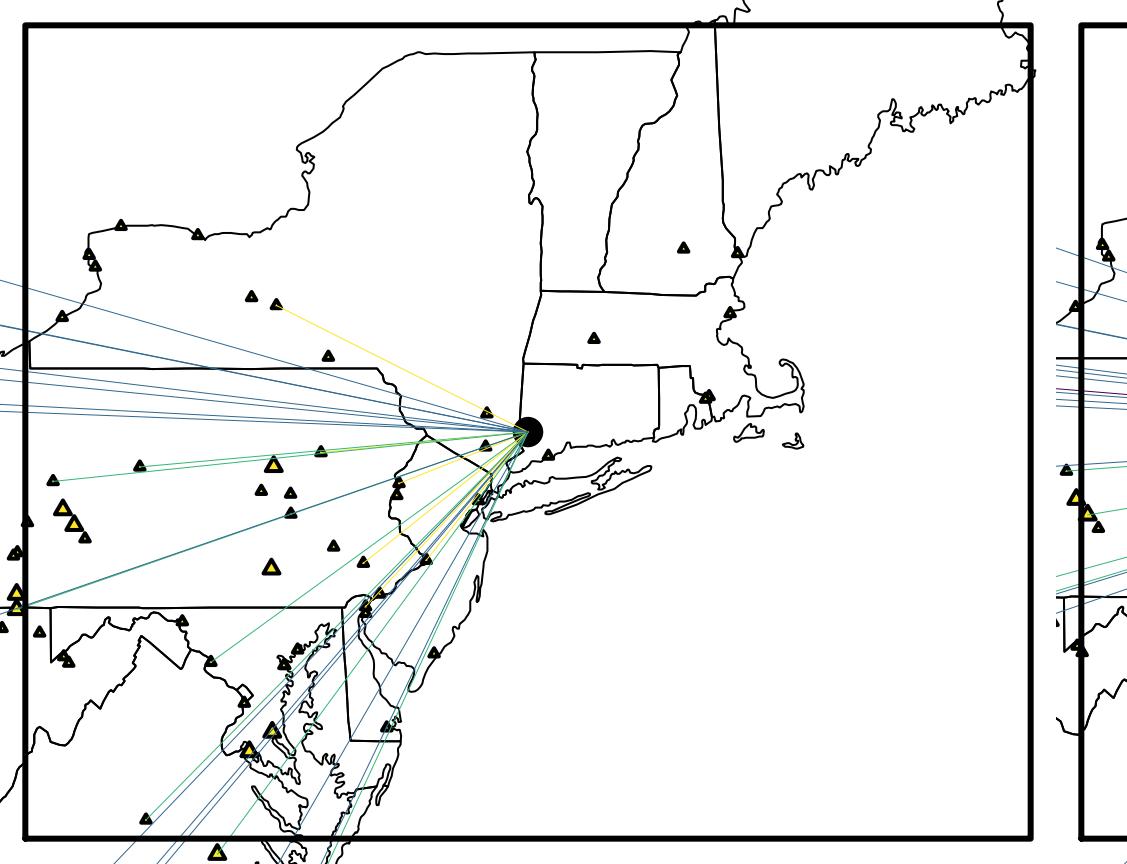
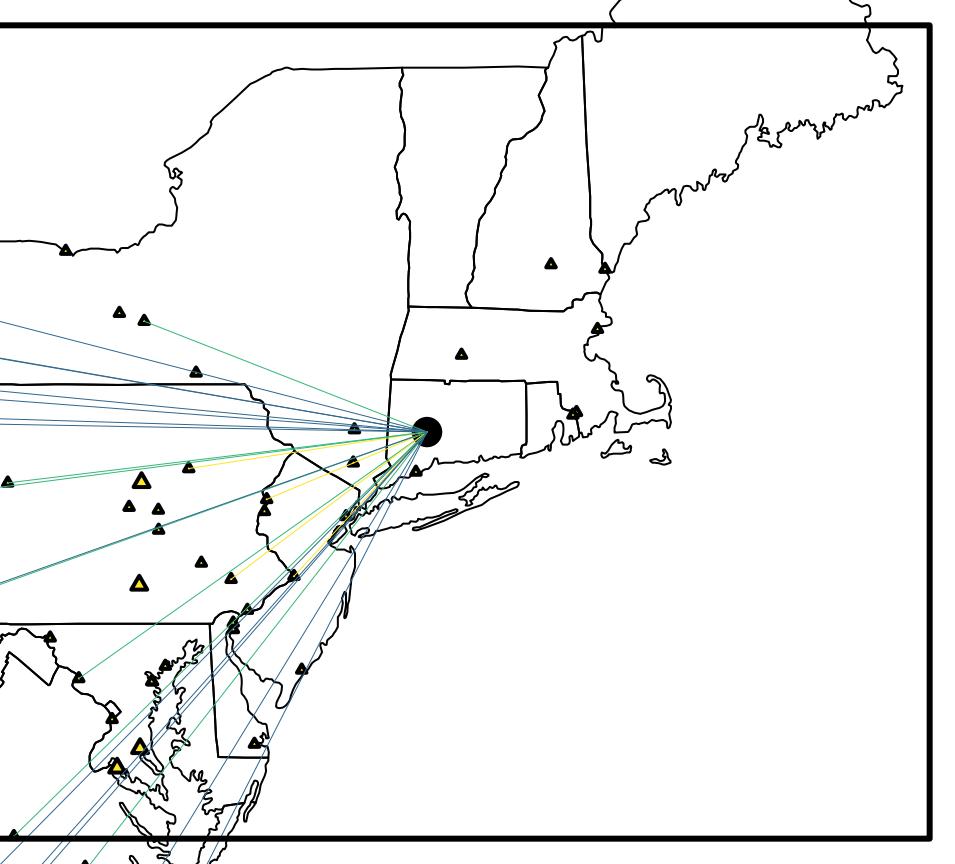
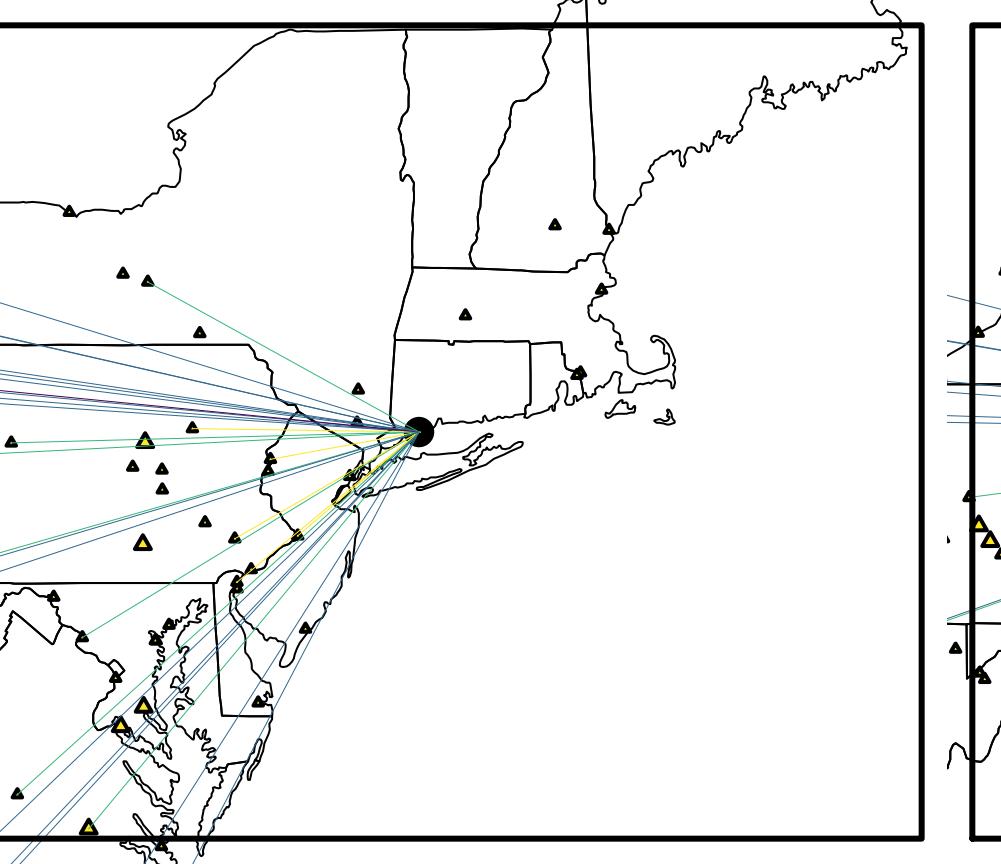
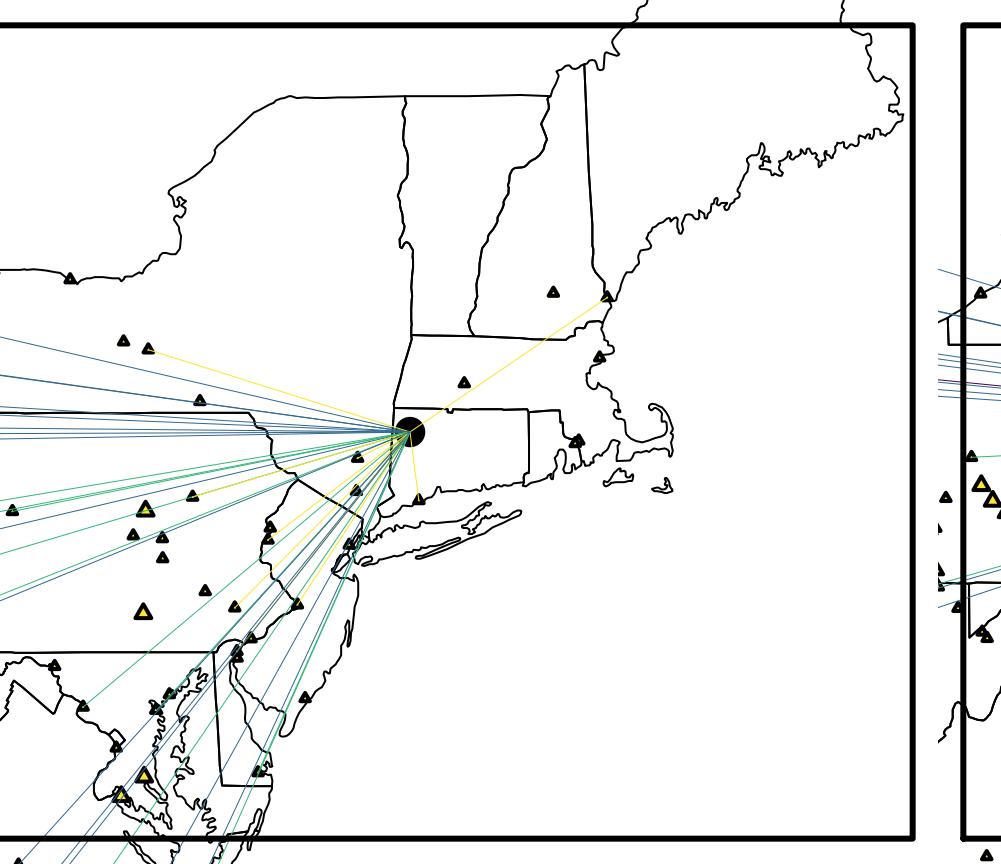
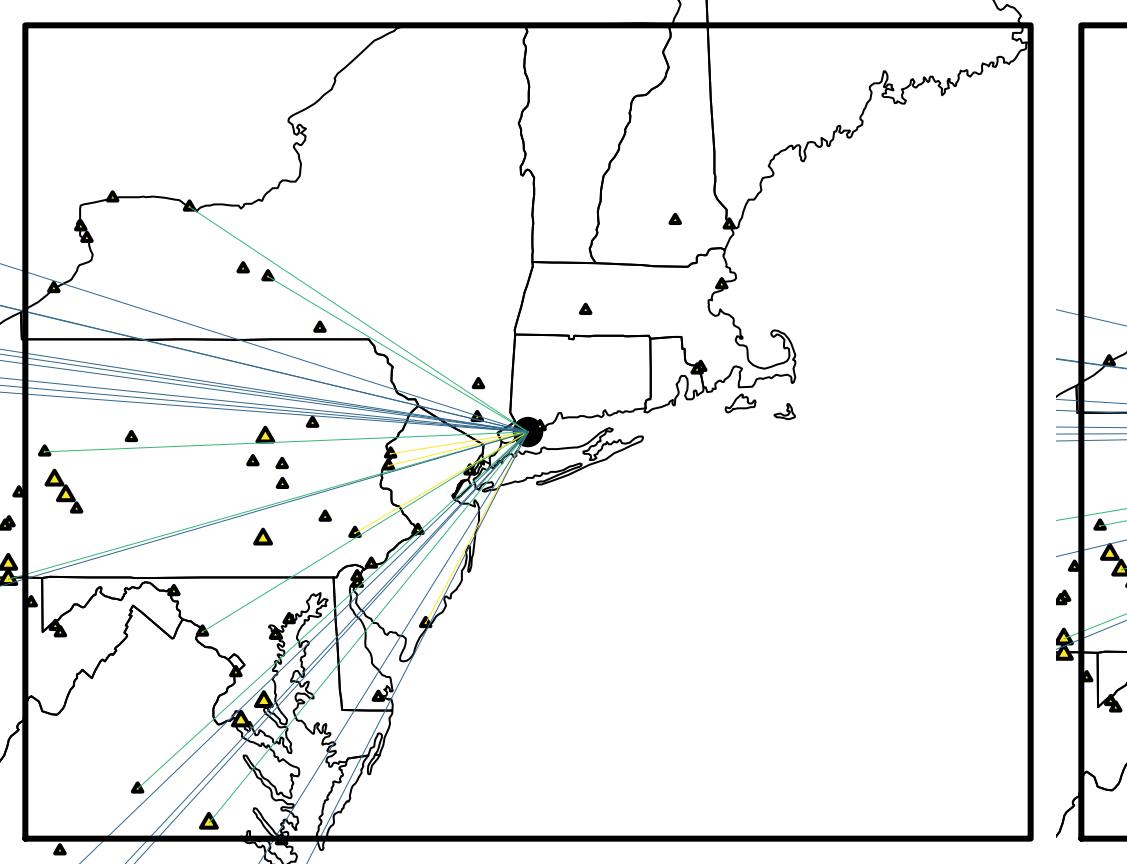
Lag 2 edges

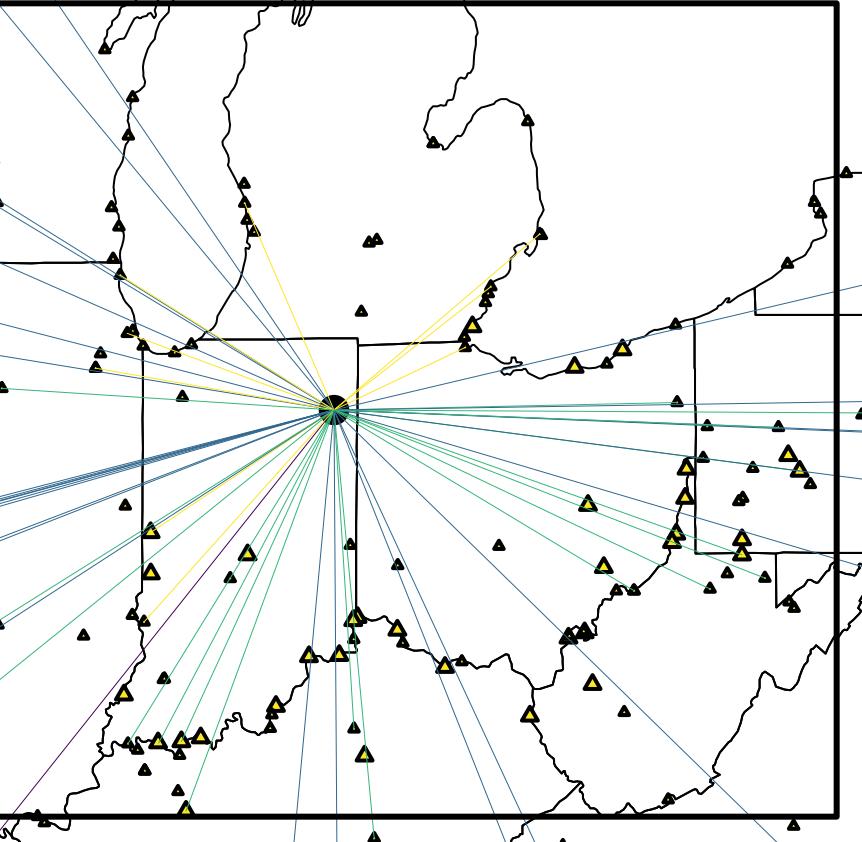
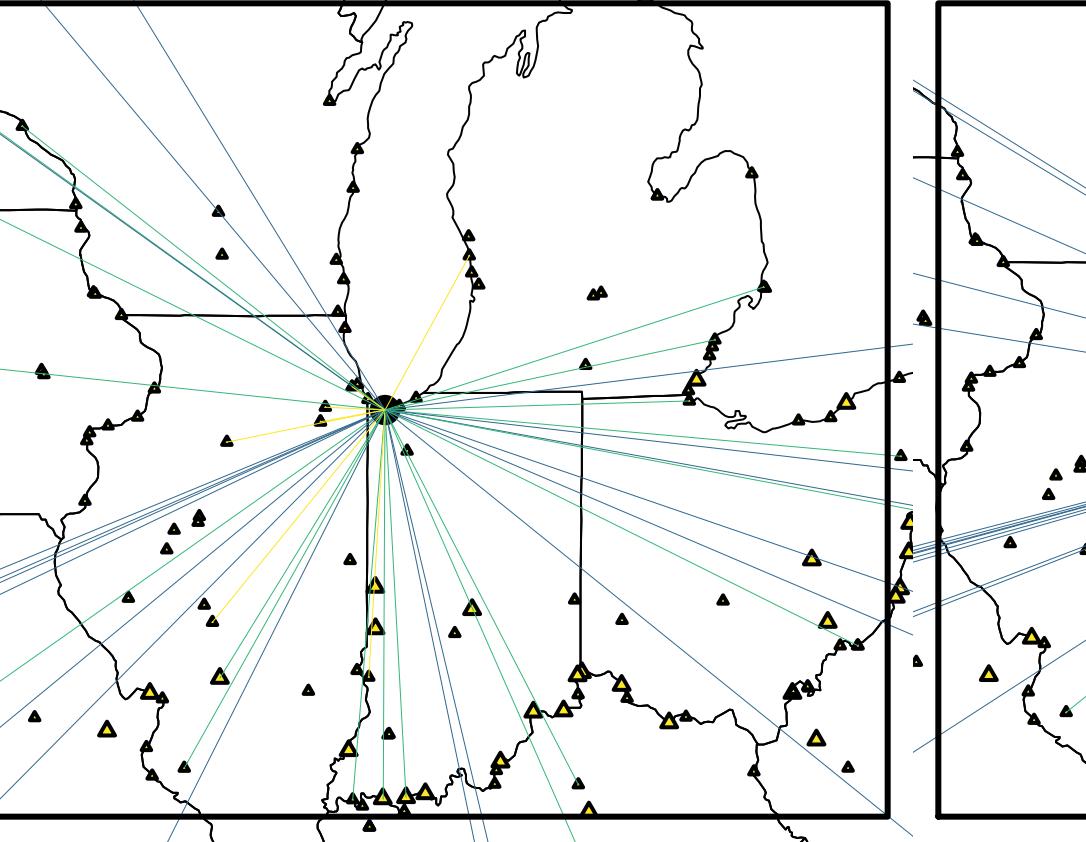
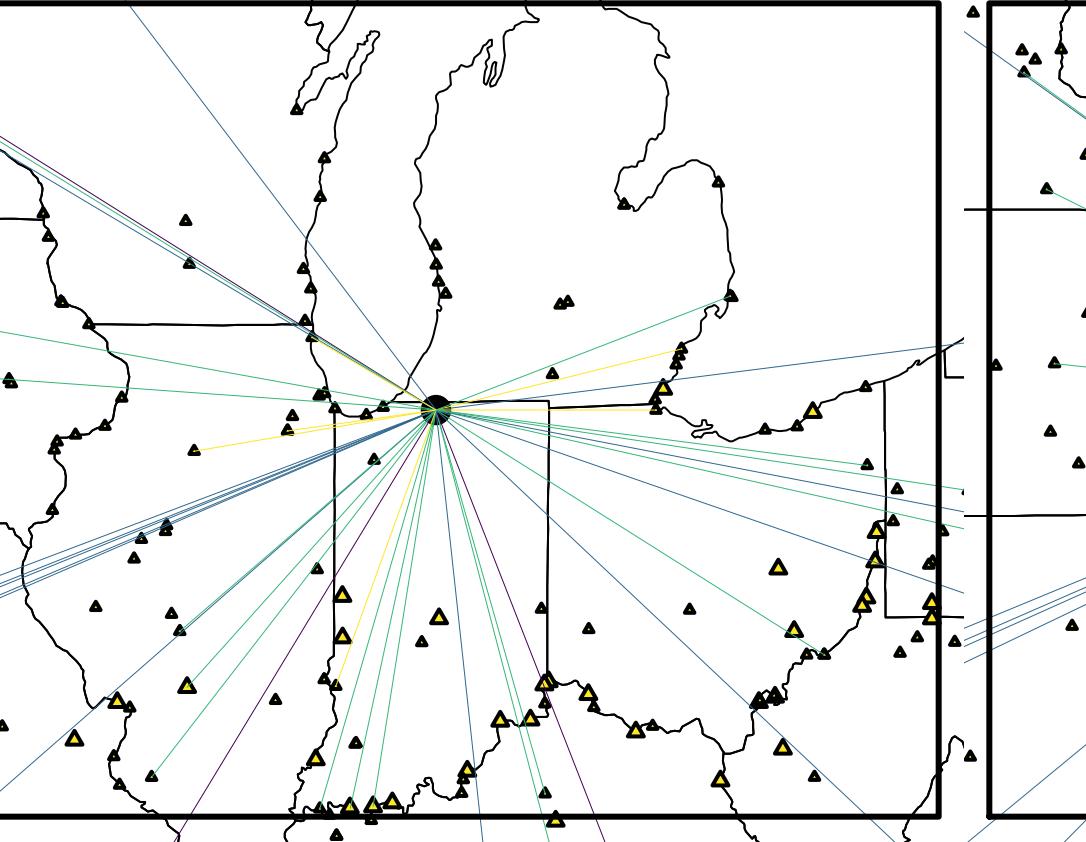
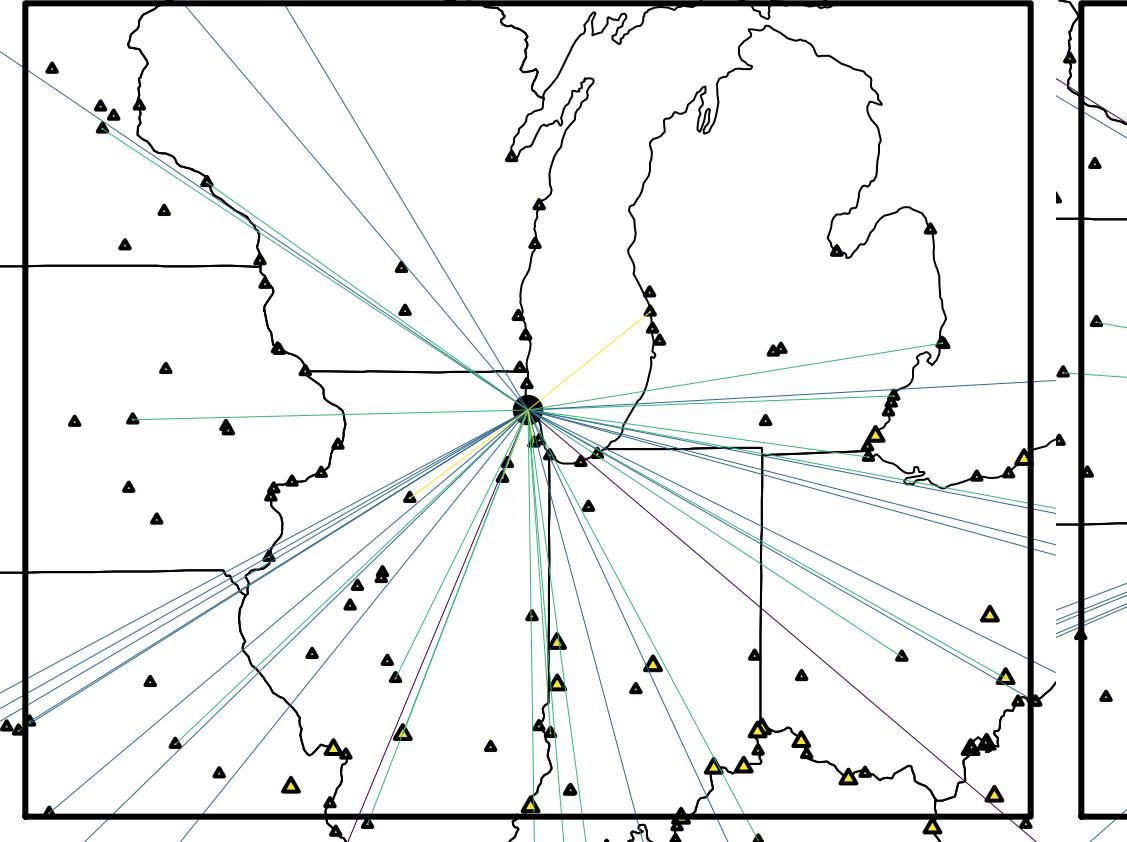
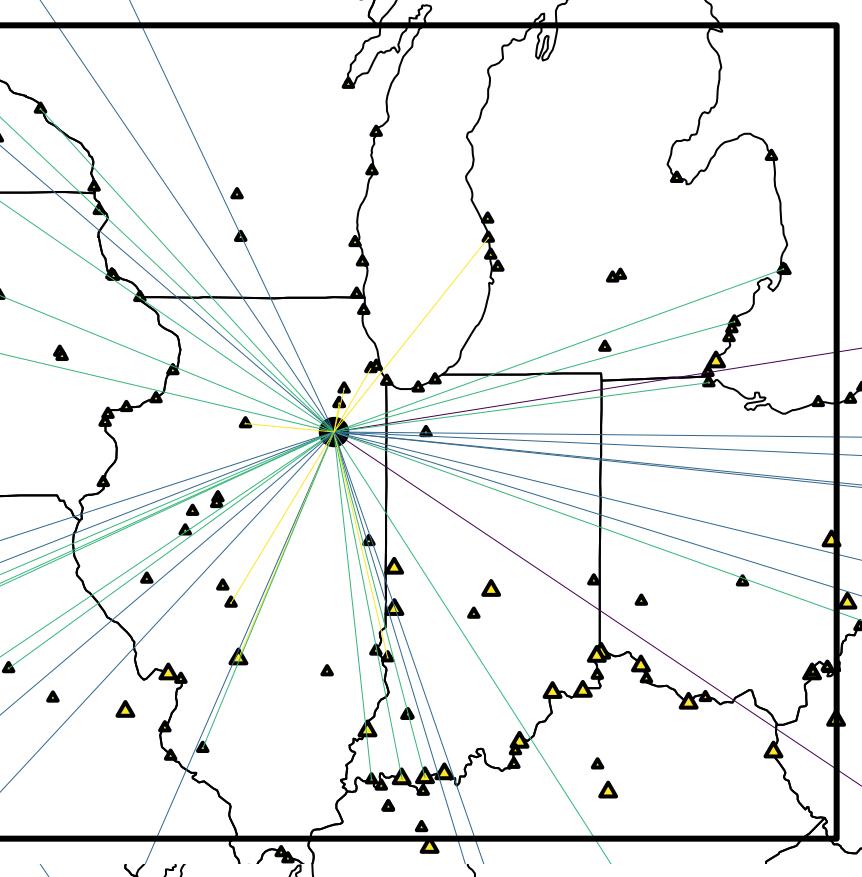
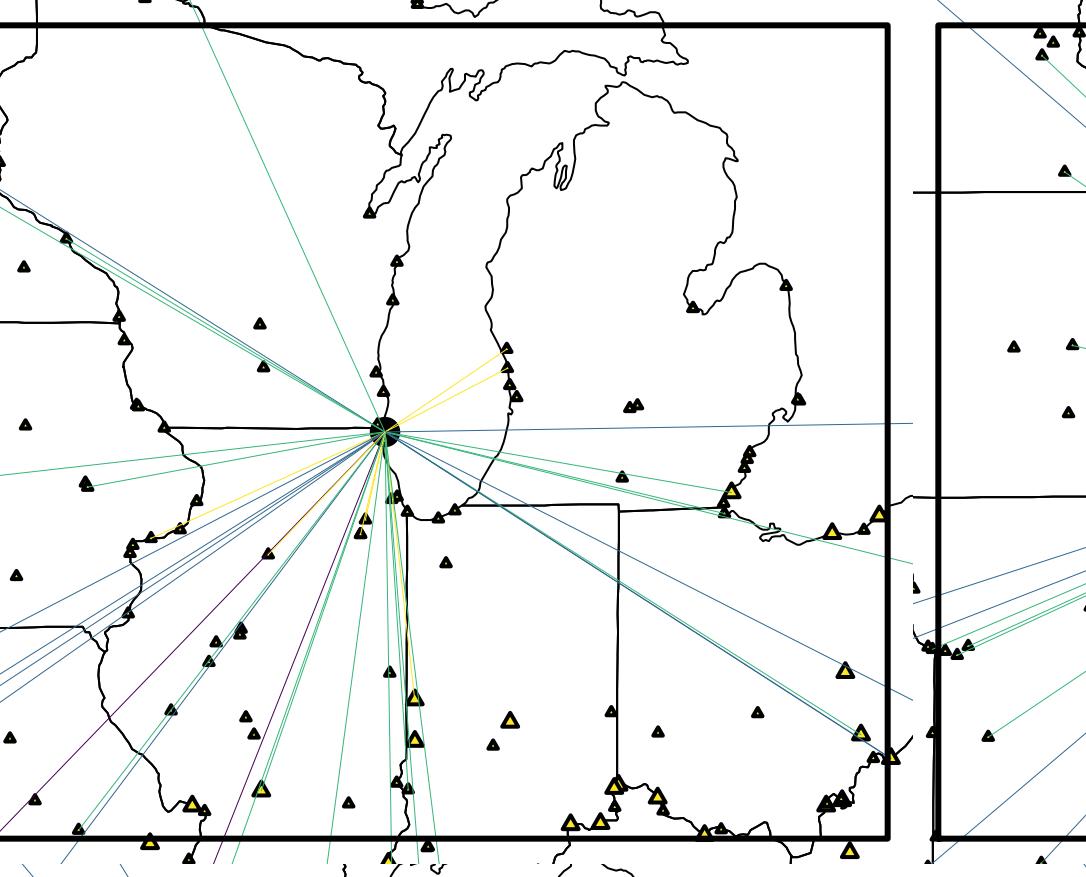
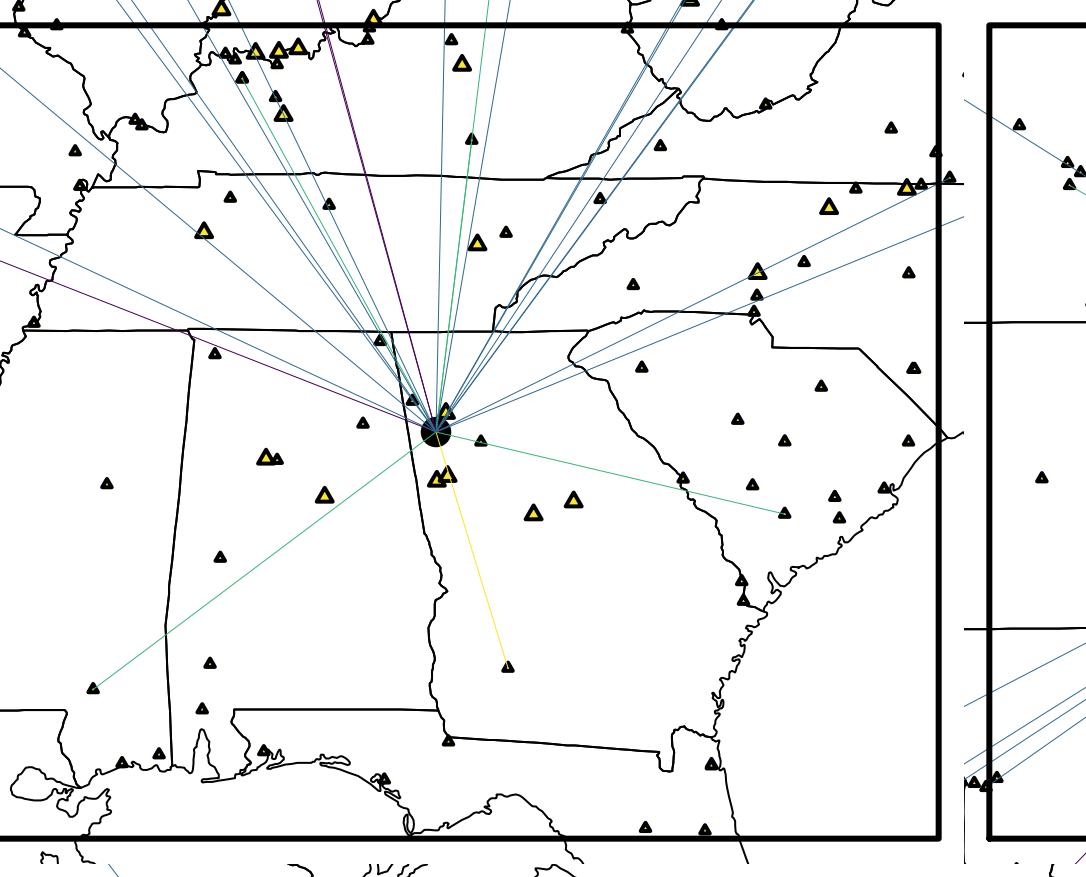
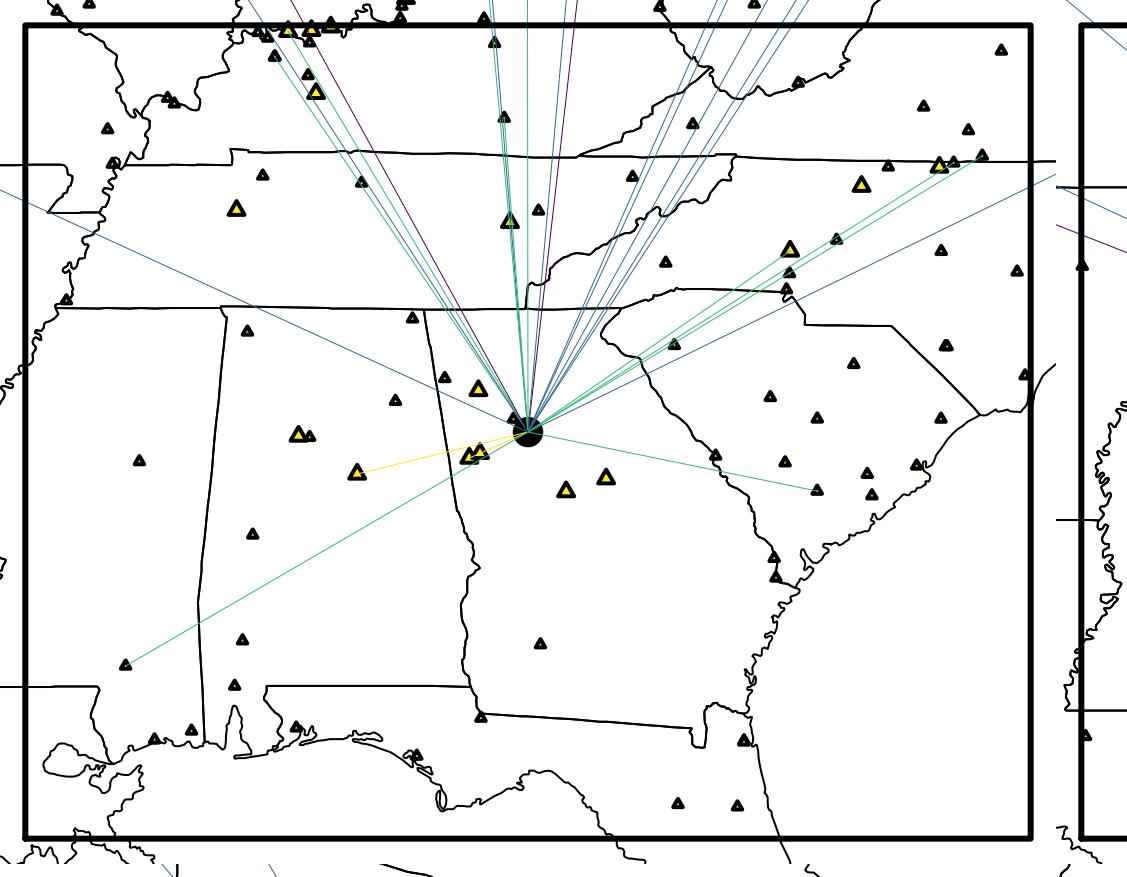


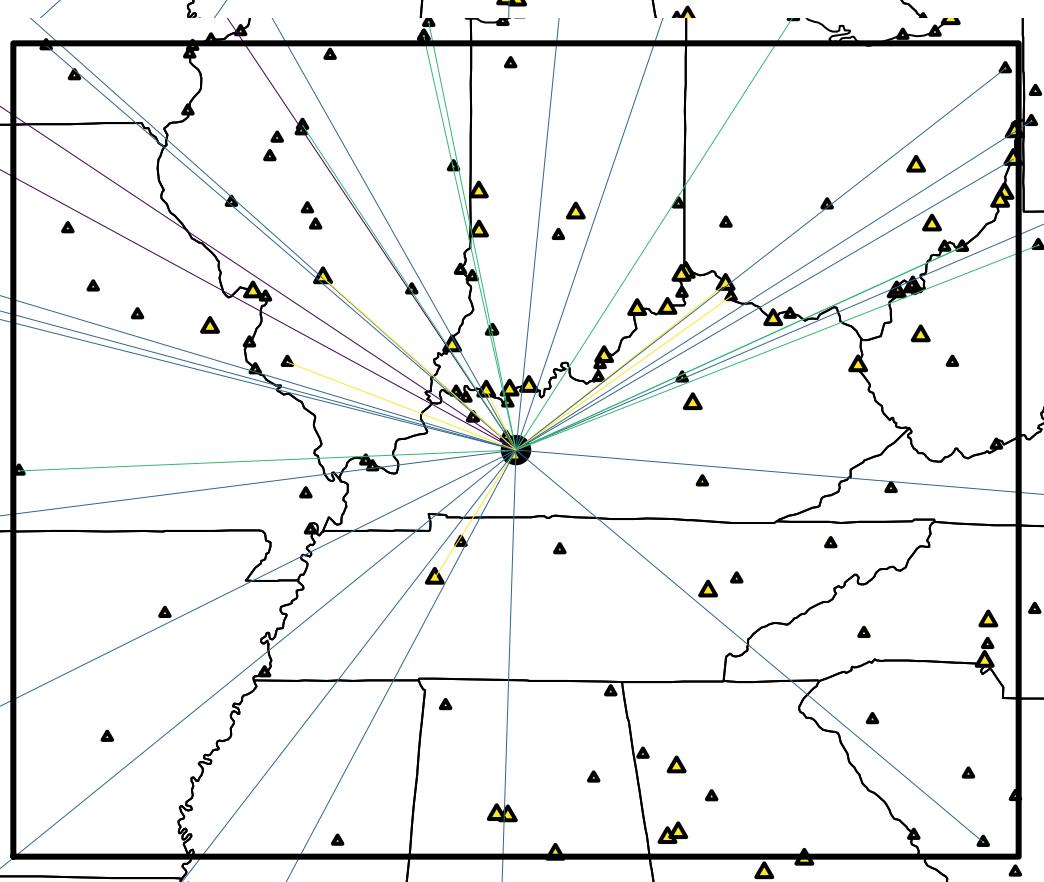
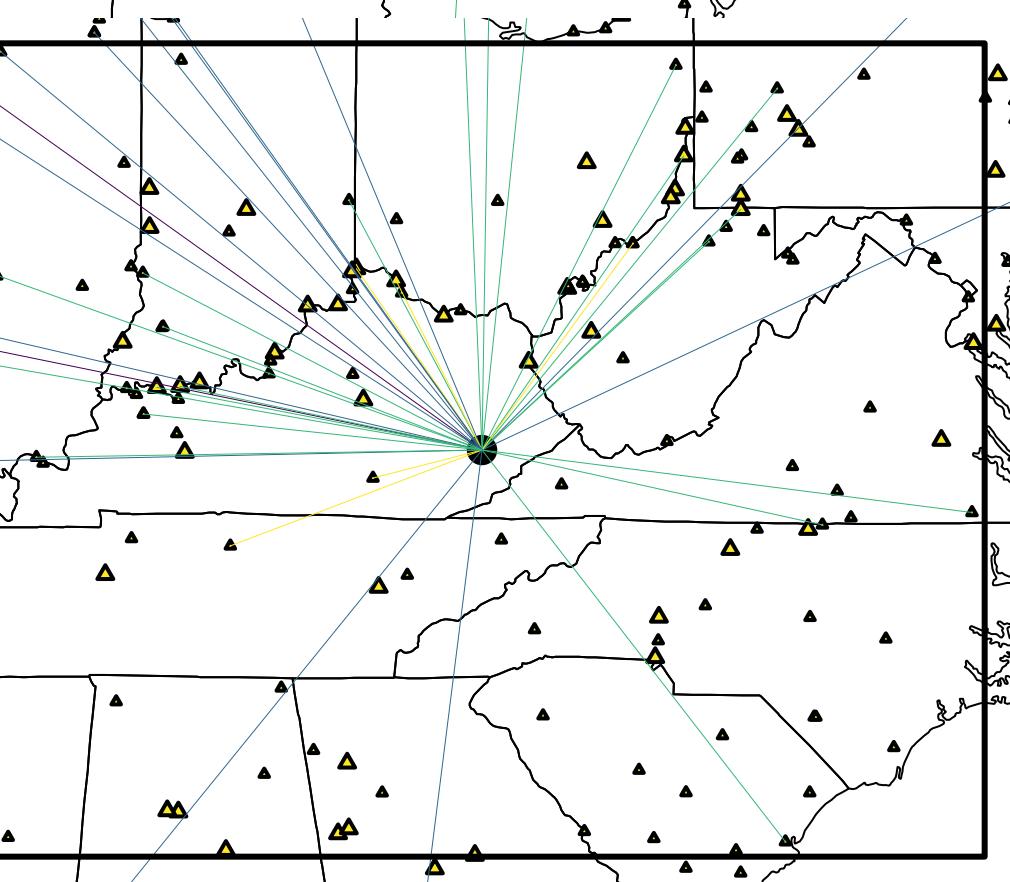
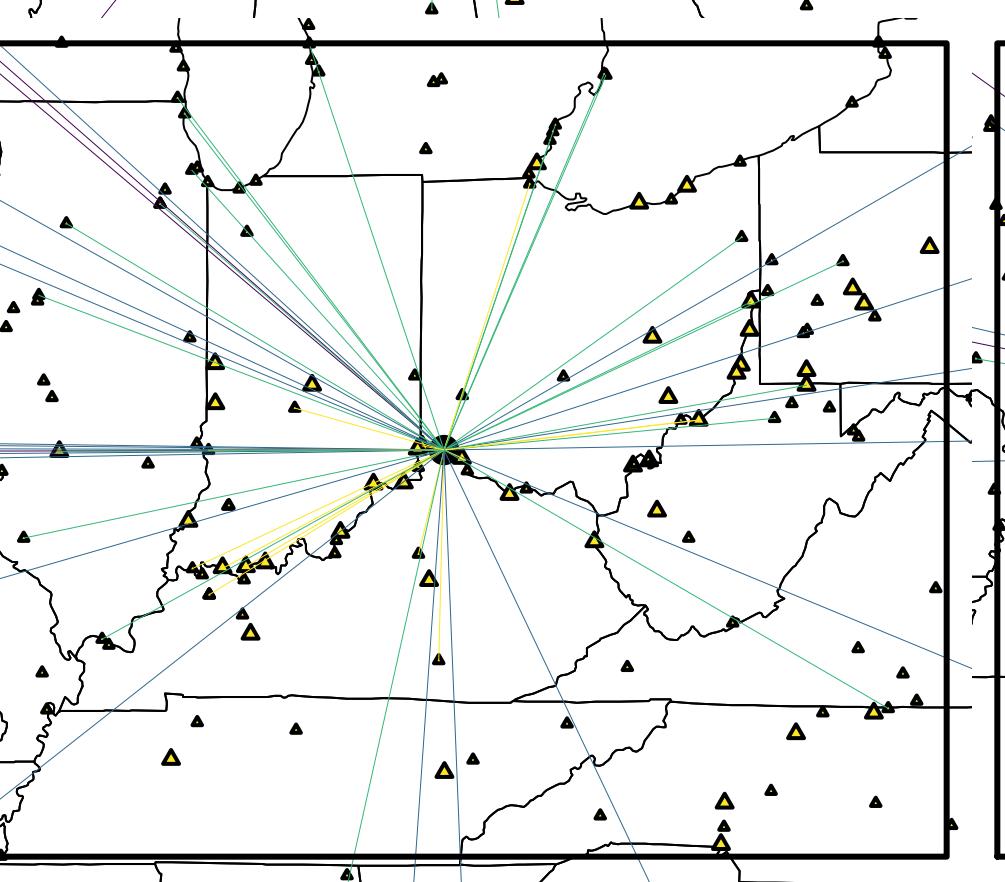
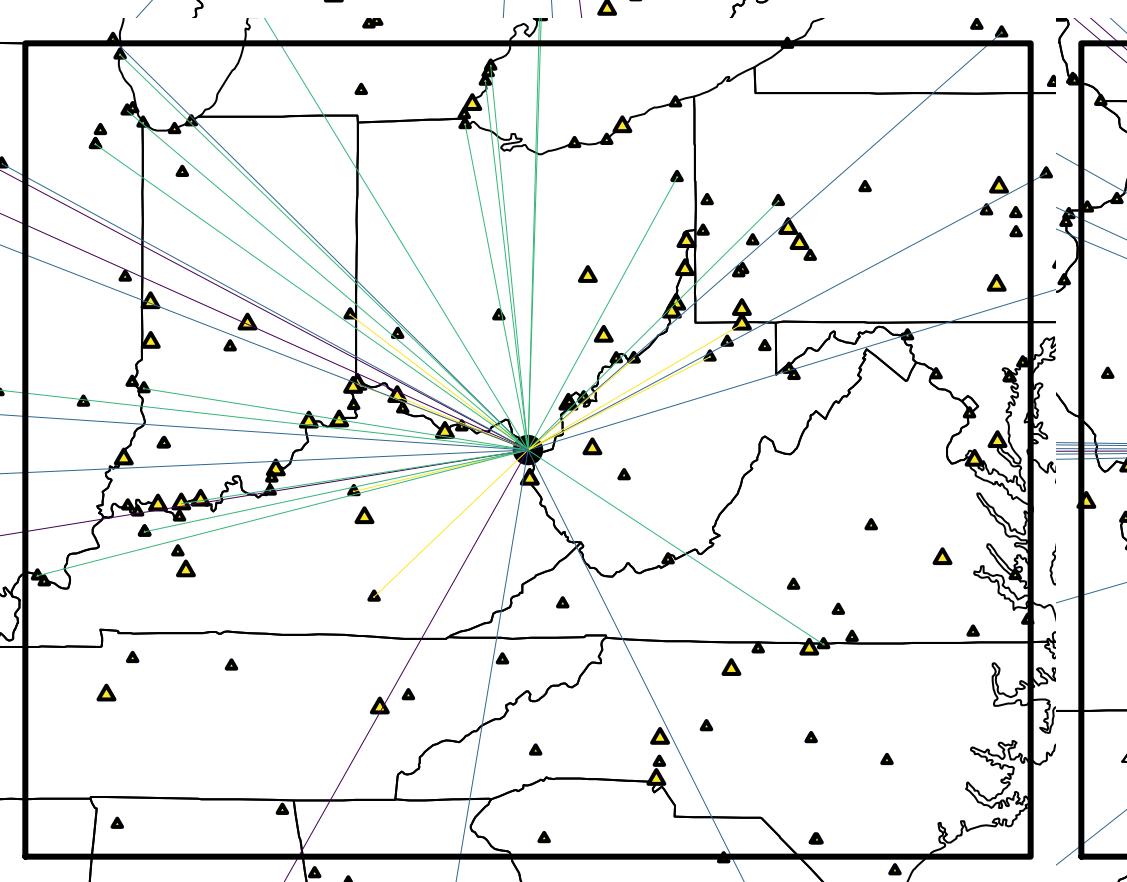
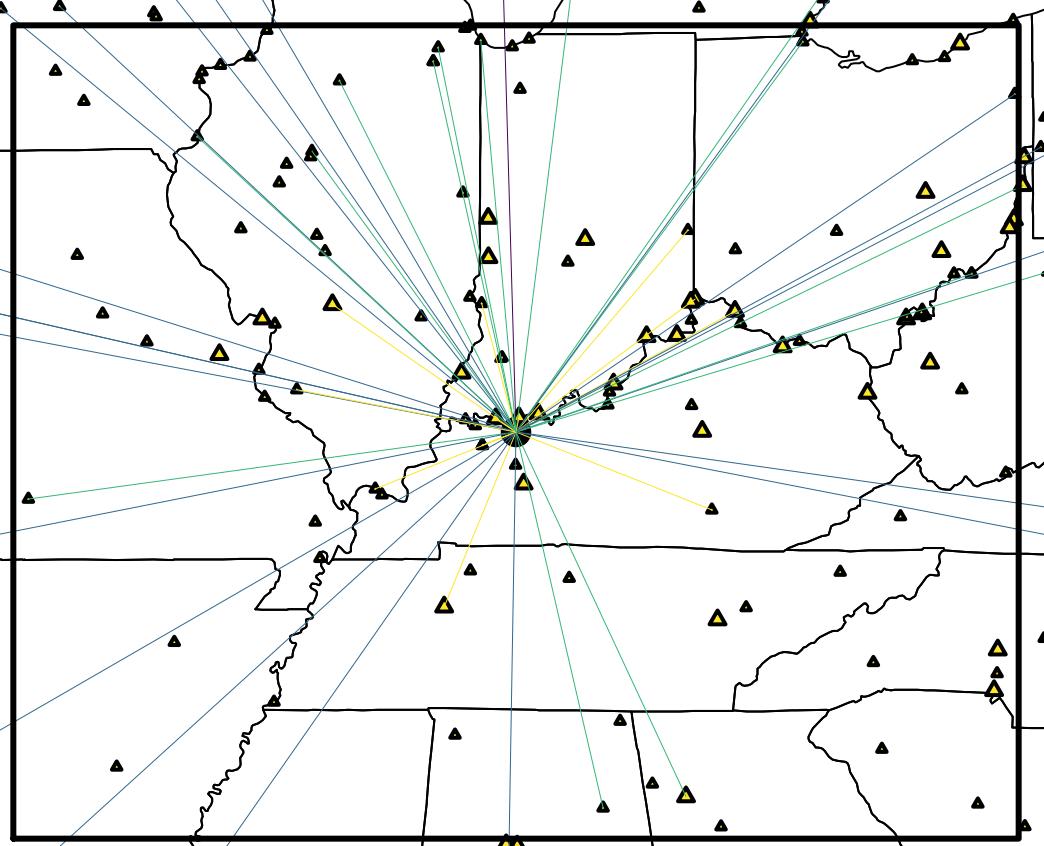
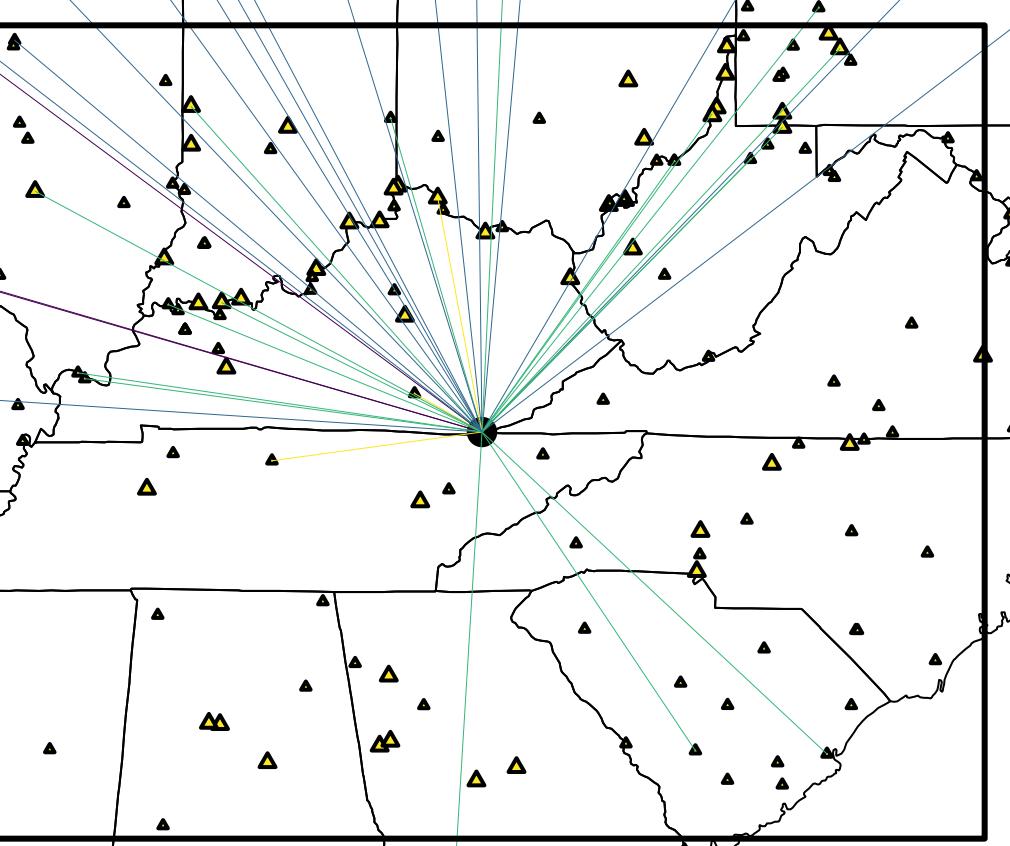
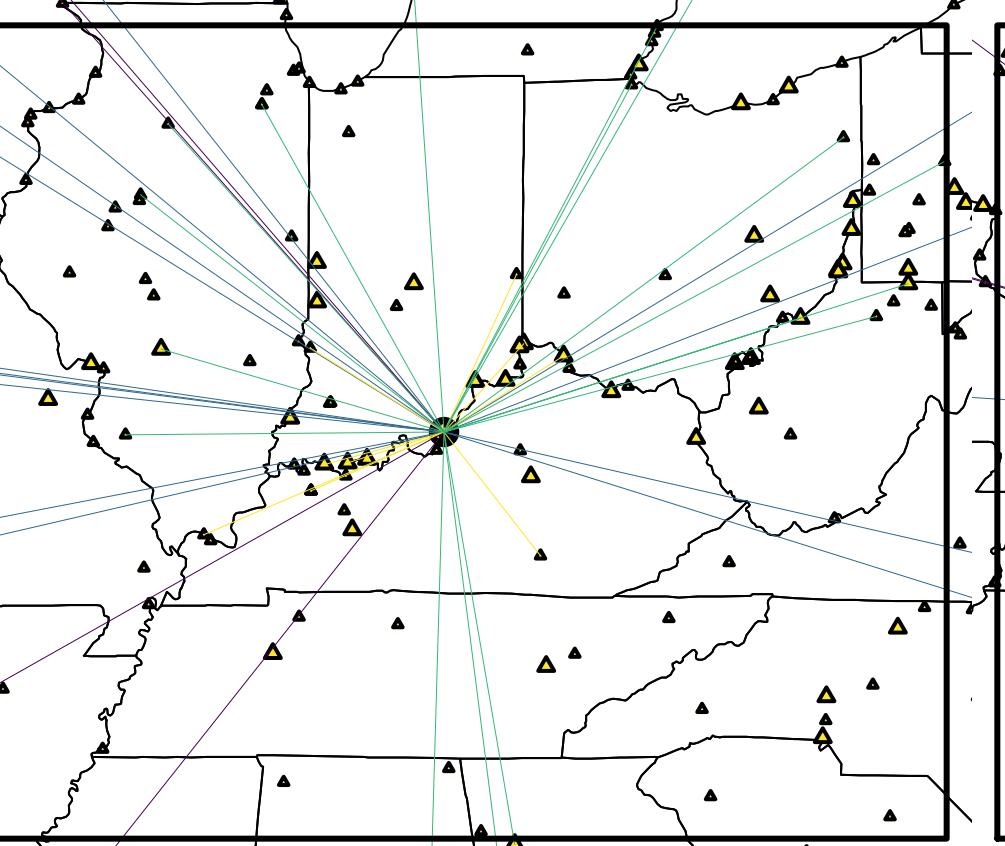
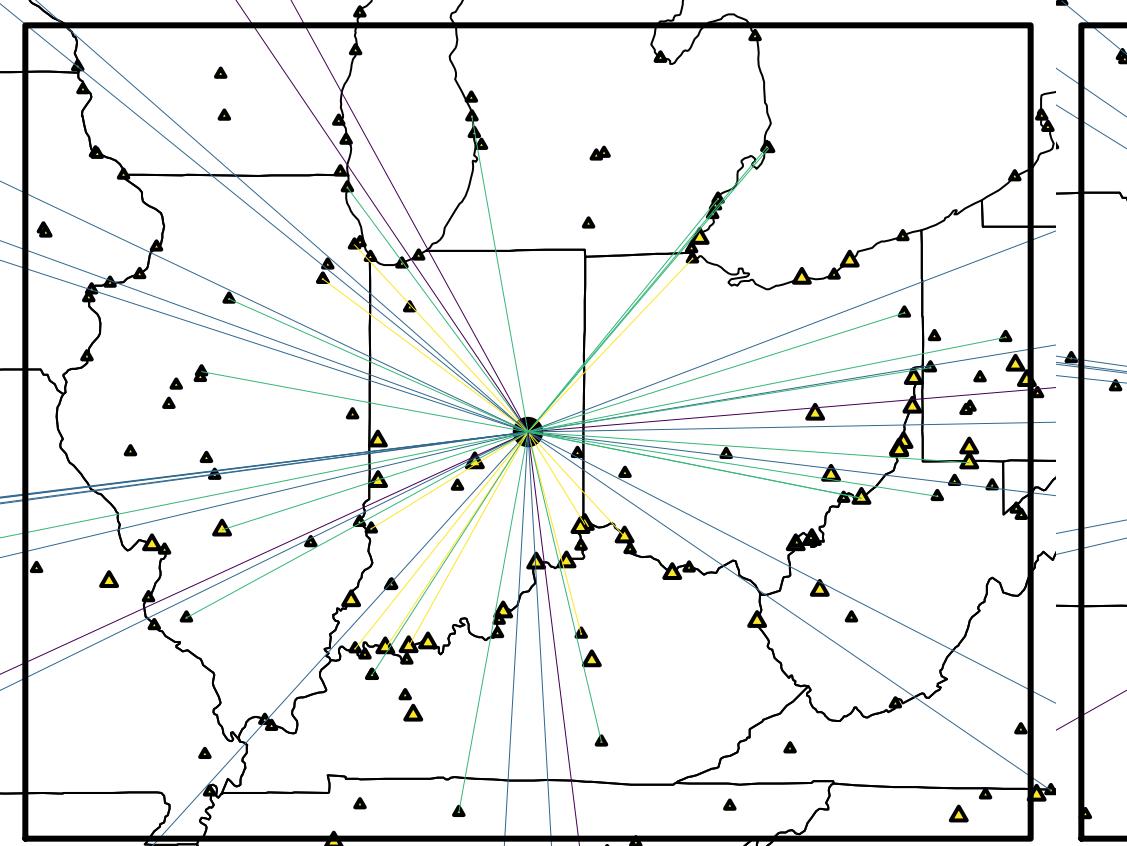
Lag 3 edges

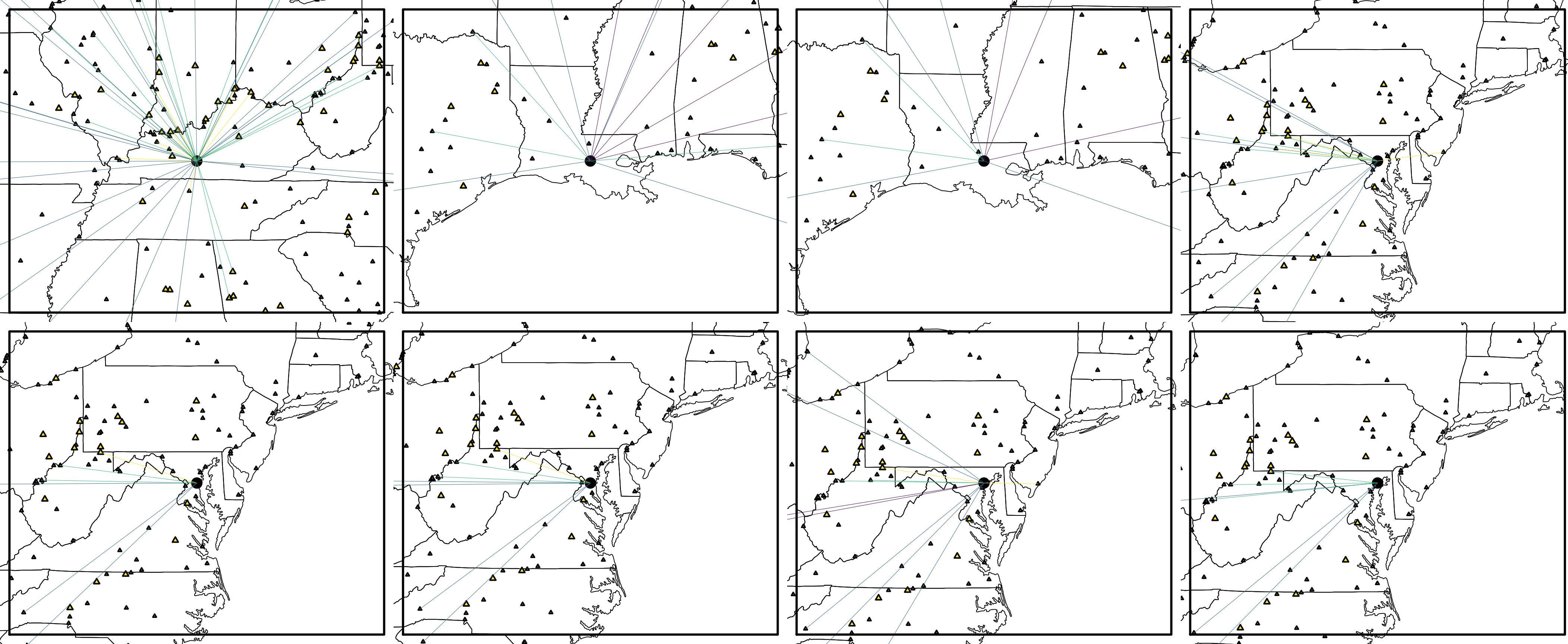


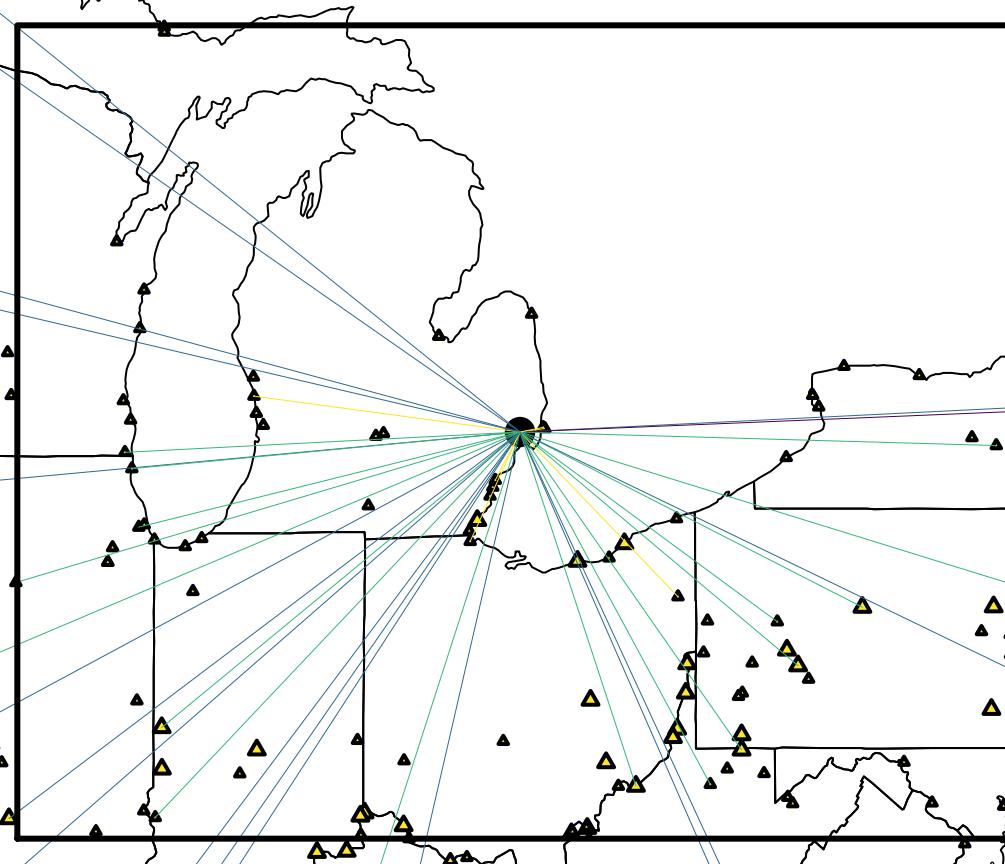
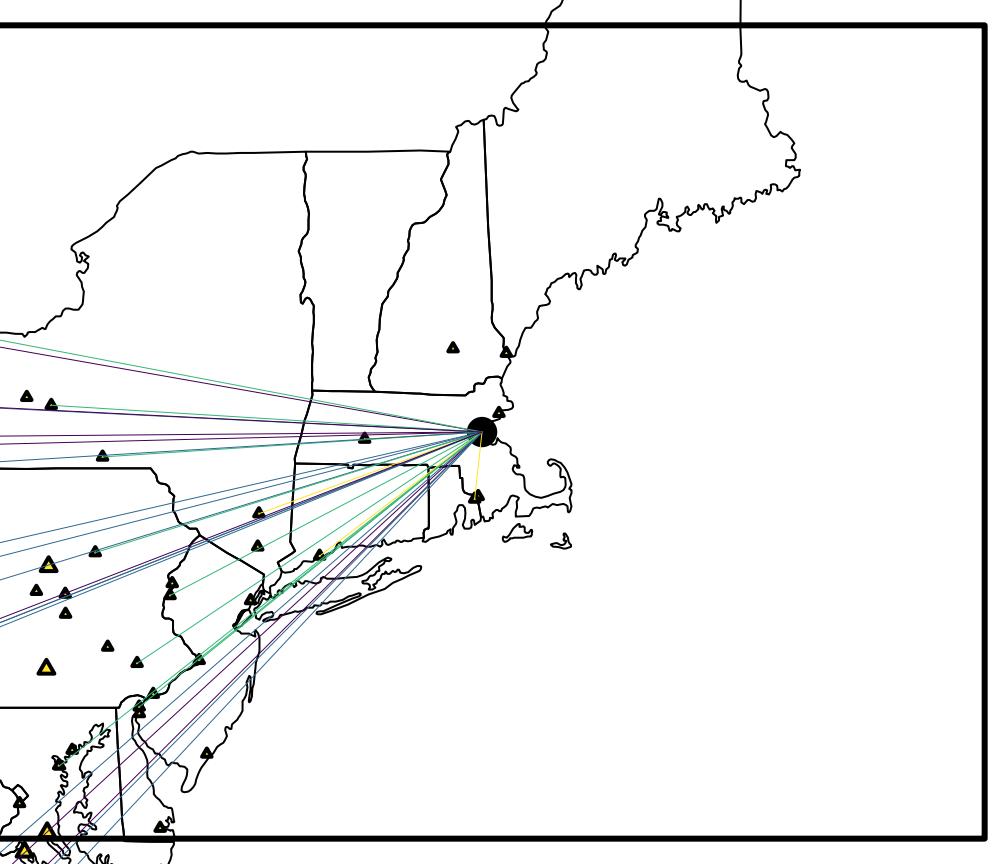
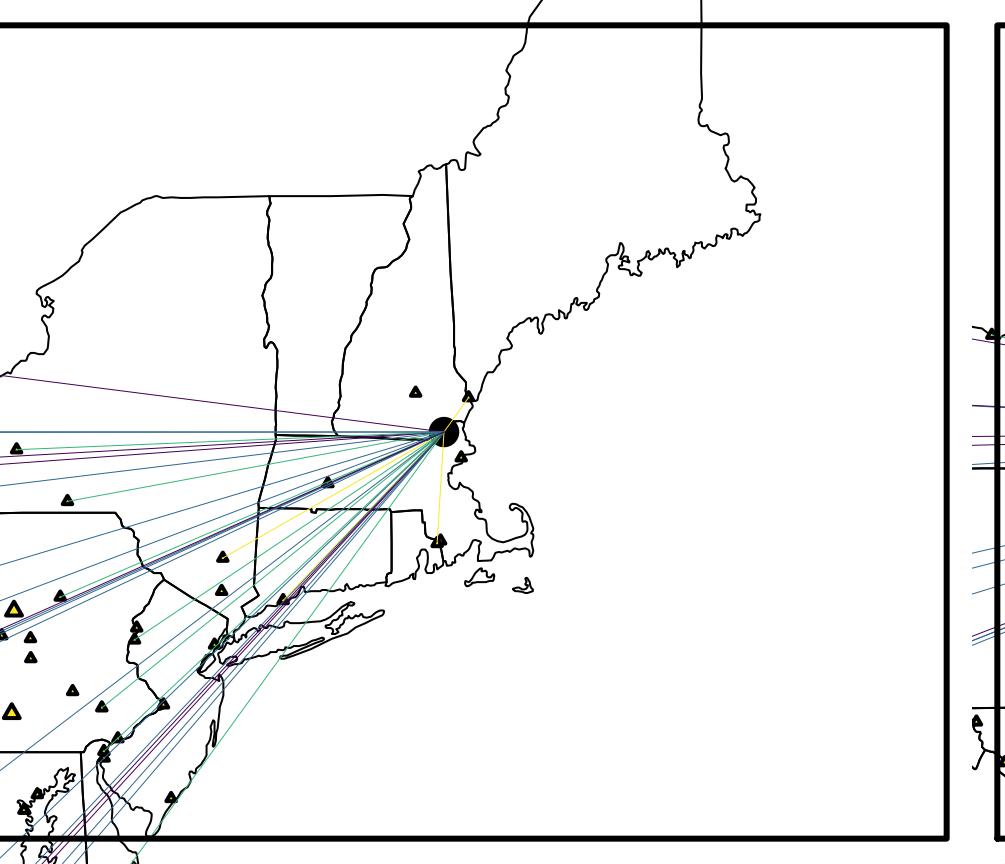
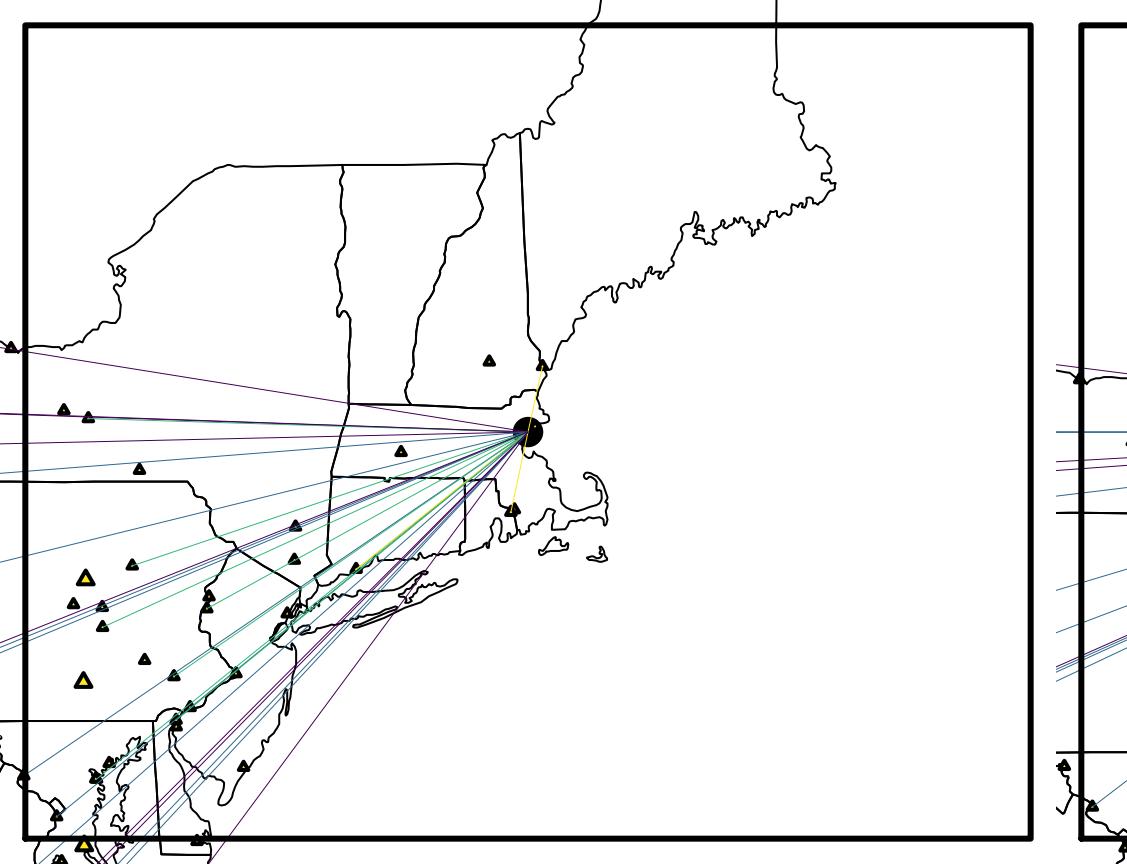
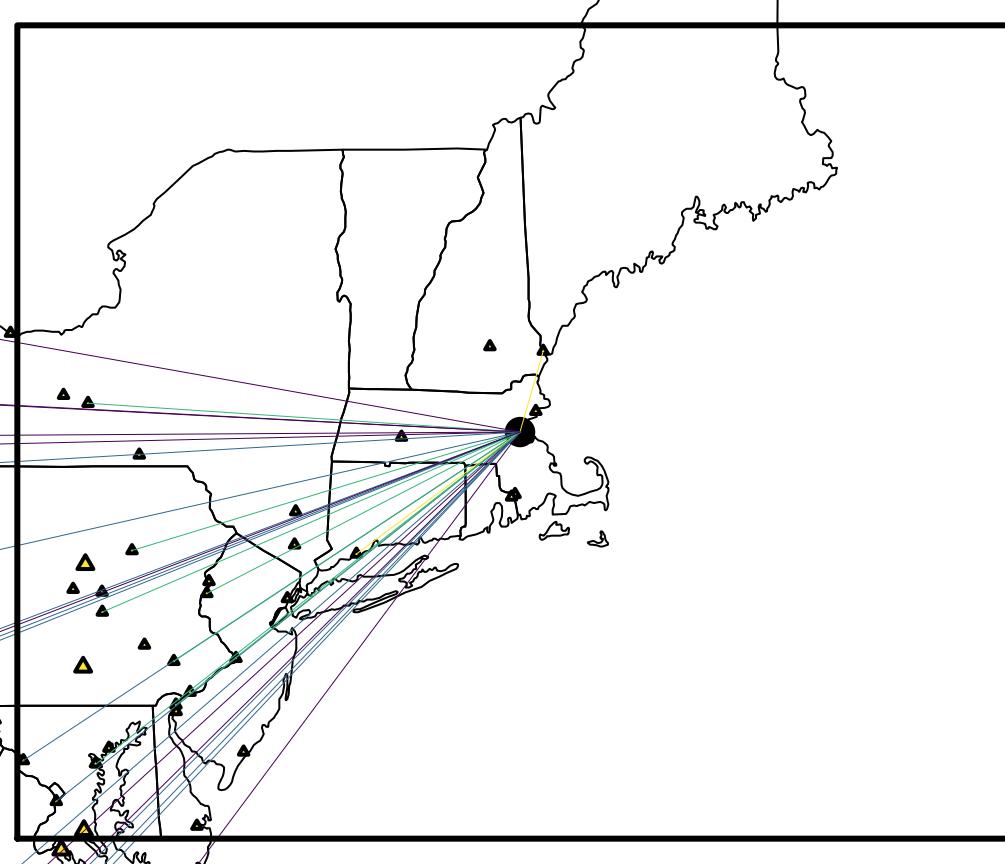
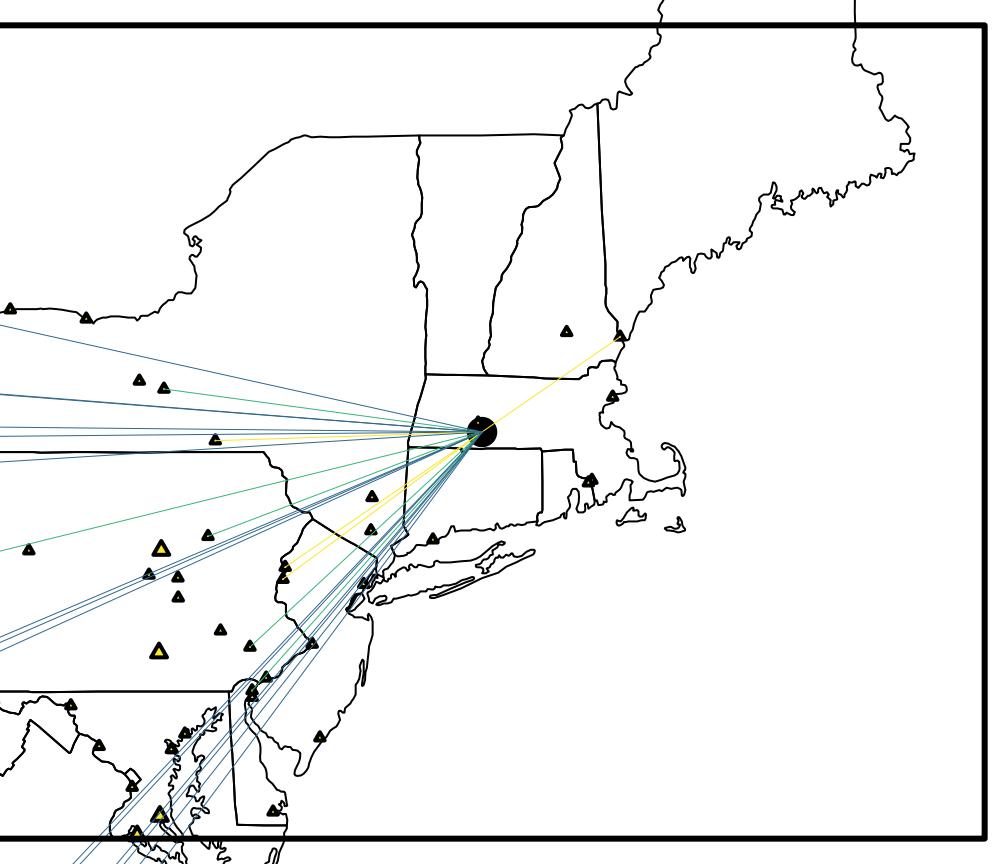
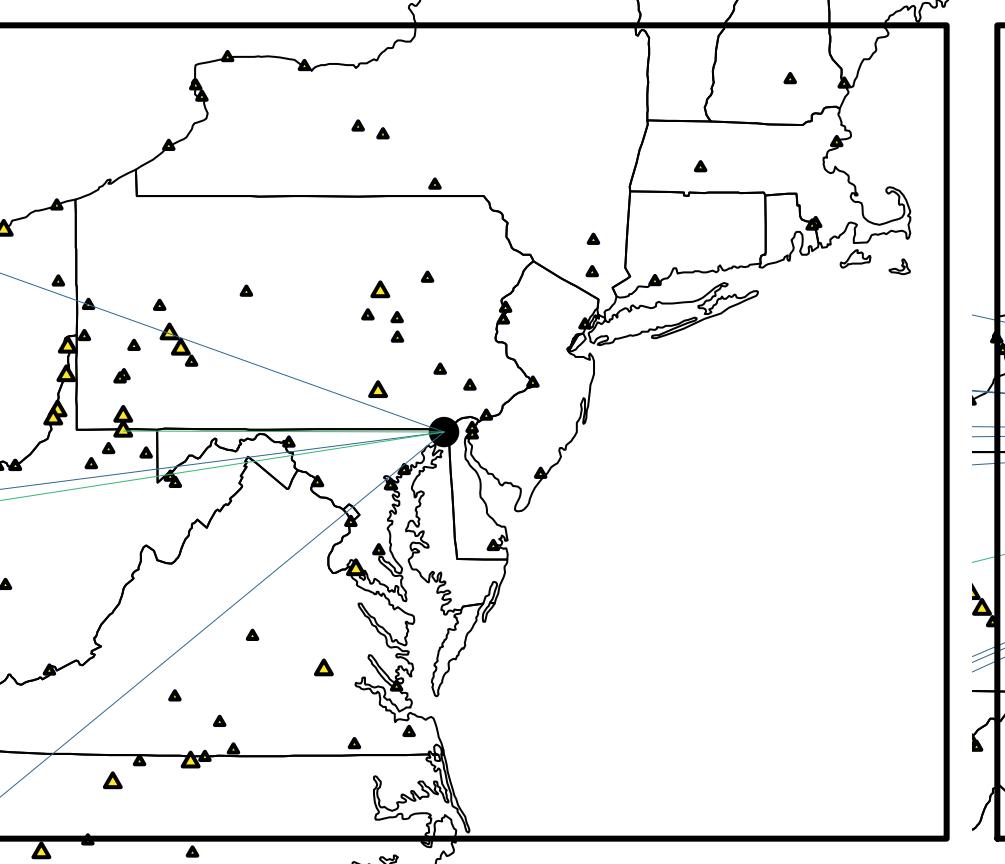
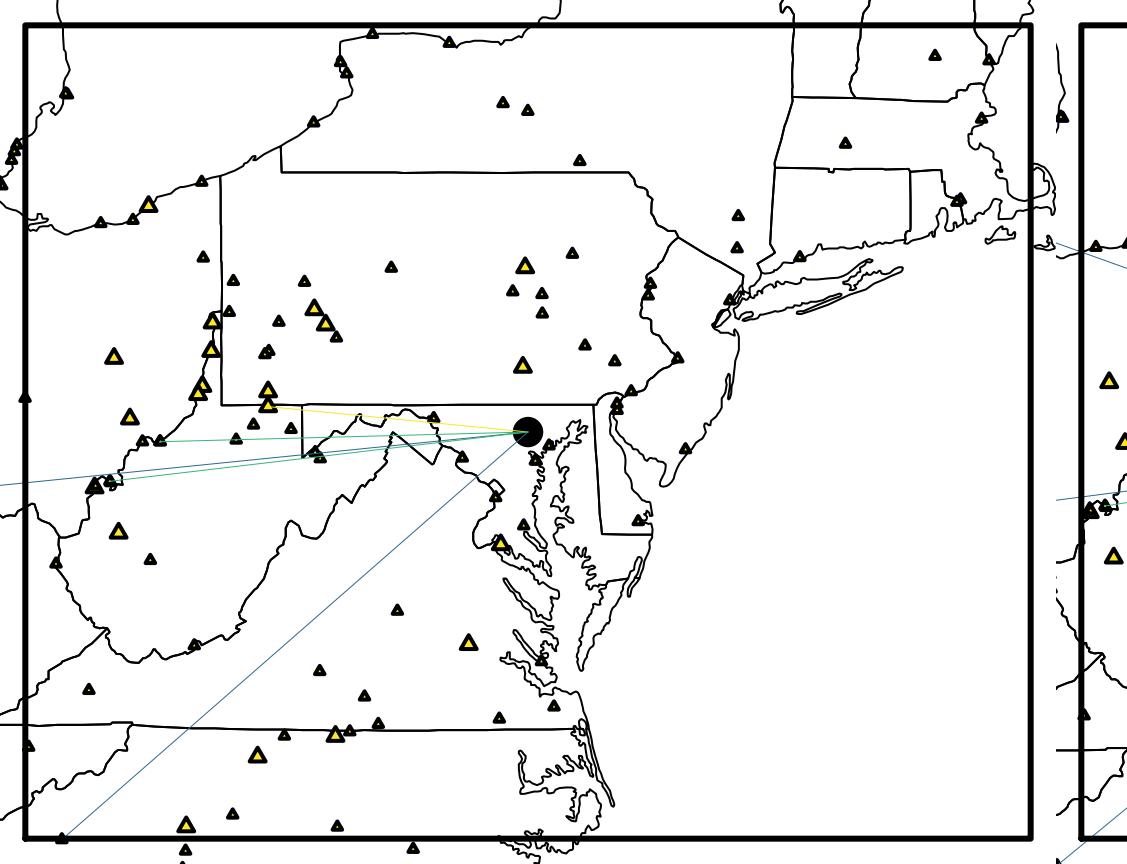


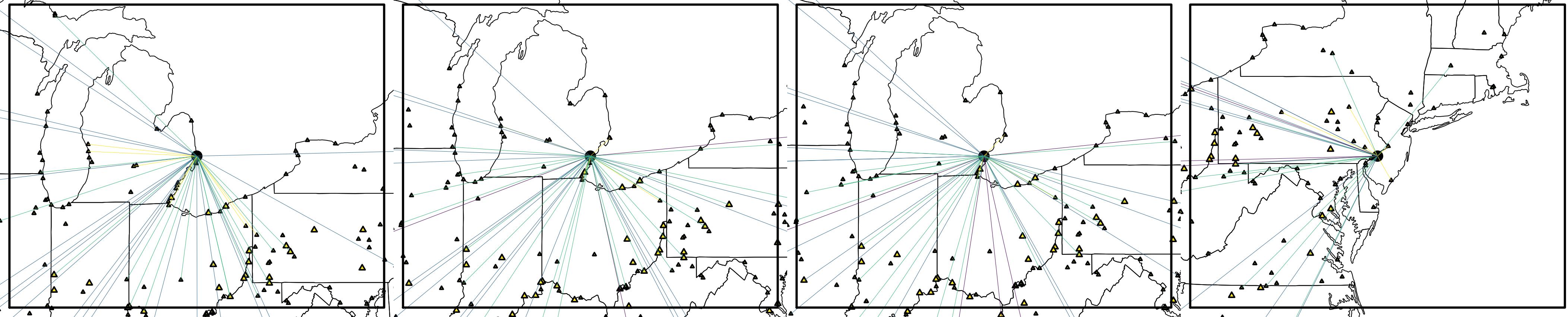
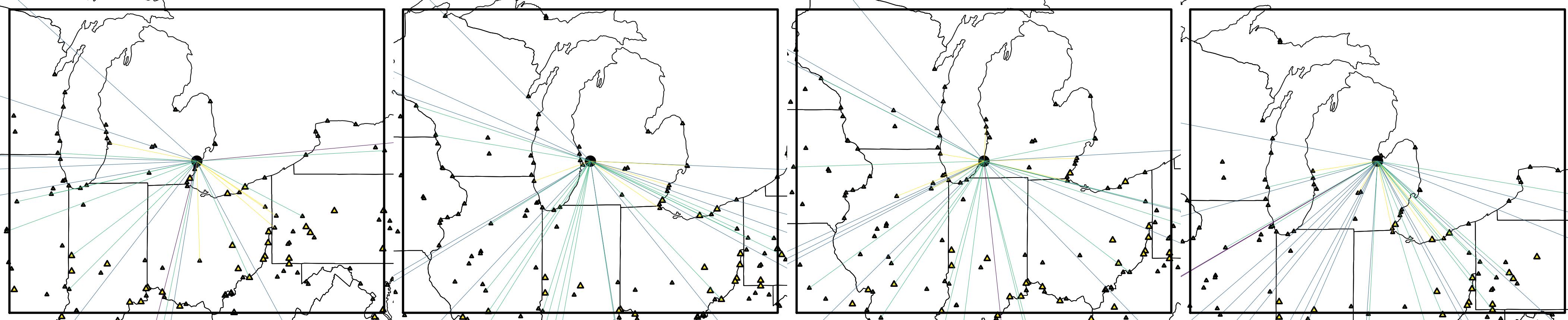


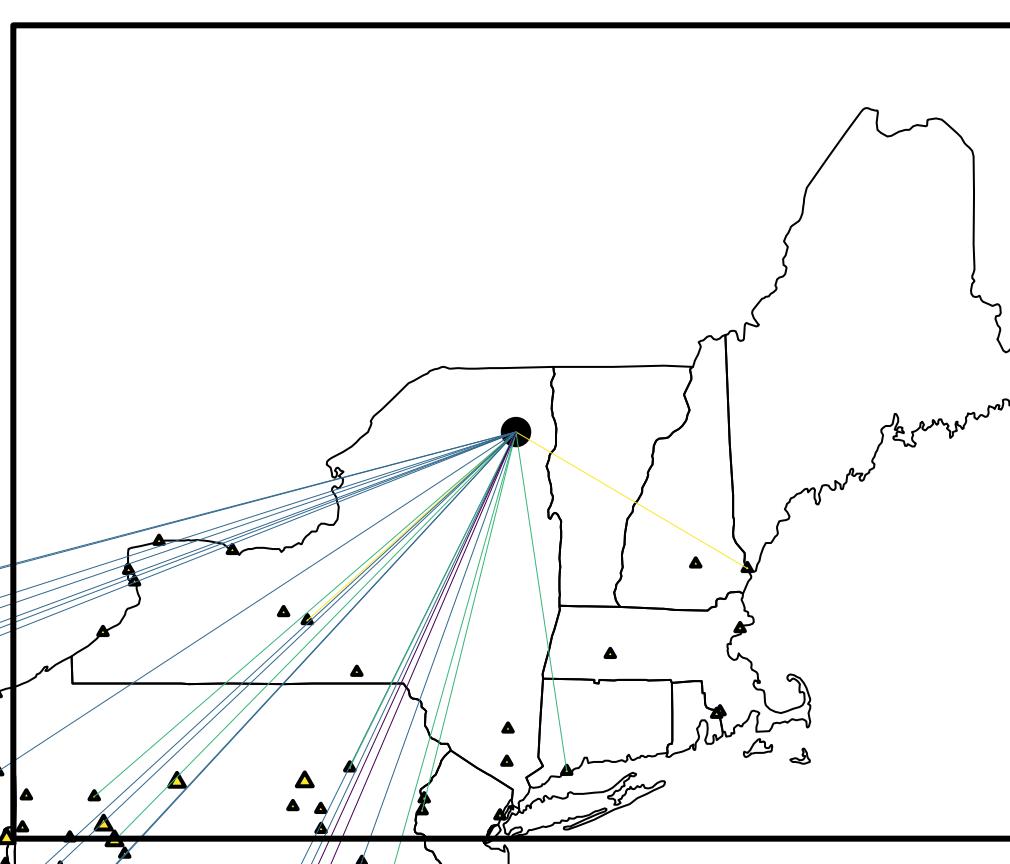
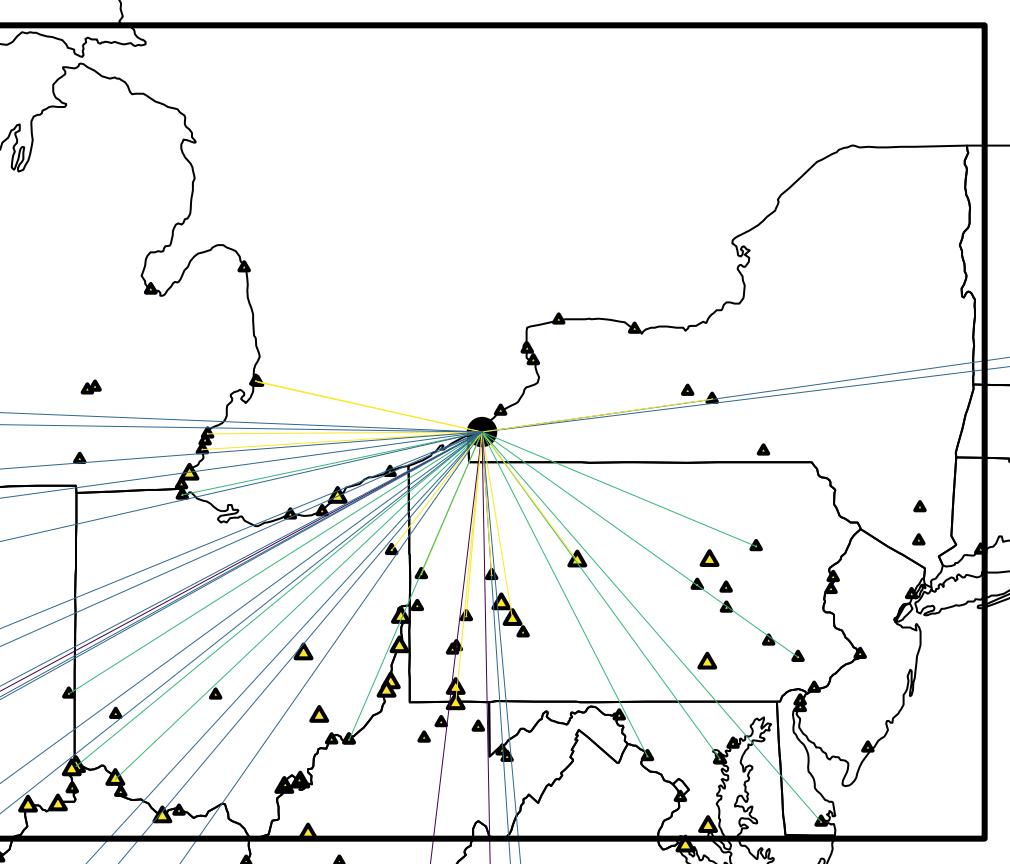
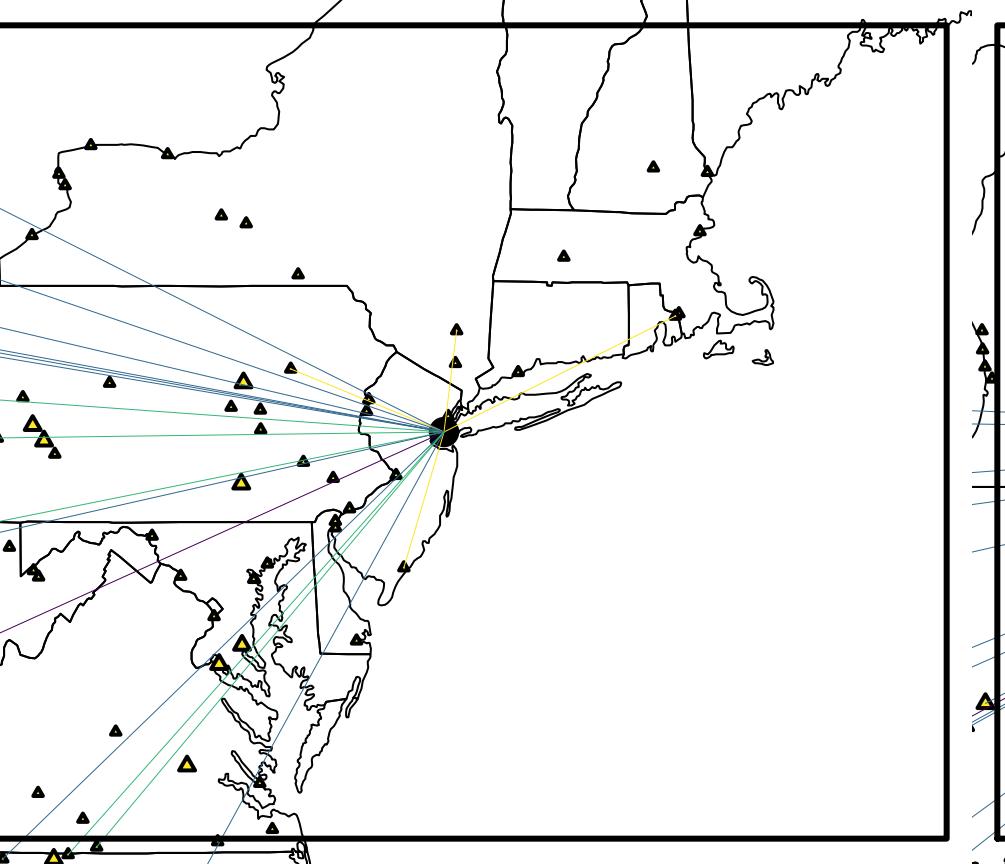
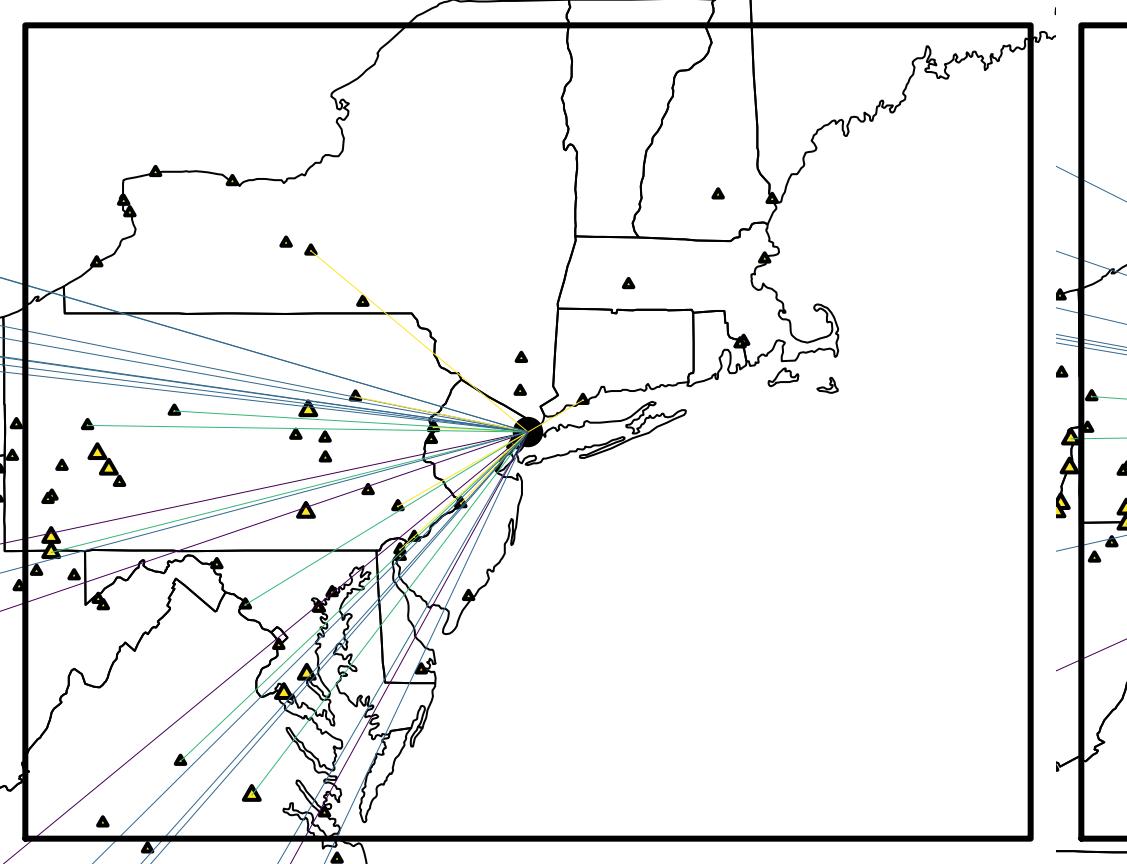
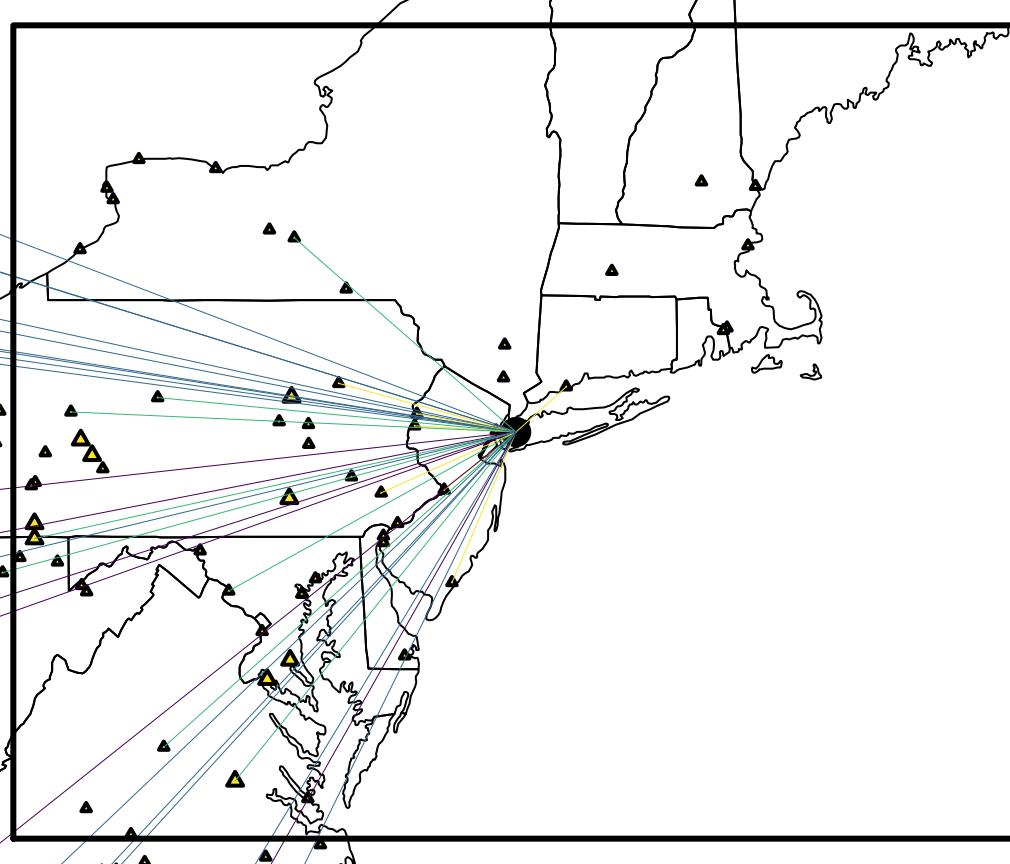
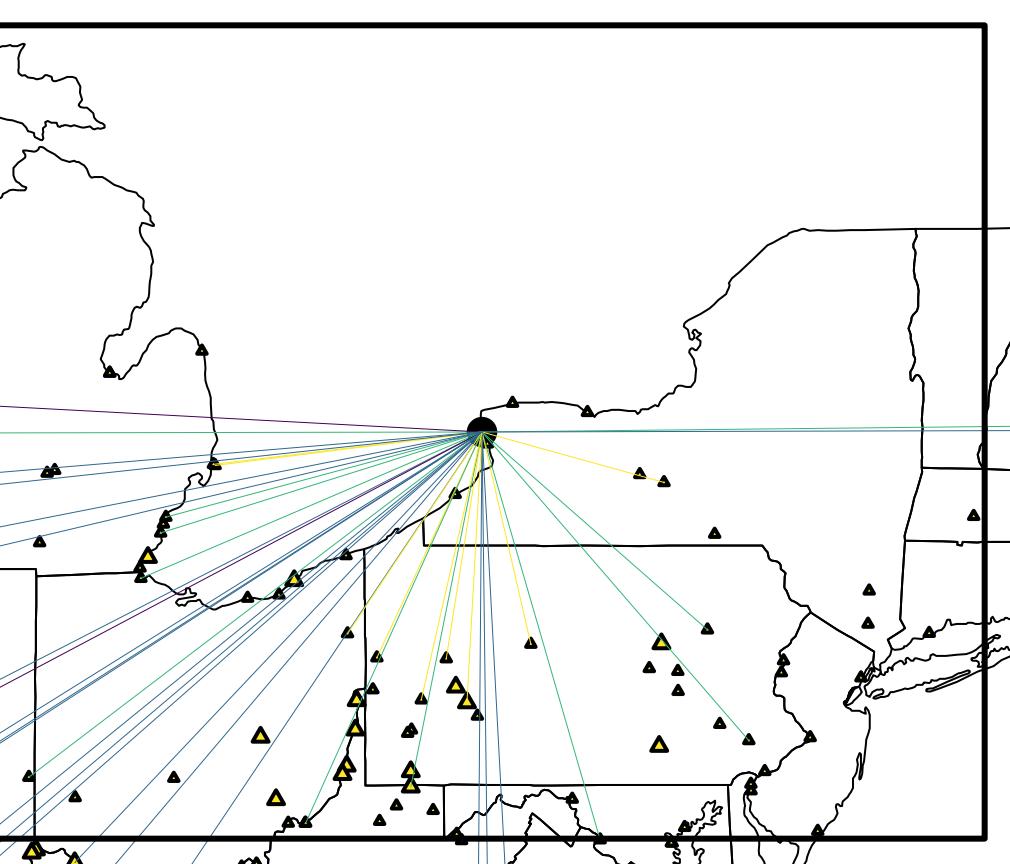
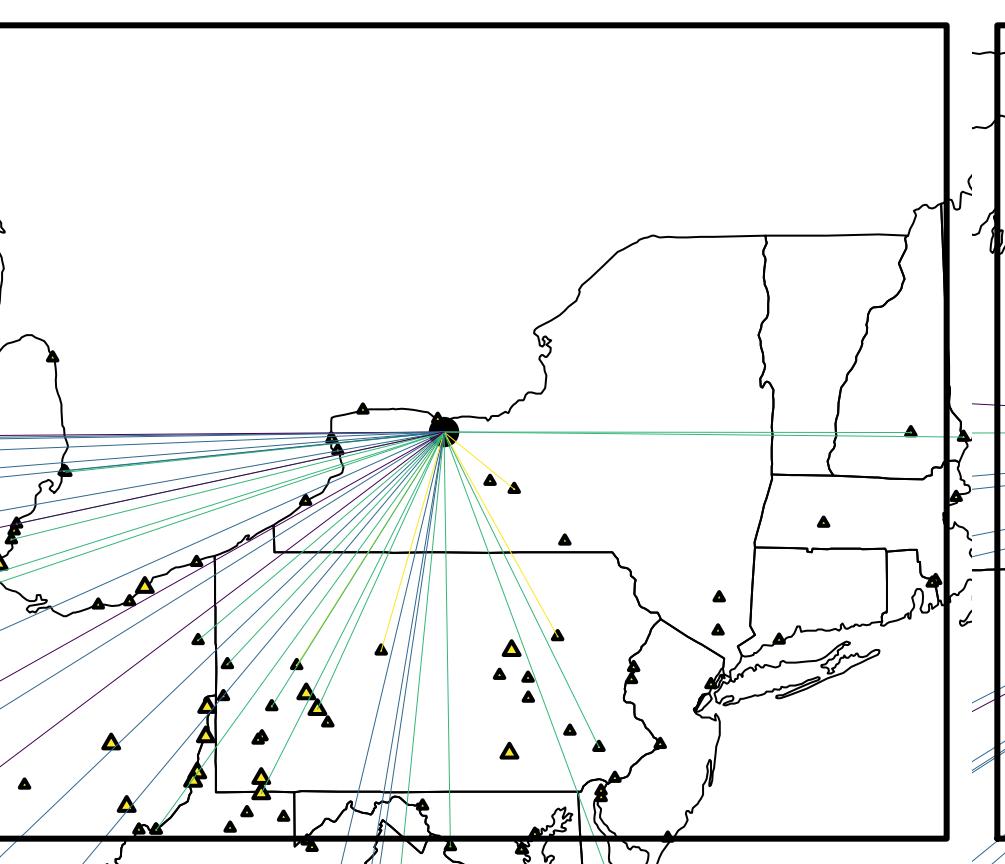
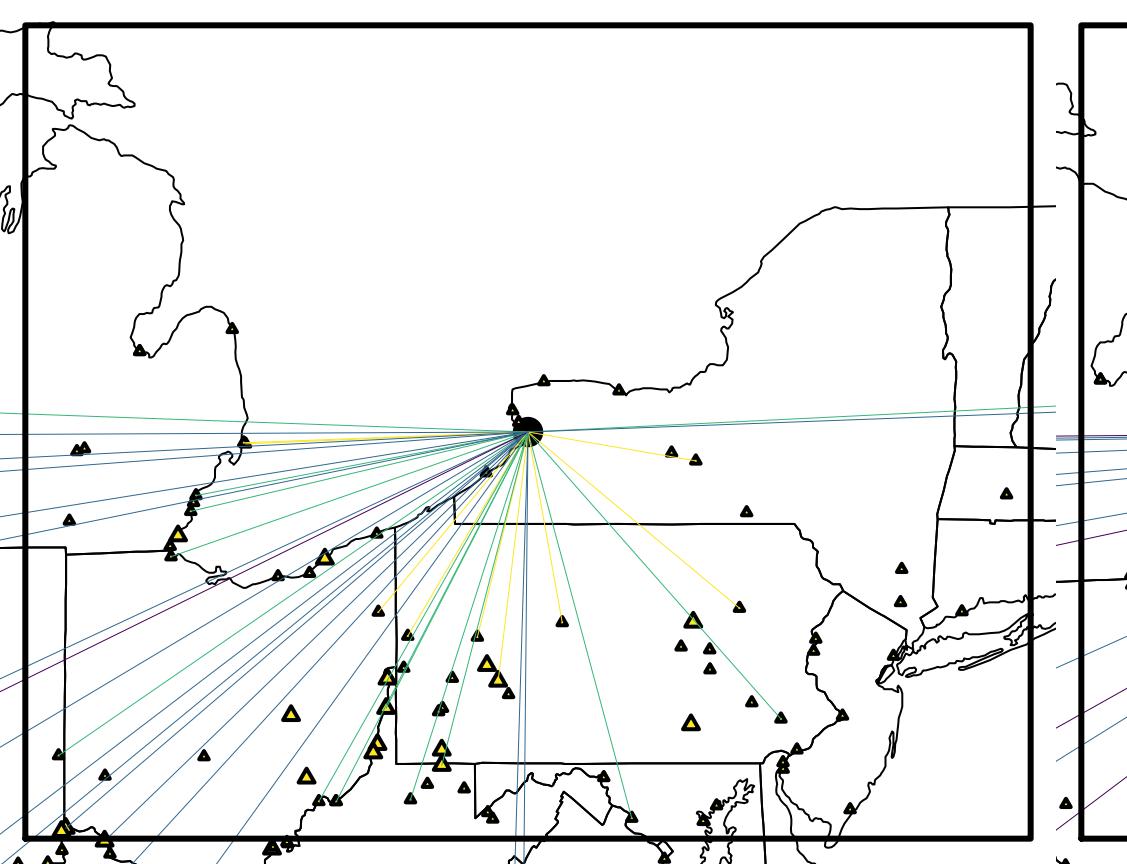


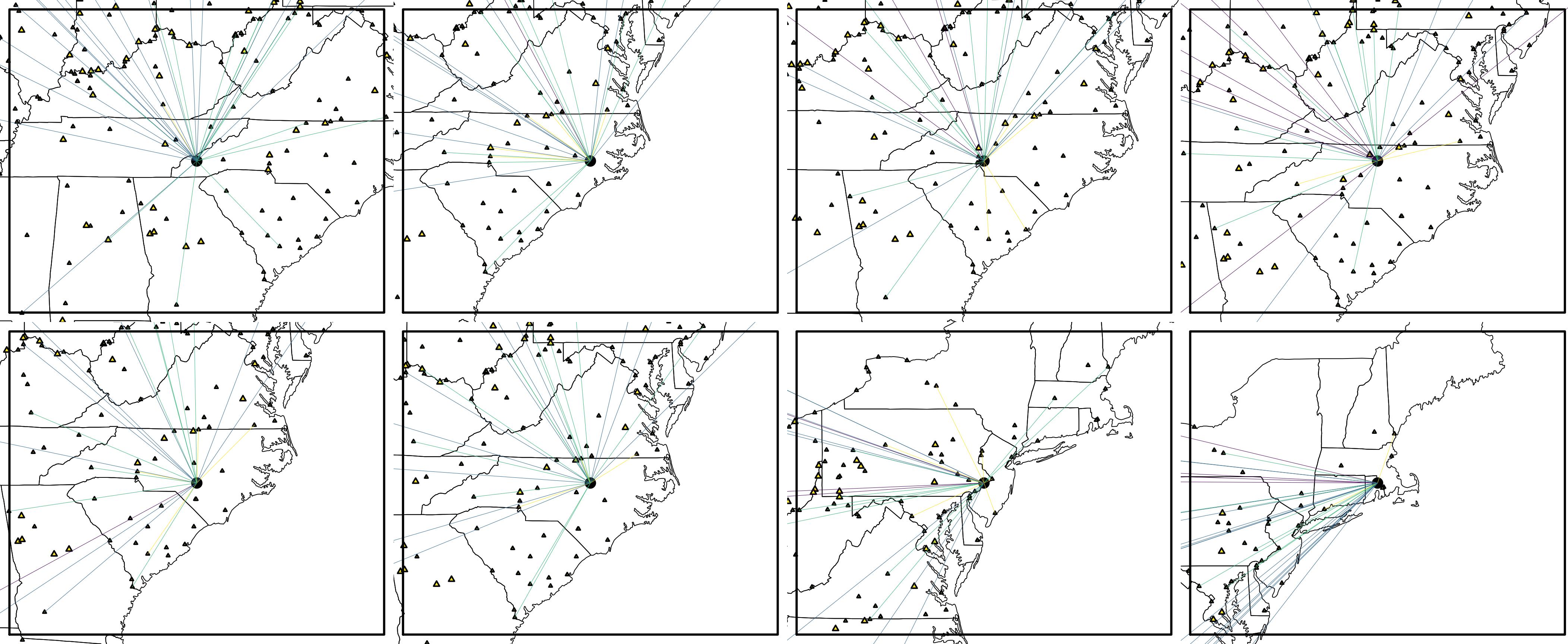


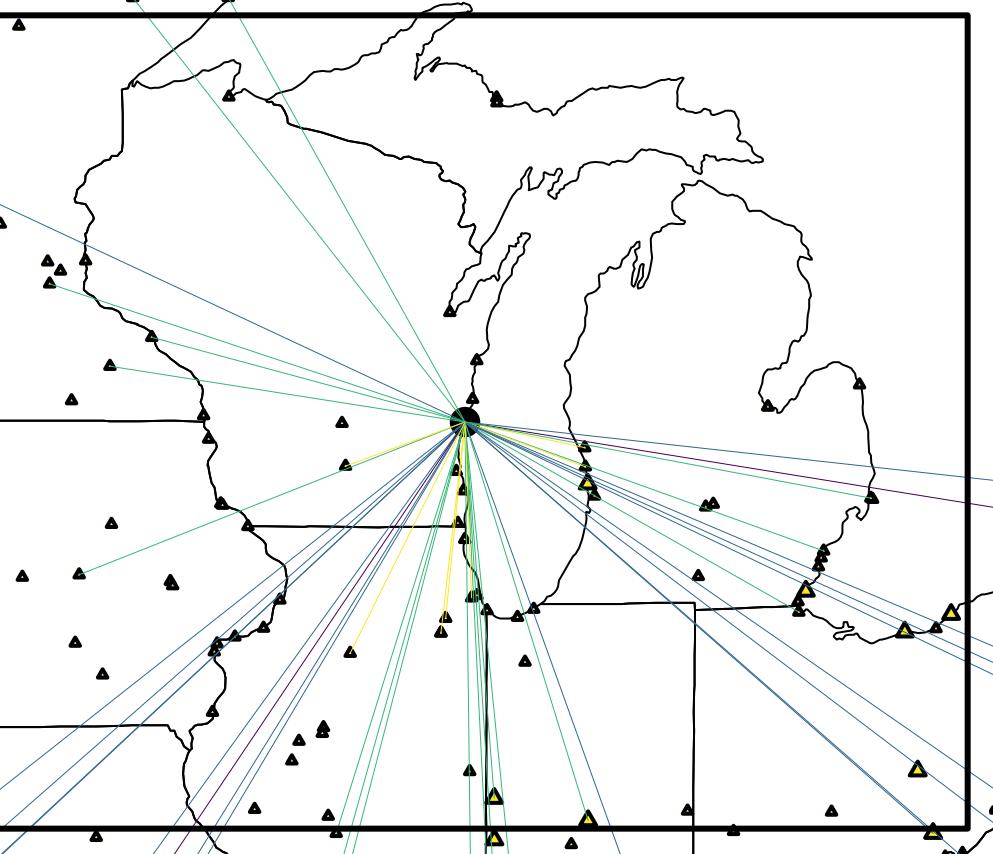
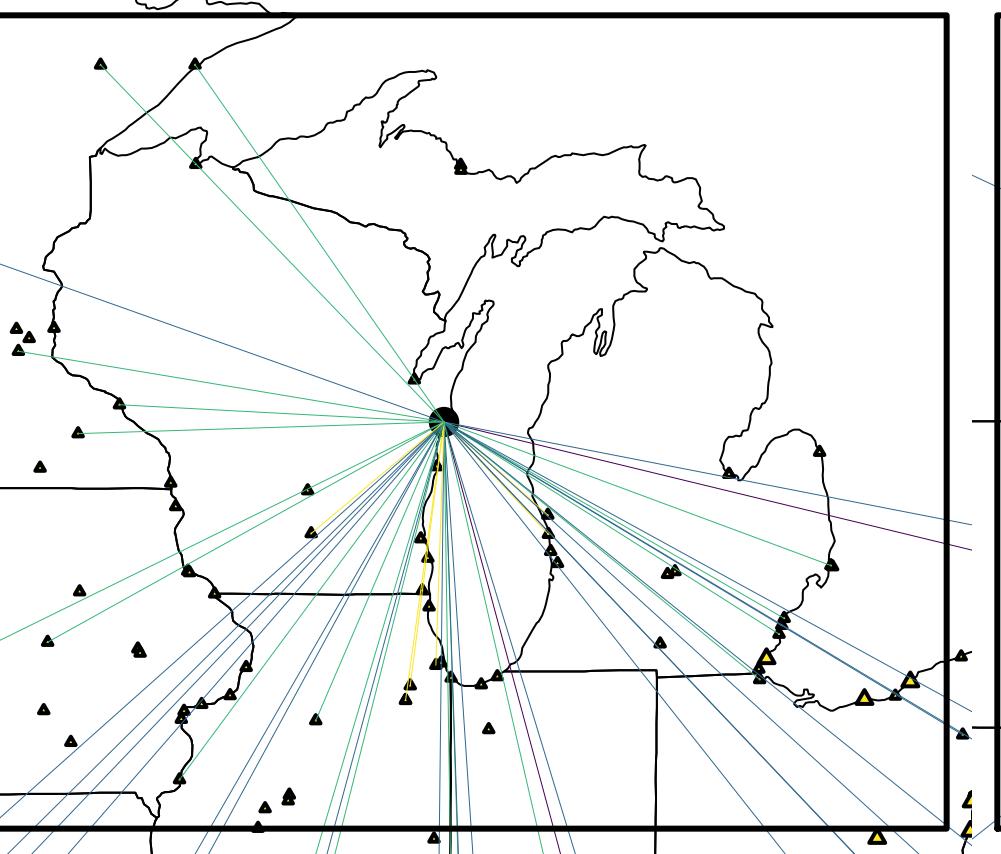
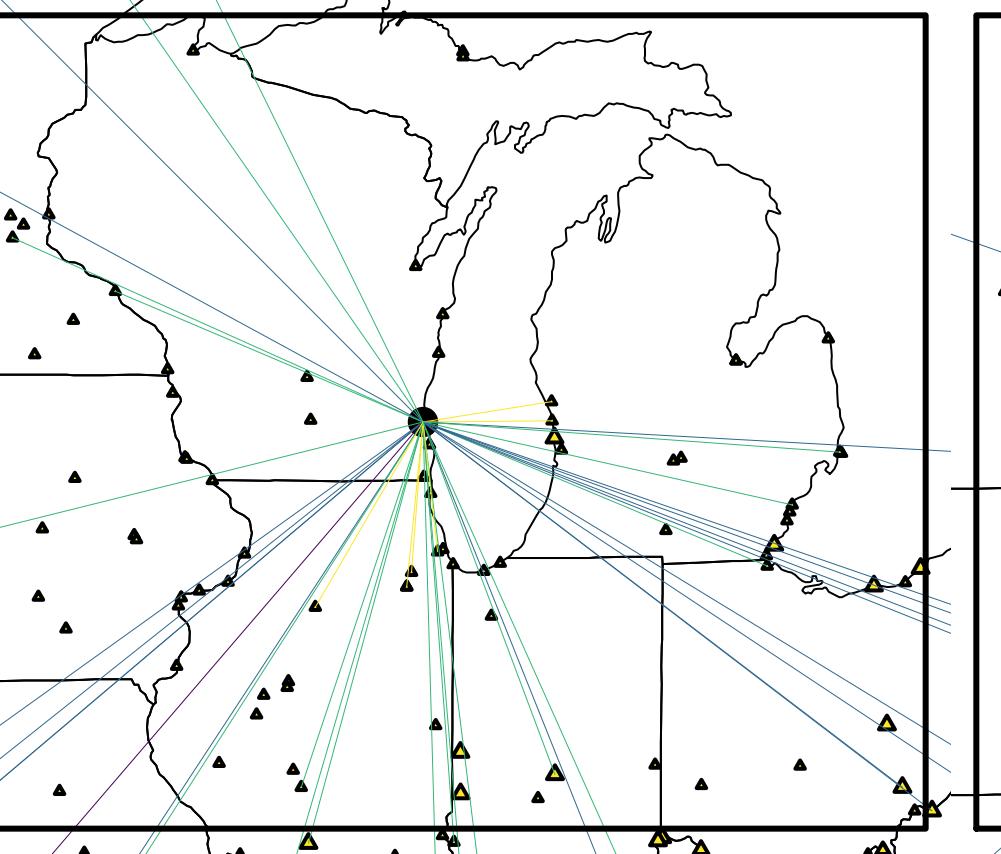
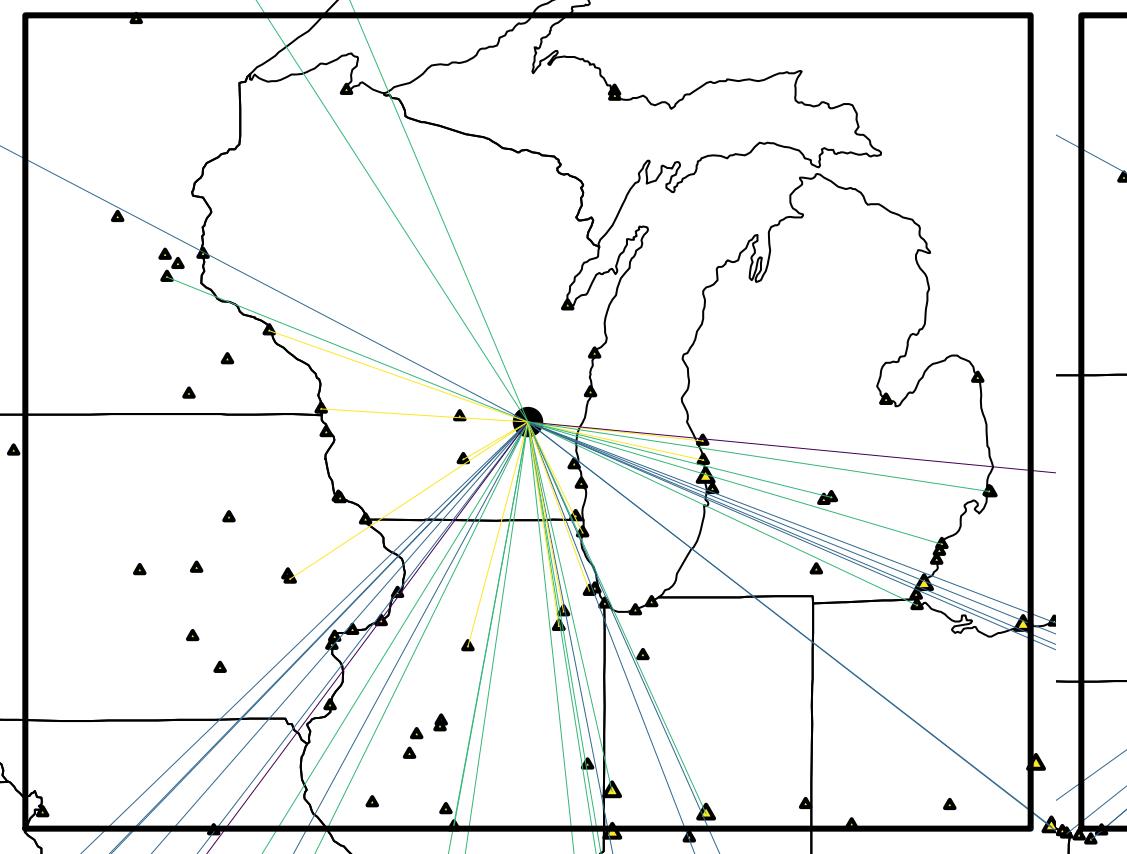
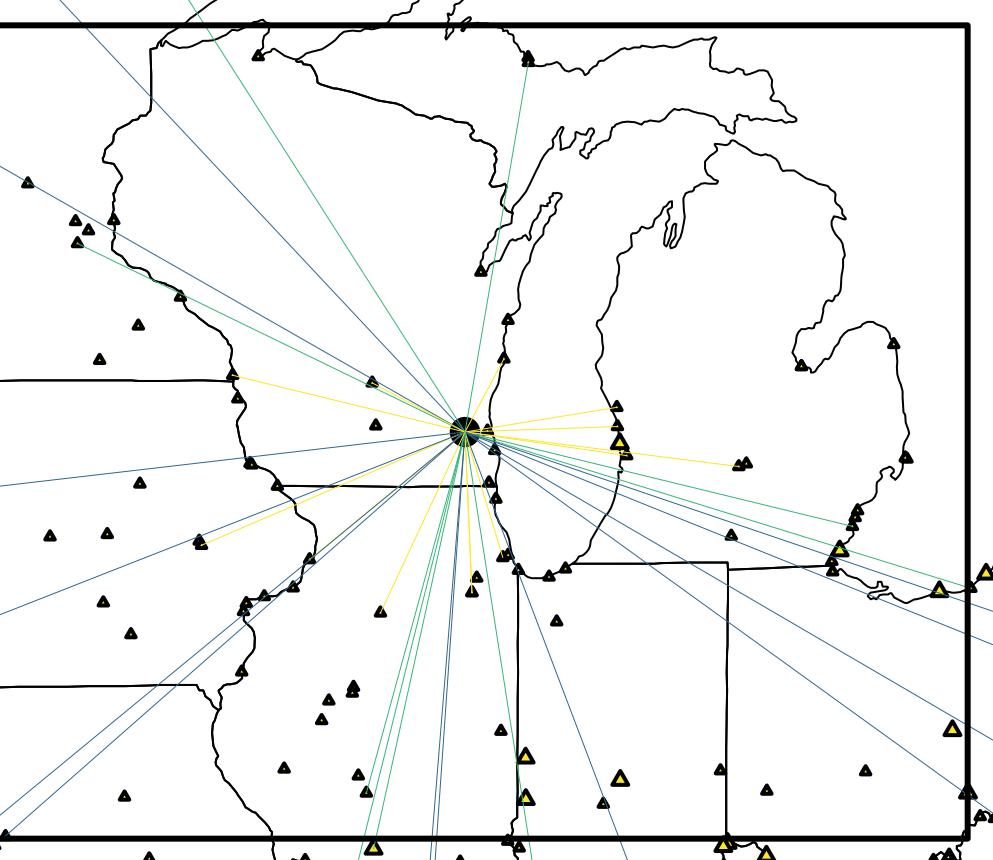
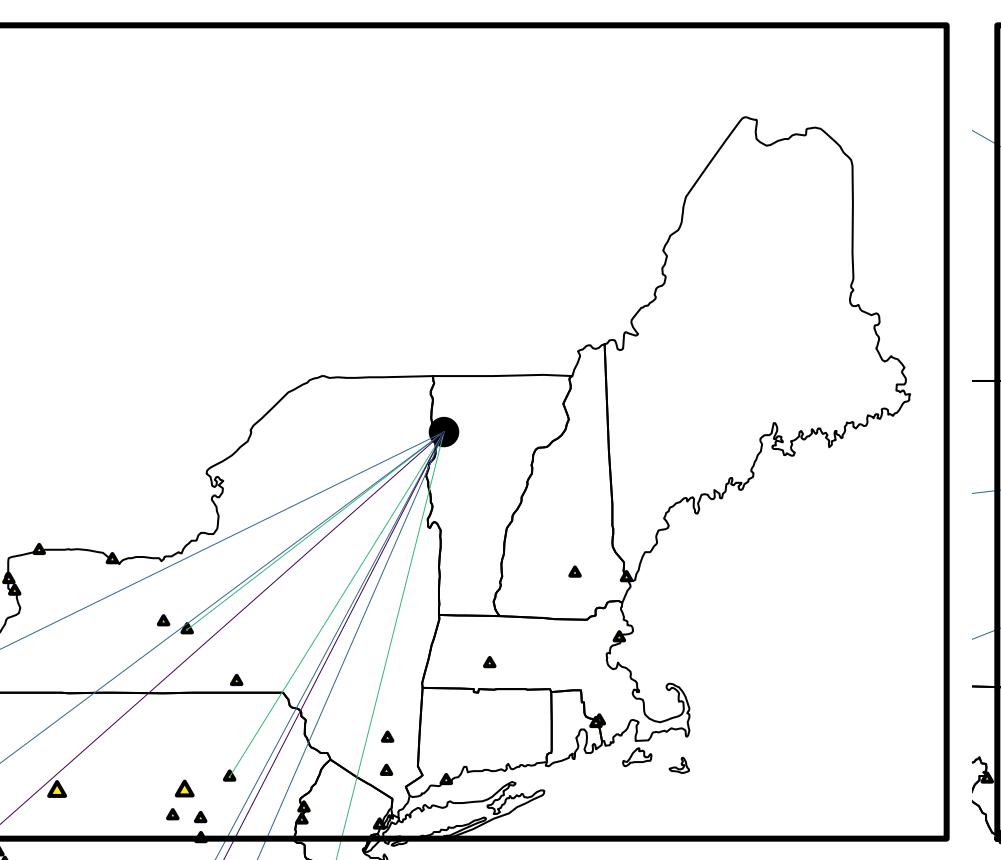
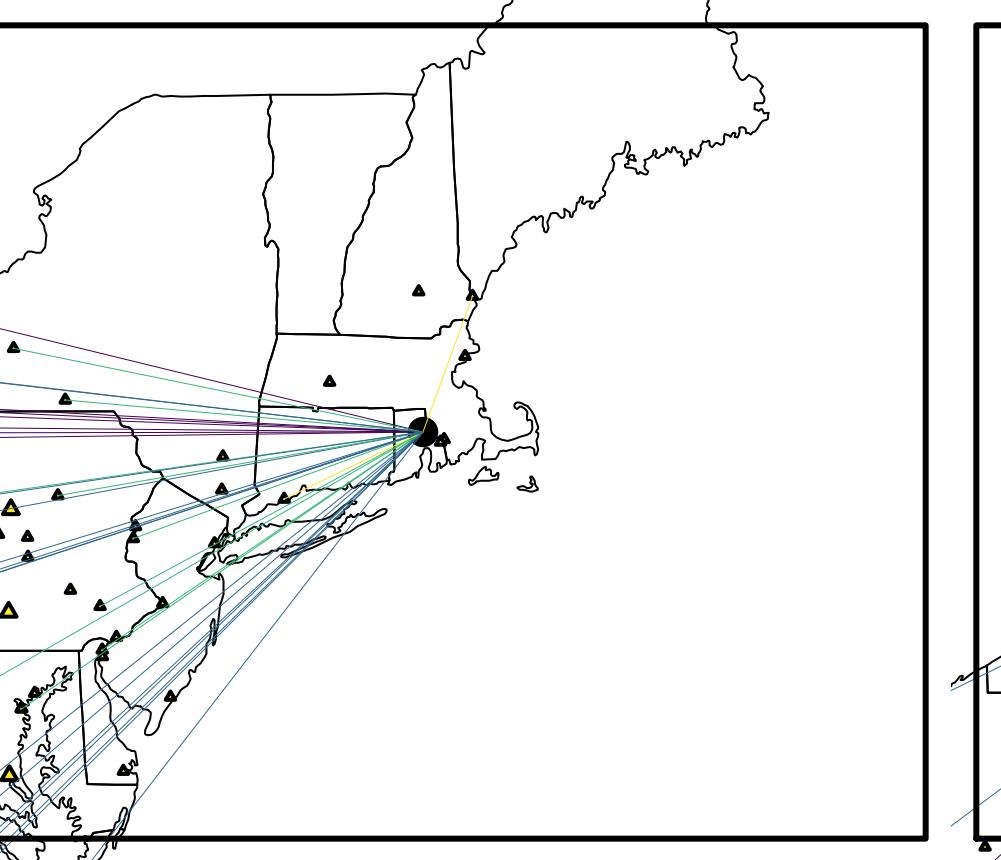
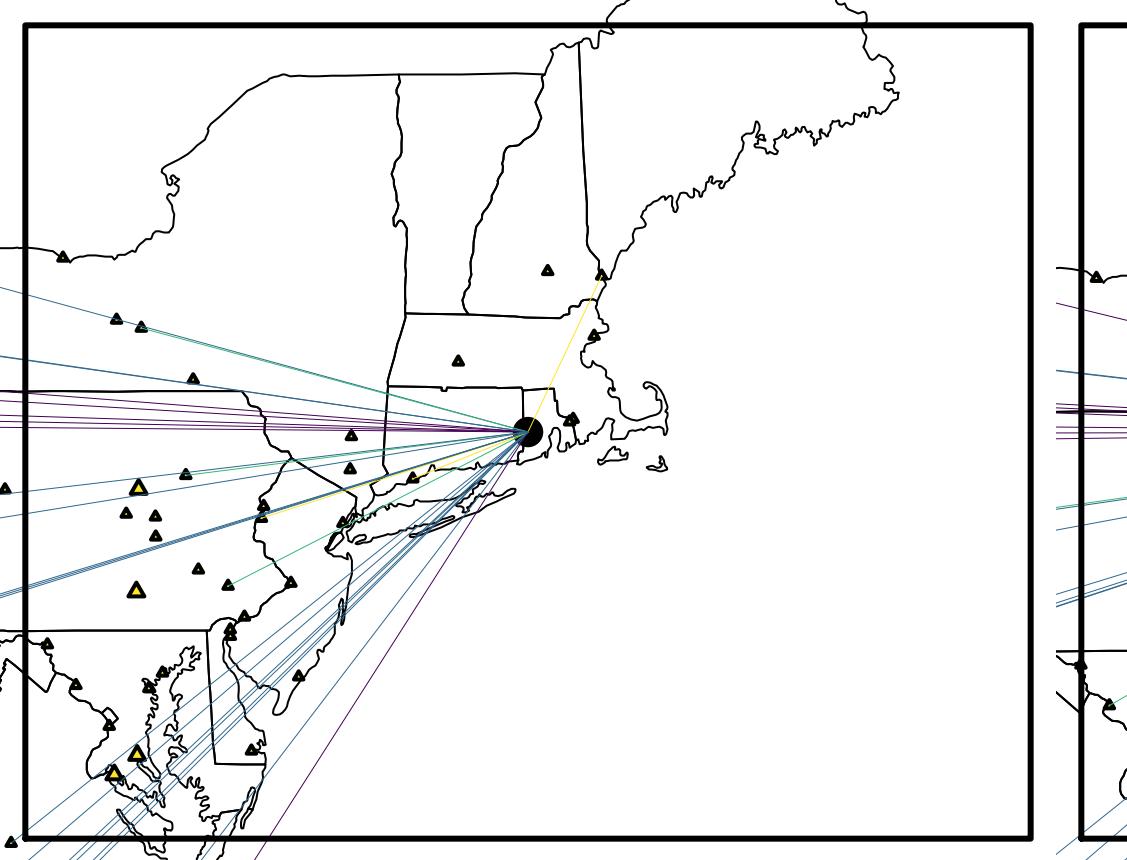


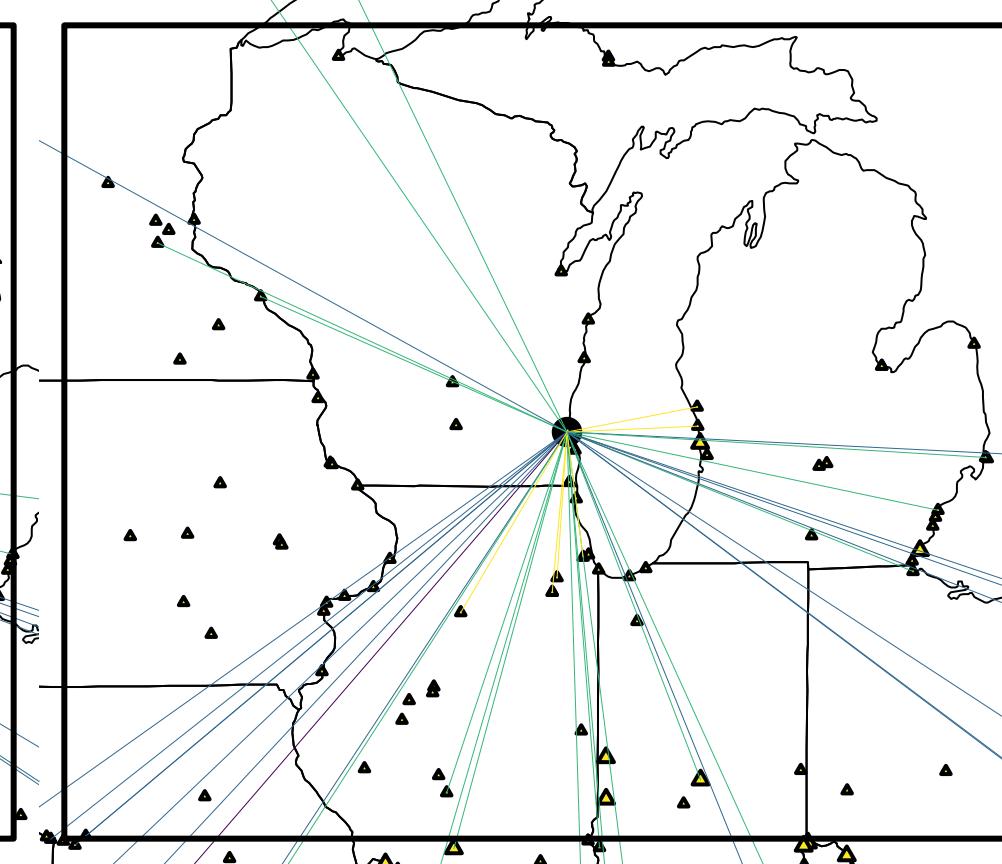
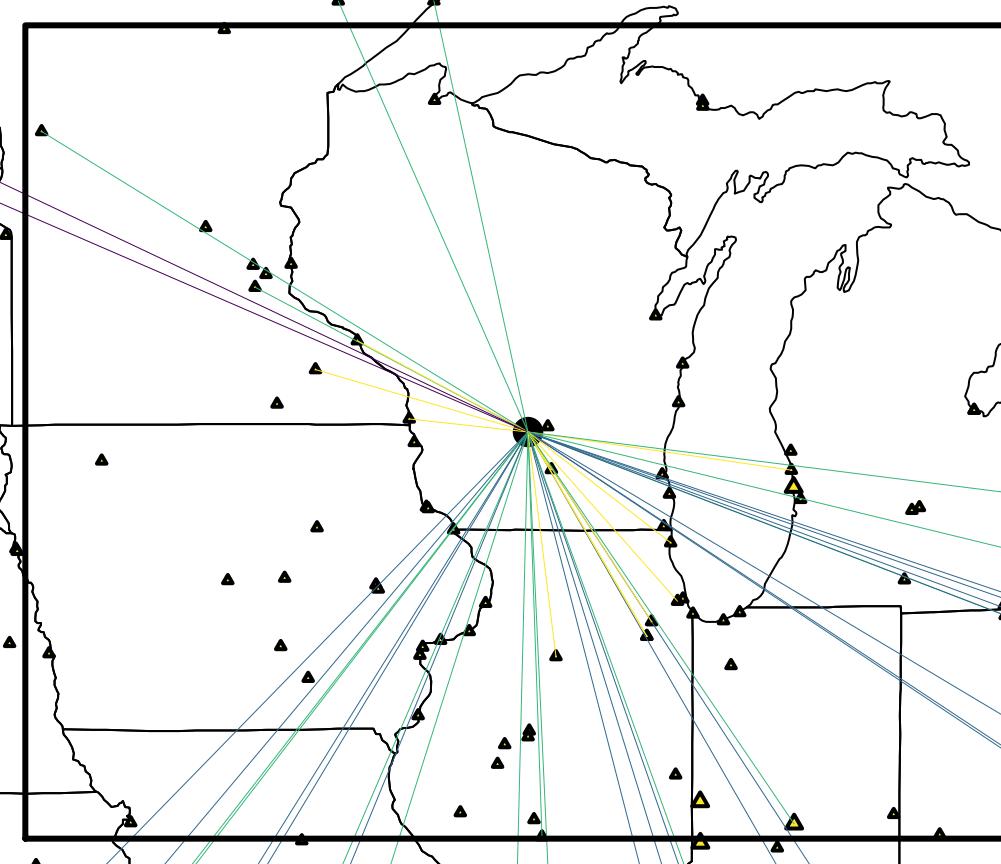
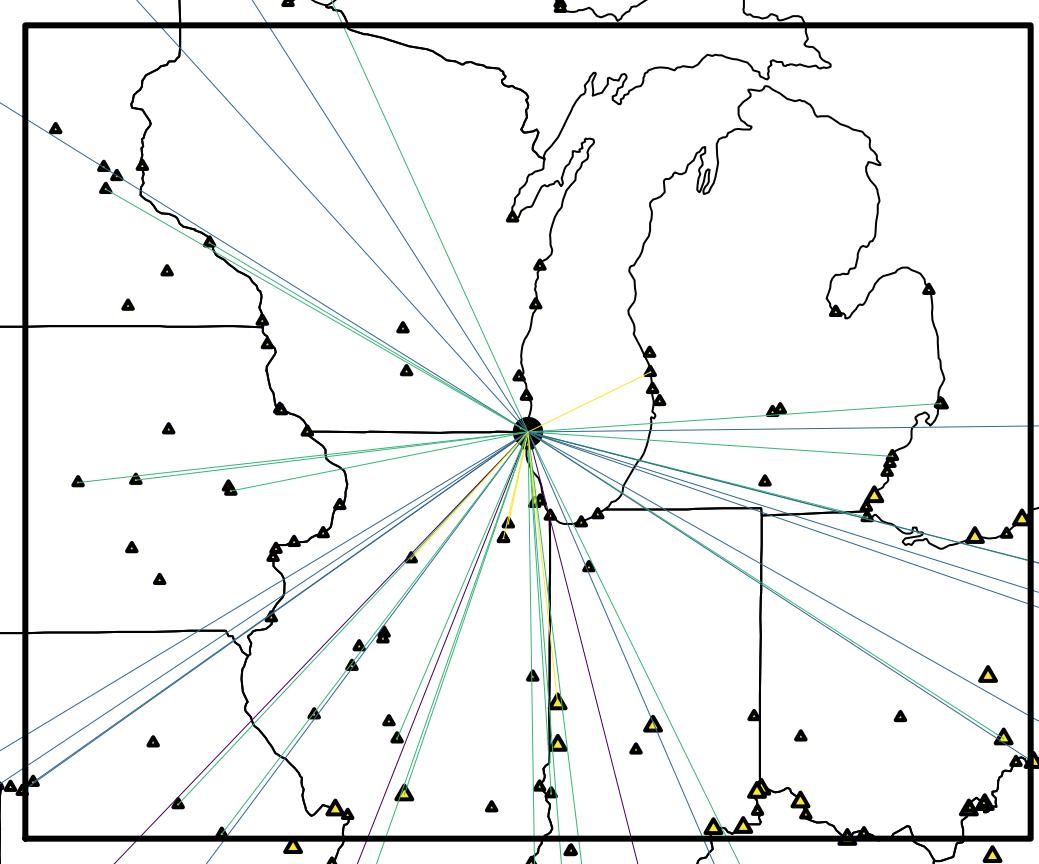


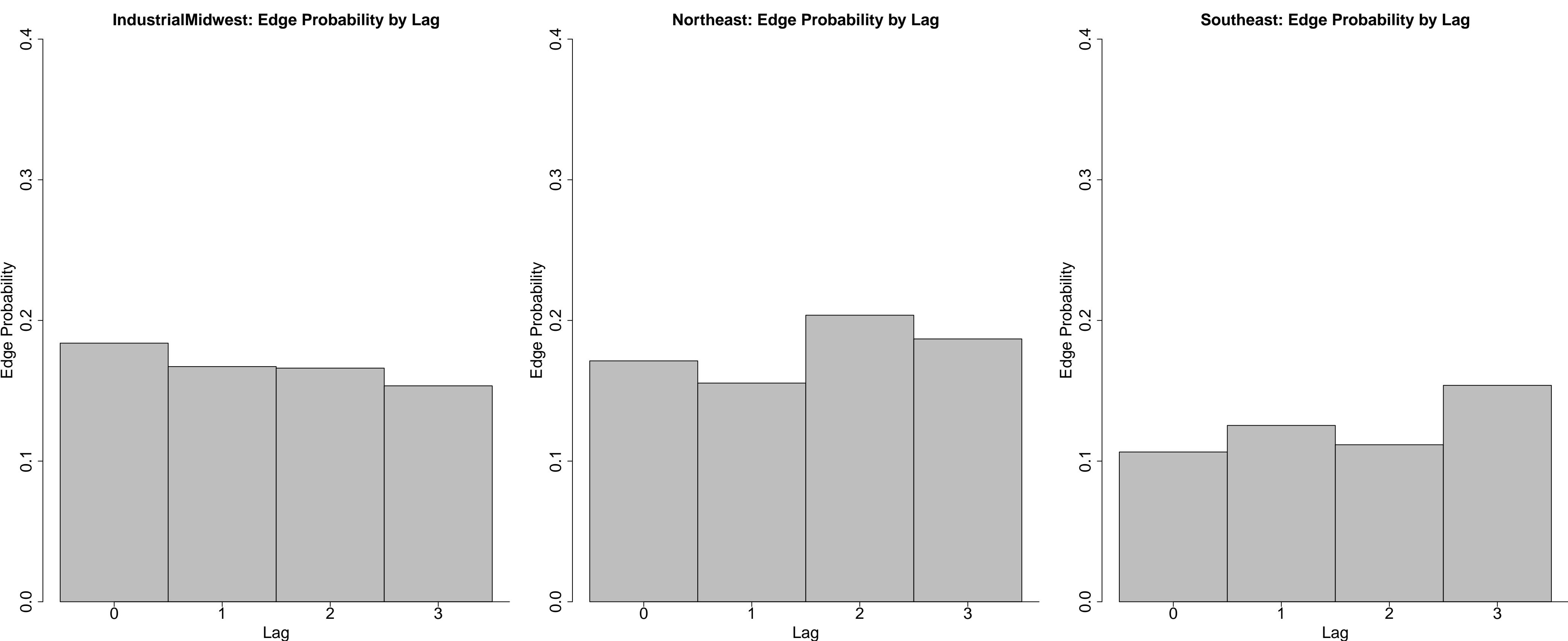




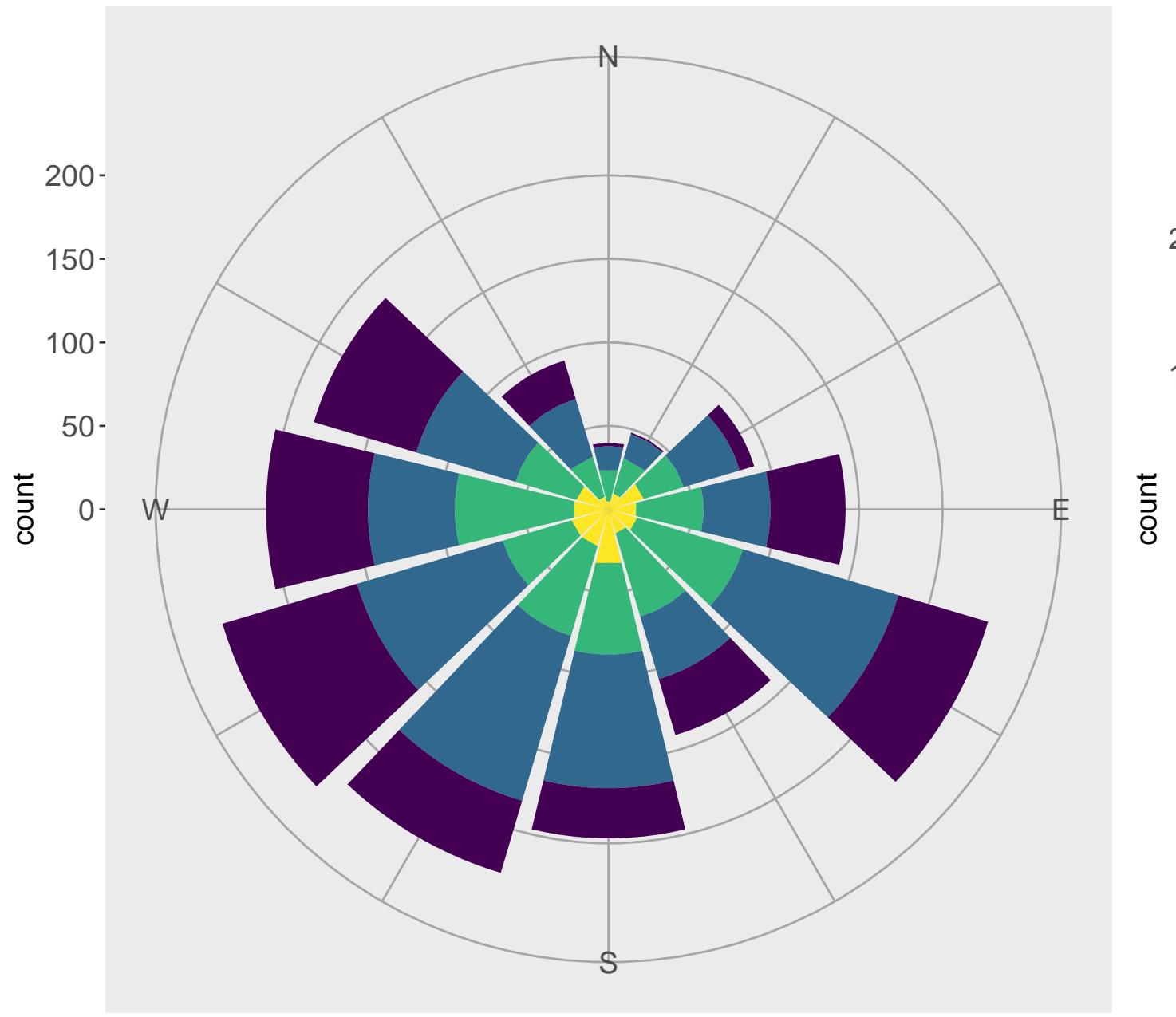




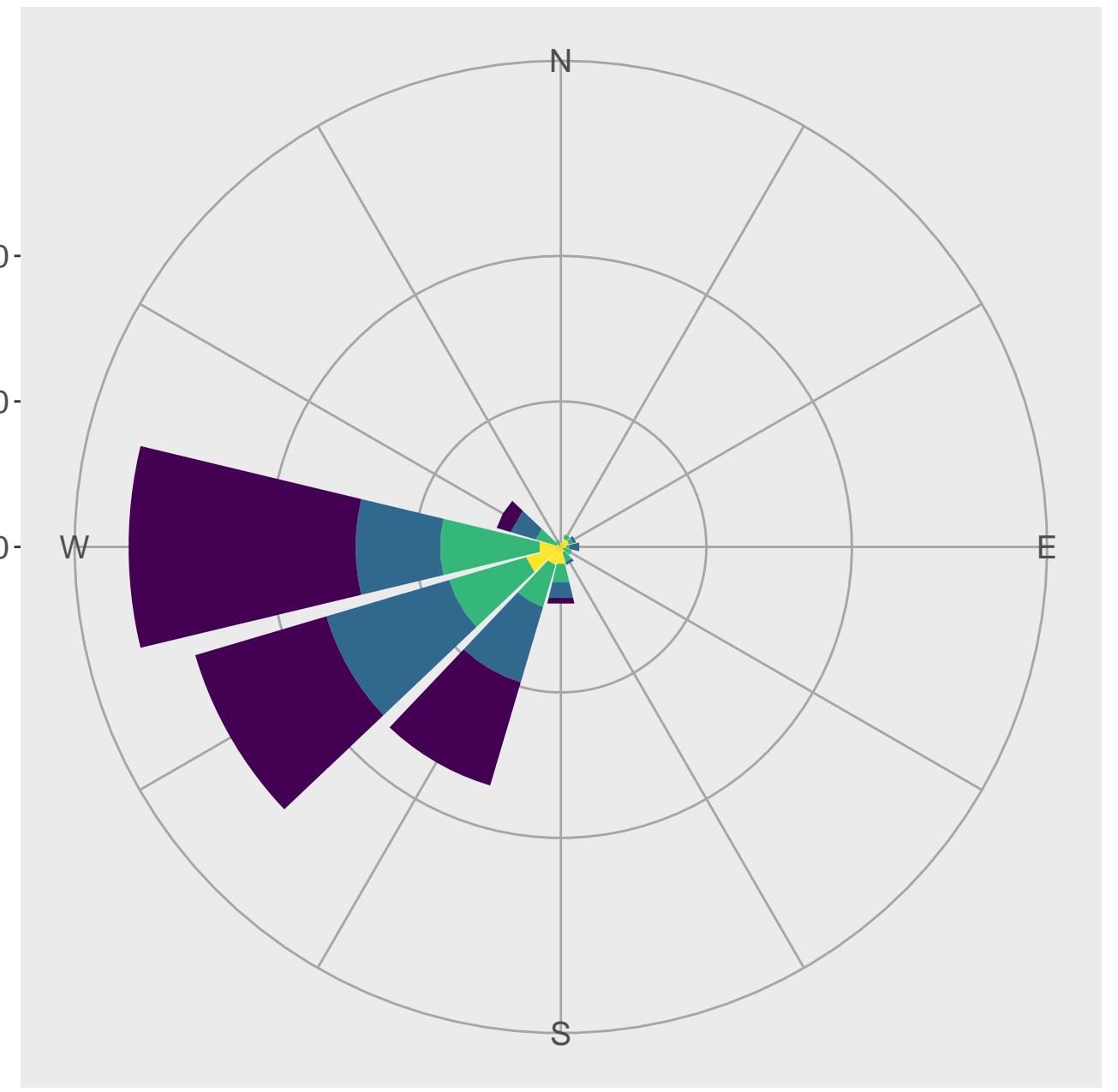




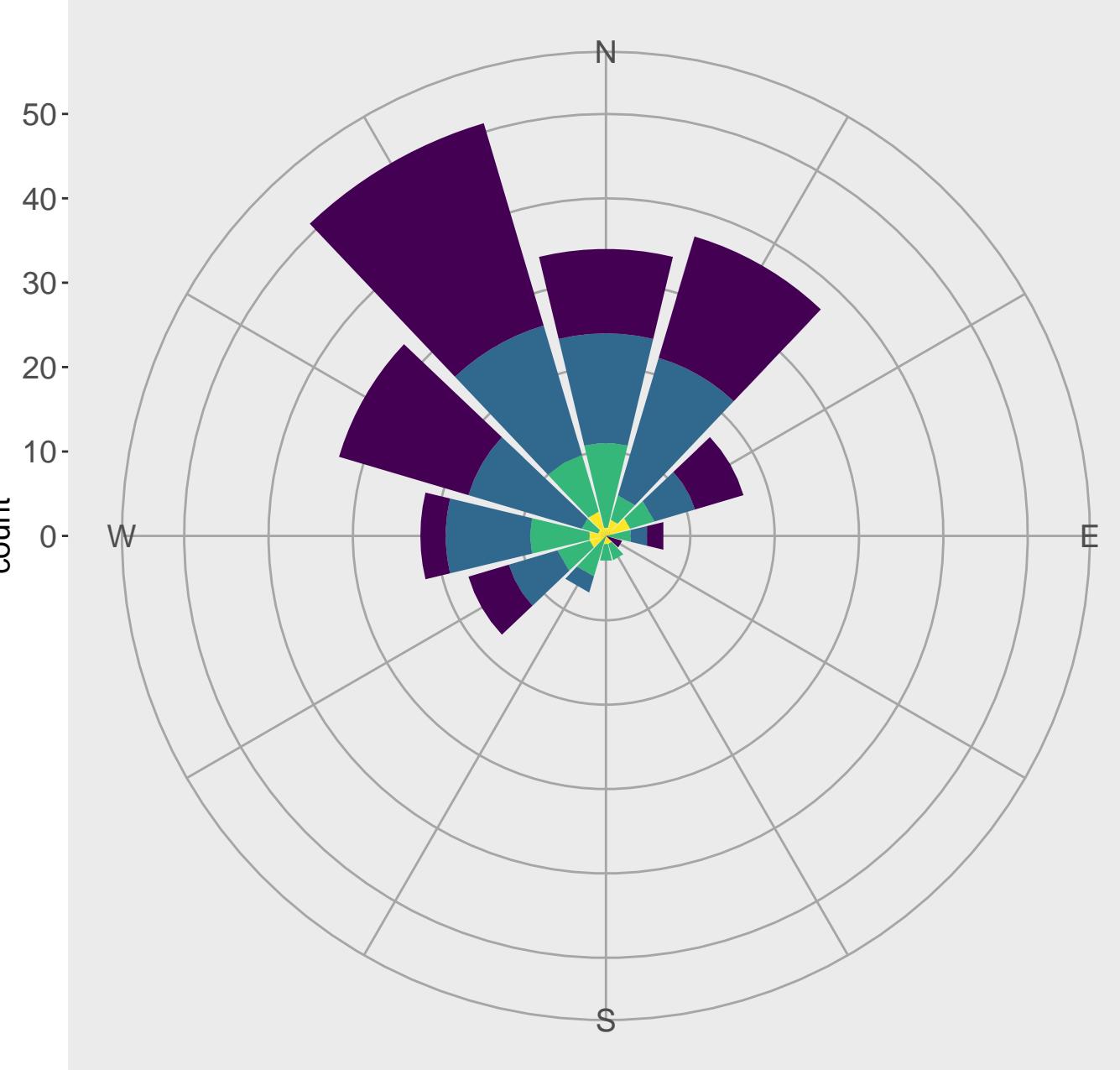
**Edge counts by distance/direction to source
Industrial Midwest receptors**



**Edge counts by distance/direction to source
Northeast receptors**



**Edge counts by distance/direction to source
Southeast receptors**

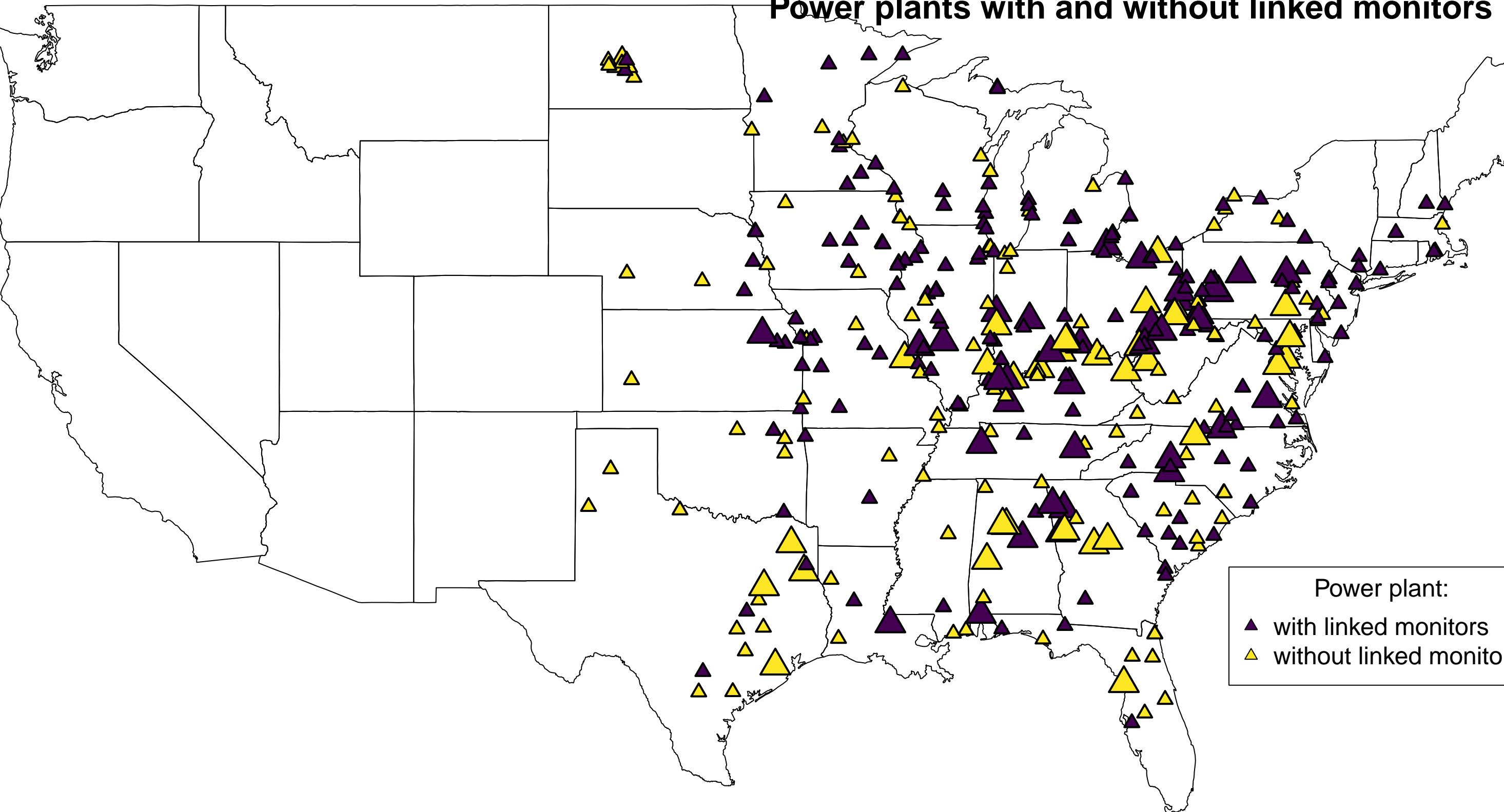


Distance to Source (km) 750–1000 500–750 250–500 0–250

Distance to Source (km) 750–1000 500–750 250–500 0–250

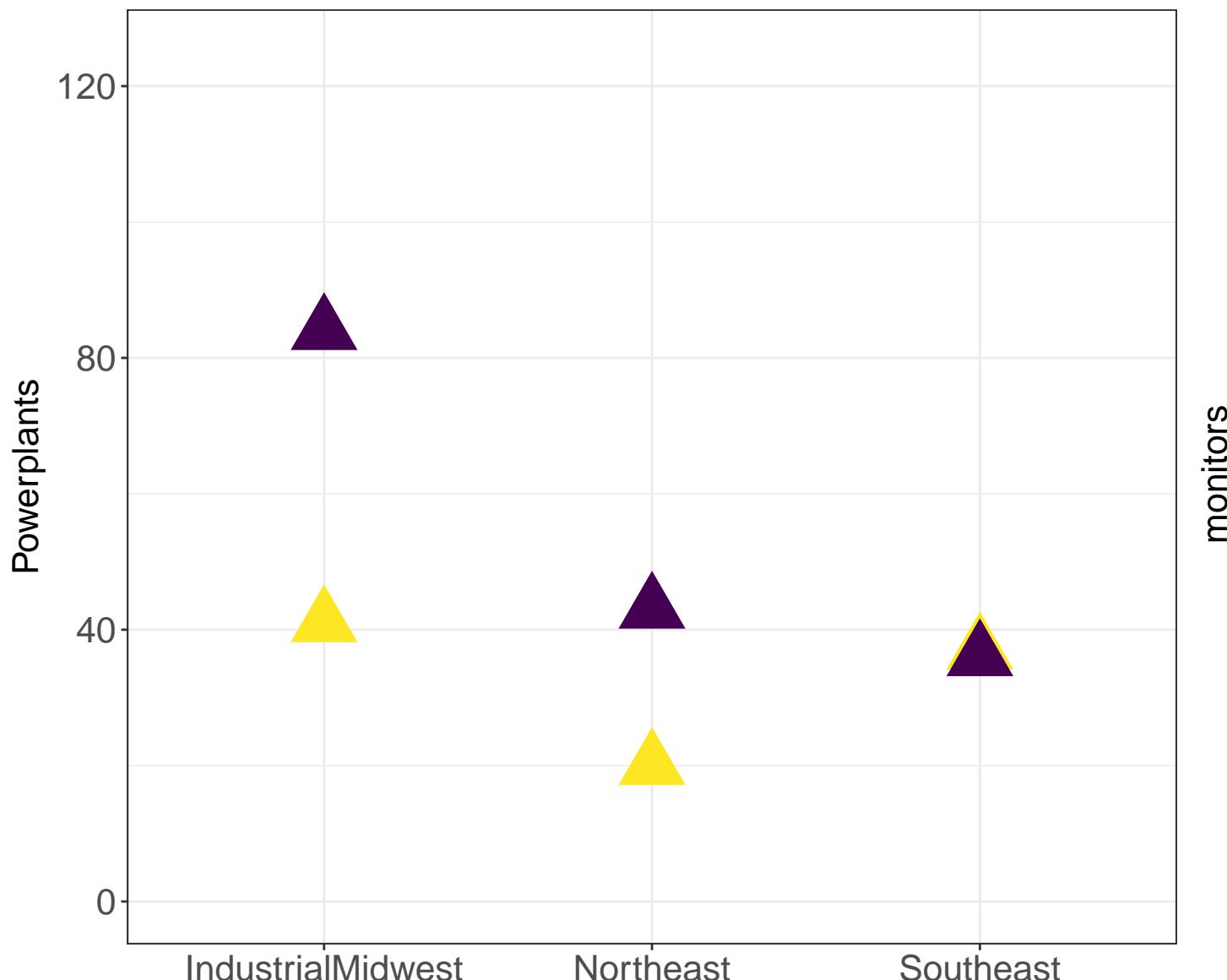
Distance to Source (km) 750–1000 500–750 250–500 0–250

Power plants with and without linked monitors

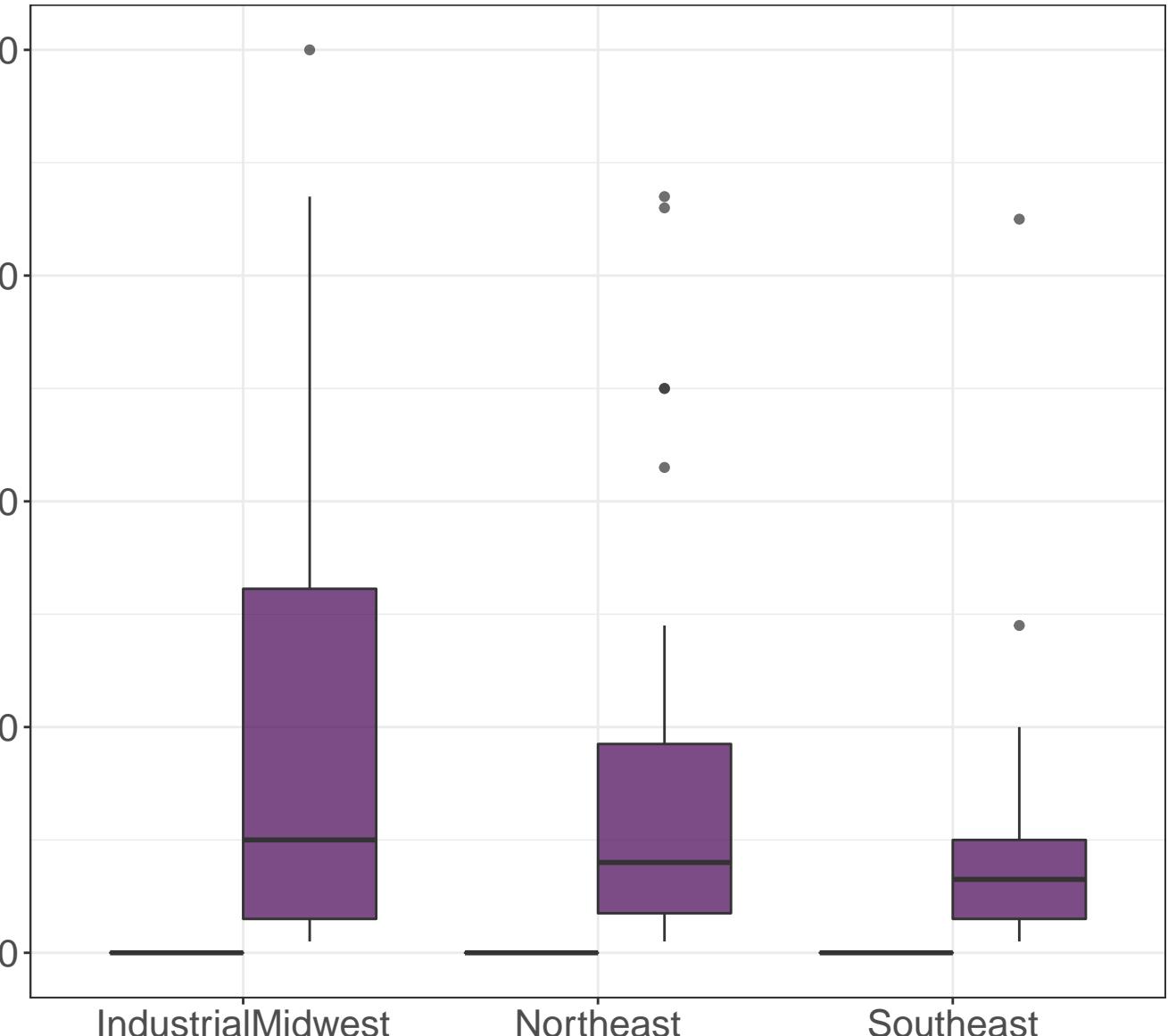


Why do some power plants have linked monitors and others do not?

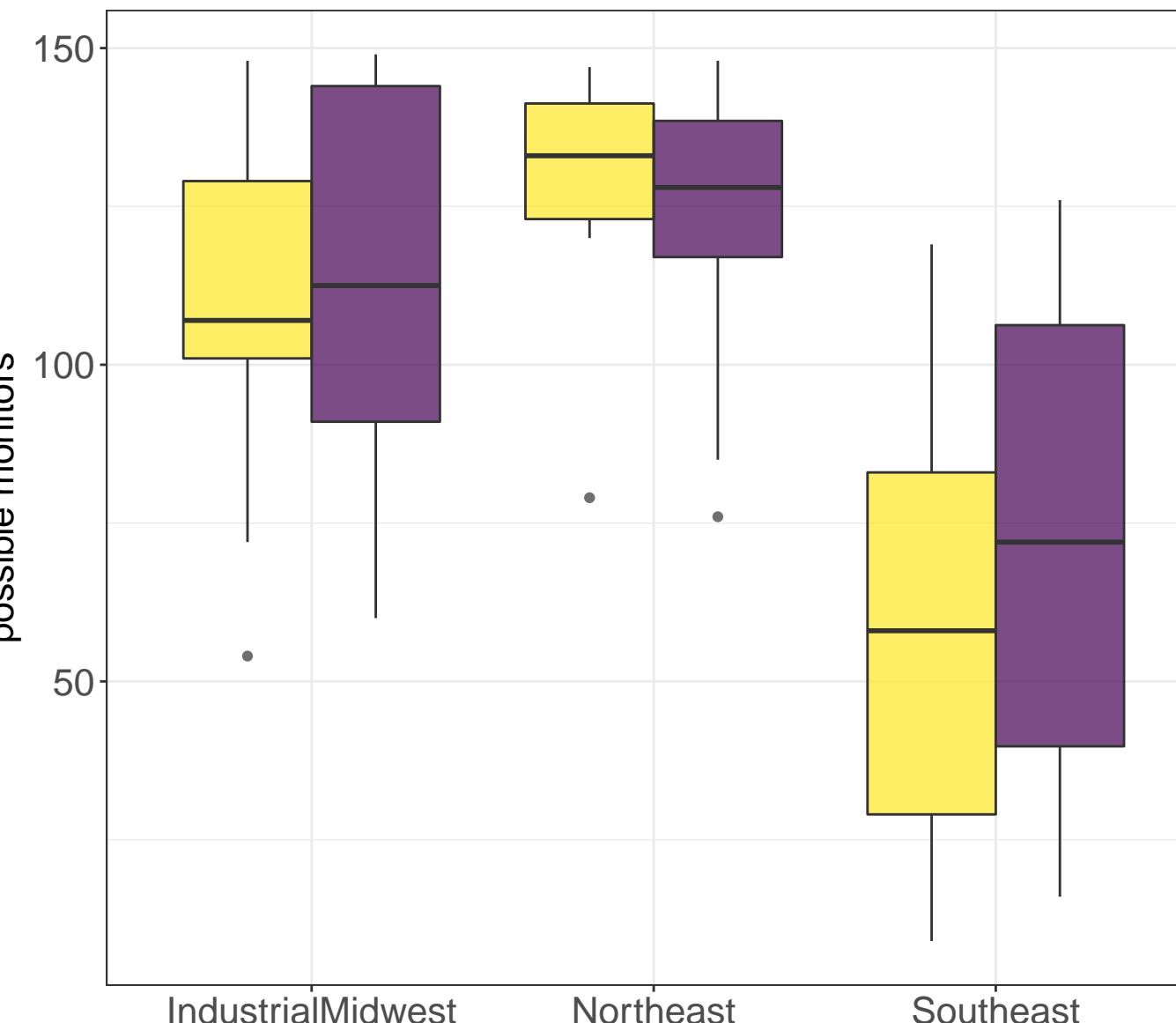
Number of powerplants



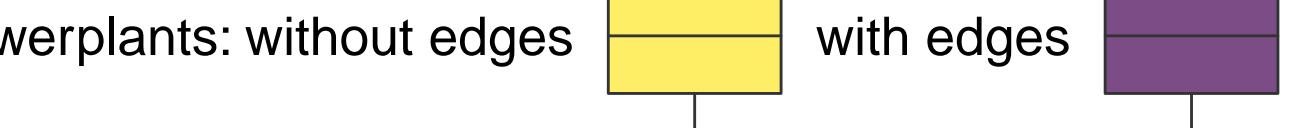
Number of linked monitors



Number of possible linked monitors



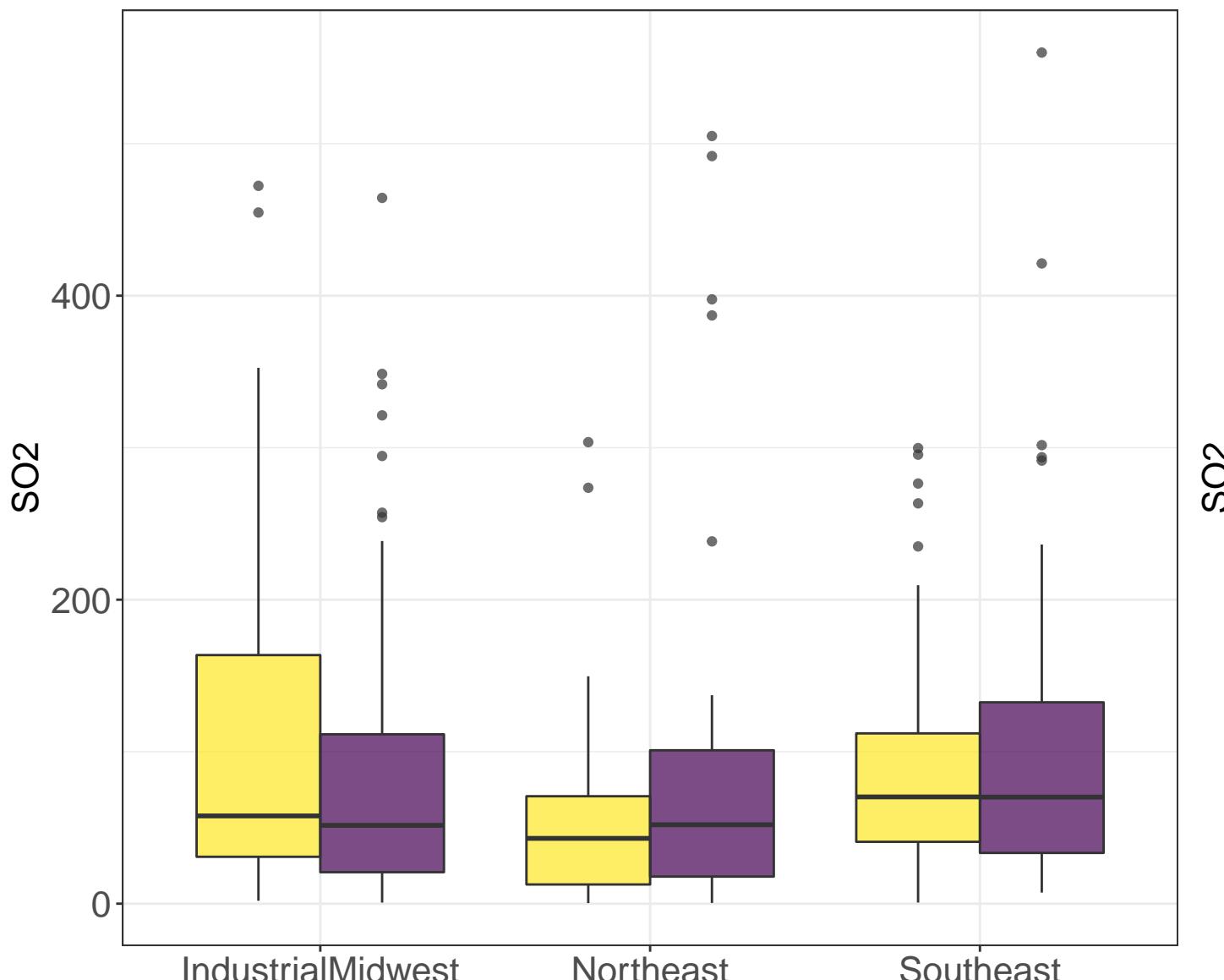
Powerplants: without edges



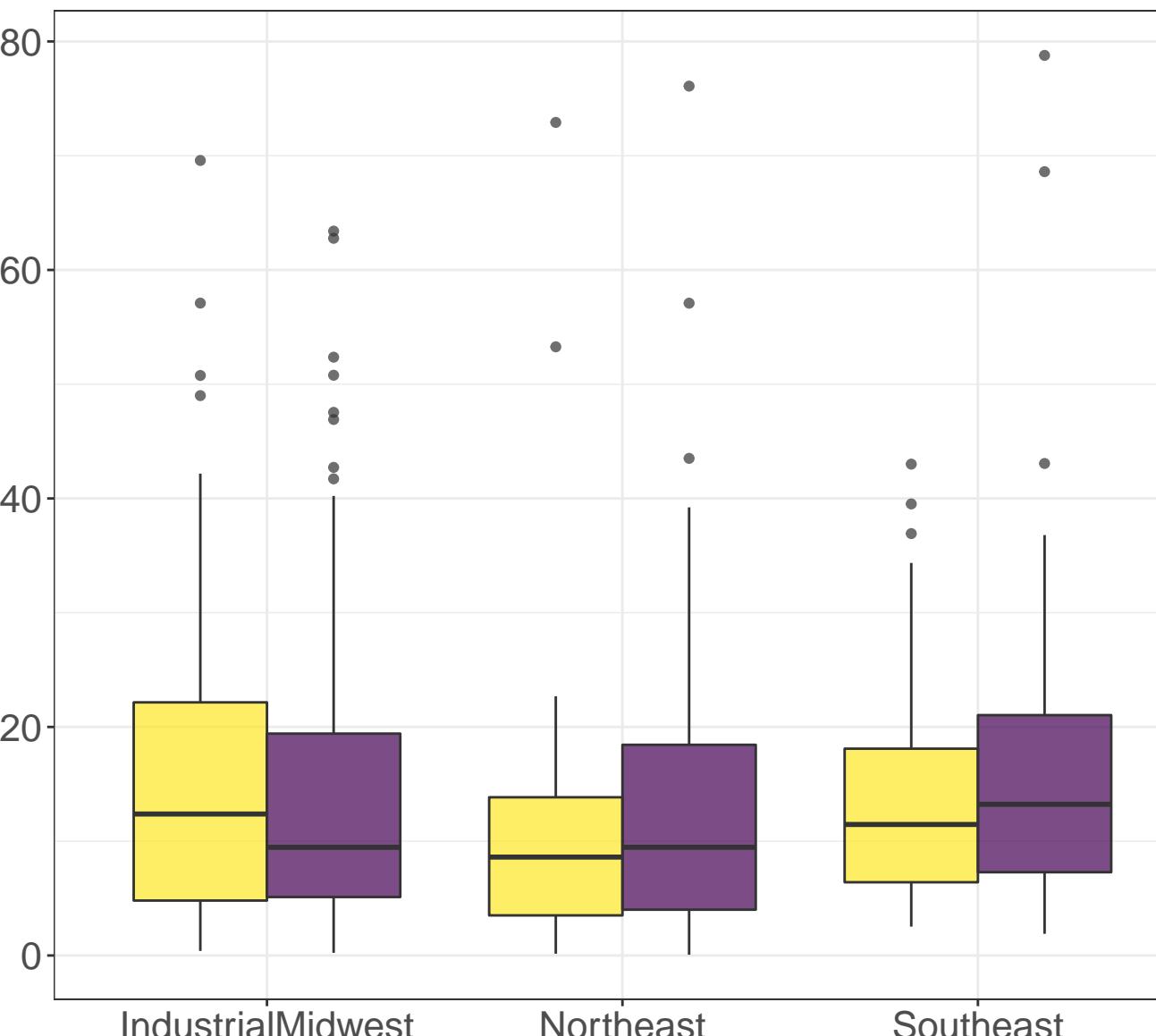
with edges

Why do some power plants have linked monitors and others do not?

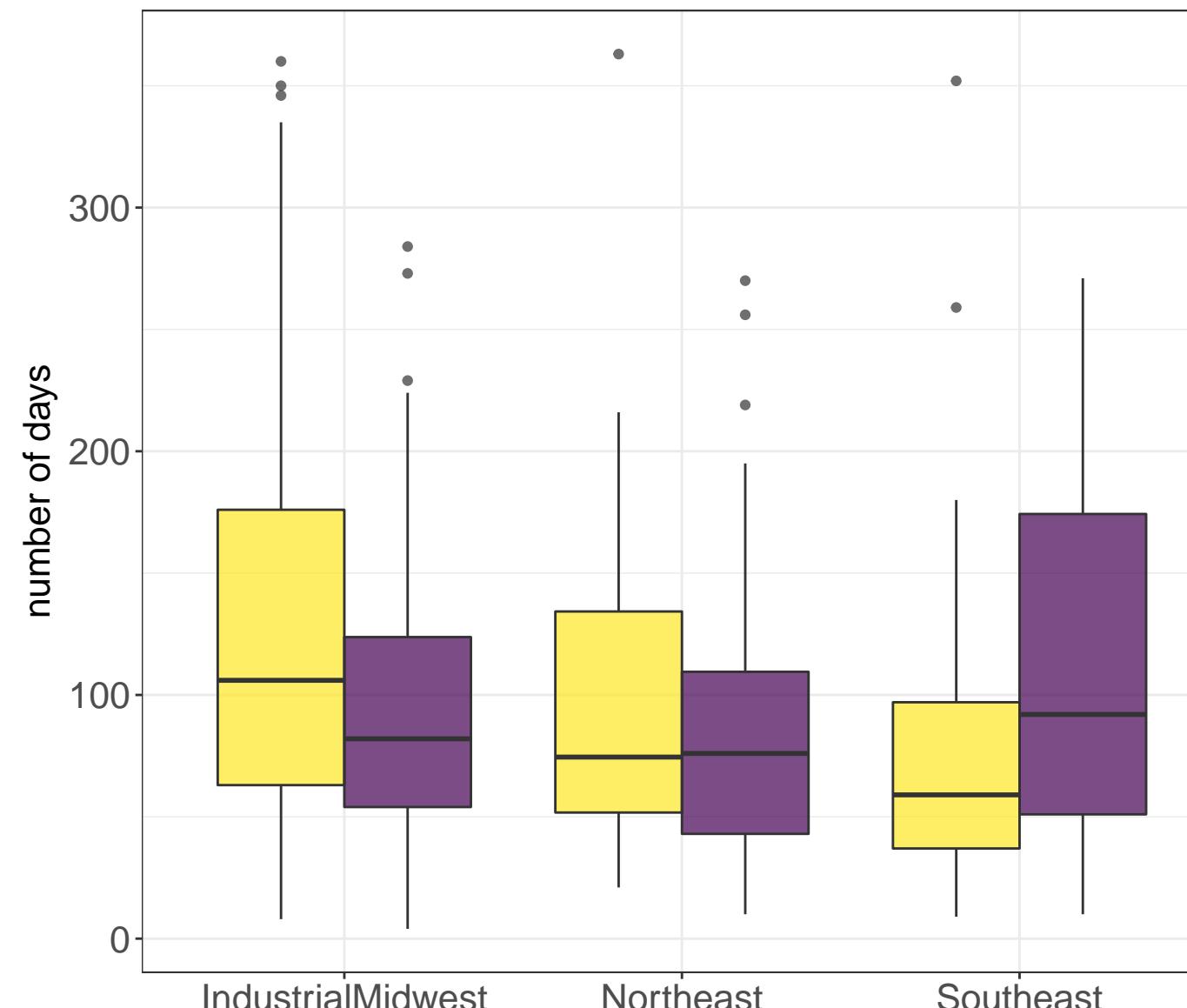
Average daily emissions



Standard deviation in daily emissions



Number of days with missing emissions data

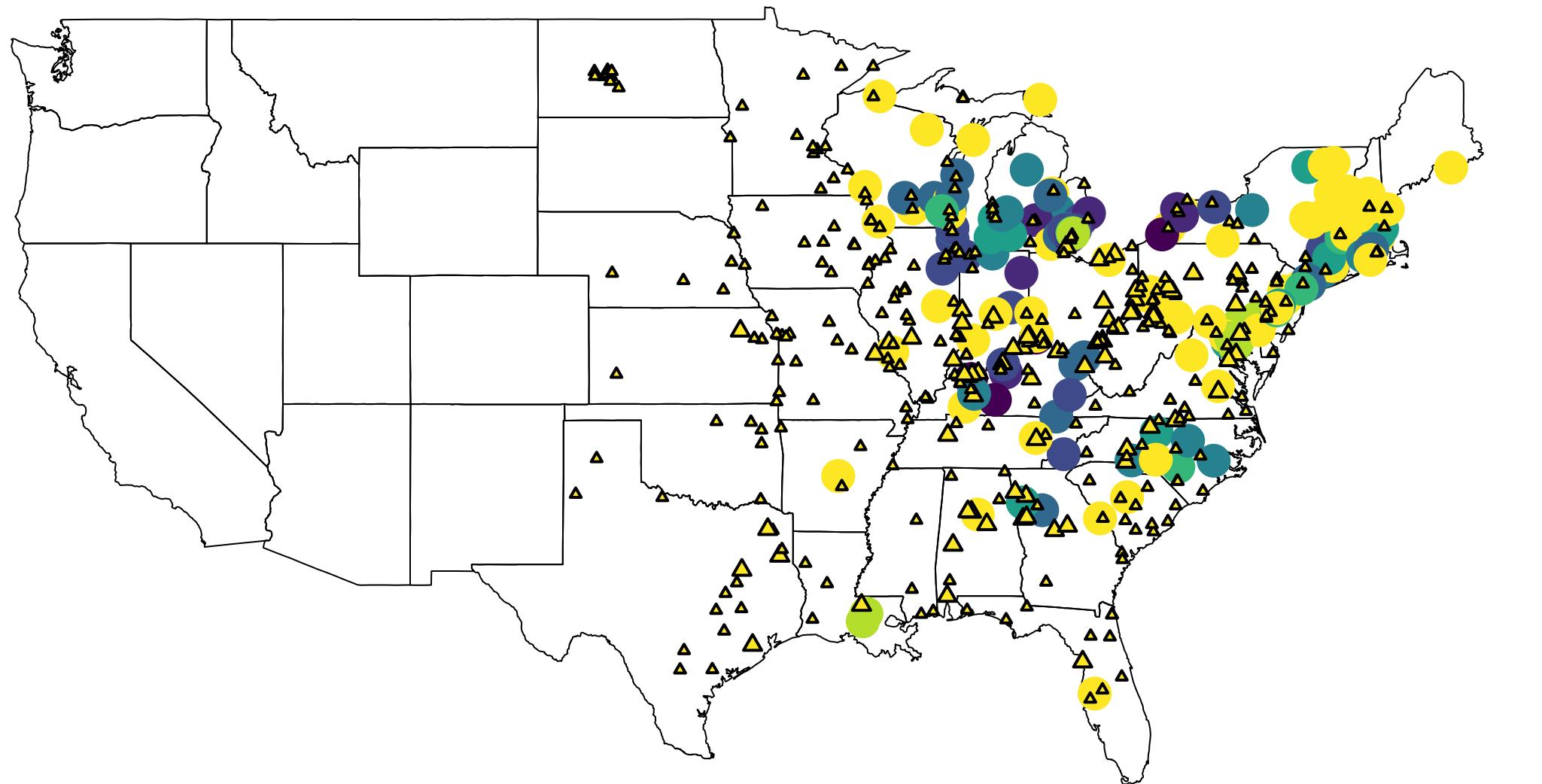


Powerplants: without edges



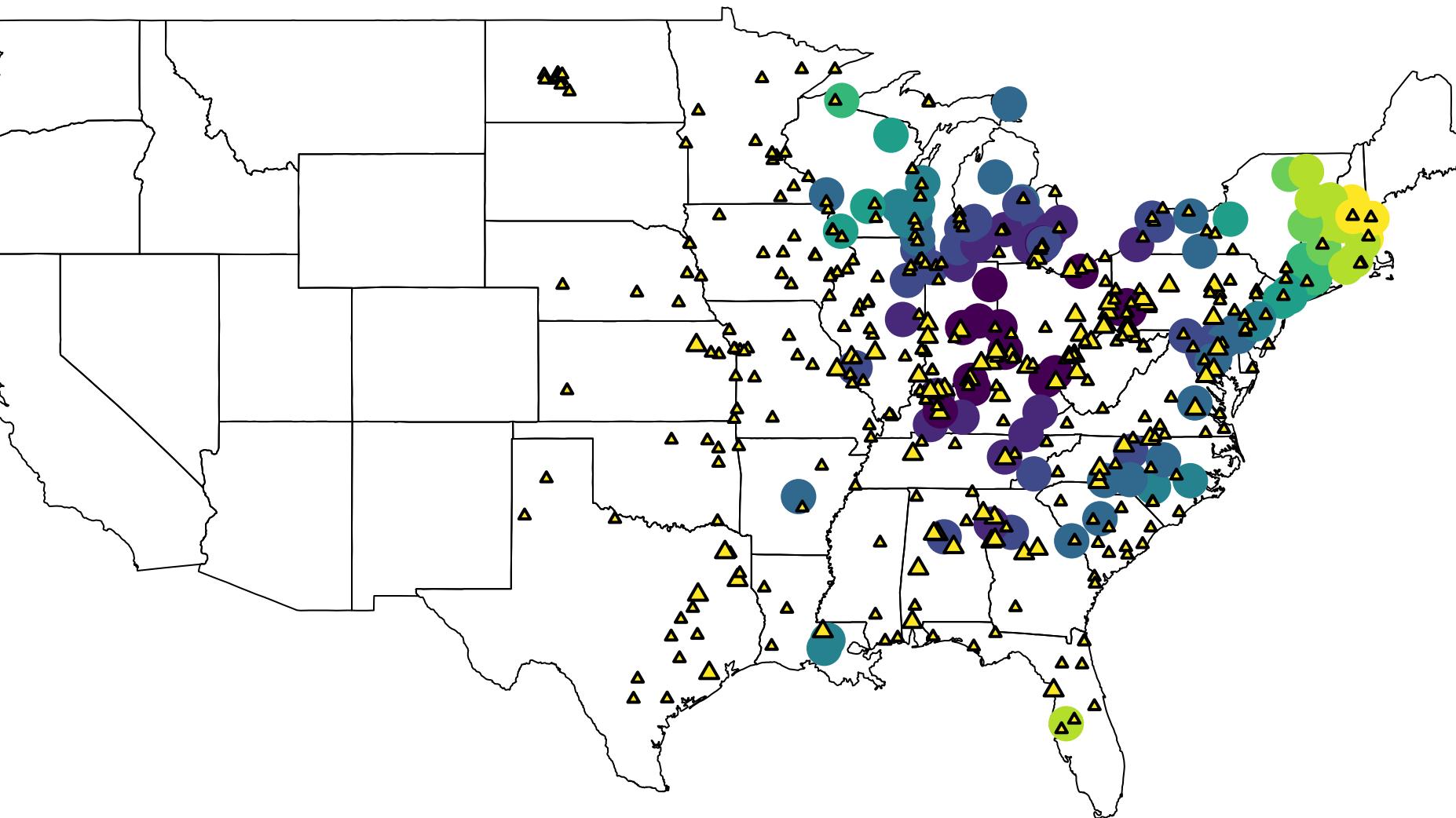
Monitor exposure:

sum of avgemissions*(1/log(distance)), year_temp_distLag 2005



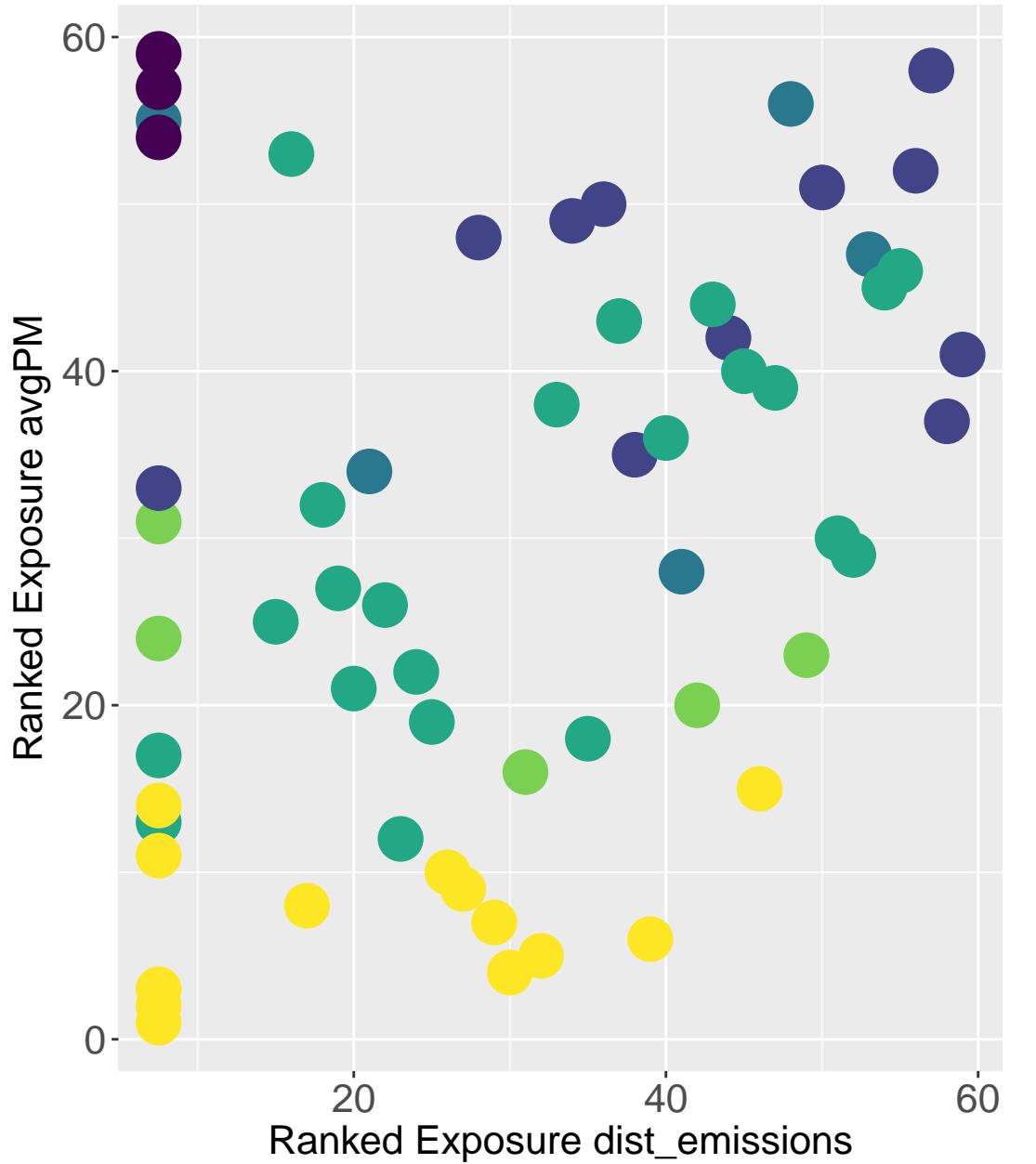
Monitor exposure:

avgPM, decomposed75 year_temp_distLag 2005

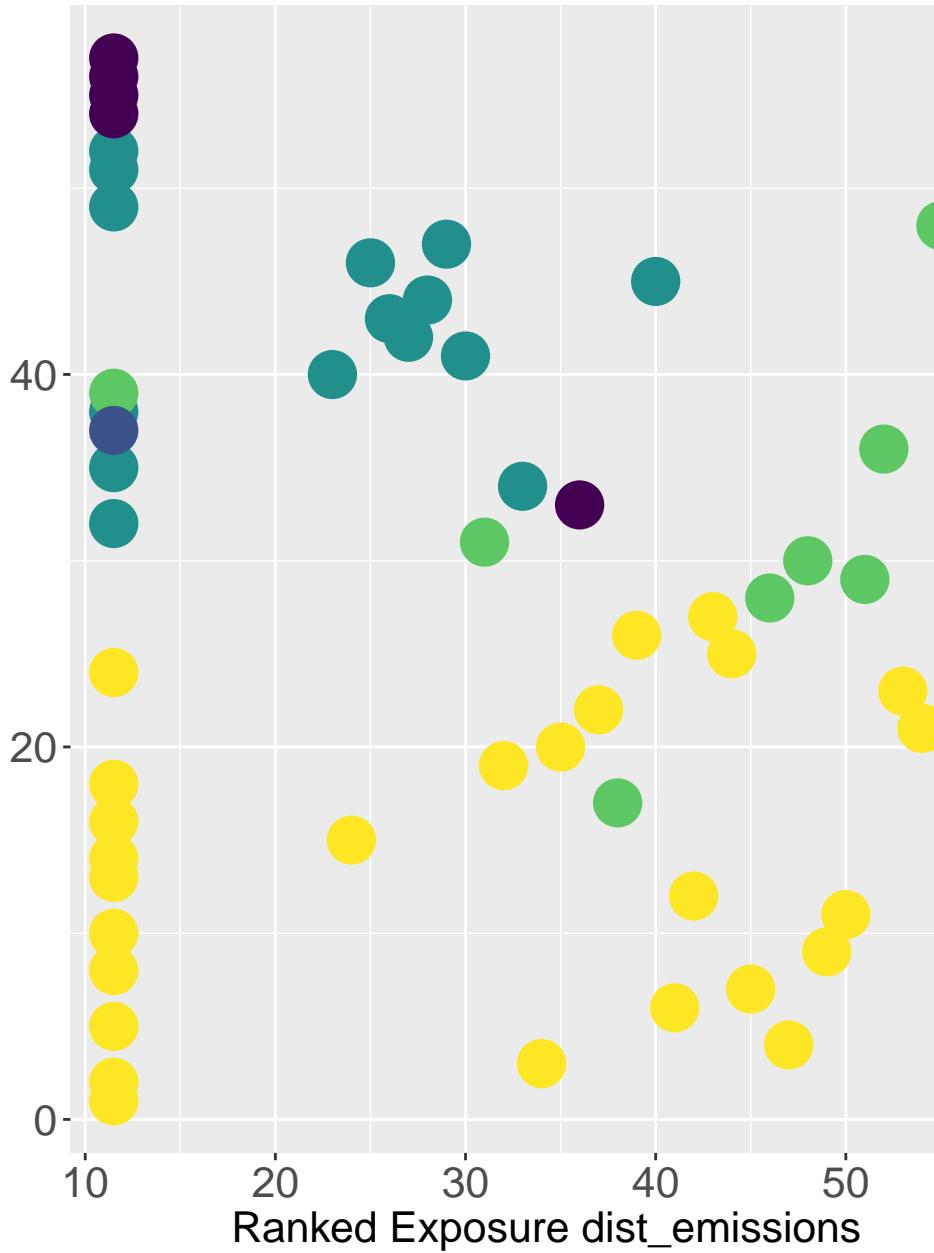


Comparison of coal emissions exposure (sum of $(1/\log(\text{distance})) * \text{avgemissions}$ vs. low freq PM)

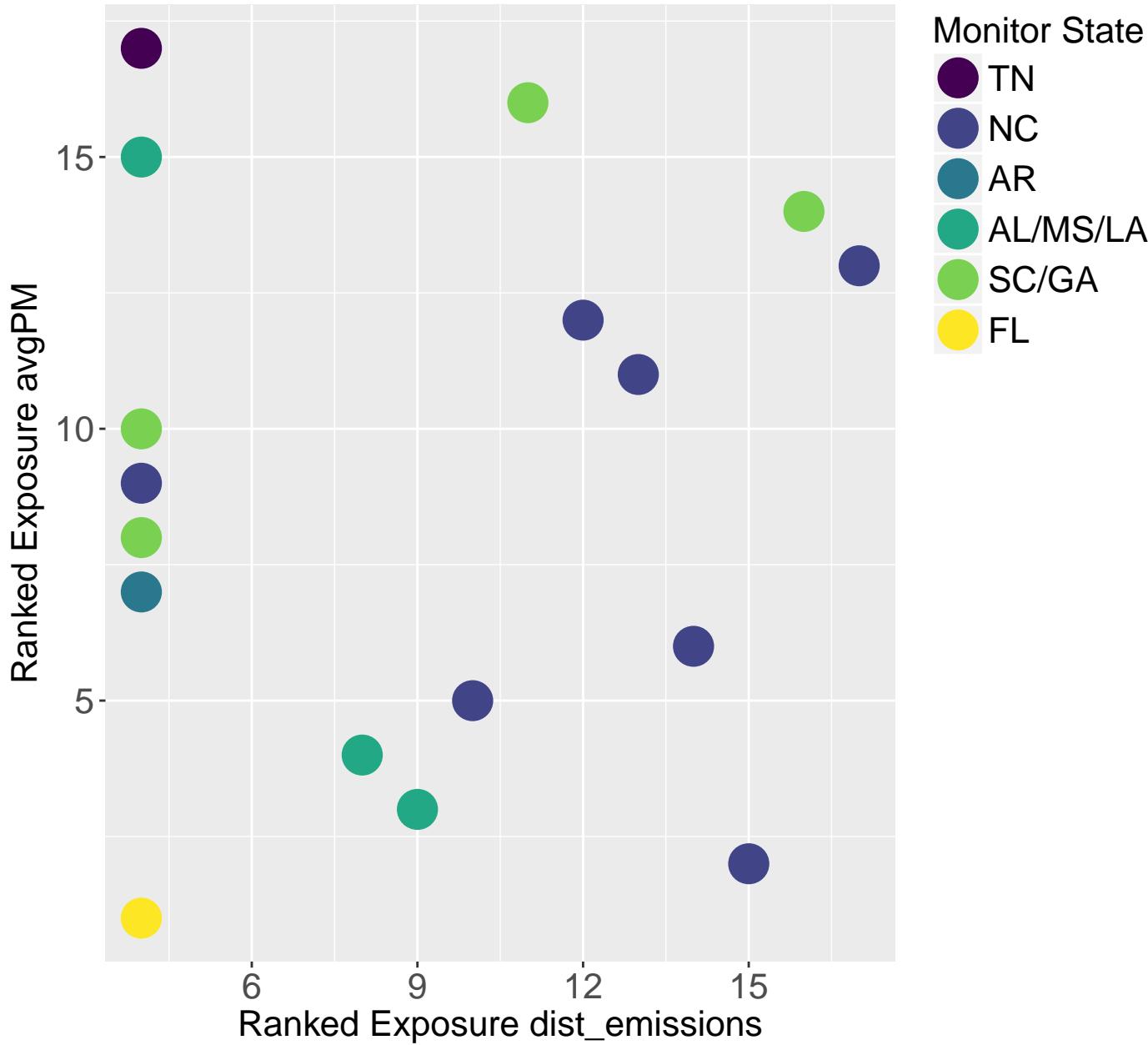
Industrial Midwest Monitors
(correlation = 0.46)



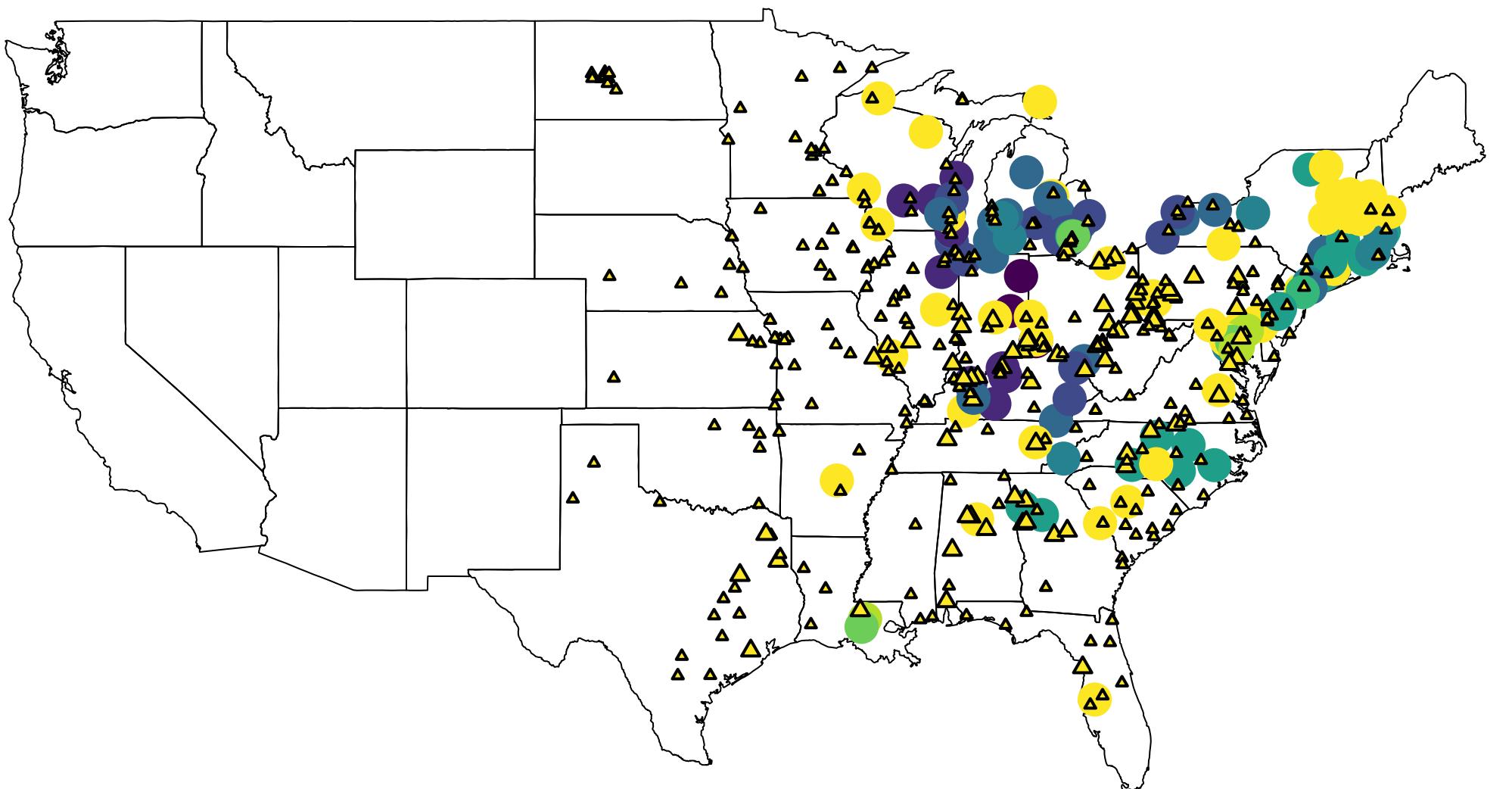
Northeast Monitors
(correlation = -0.1)



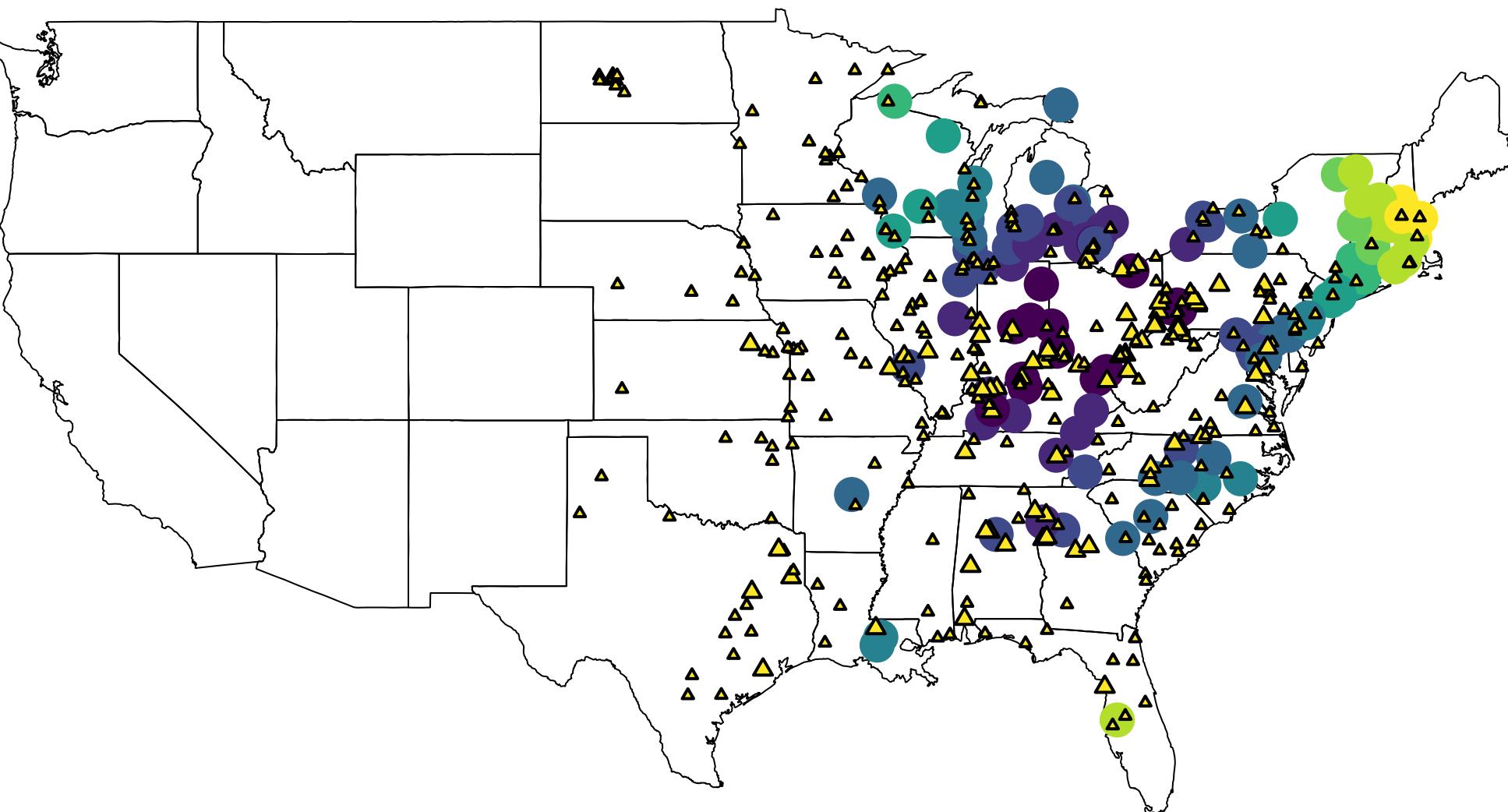
Southeast Monitors
(correlation = 0.38)



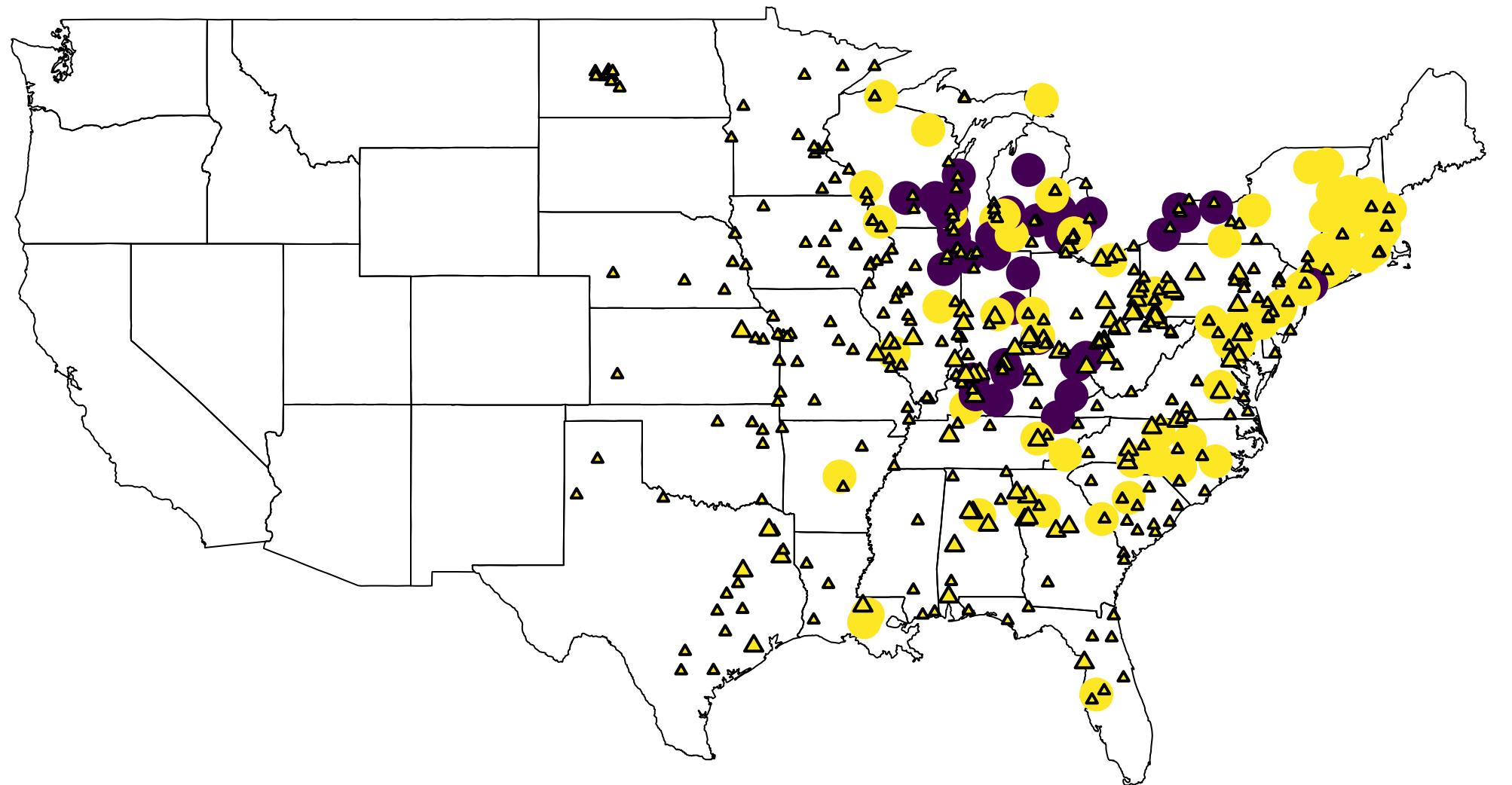
Monitor exposure: num_edges, year_temp_distLag 2005



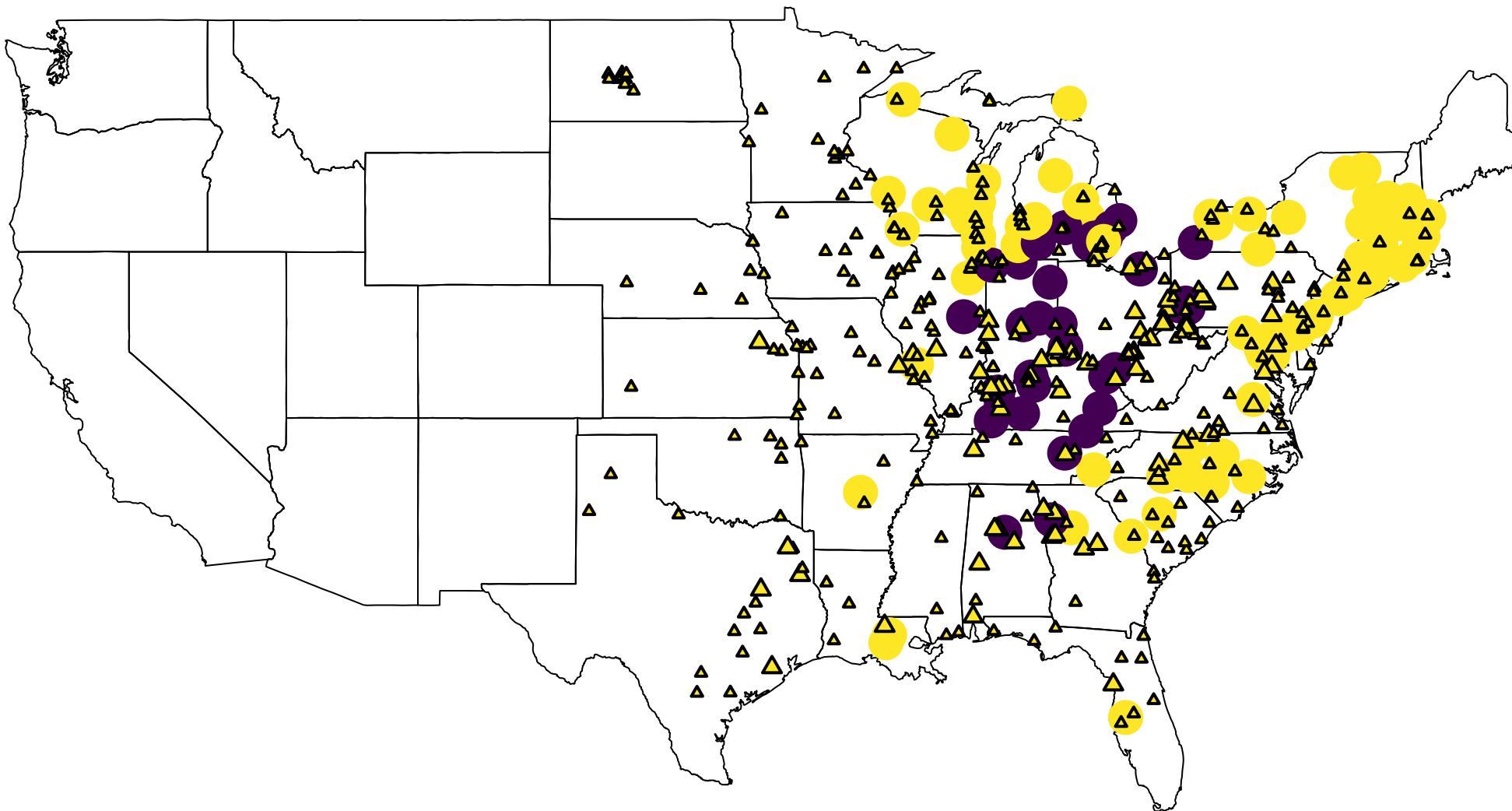
Monitor exposure: avgPM, decomposed75 year_temp_distLag 2005



Highest exposed: num_edges, year_temp_distLag 2005

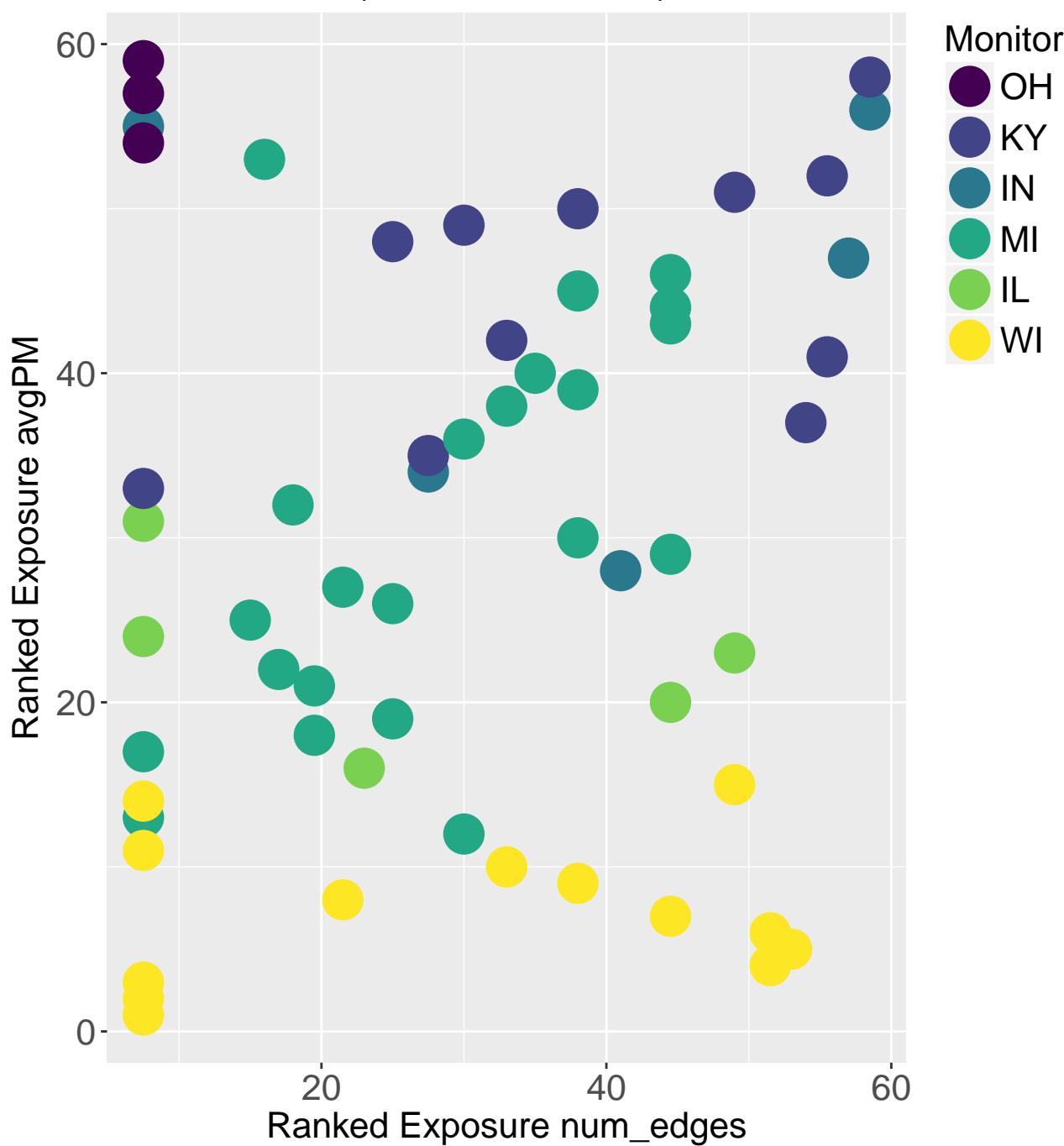


Highest exposed: avgPM, decomposed75 year_temp_distLag 2005

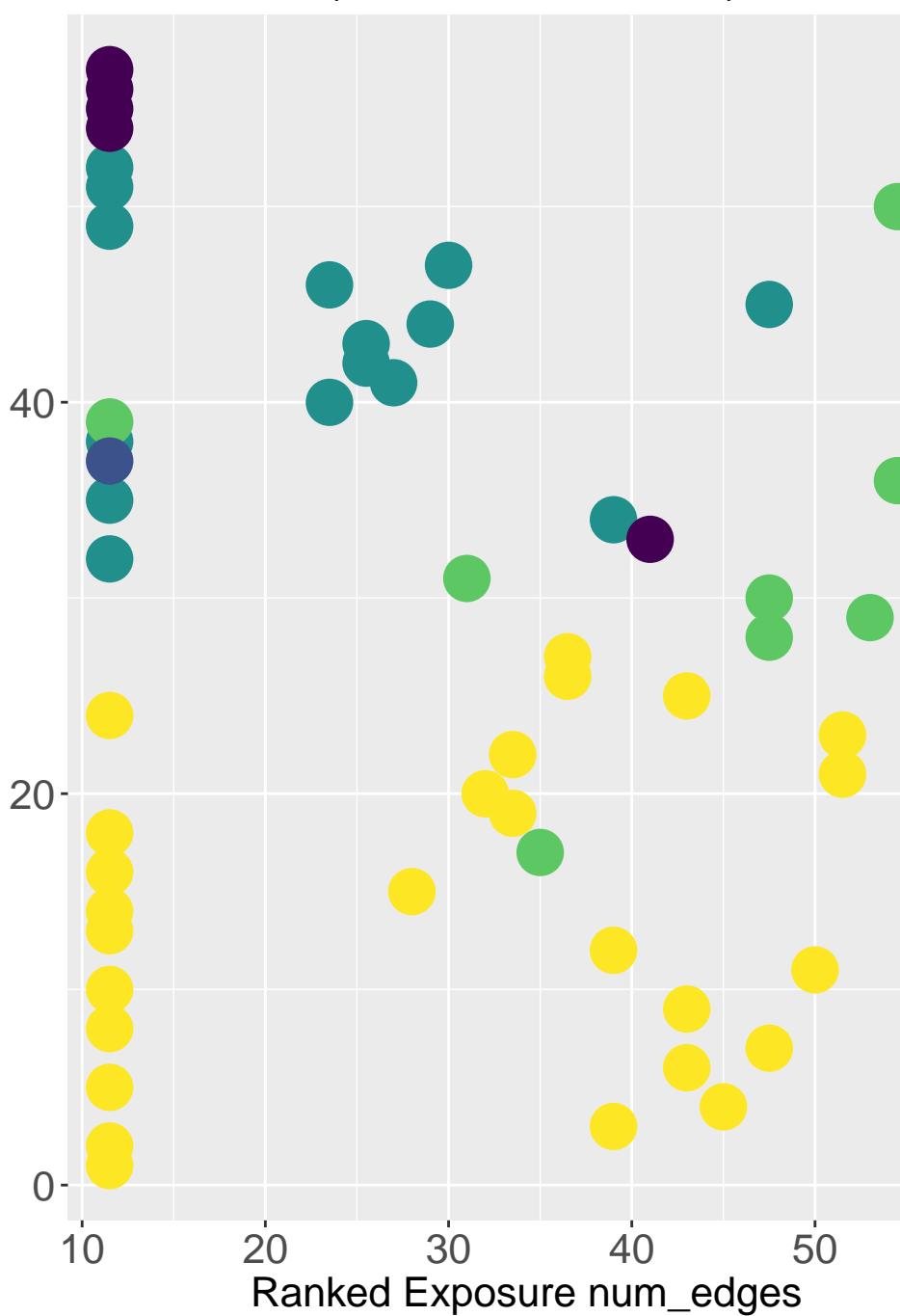


Comparison of coal emissions exposure (num_edges vs. low freq PM)

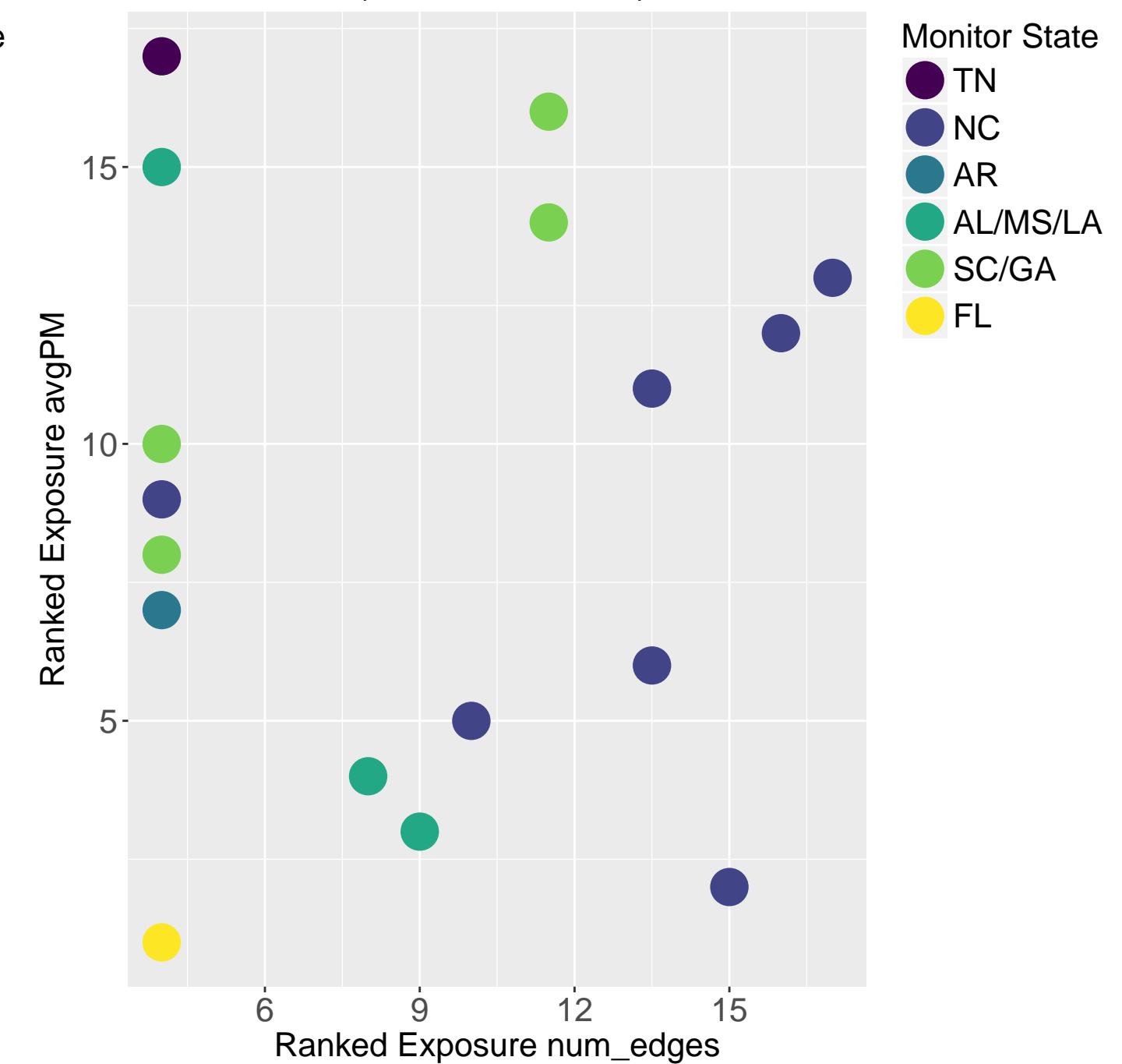
Industrial Midwest Monitors
(correlation = 0.2)



Northeast Monitors
(correlation = -0.06)

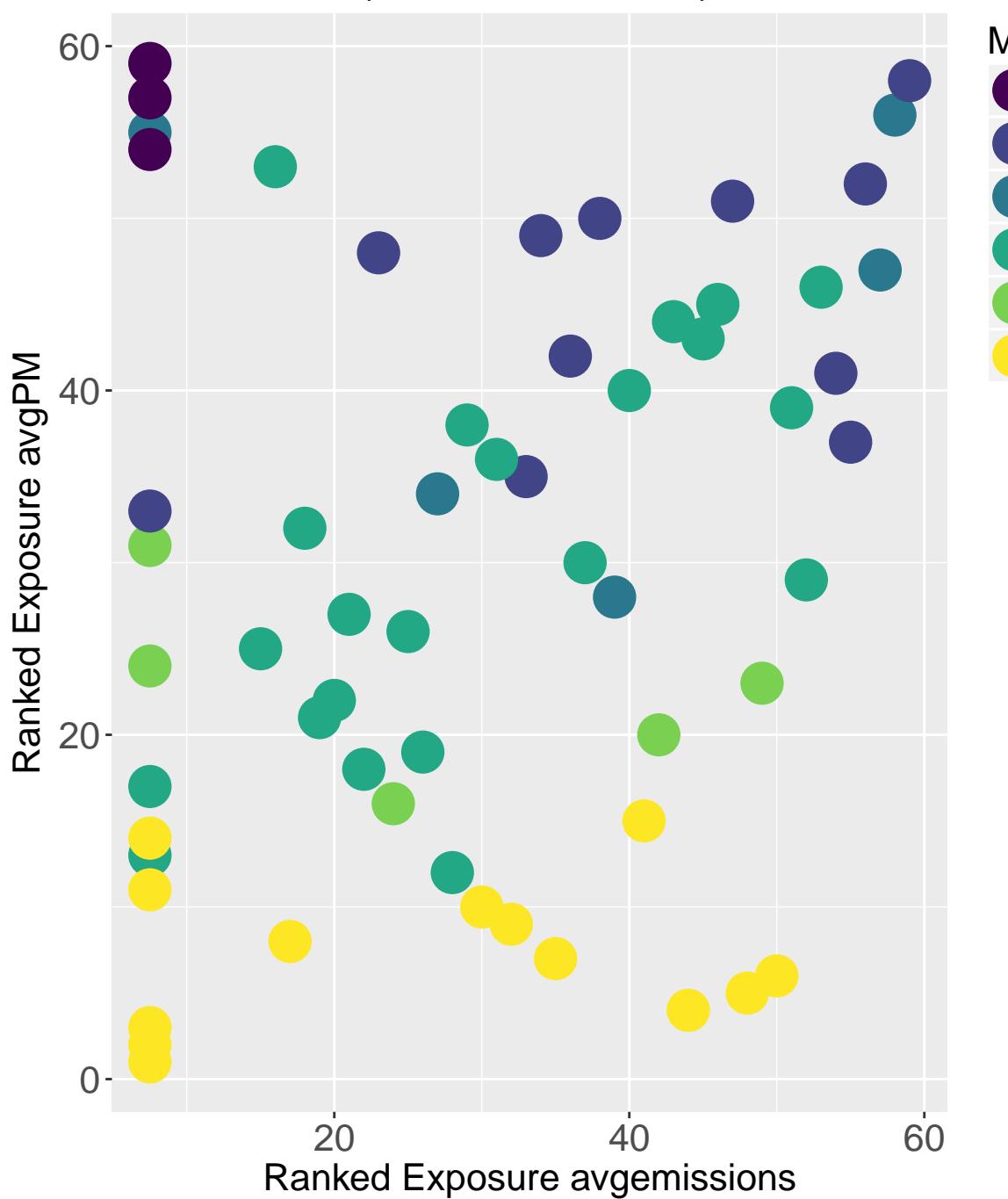


Southeast Monitors
(correlation = 0.3)

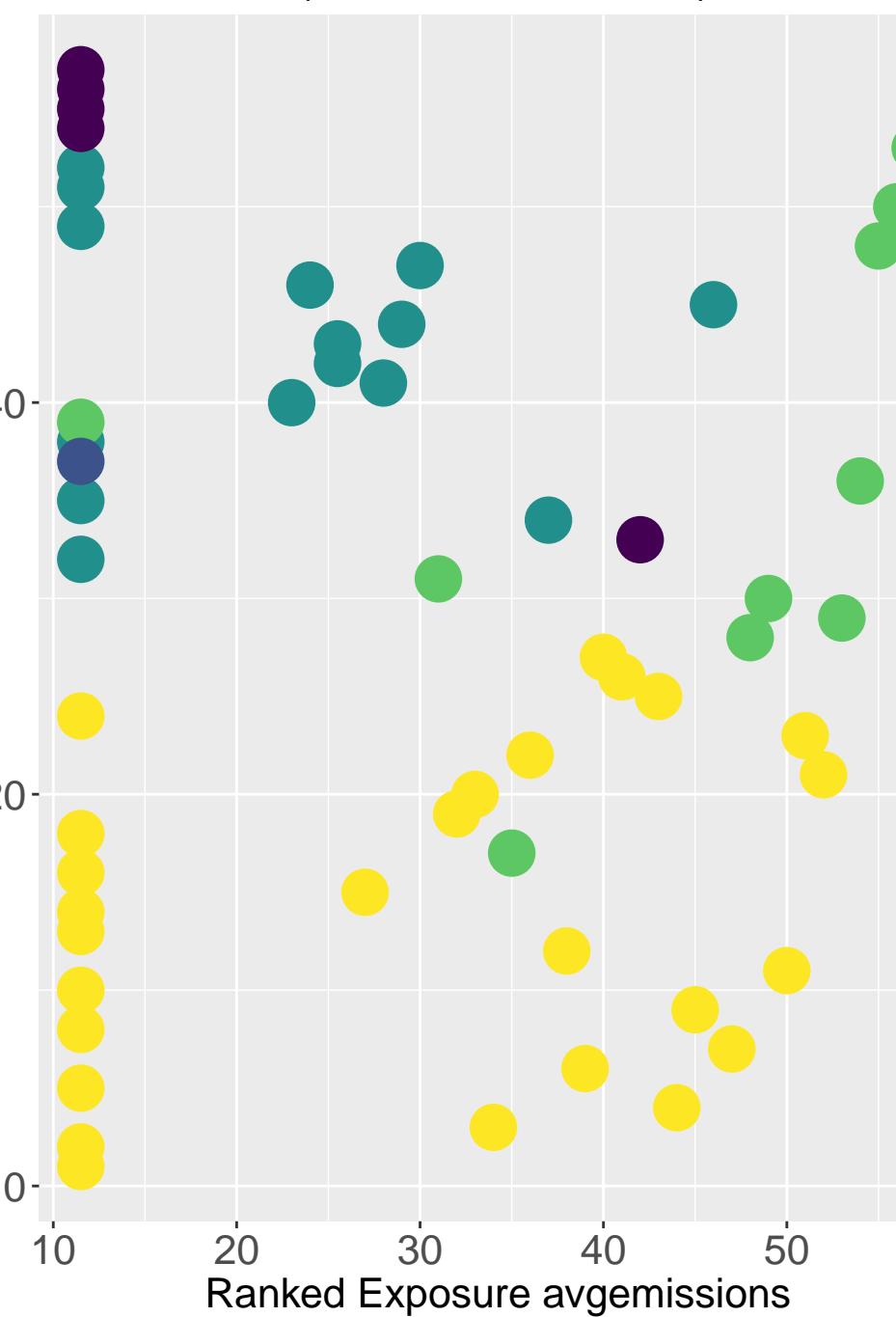


Comparison of coal emissions exposure (avgemissions vs. low freq PM)

Industrial Midwest Monitors
(correlation = 0.35)



Northeast Monitors
(correlation = -0.02)



Southeast Monitors
(correlation = 0.14)

