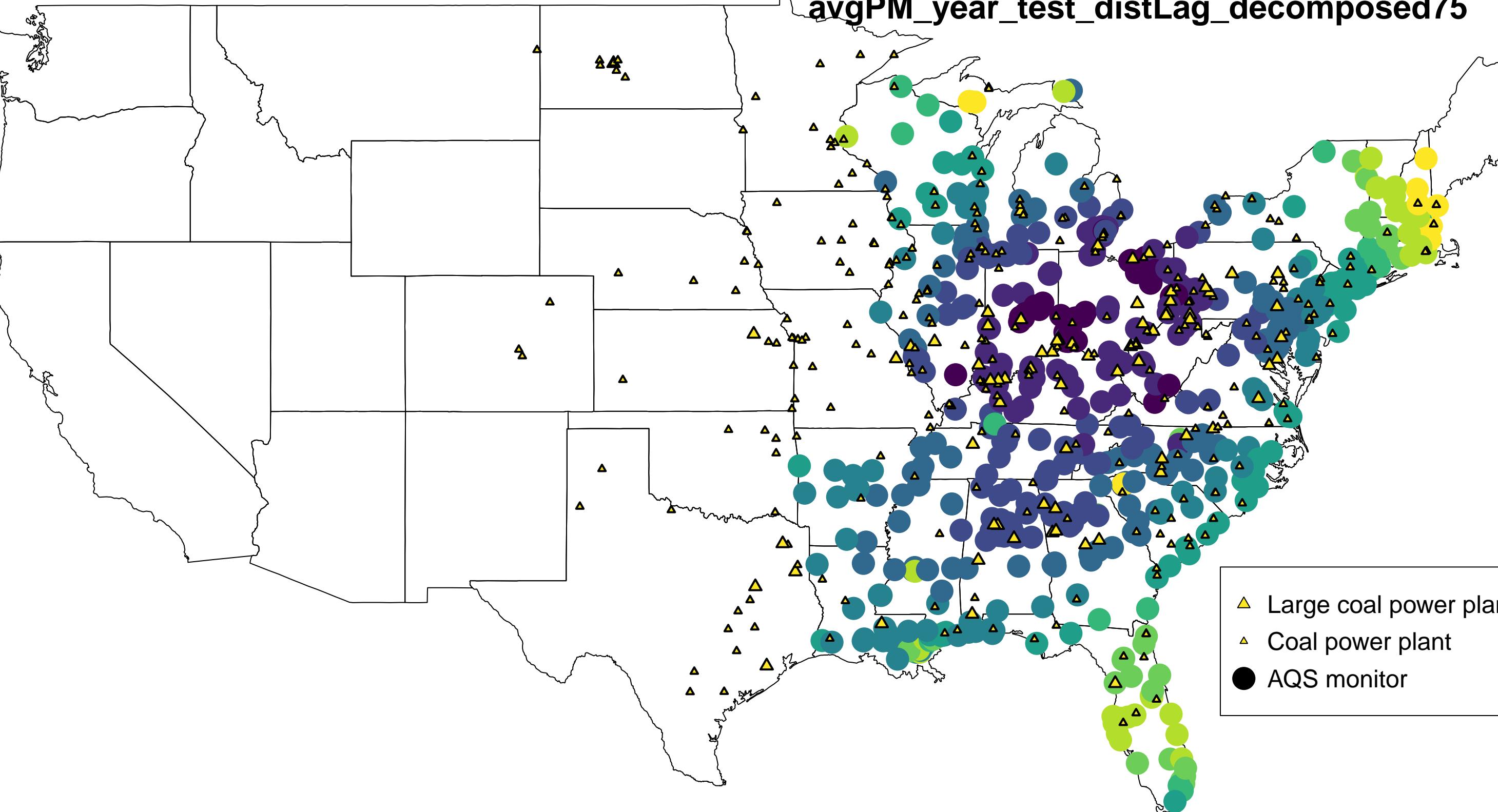
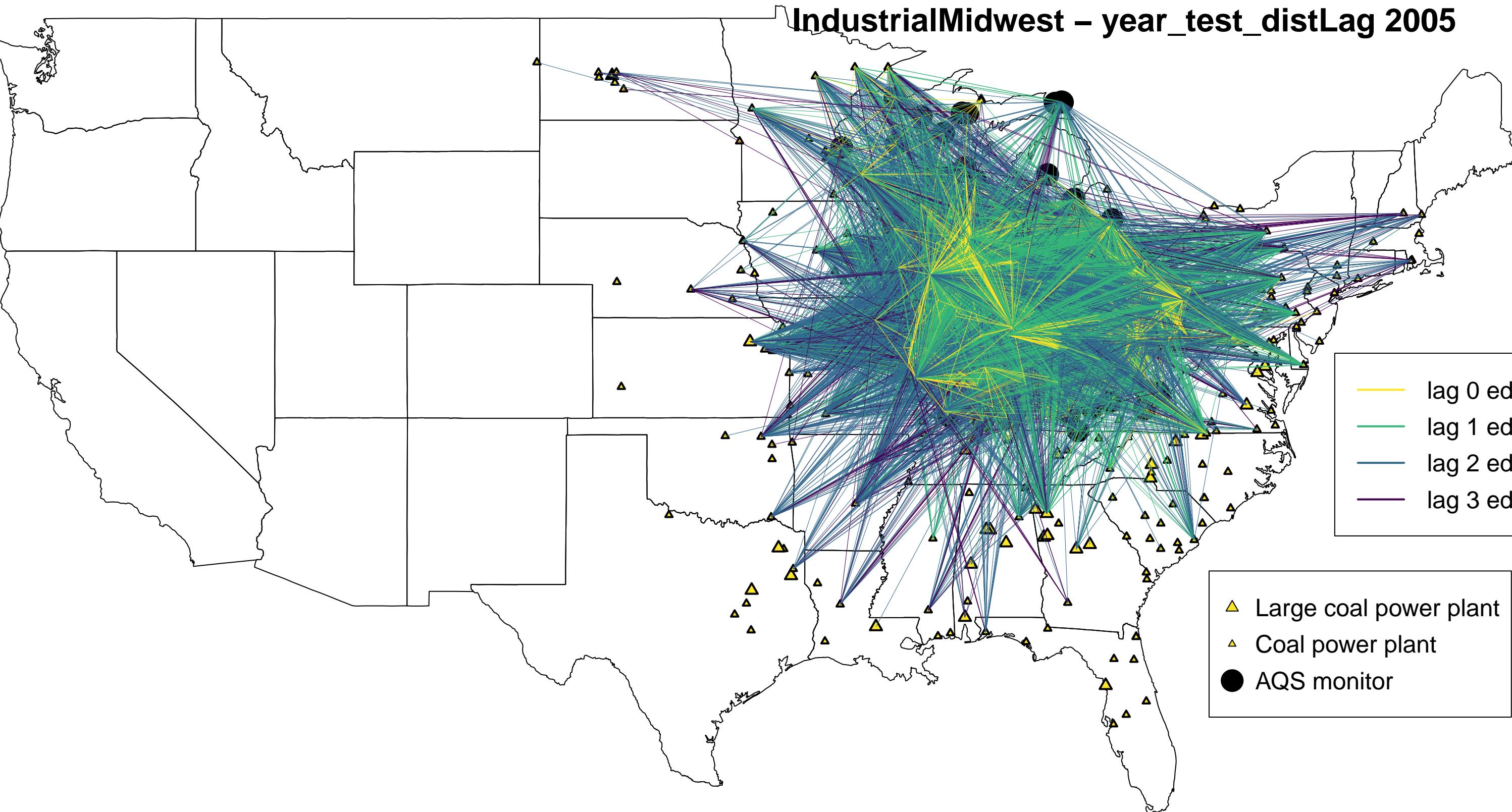


- ▲ Large coal power plant
- ▼ Coal power plant
- AQS monitor

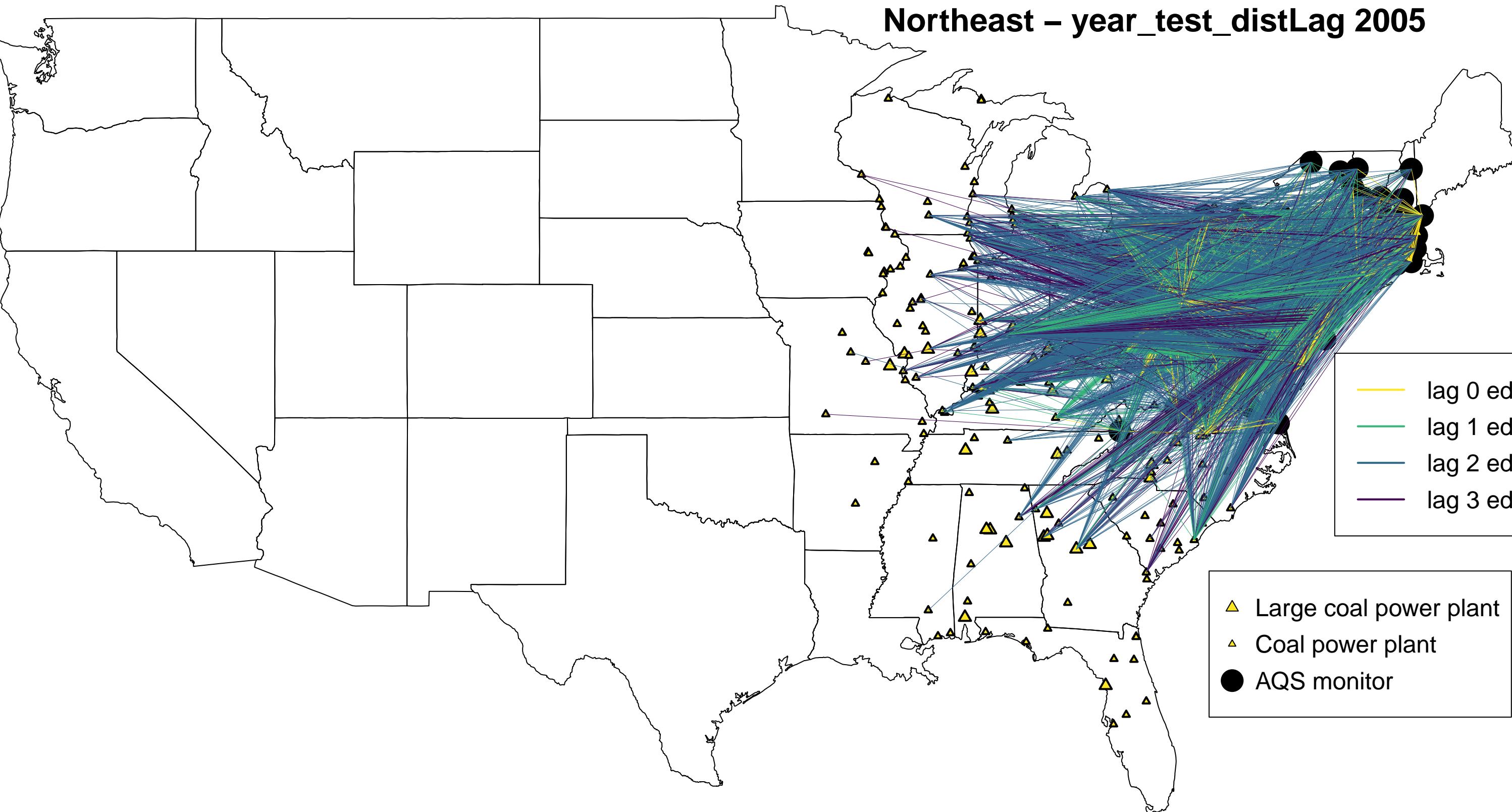
avgPM_year_test_distLag_decomposed75



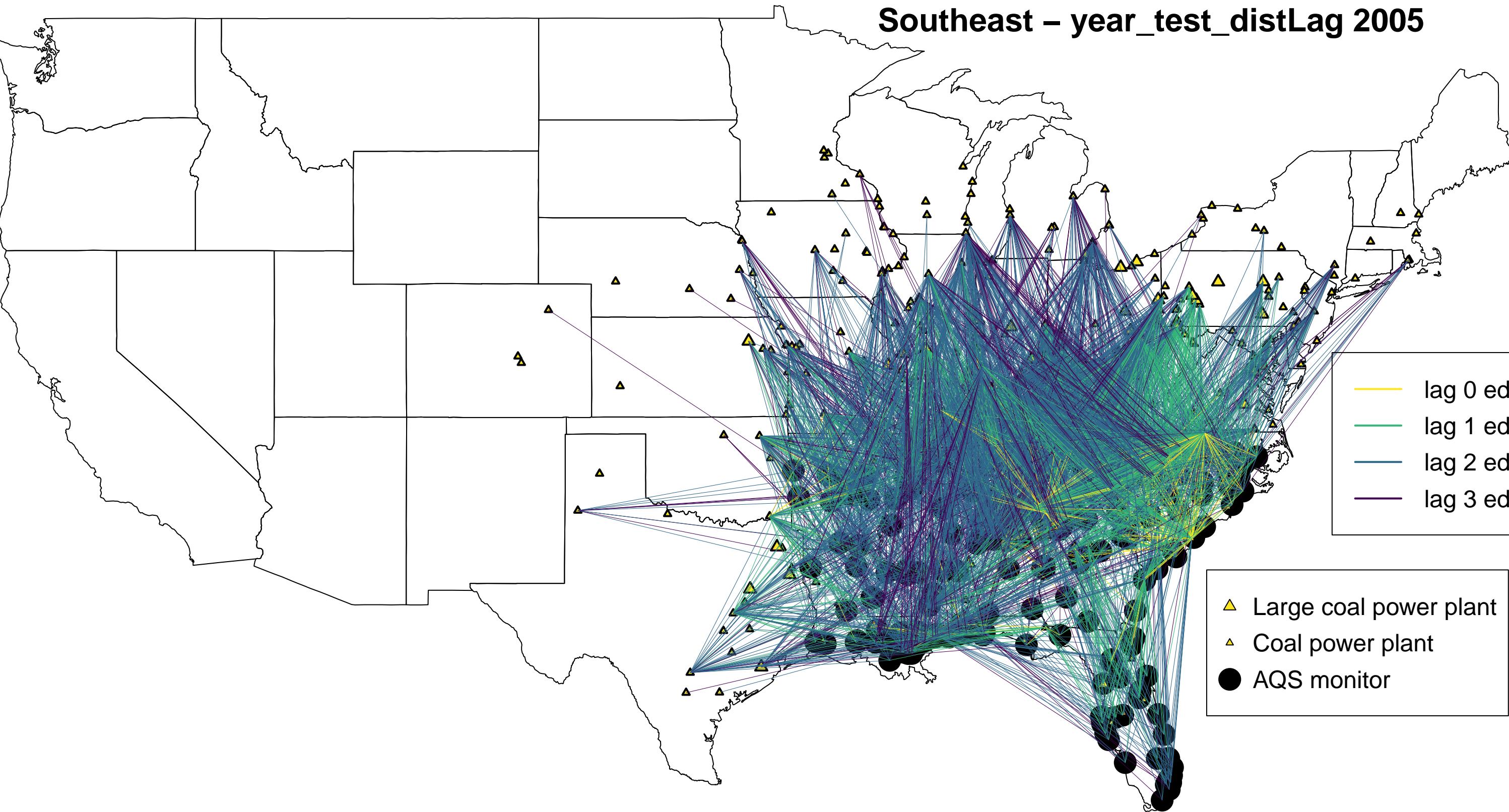
IndustrialMidwest – year_test_distLag 2005



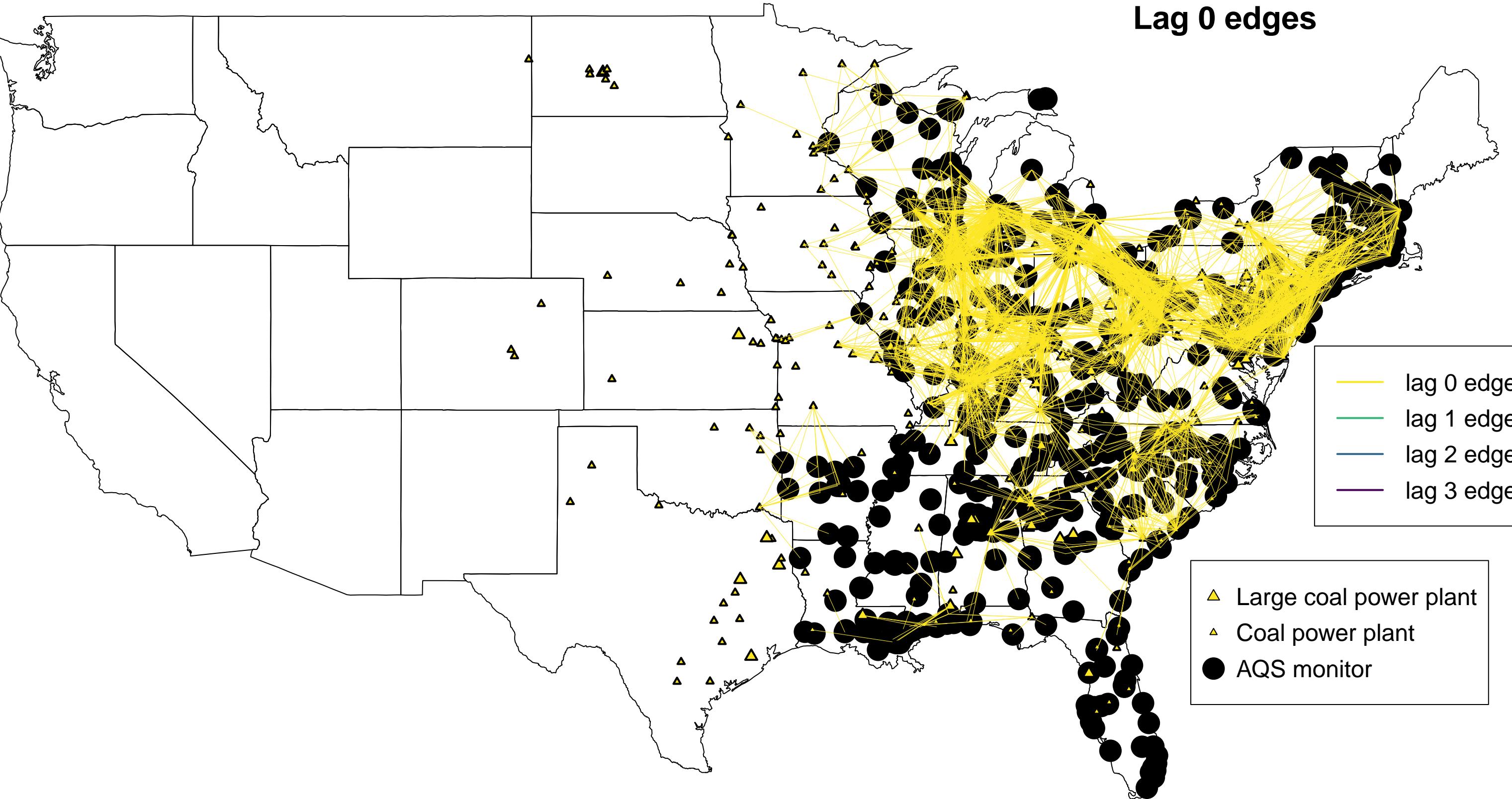
Northeast – year_test_distLag 2005



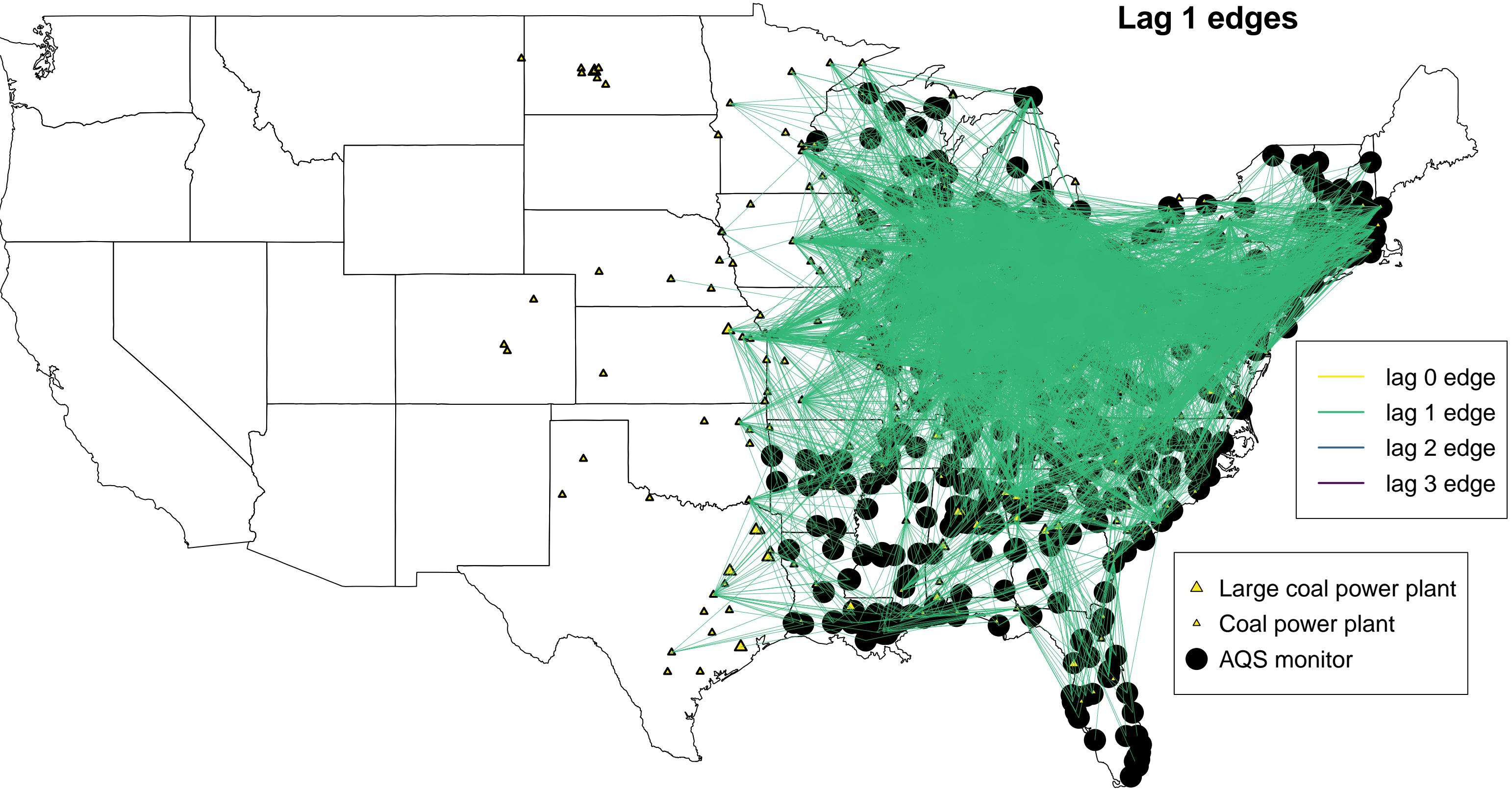
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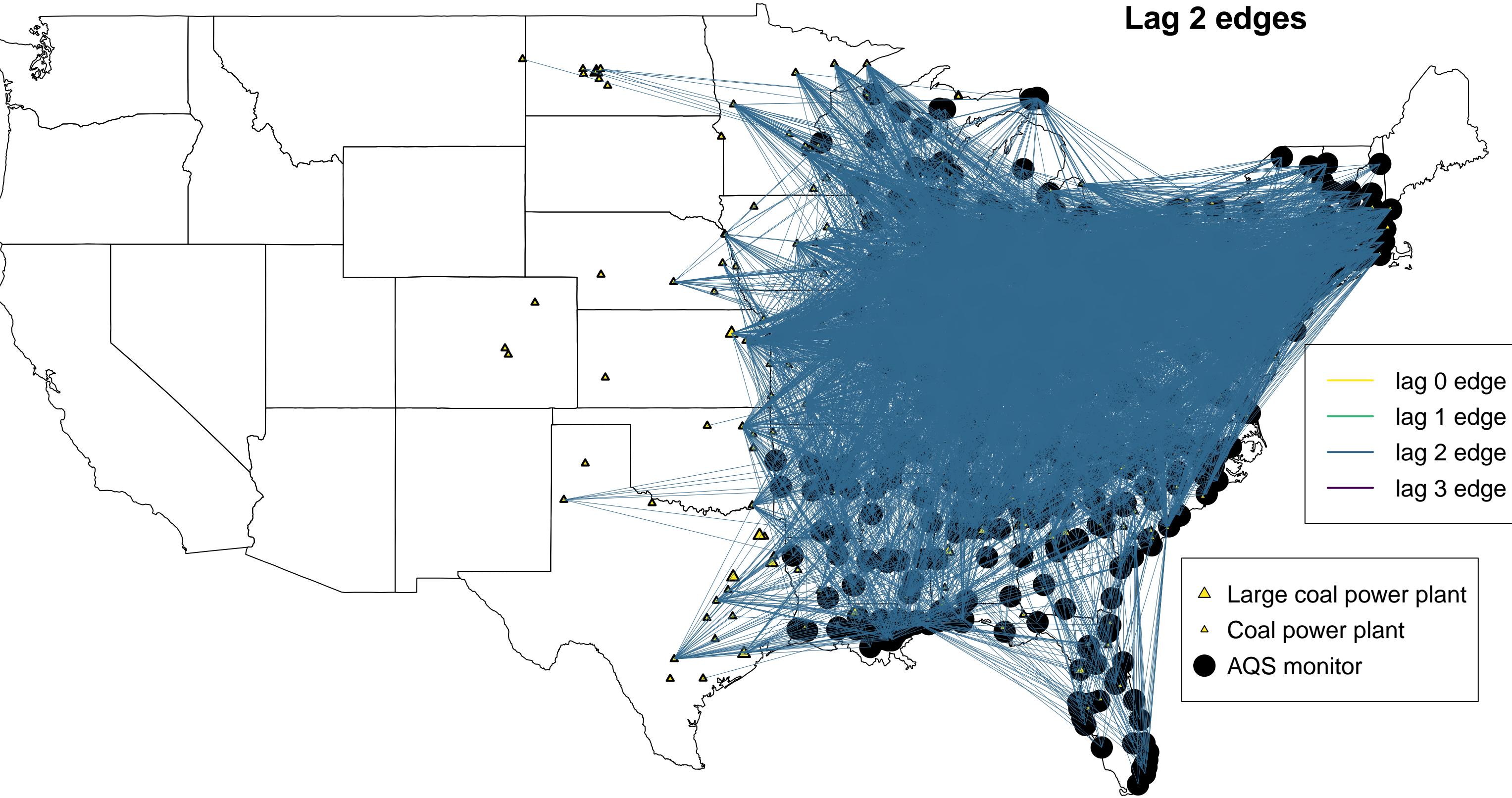
Lag 0 edges



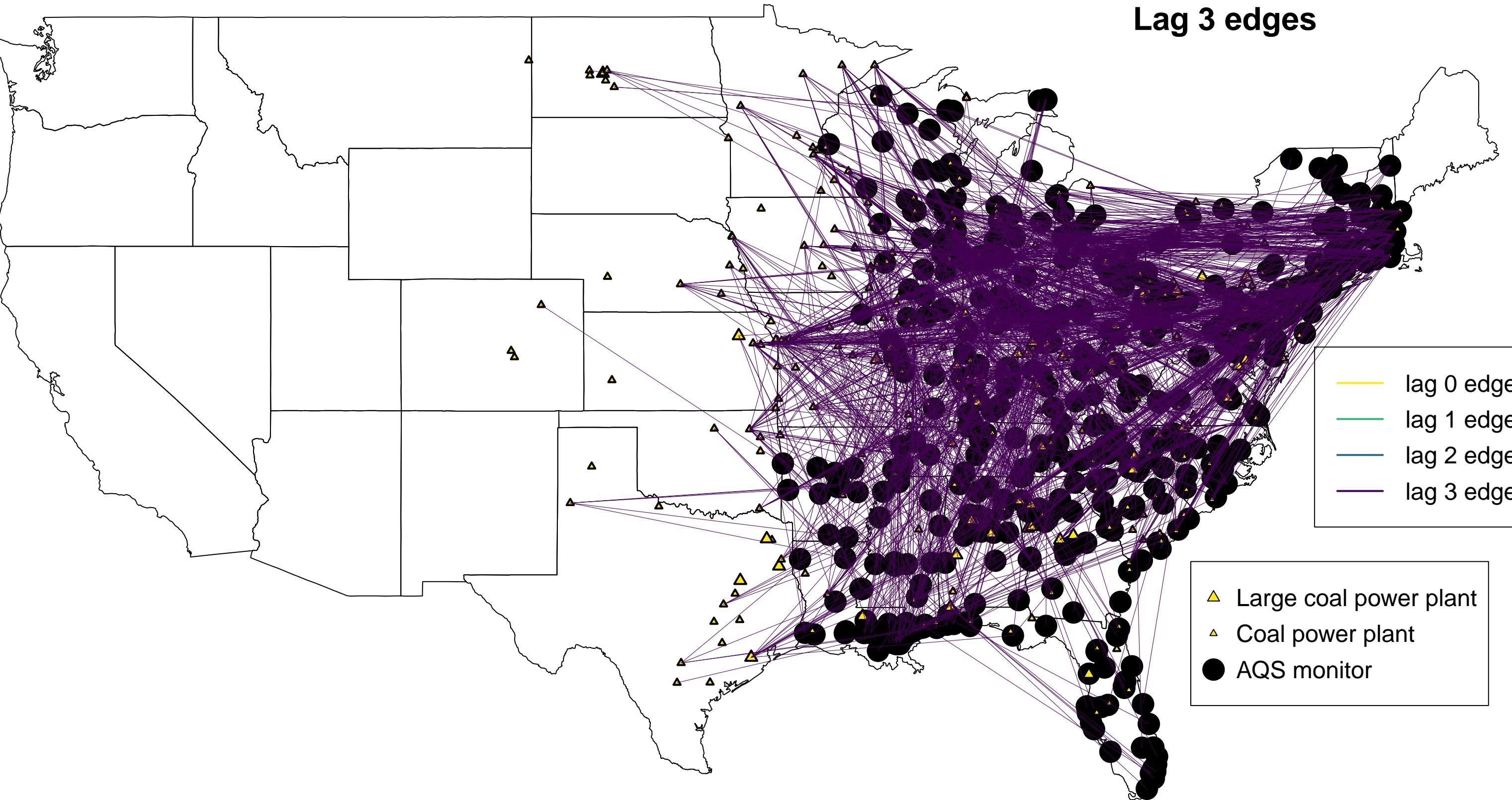
Lag 1 edges

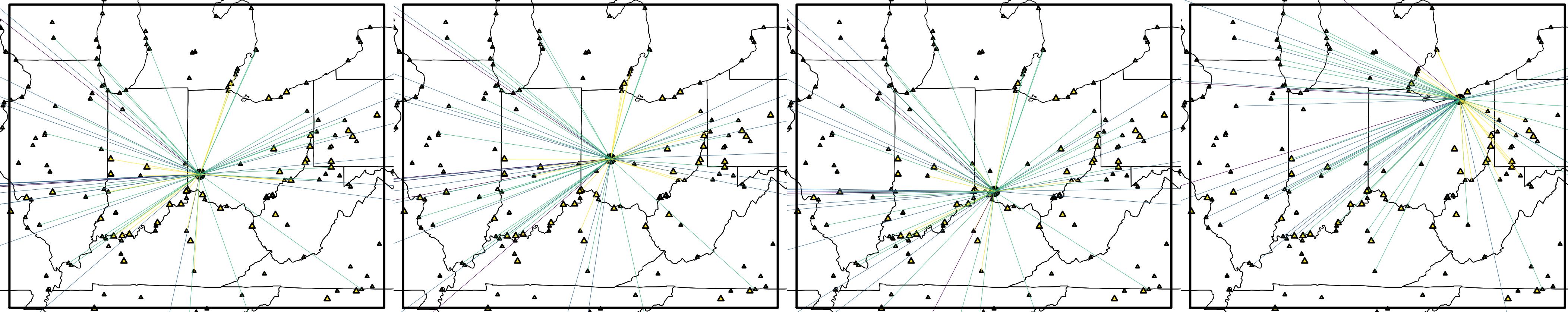
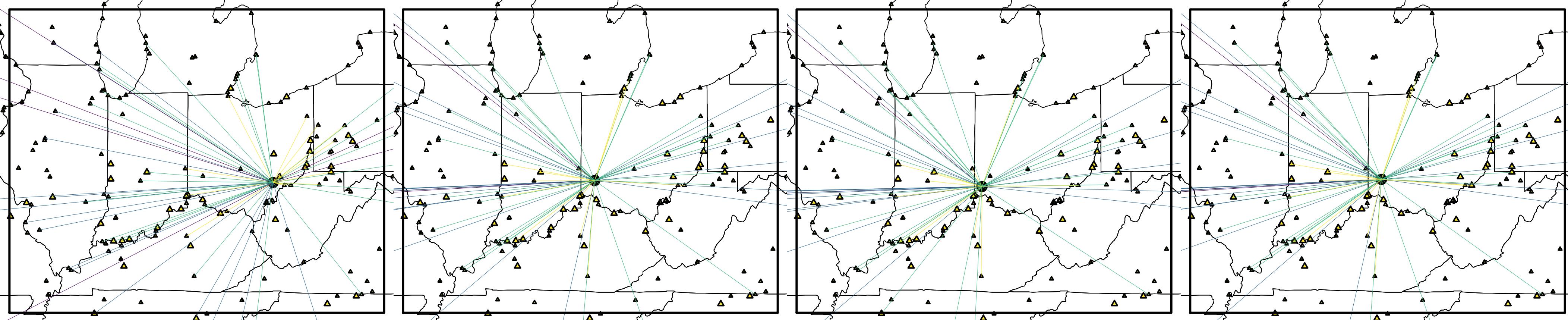


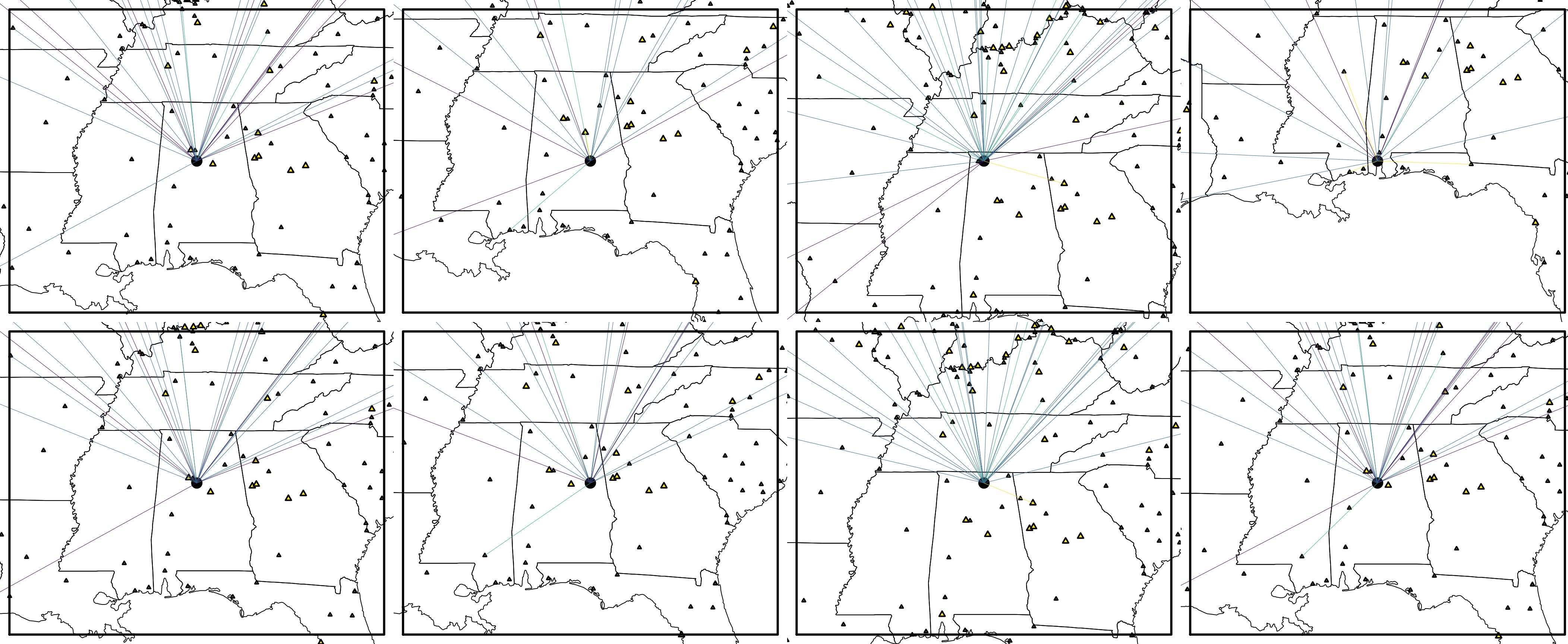
Lag 2 edges

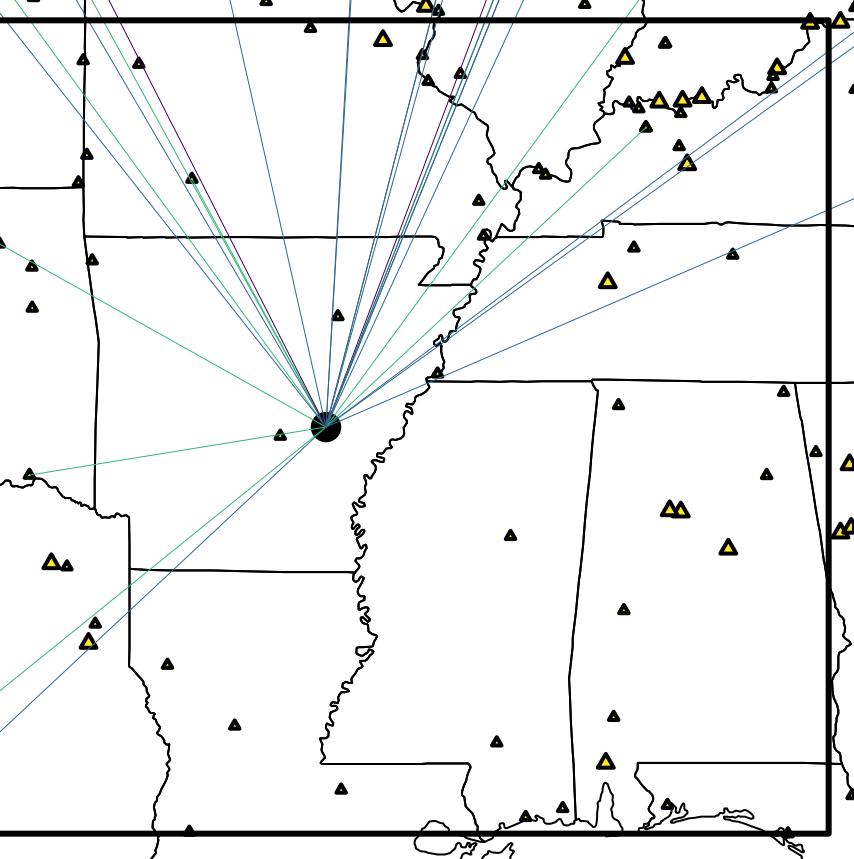
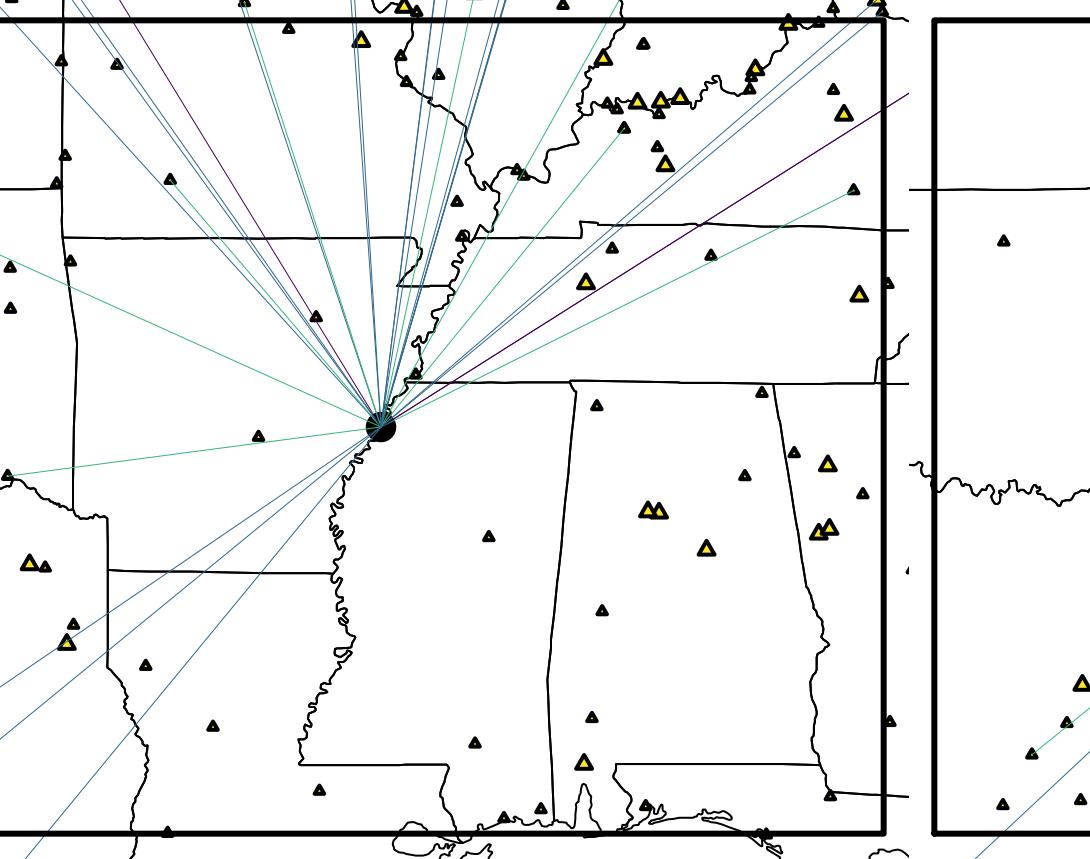
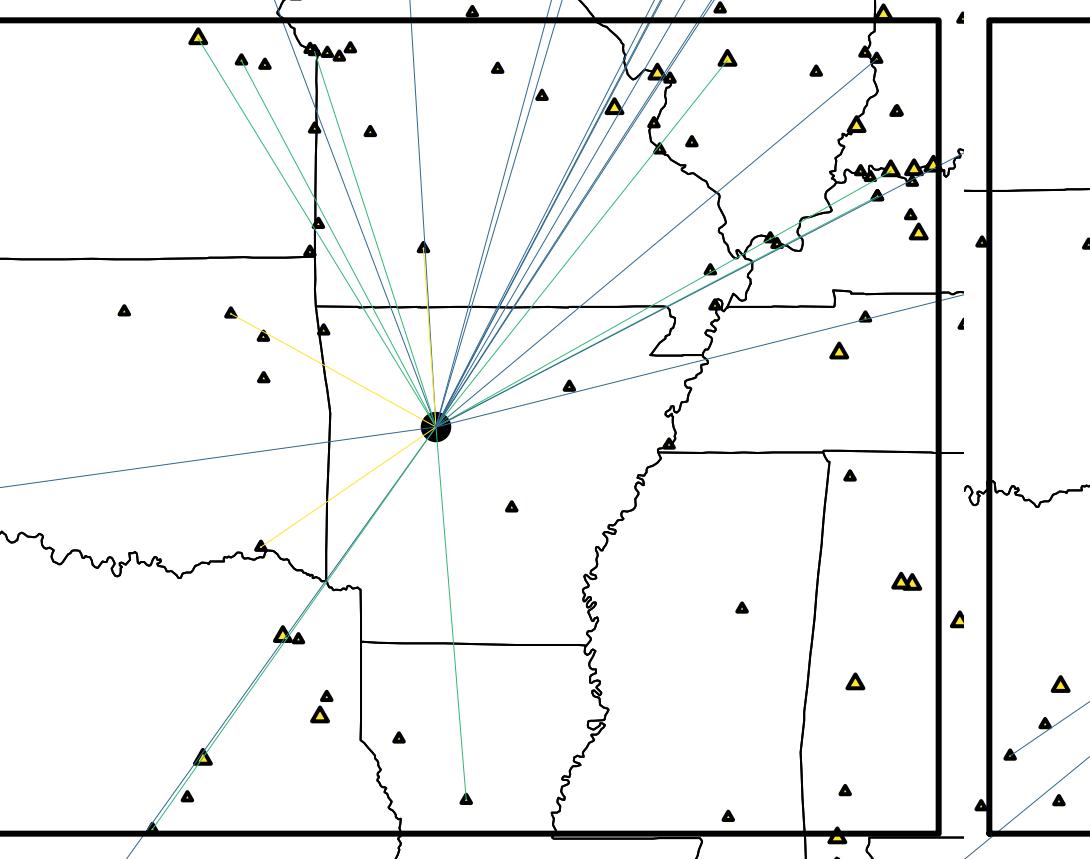
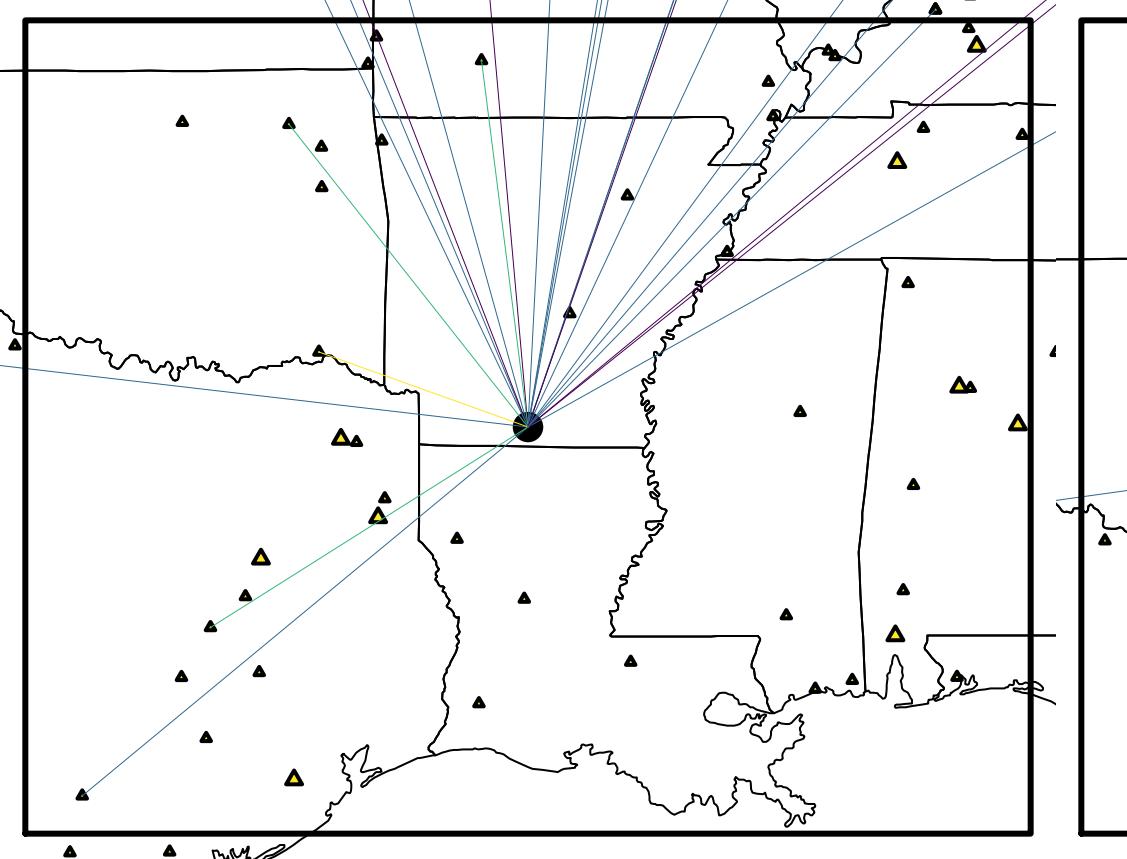
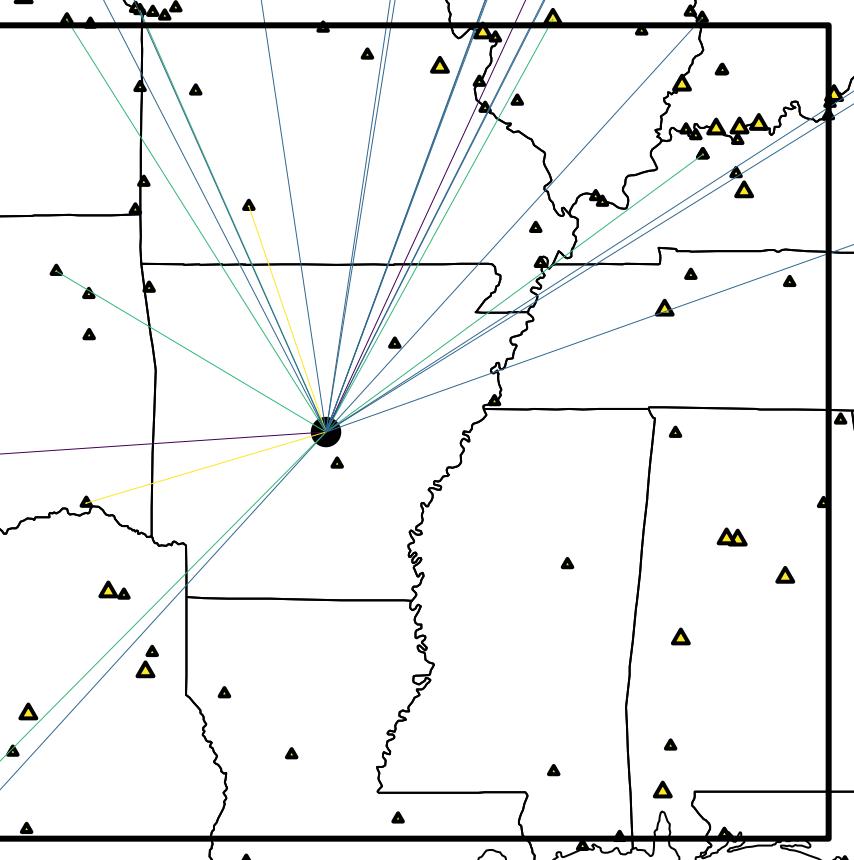
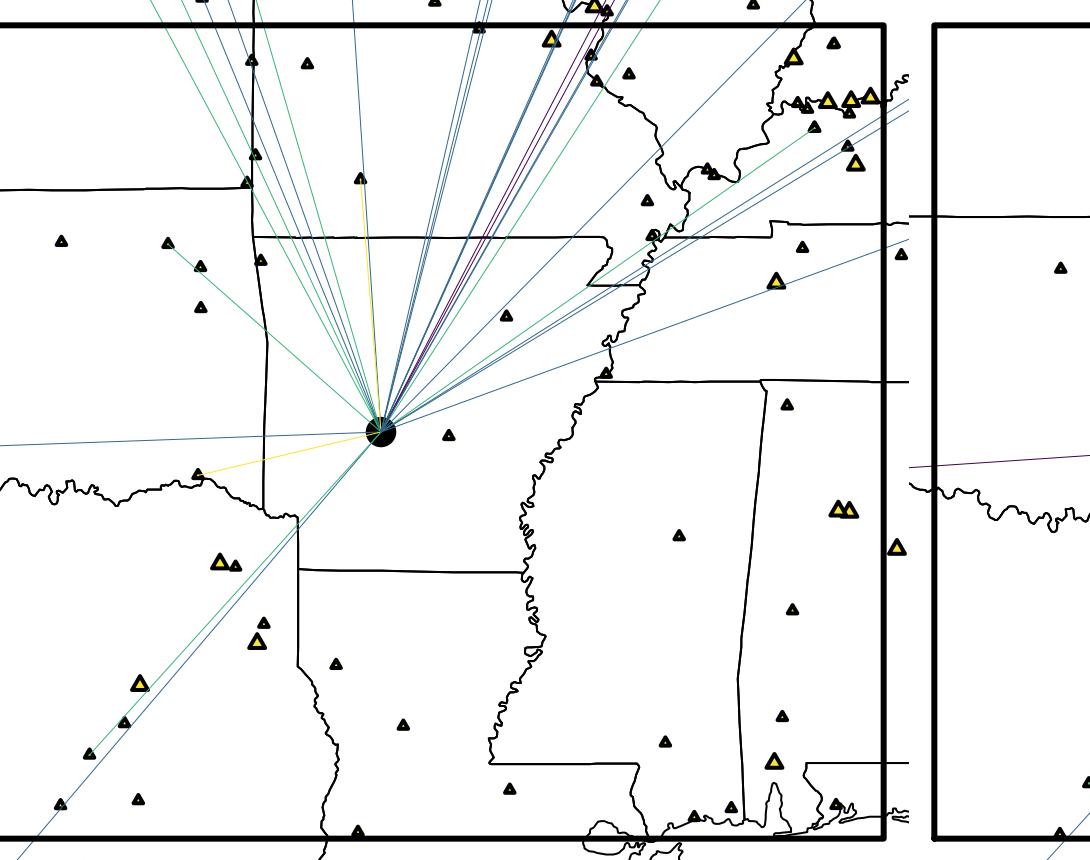
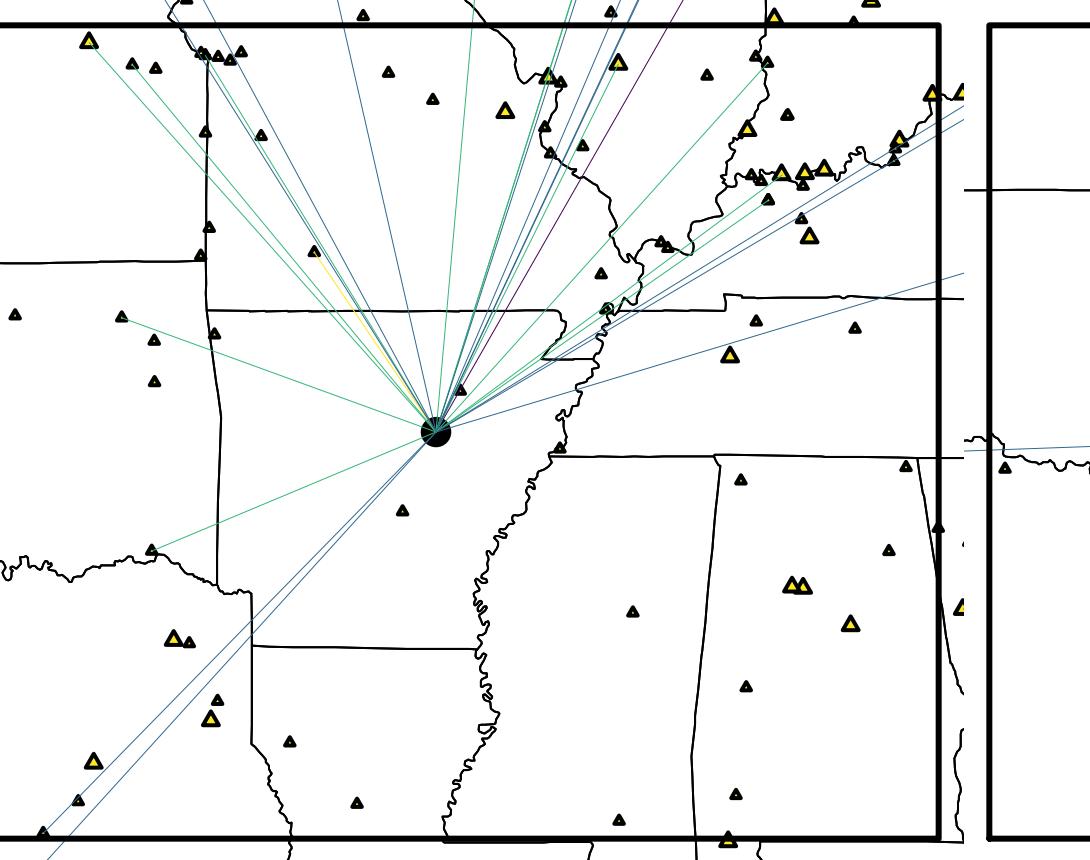
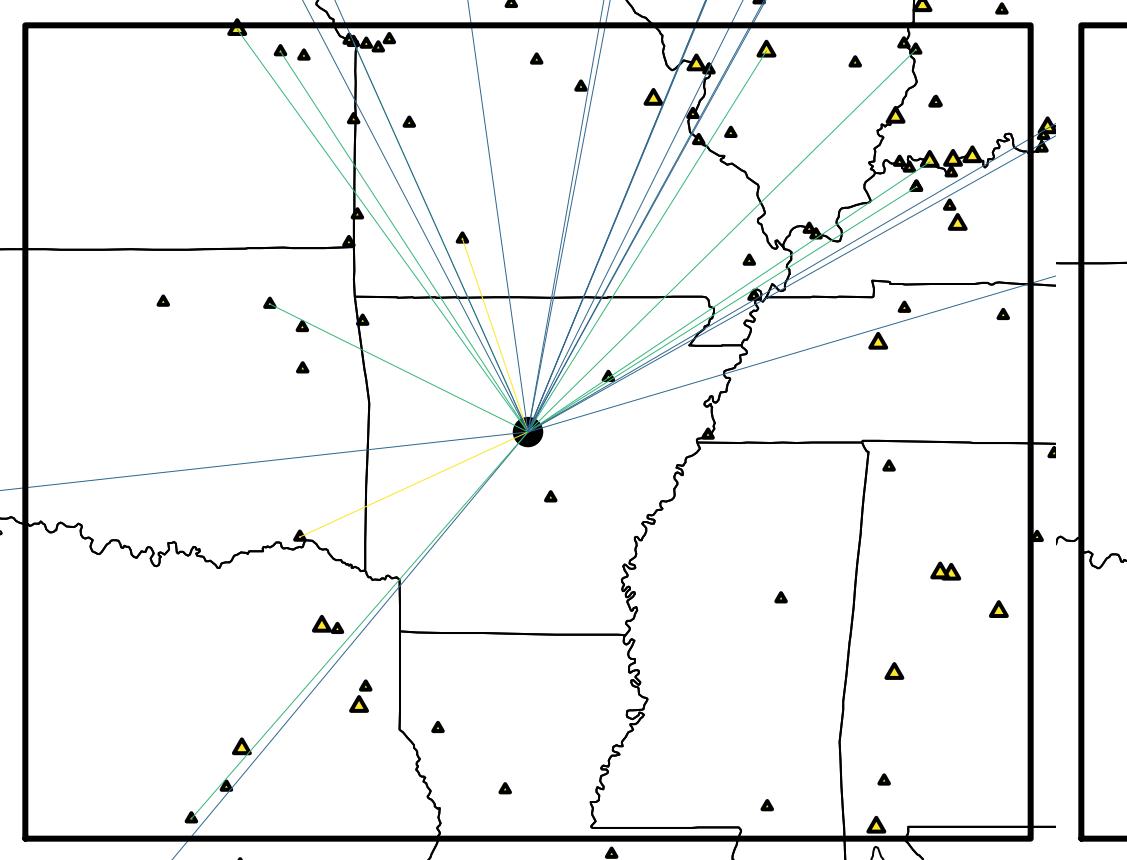


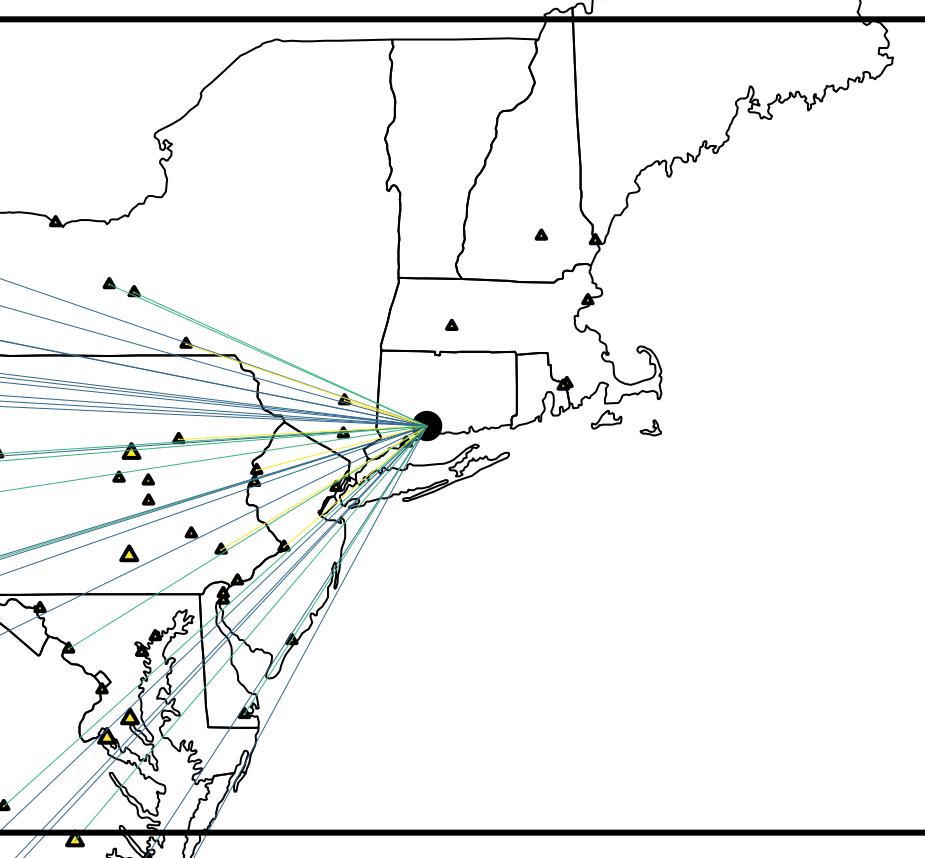
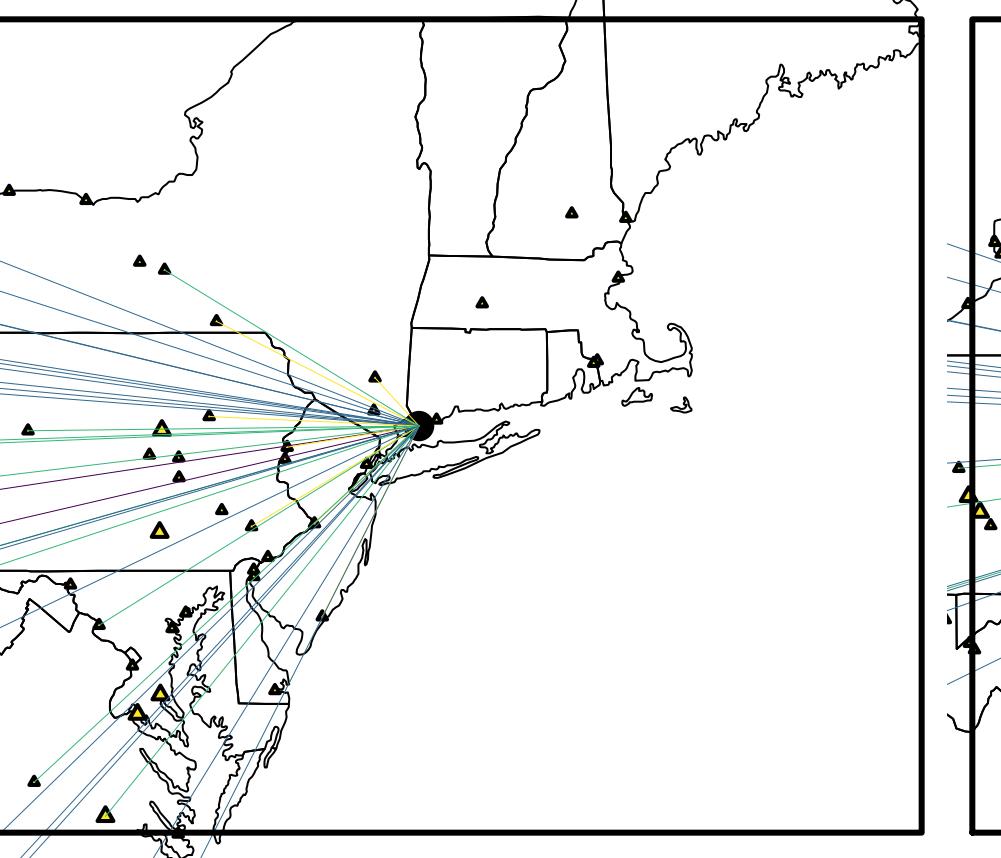
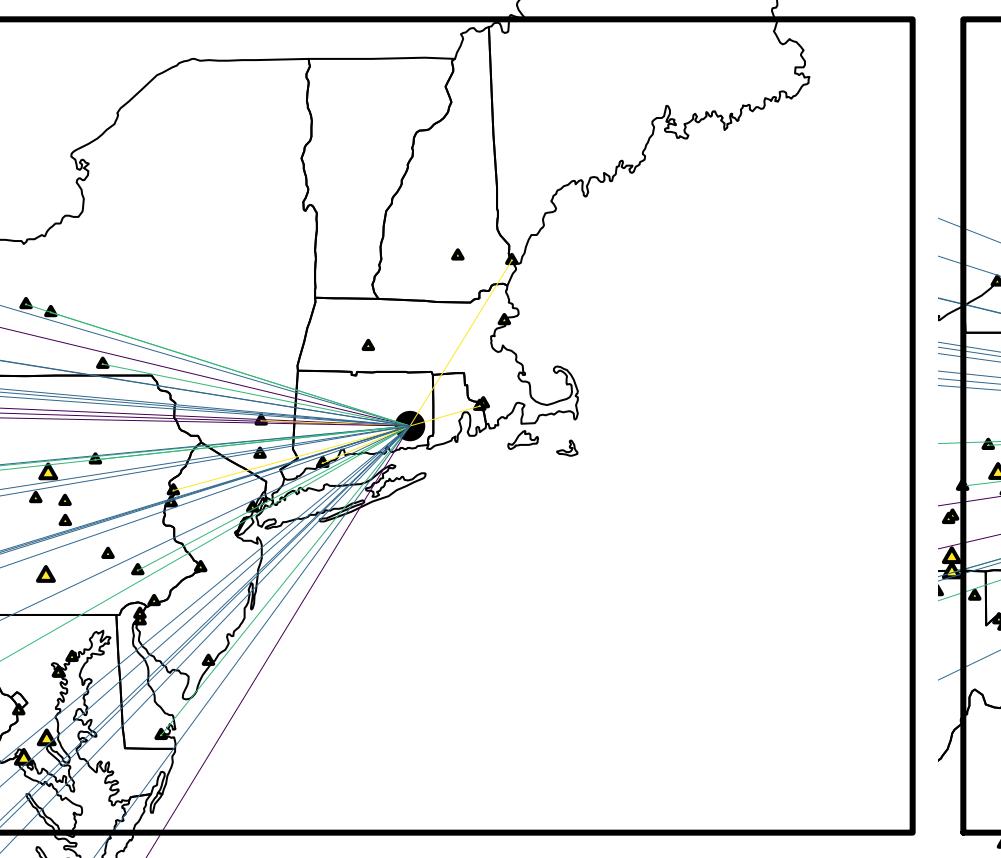
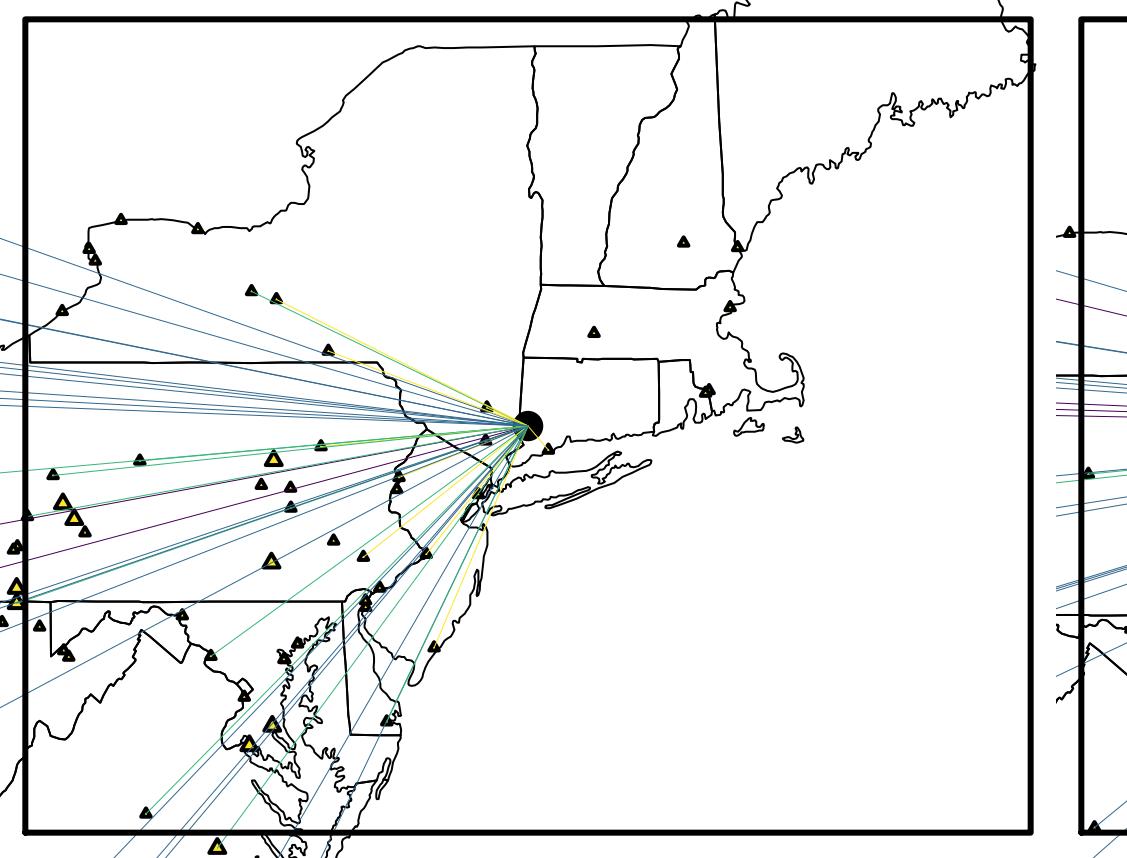
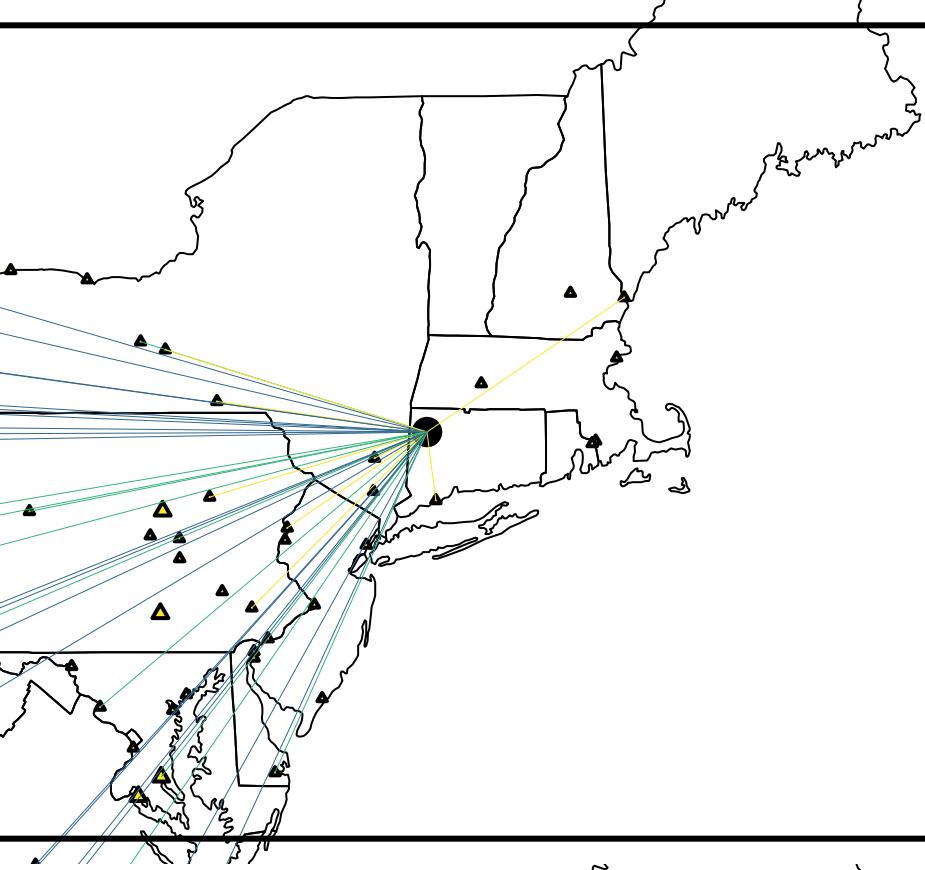
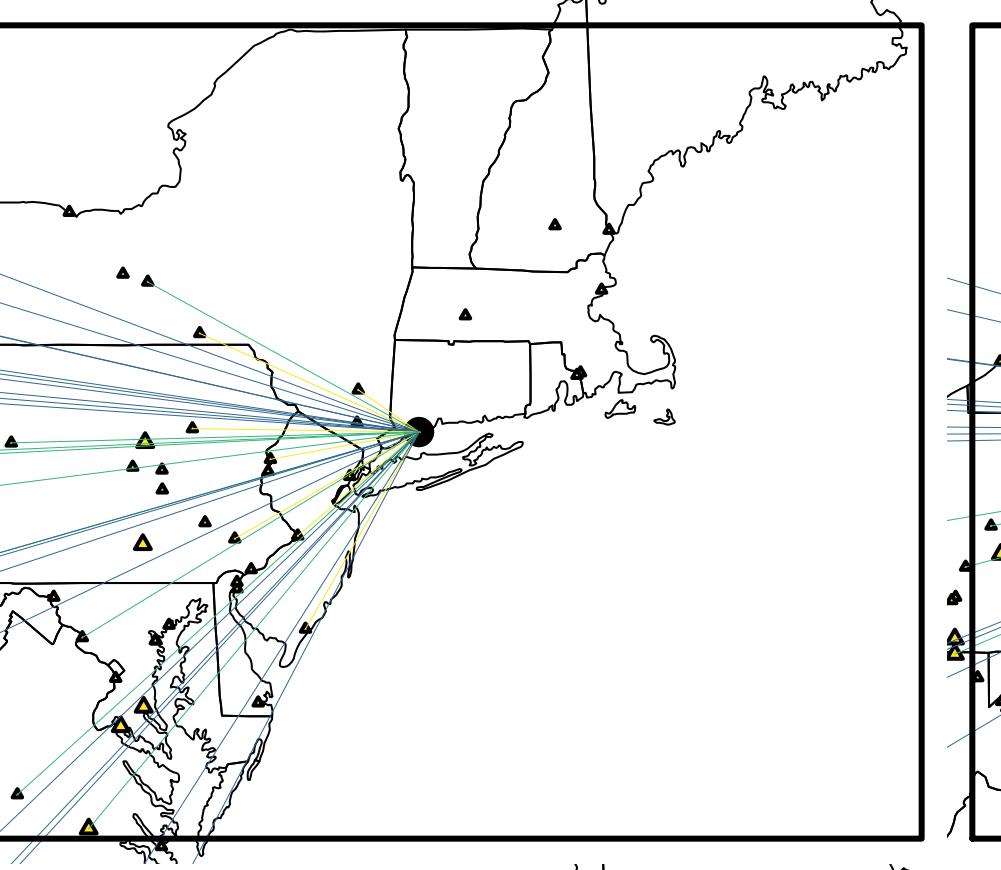
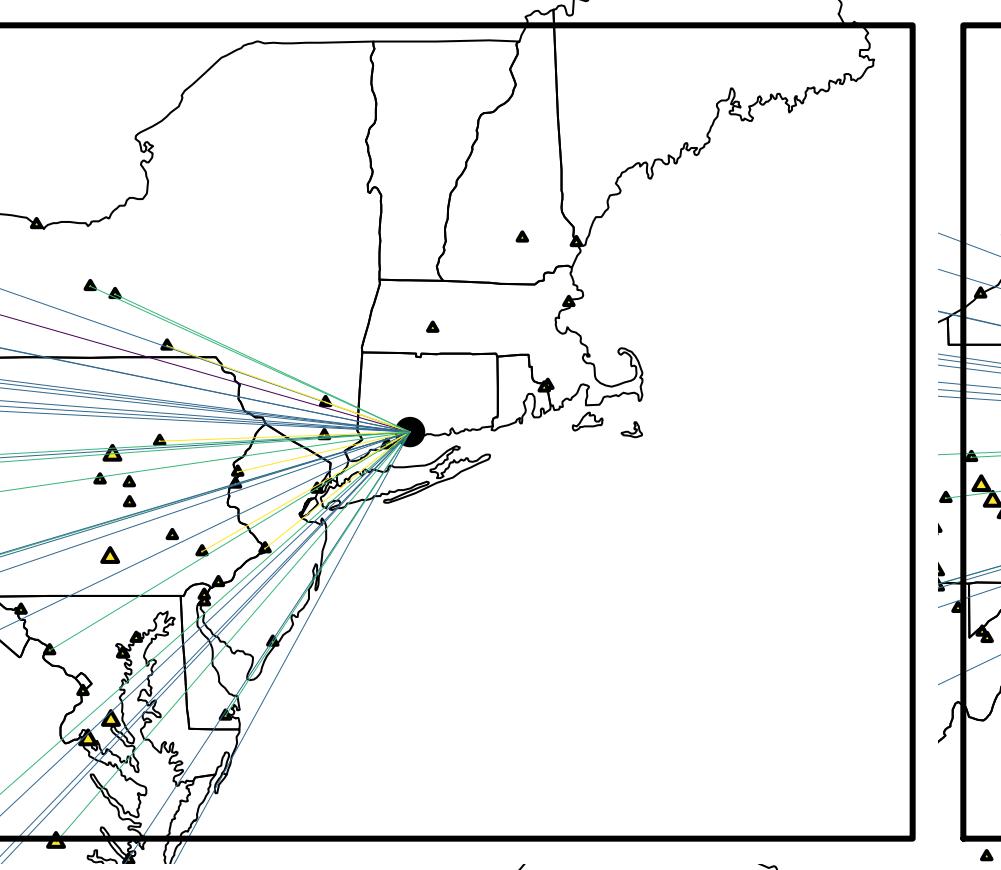
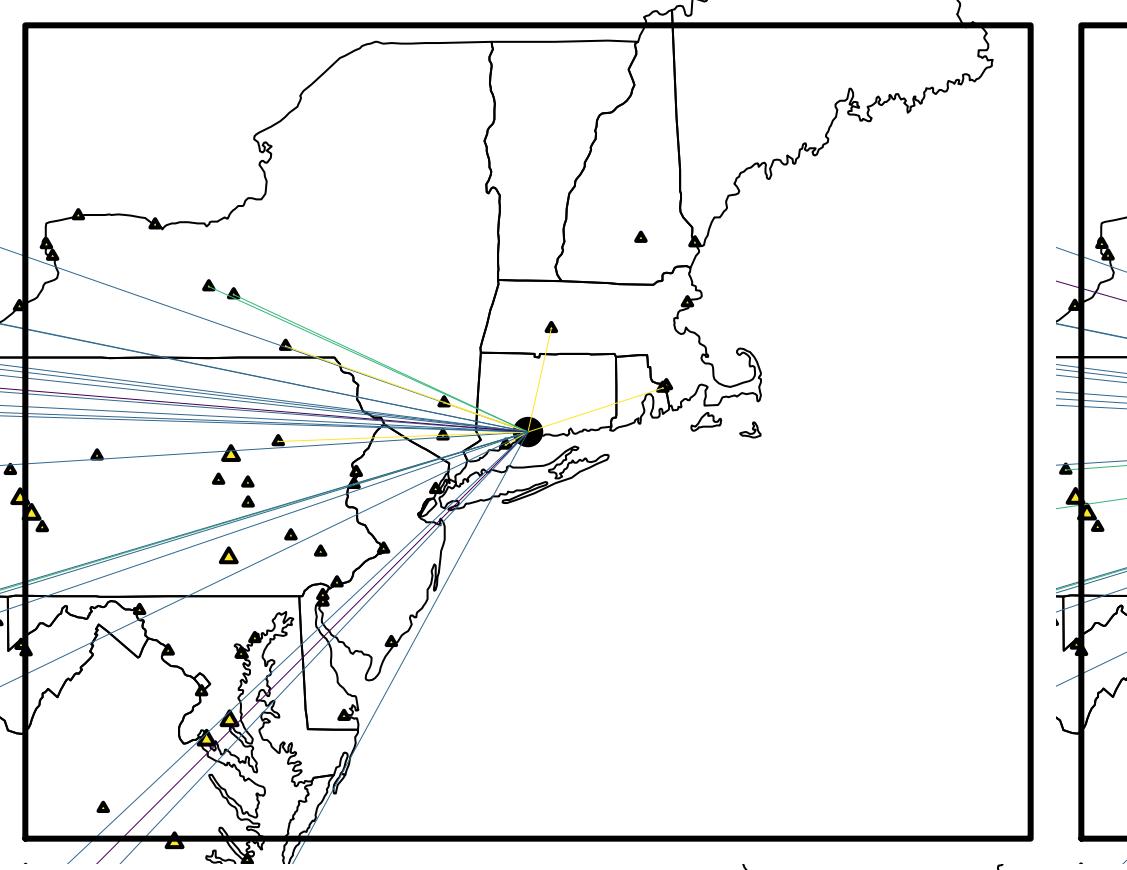
Lag 3 edges

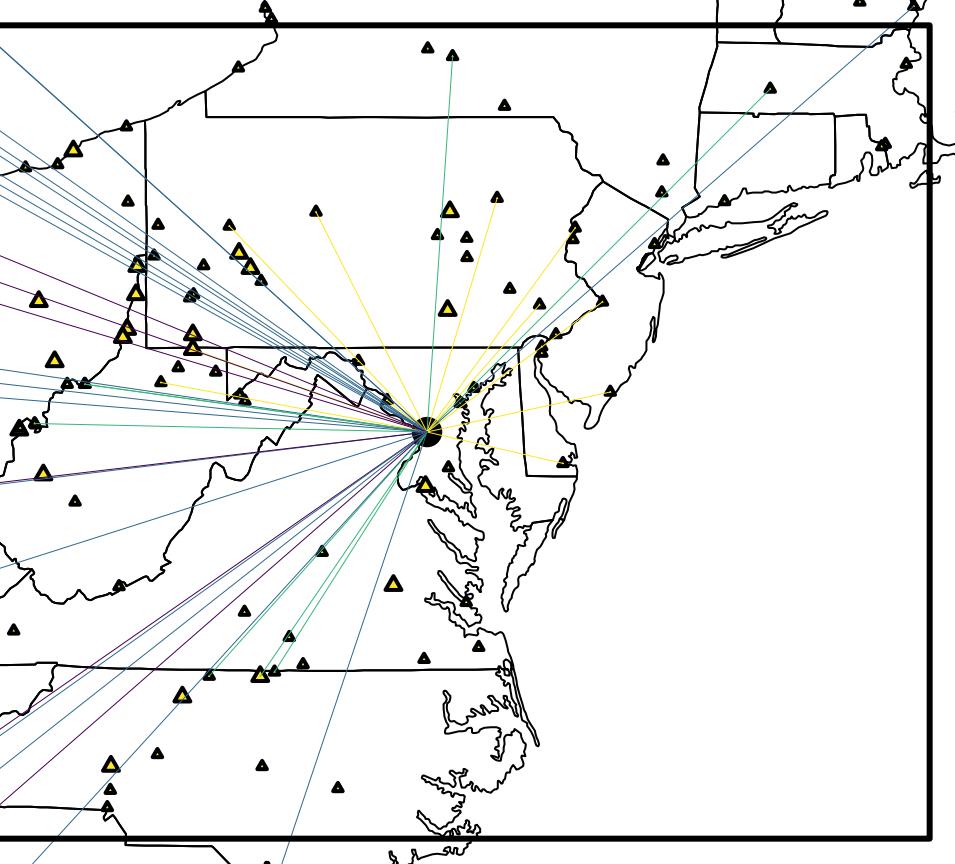
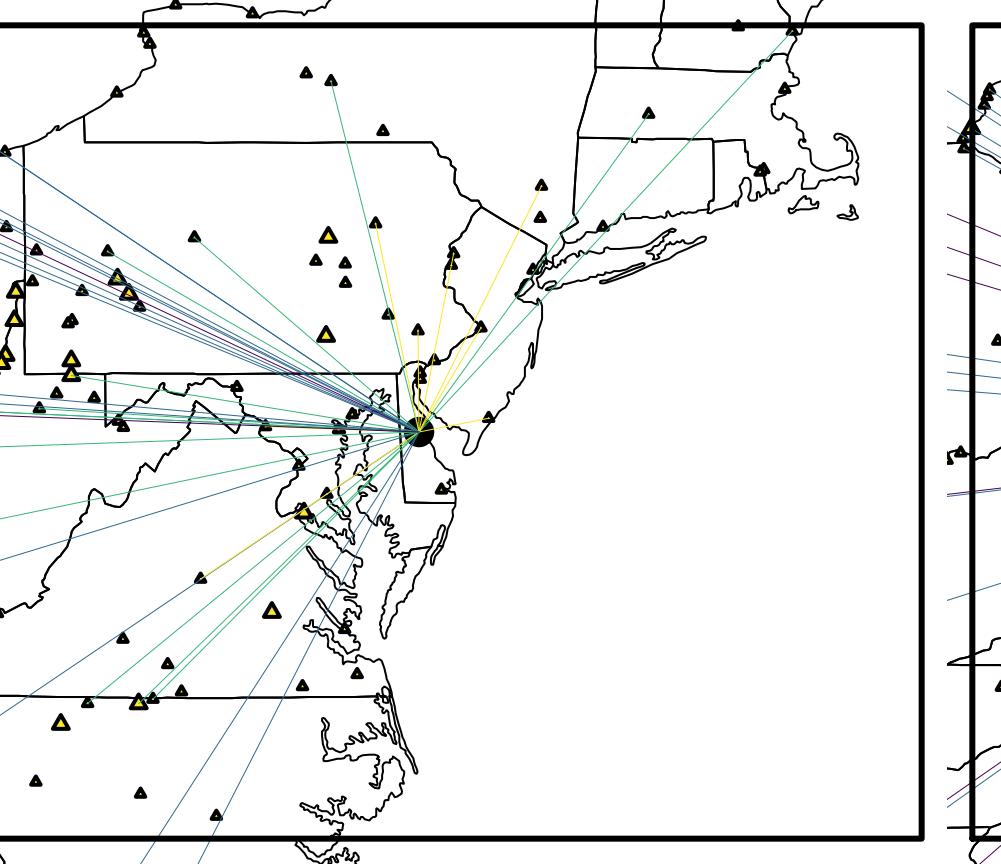
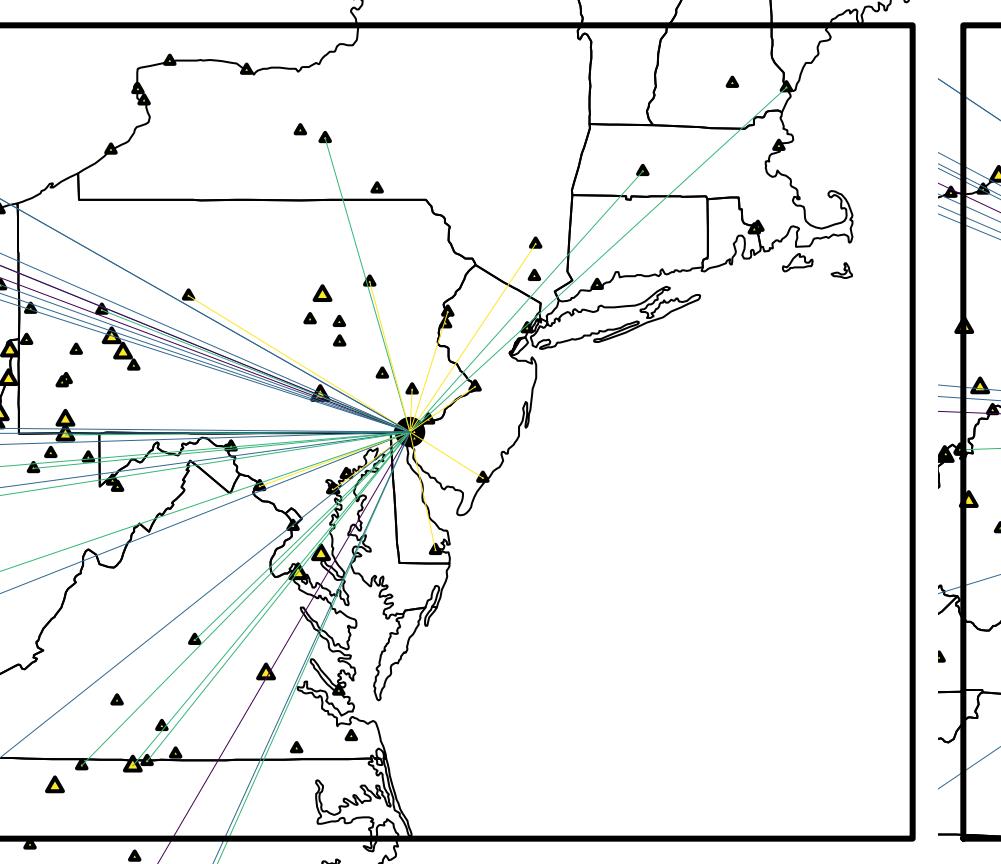
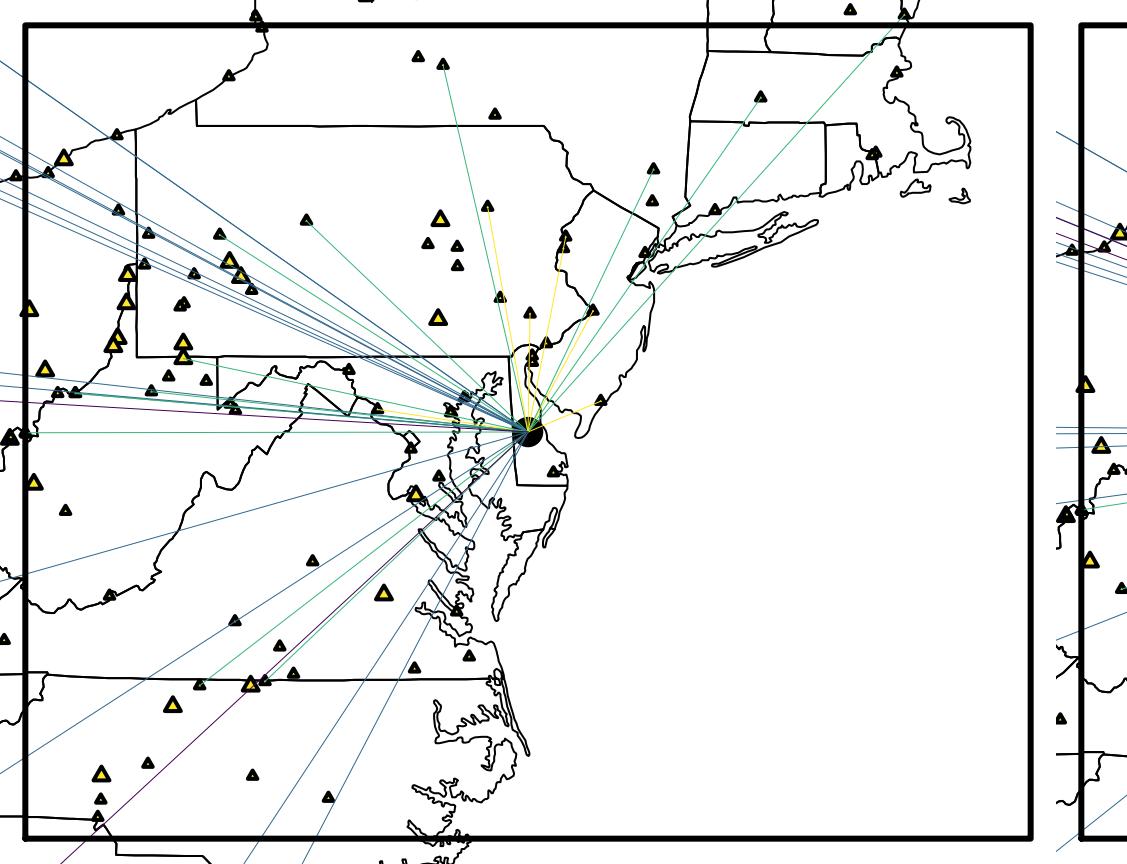
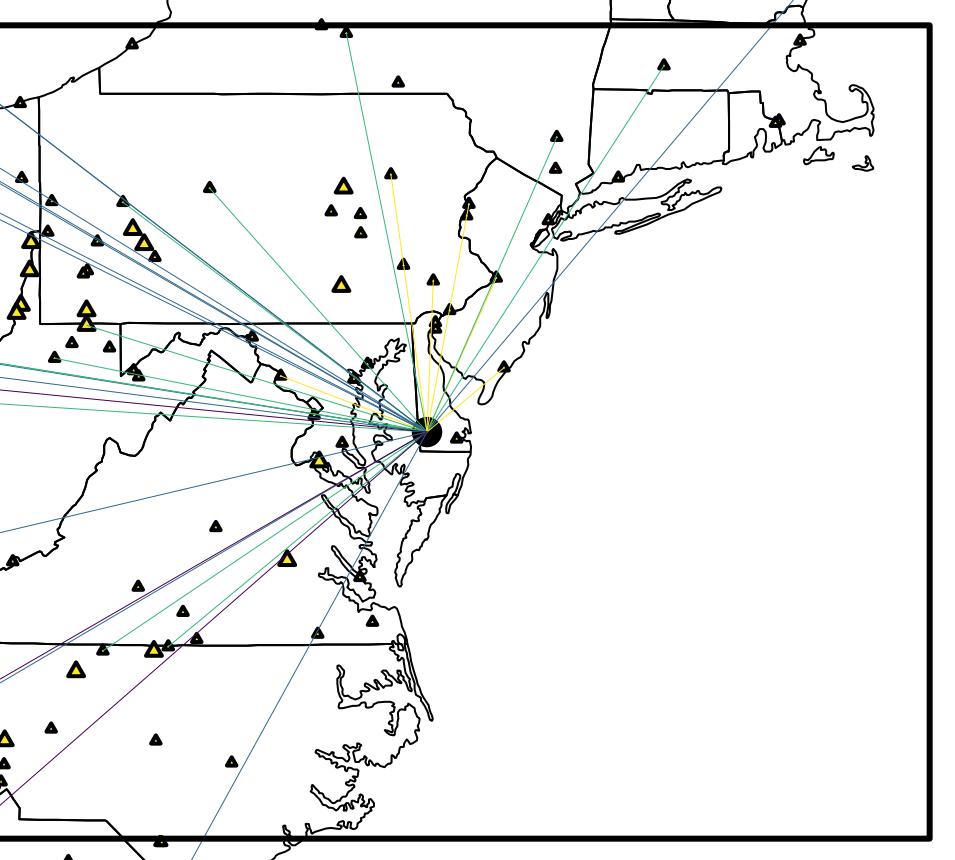
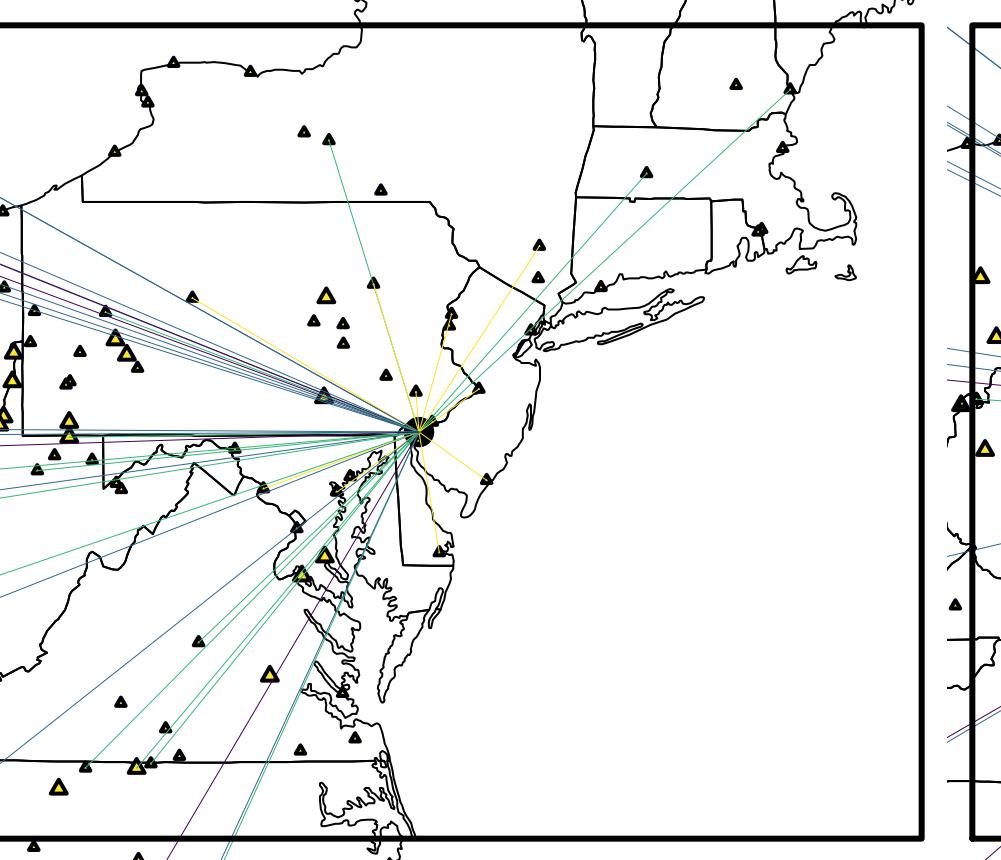
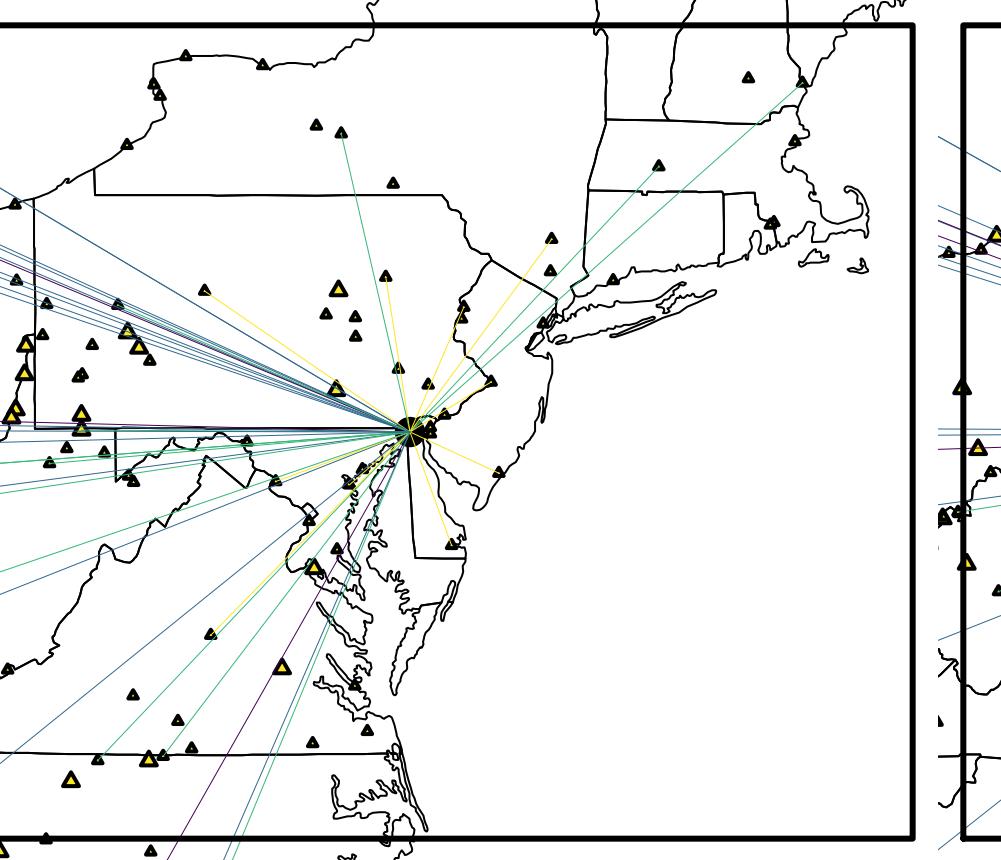
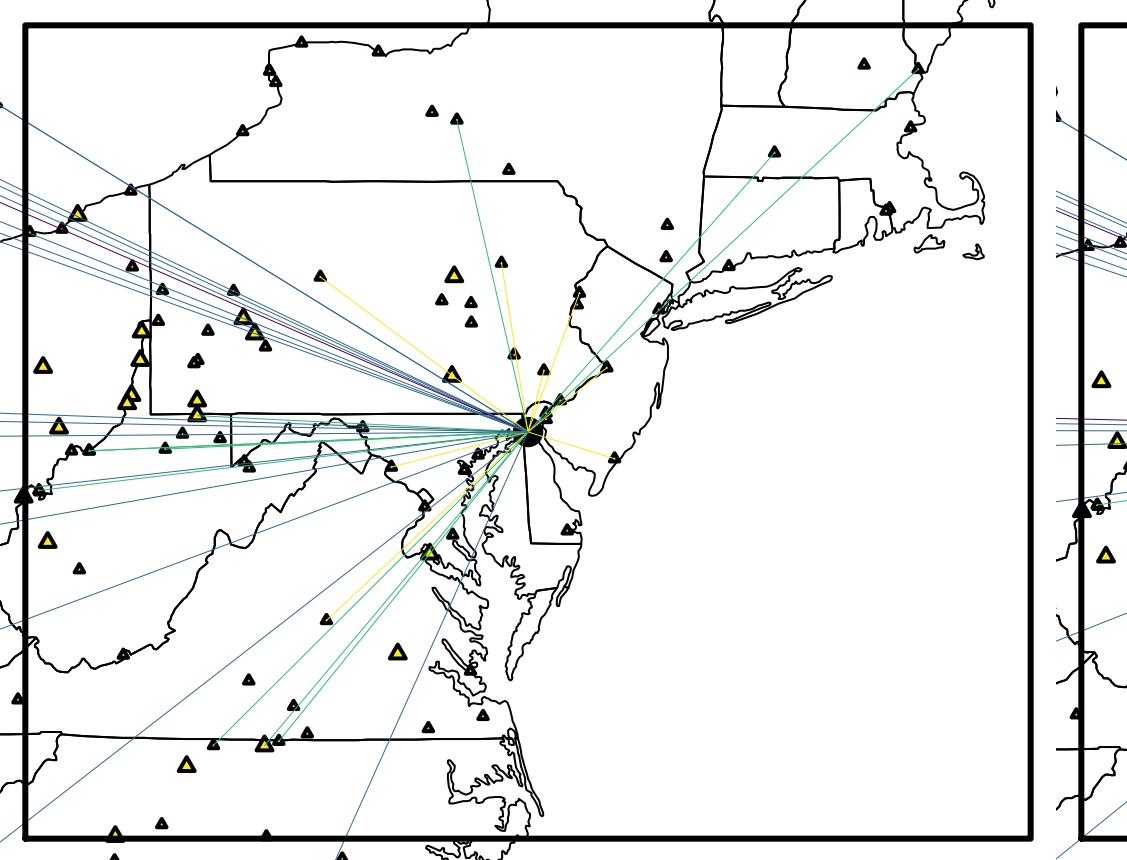


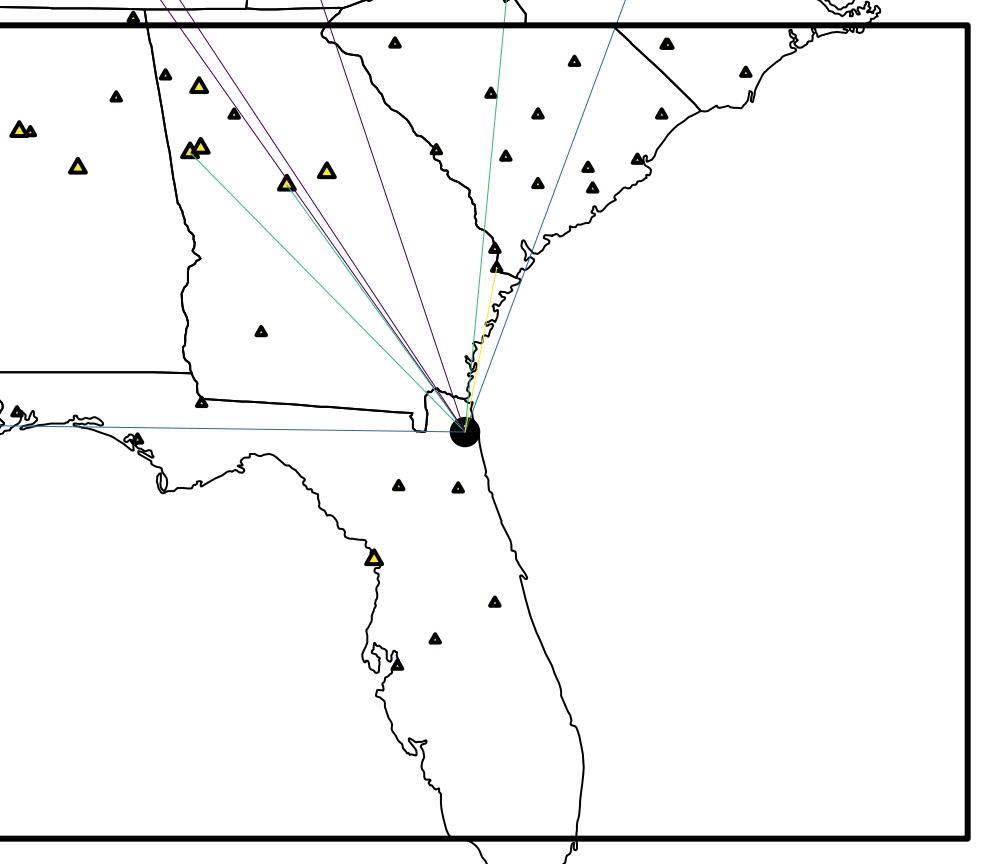
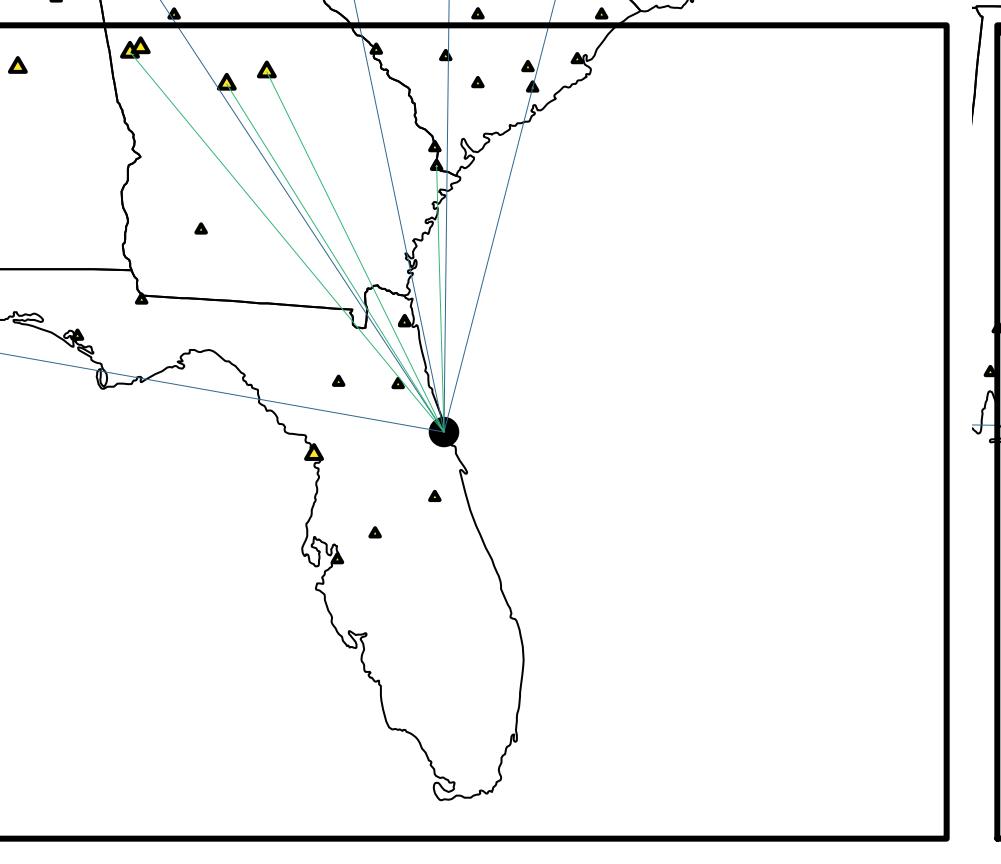
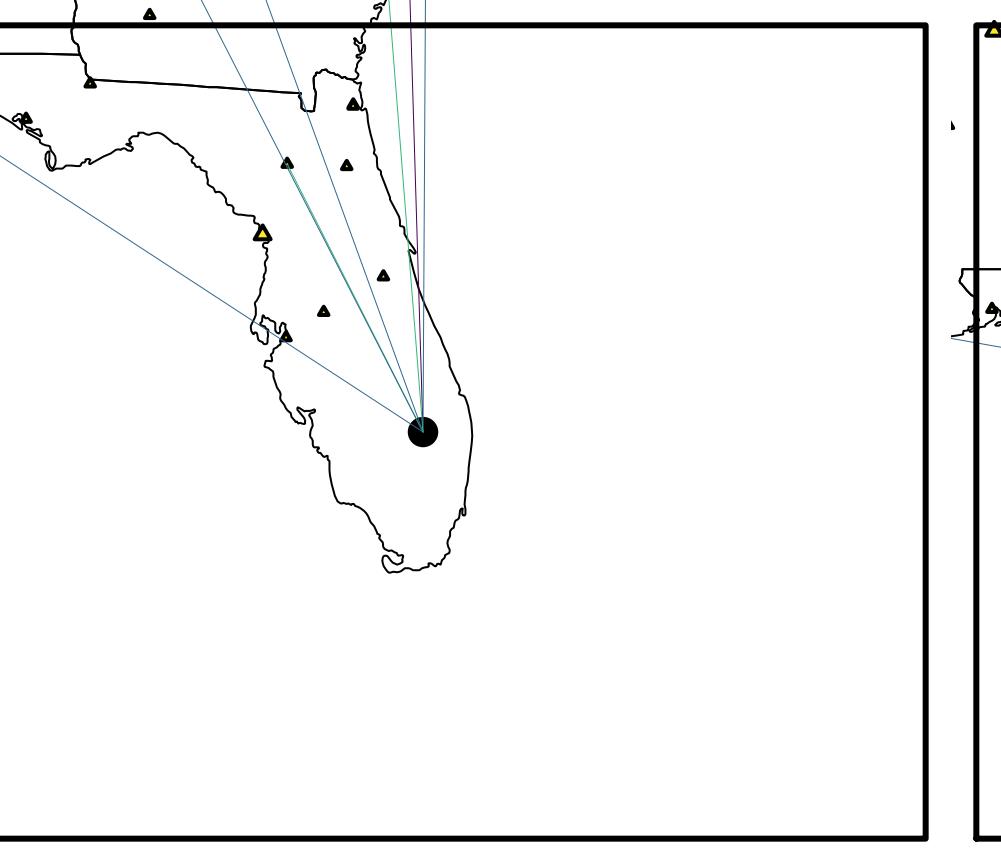
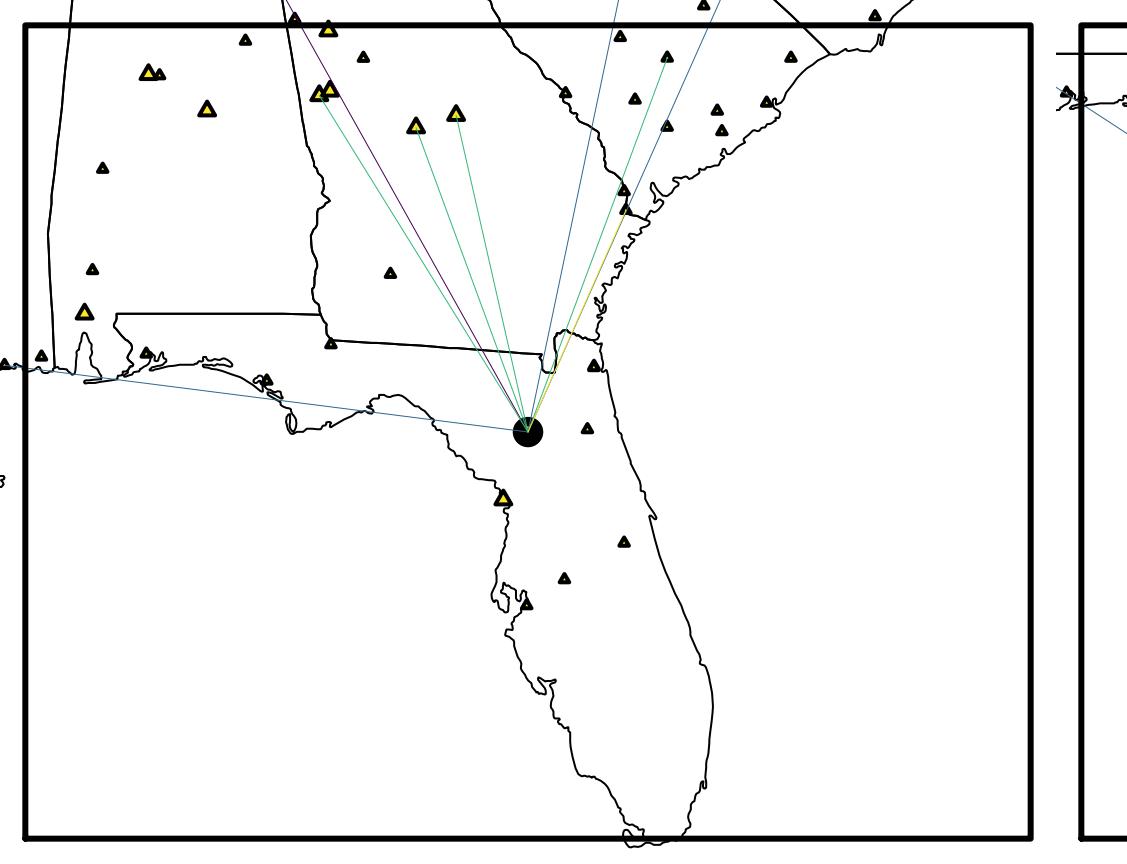
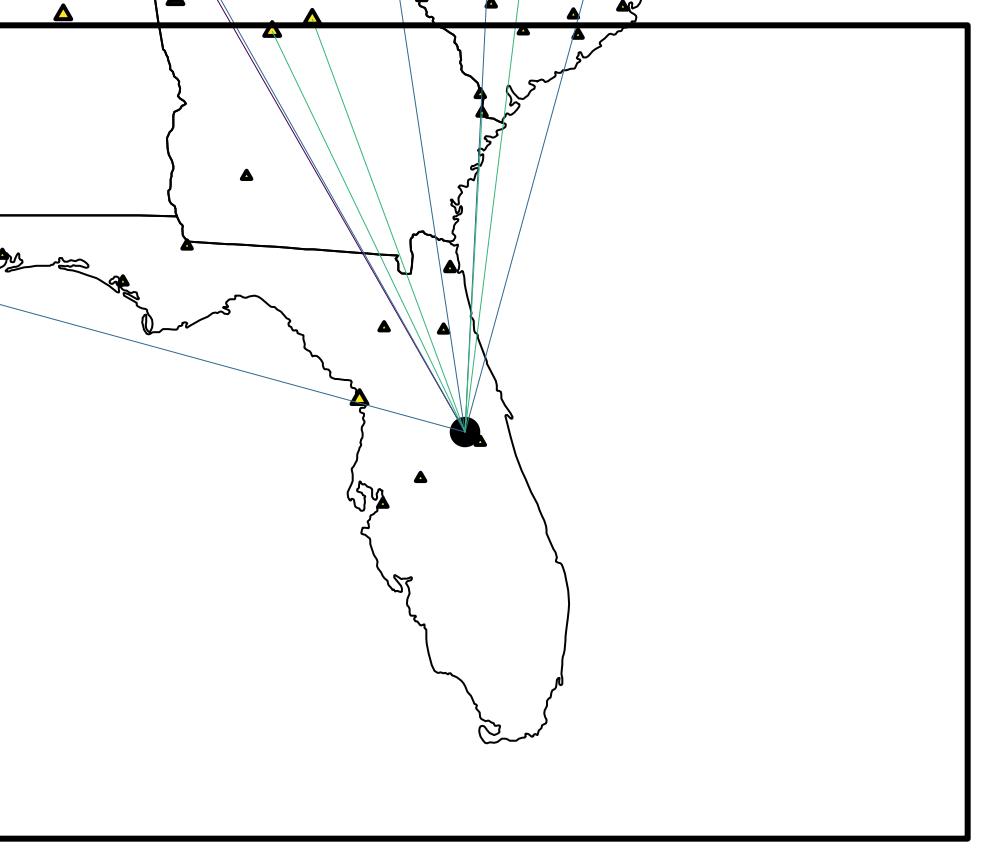
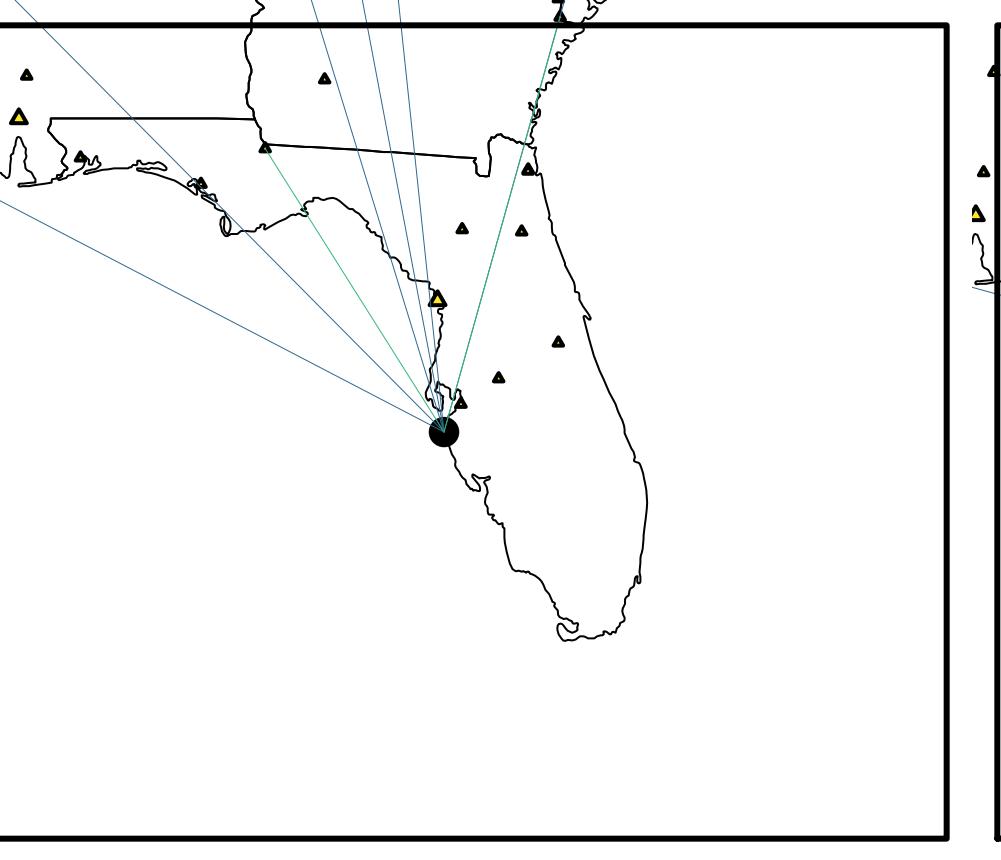
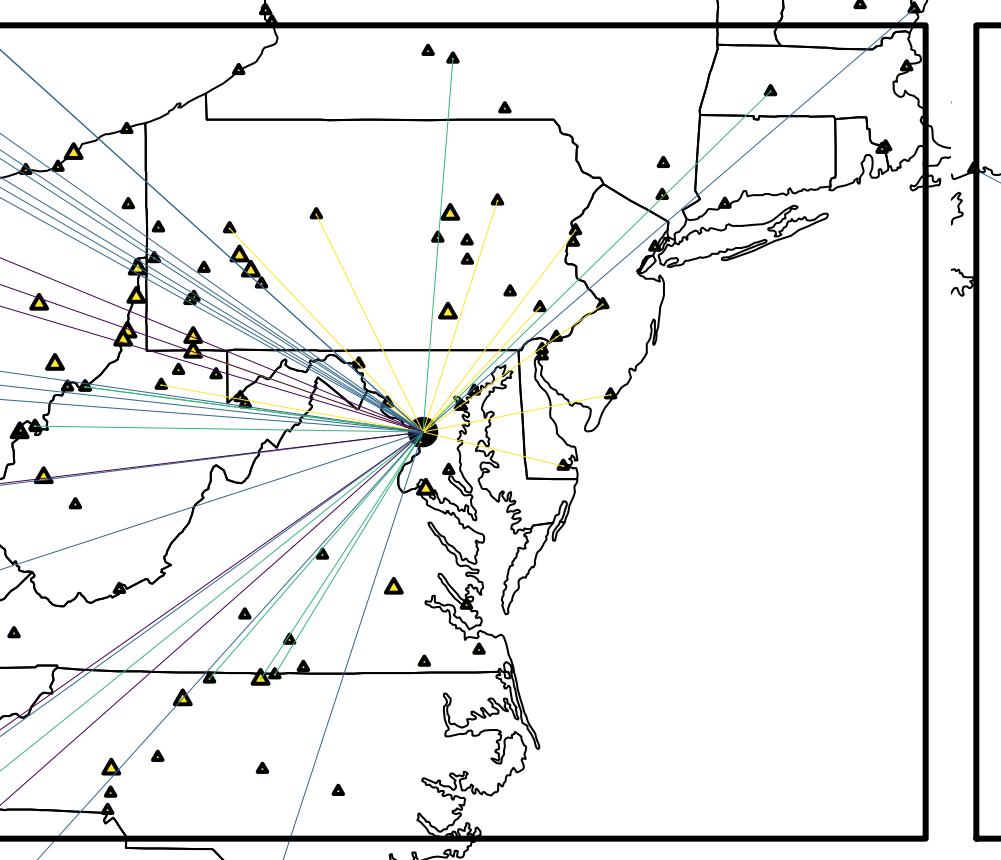
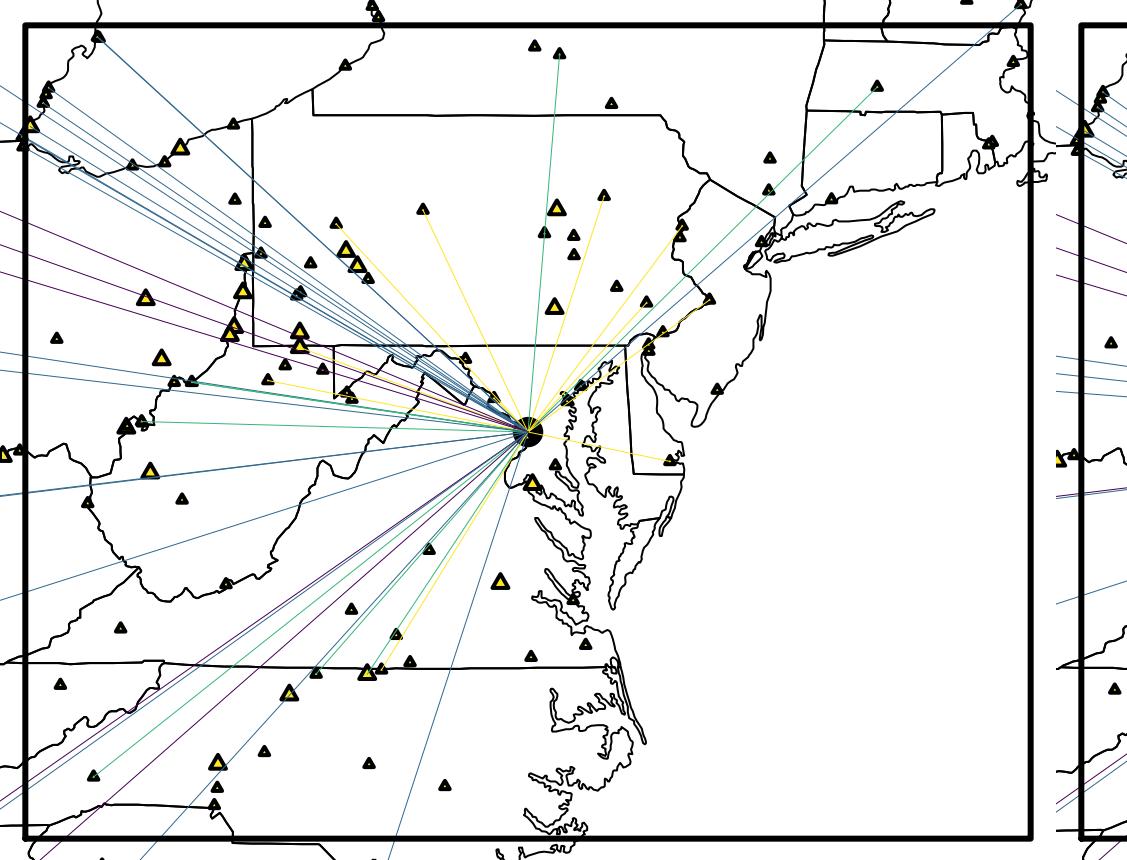


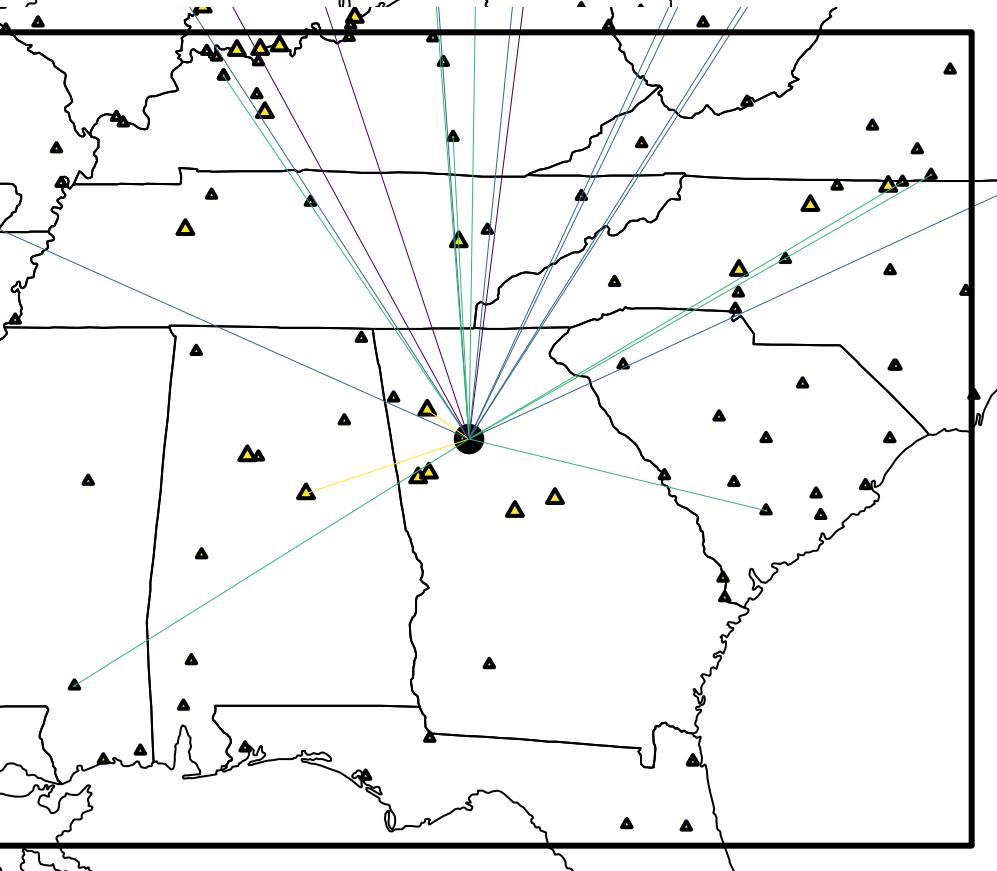
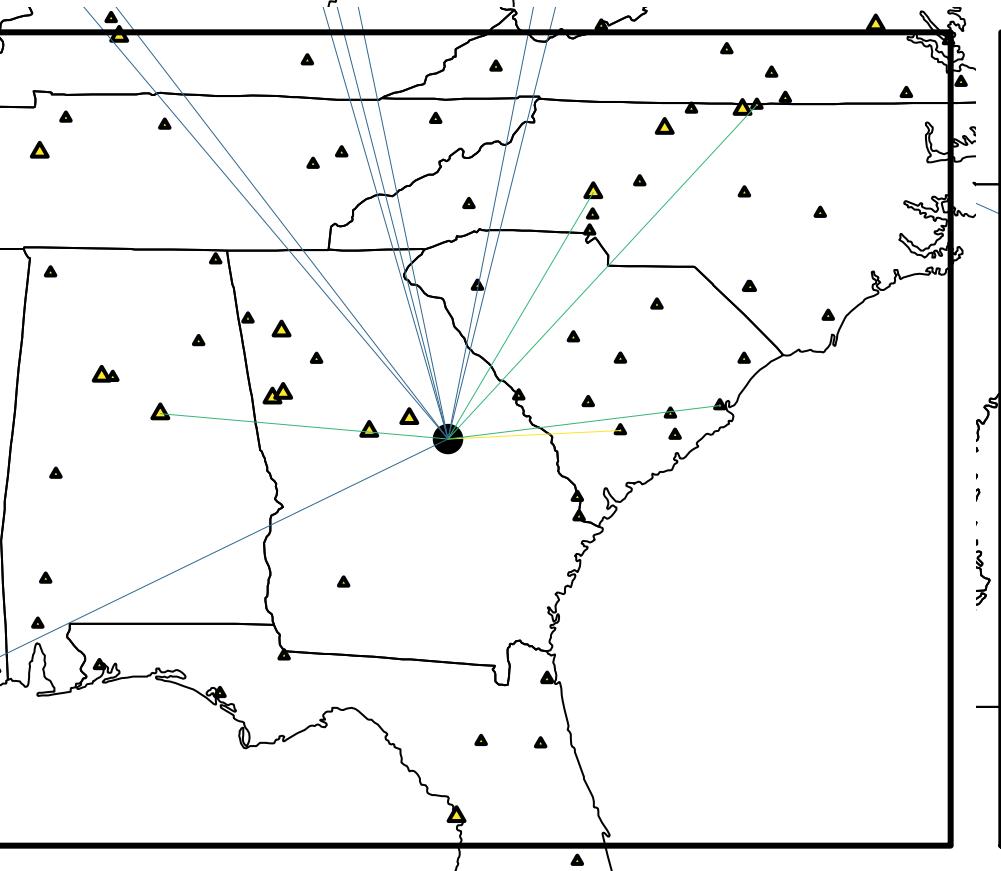
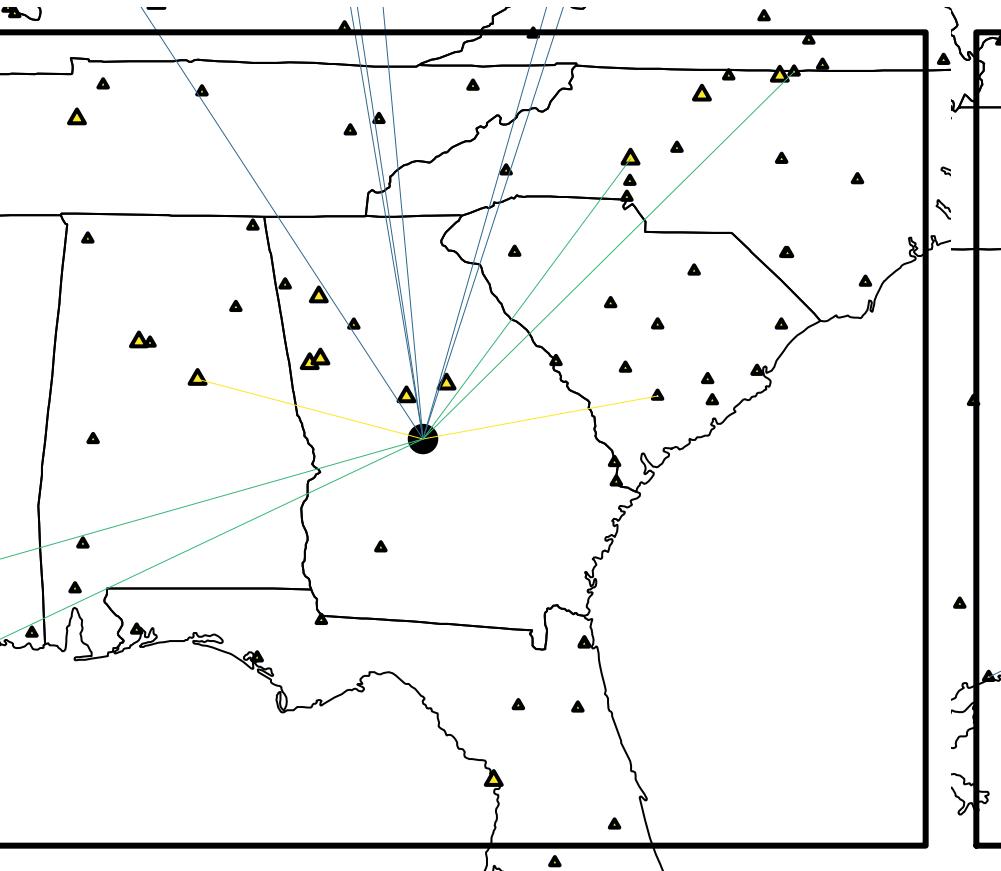
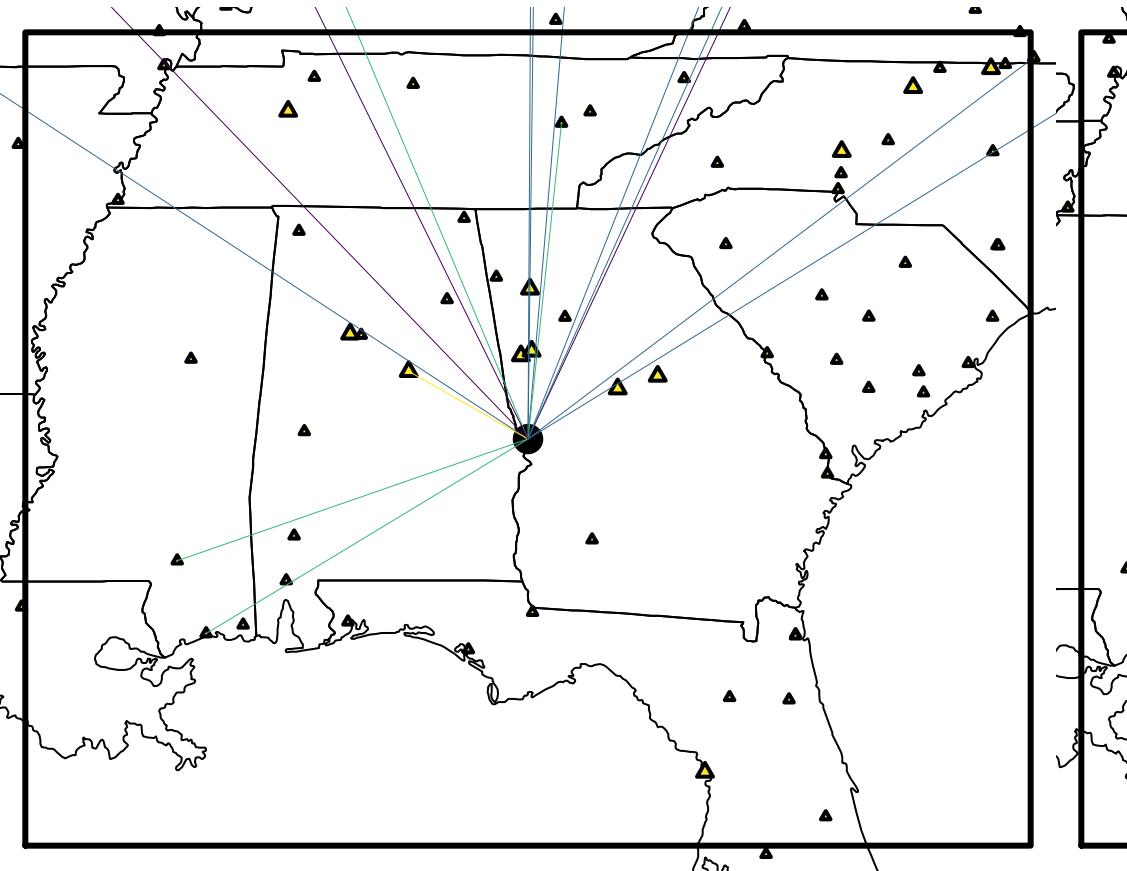
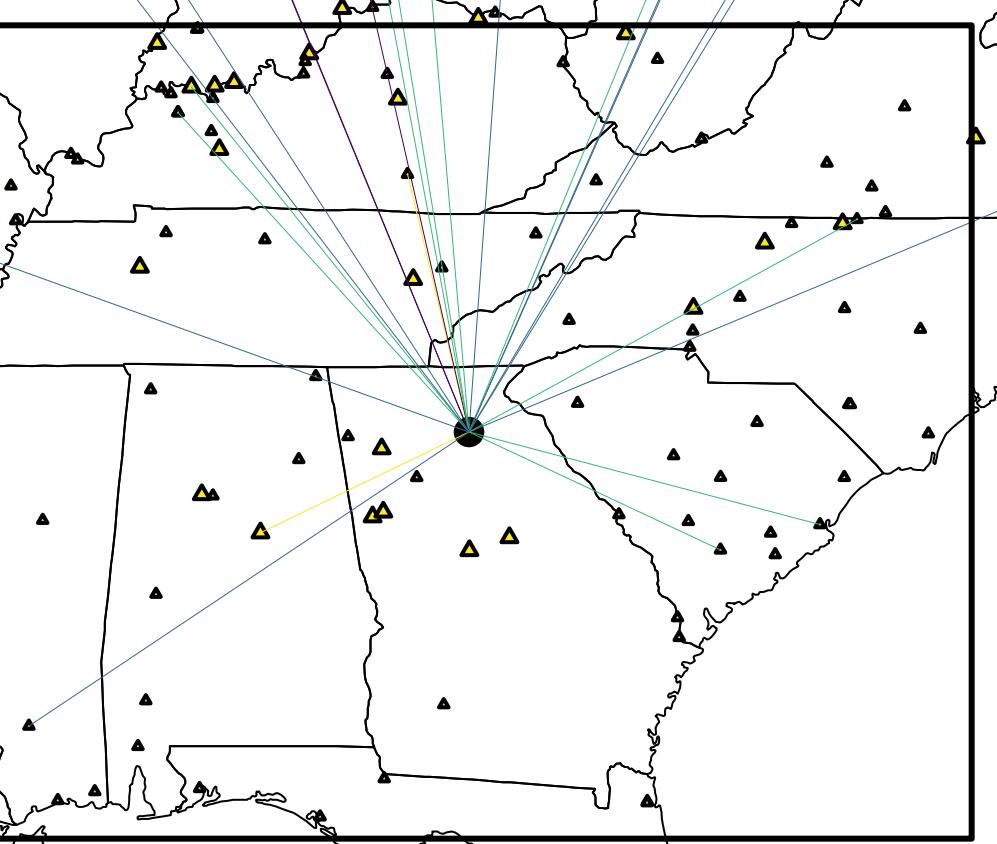
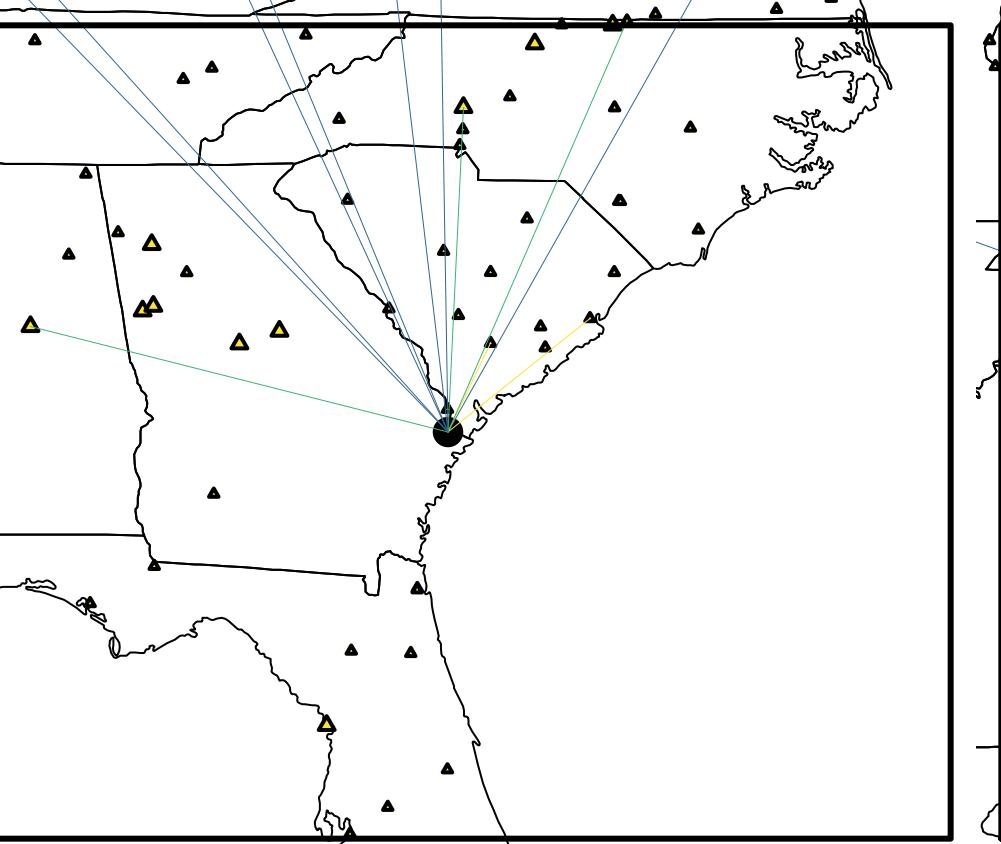
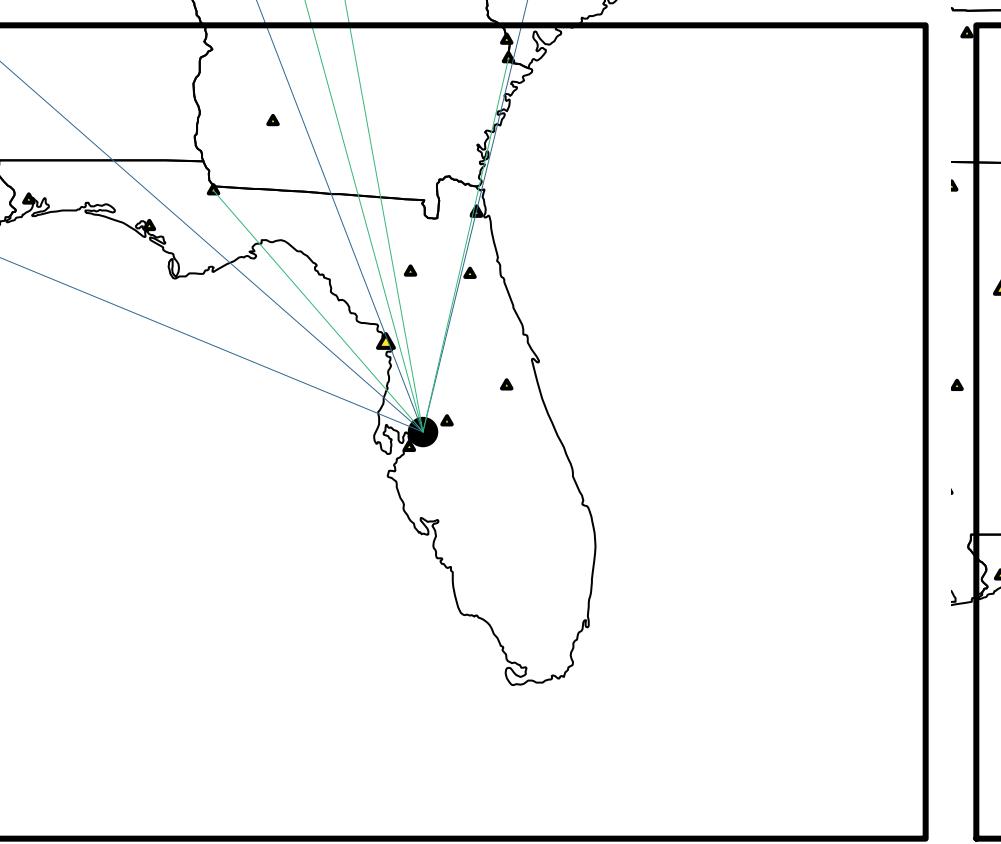
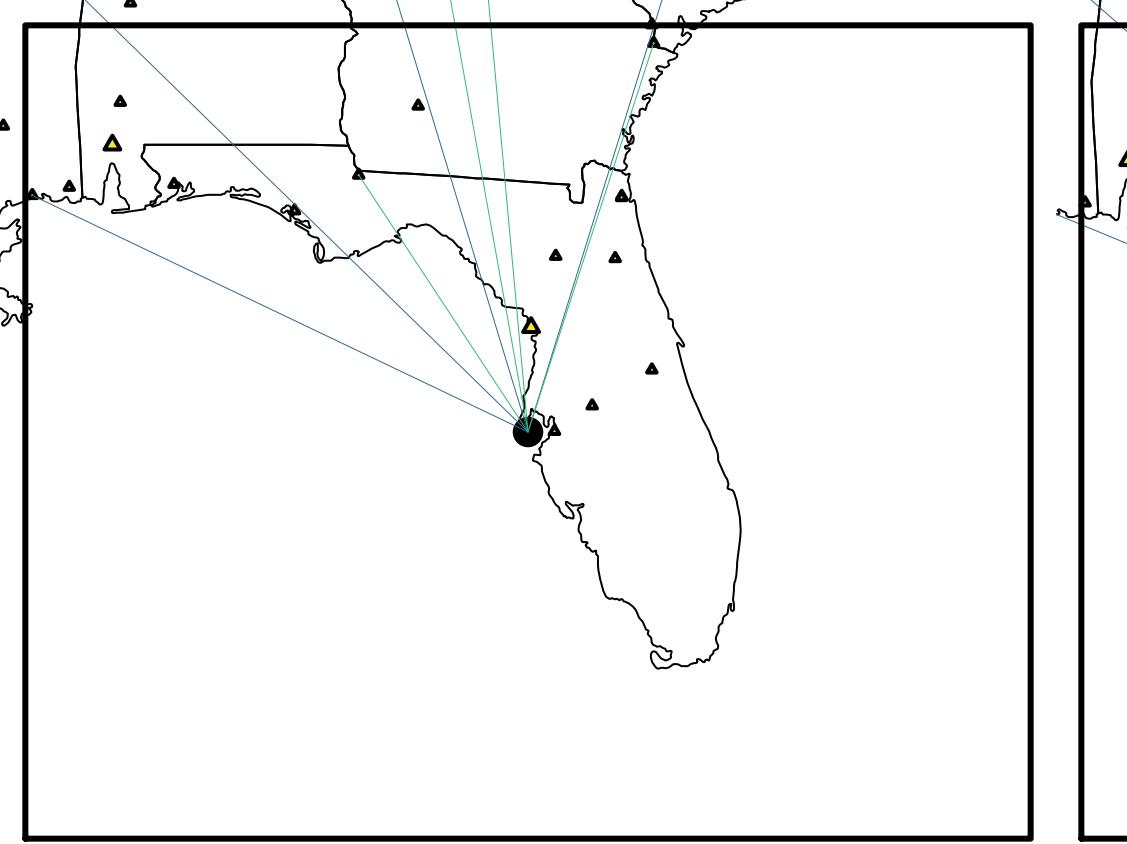


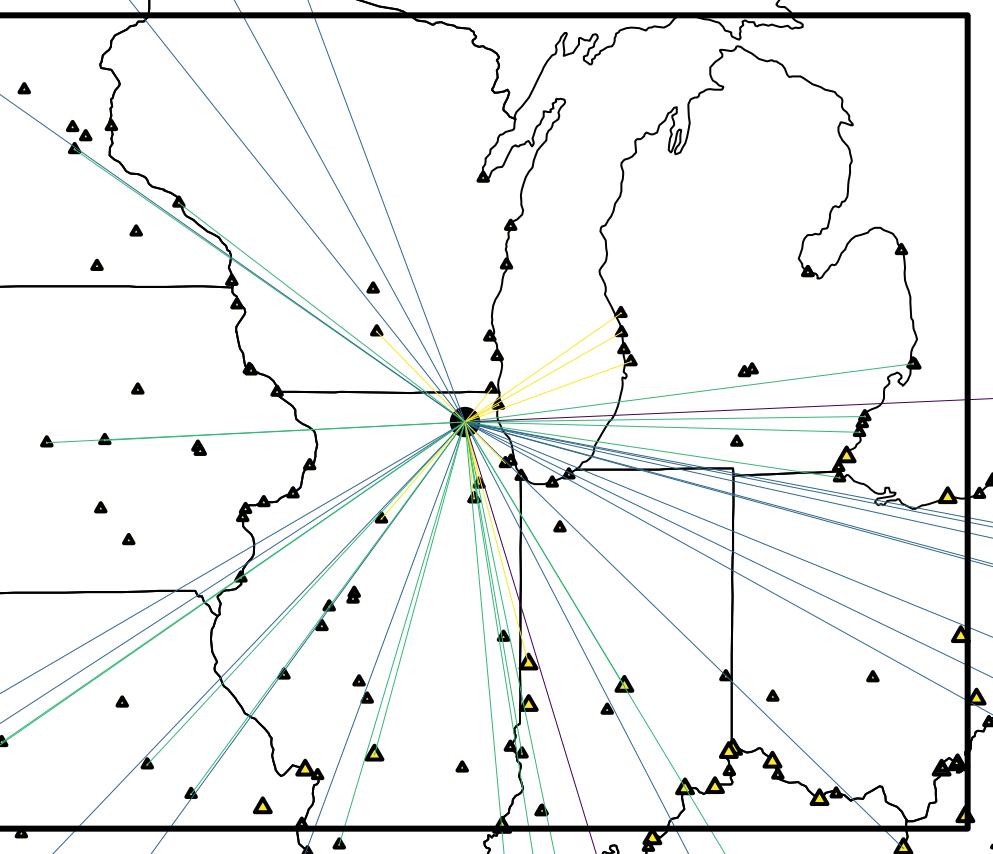
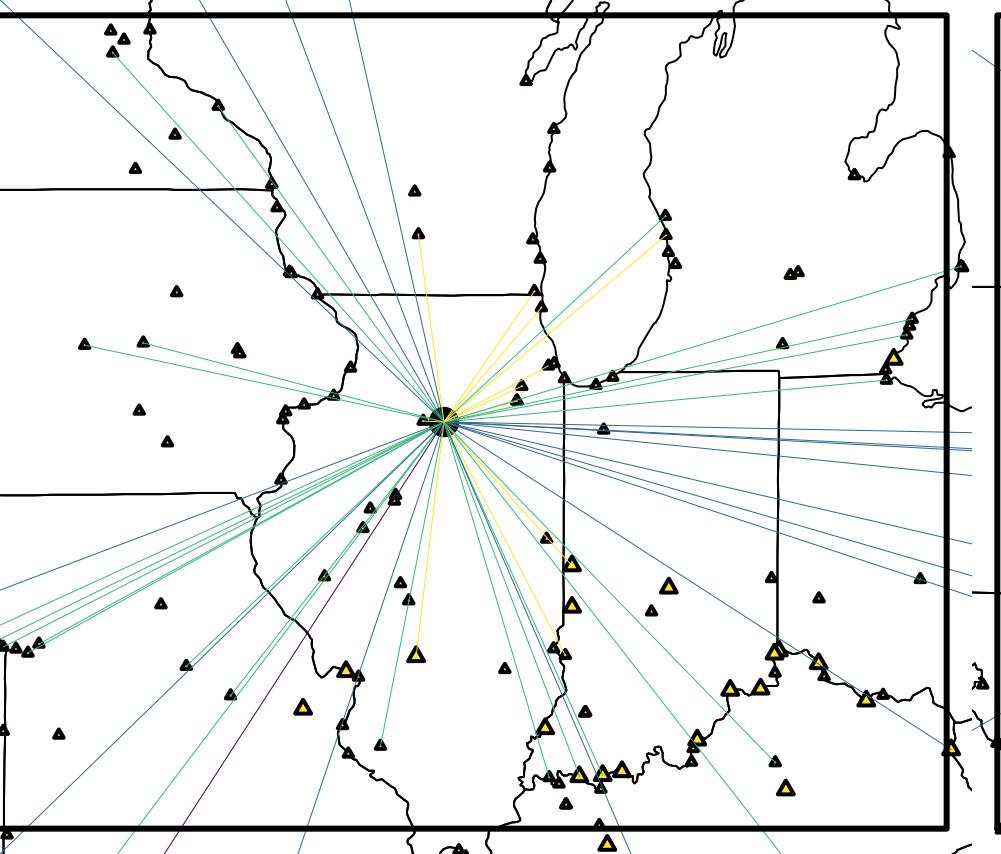
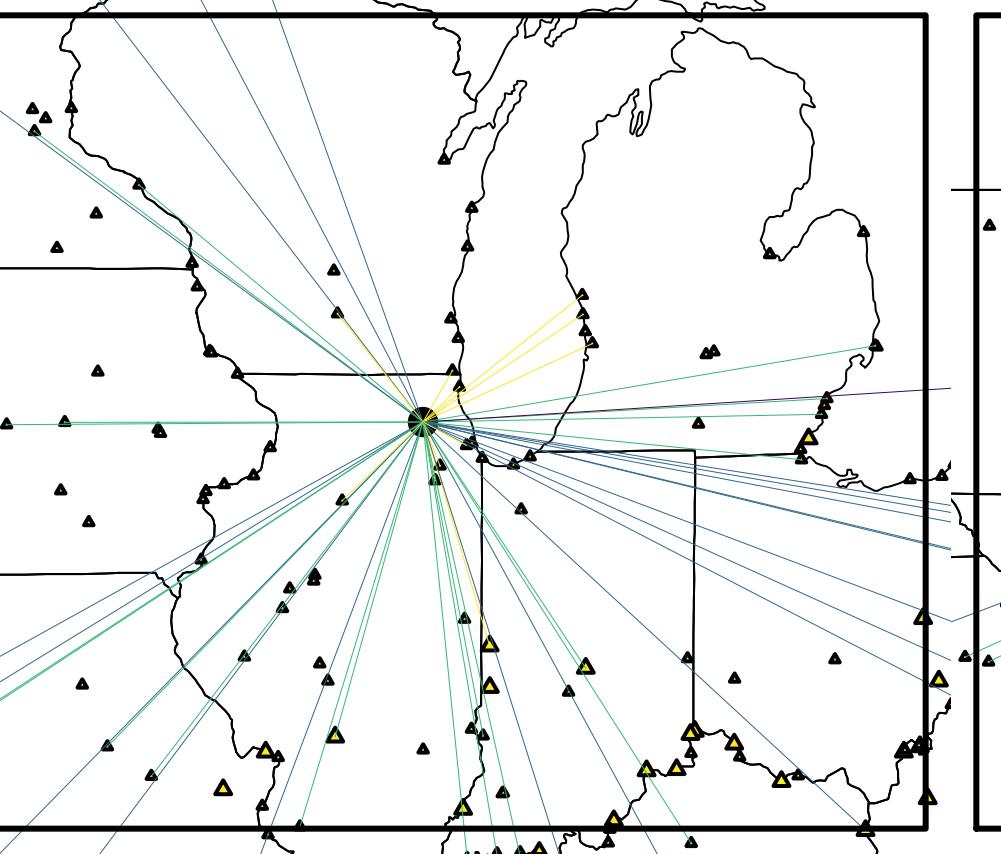
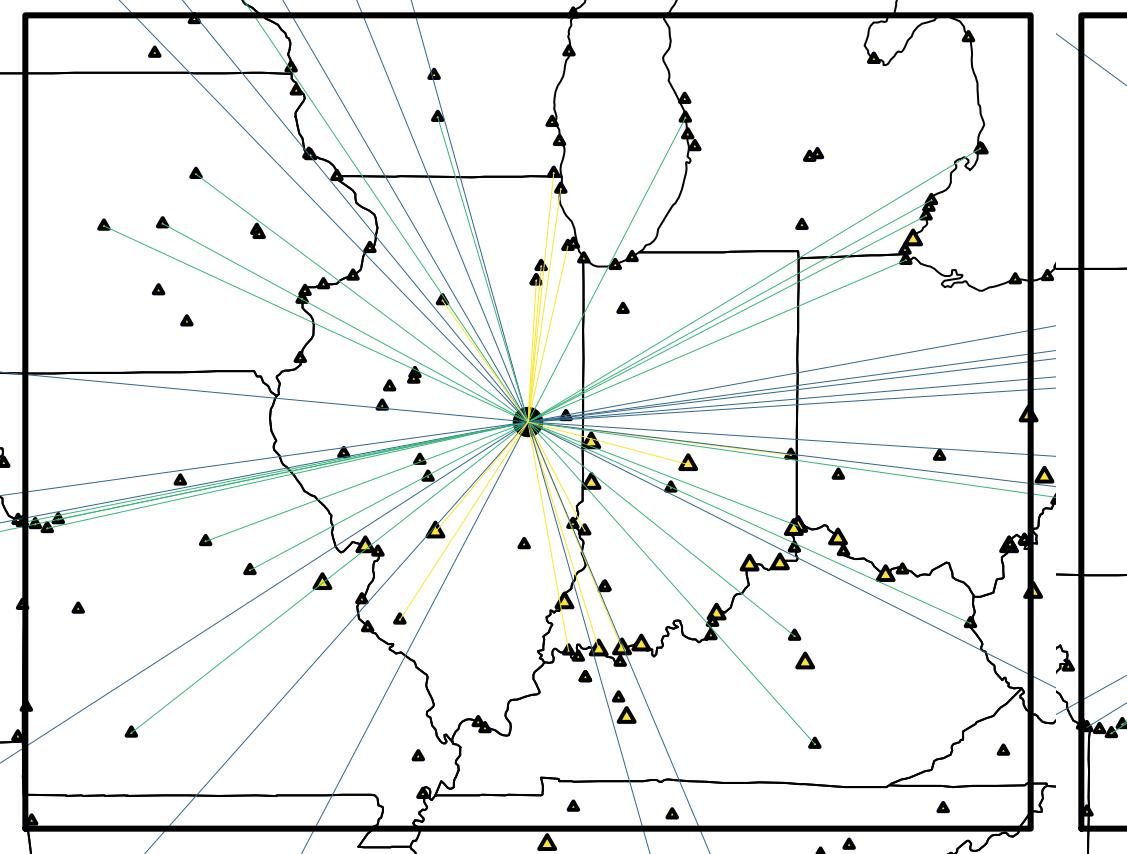
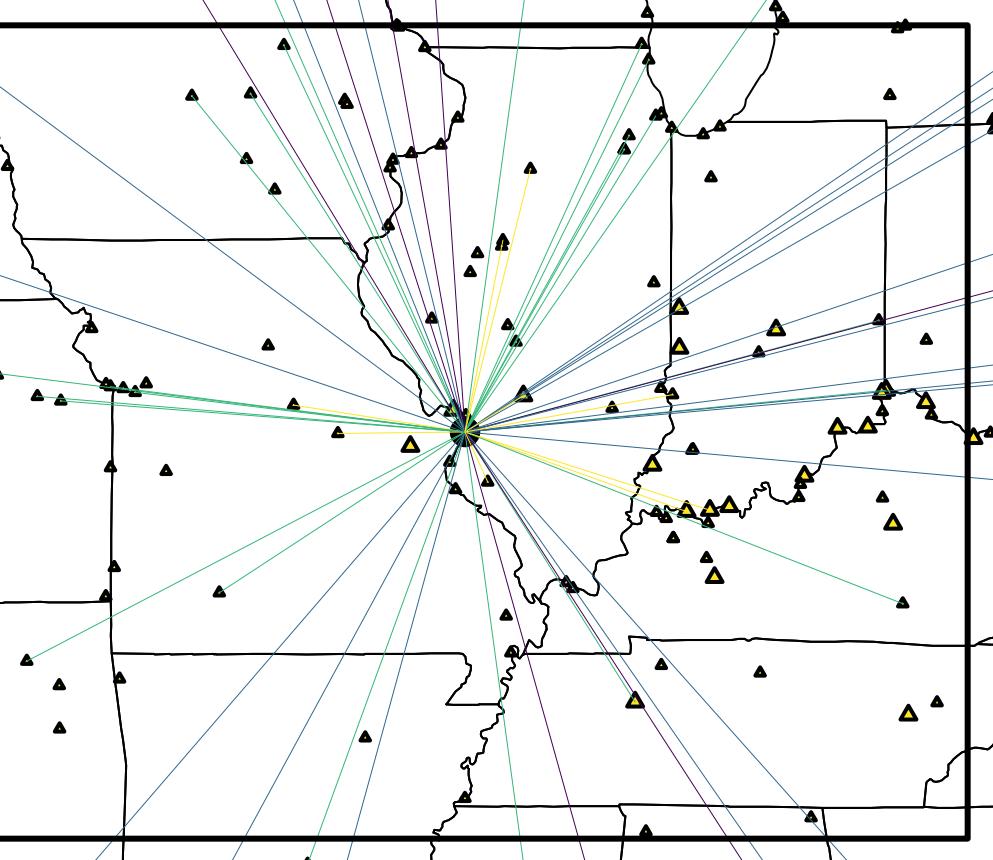
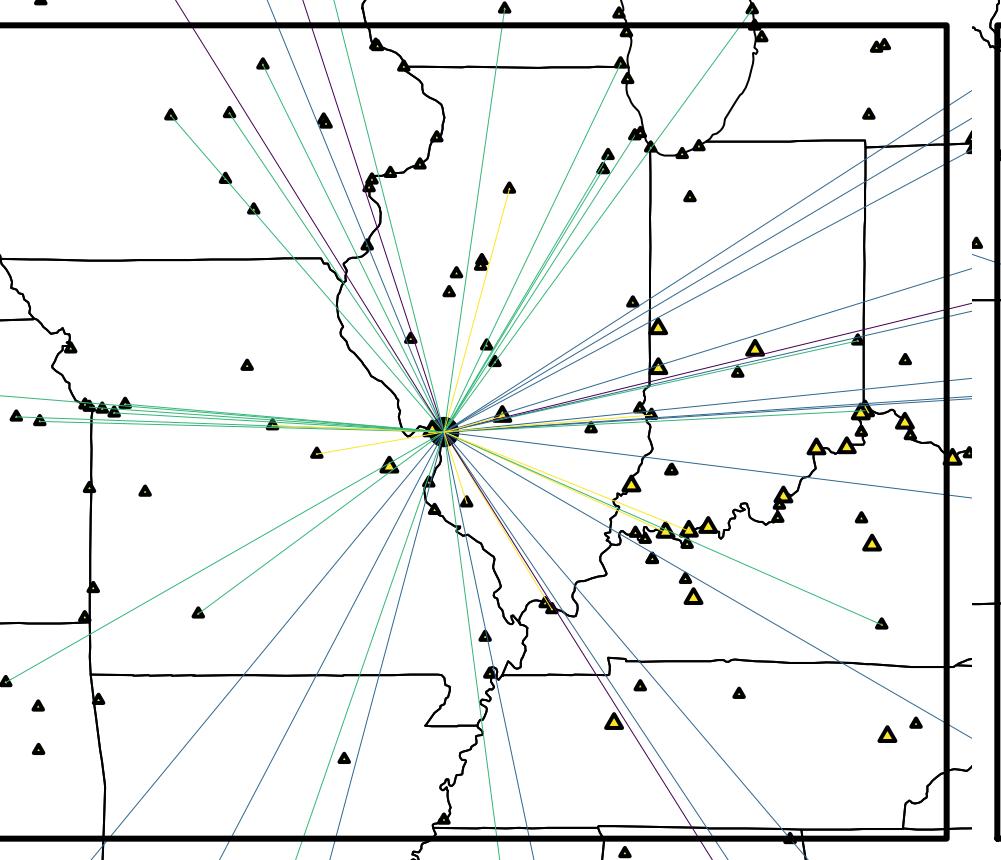
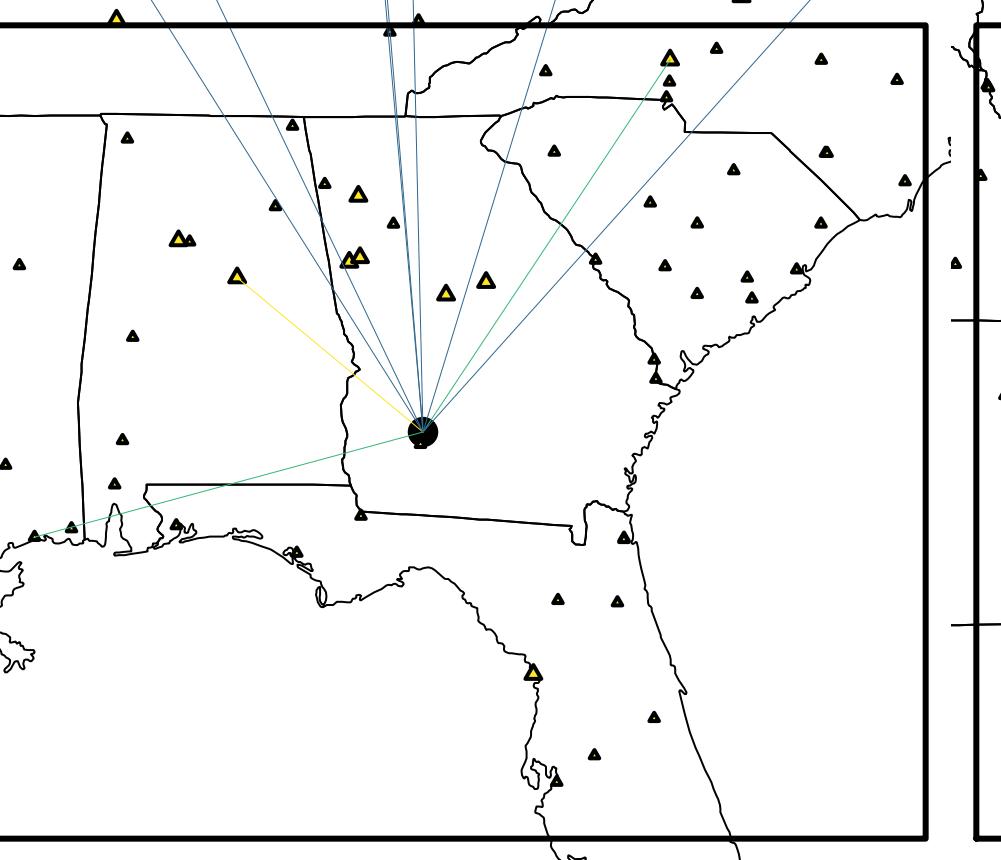
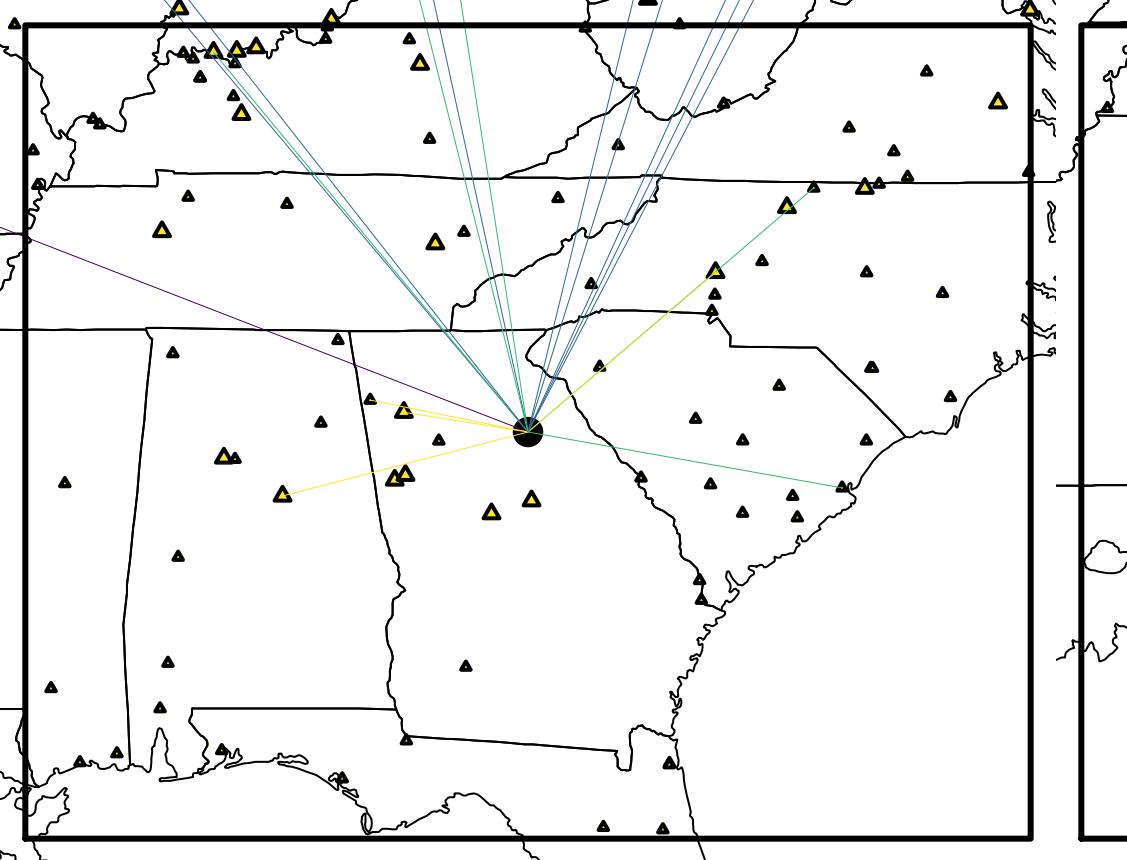


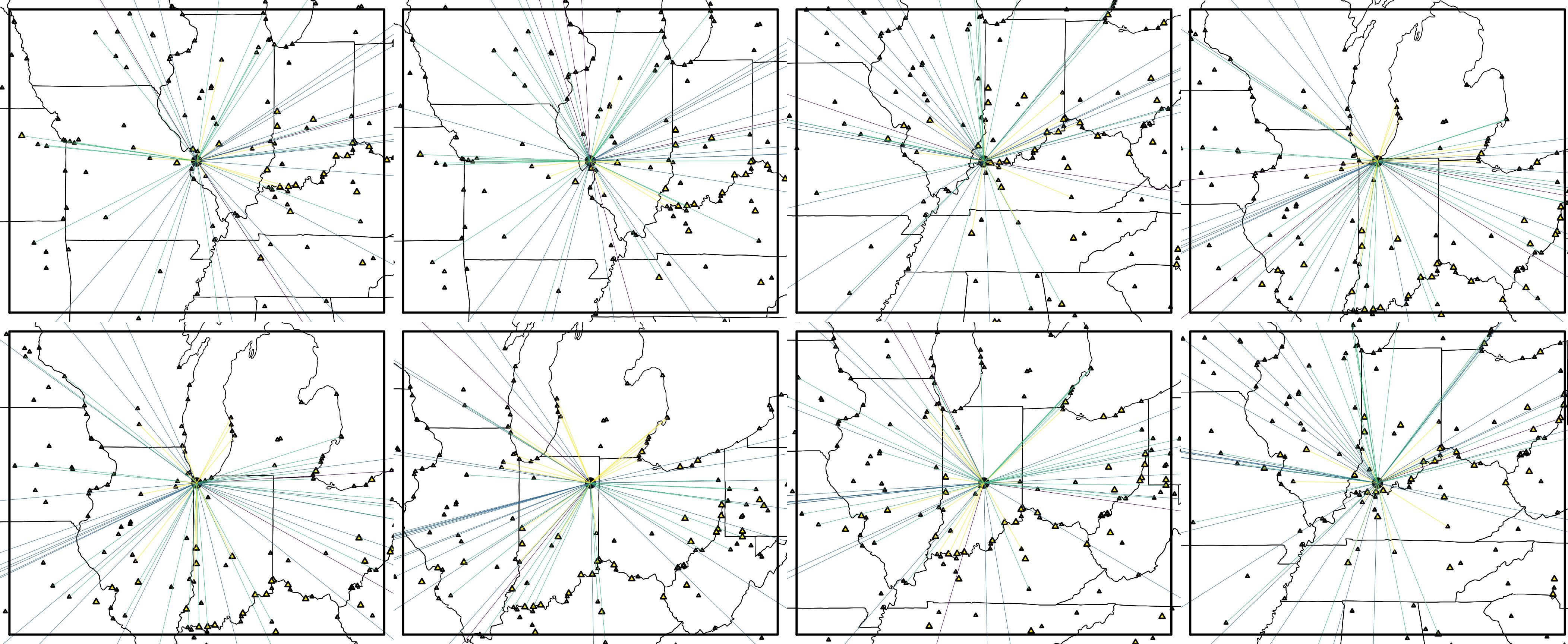


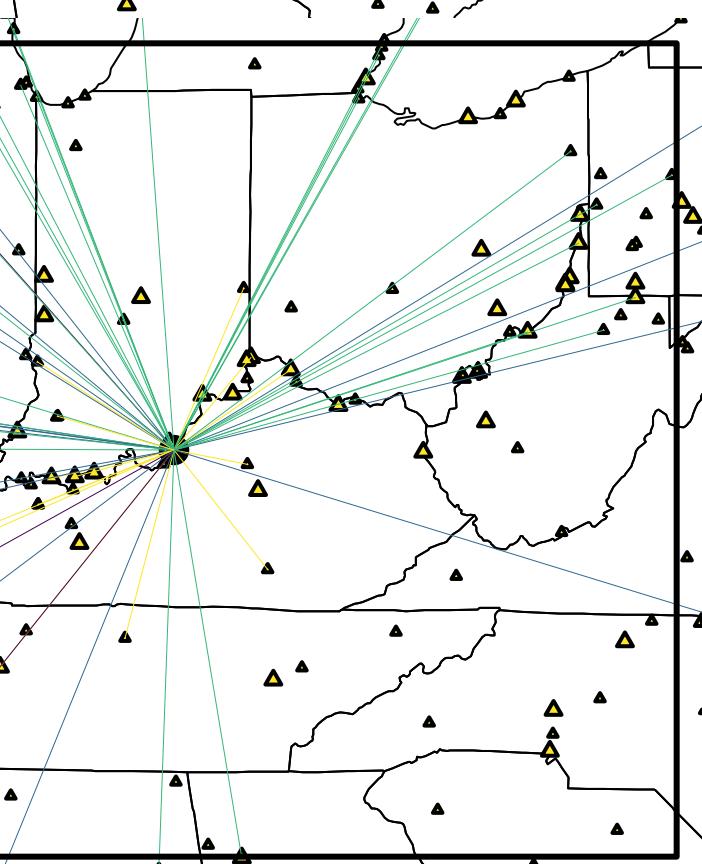
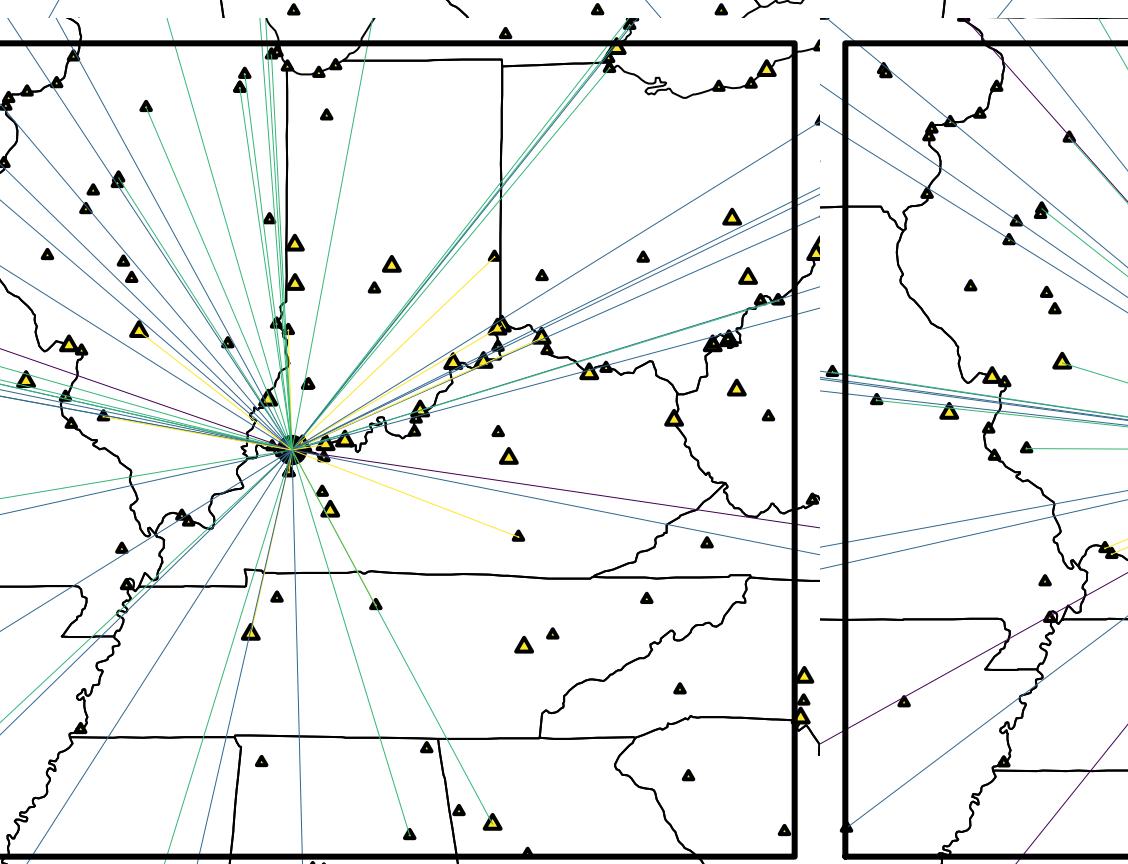
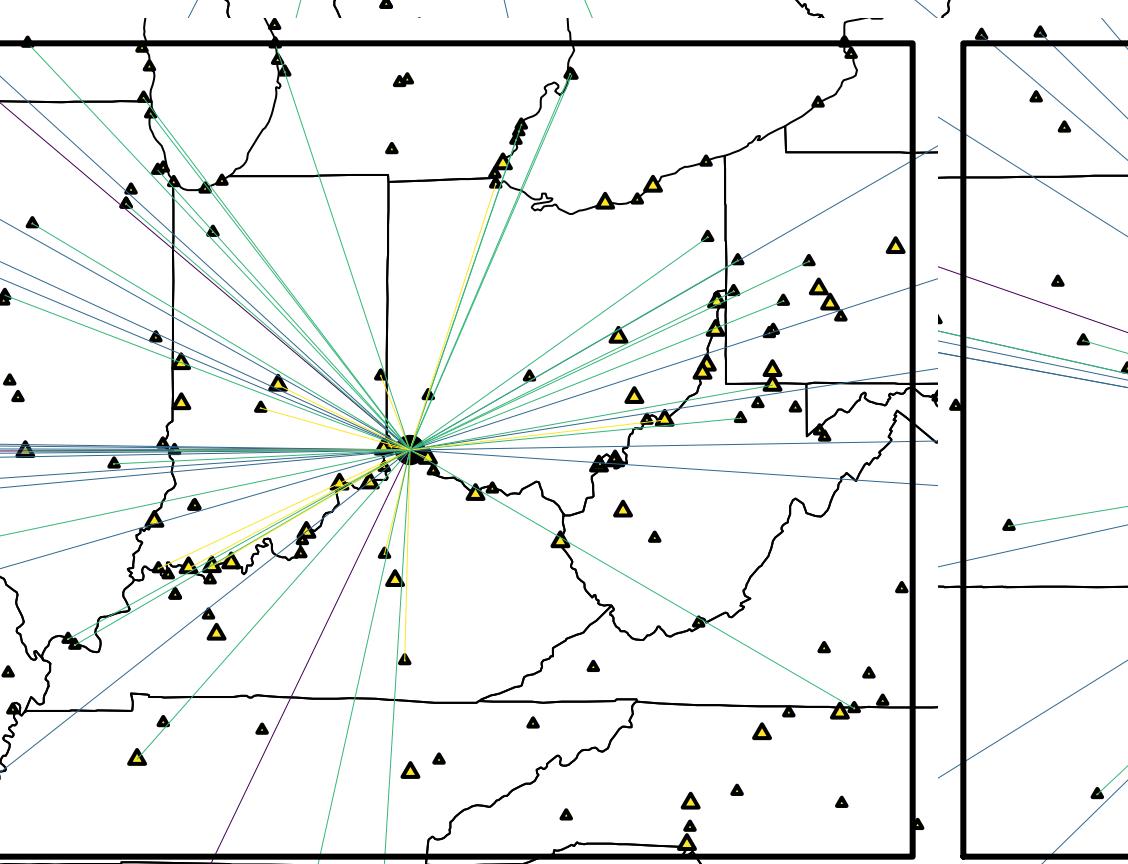
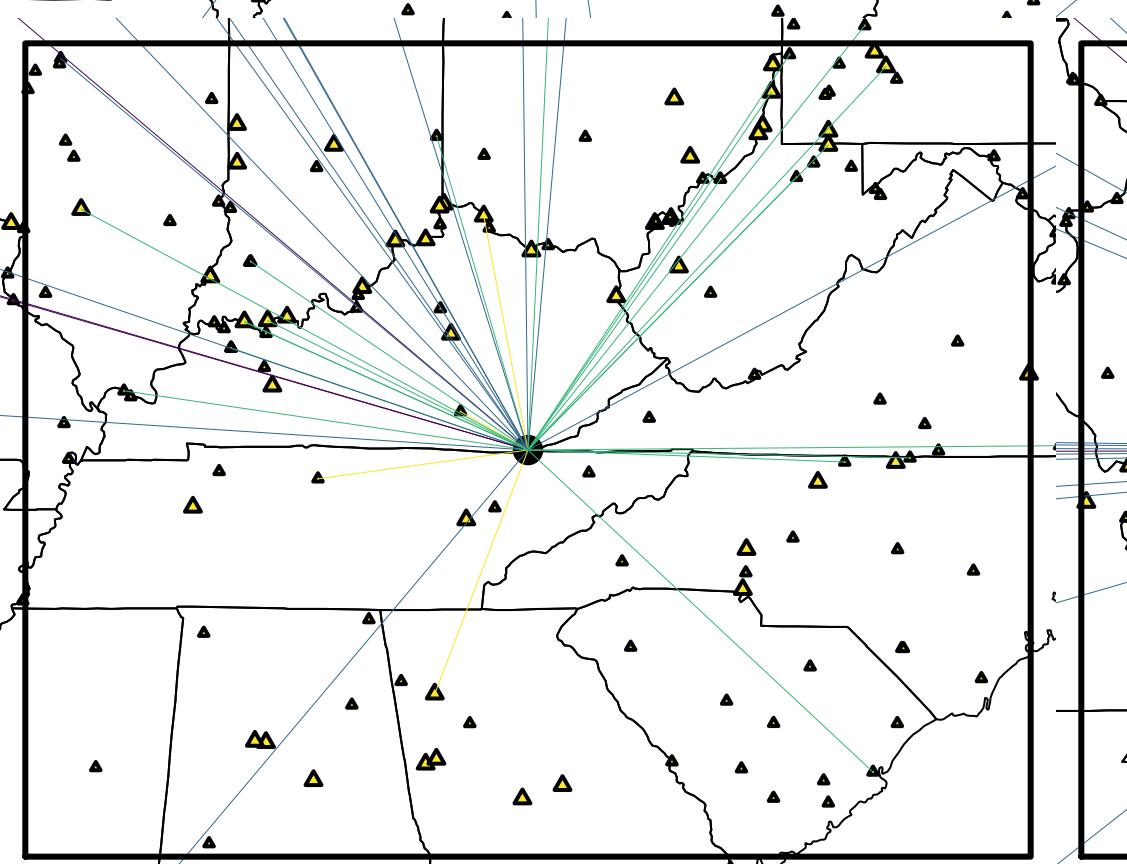
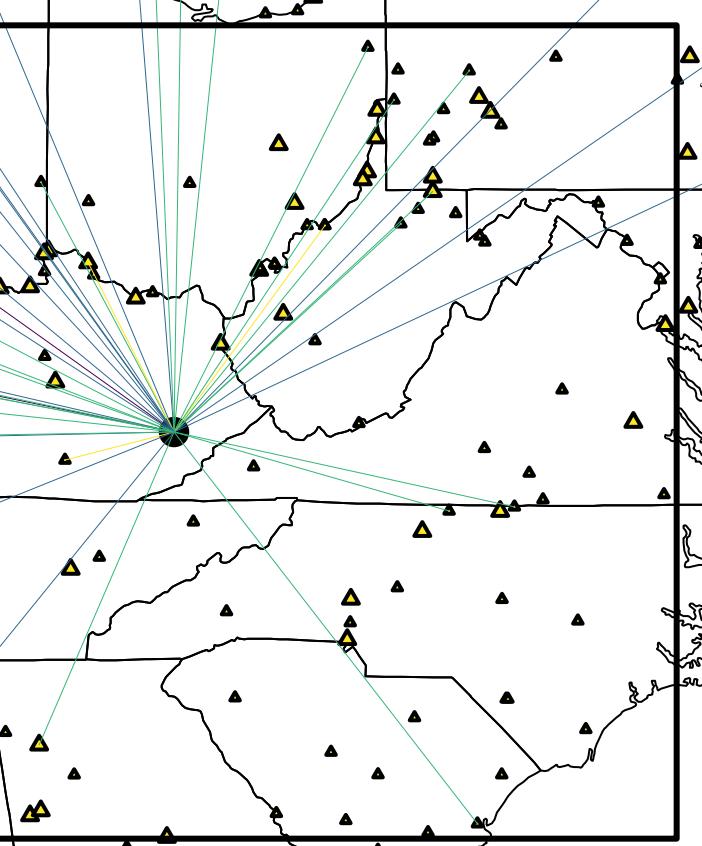
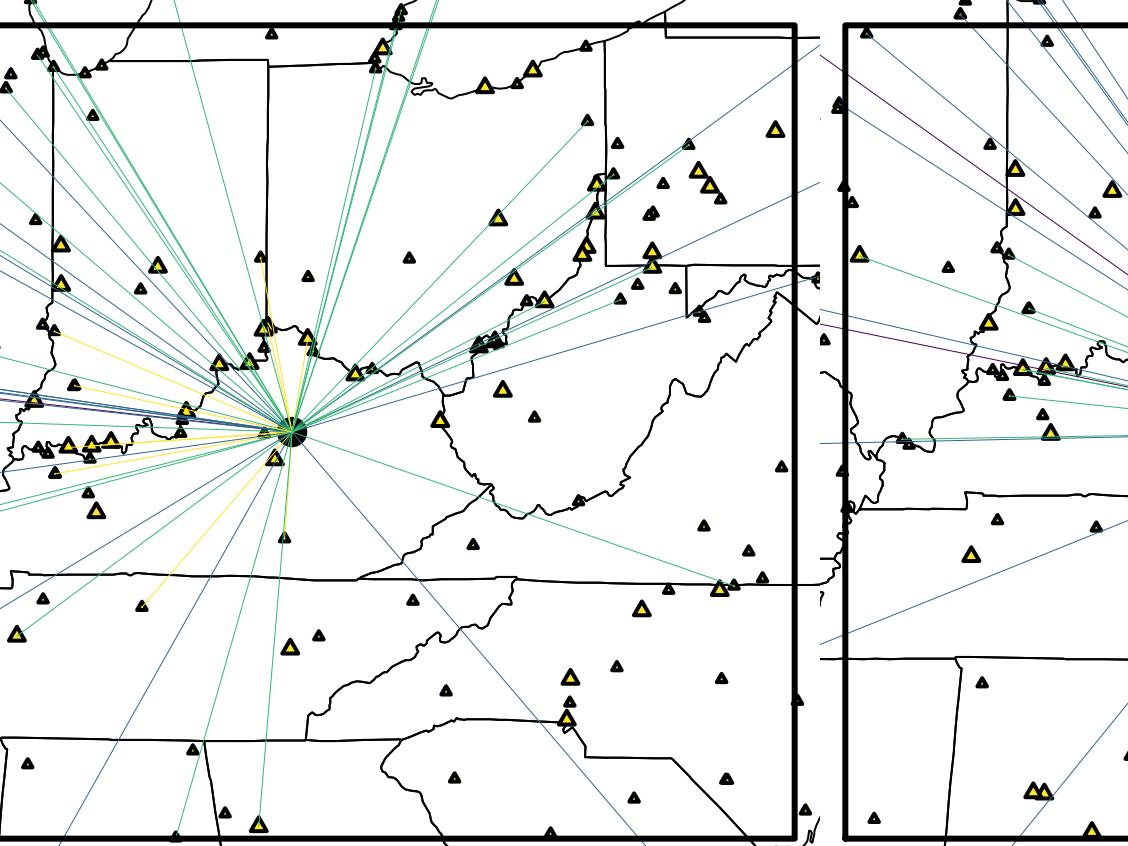
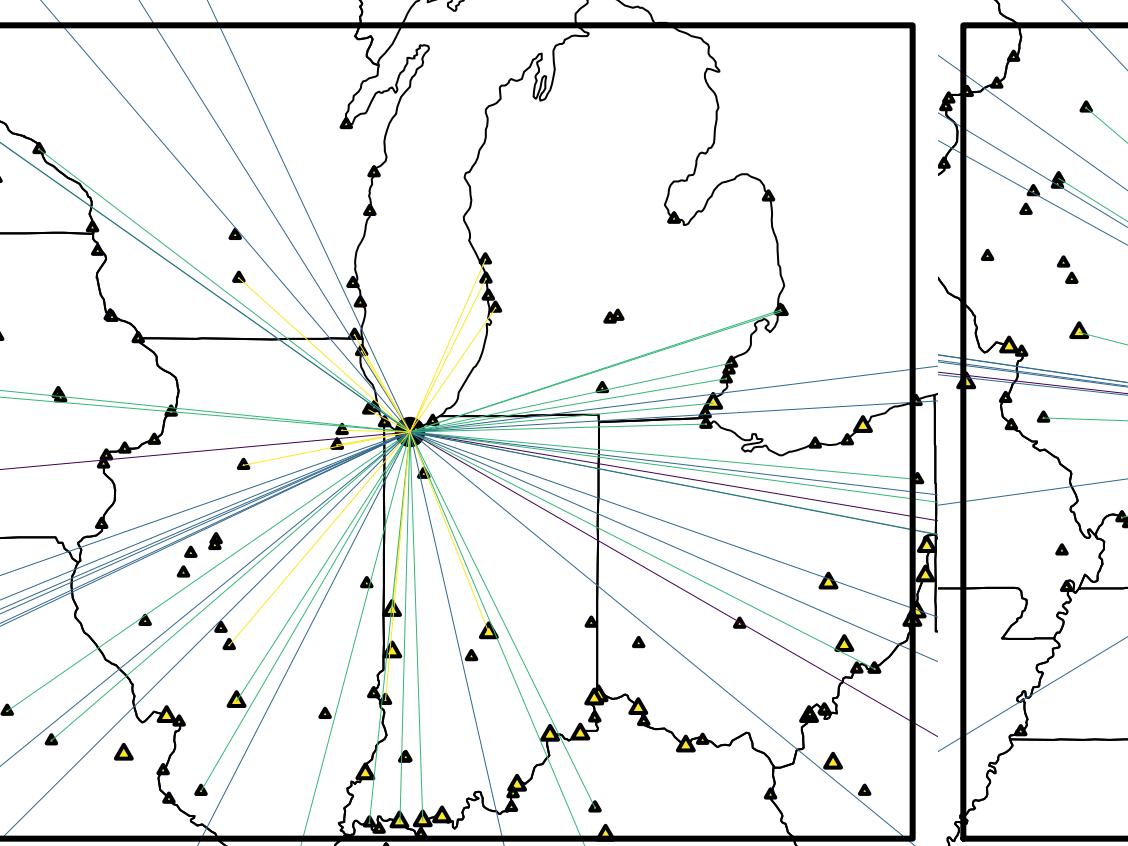
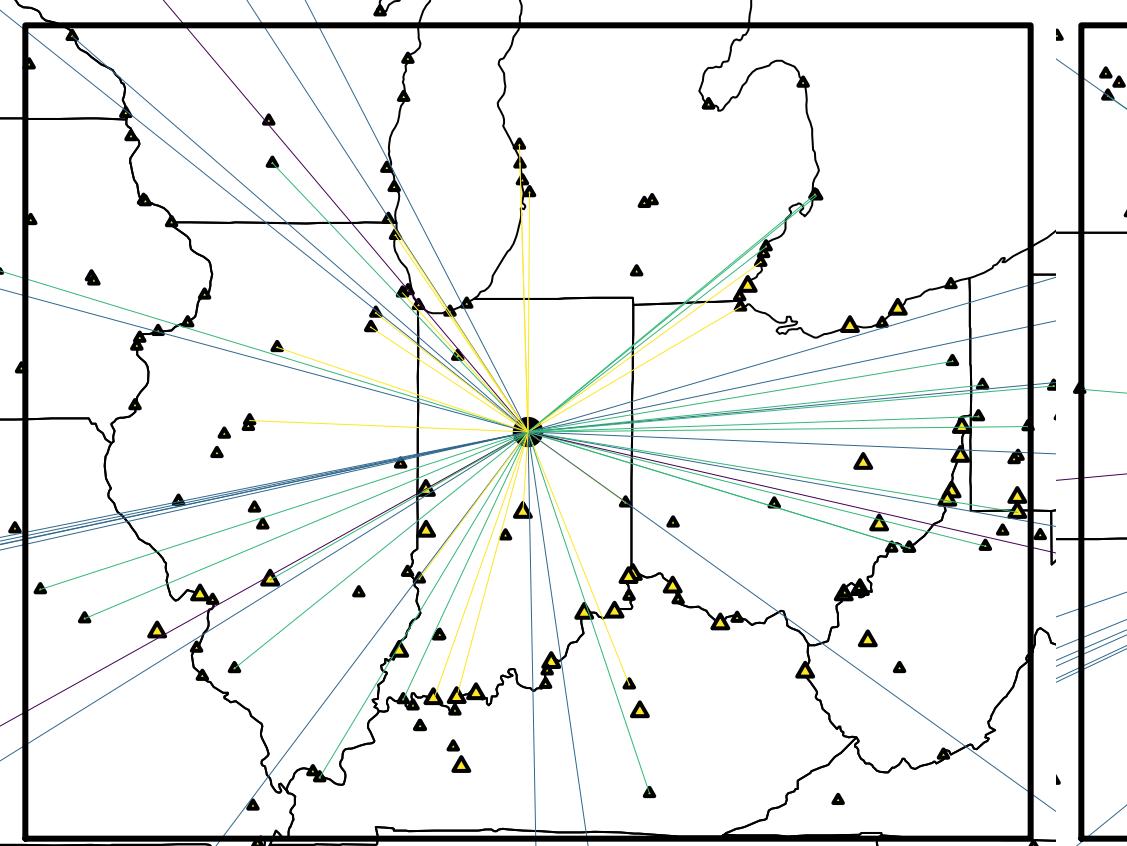


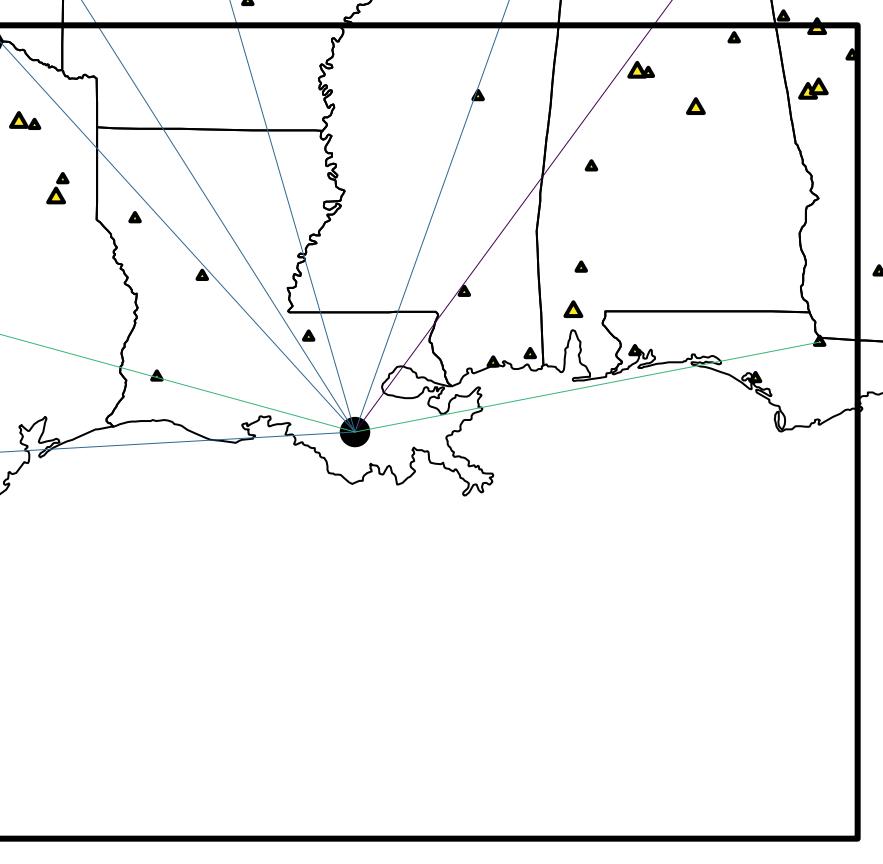
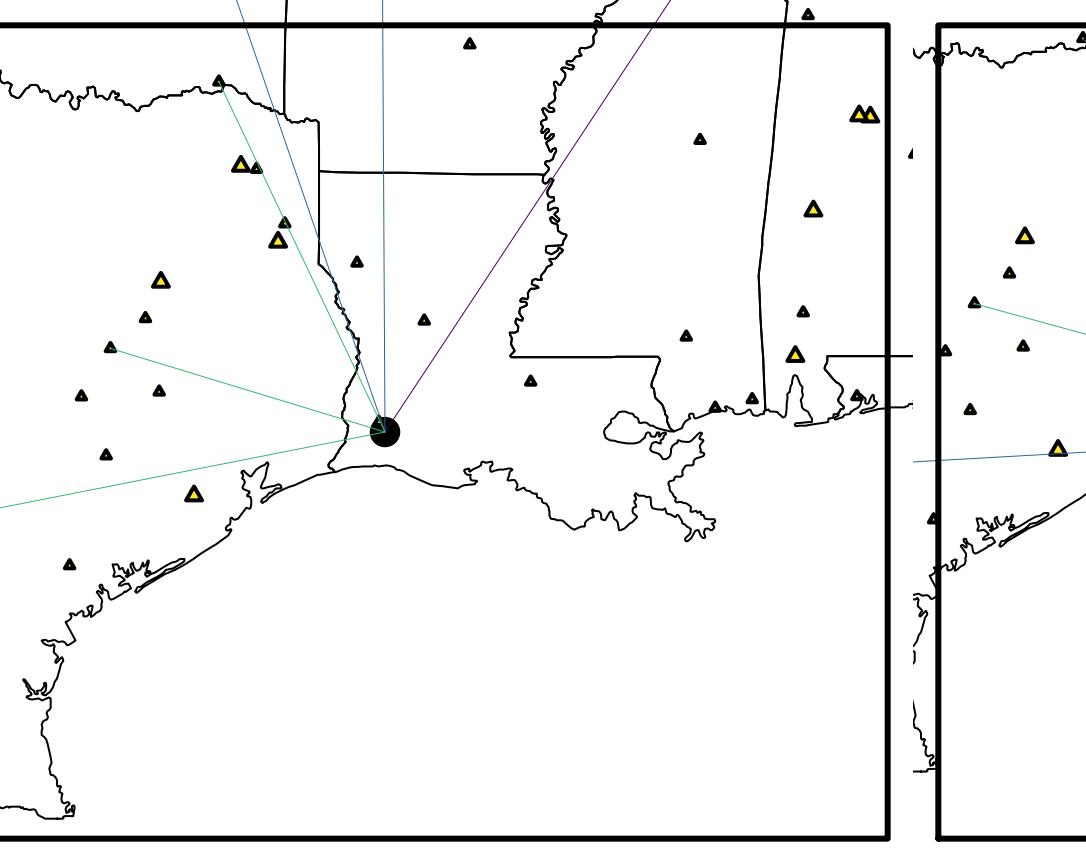
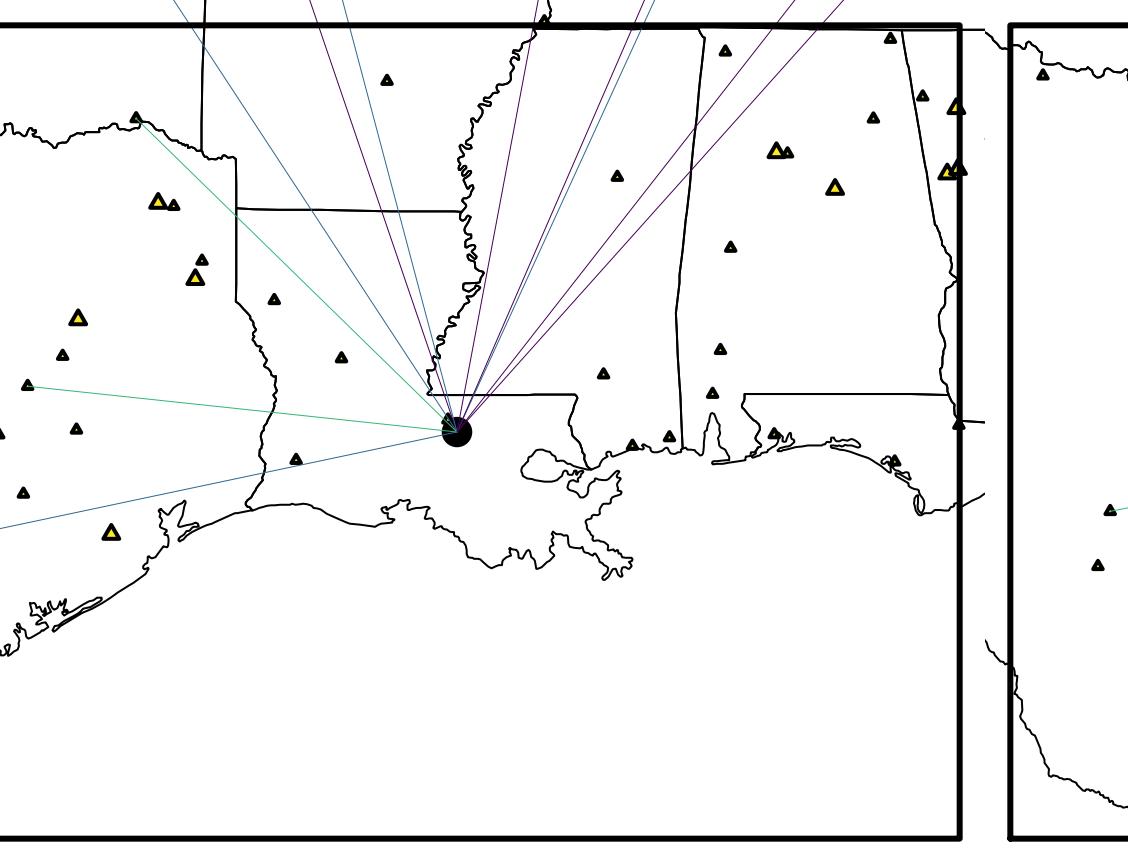
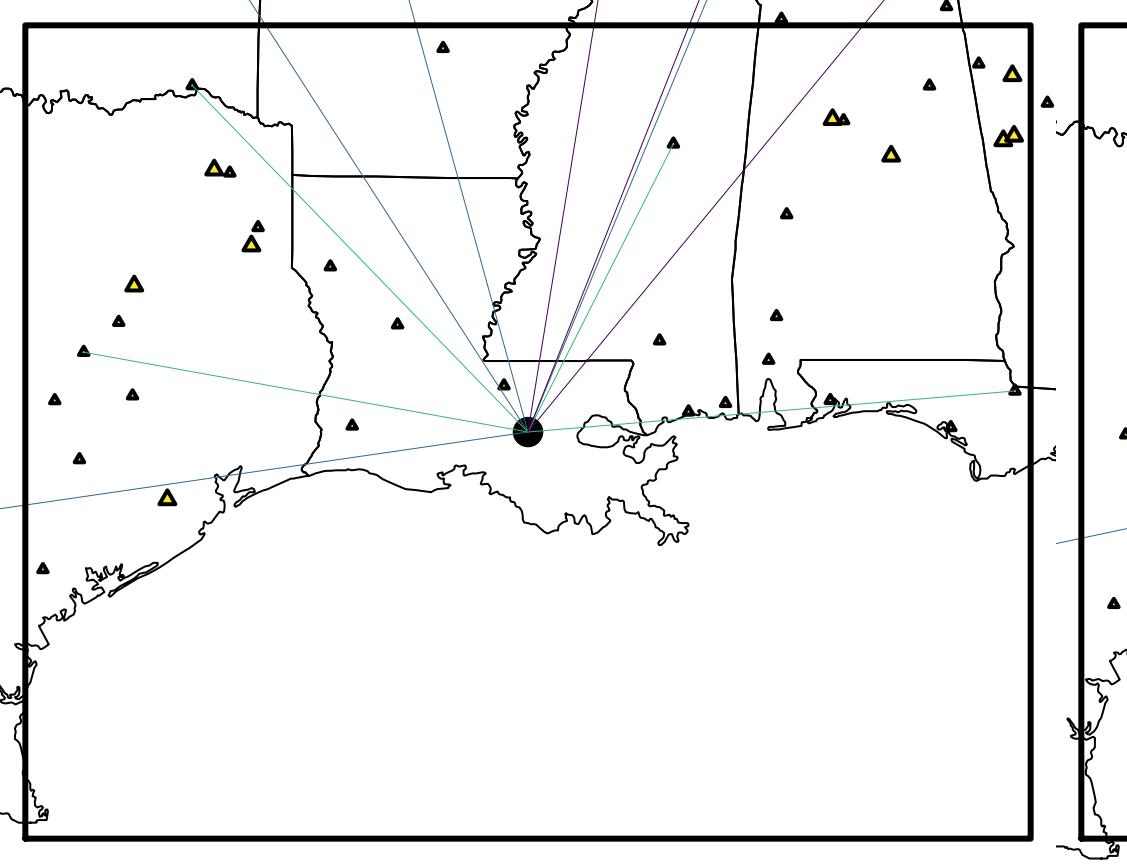
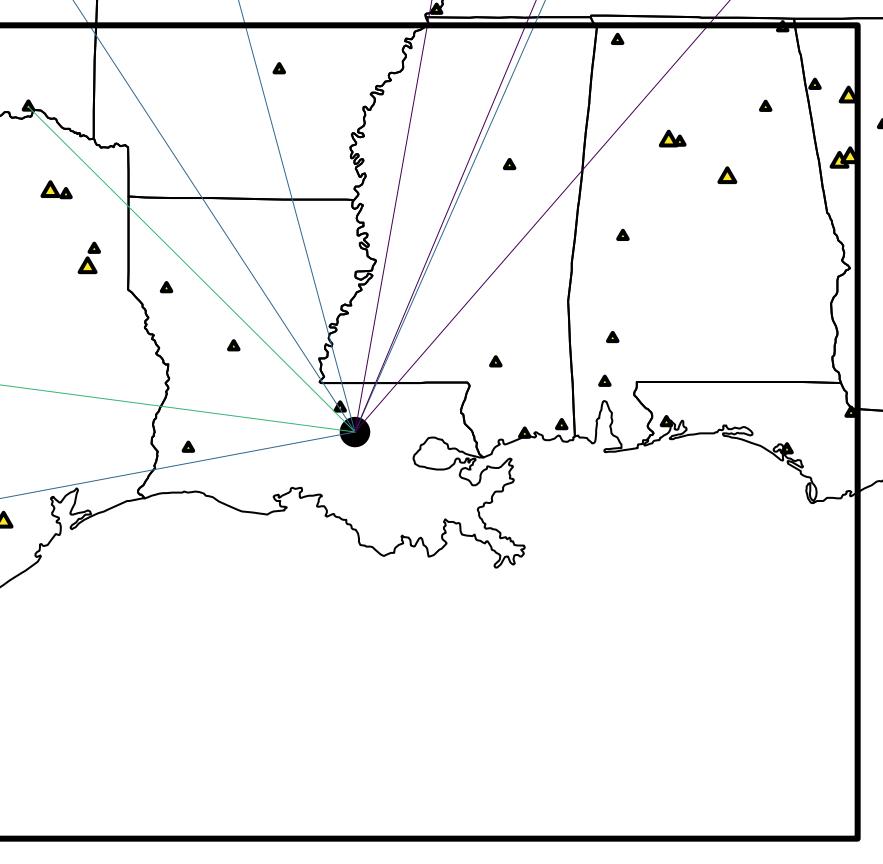
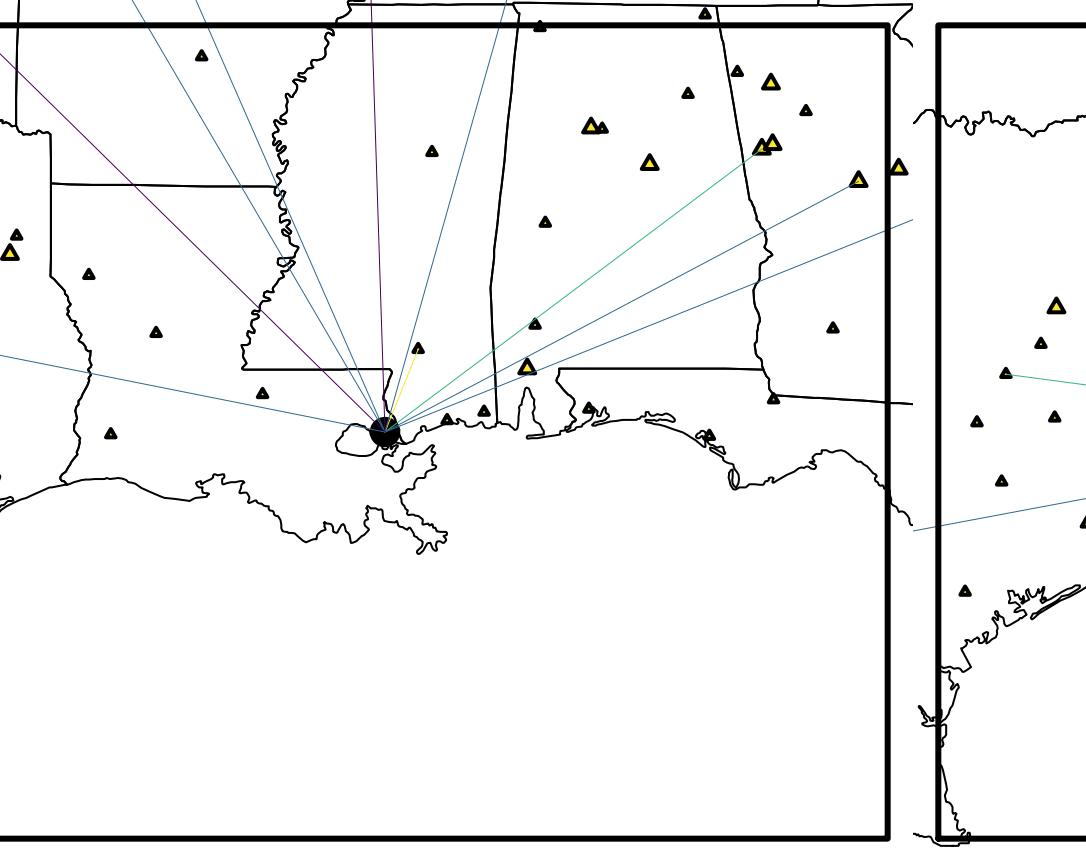
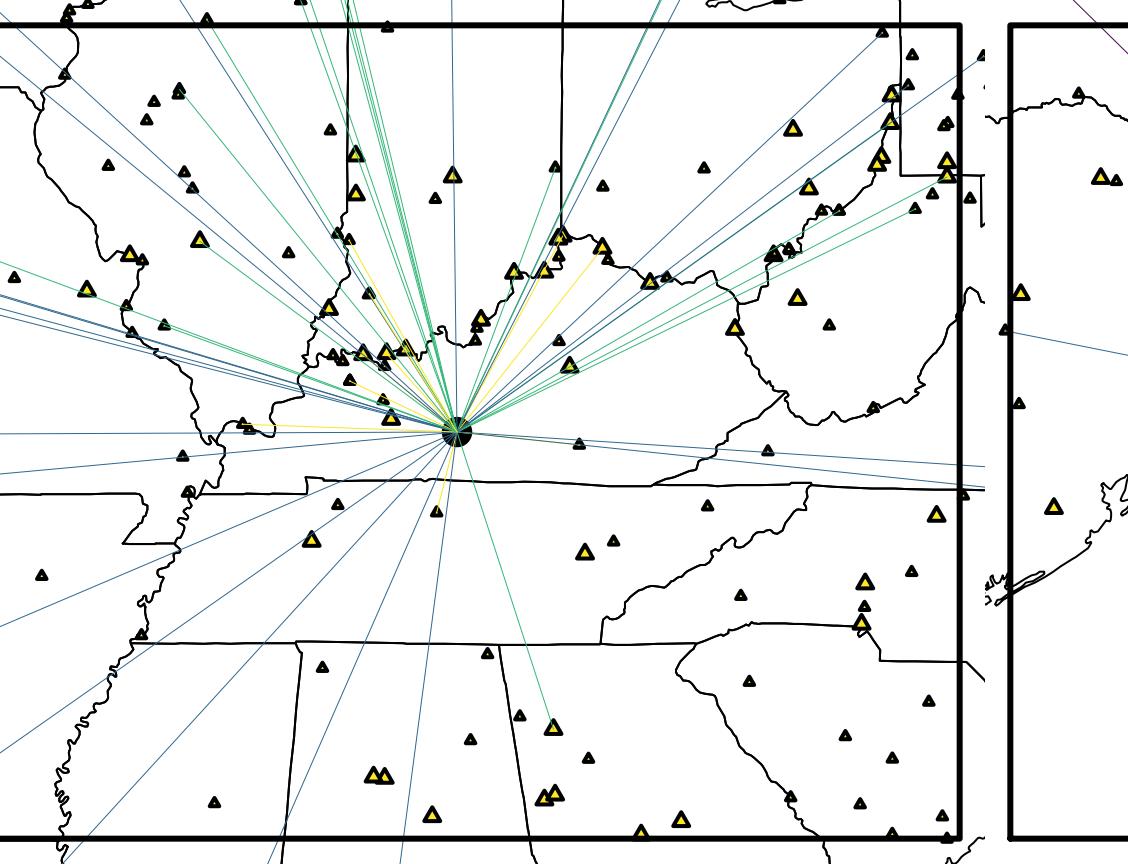
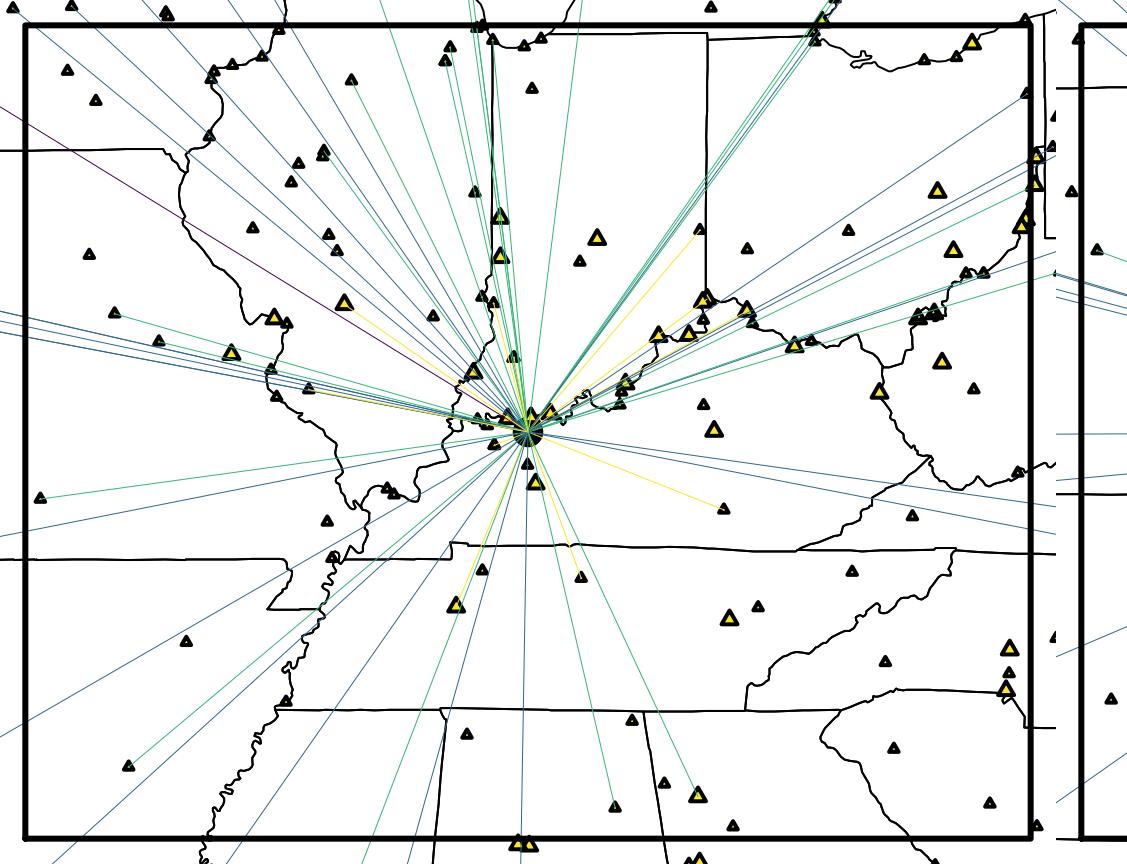


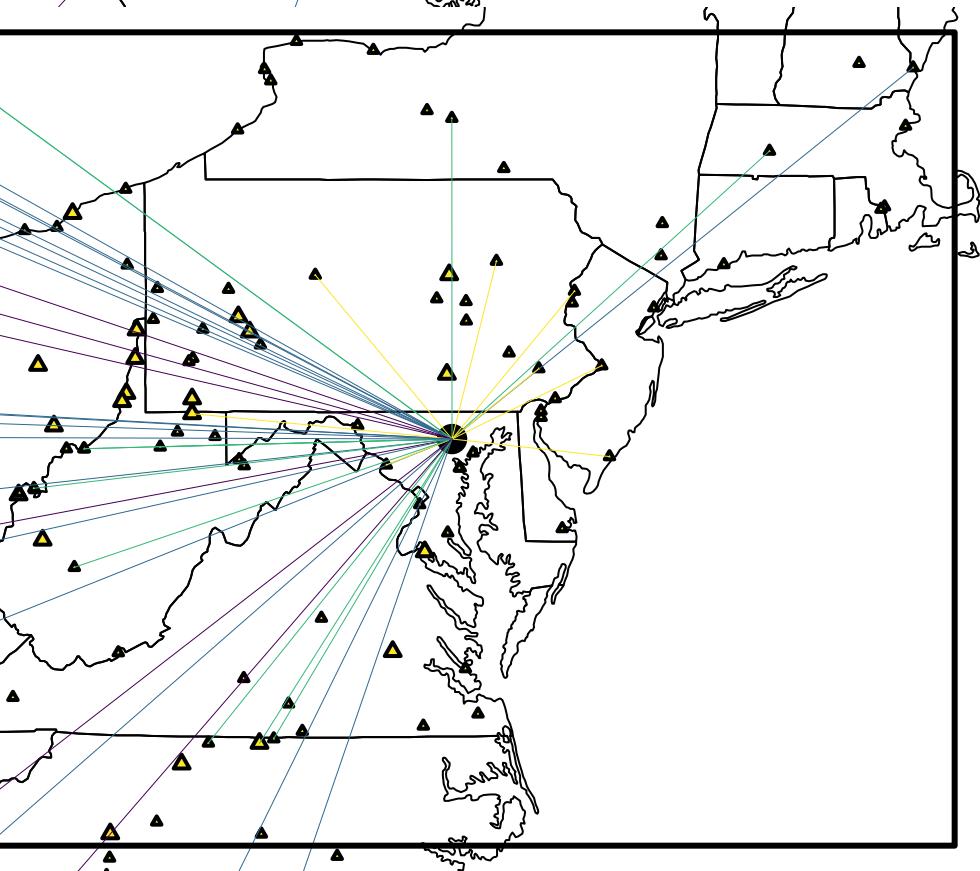
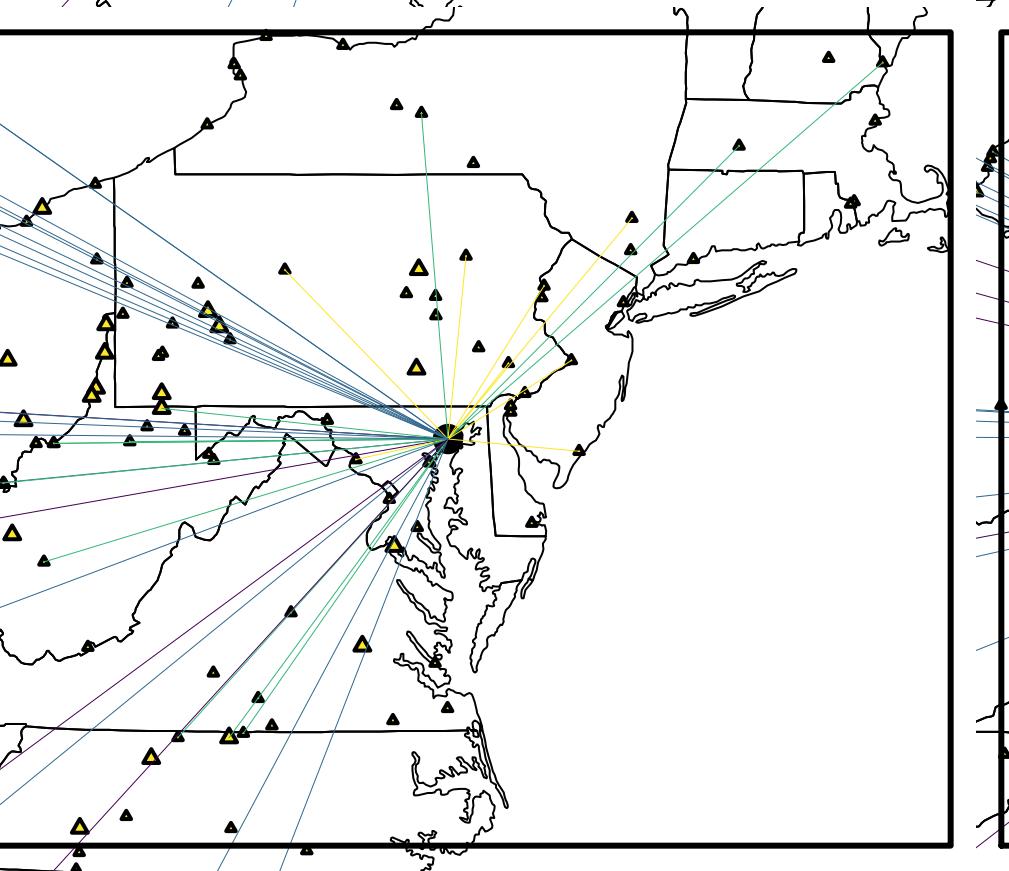
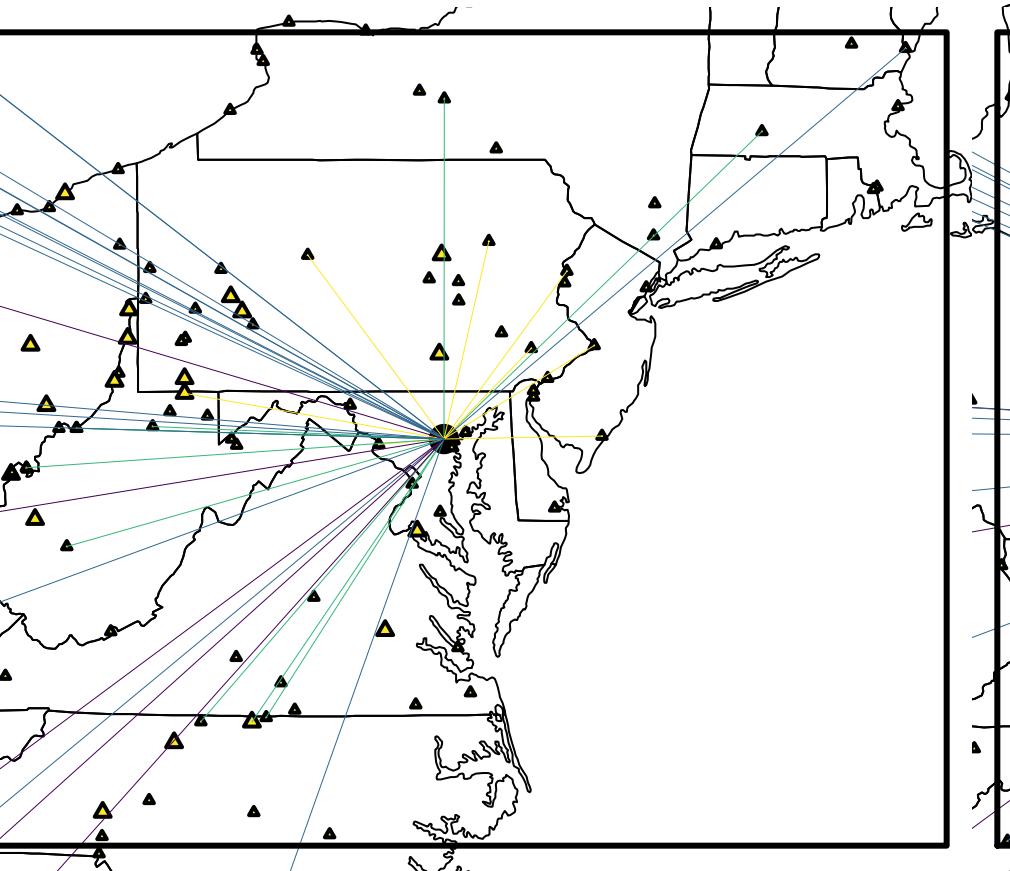
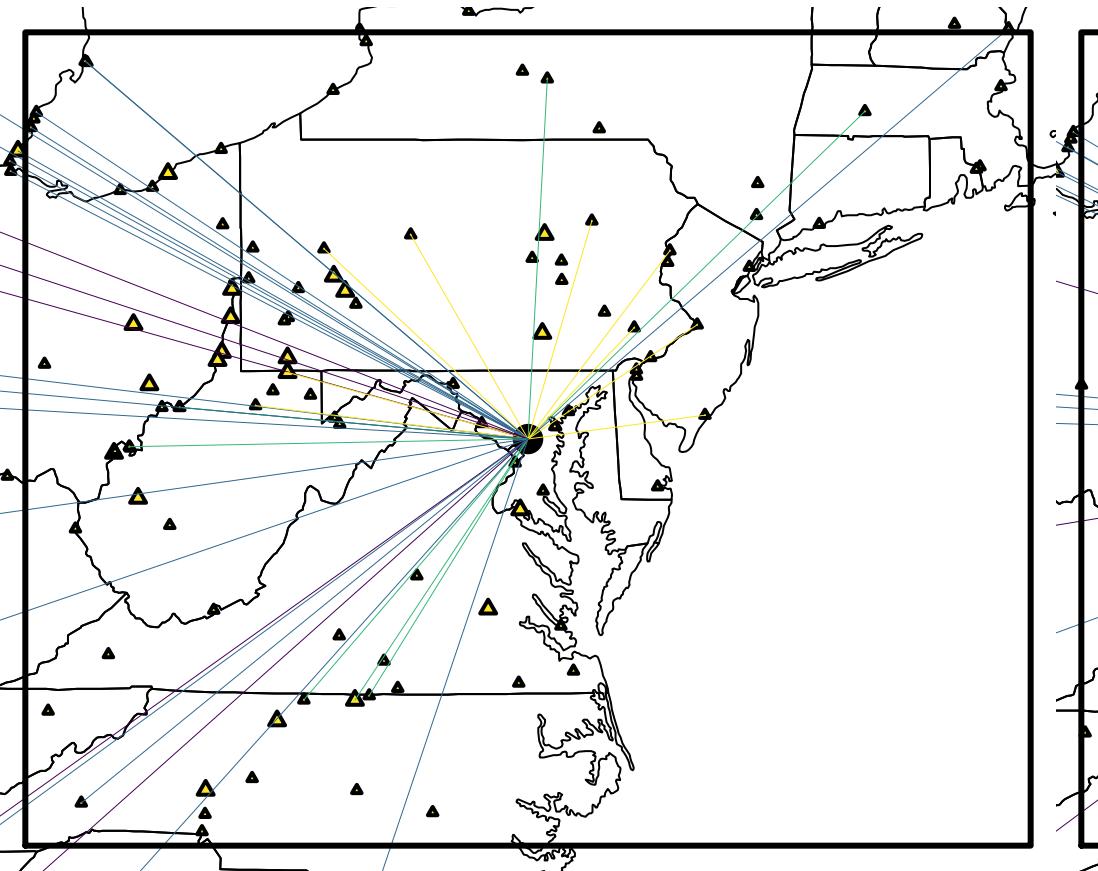
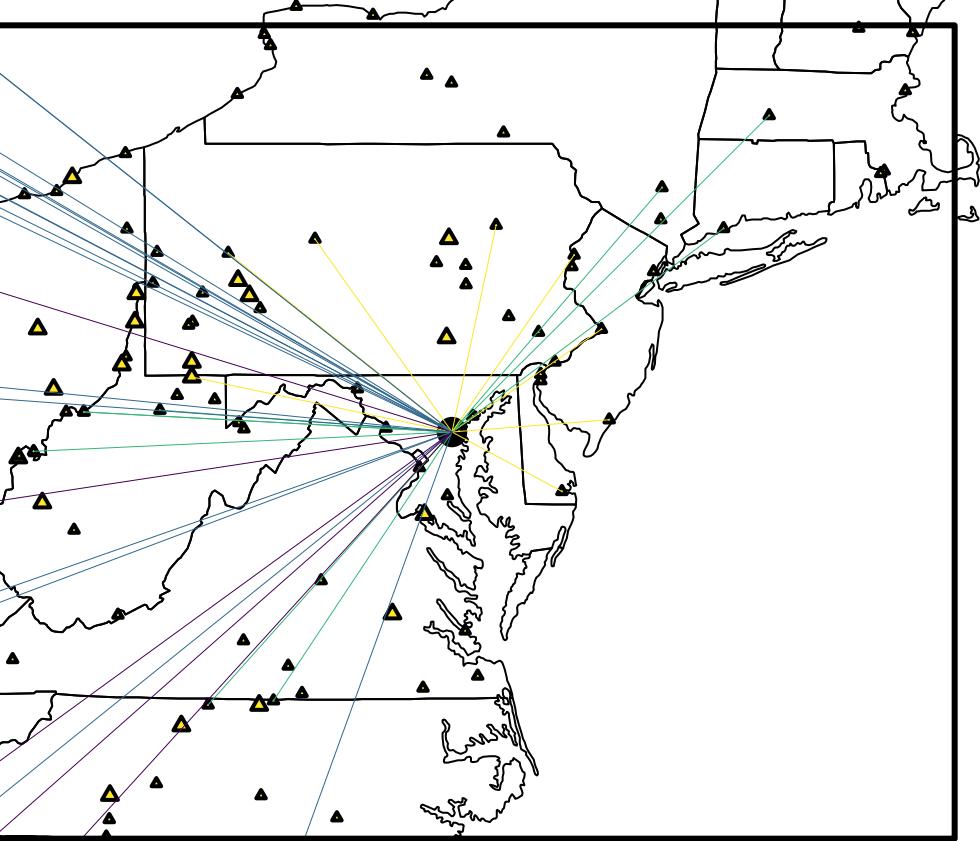
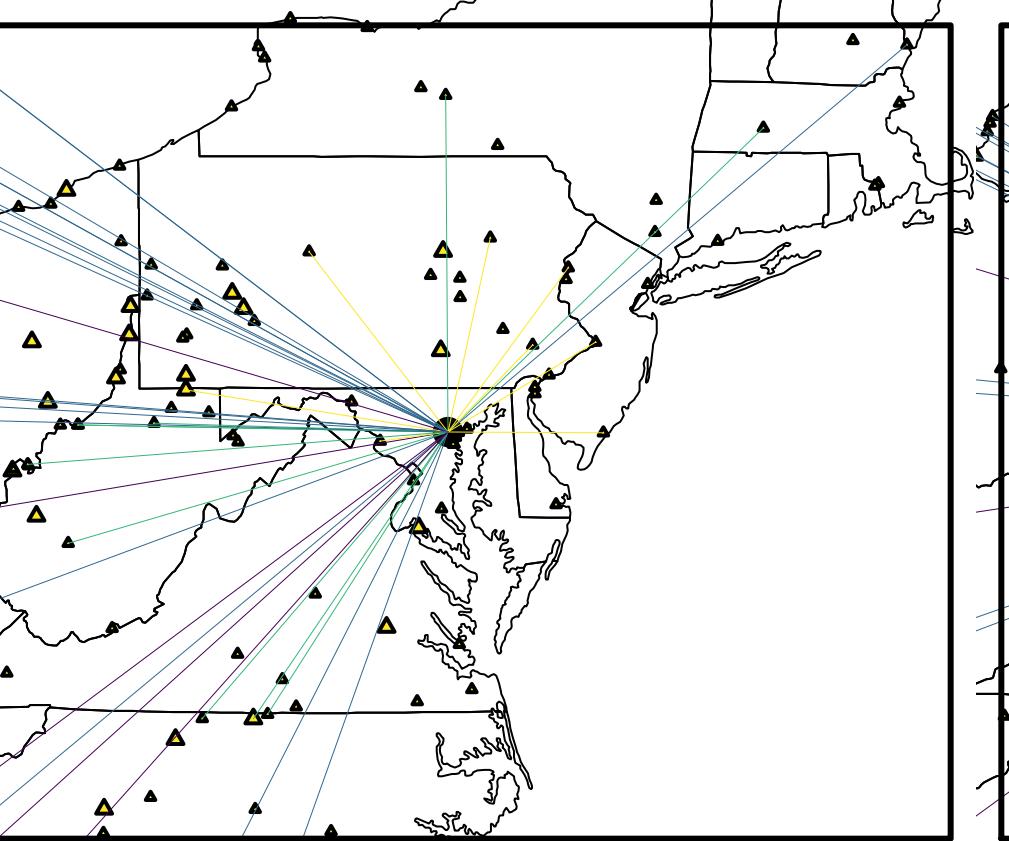
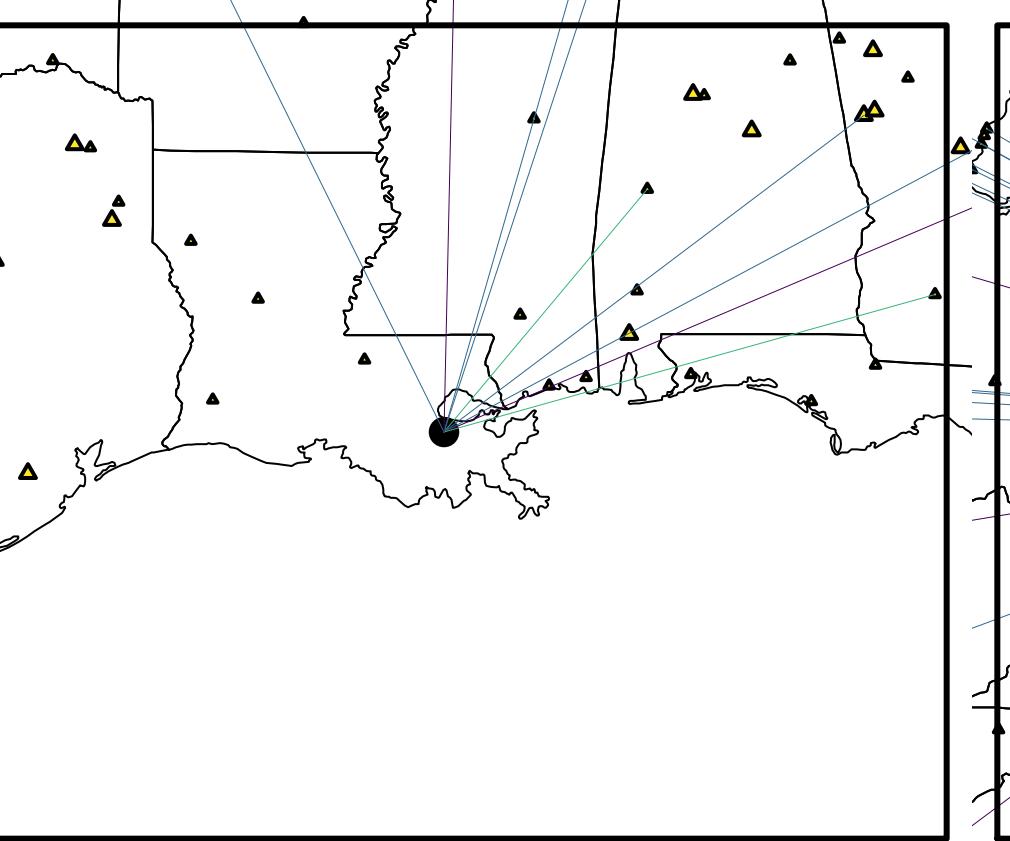
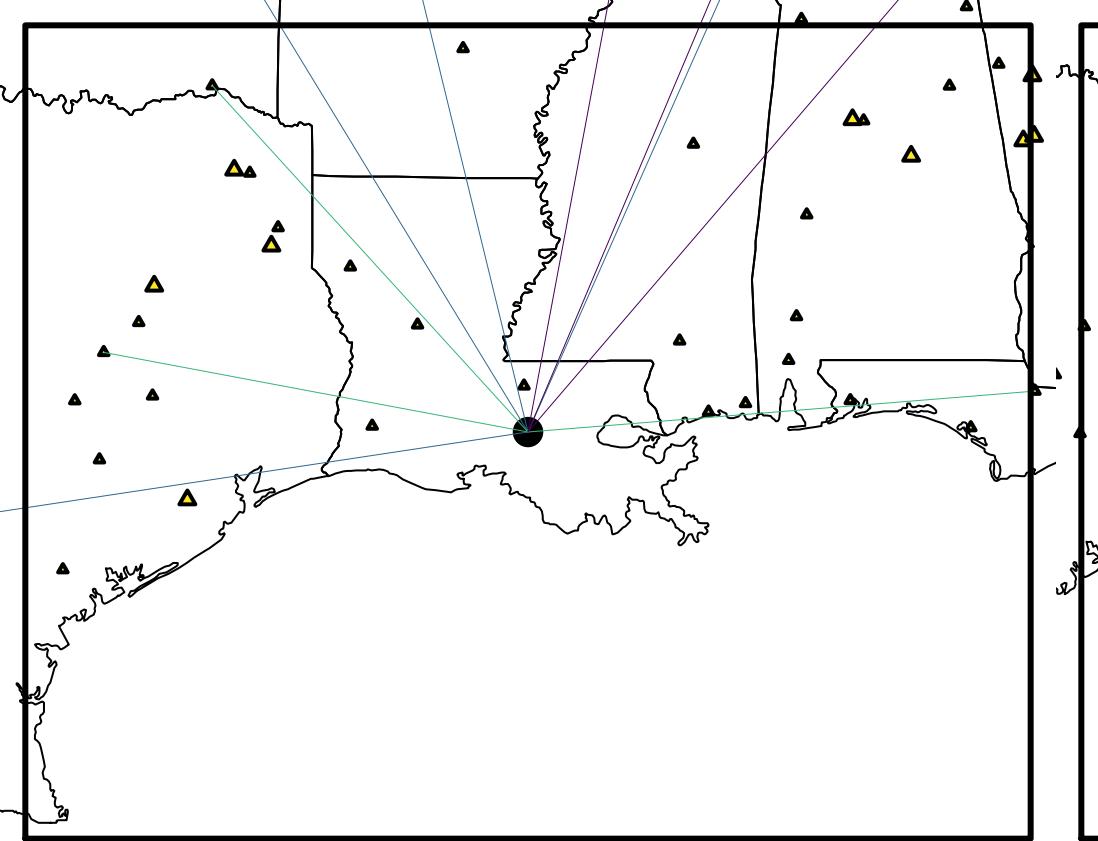


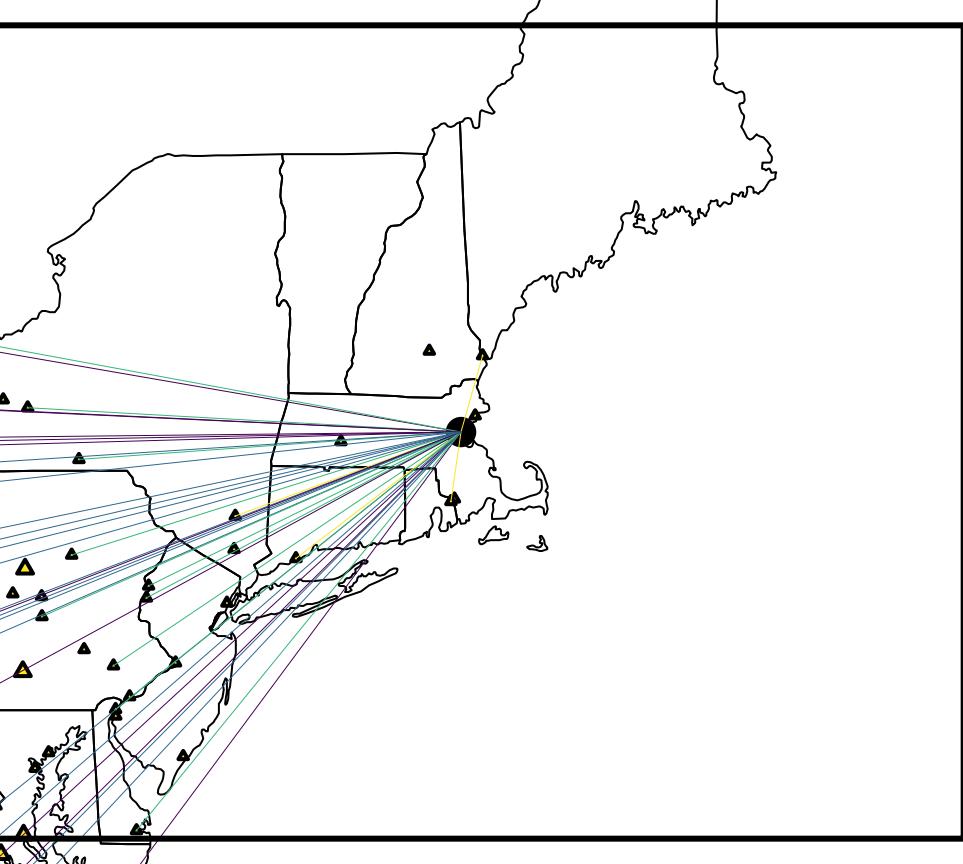
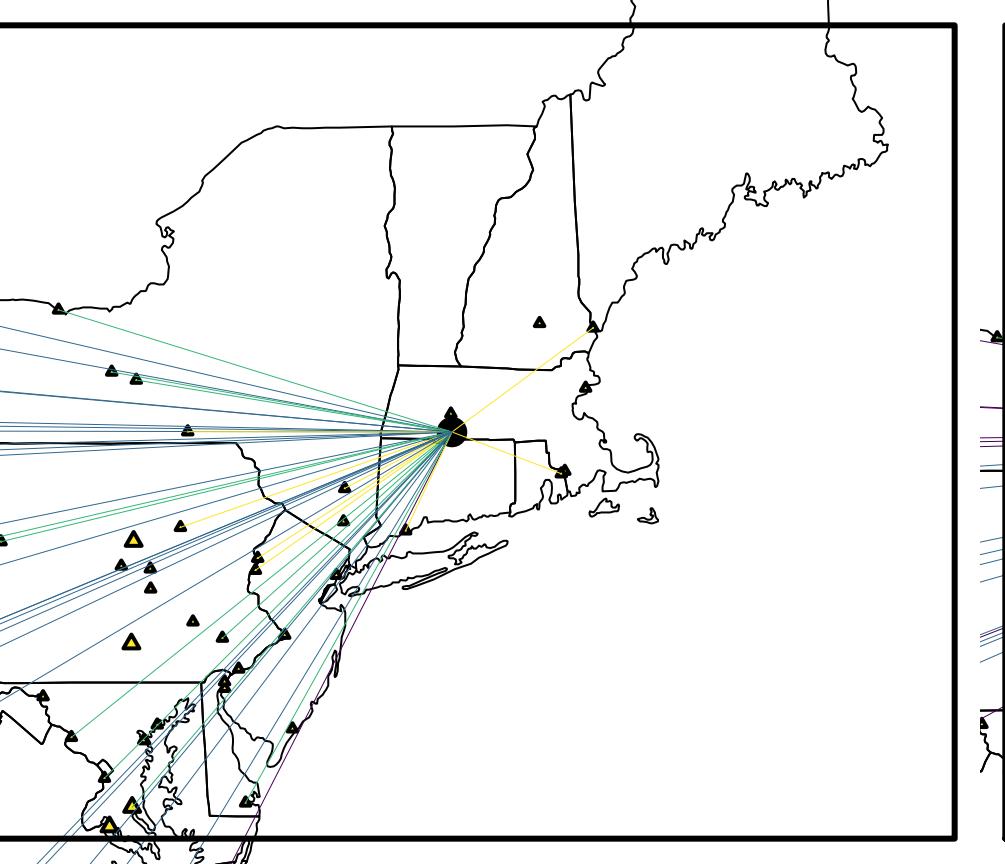
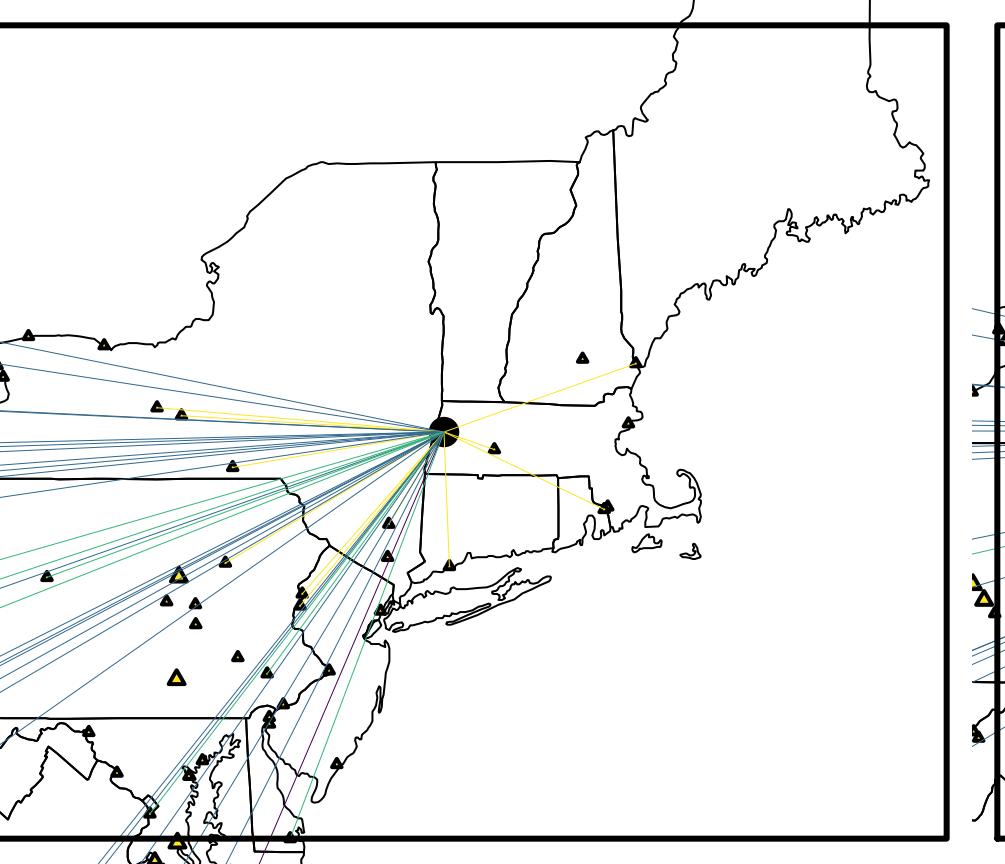
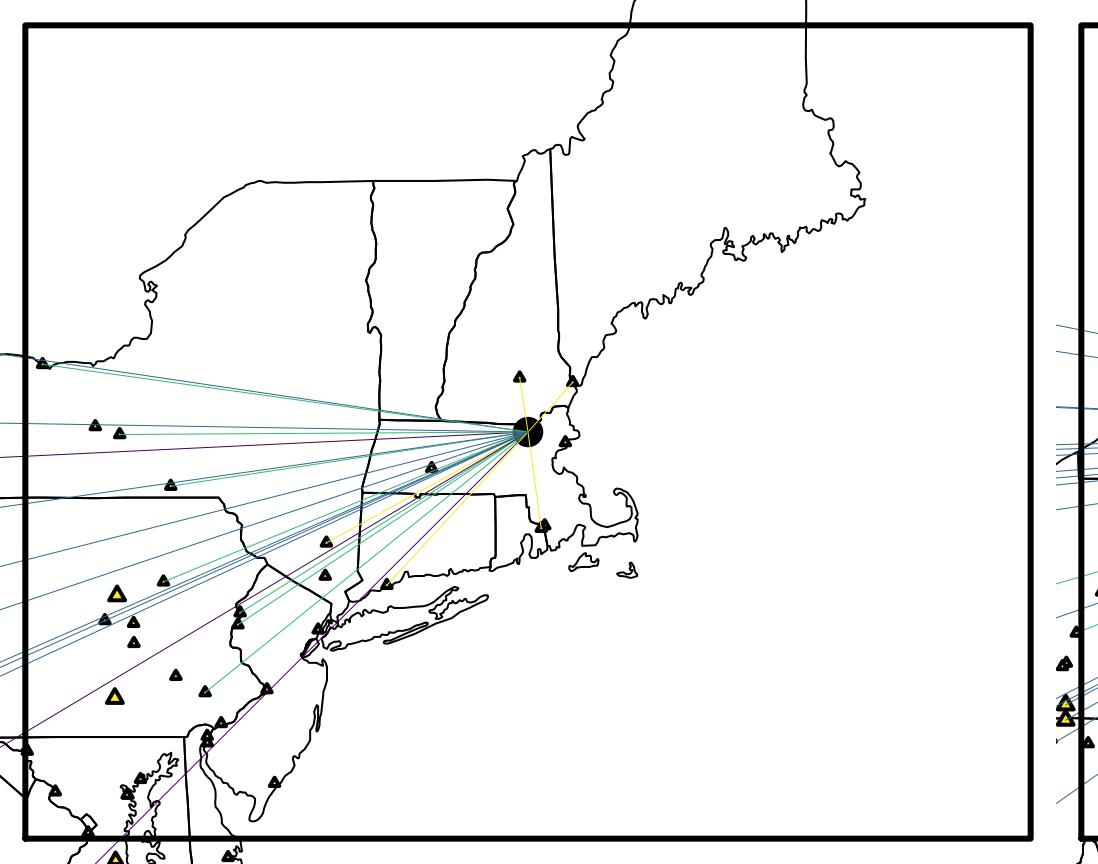
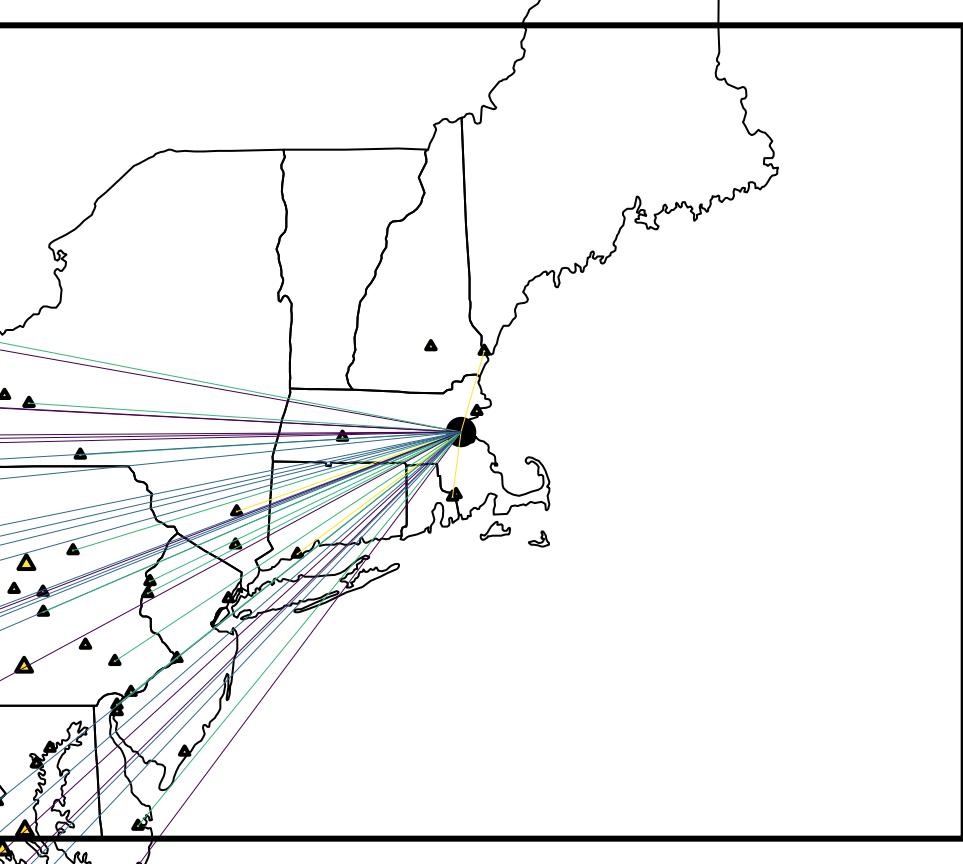
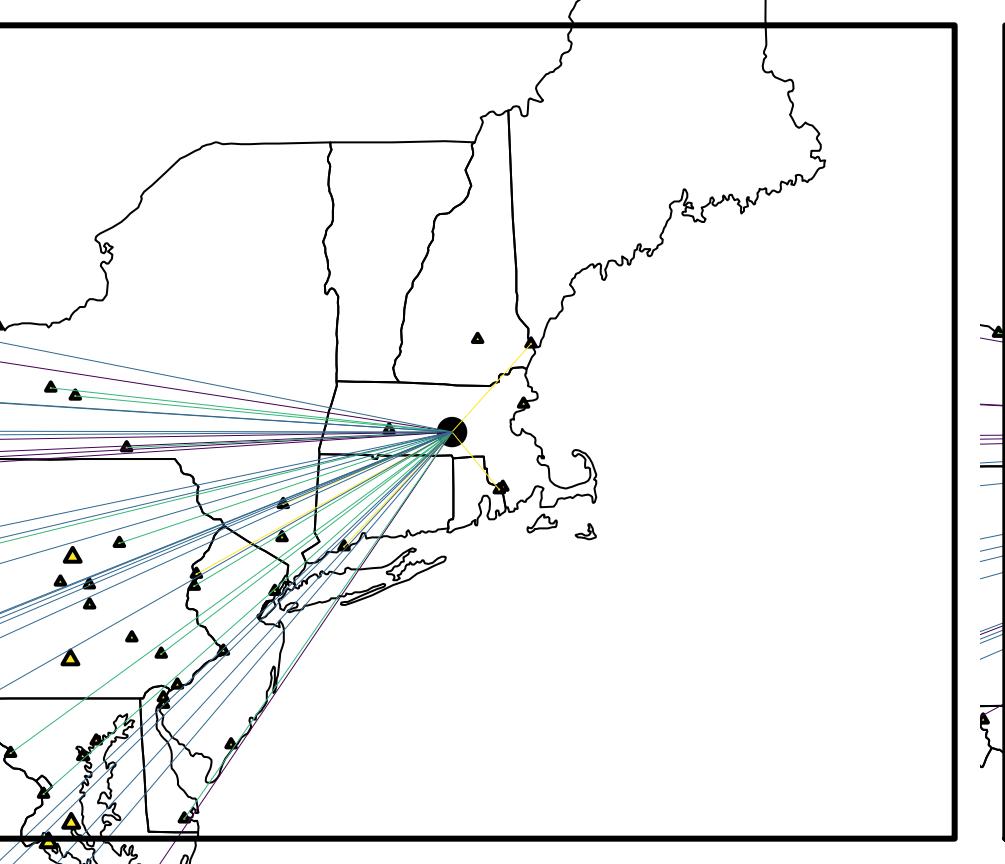
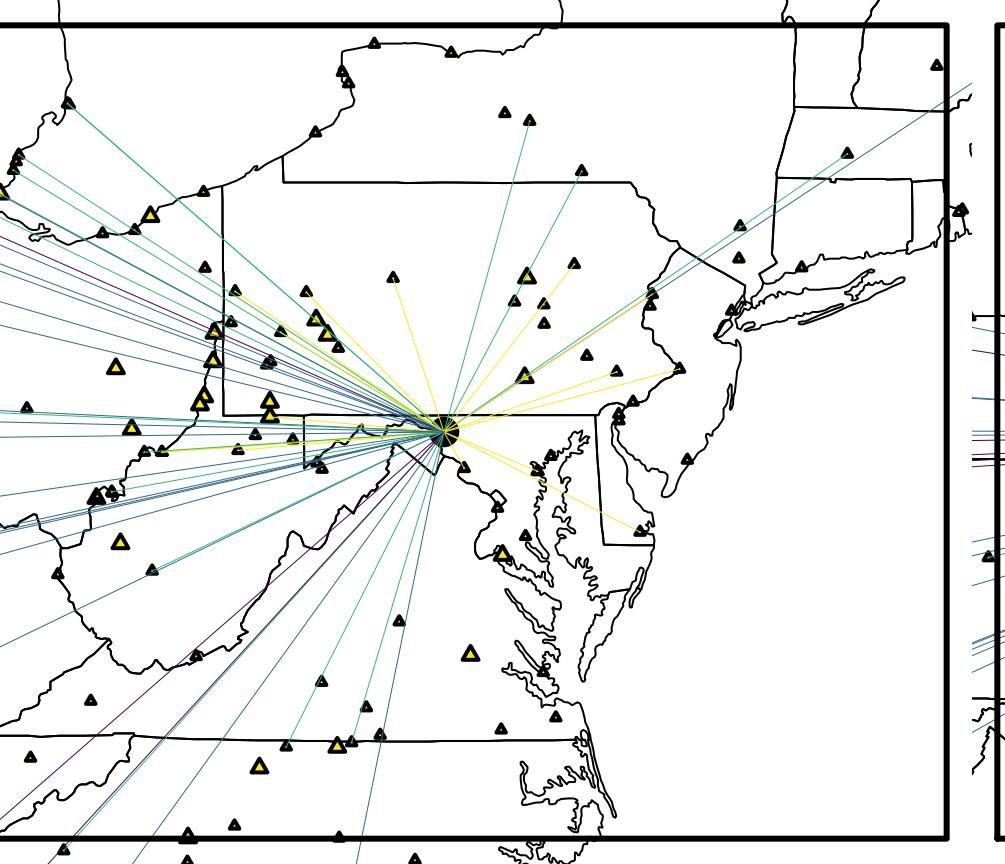
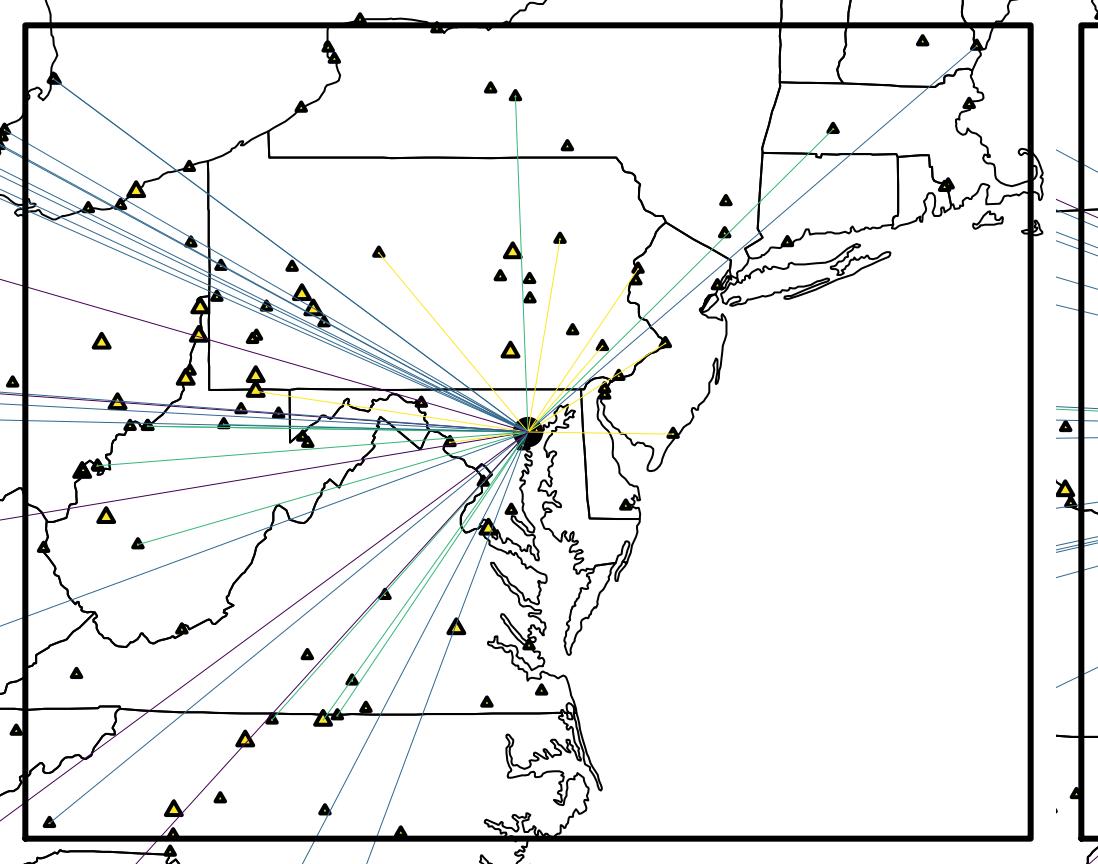


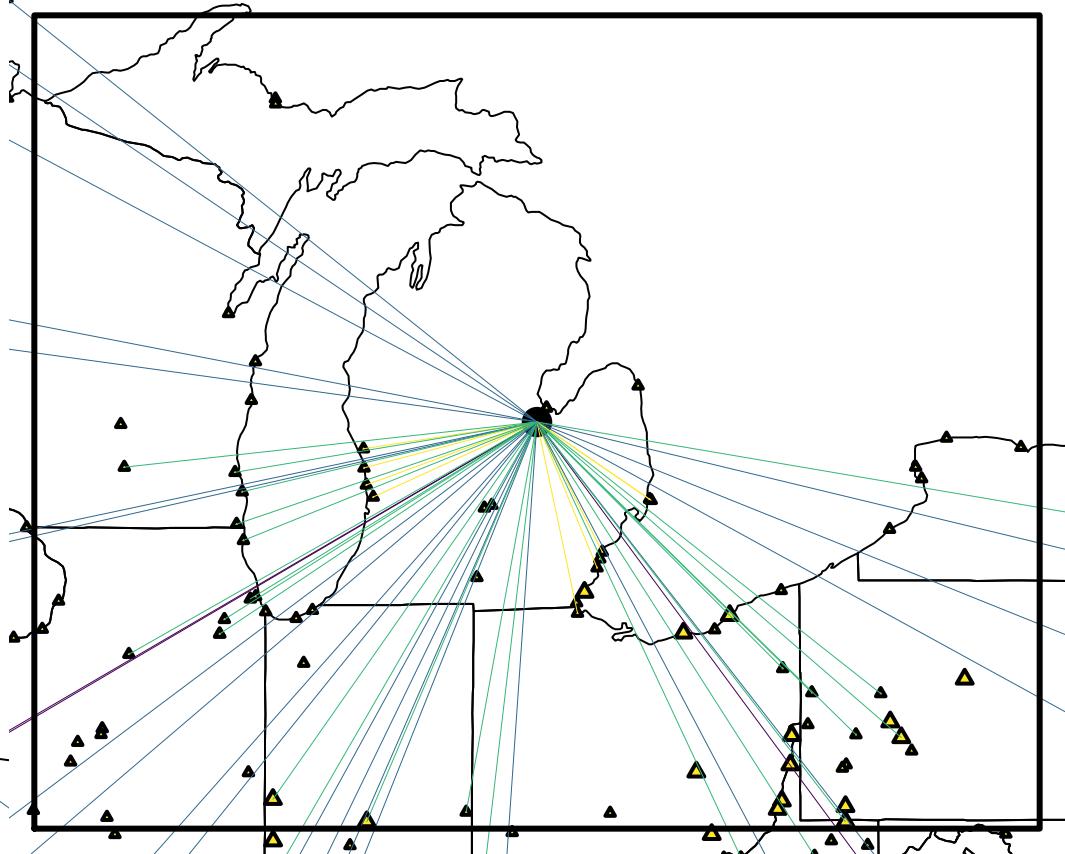
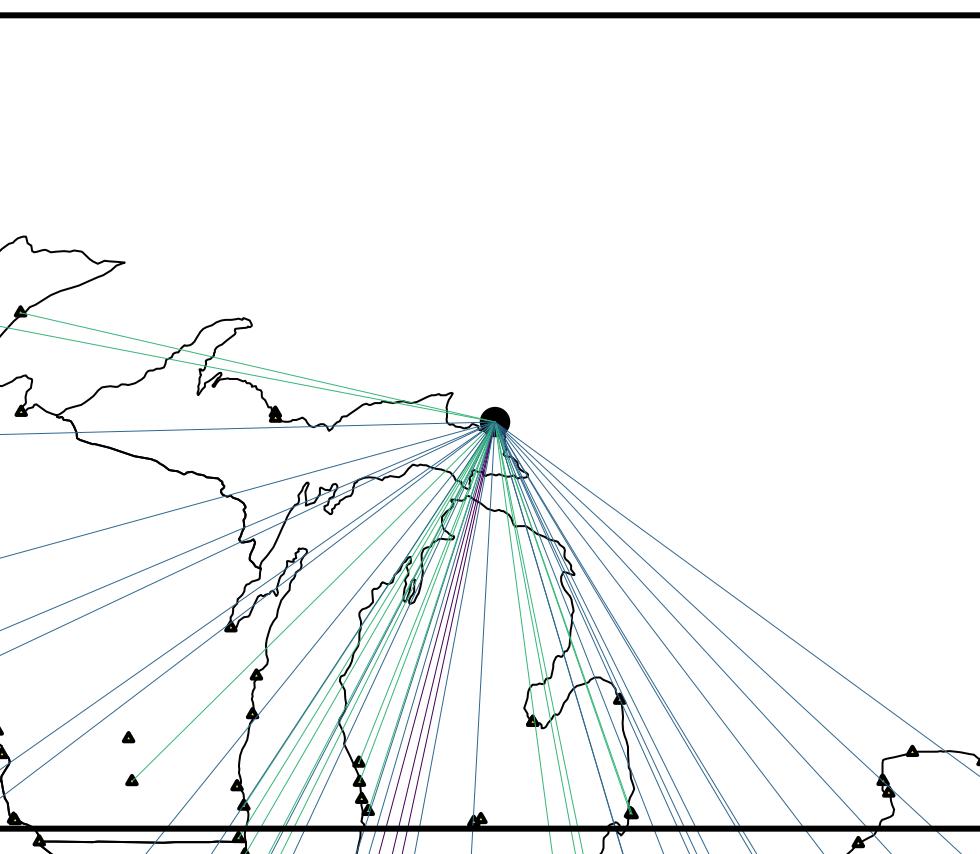
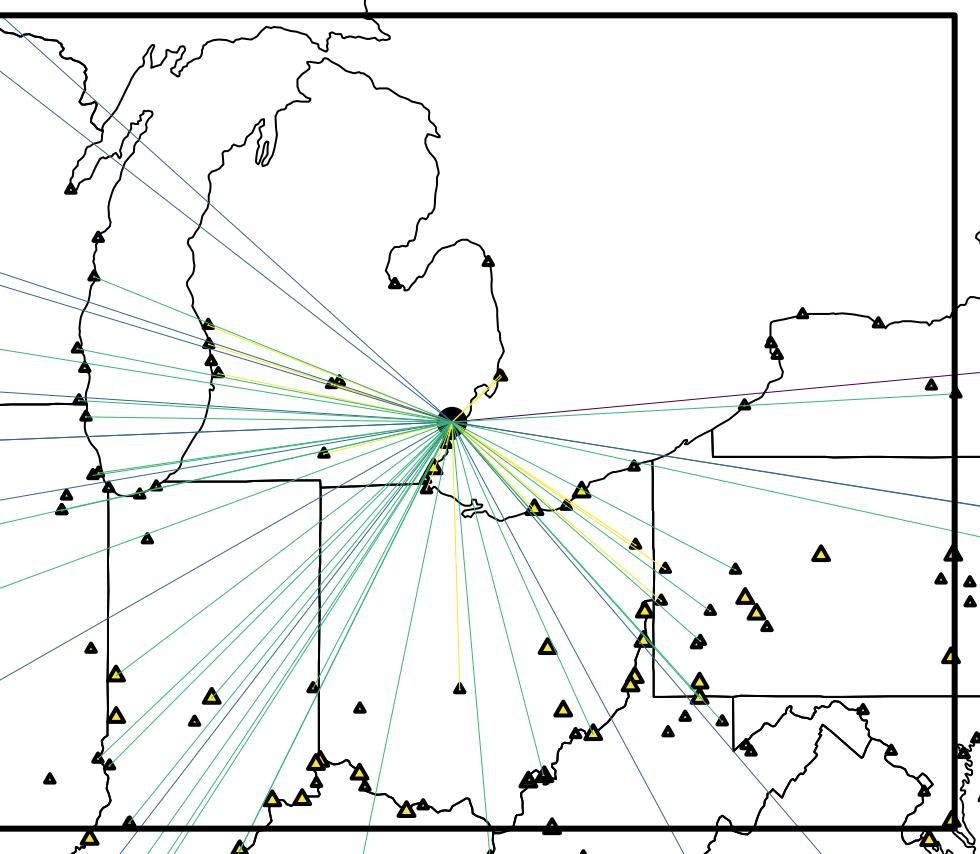
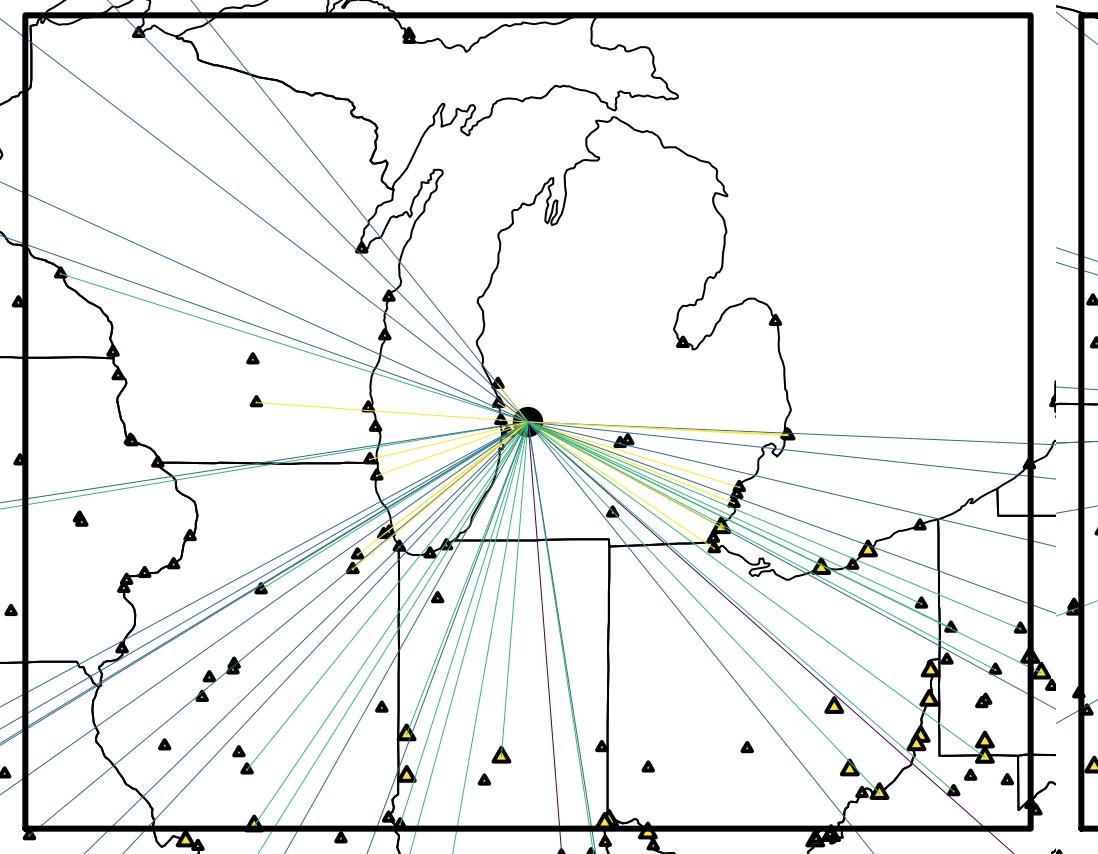
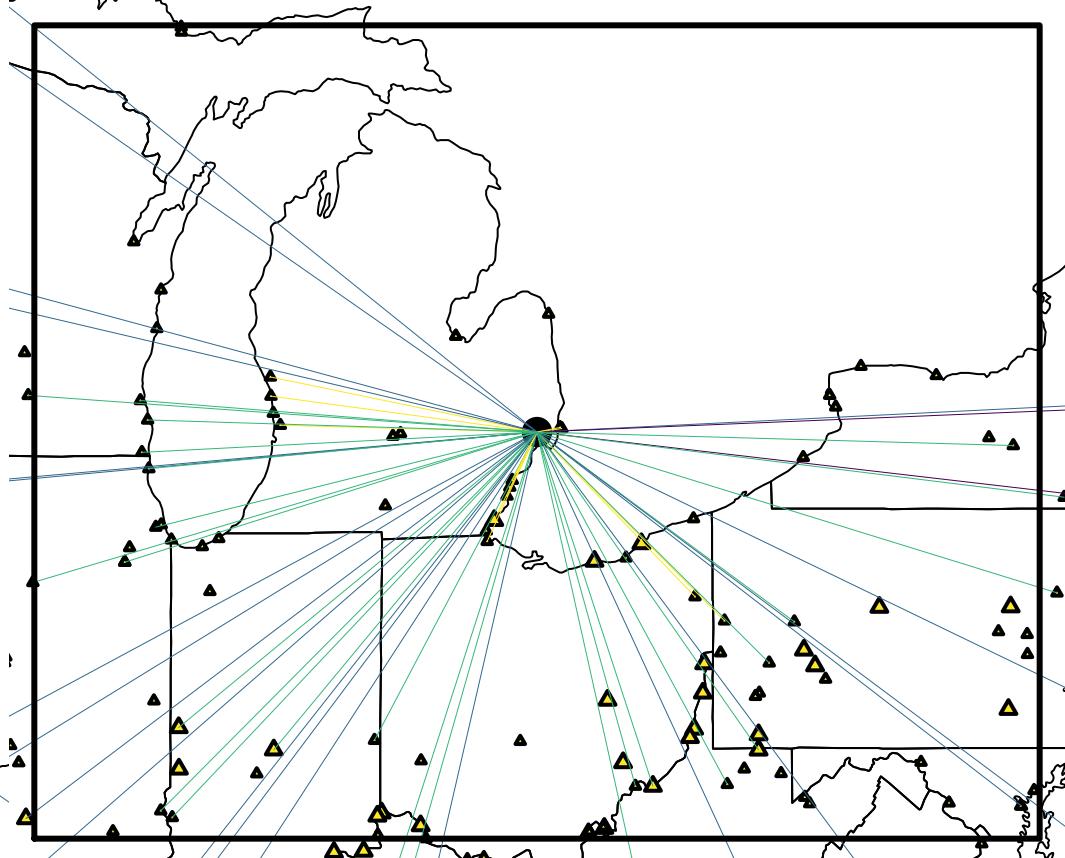
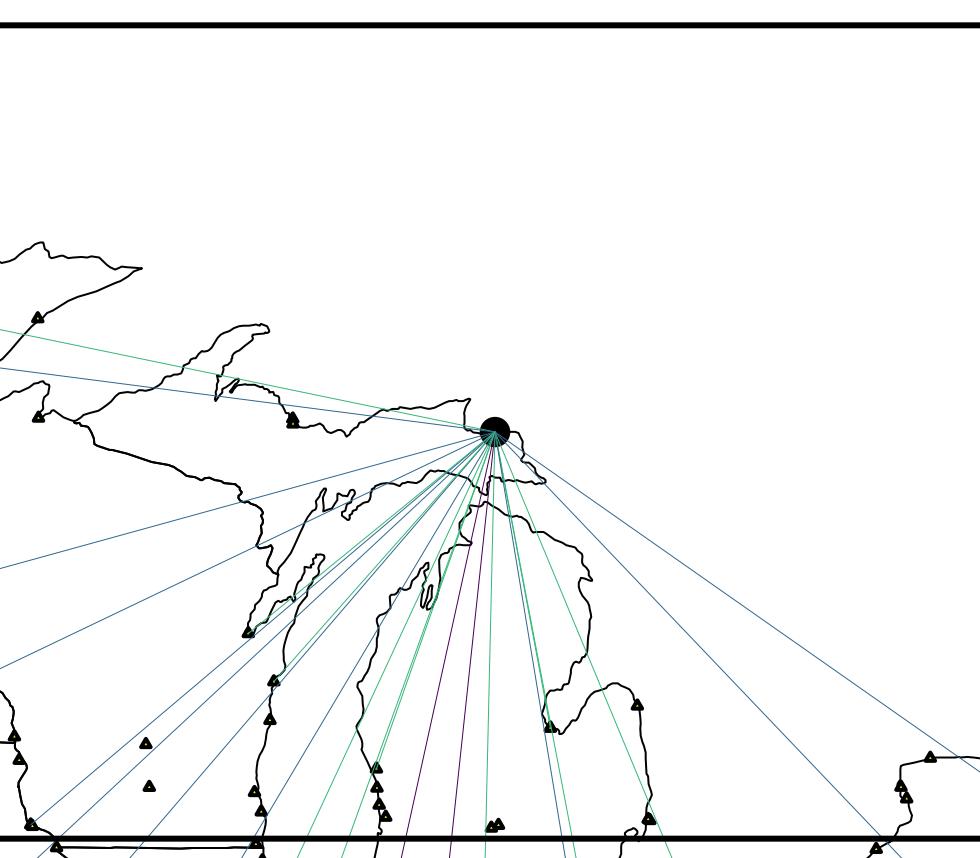
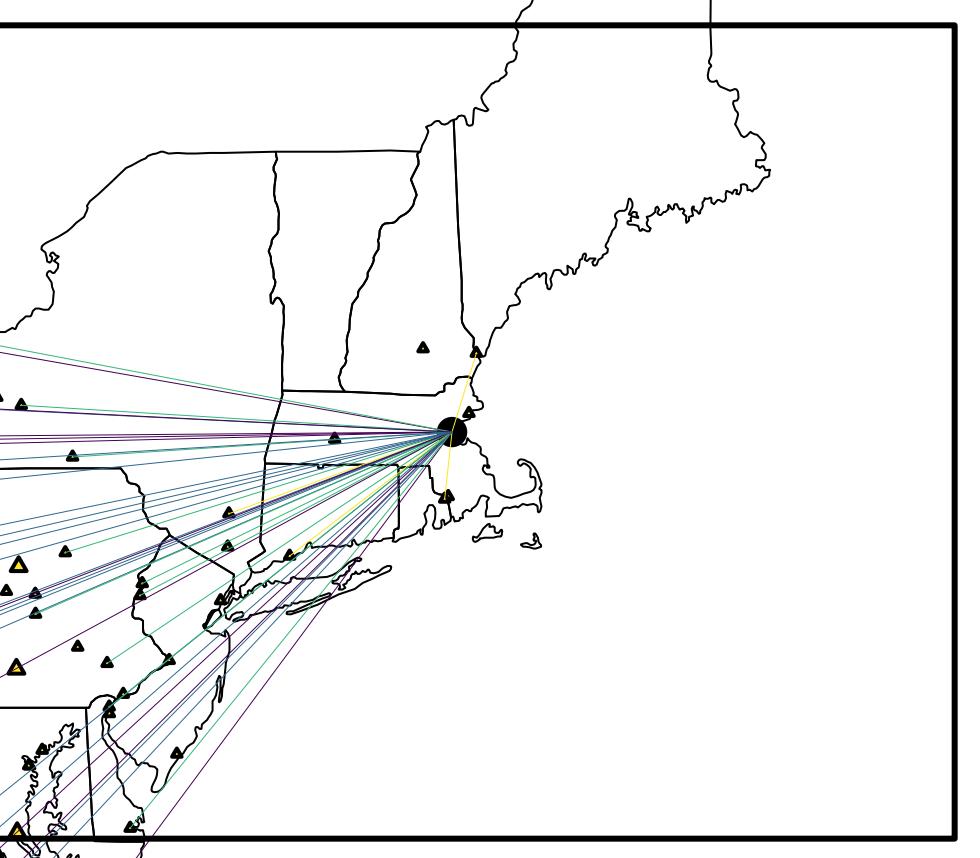
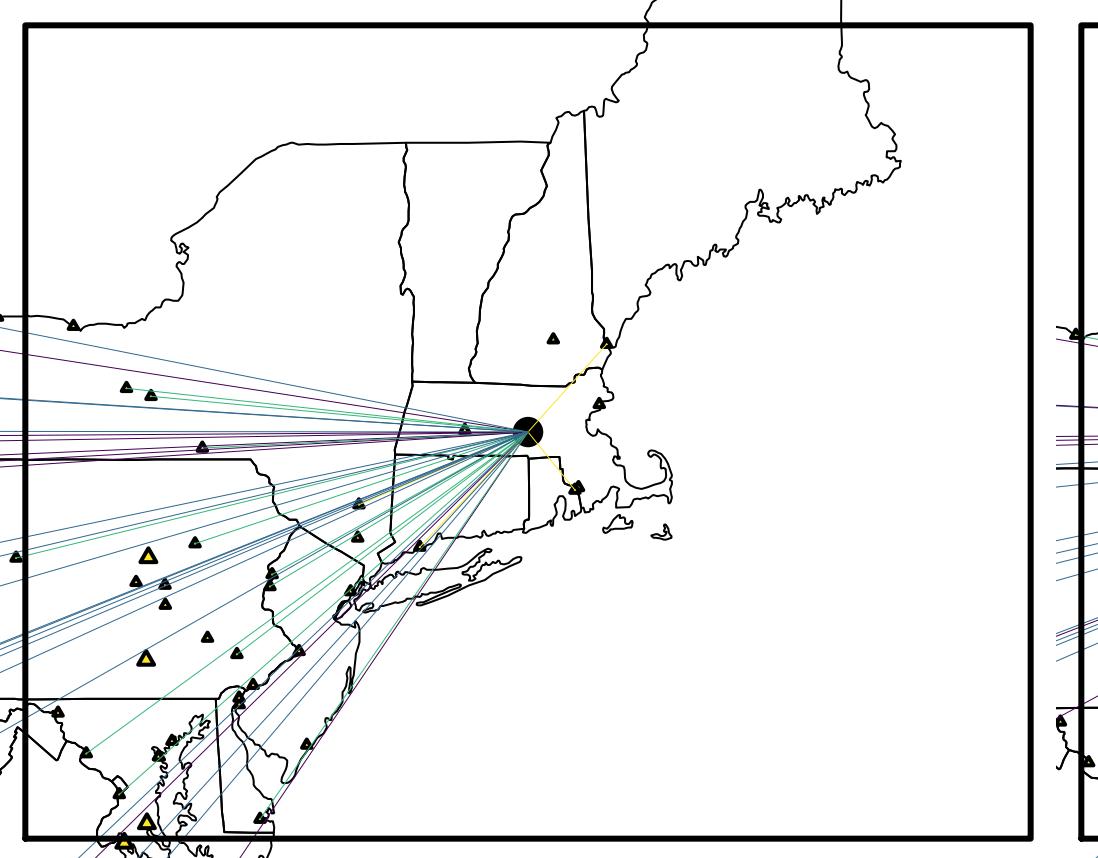


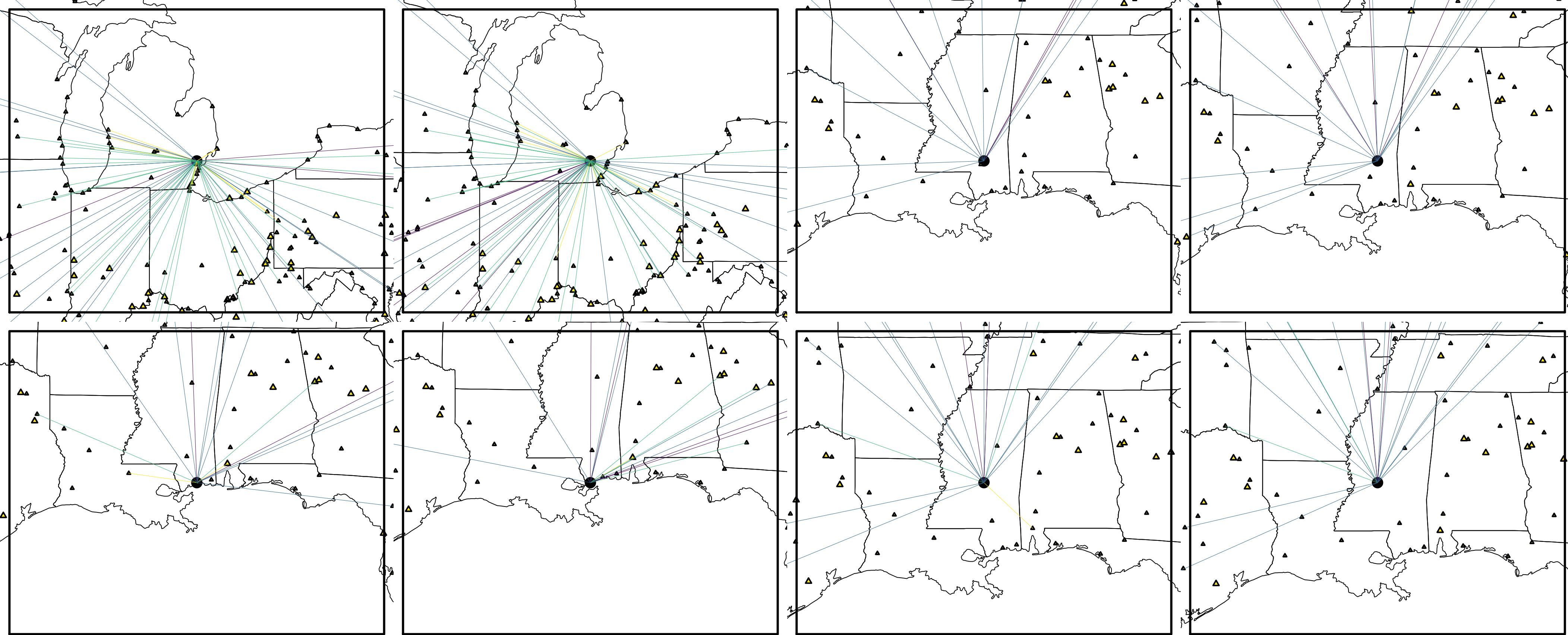


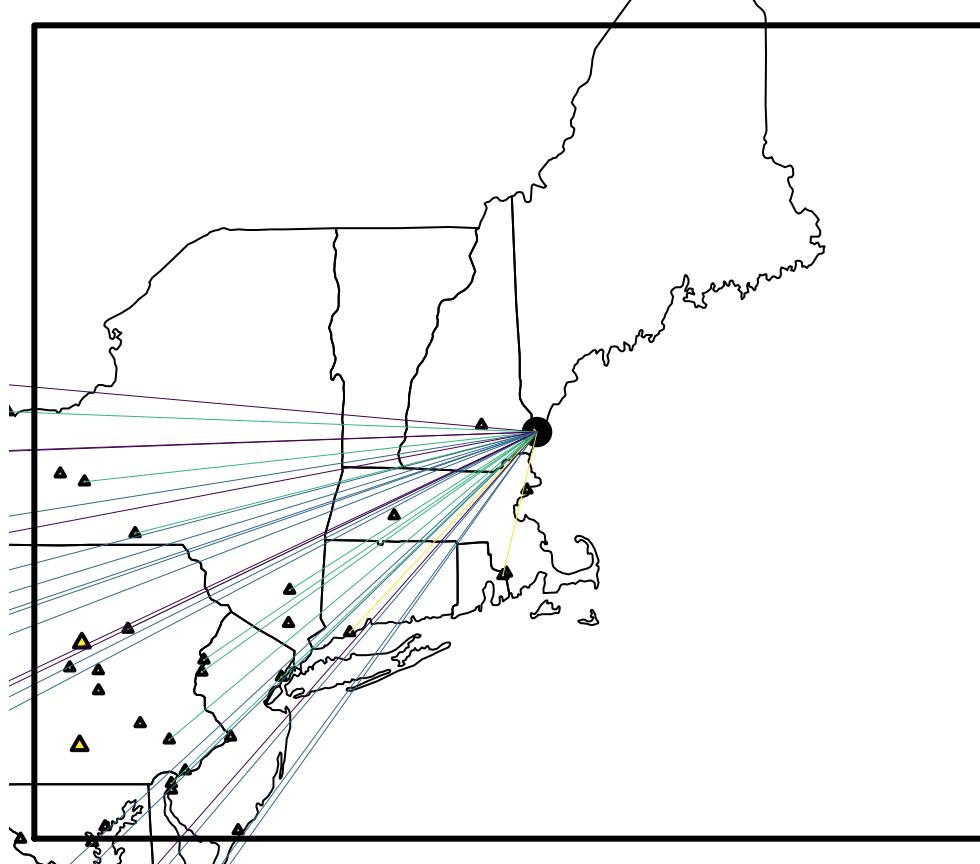
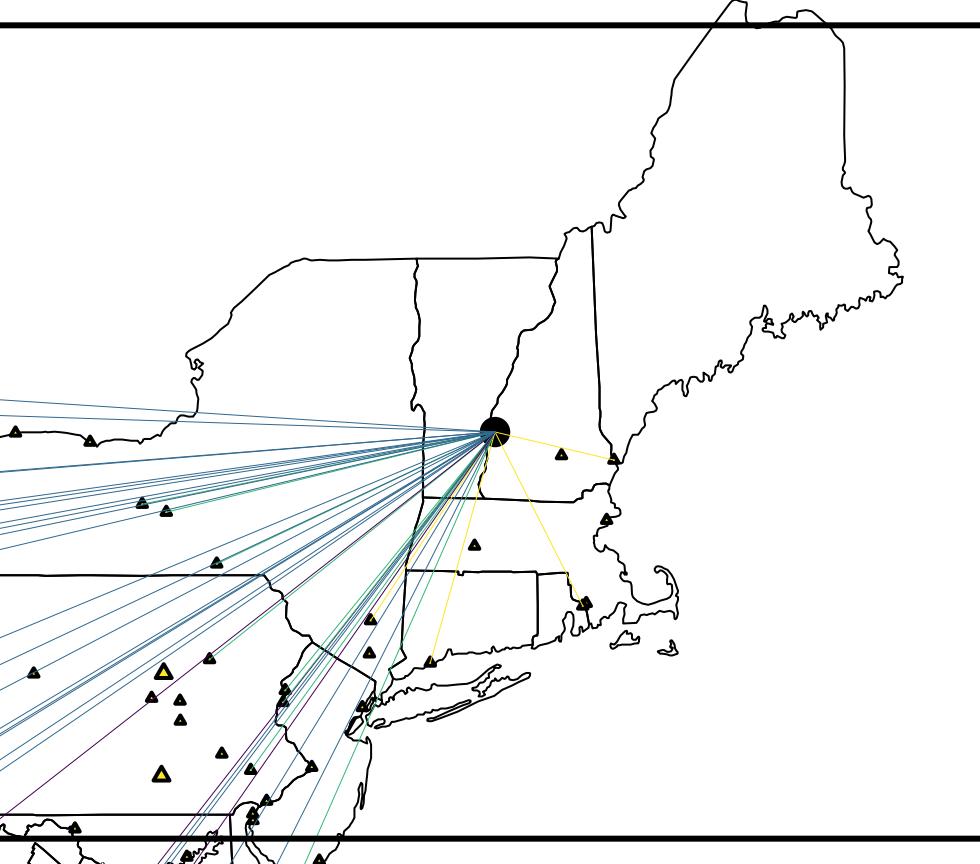
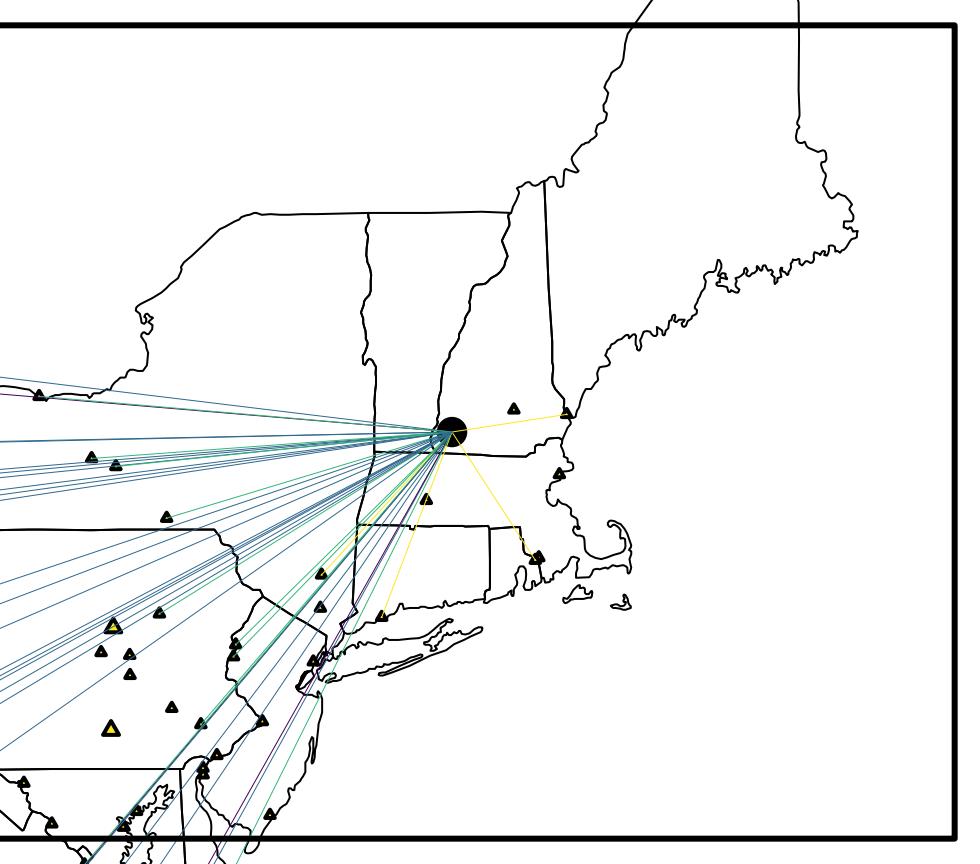
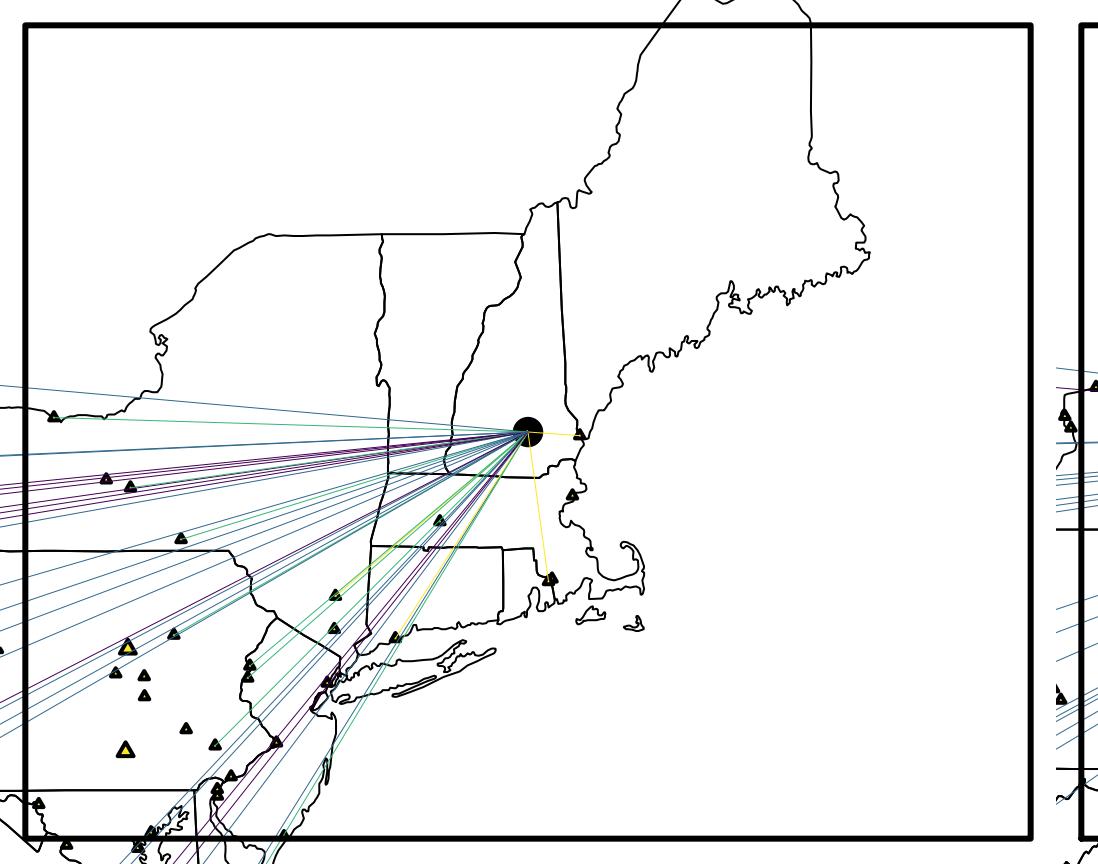
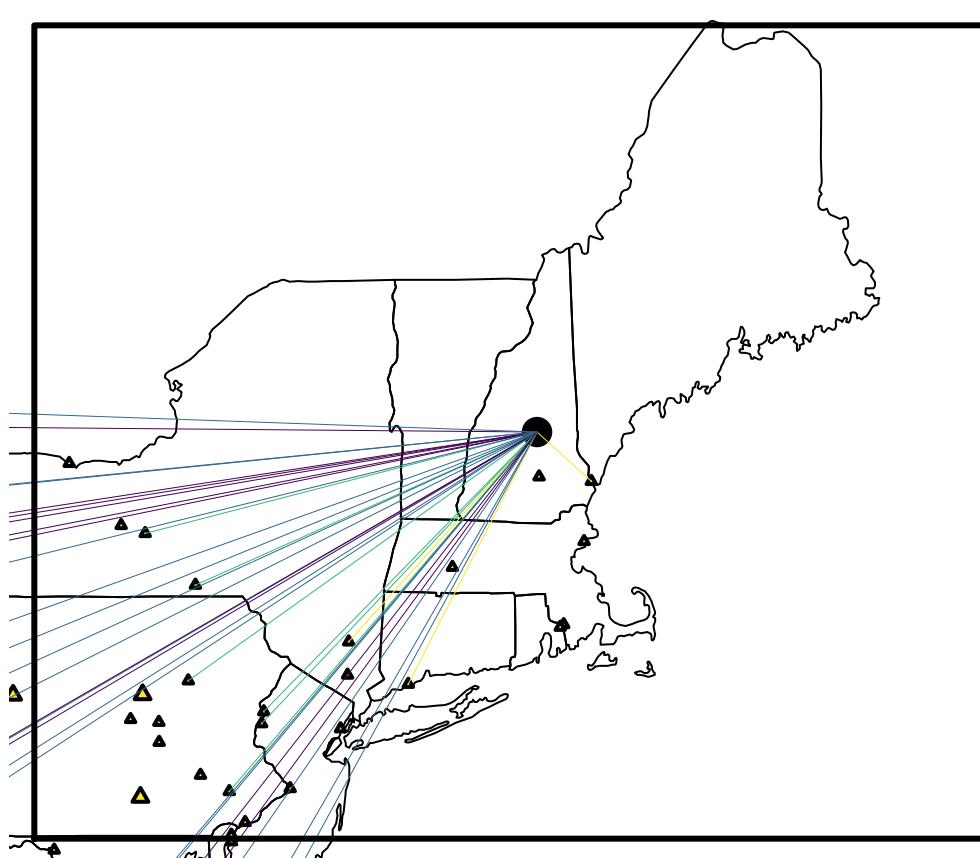
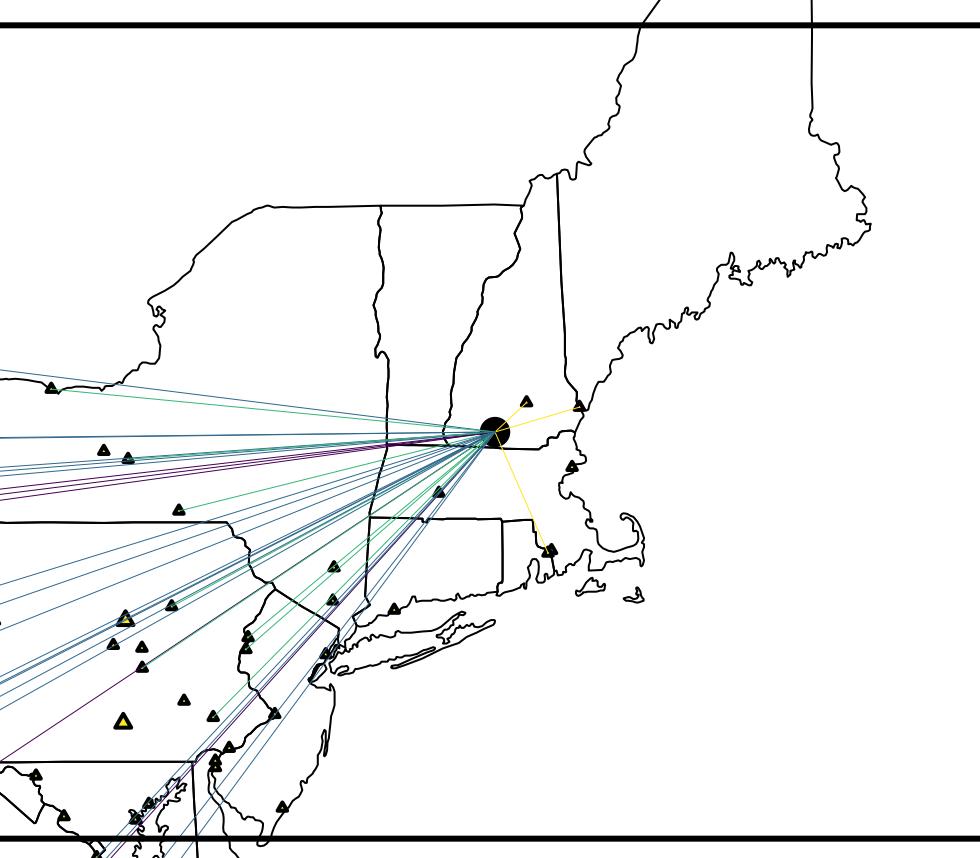
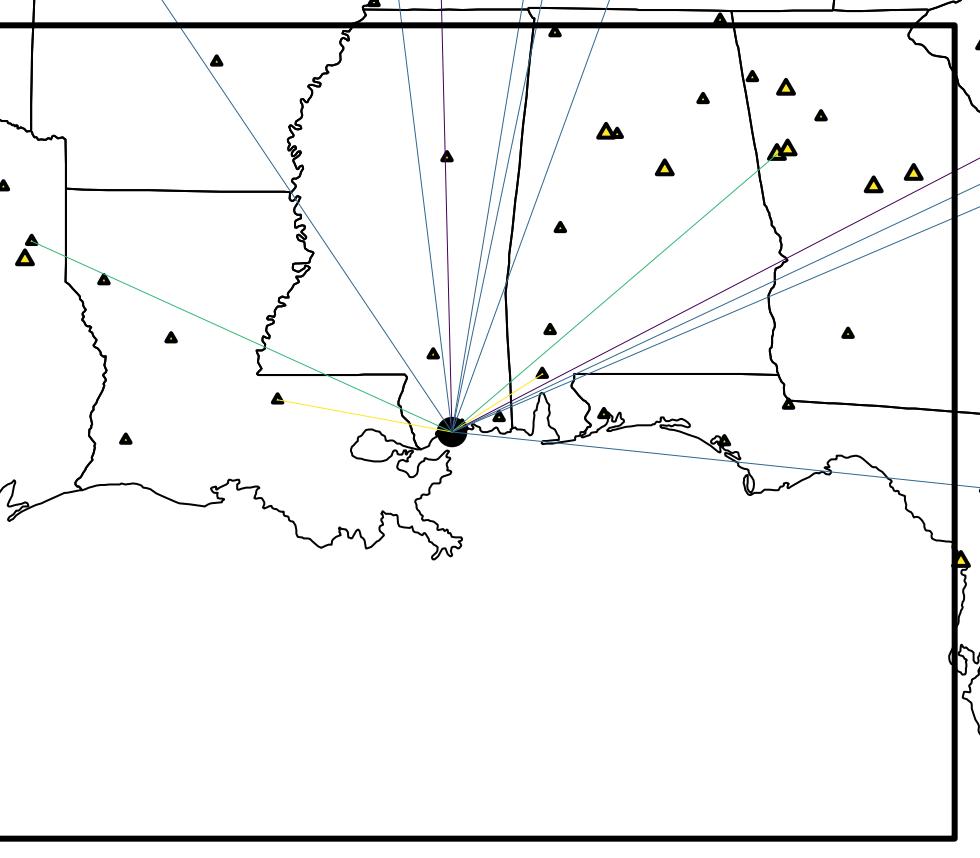
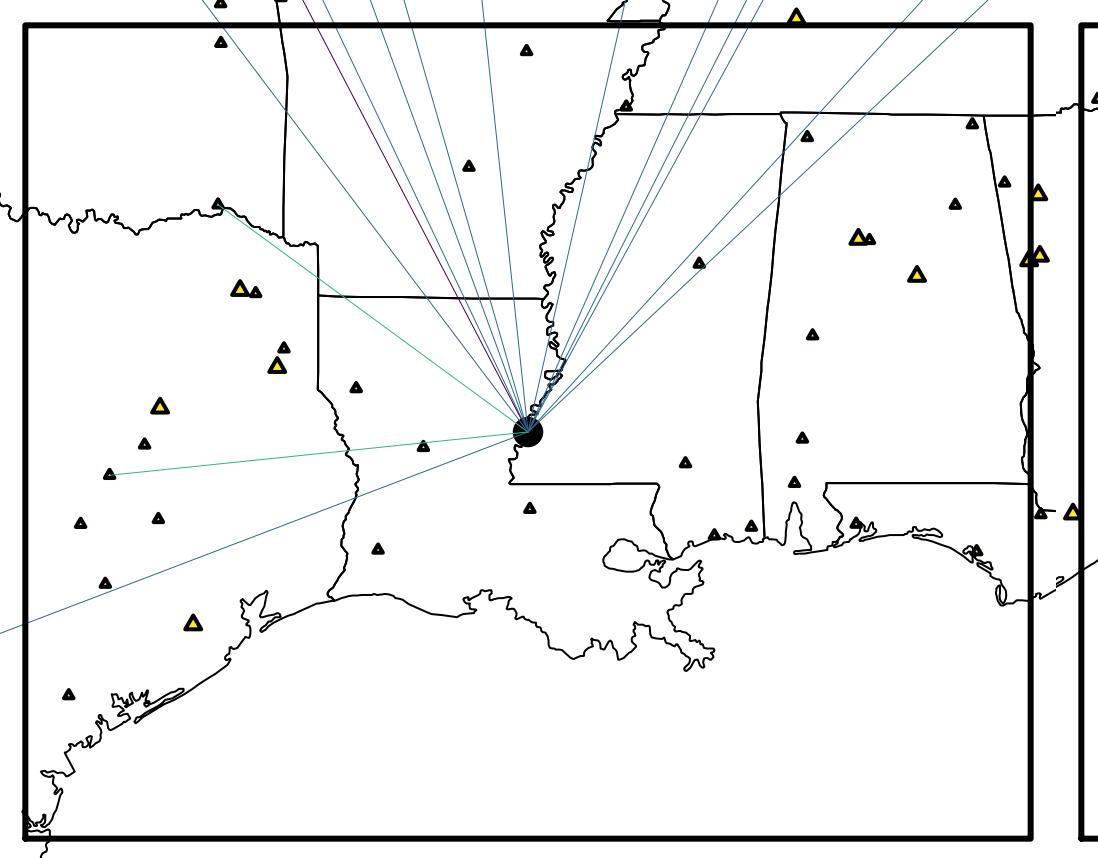


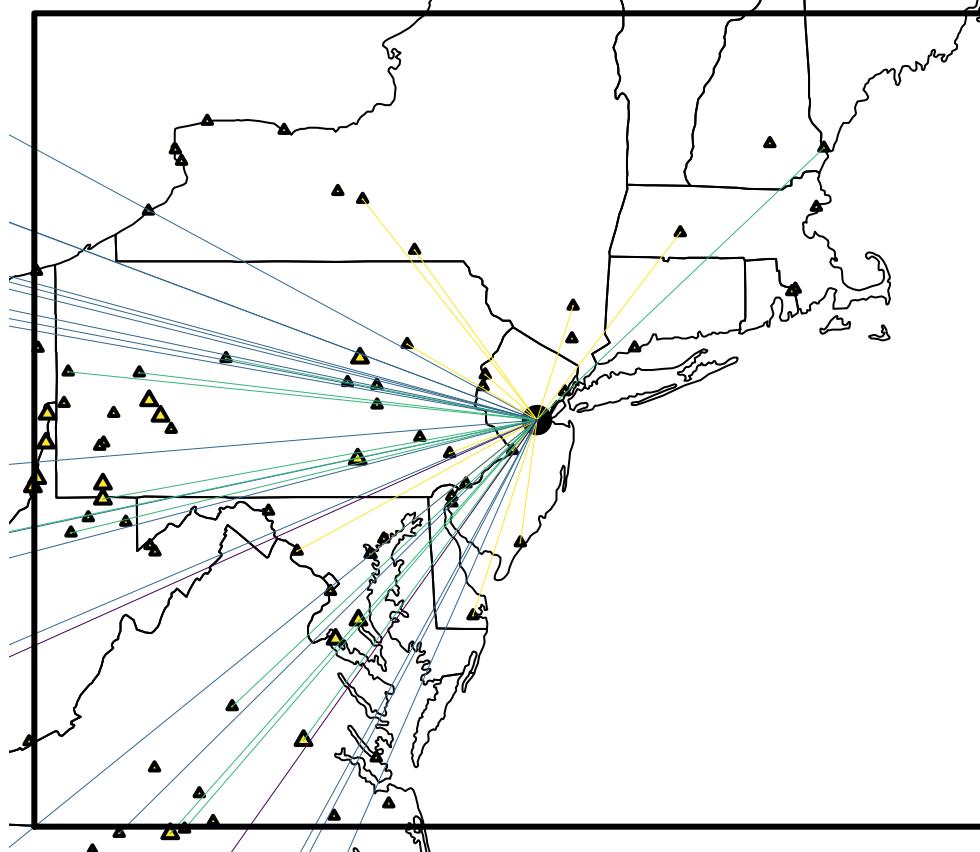
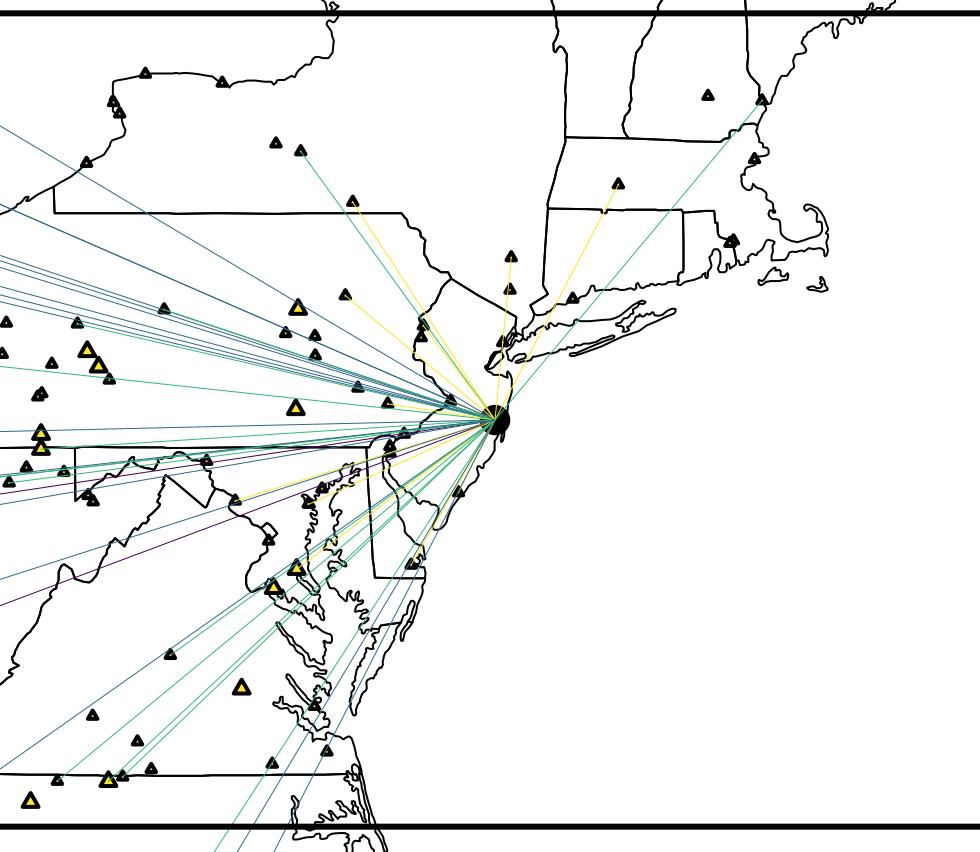
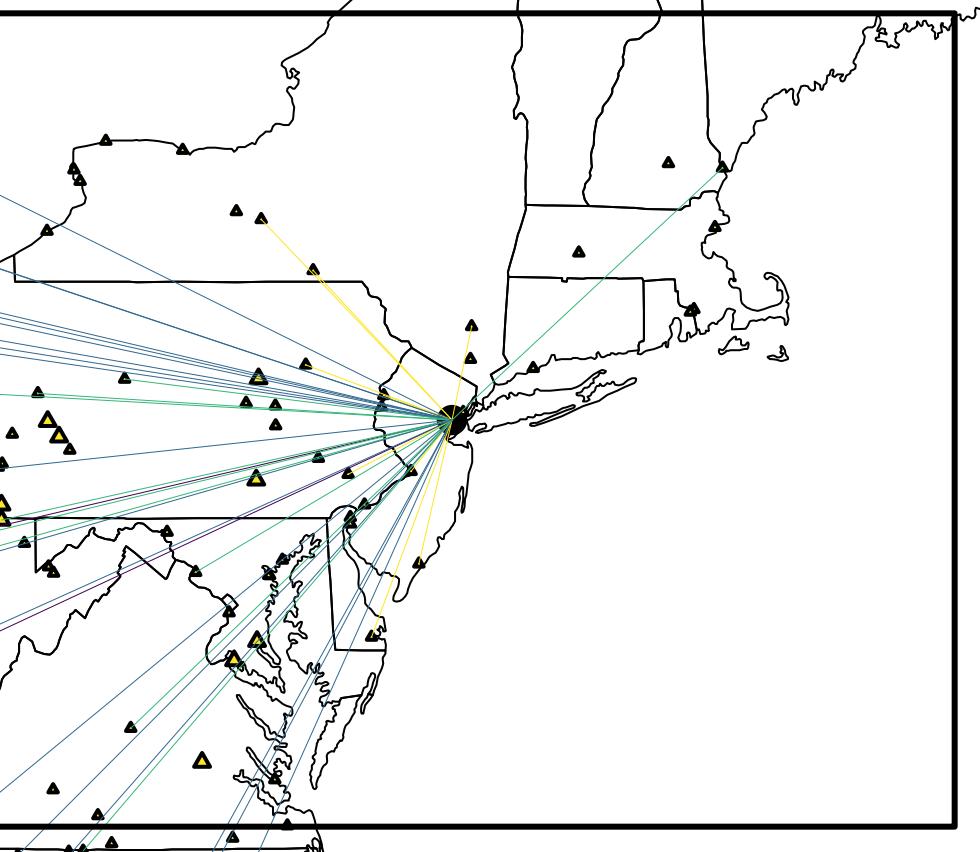
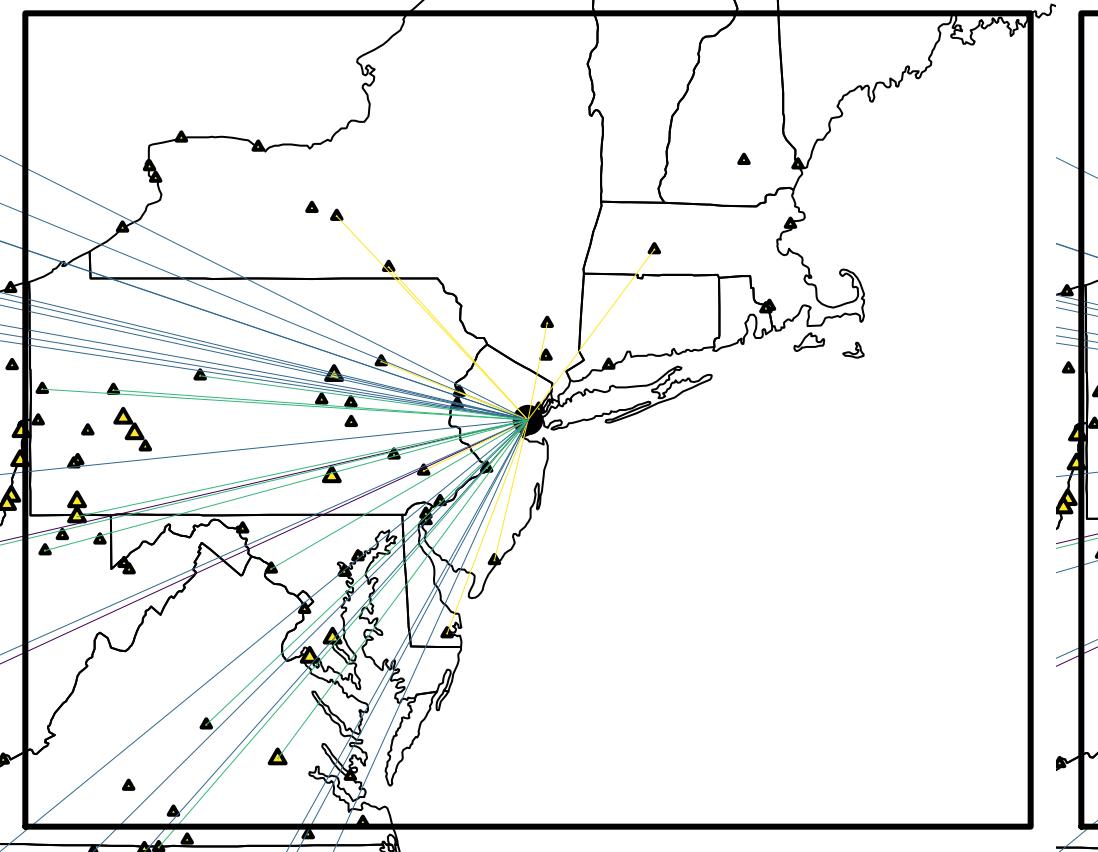
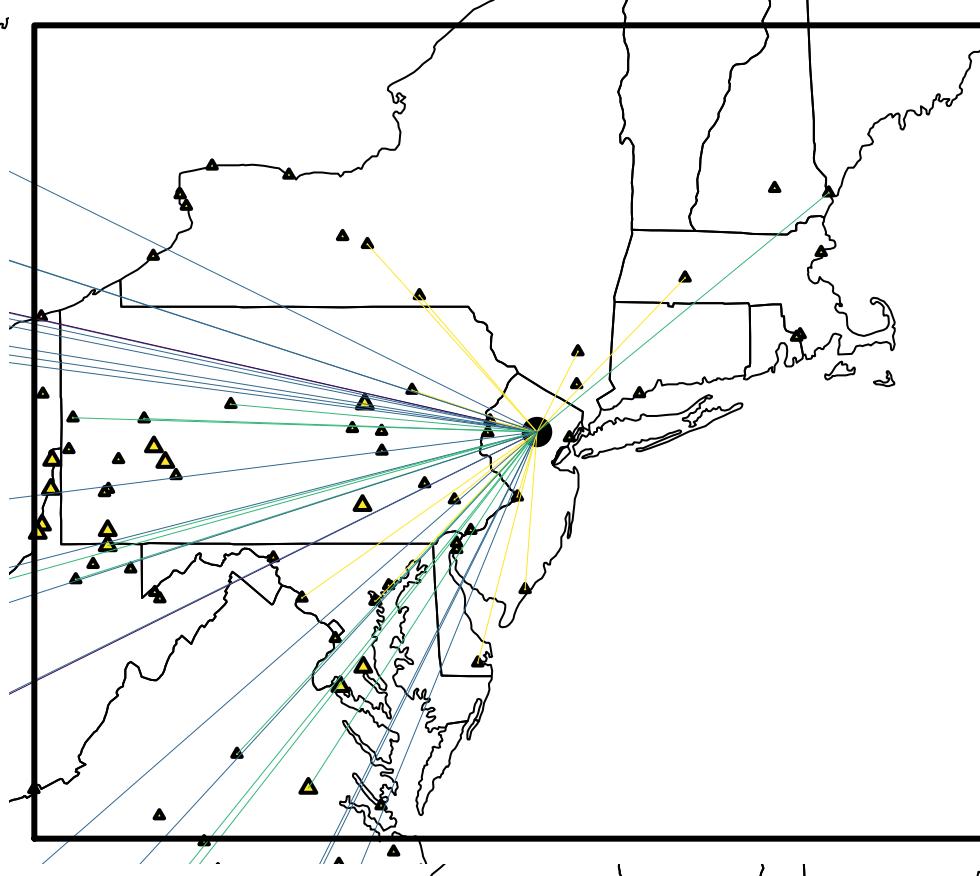
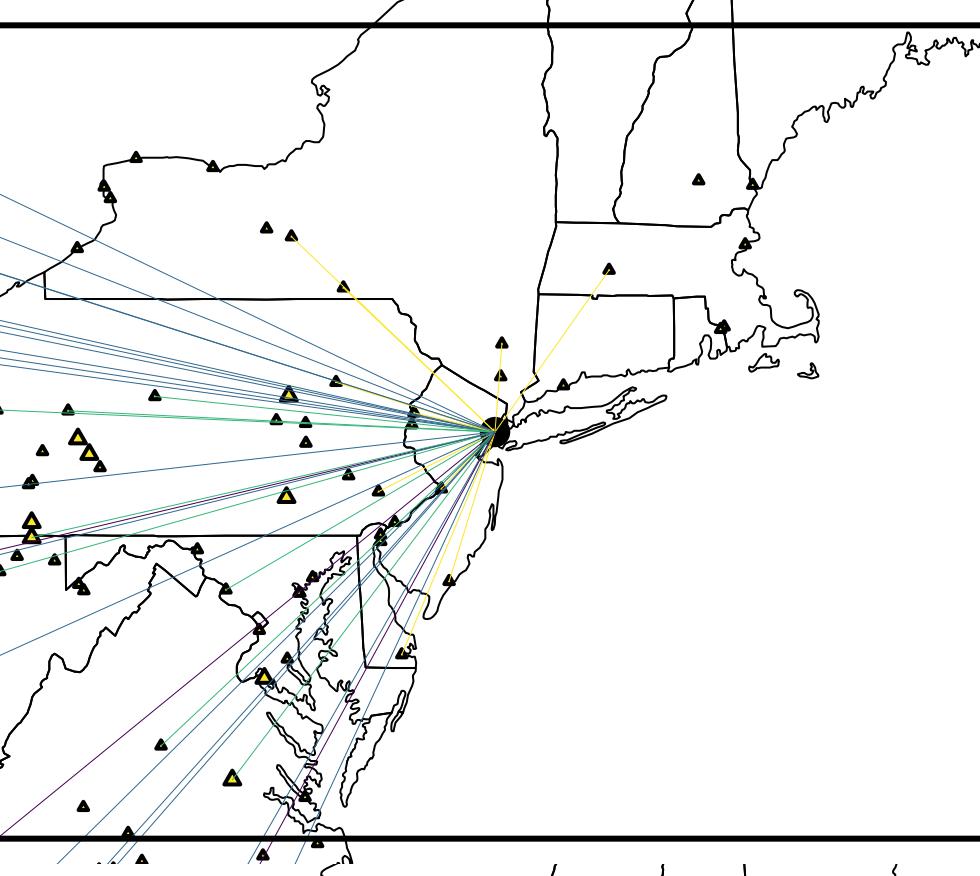
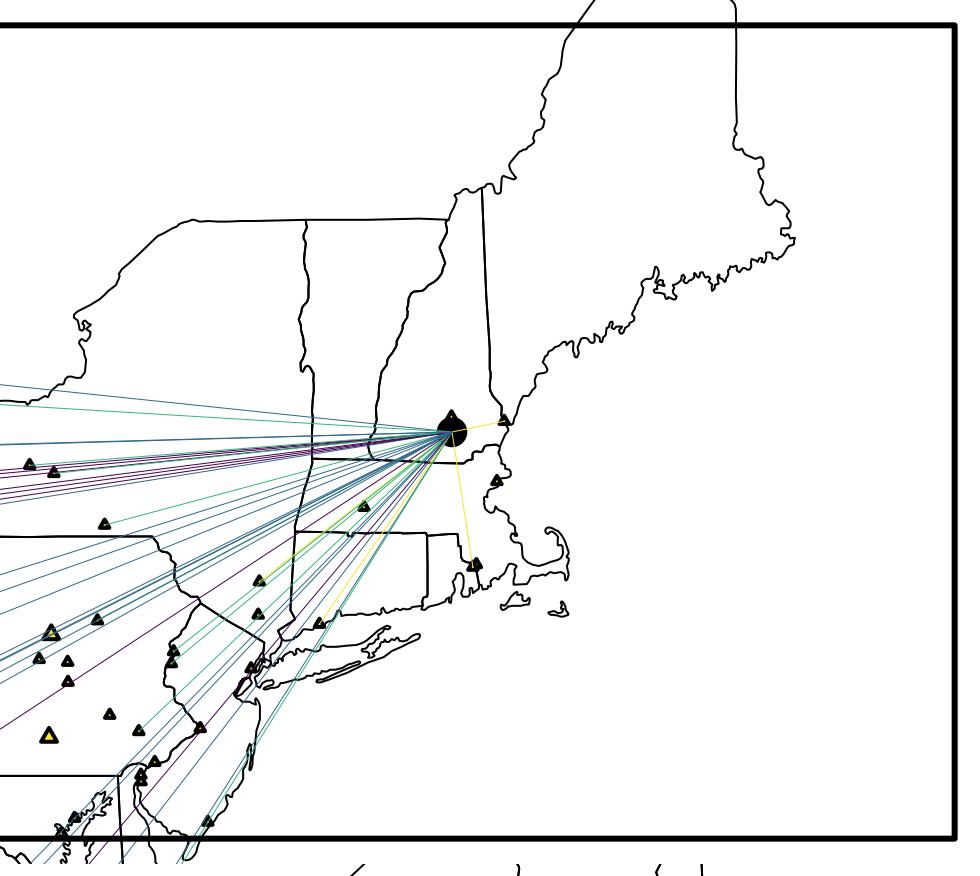
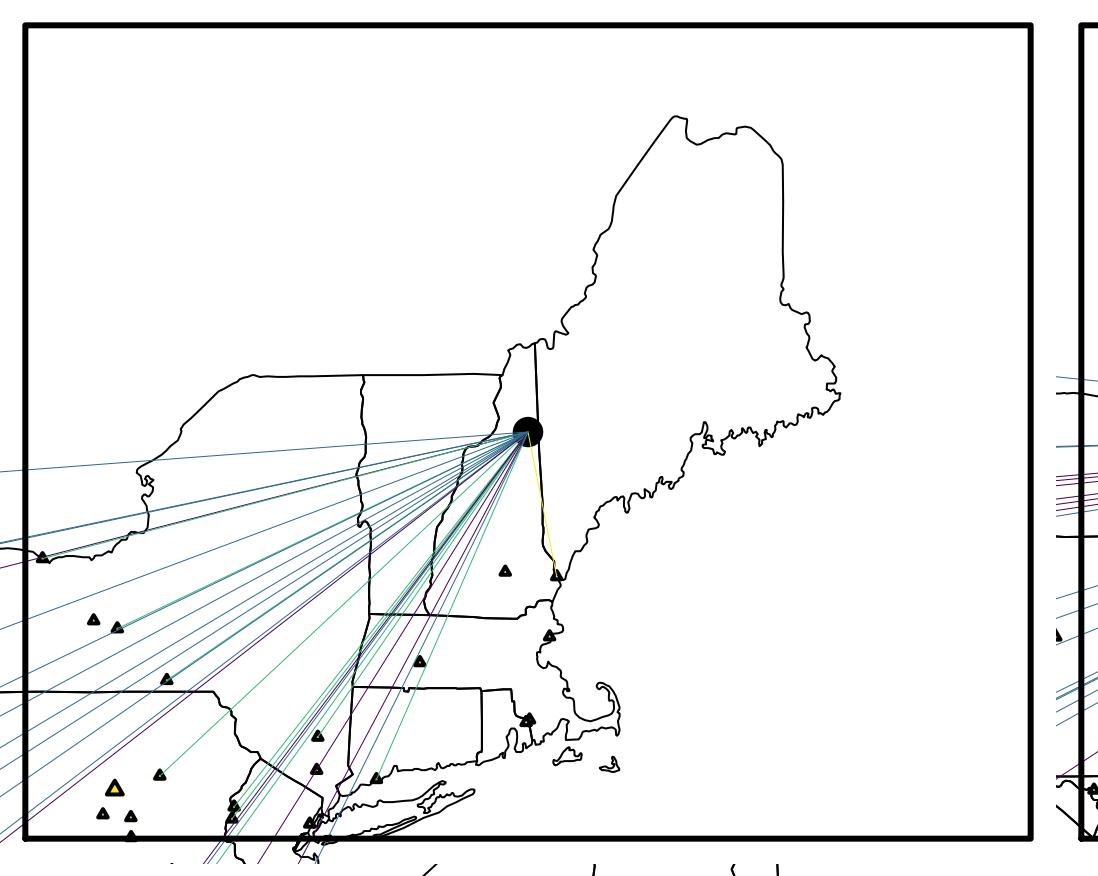


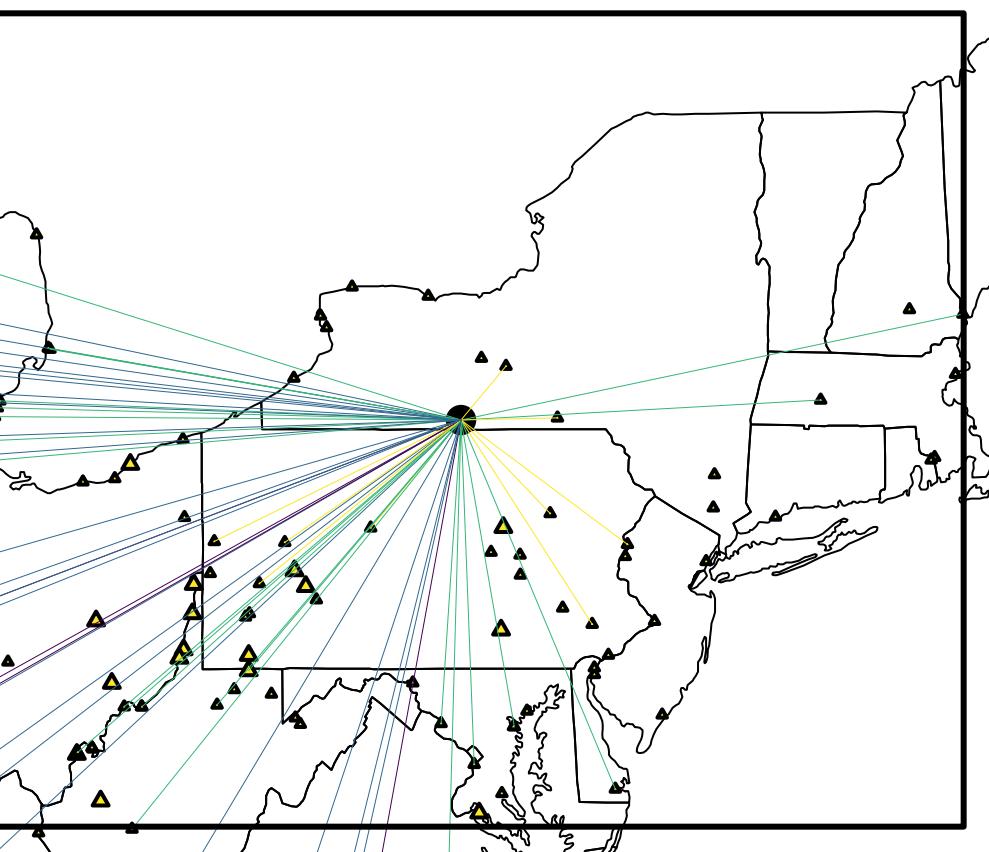
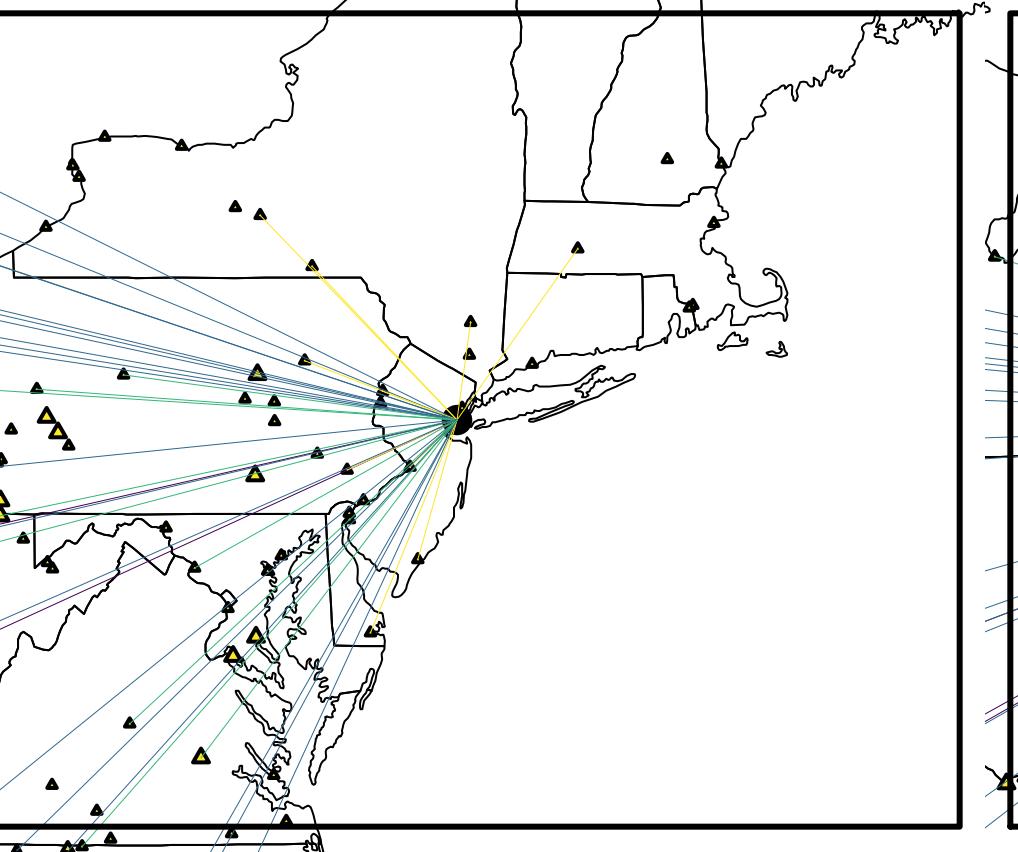
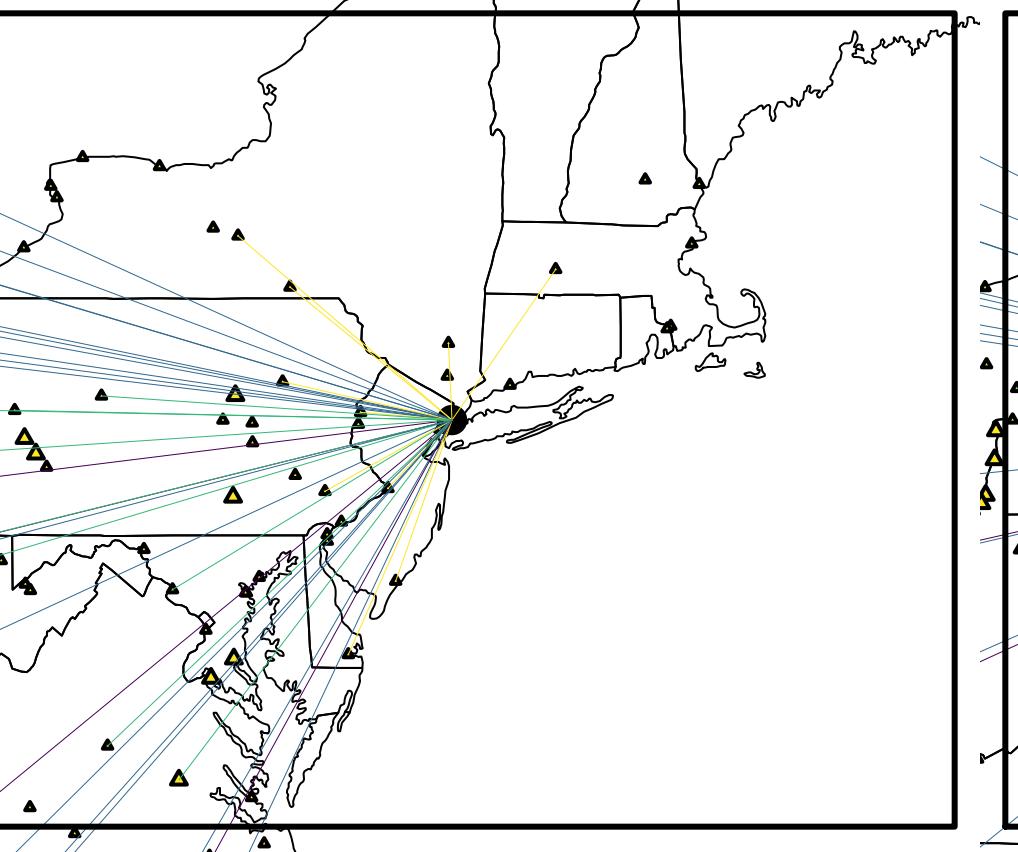
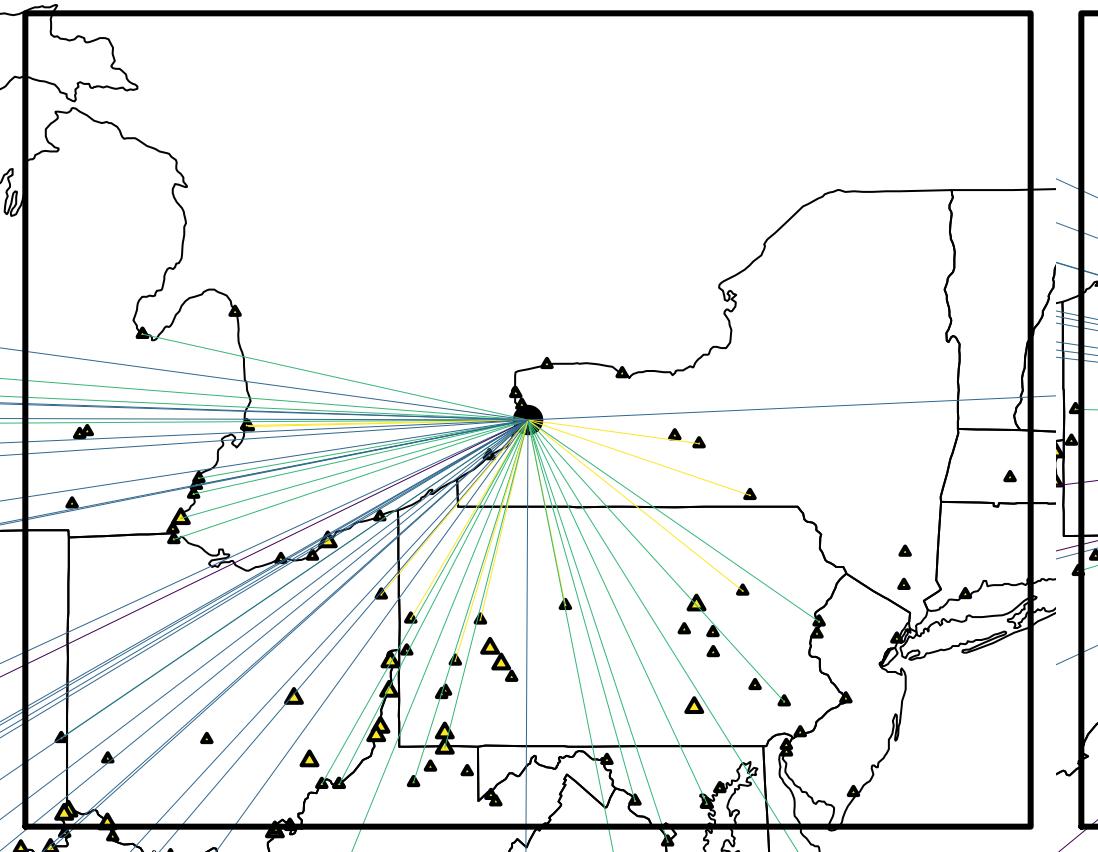
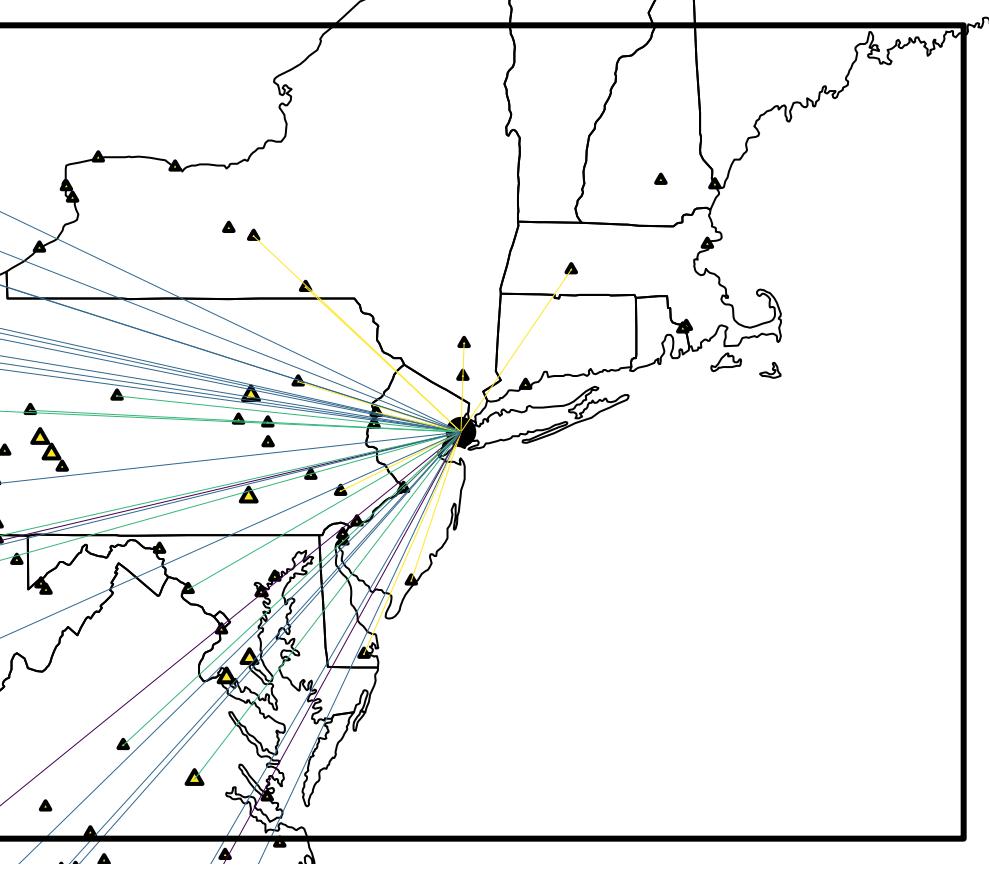
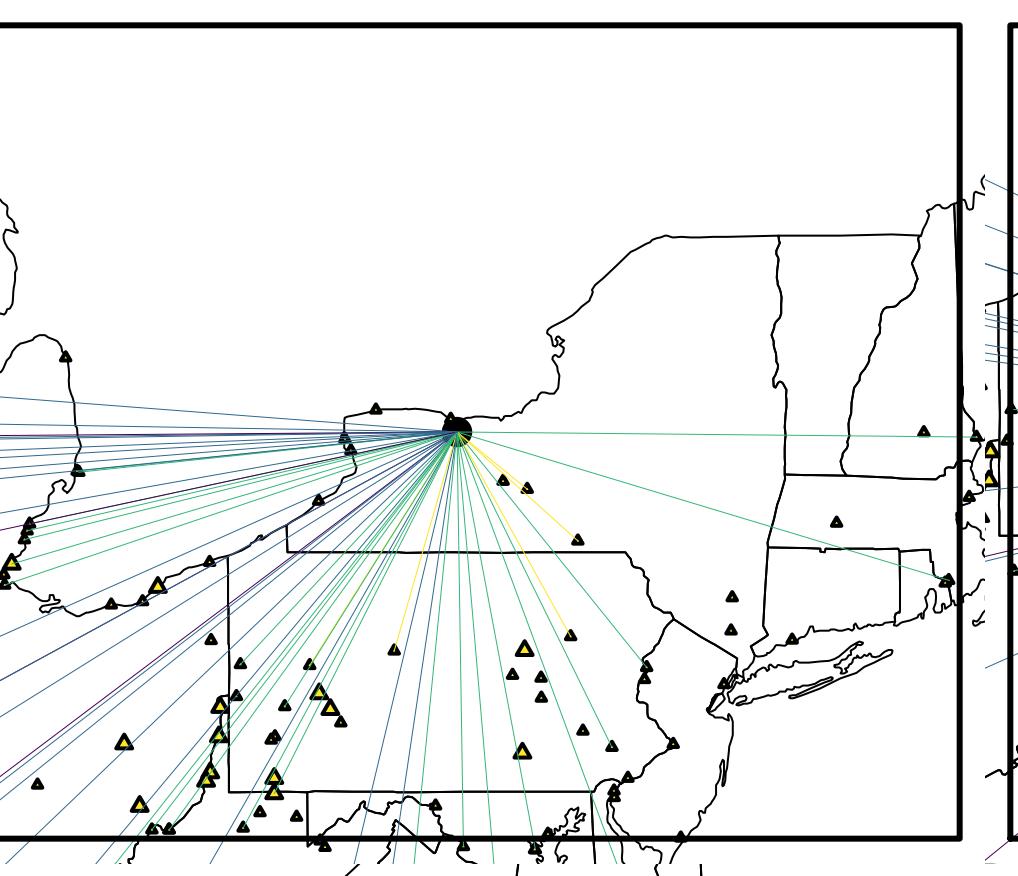
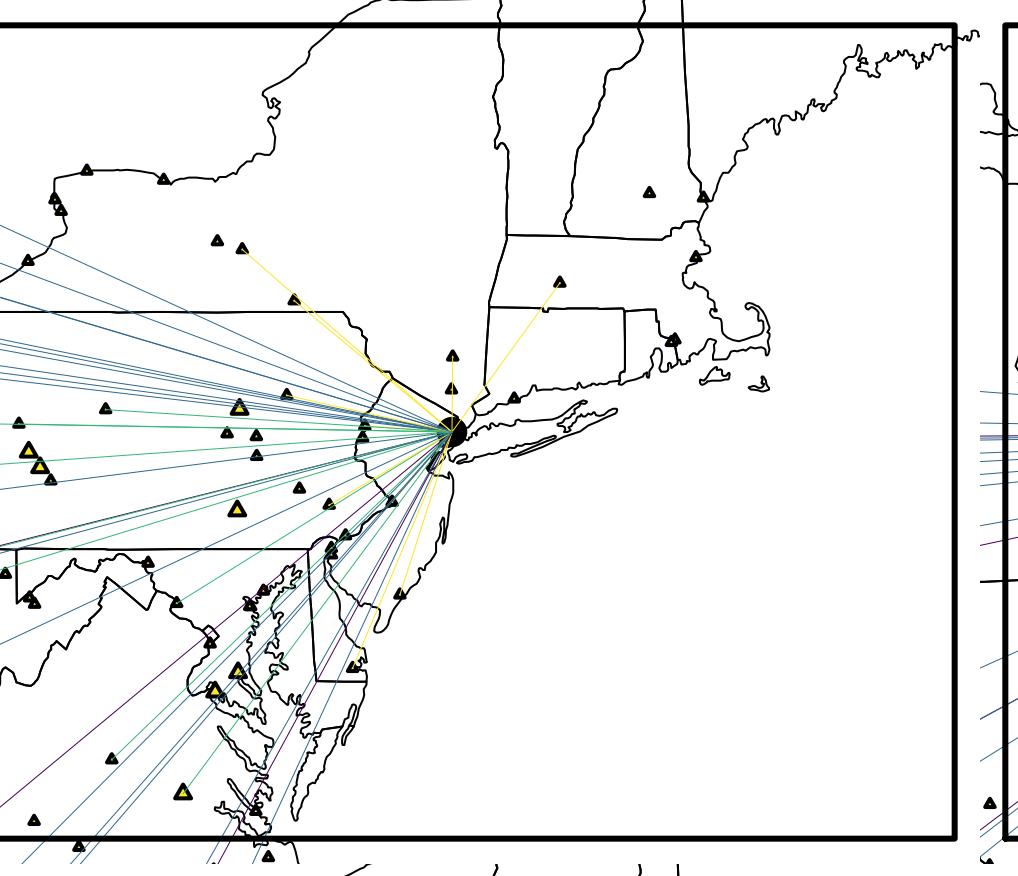
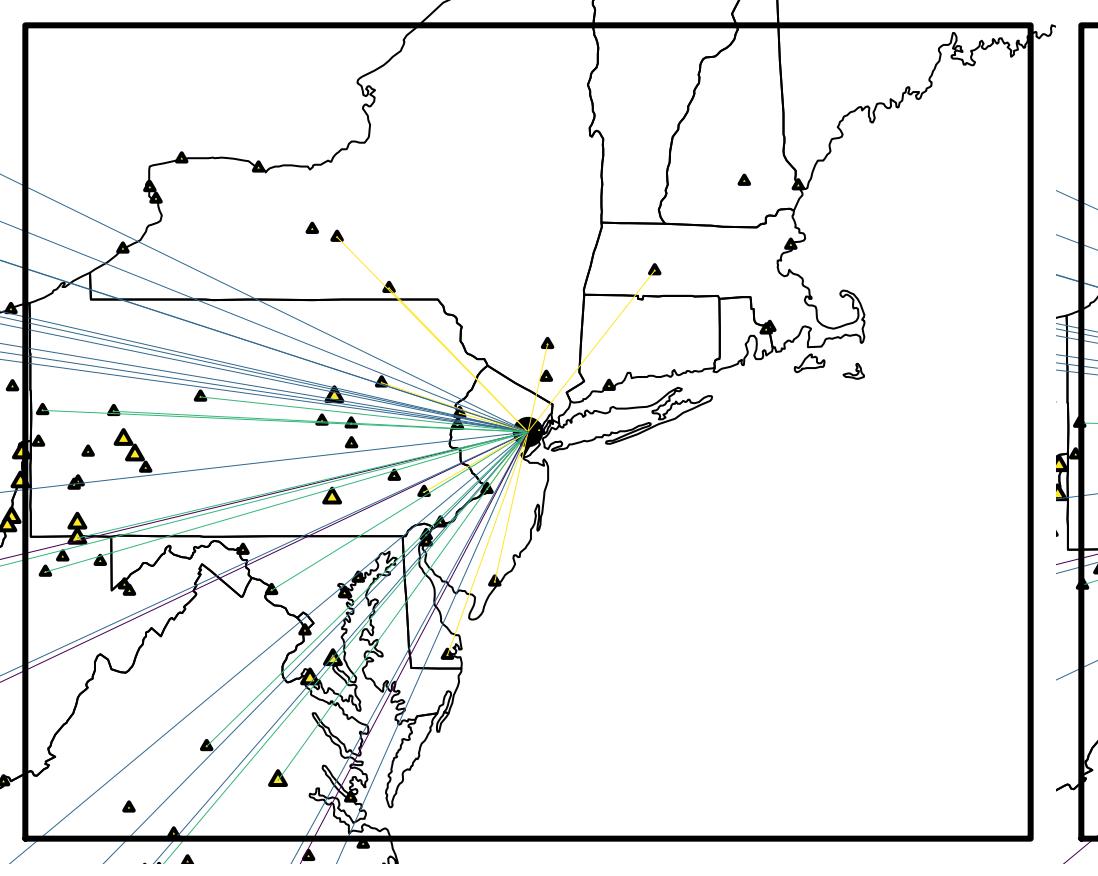


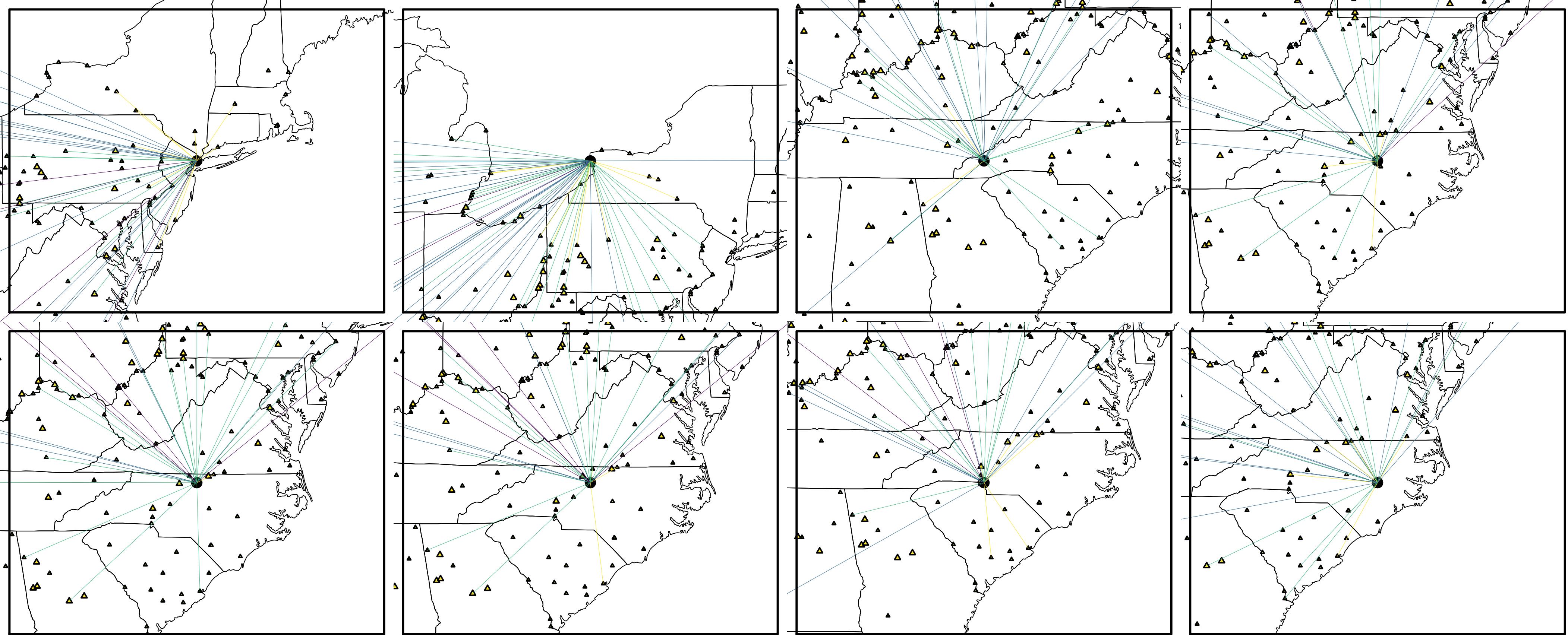


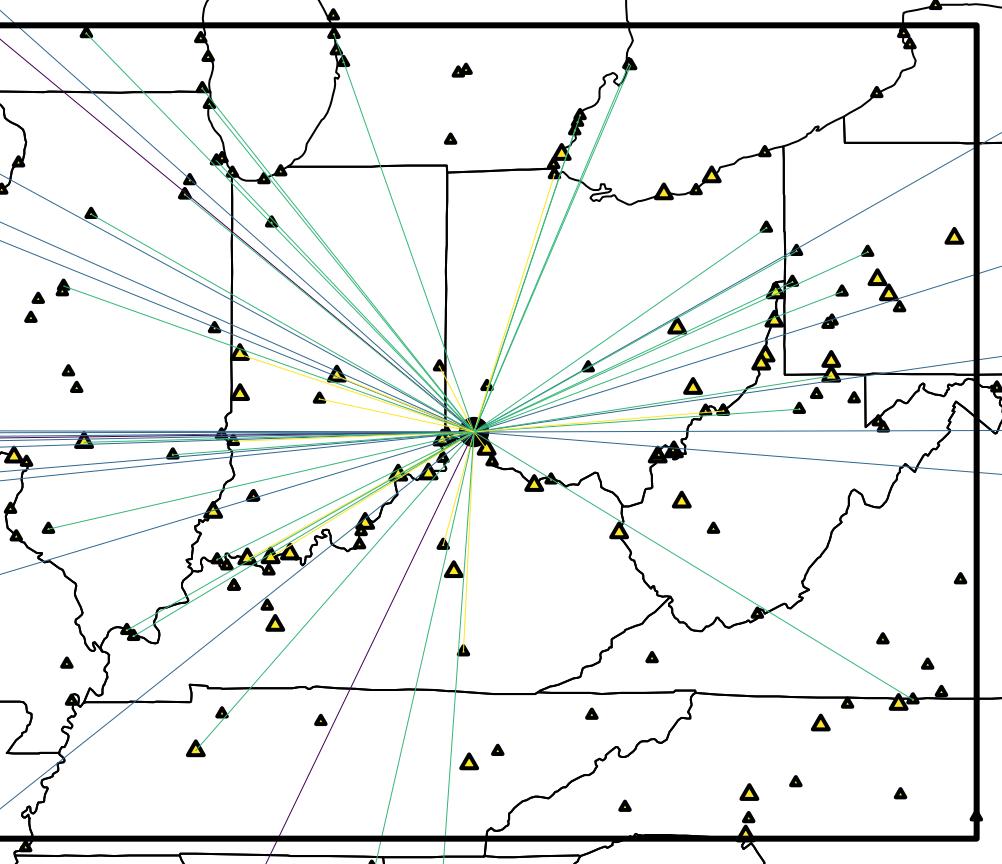
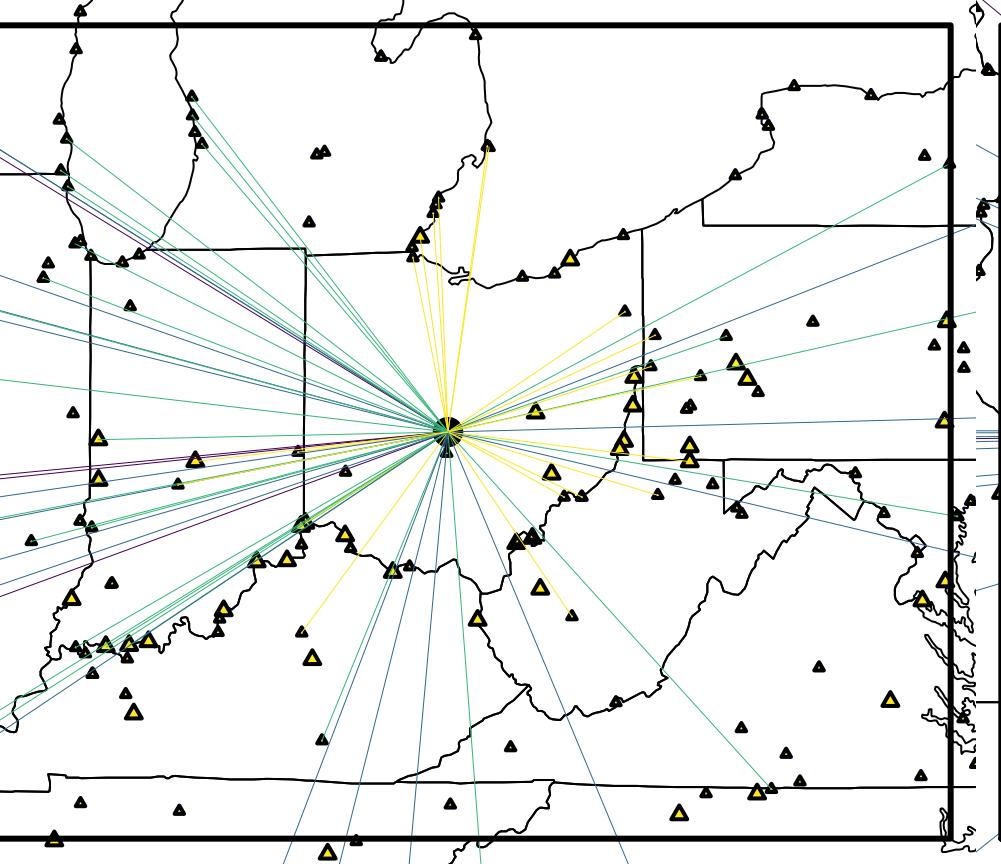
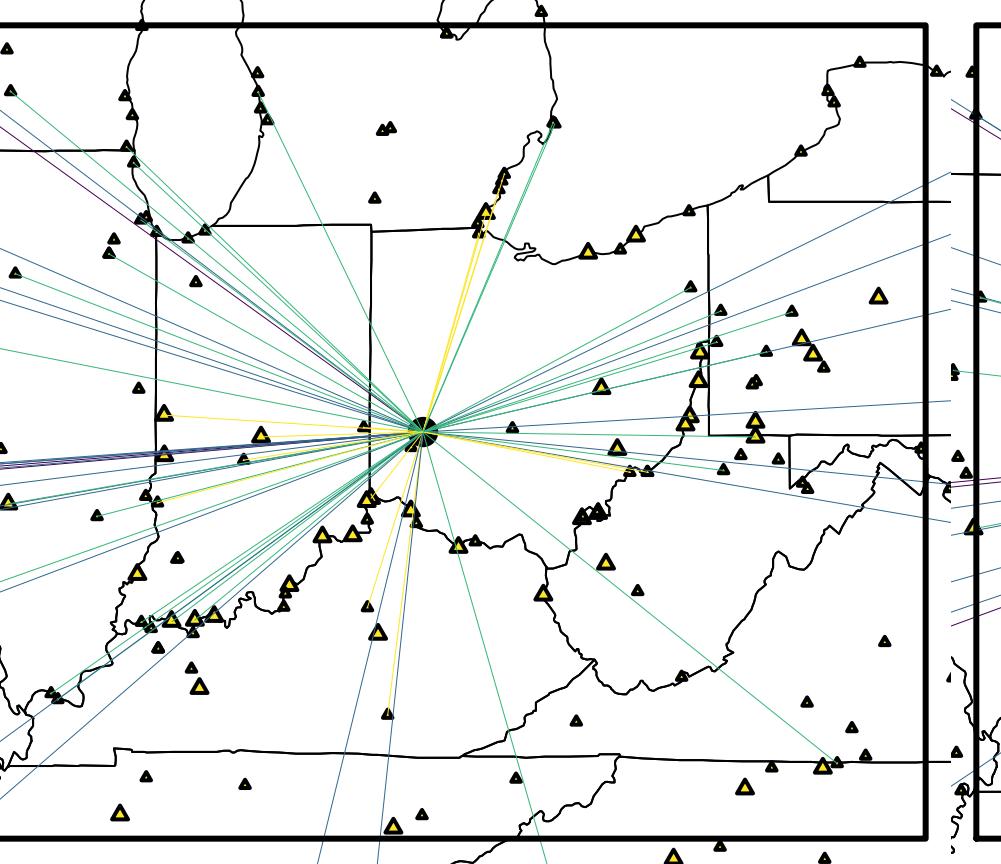
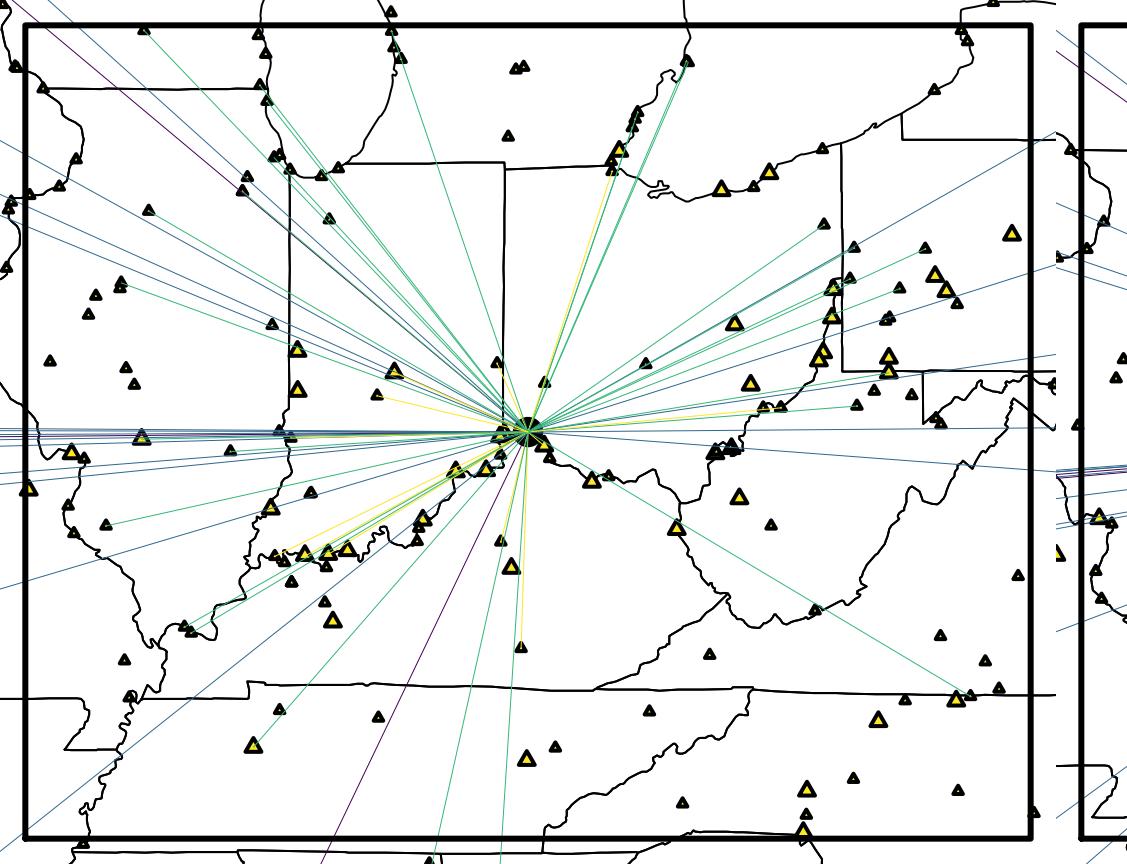
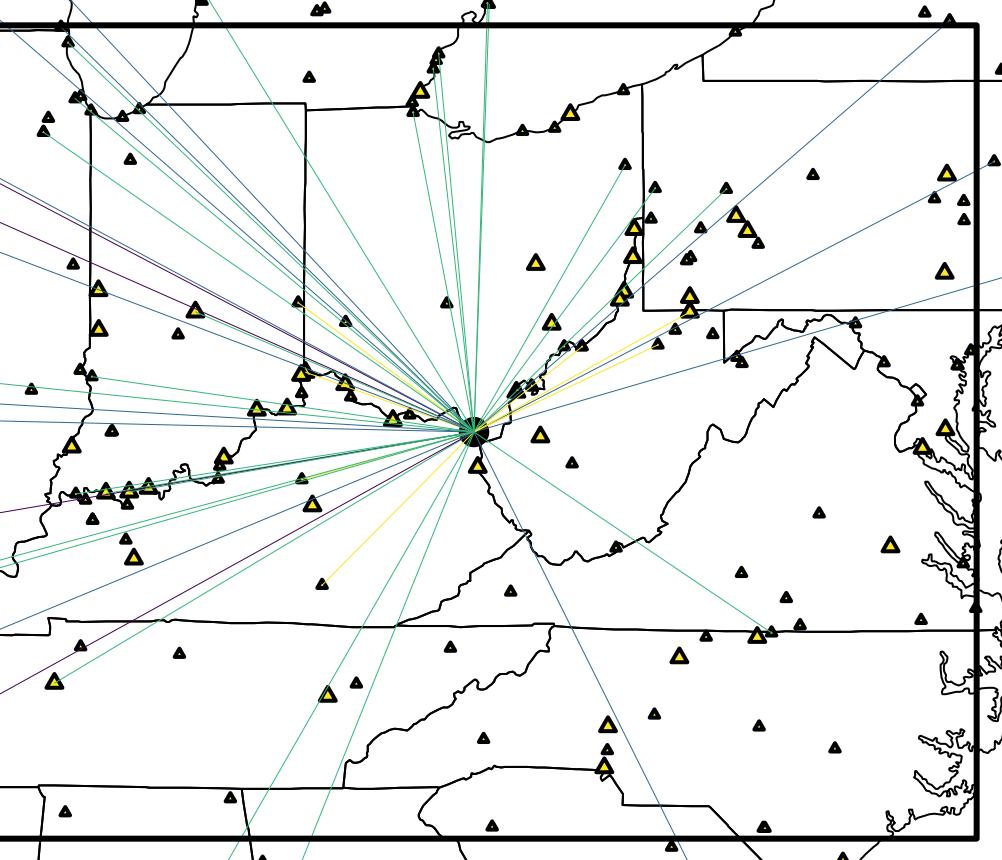
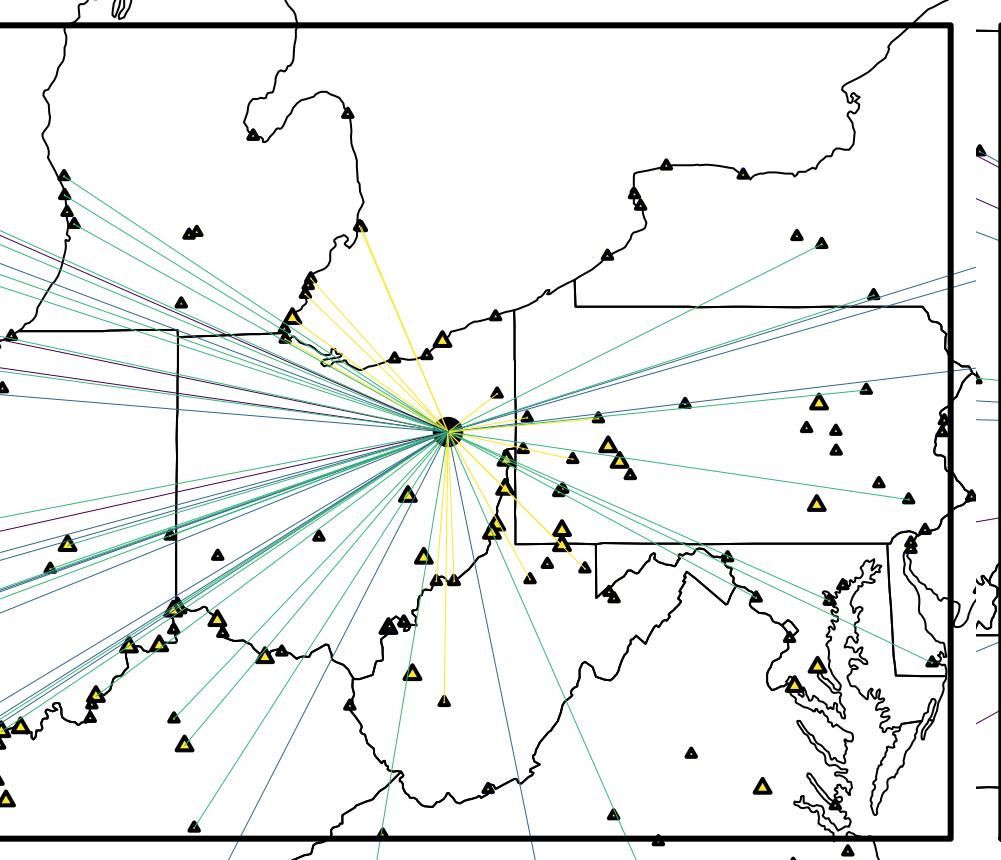
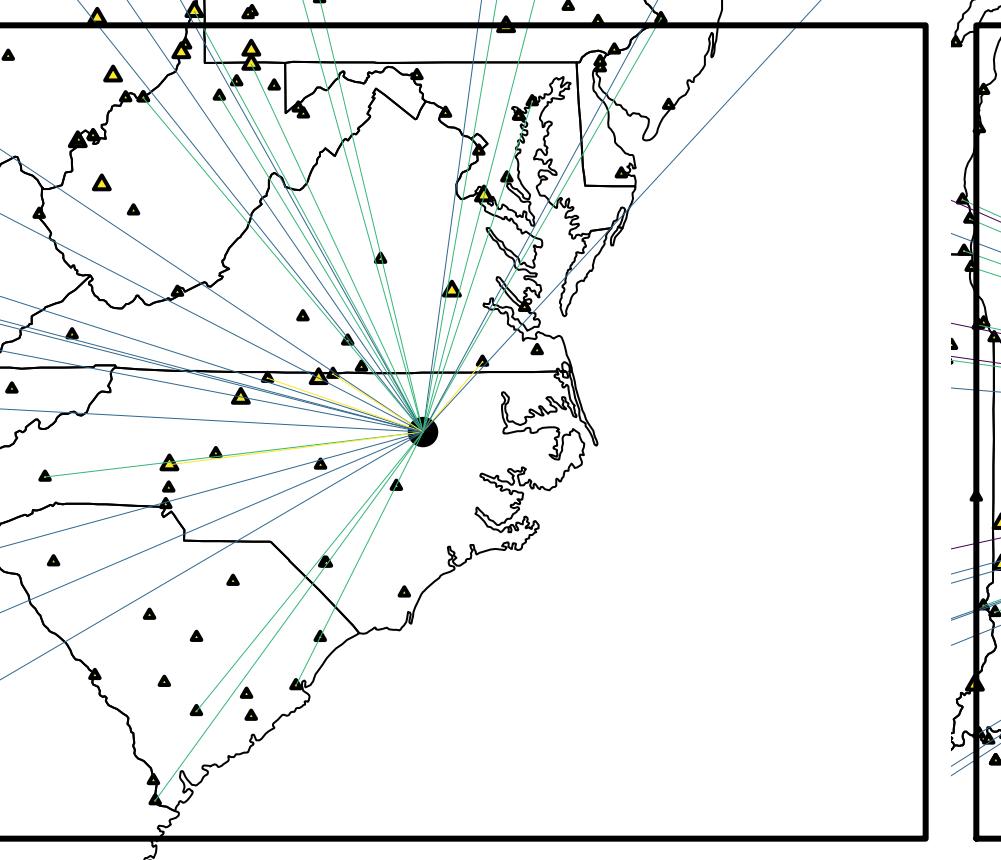
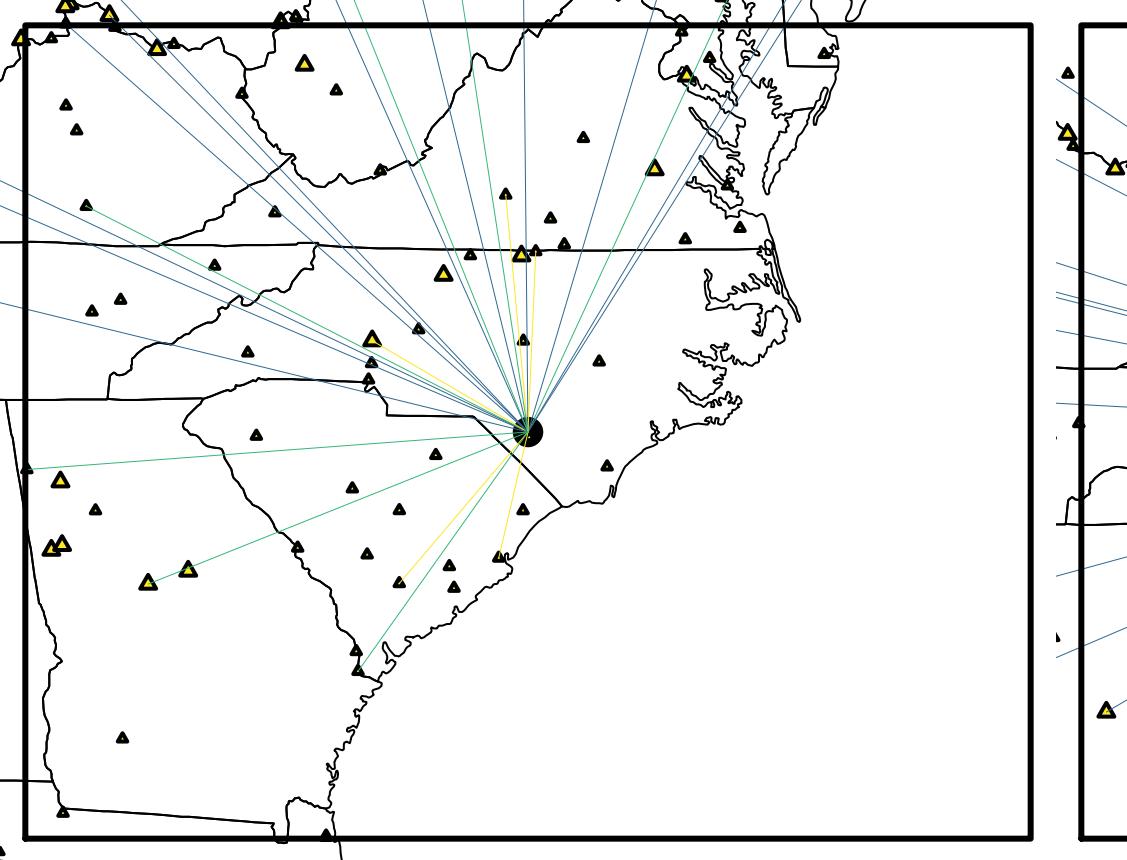


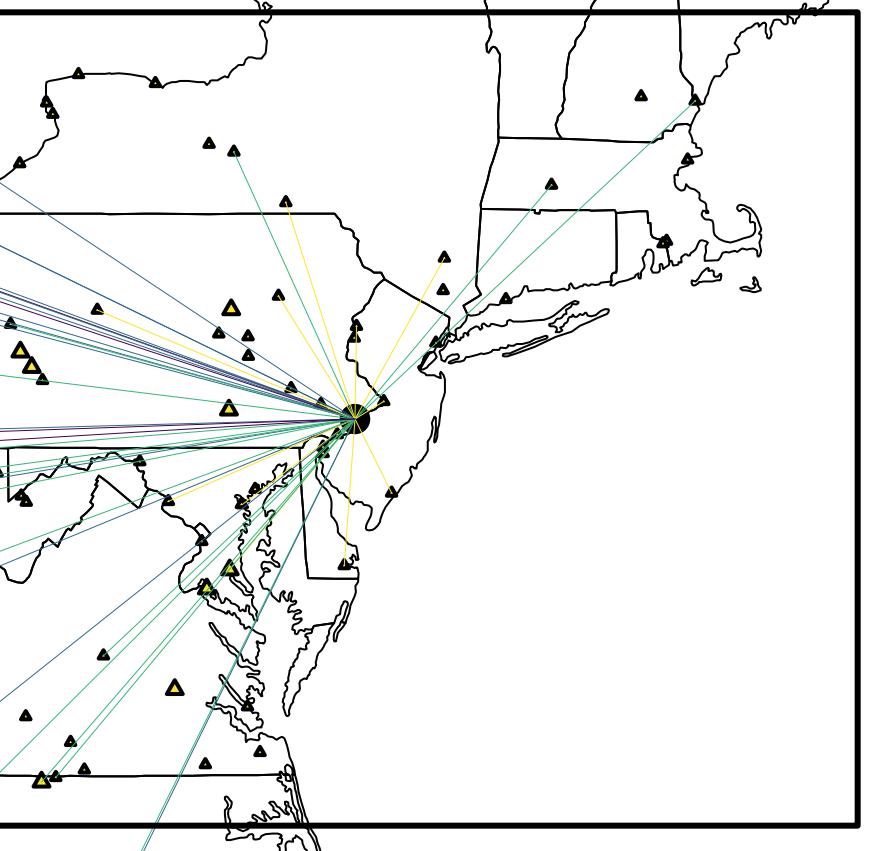
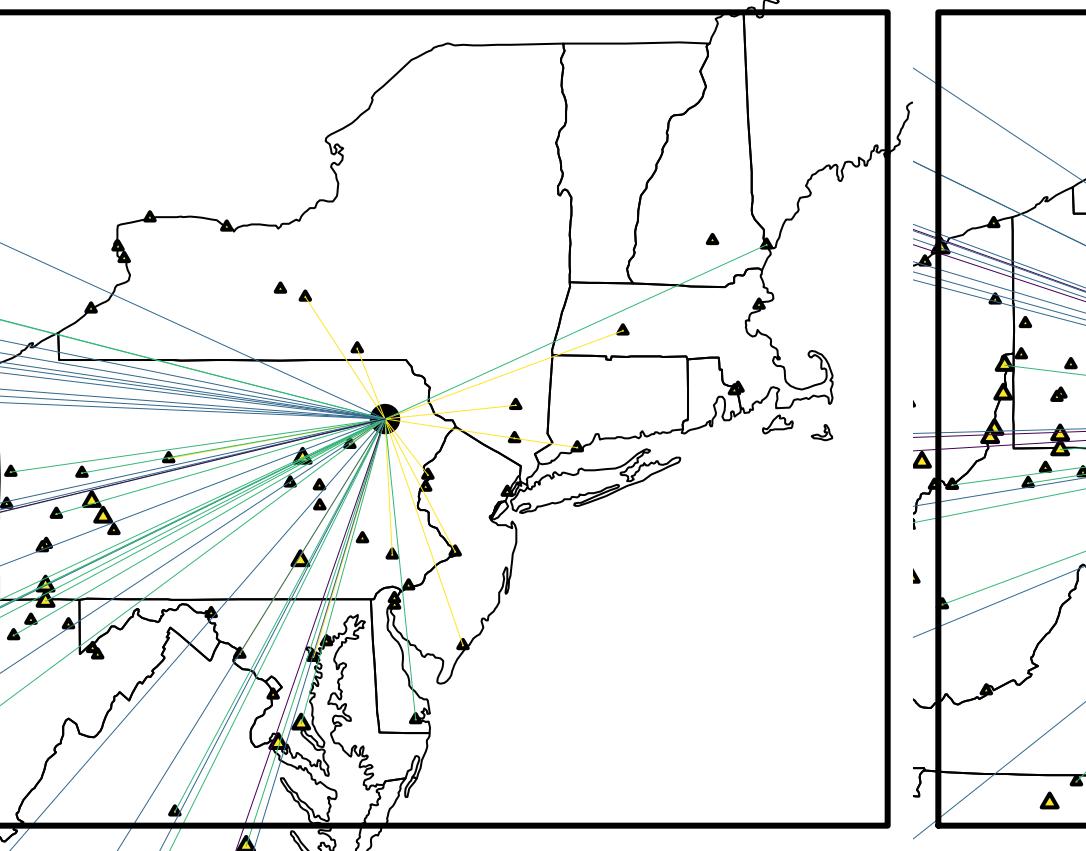
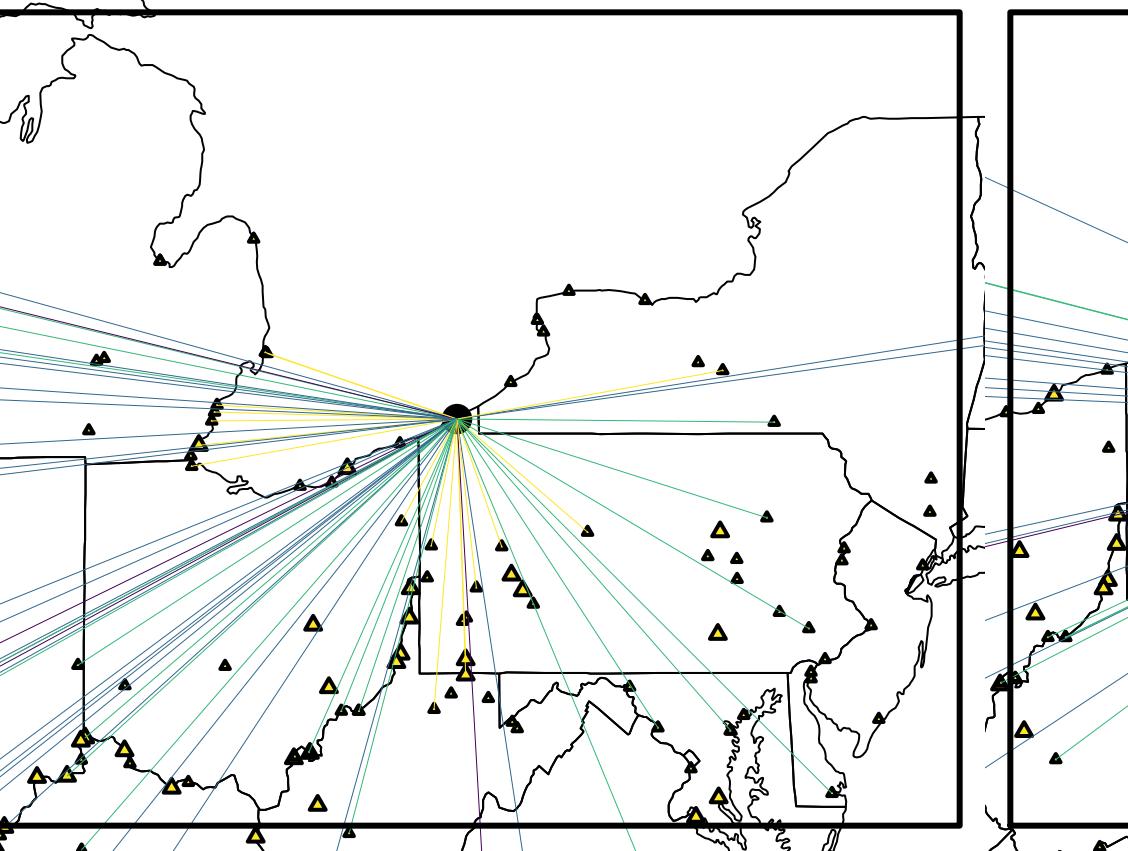
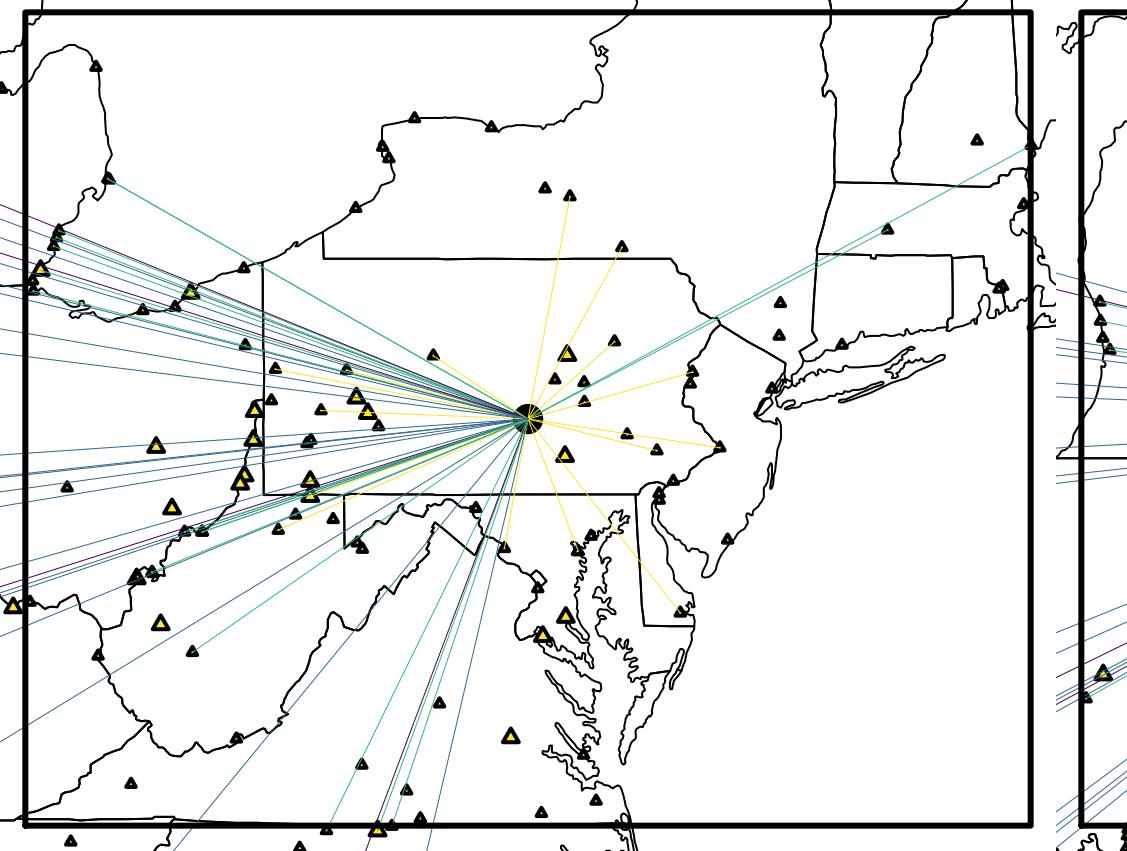
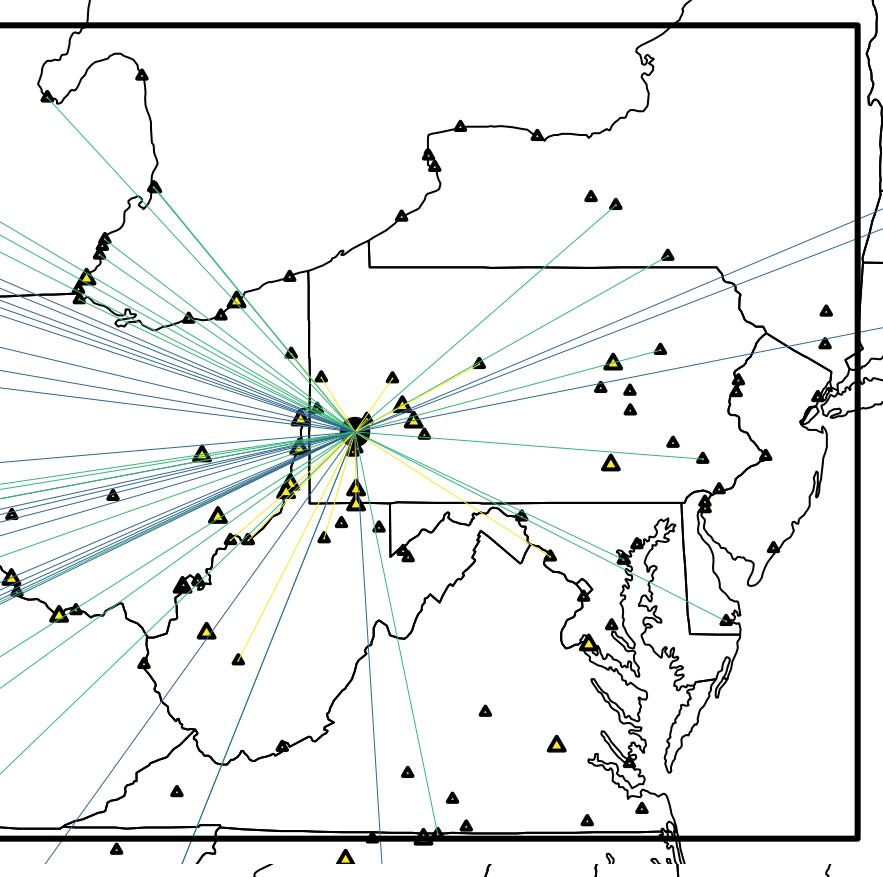
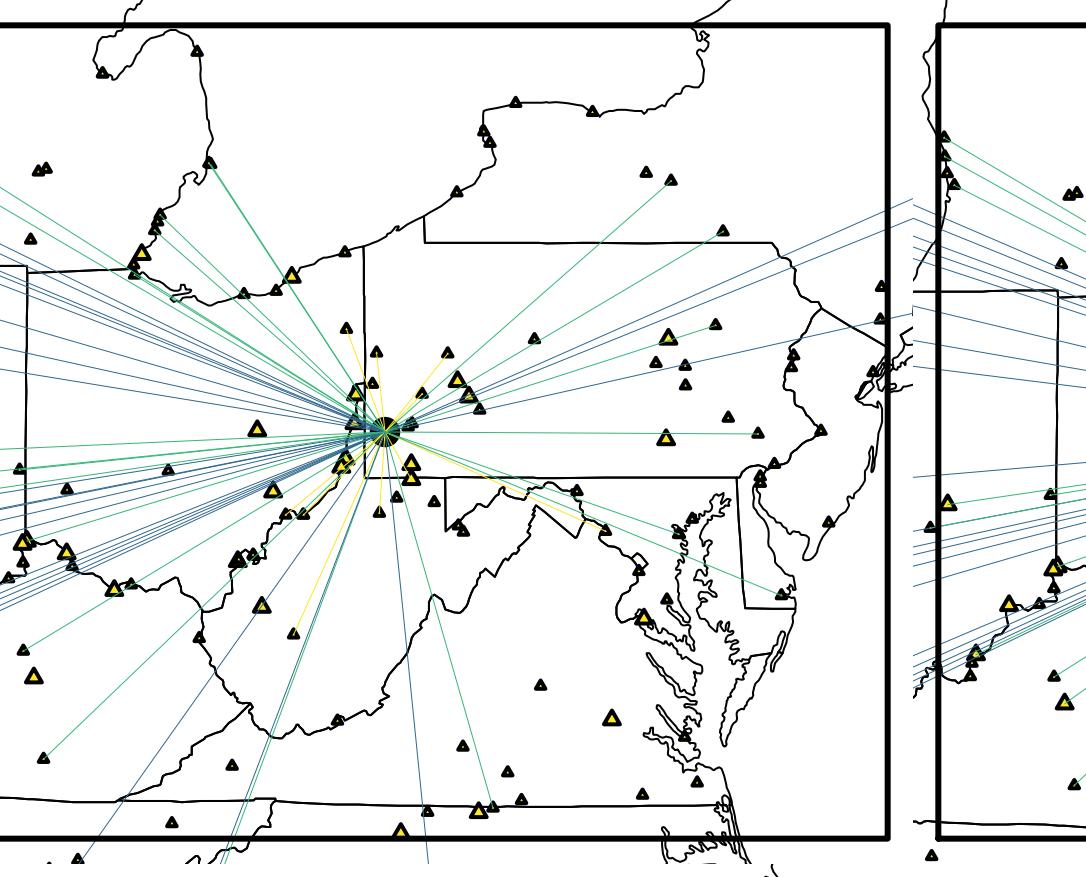
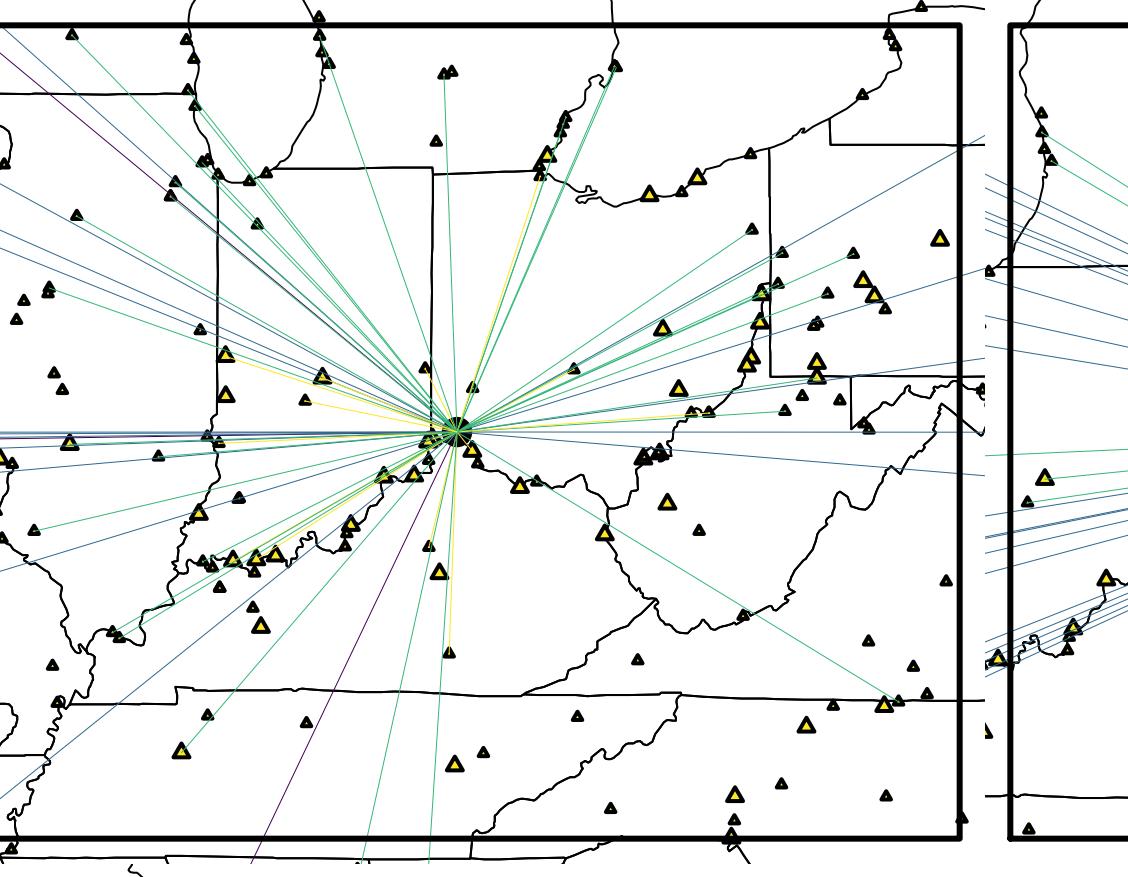
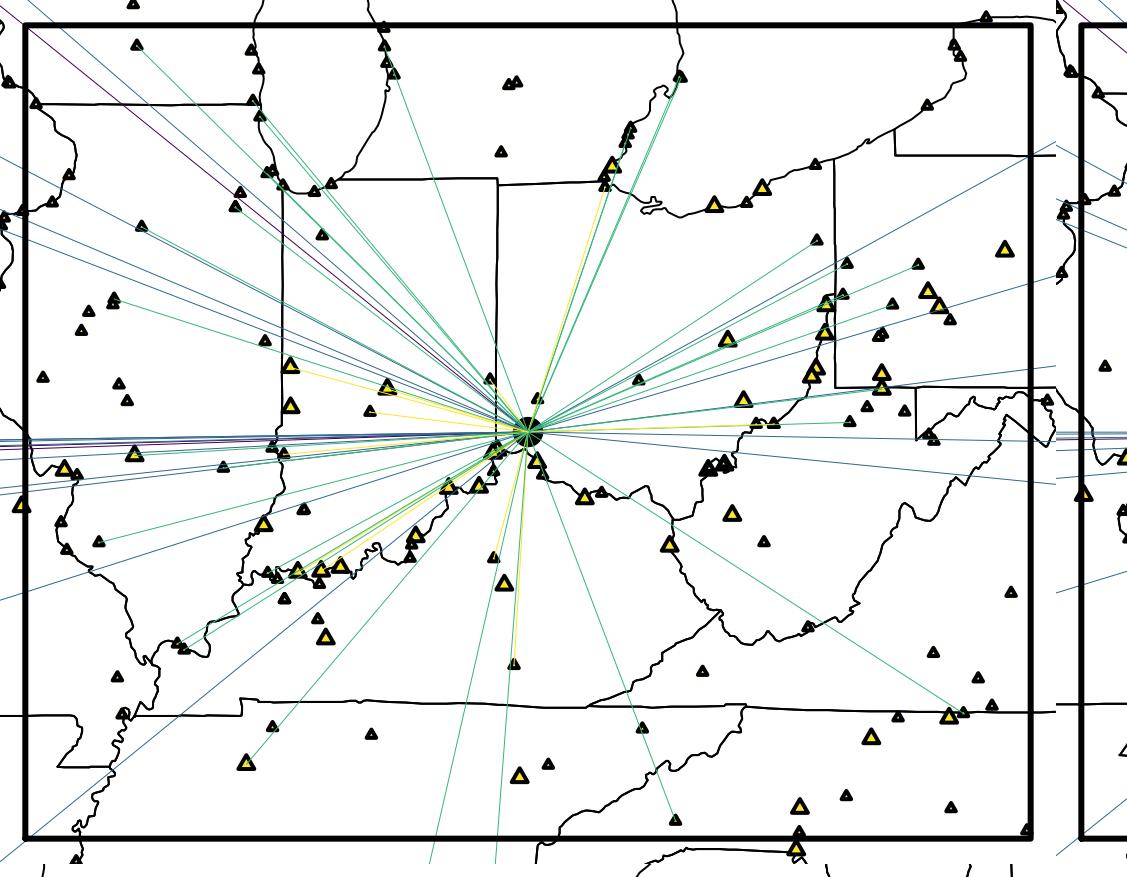


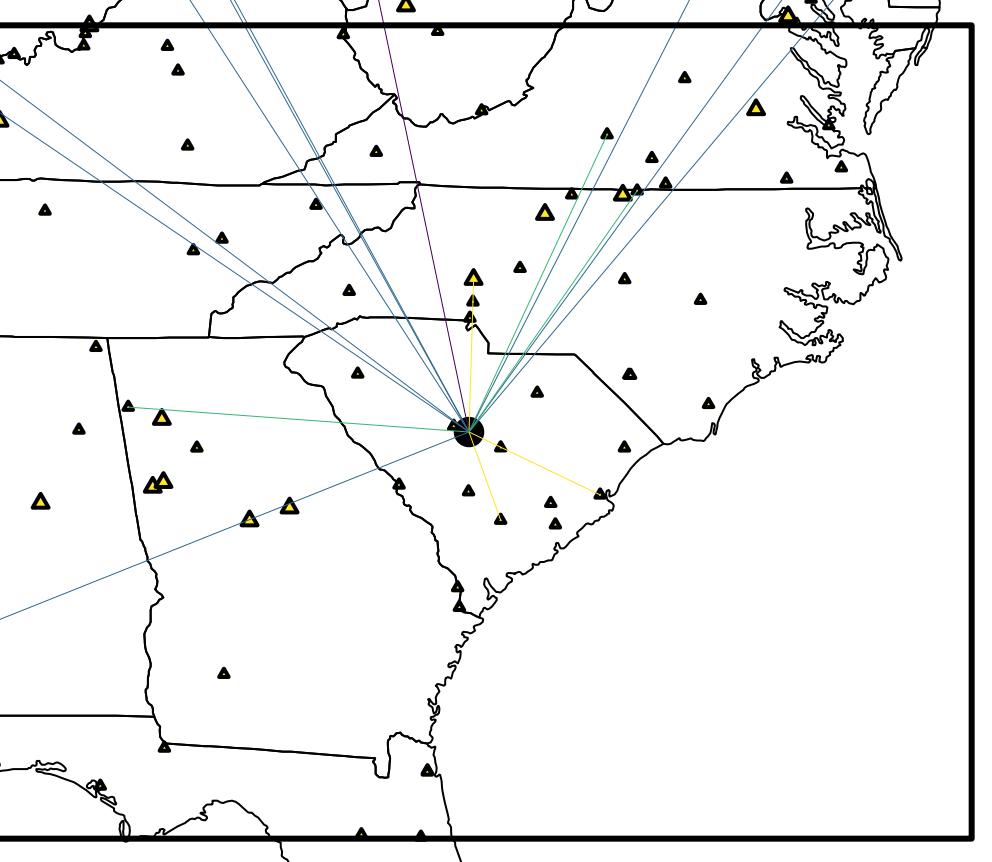
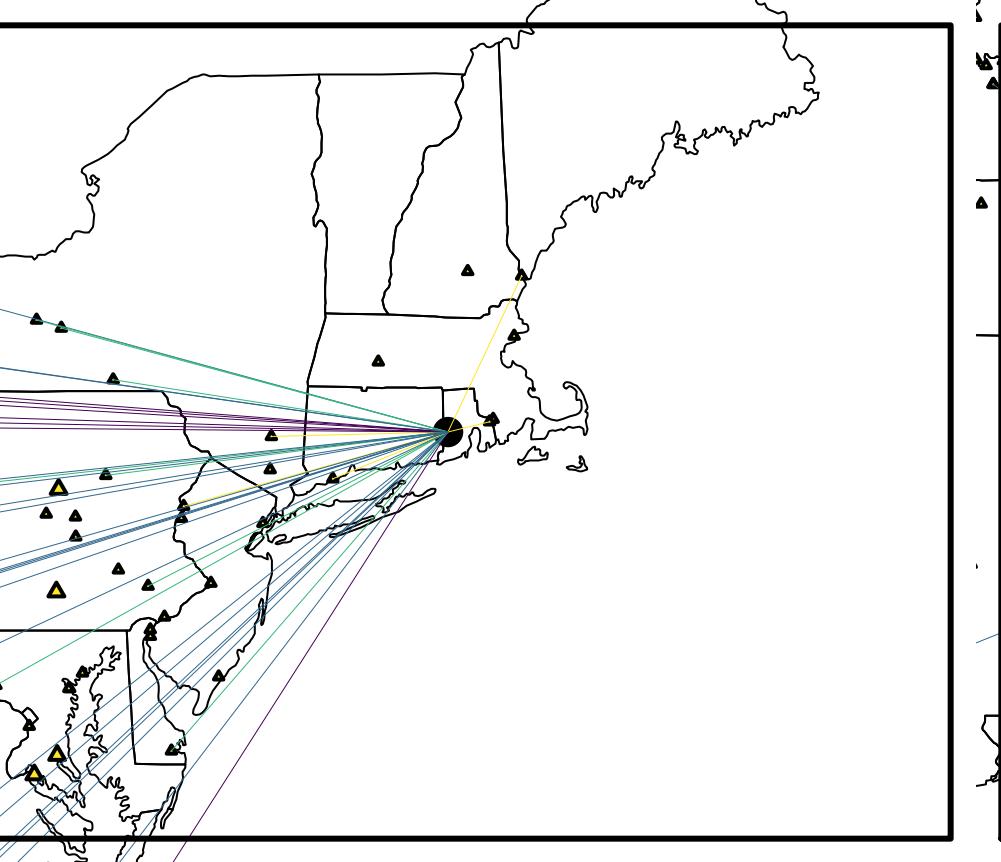
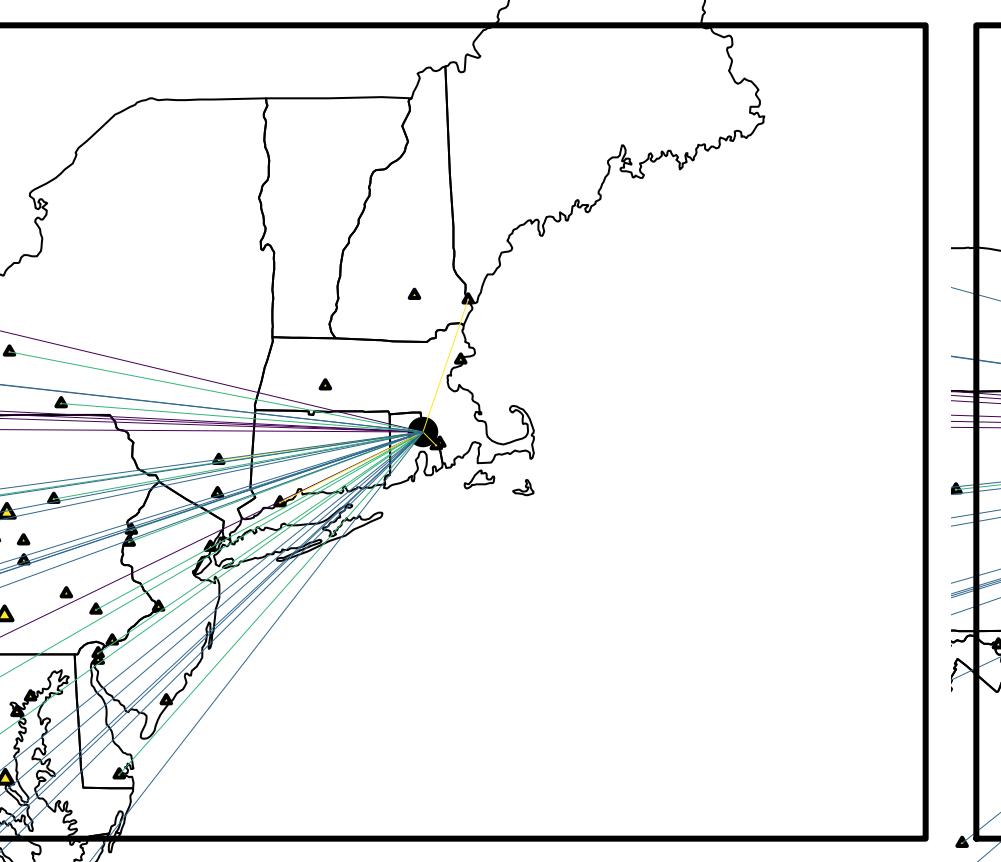
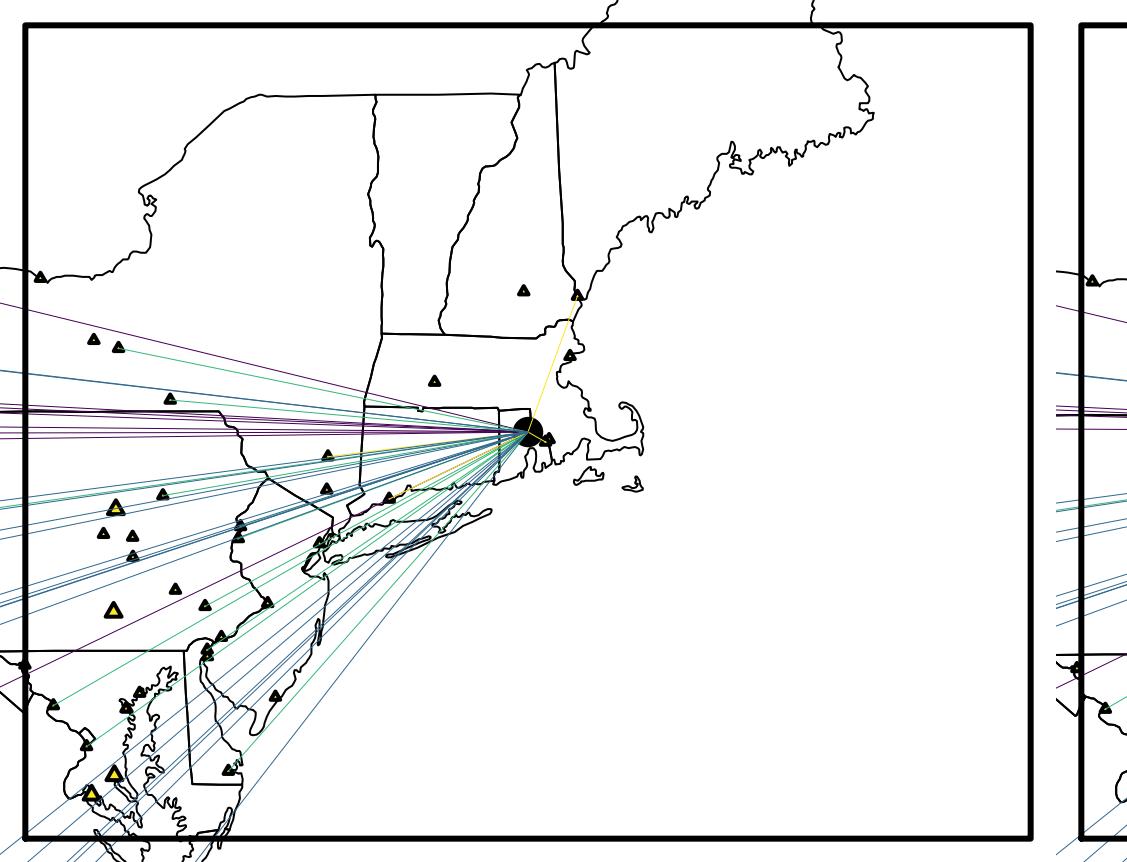
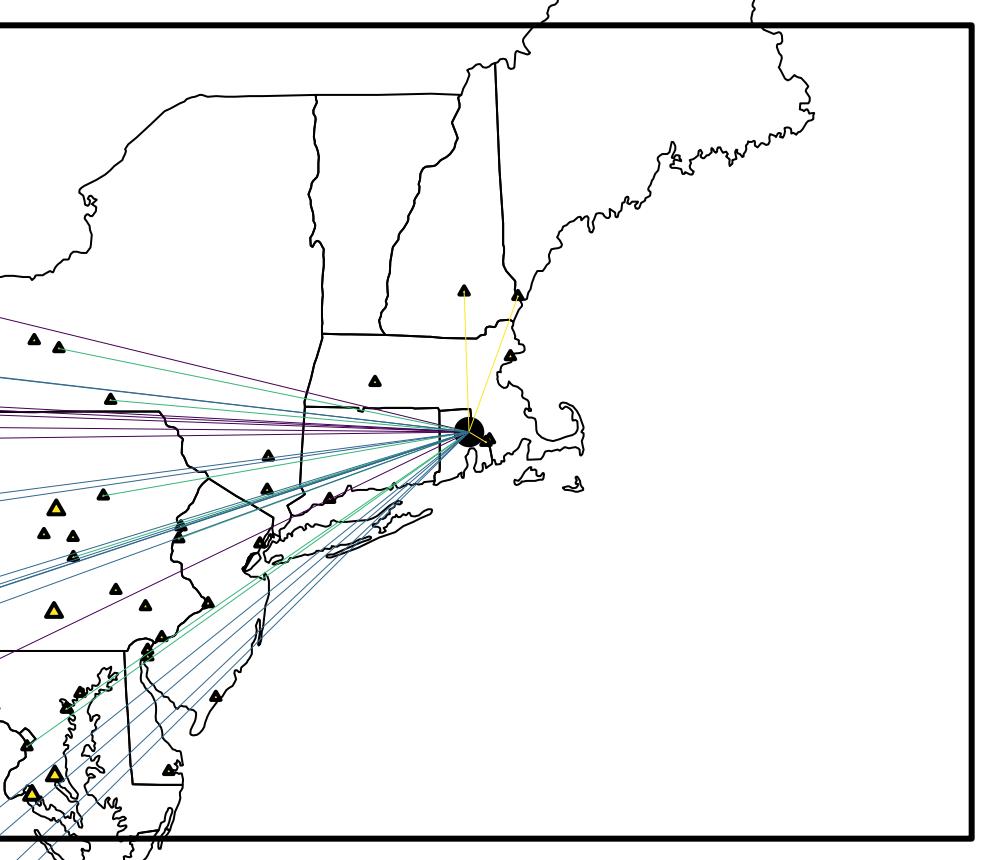
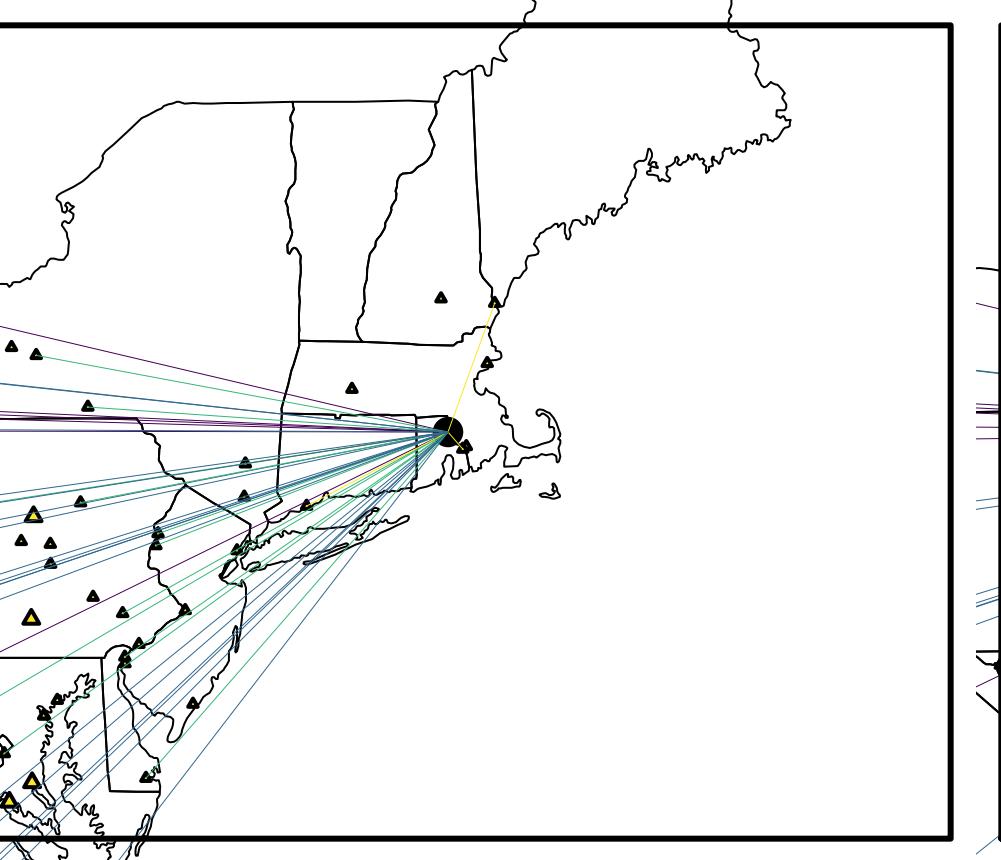
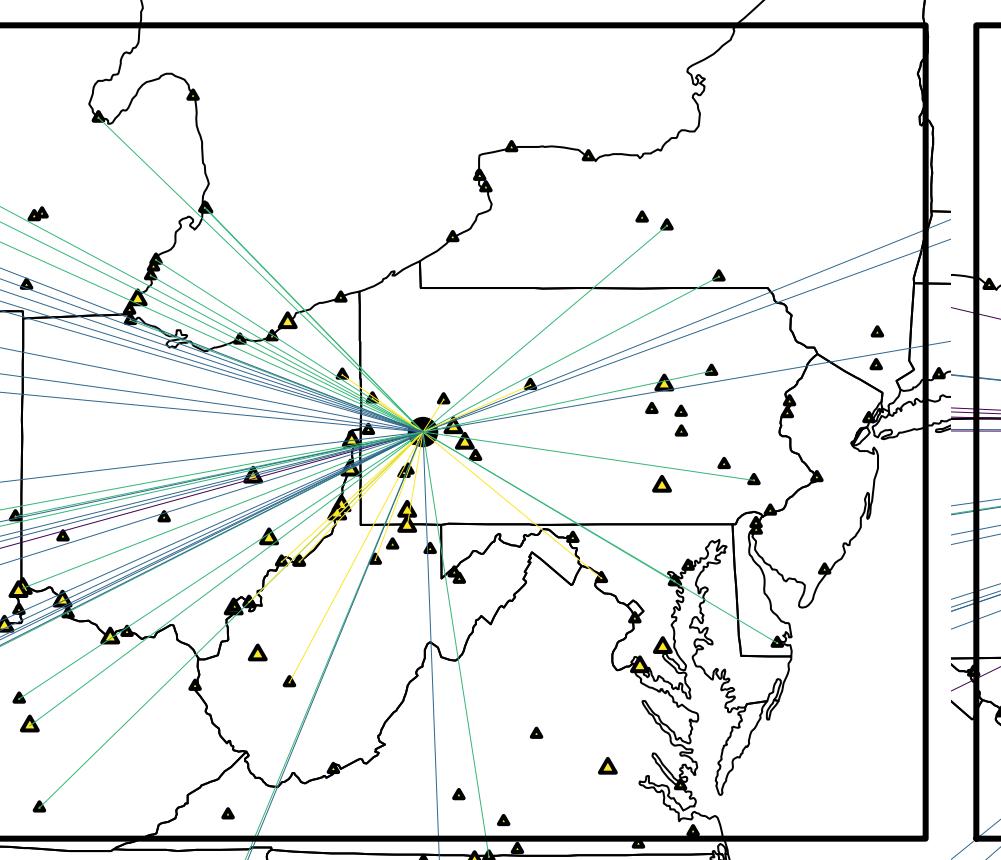
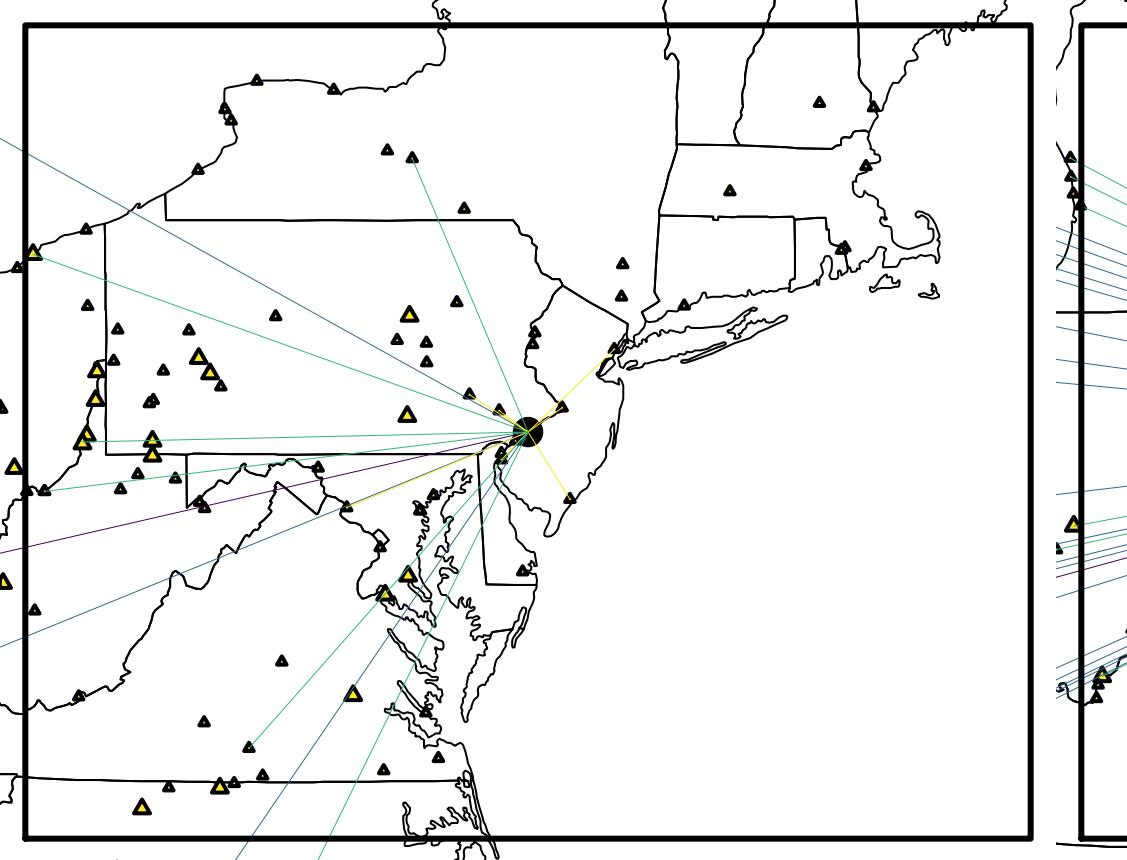


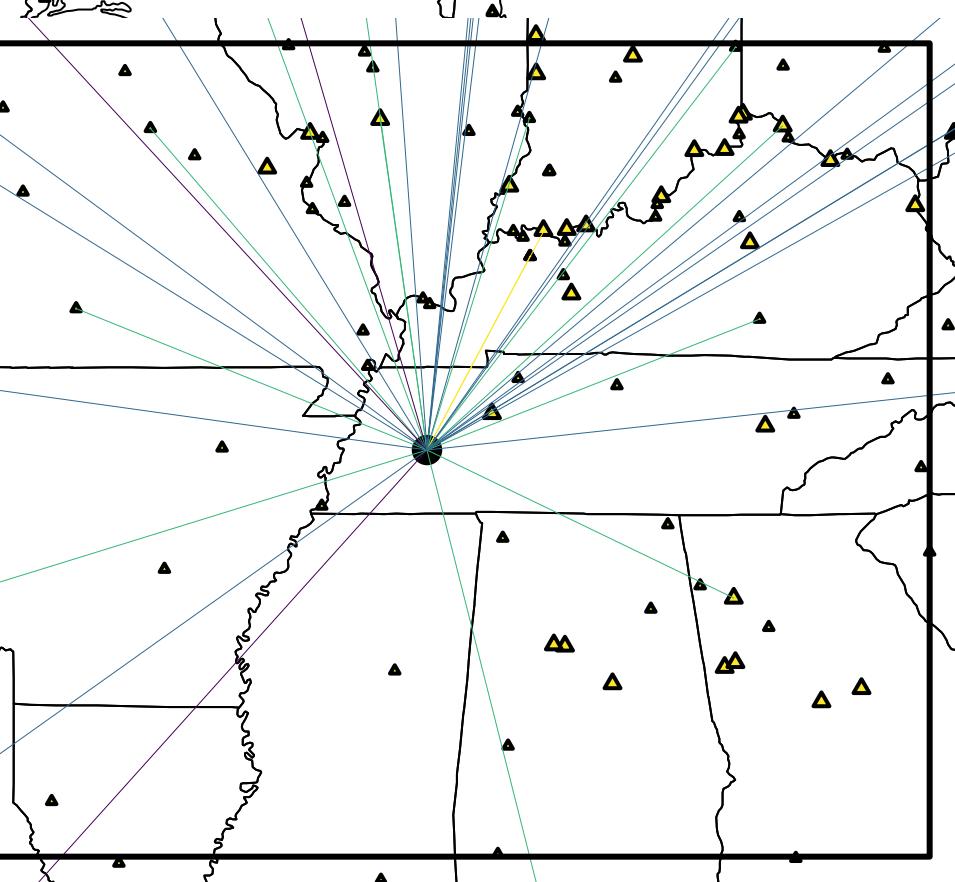
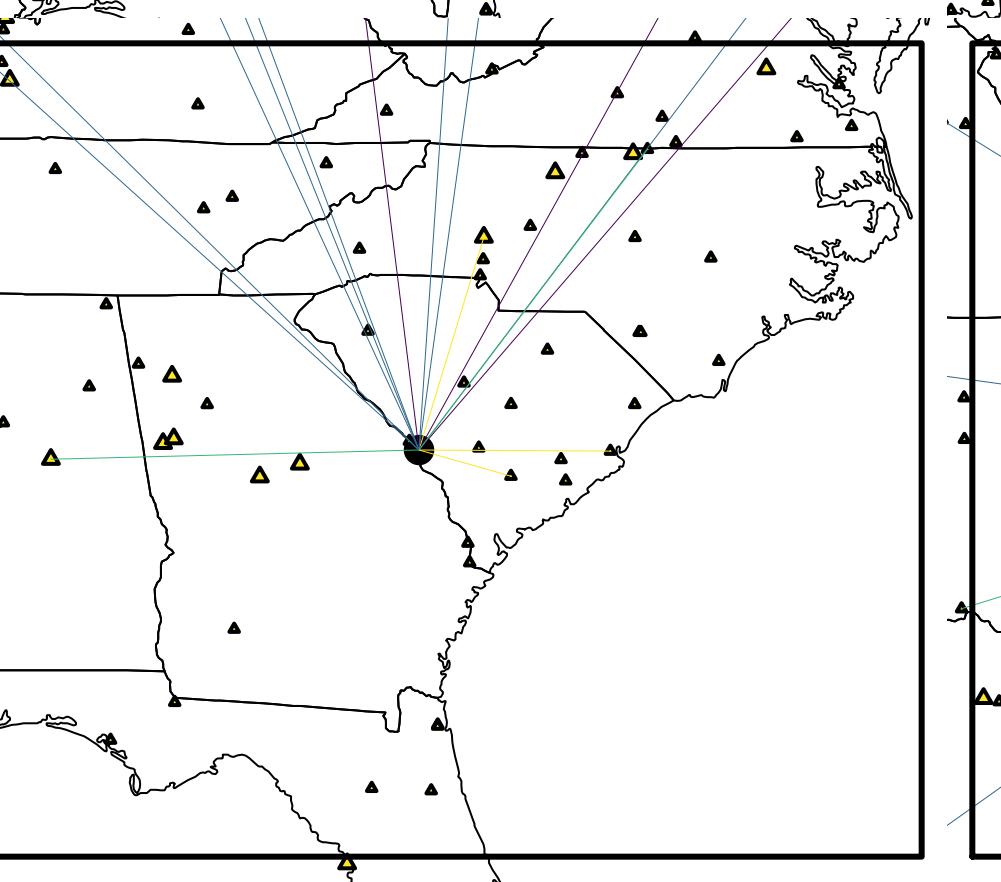
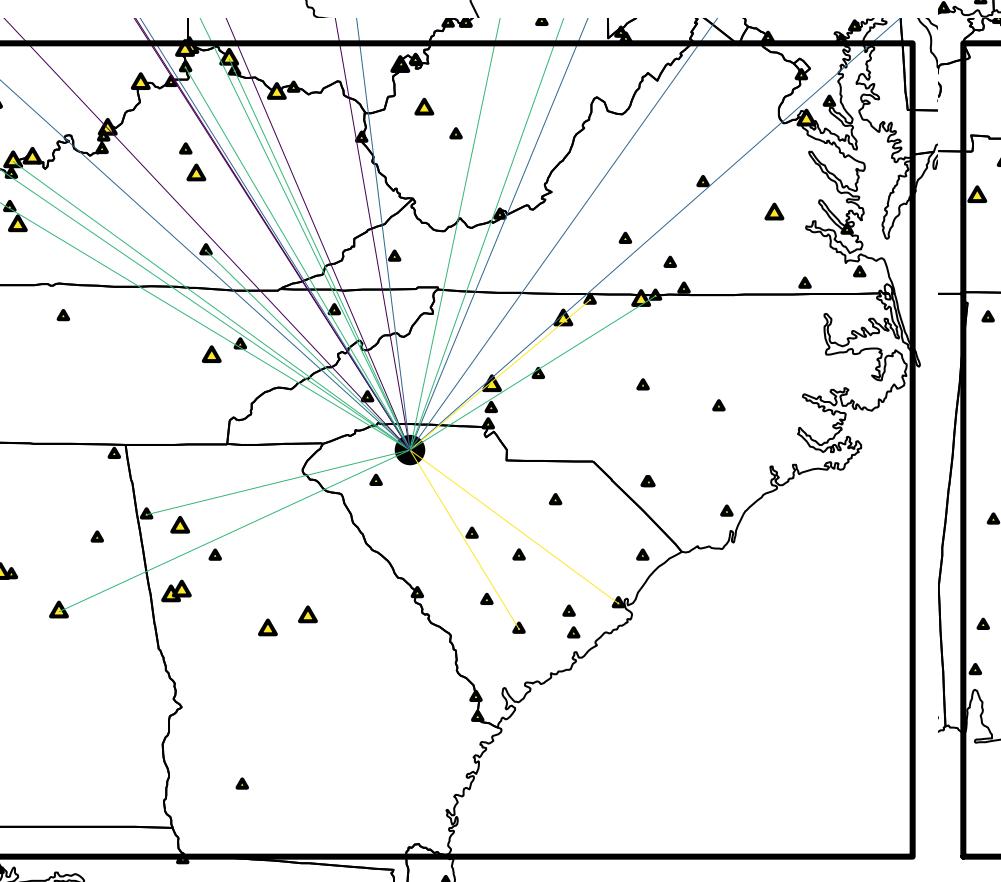
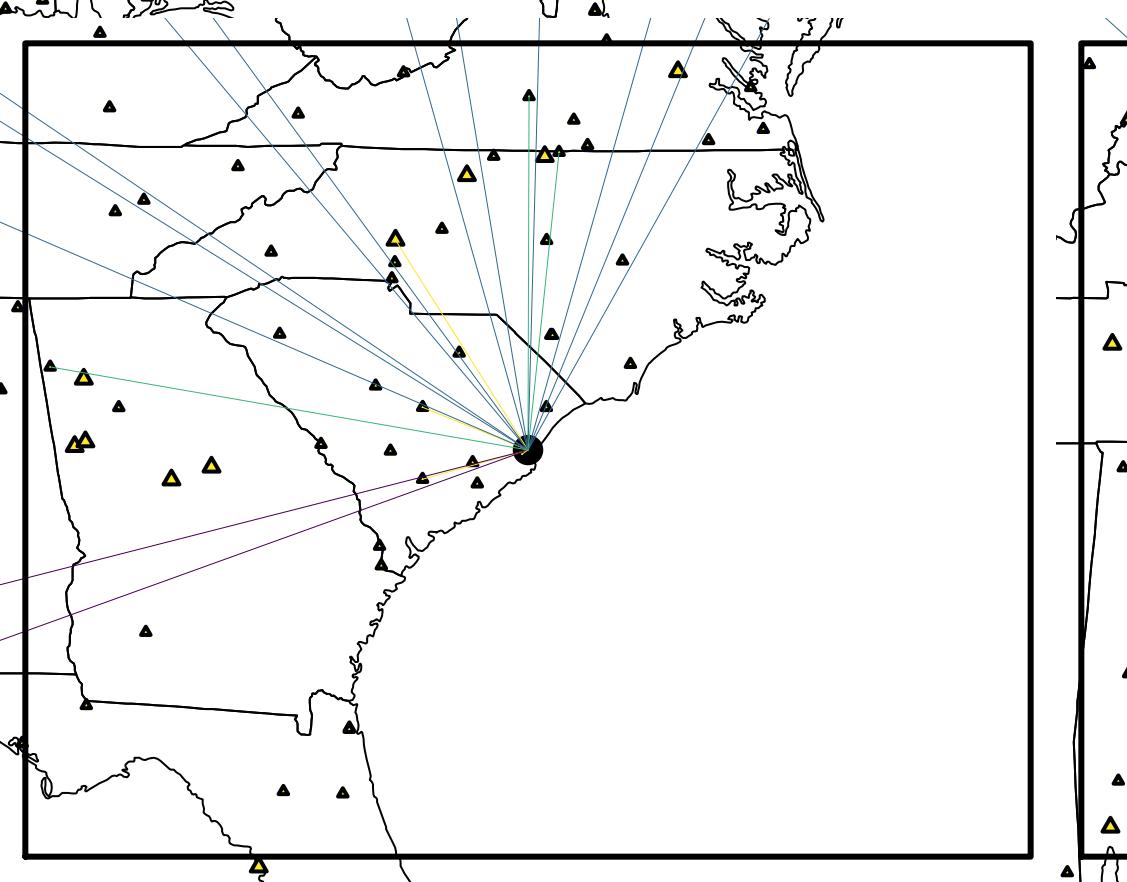
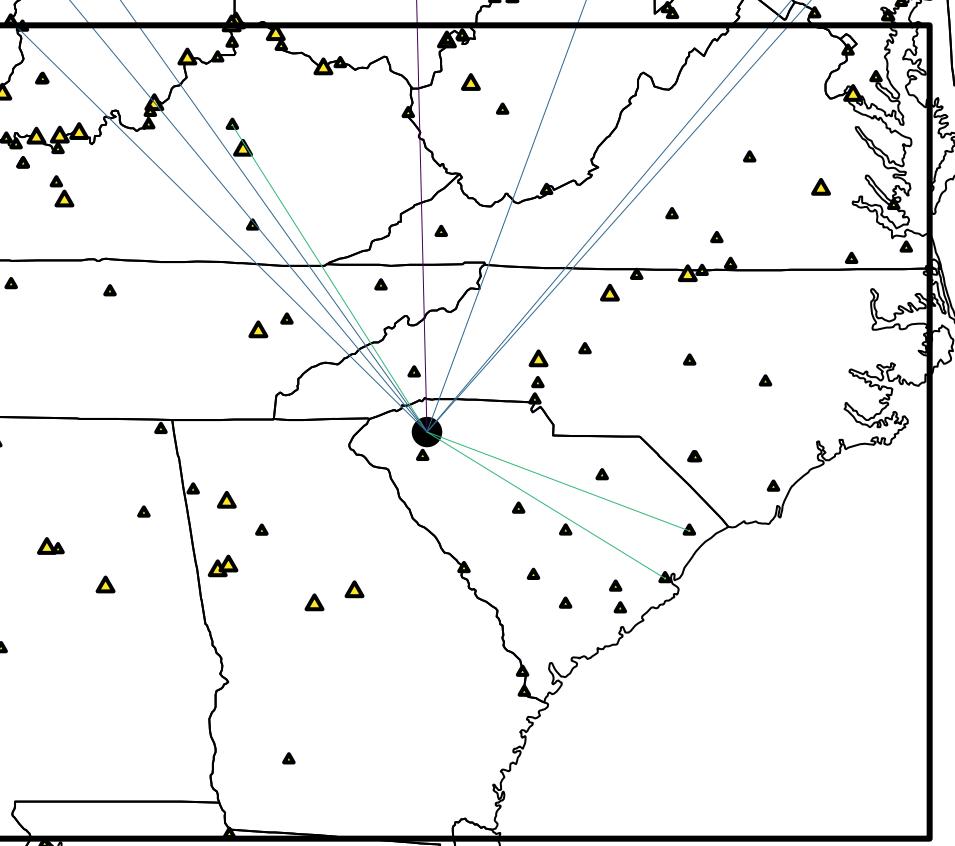
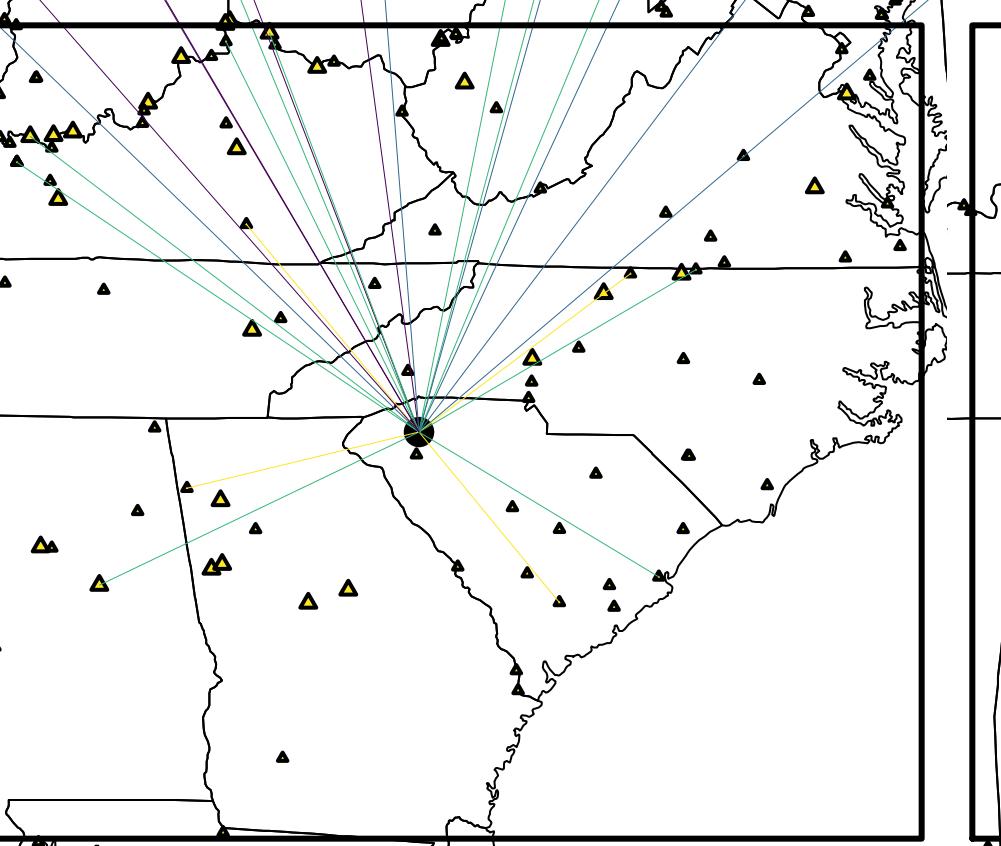
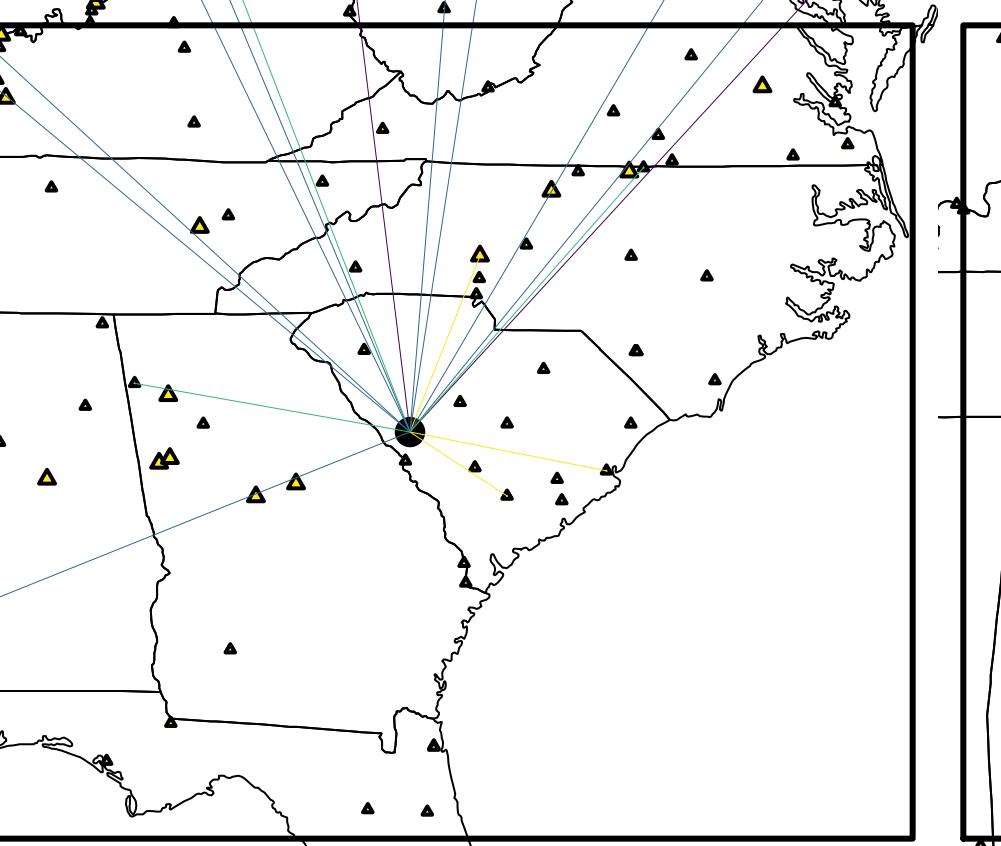
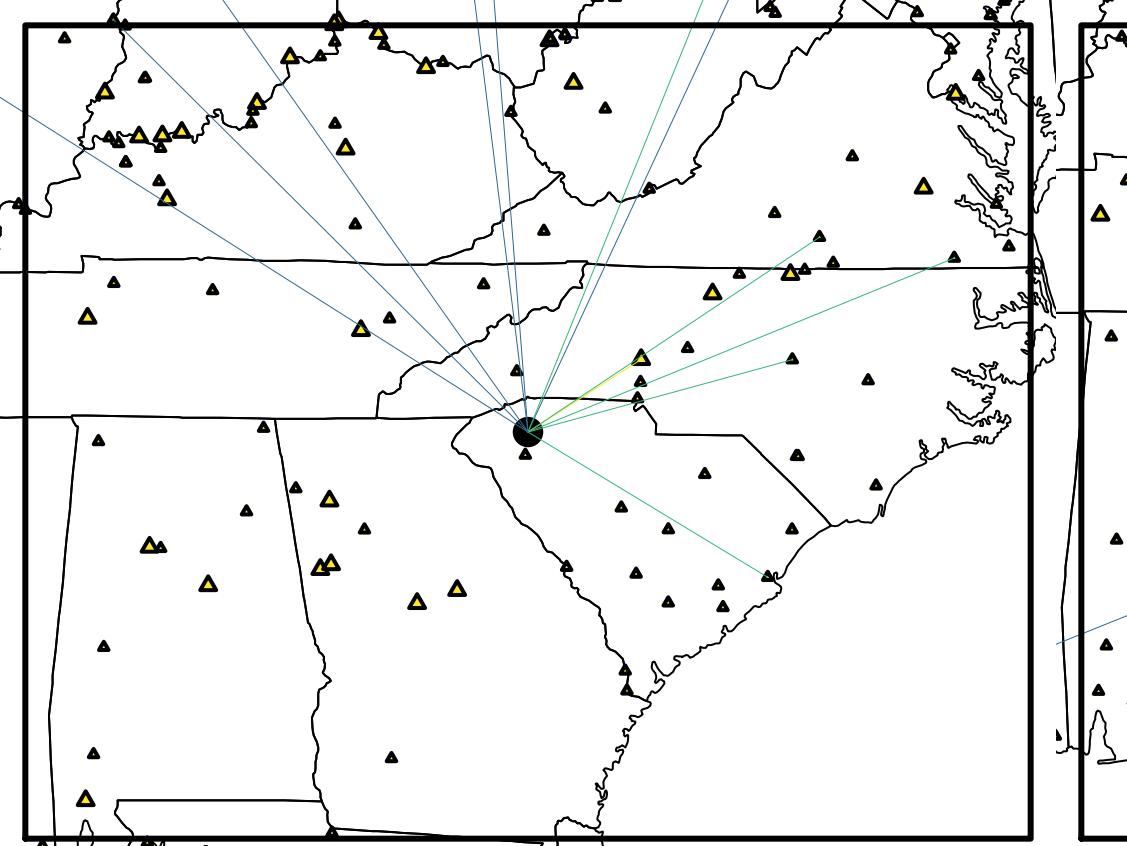


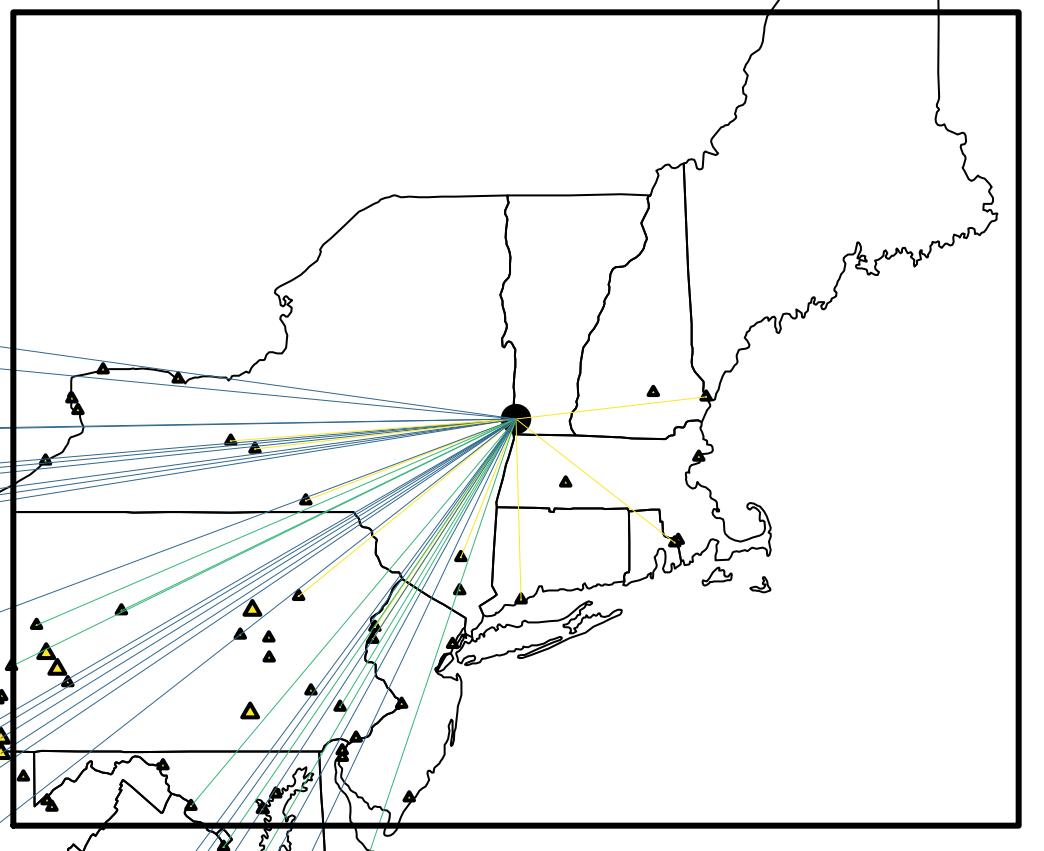
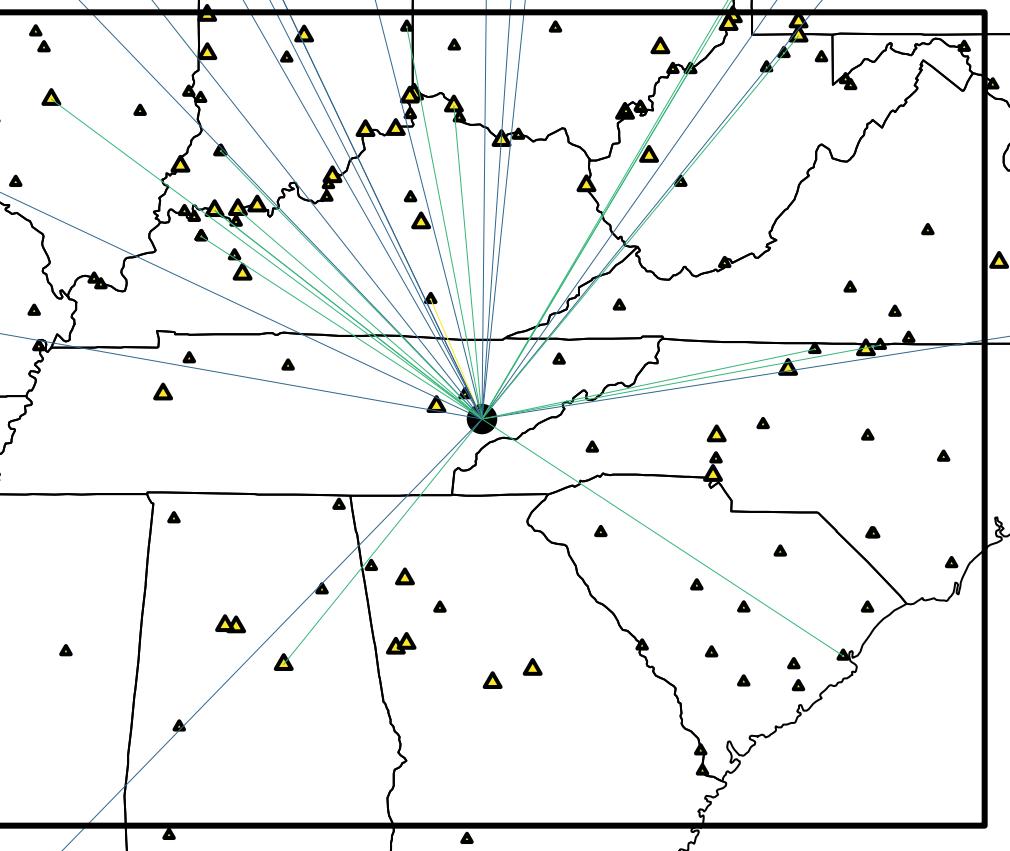
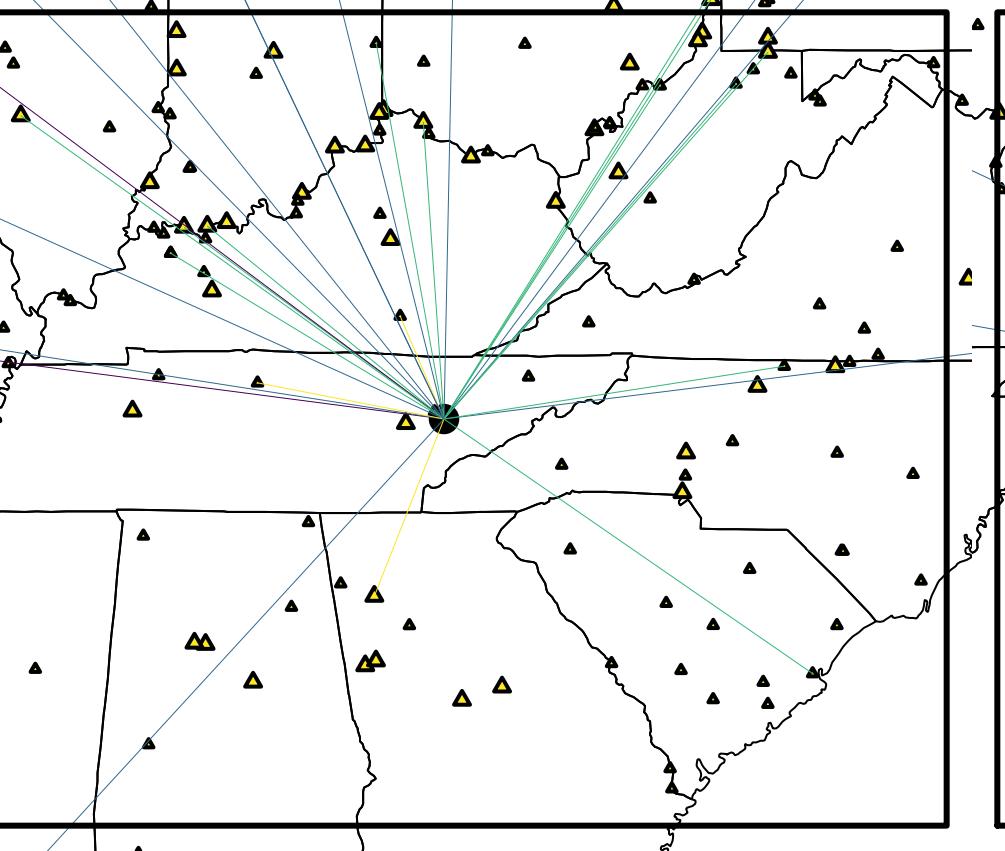
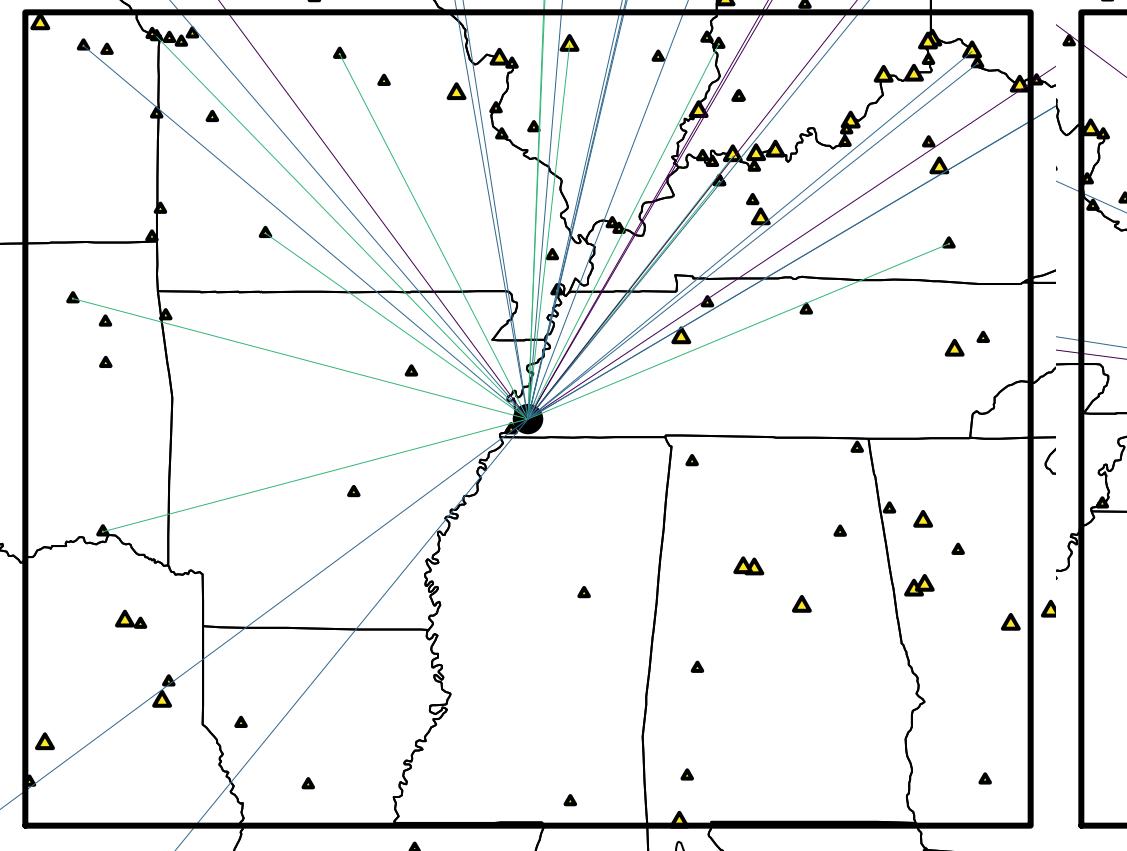
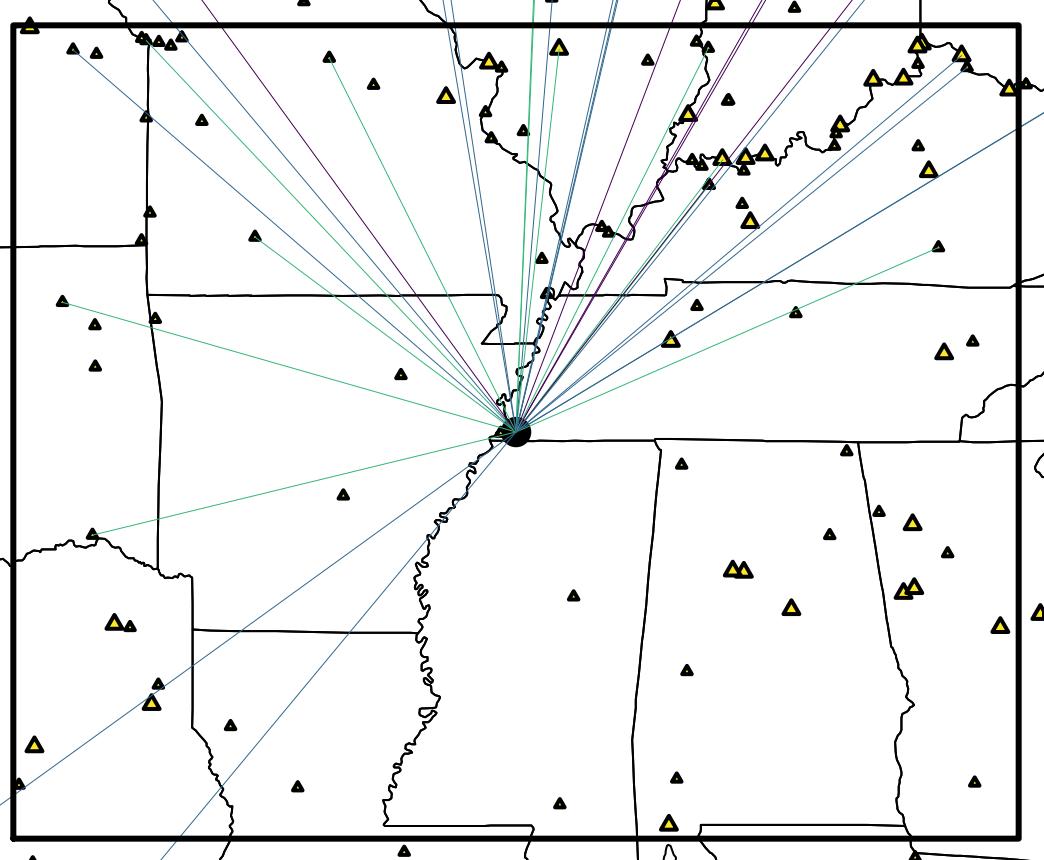
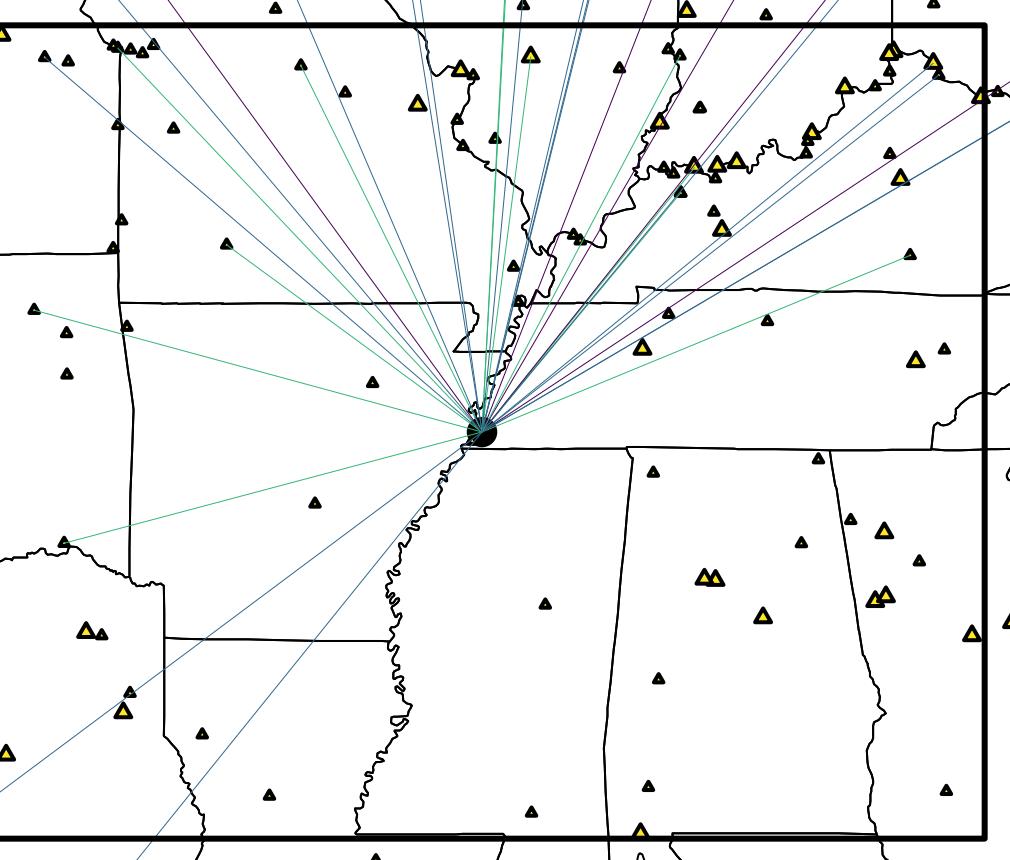
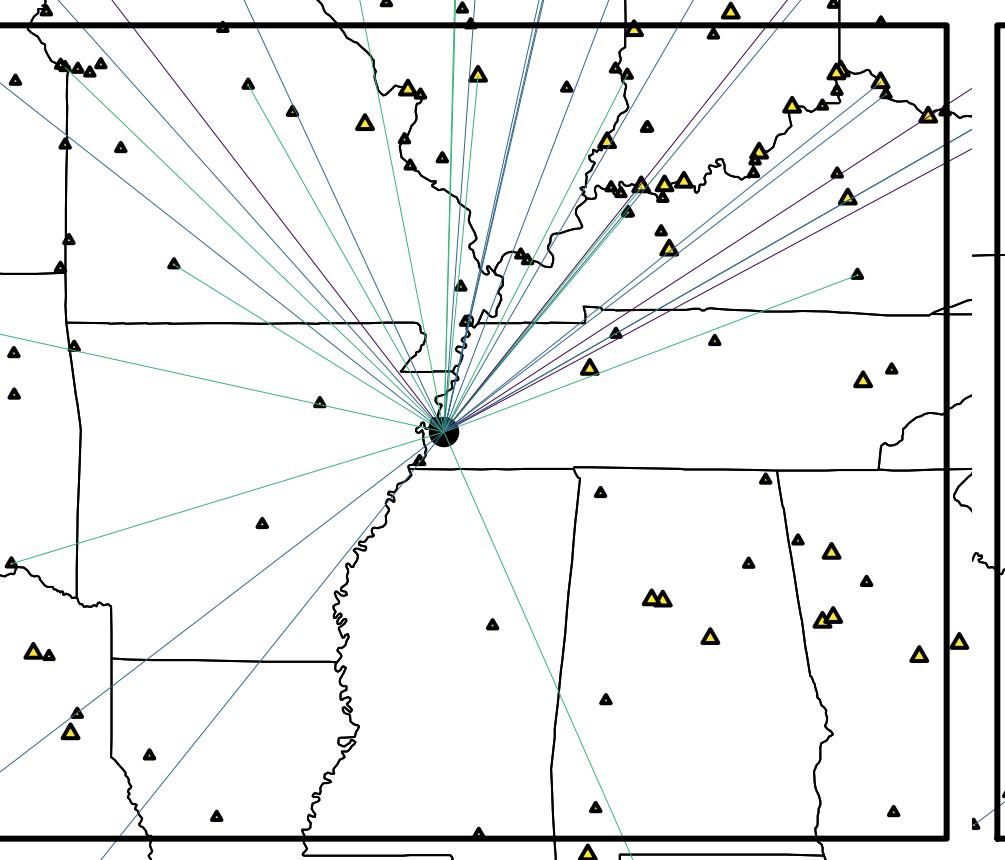
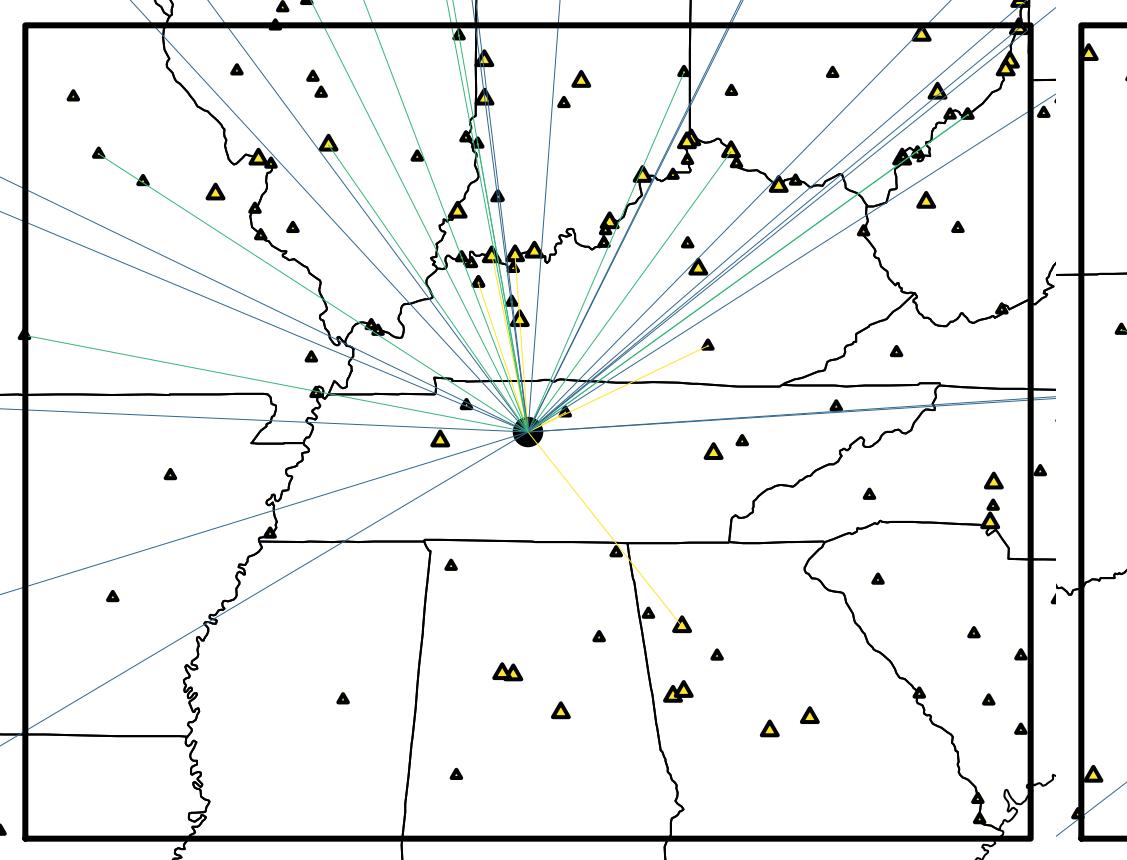


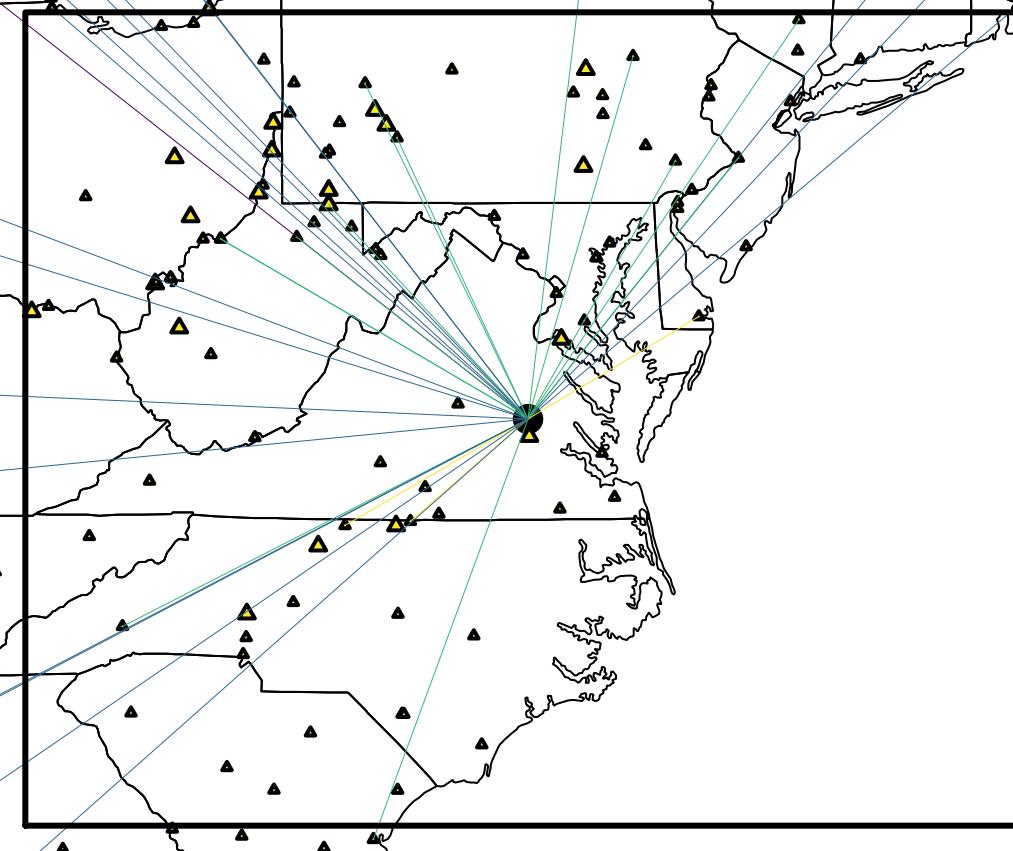
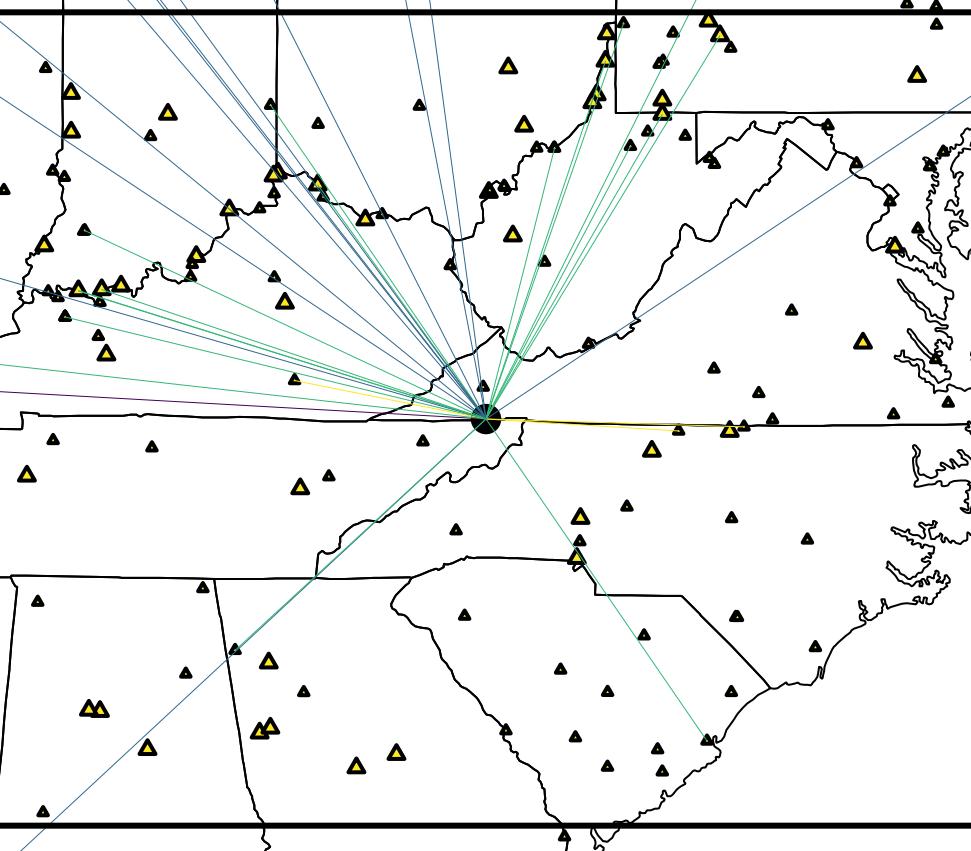
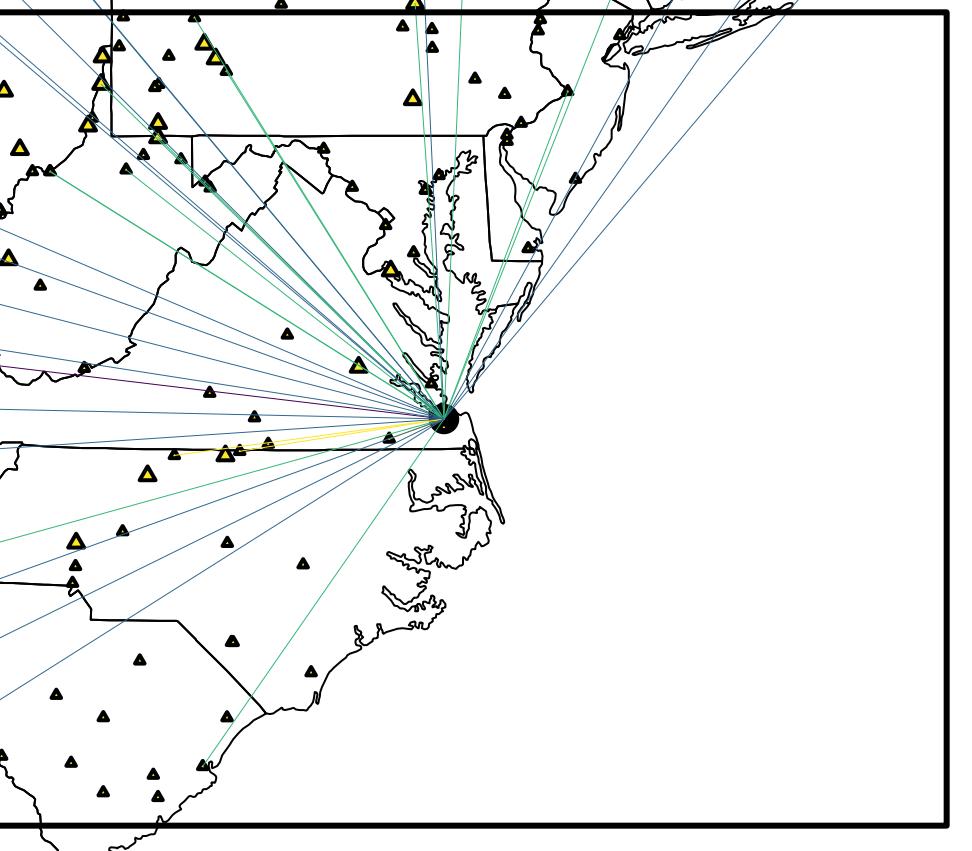
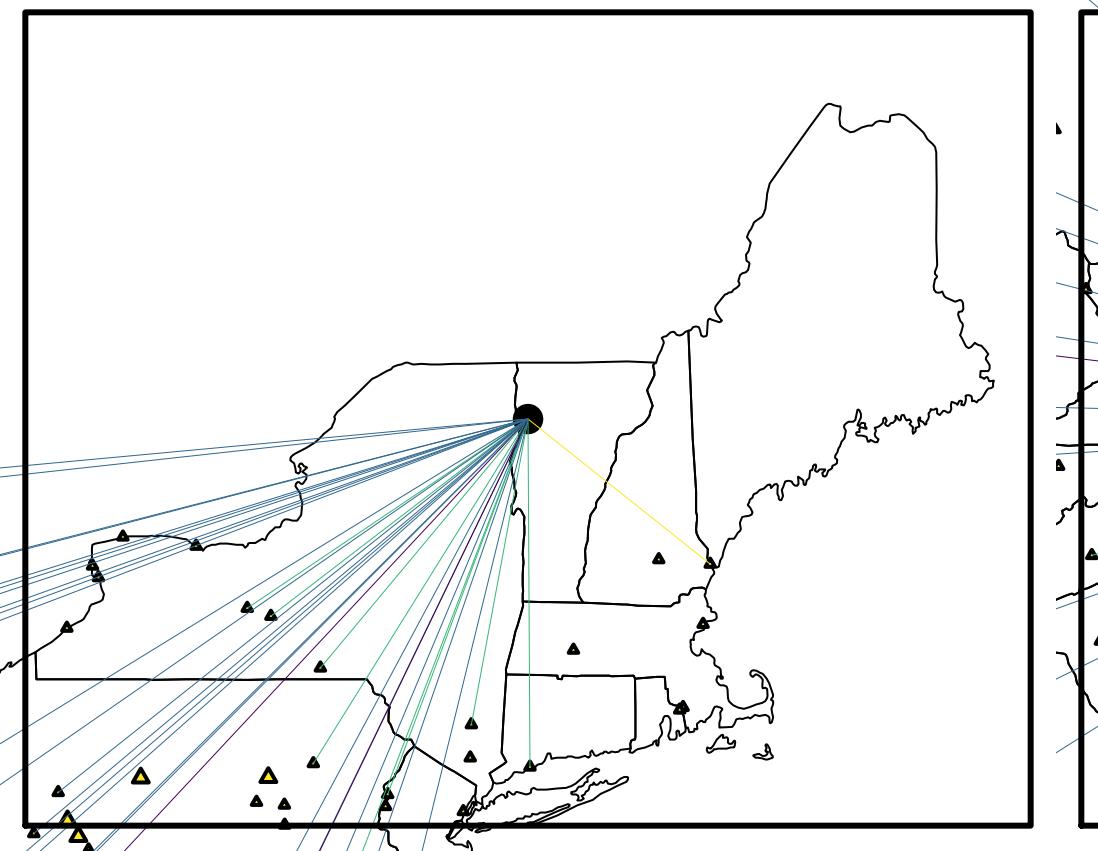
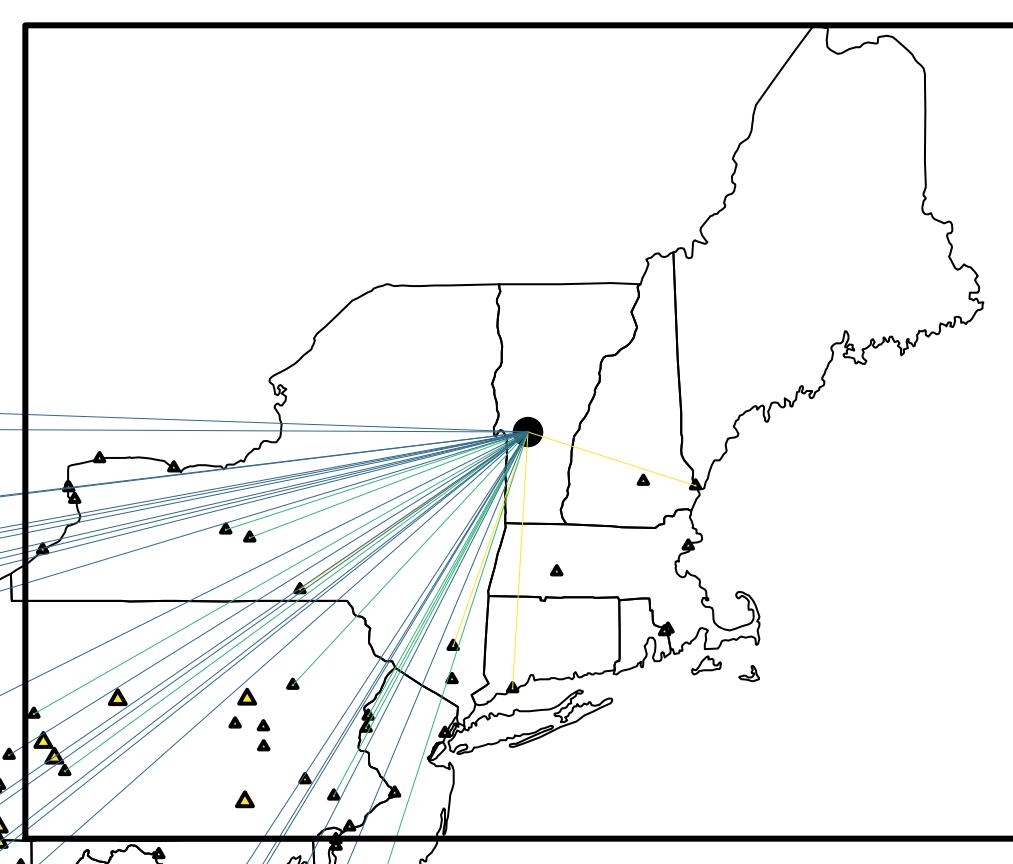
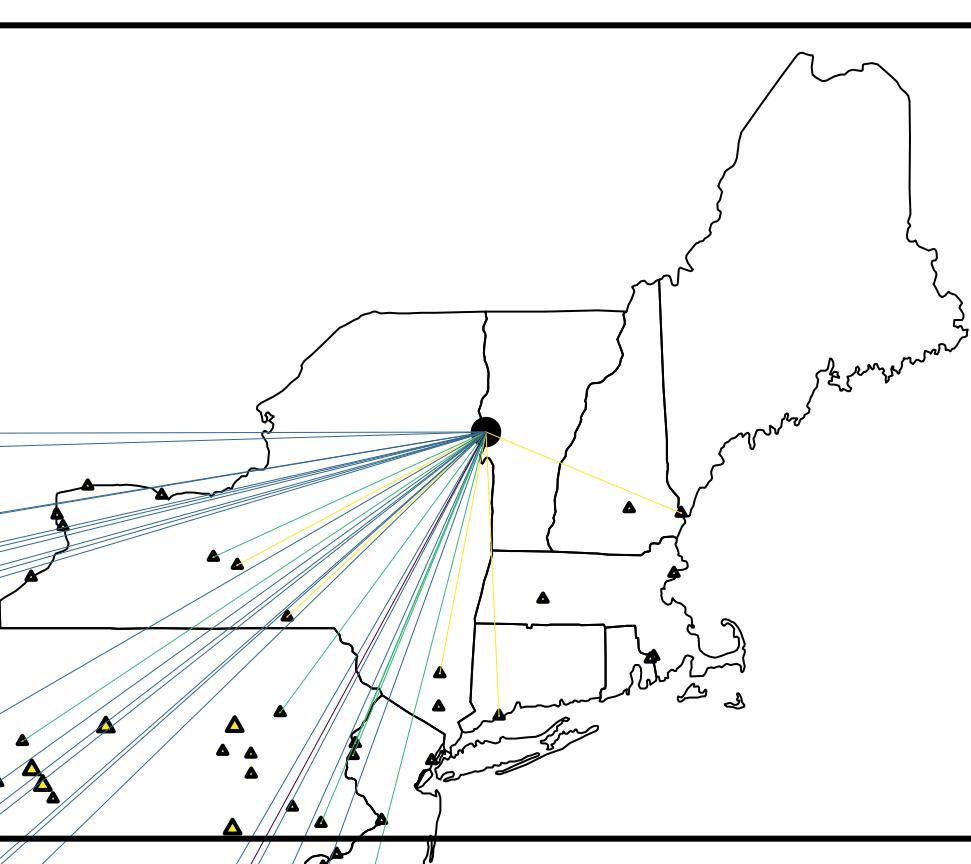
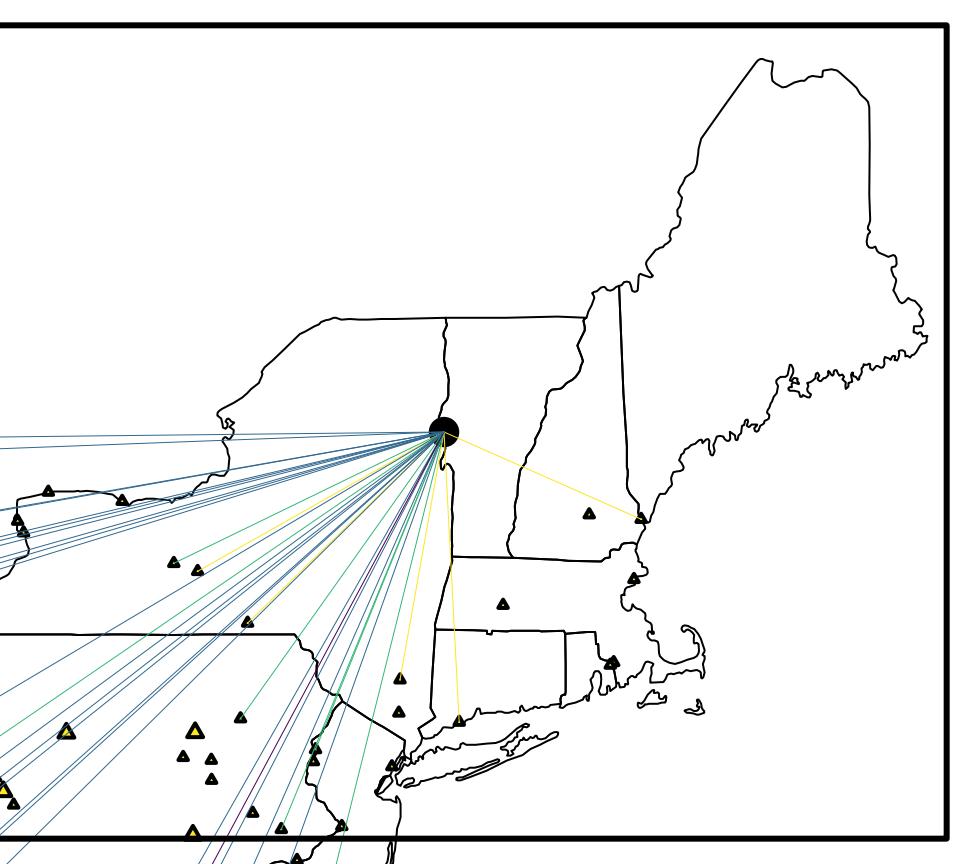
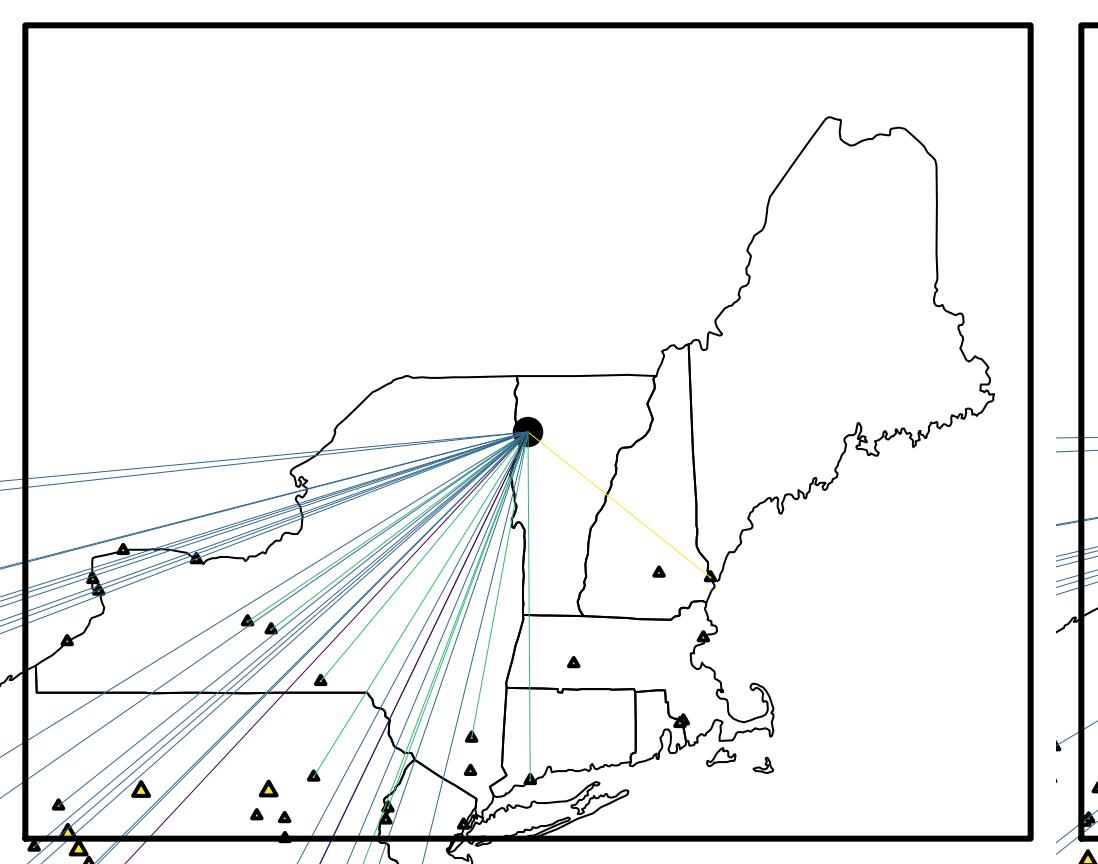


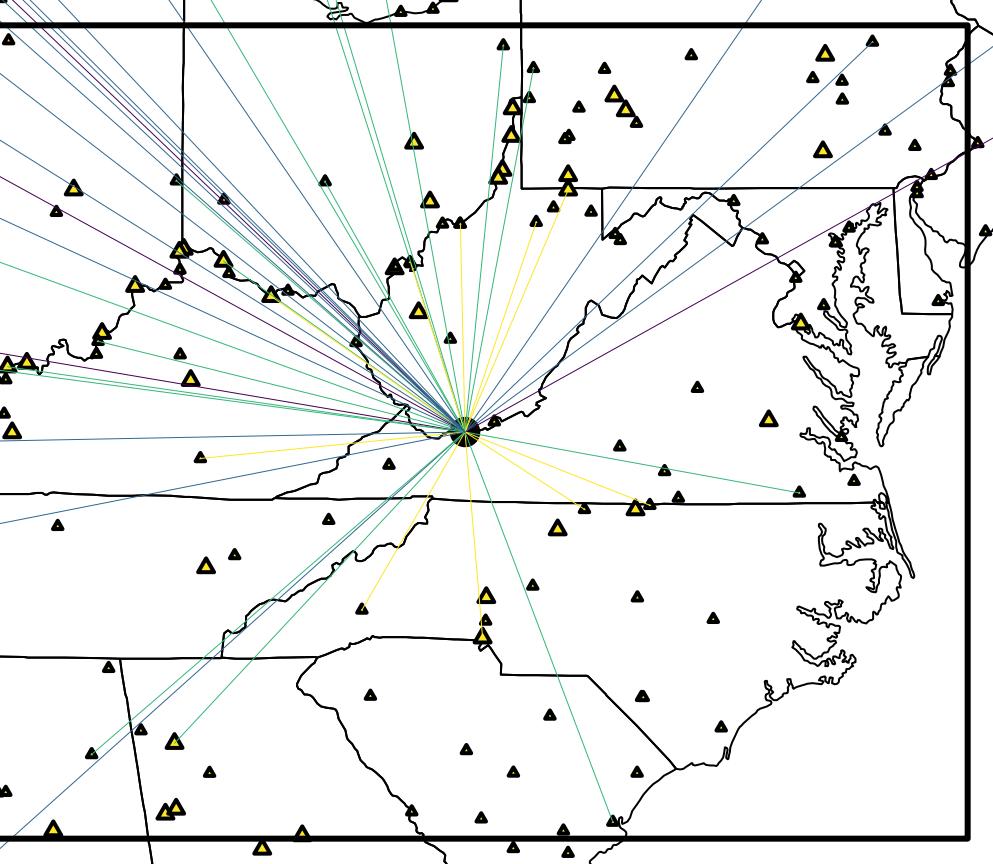
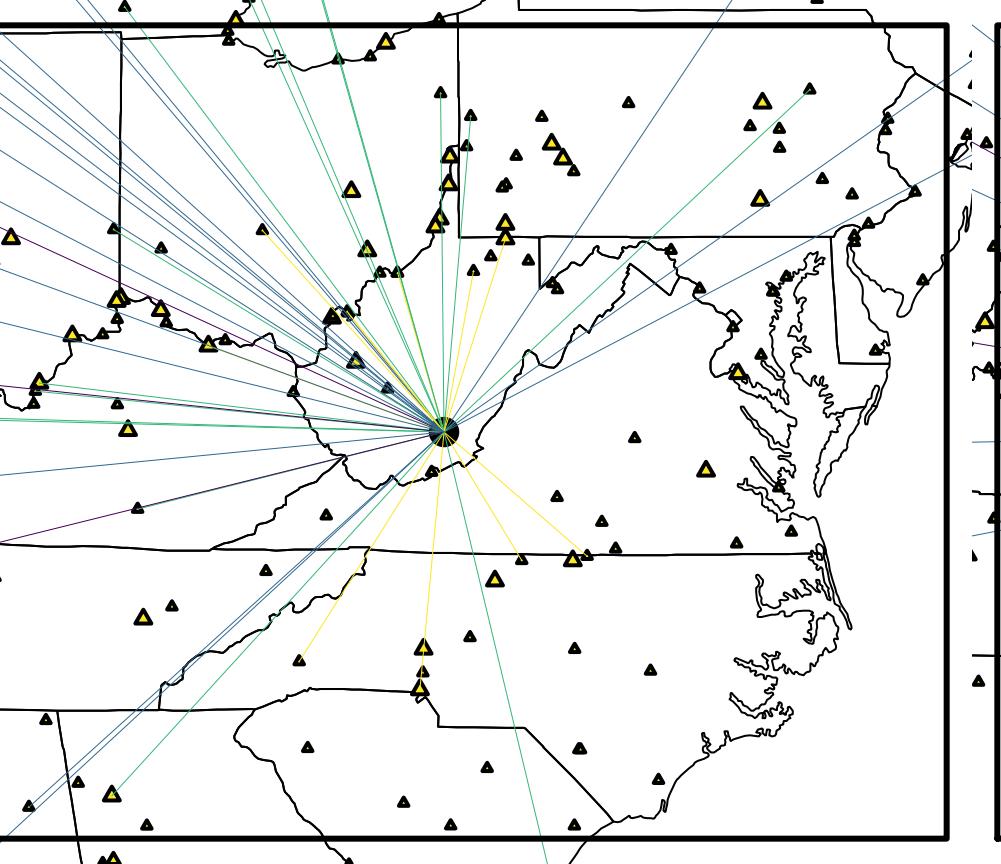
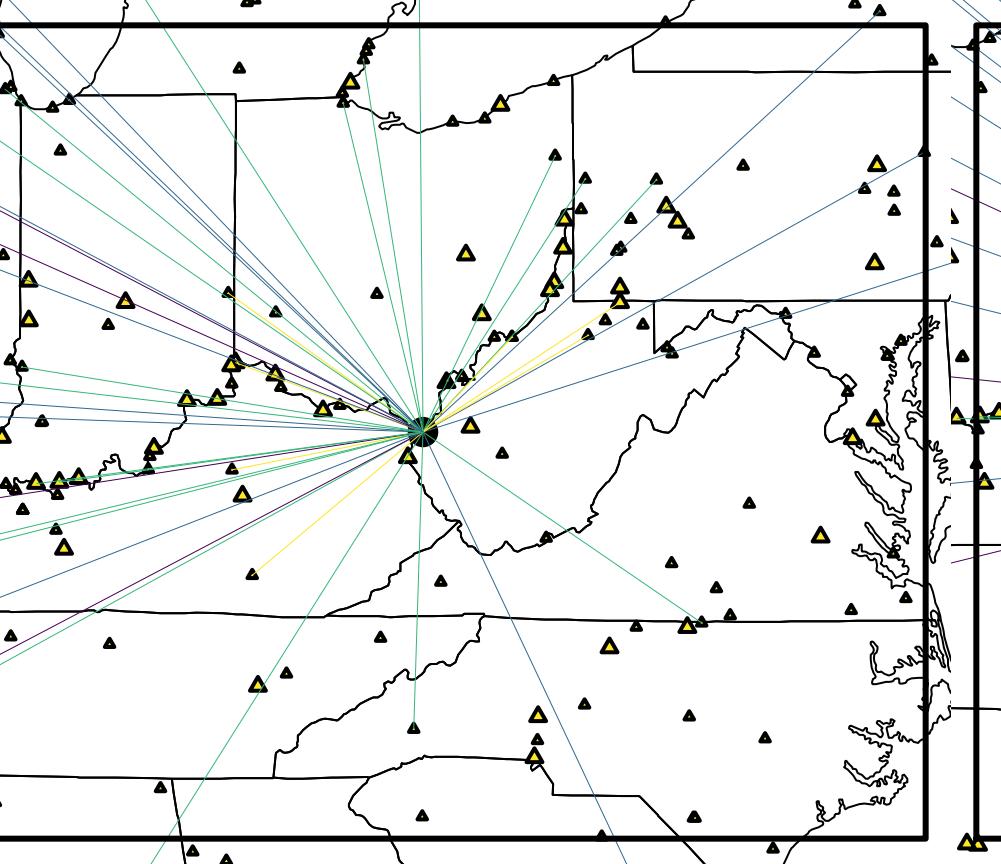
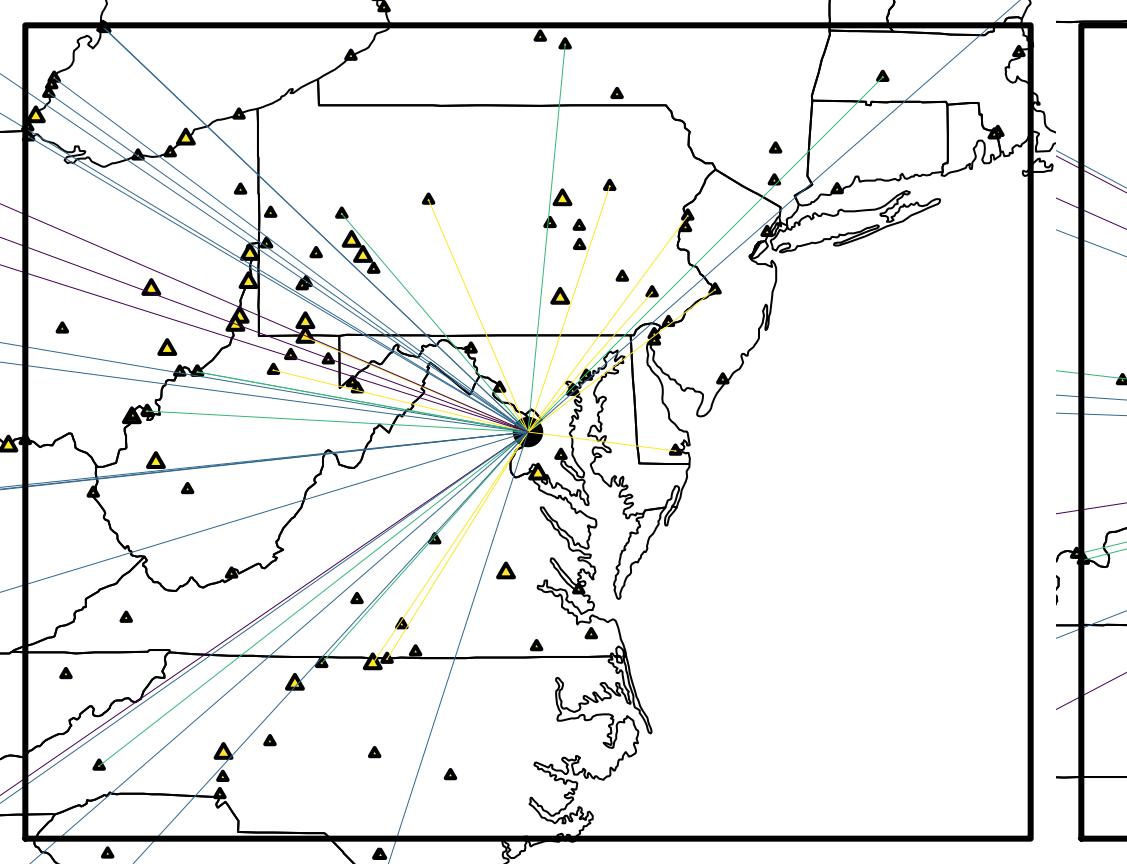
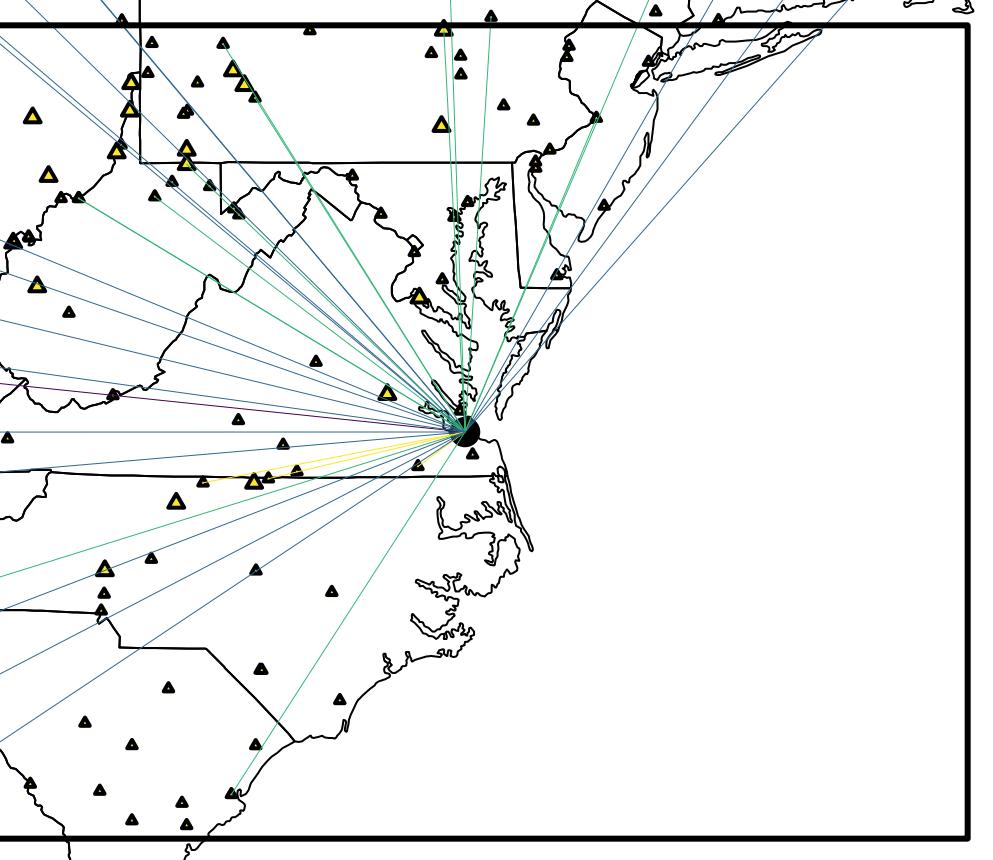
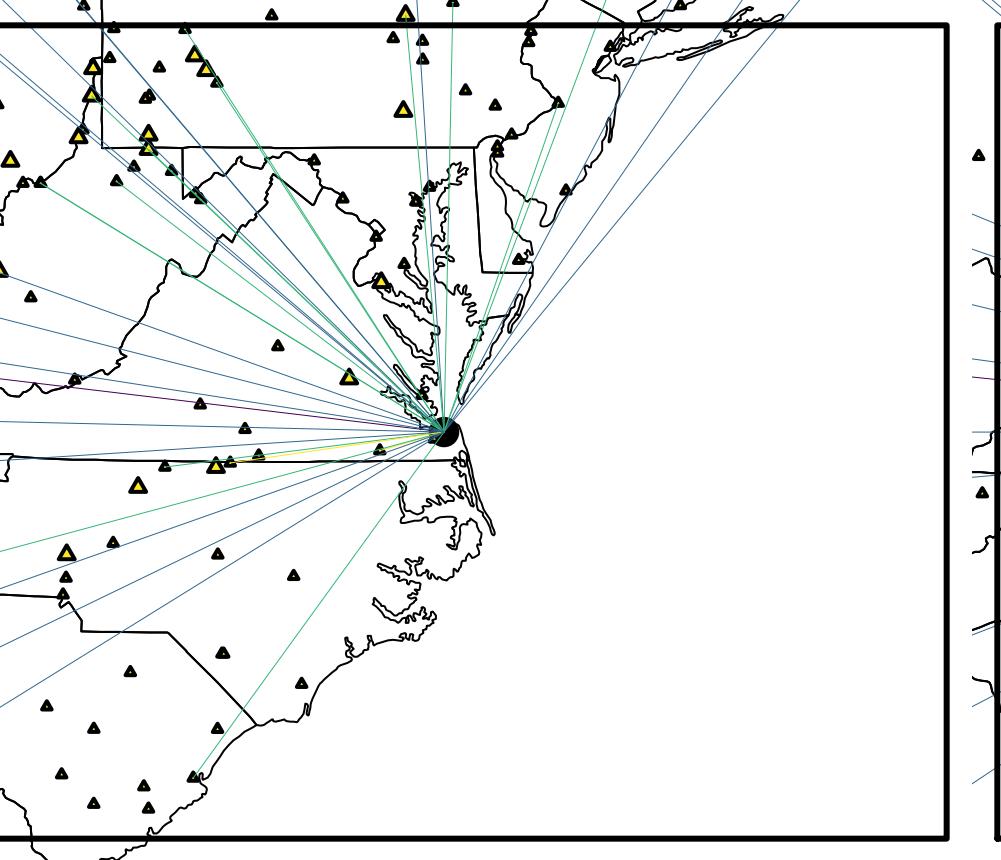
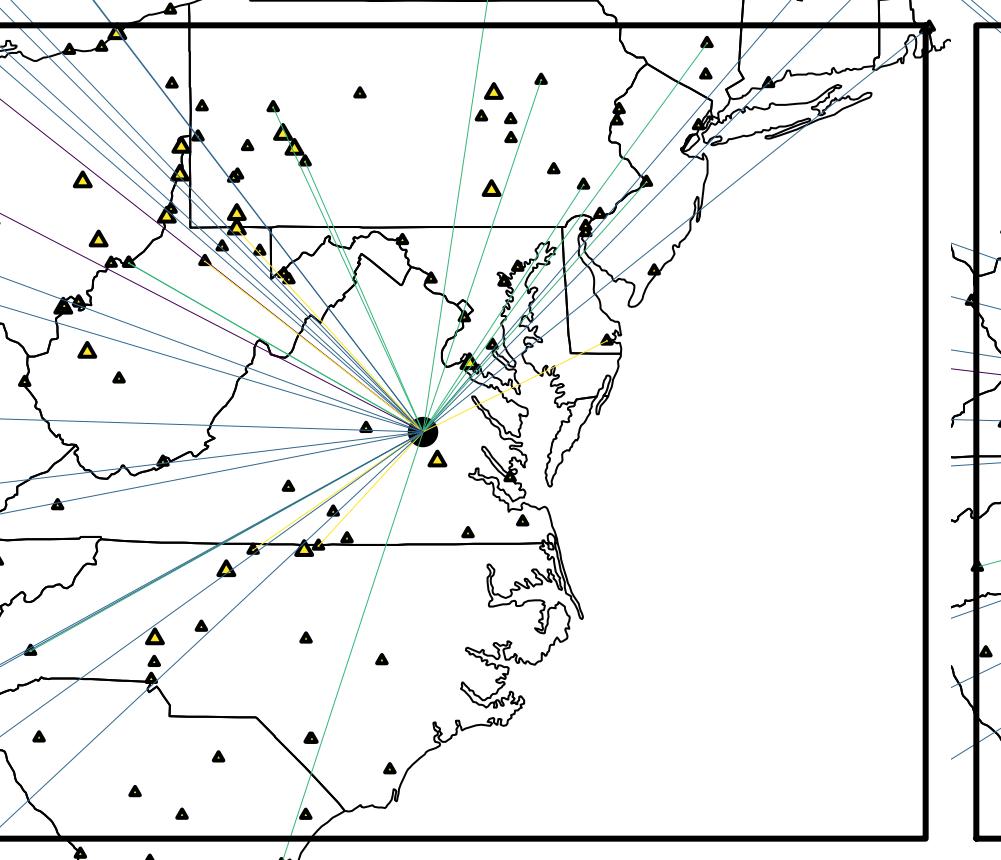
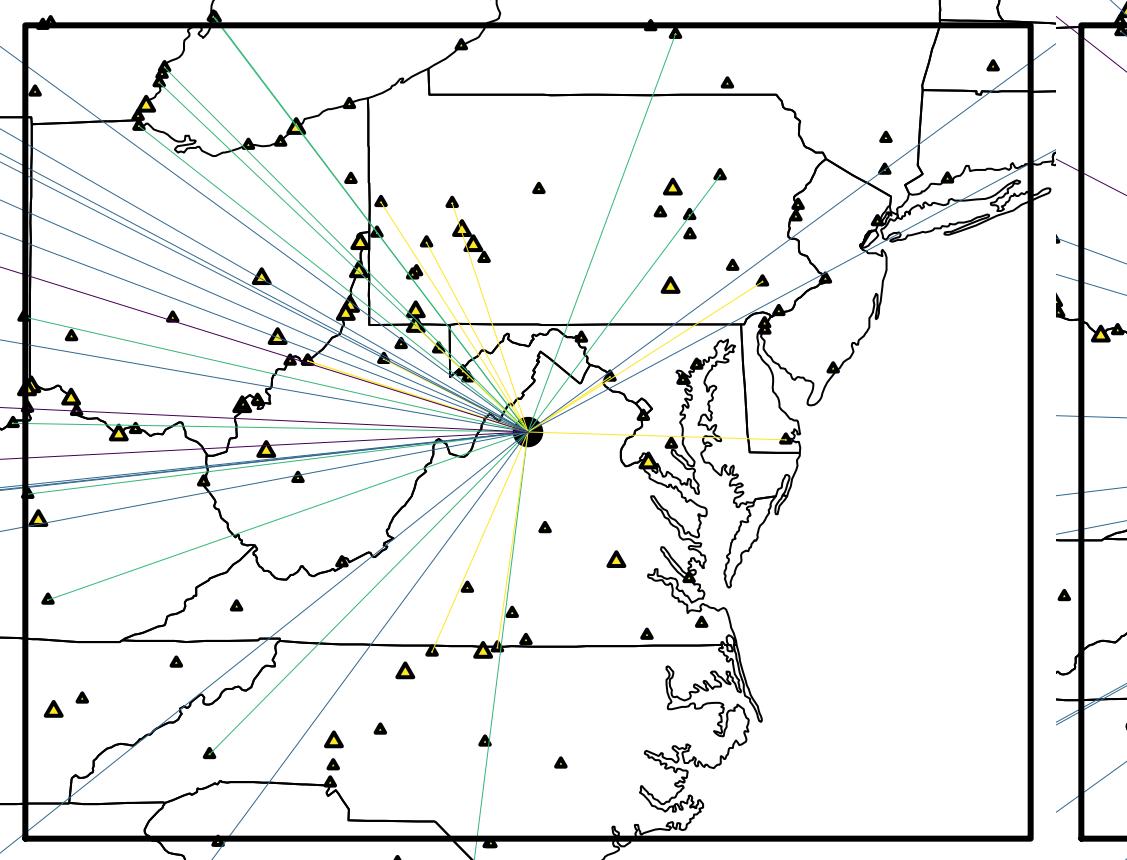


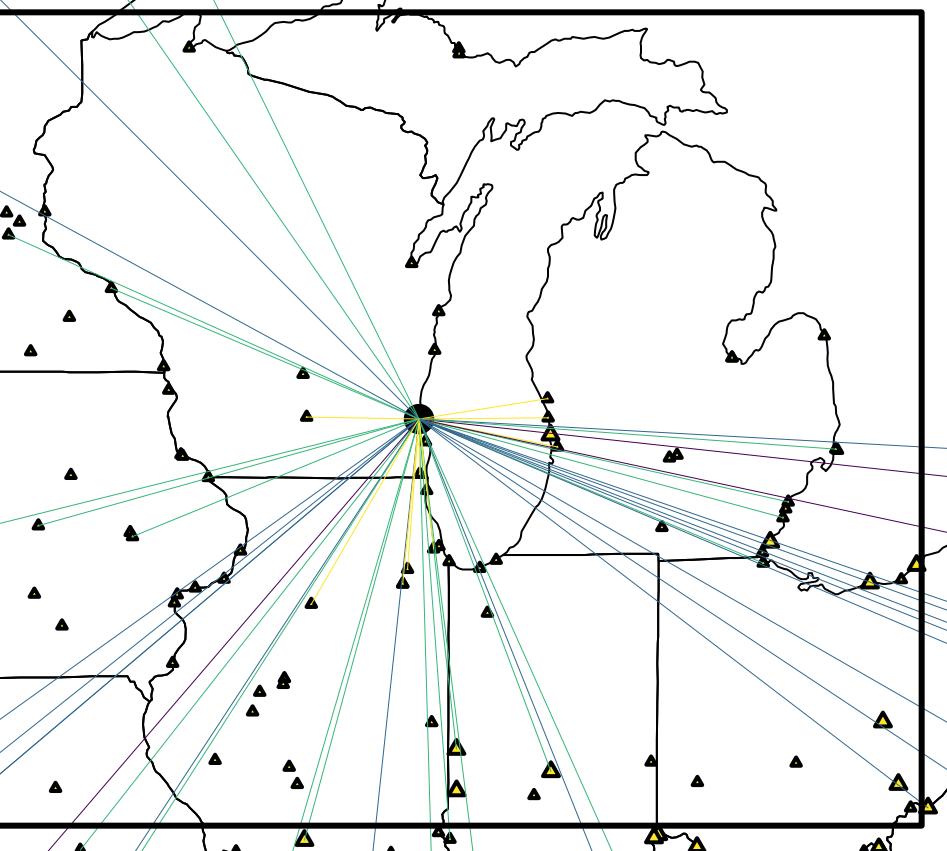
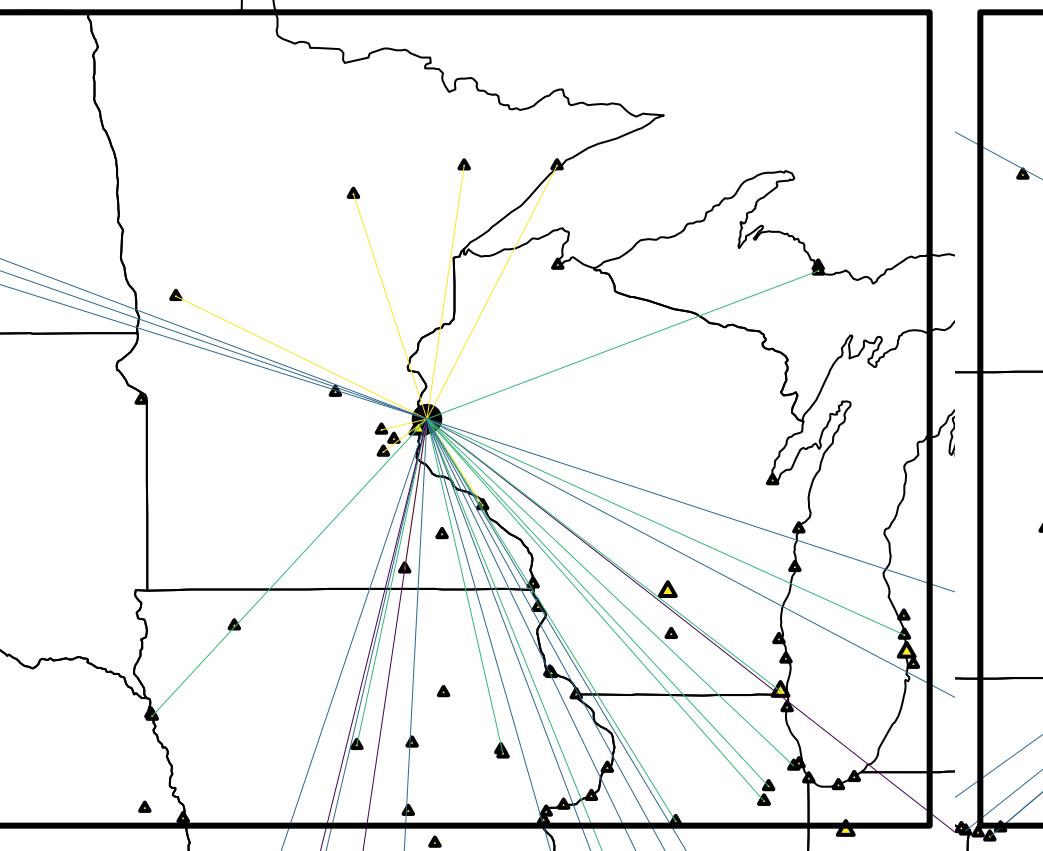
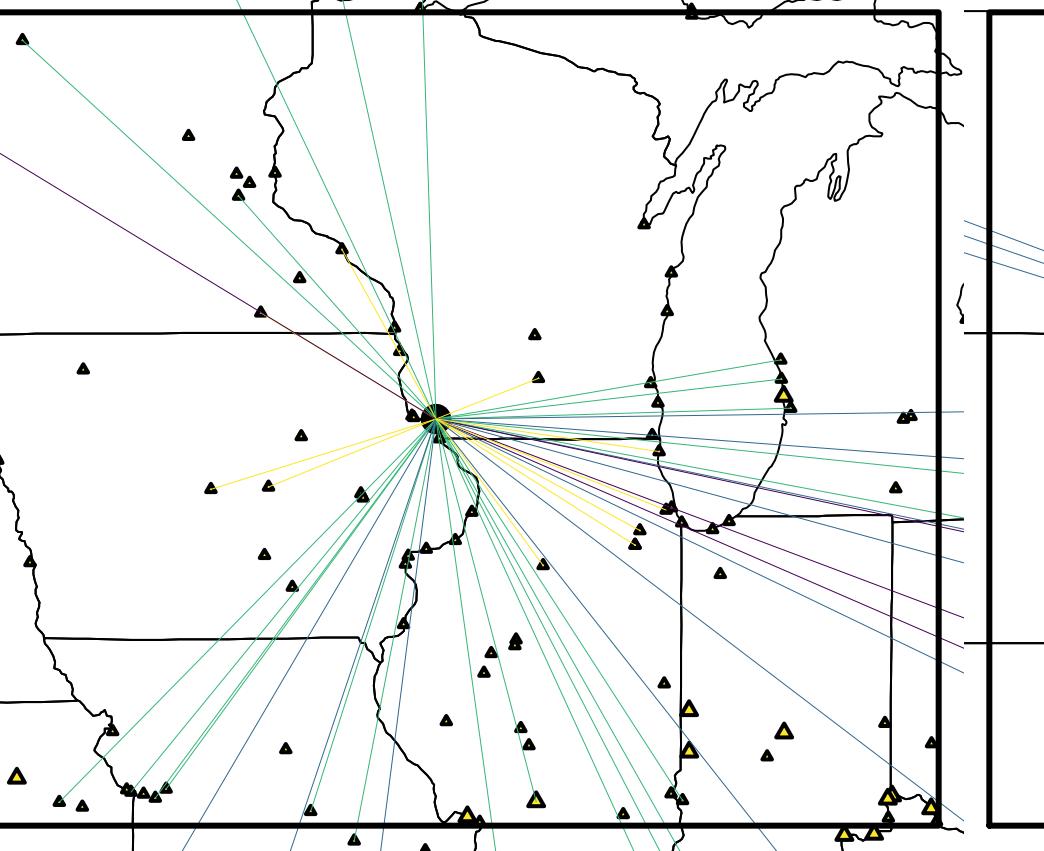
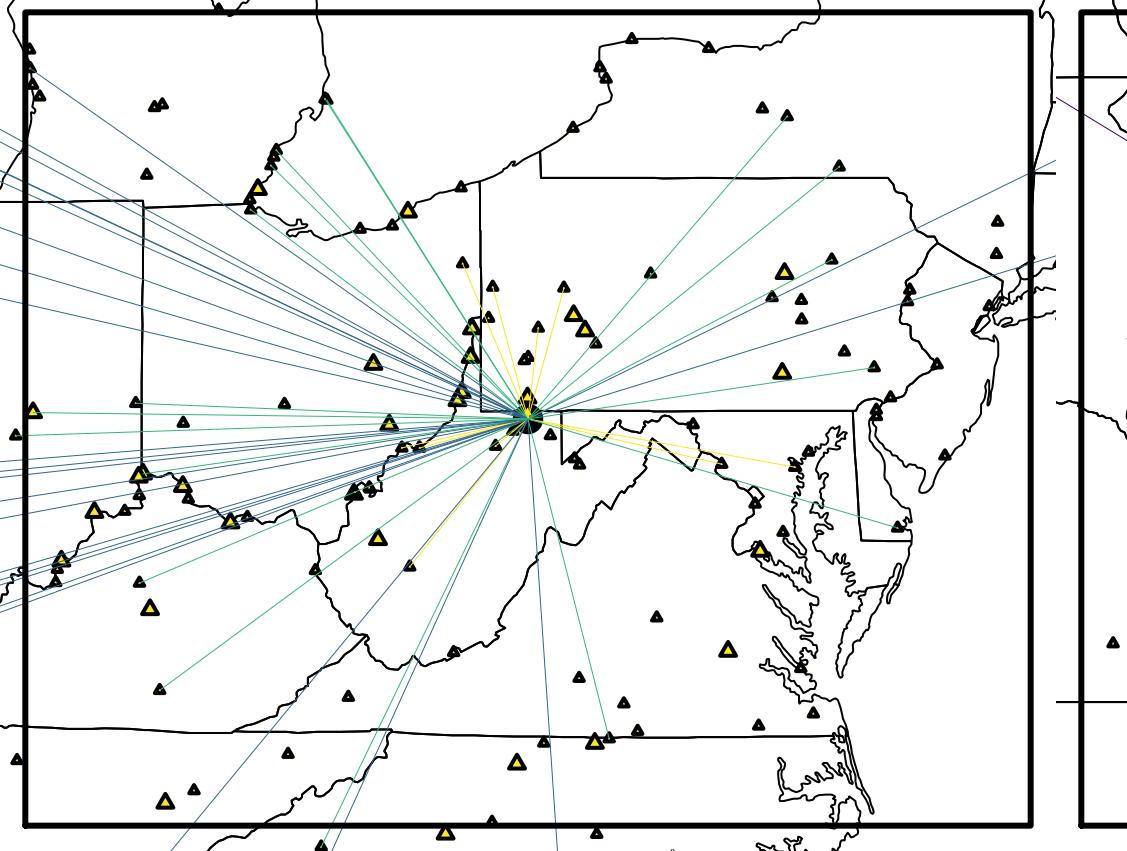
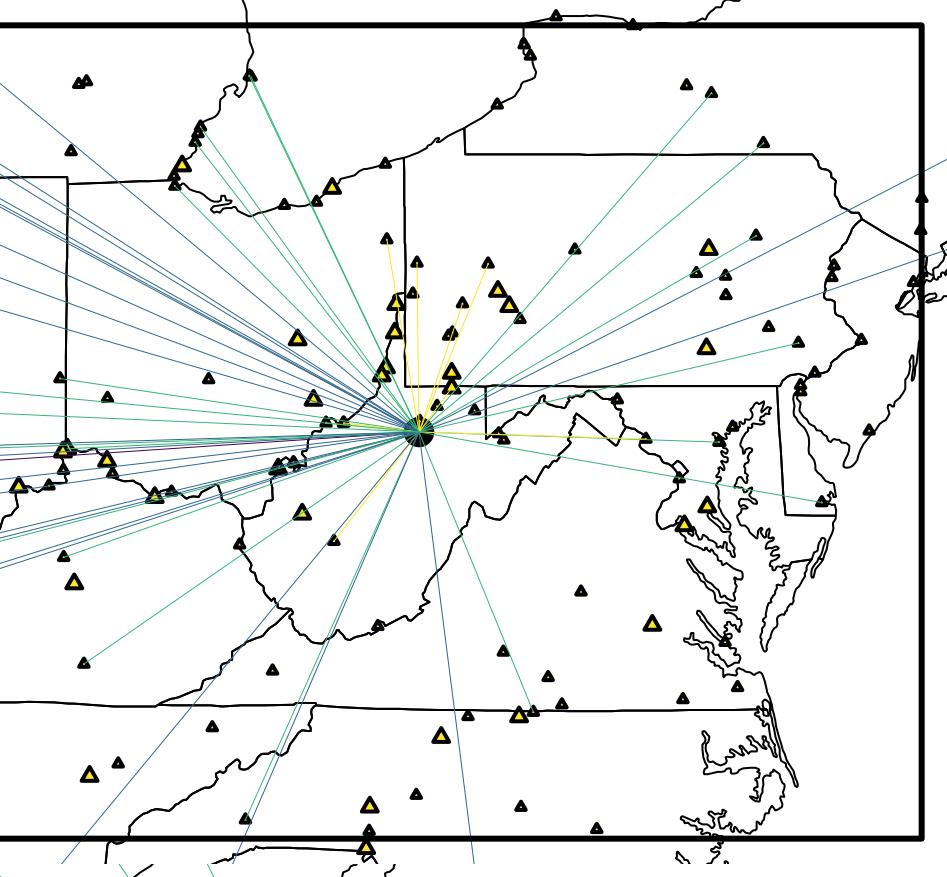
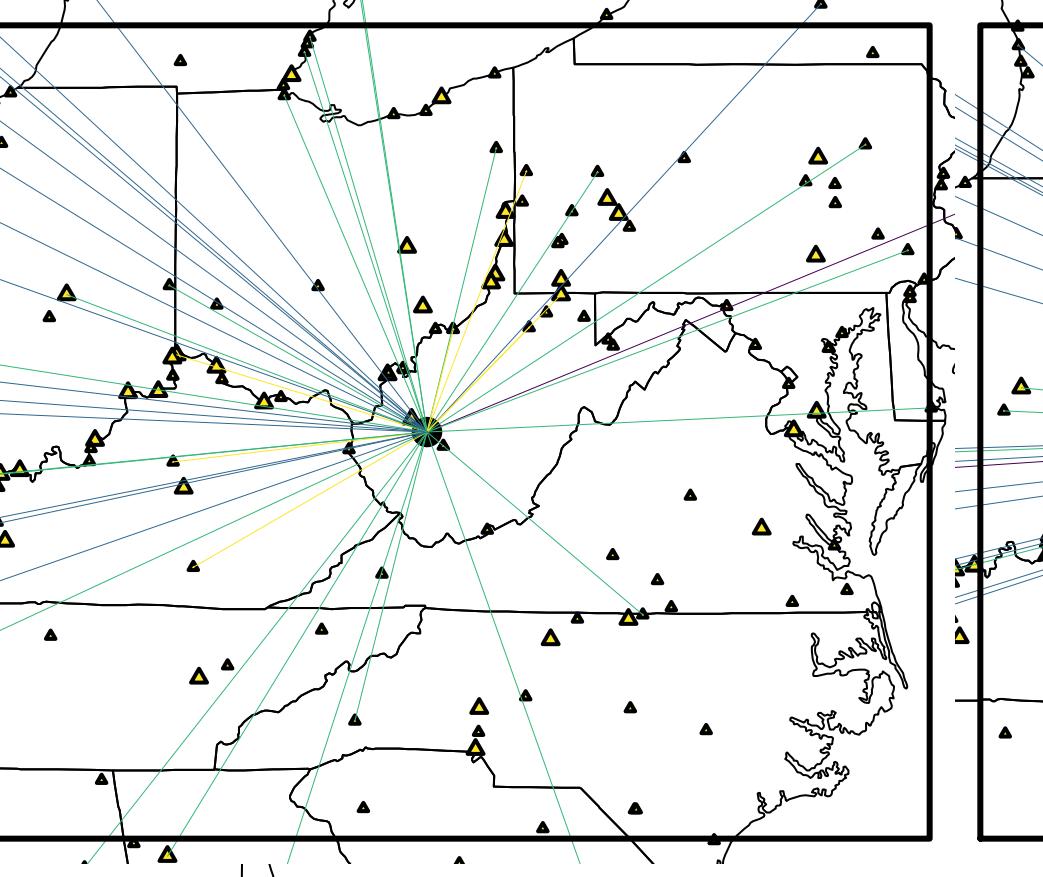
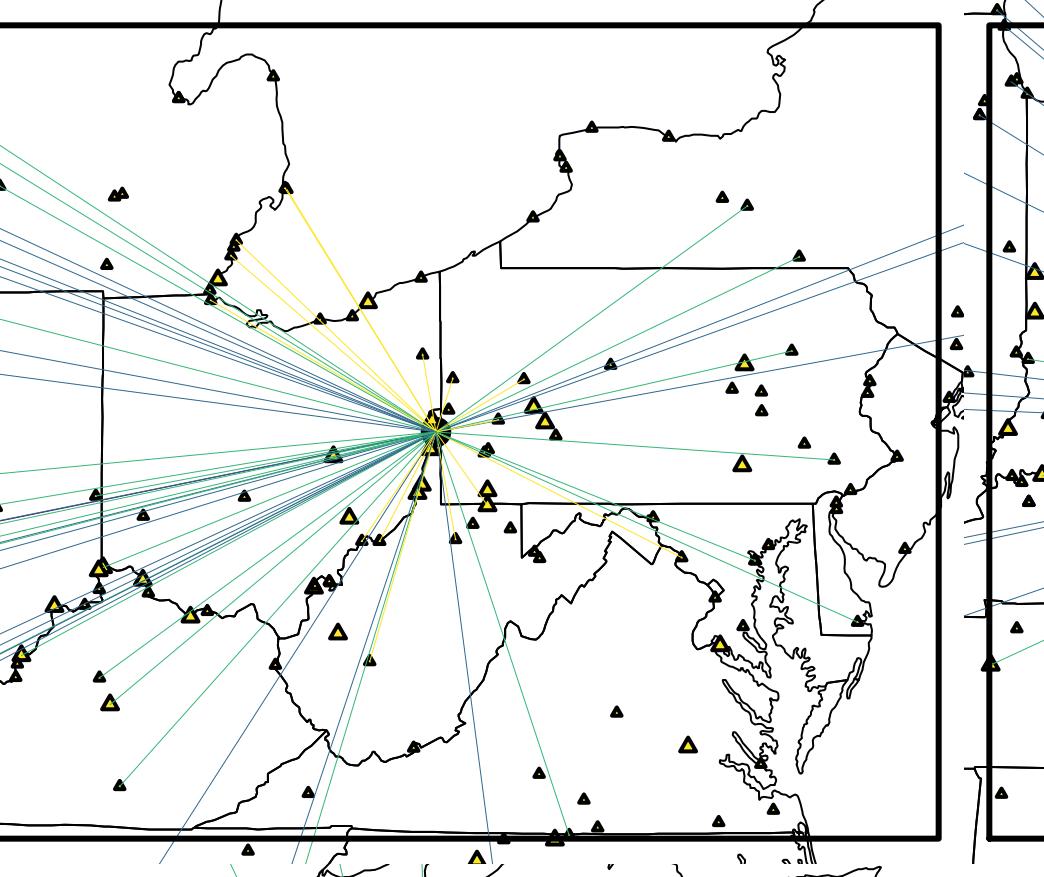
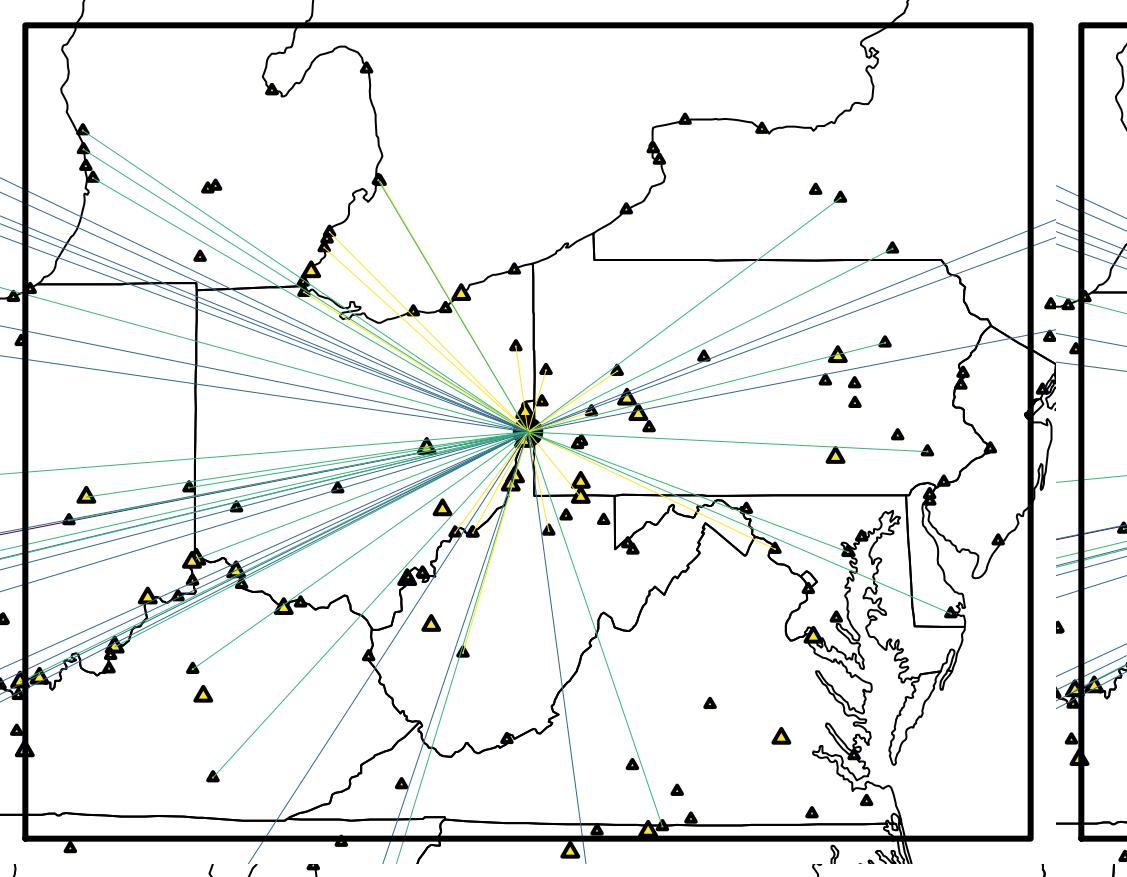


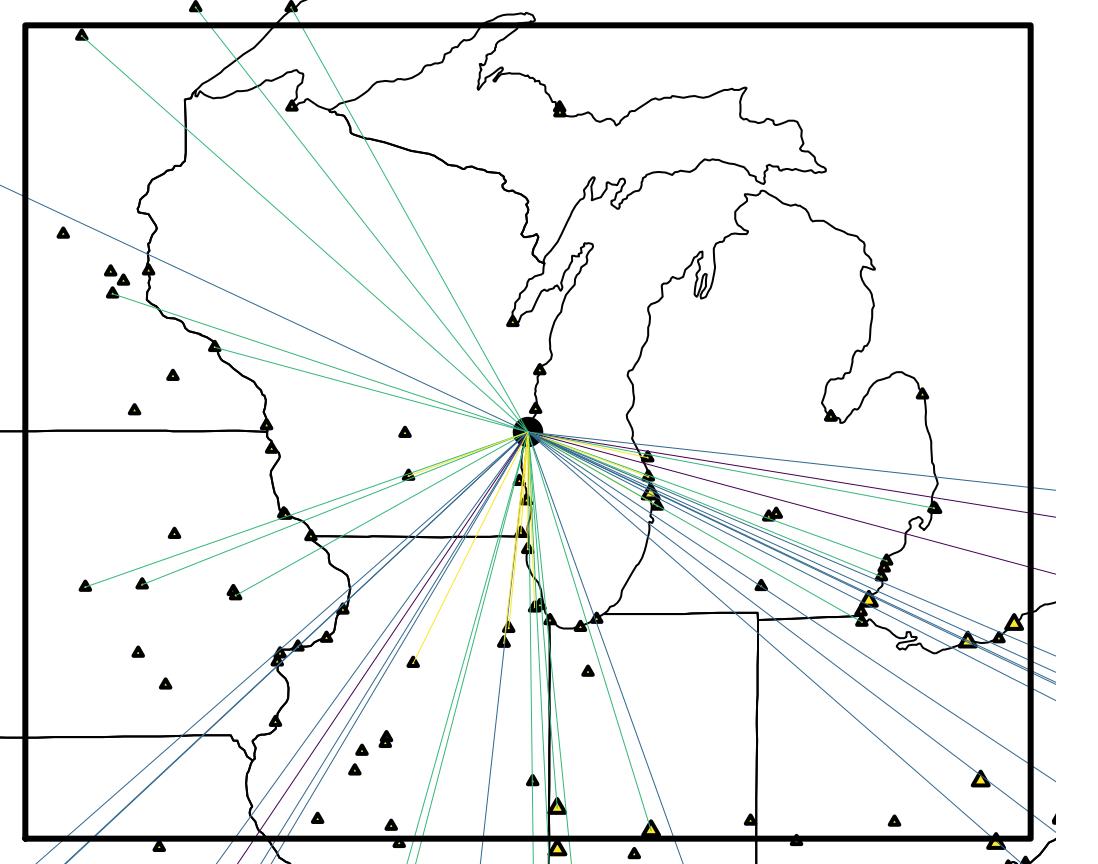
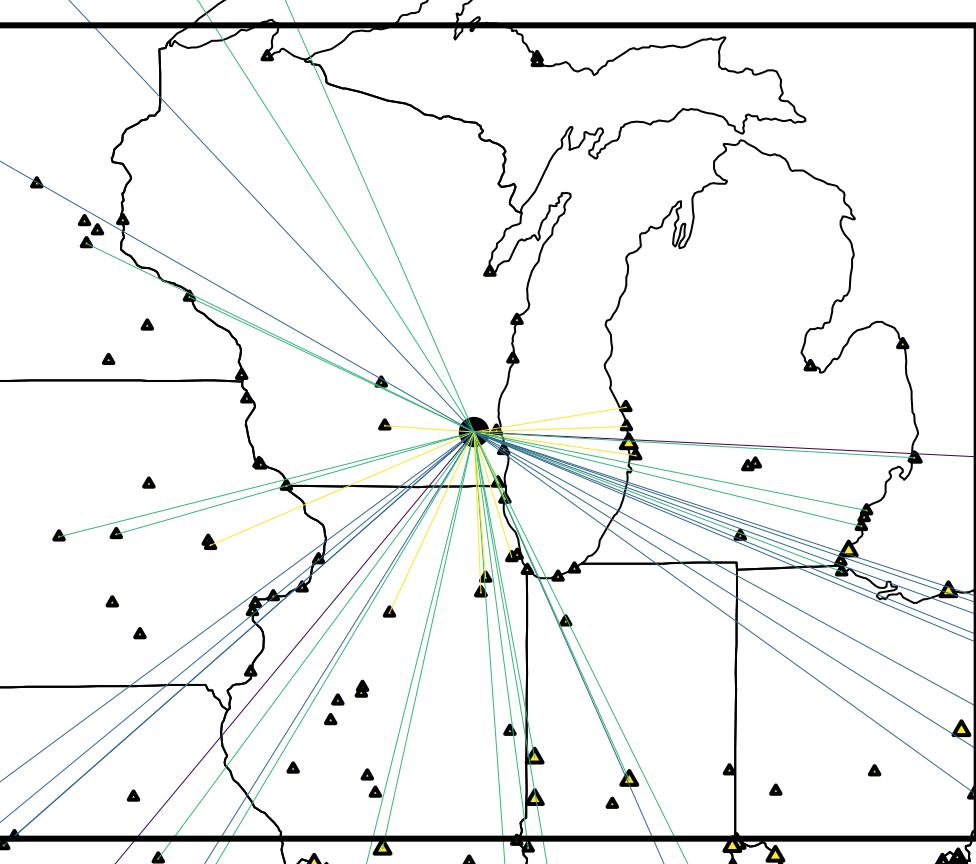
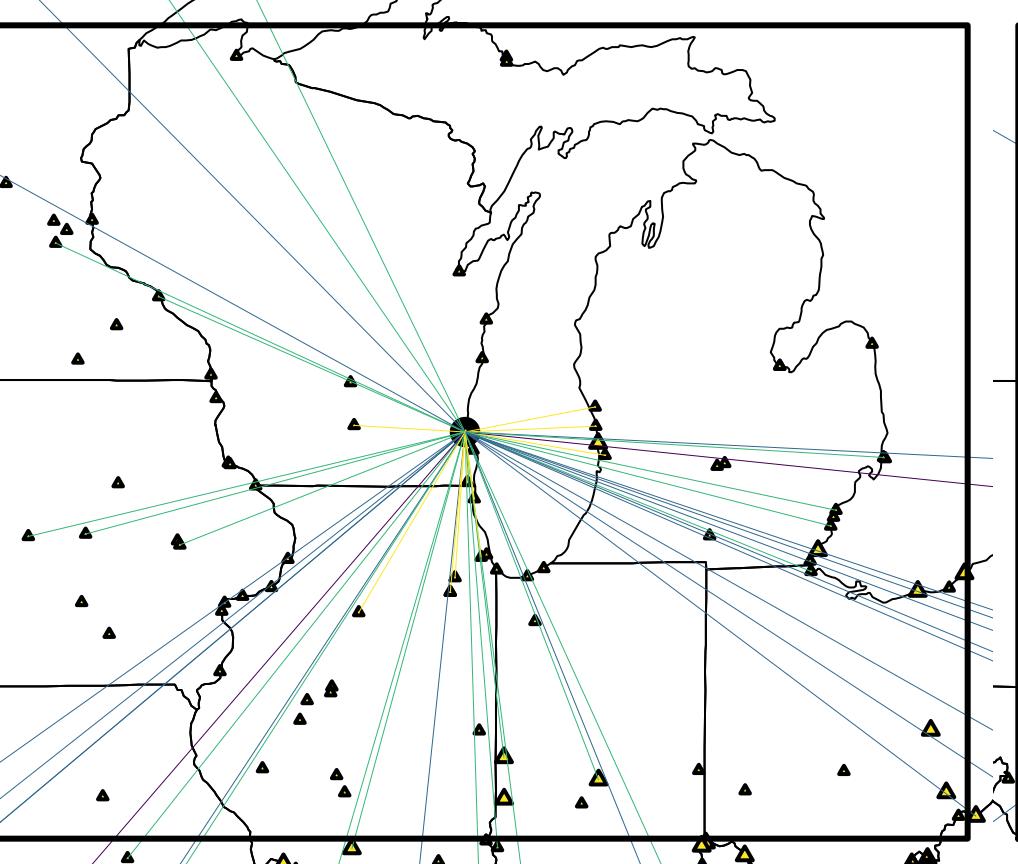
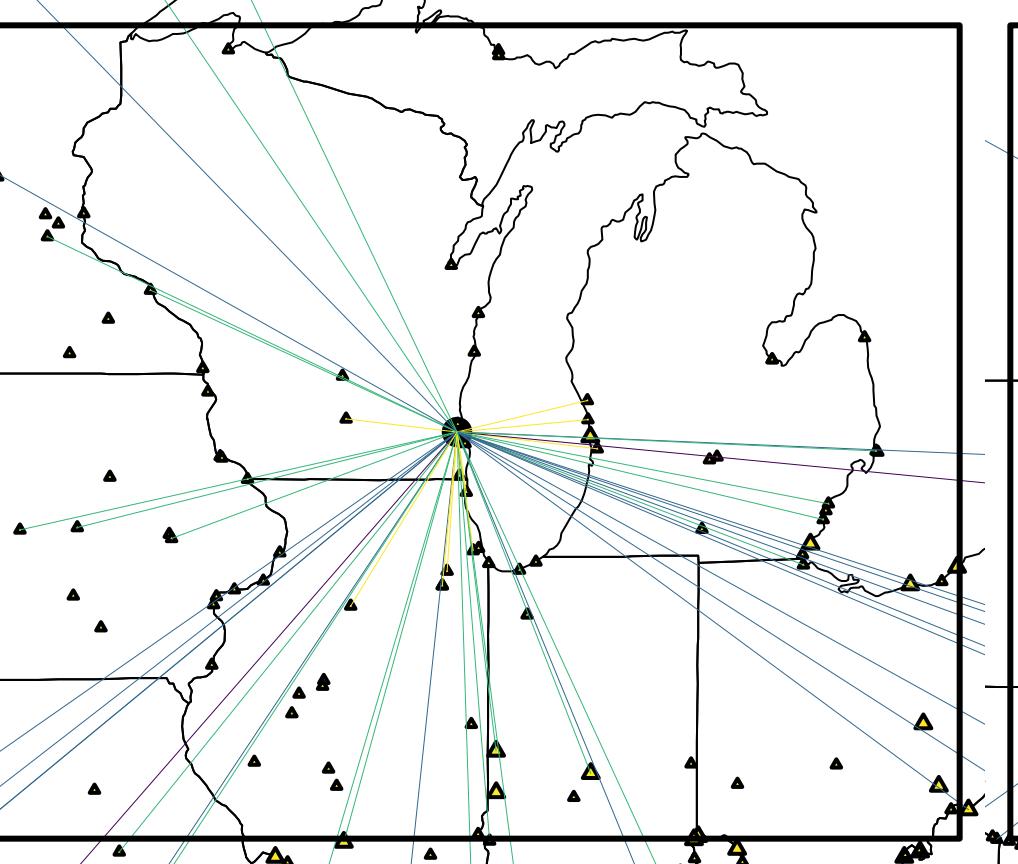
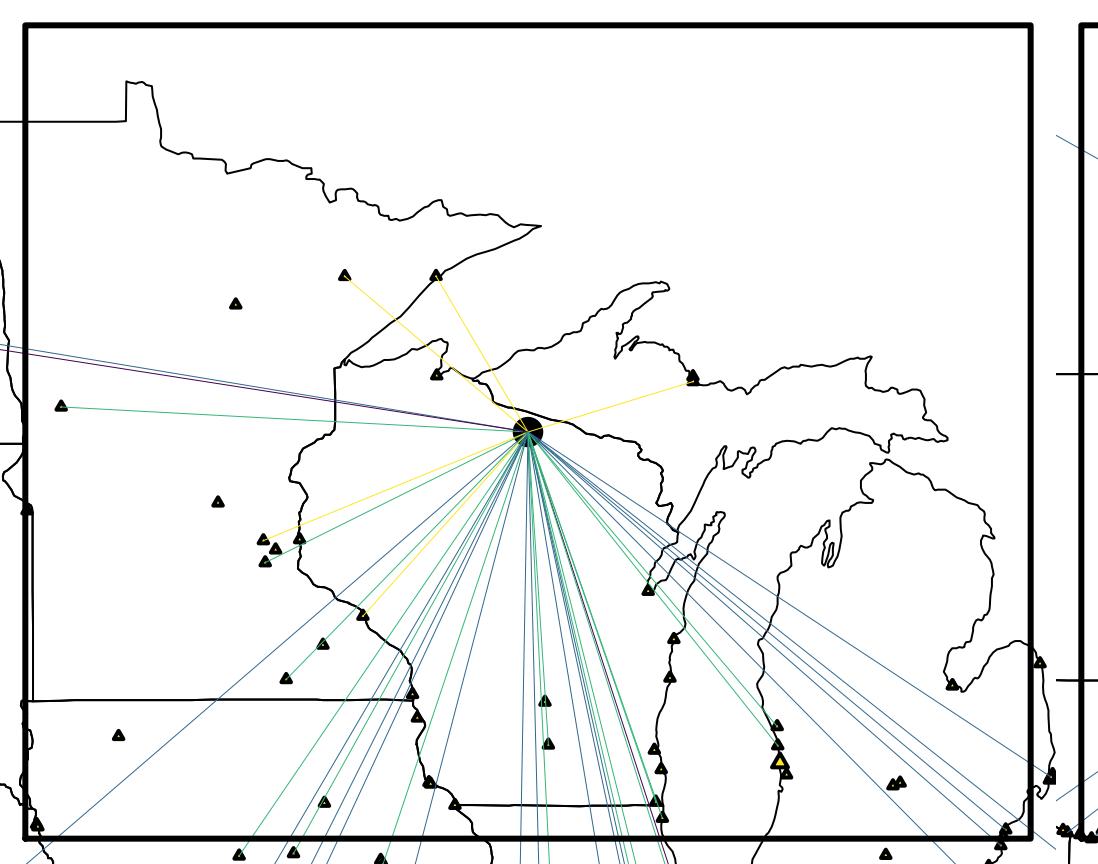




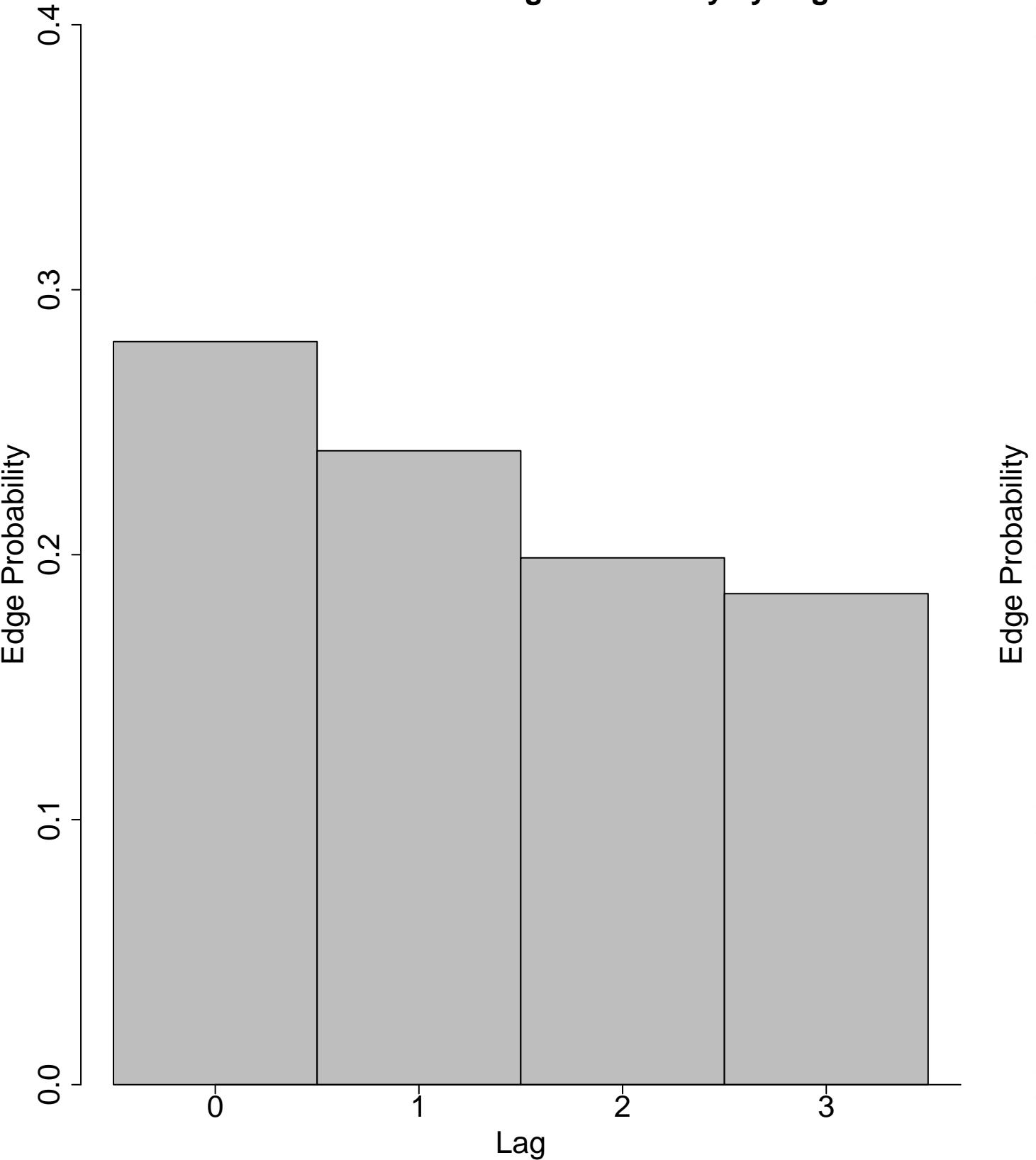




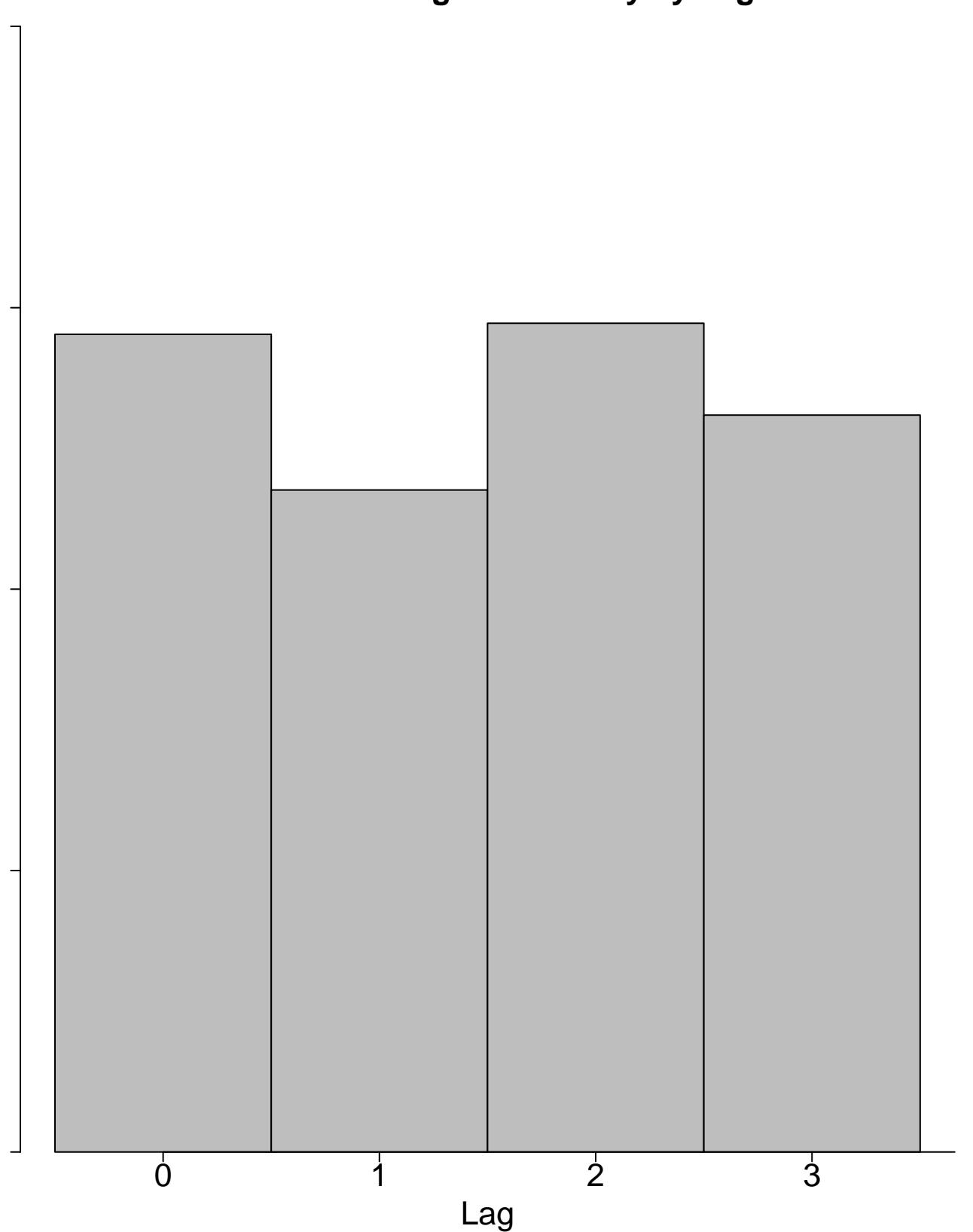




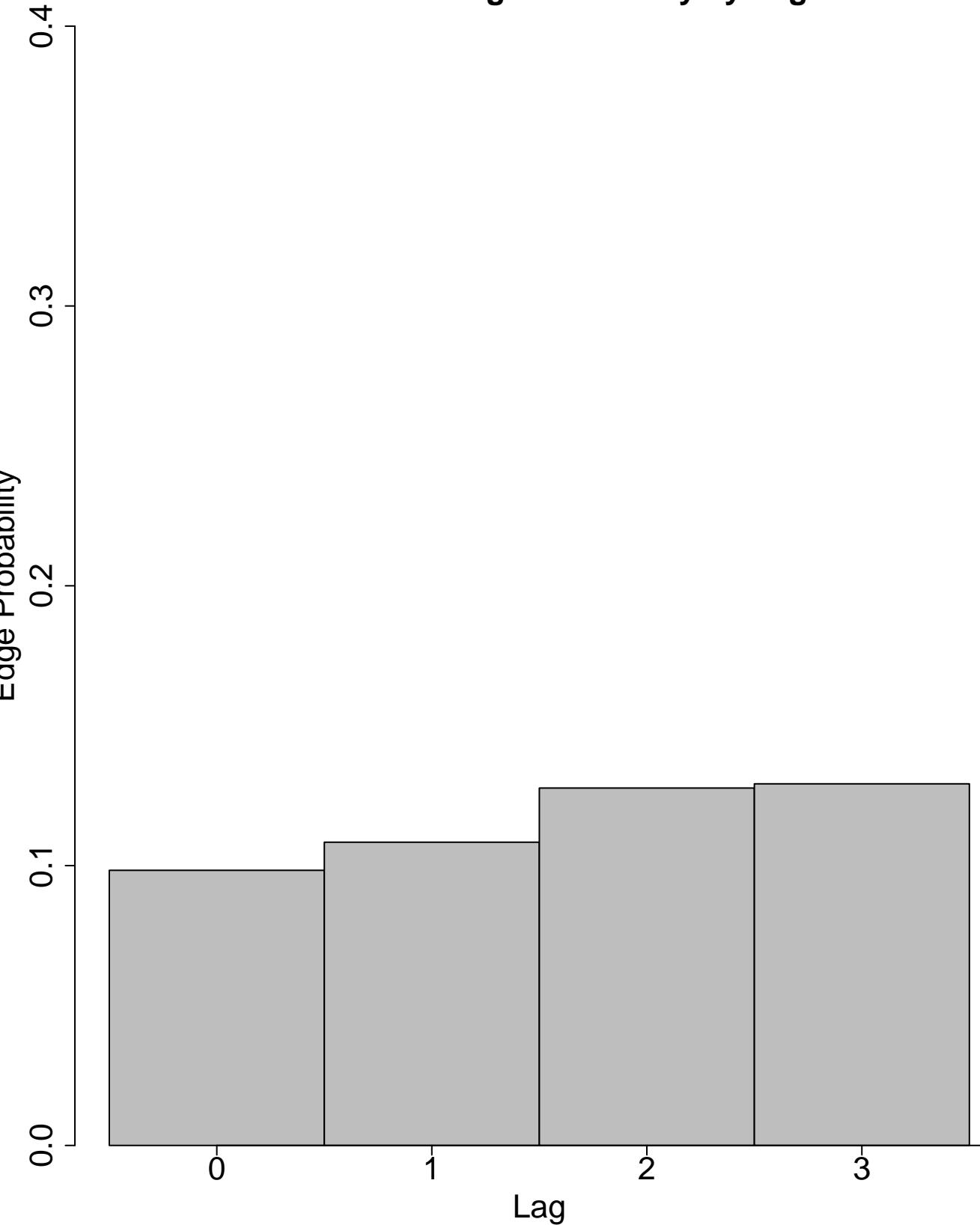
IndustrialMidwest: Edge Probability by Lag



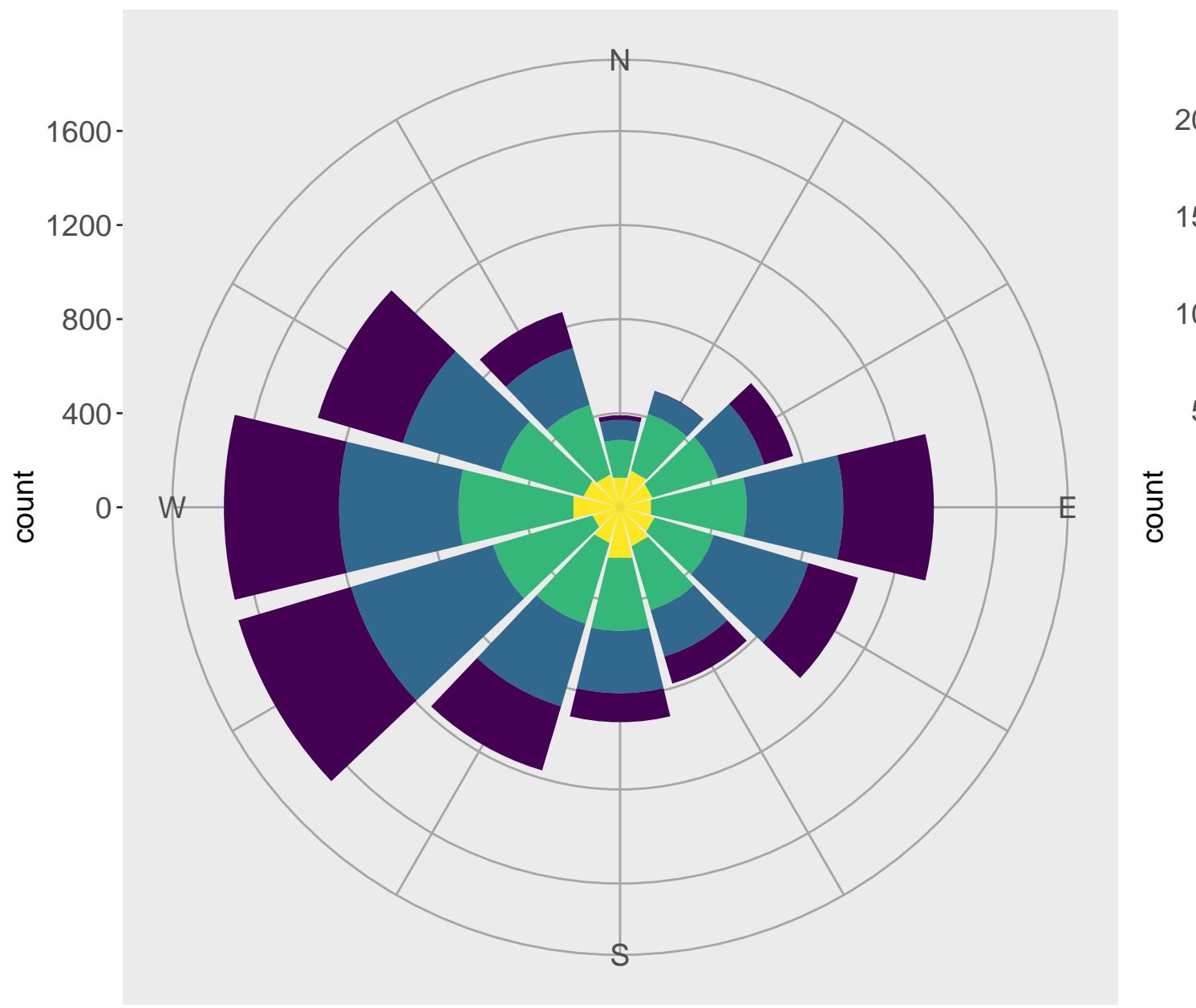
Northeast: Edge Probability by Lag



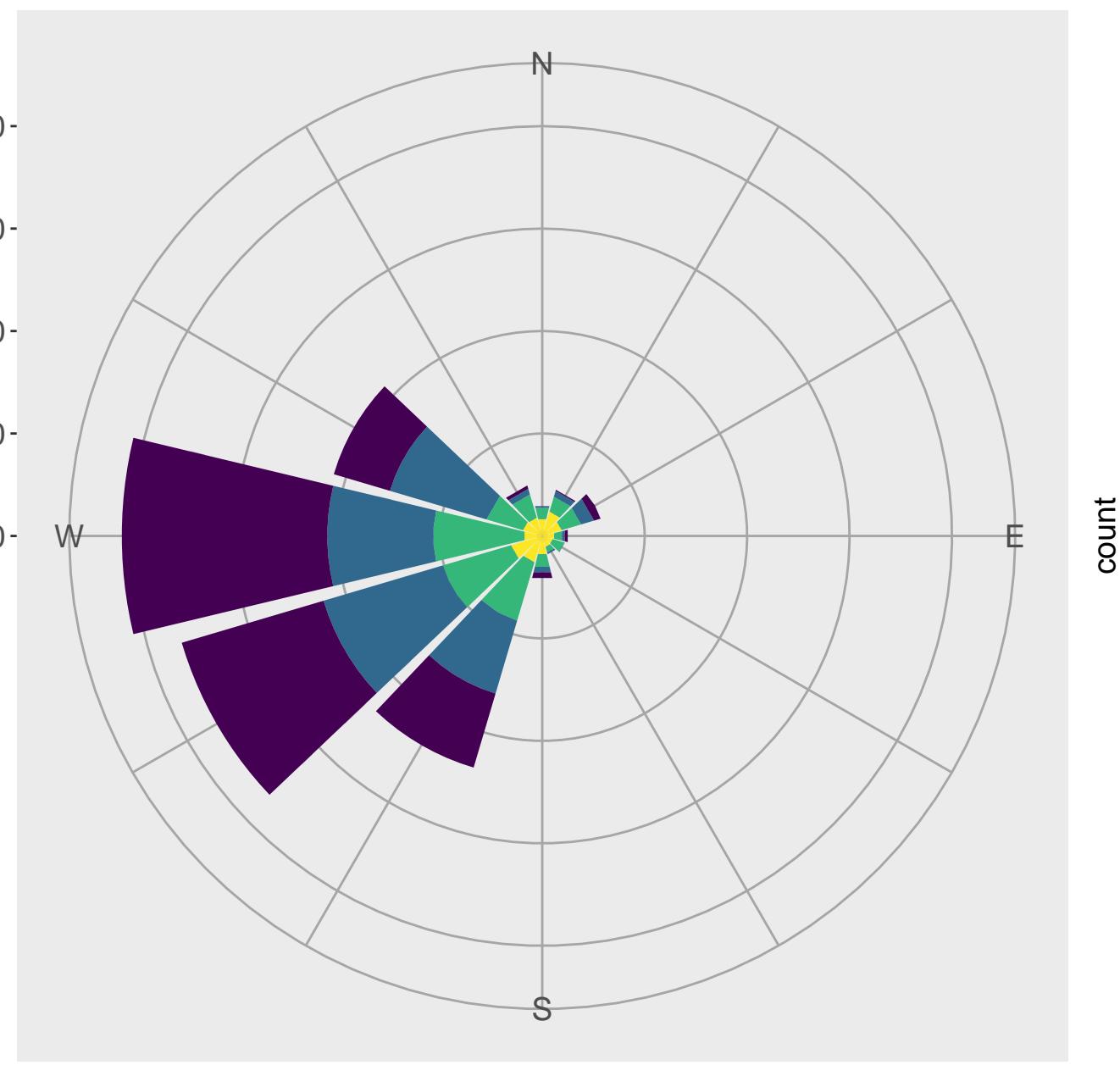
Southeast: Edge Probability by Lag



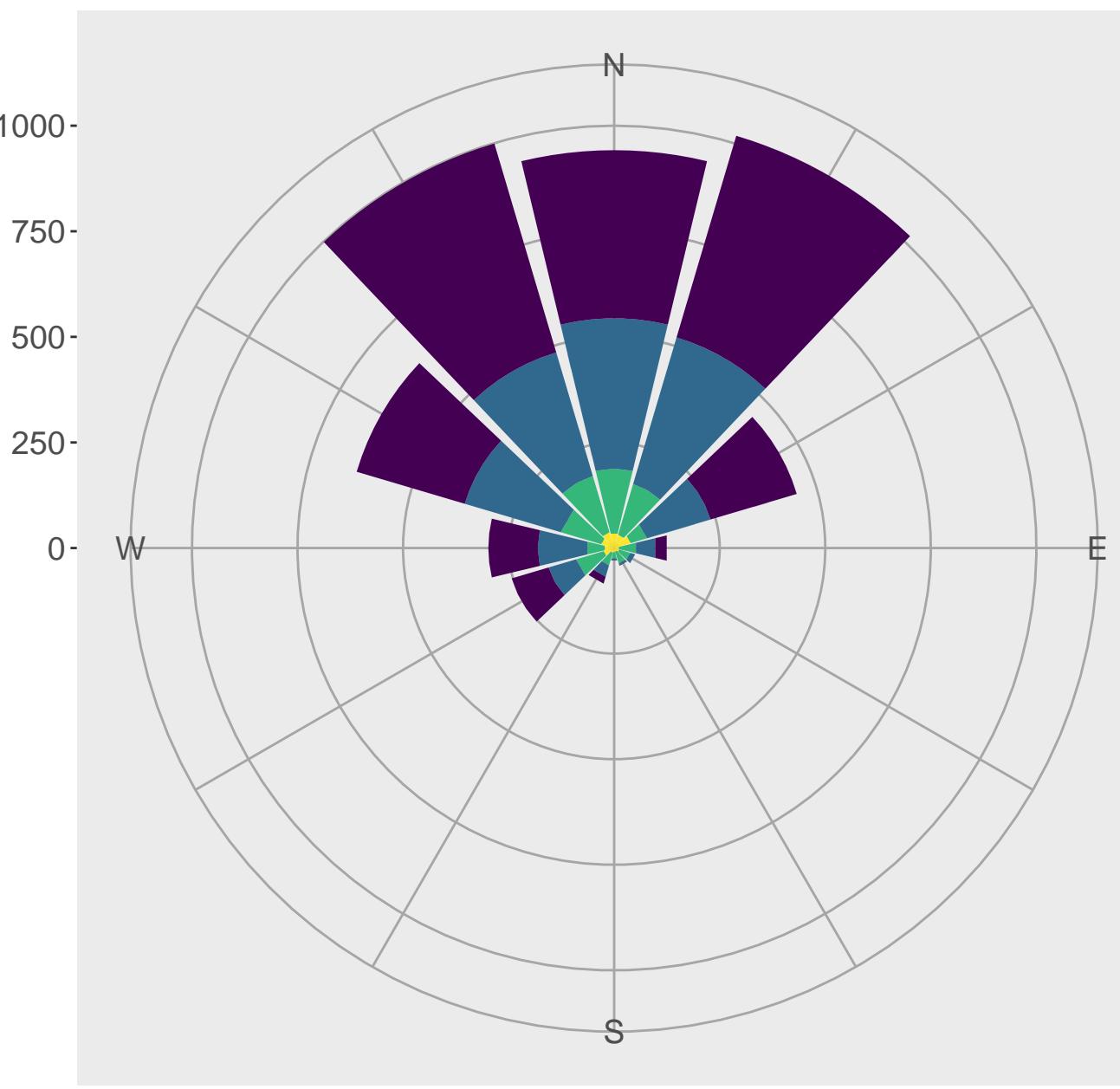
Edge counts by distance/direction to source
Industrial Midwest receptors



Edge counts by distance/direction to source
Northeast receptors



Edge counts by distance/direction to source
Southeast receptors

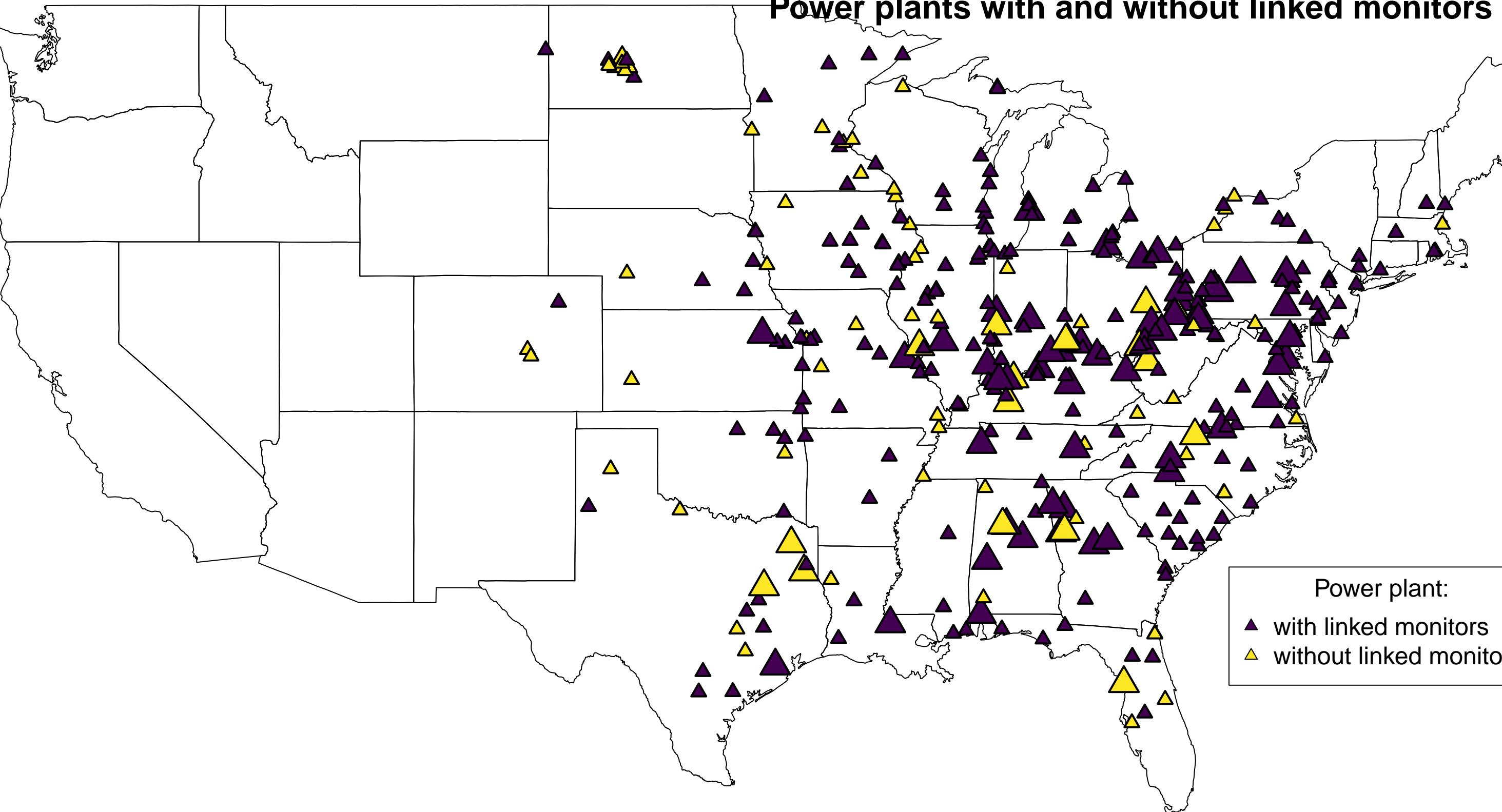


Distance to Source (km) 750–1000 500–750 250–500 0–250

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

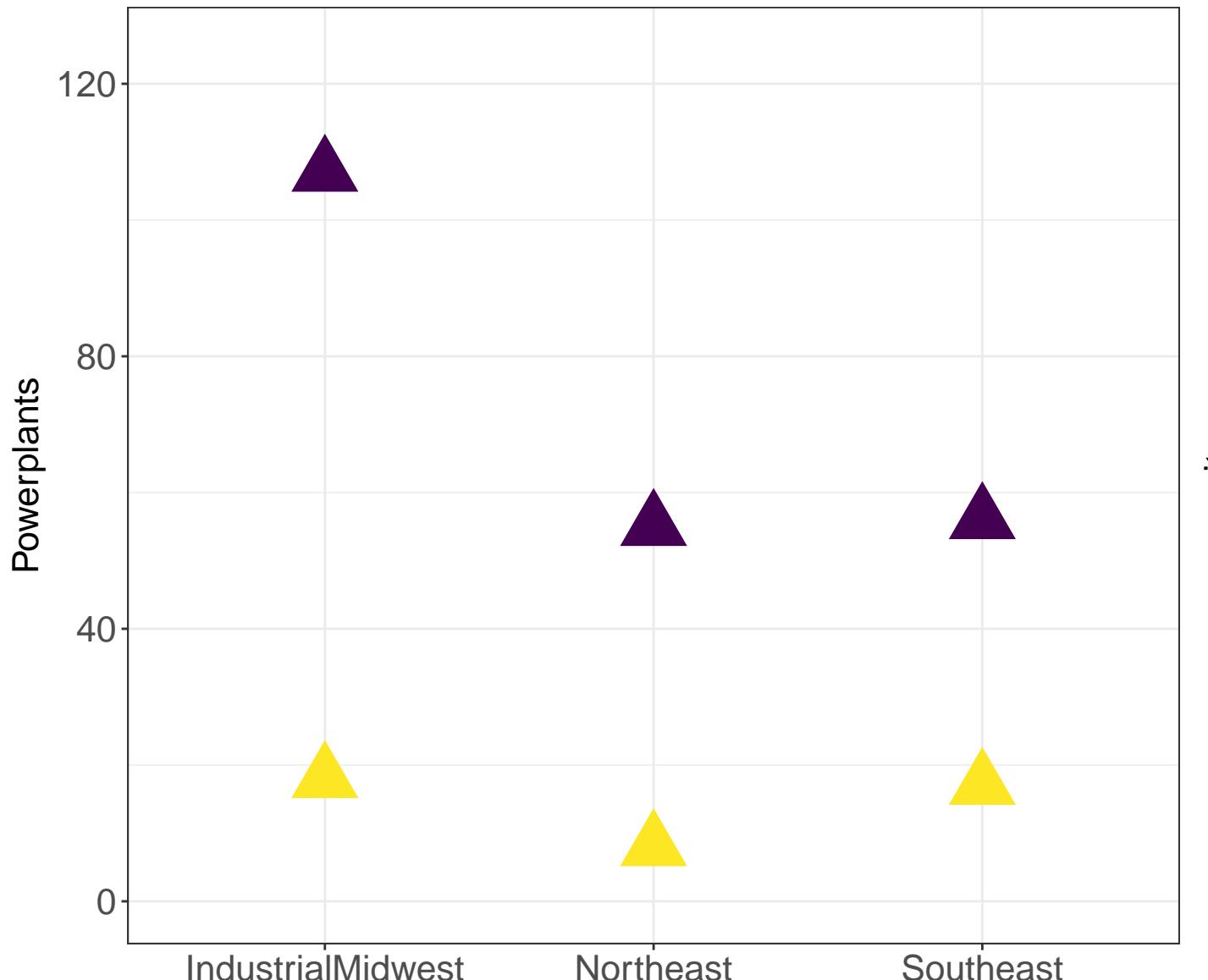
Distance to Source (km) 750–1000 500–750 250–500 0–250

Power plants with and without linked monitors

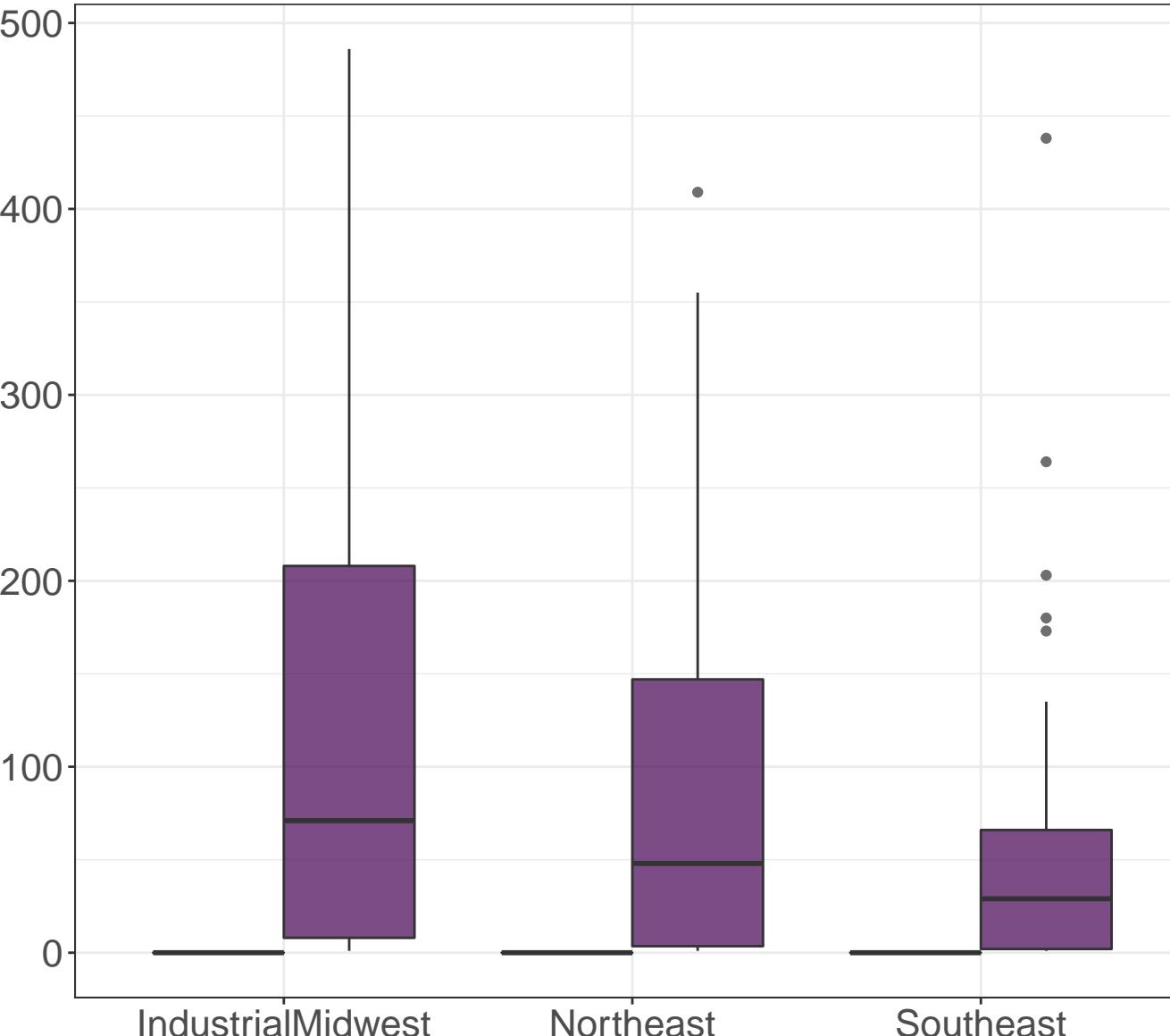


Why do some power plants have linked monitors and others do not?

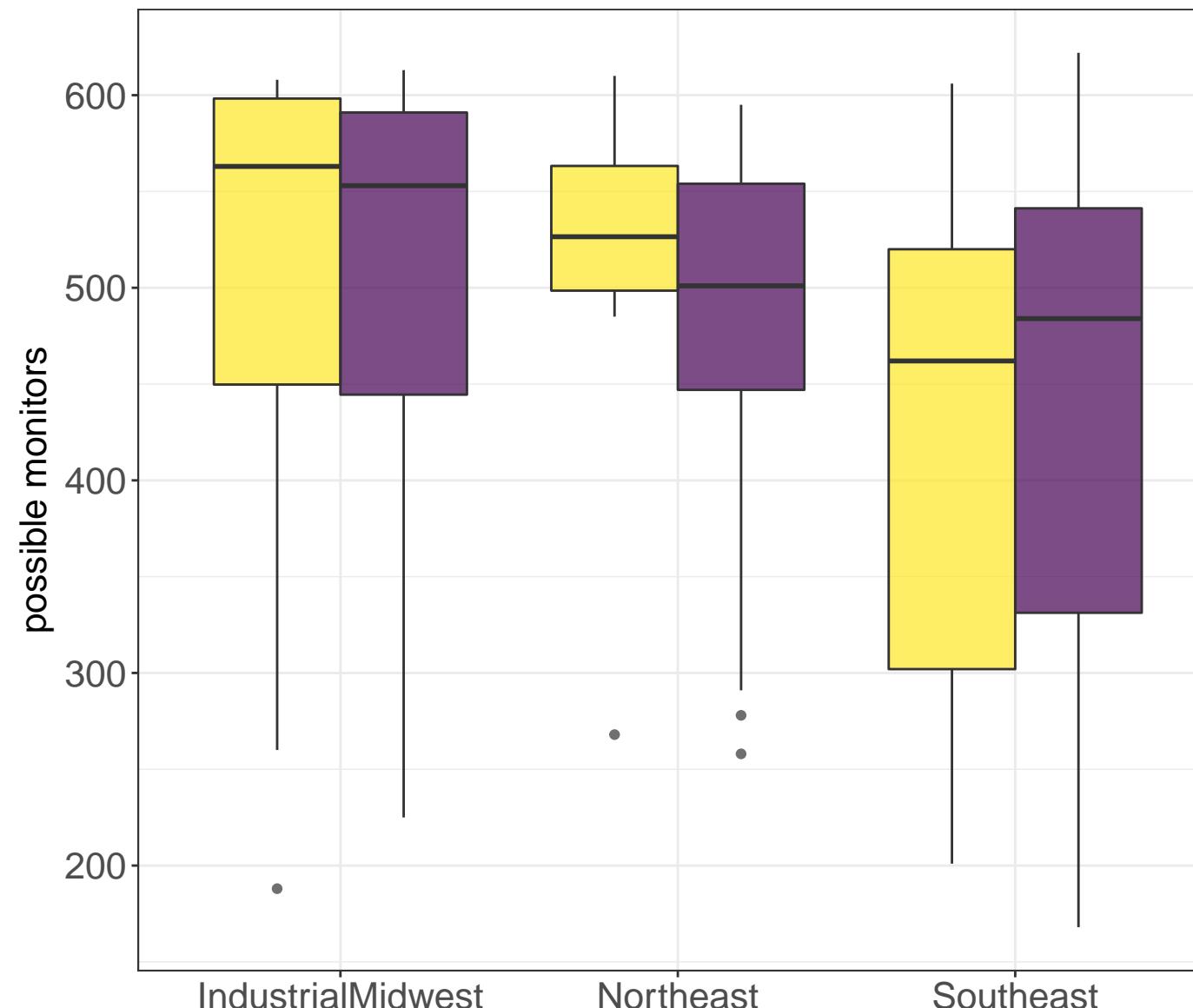
Number of powerplants



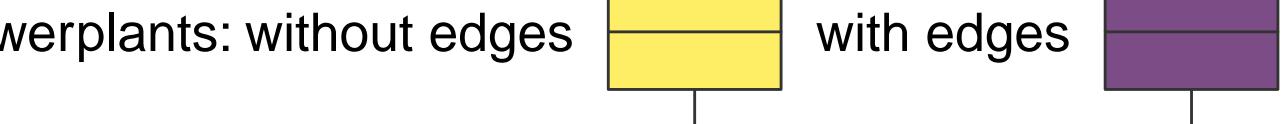
Number of linked monitors



Number of possible linked monitors

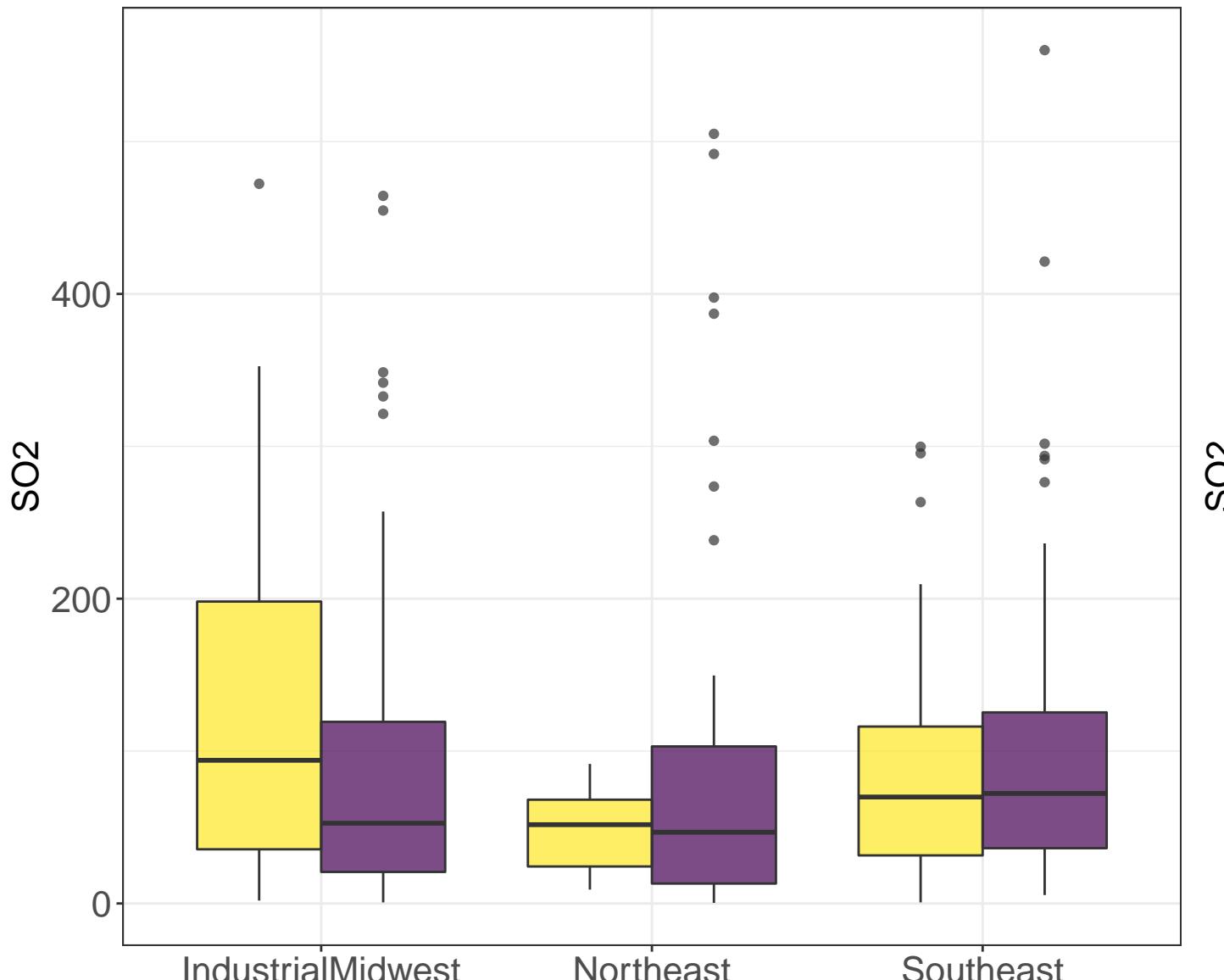


Powerplants: without edges

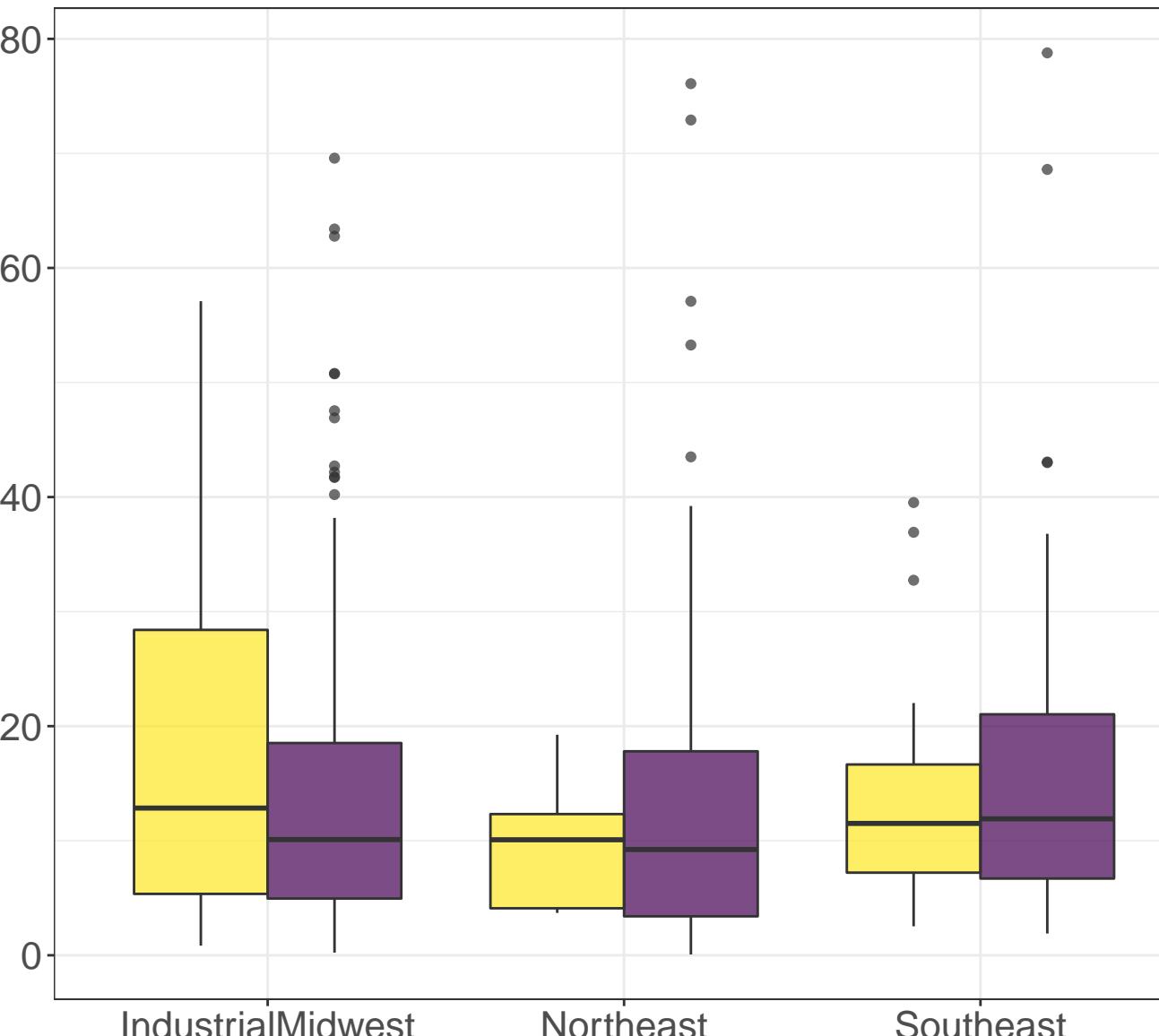


Why do some power plants have linked monitors and others do not?

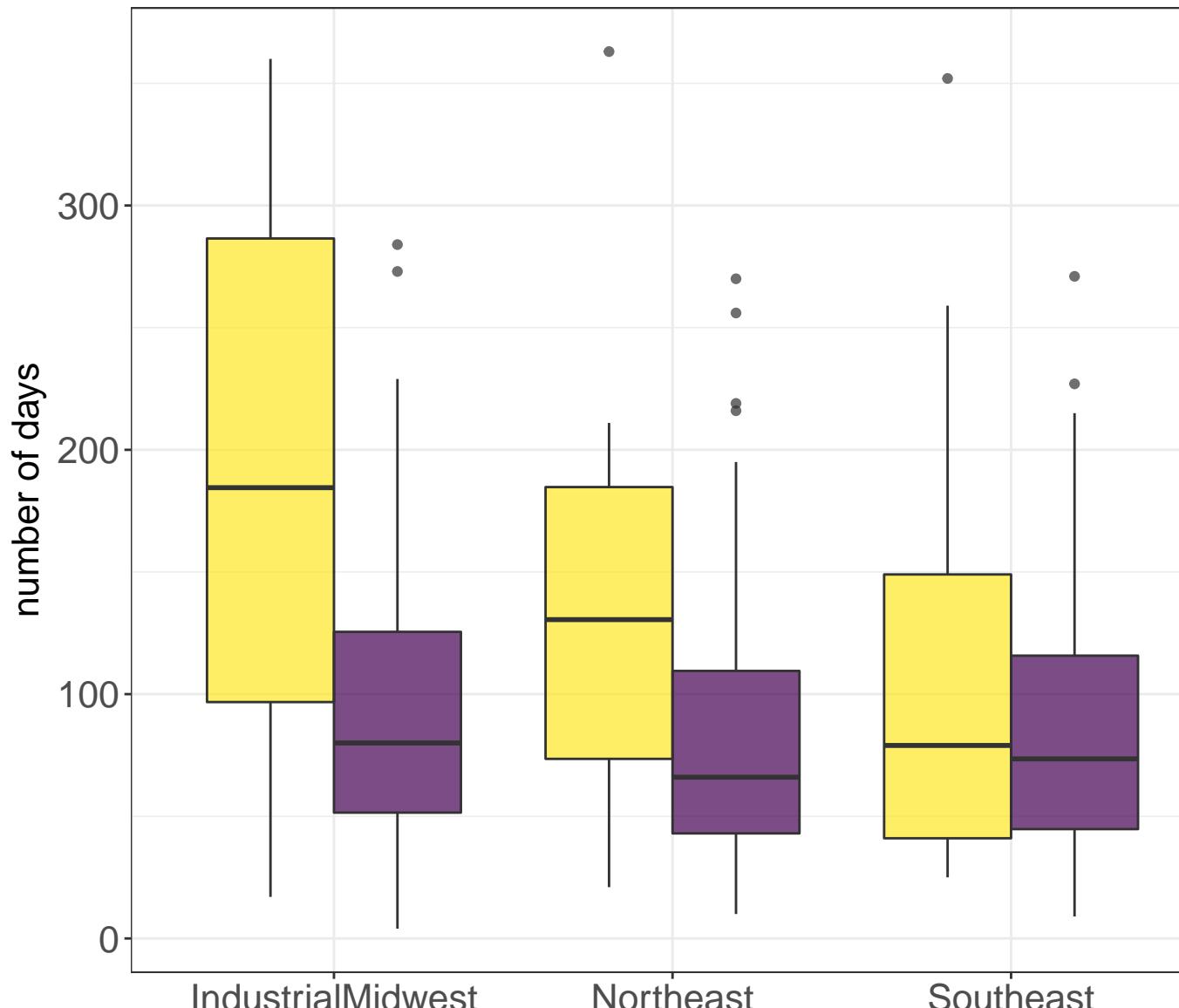
Average daily emissions



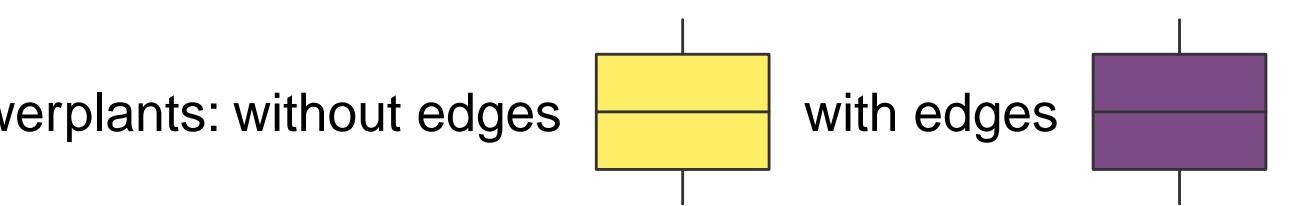
Standard deviation in daily emissions



Number of days with missing emissions data



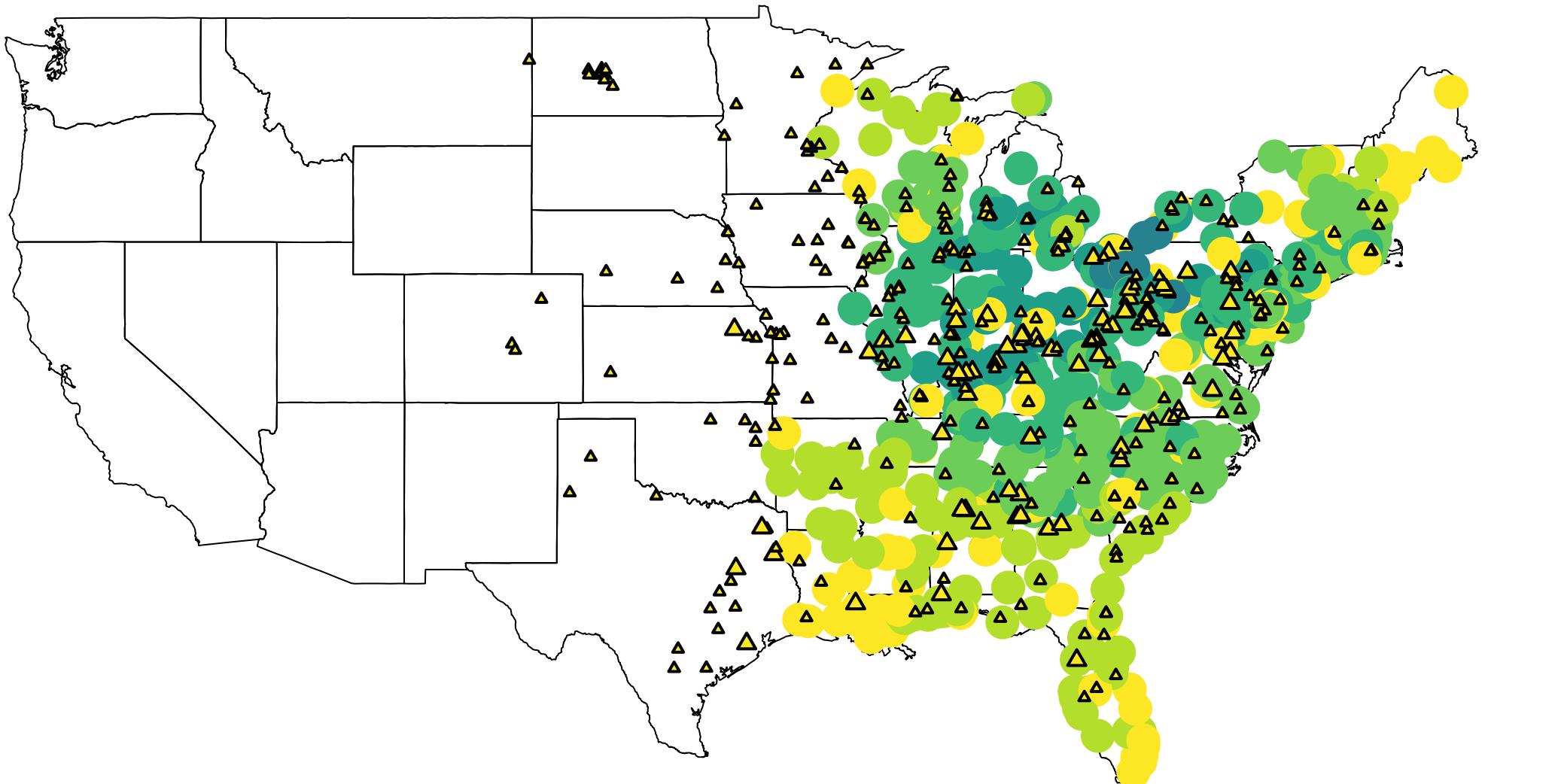
Powerplants: without edges



with edges

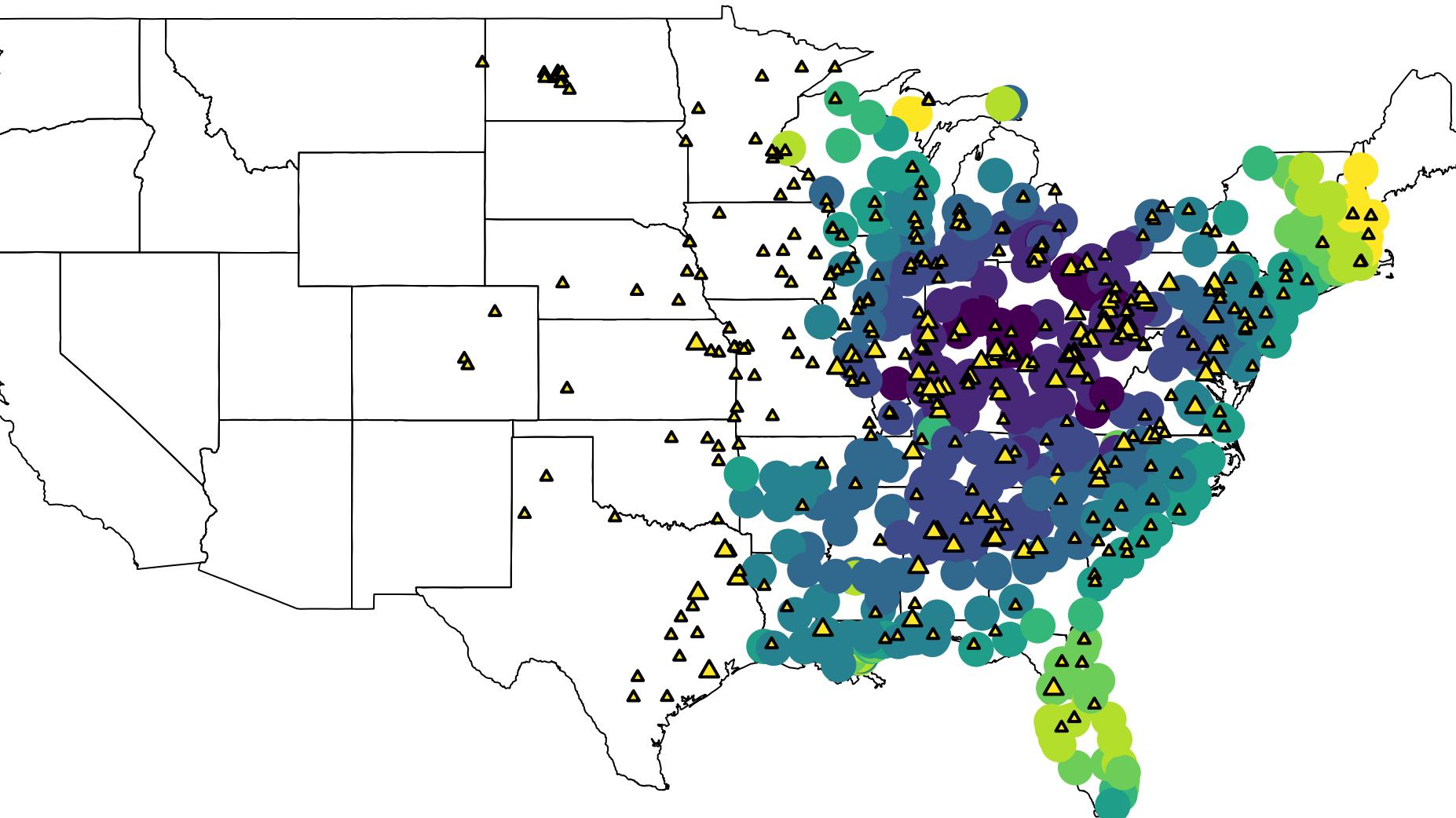
Monitor exposure:

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

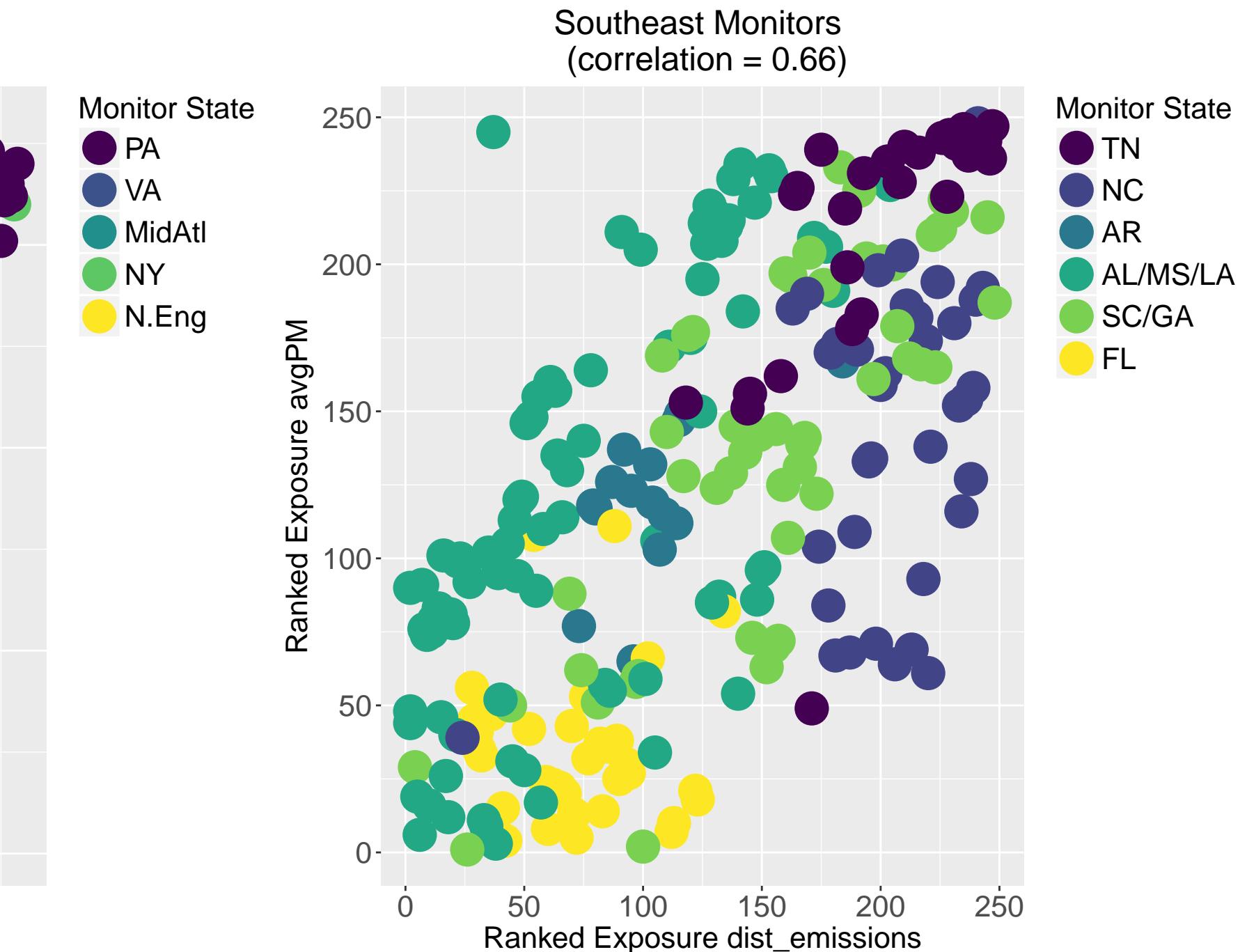
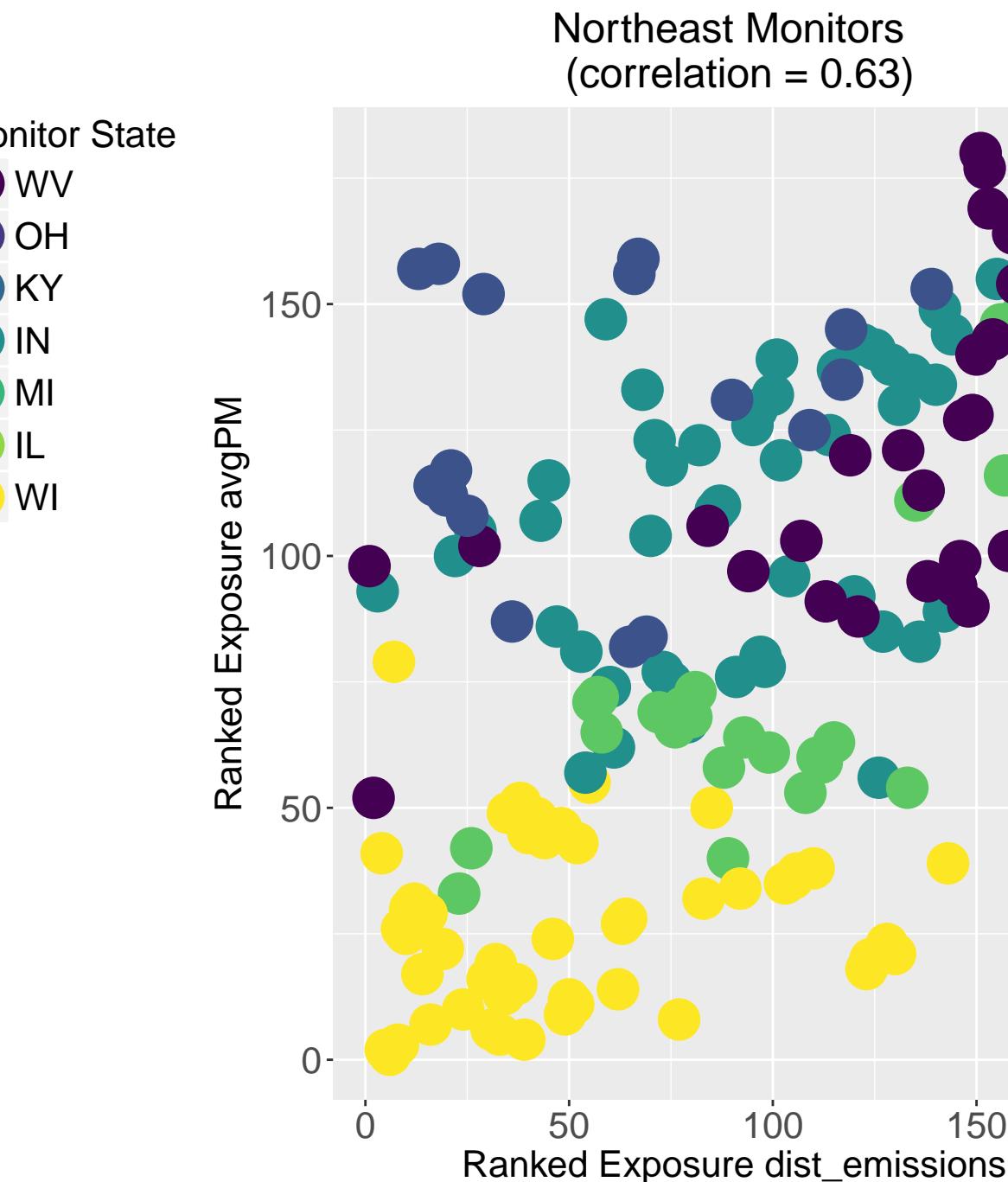
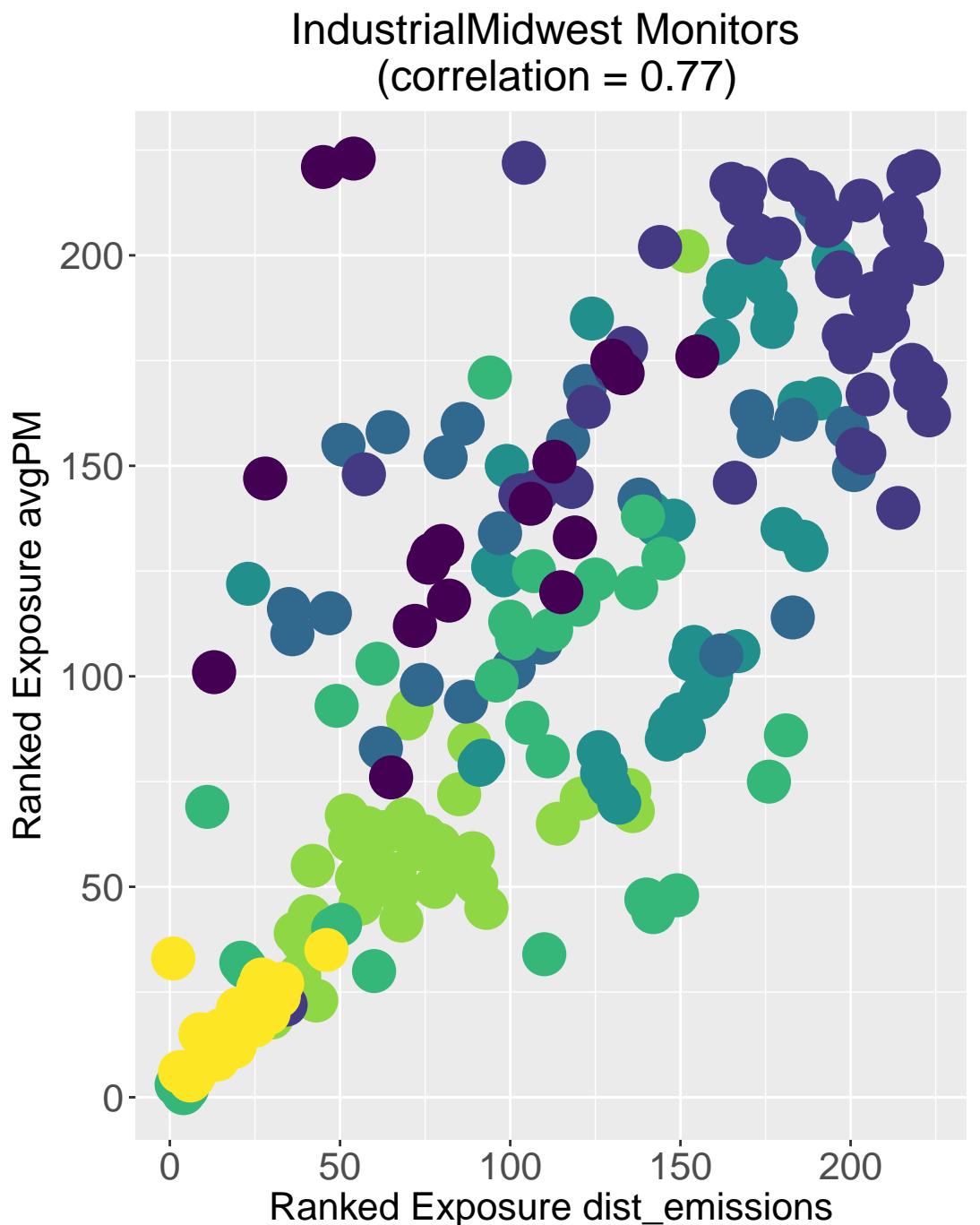


Monitor exposure:

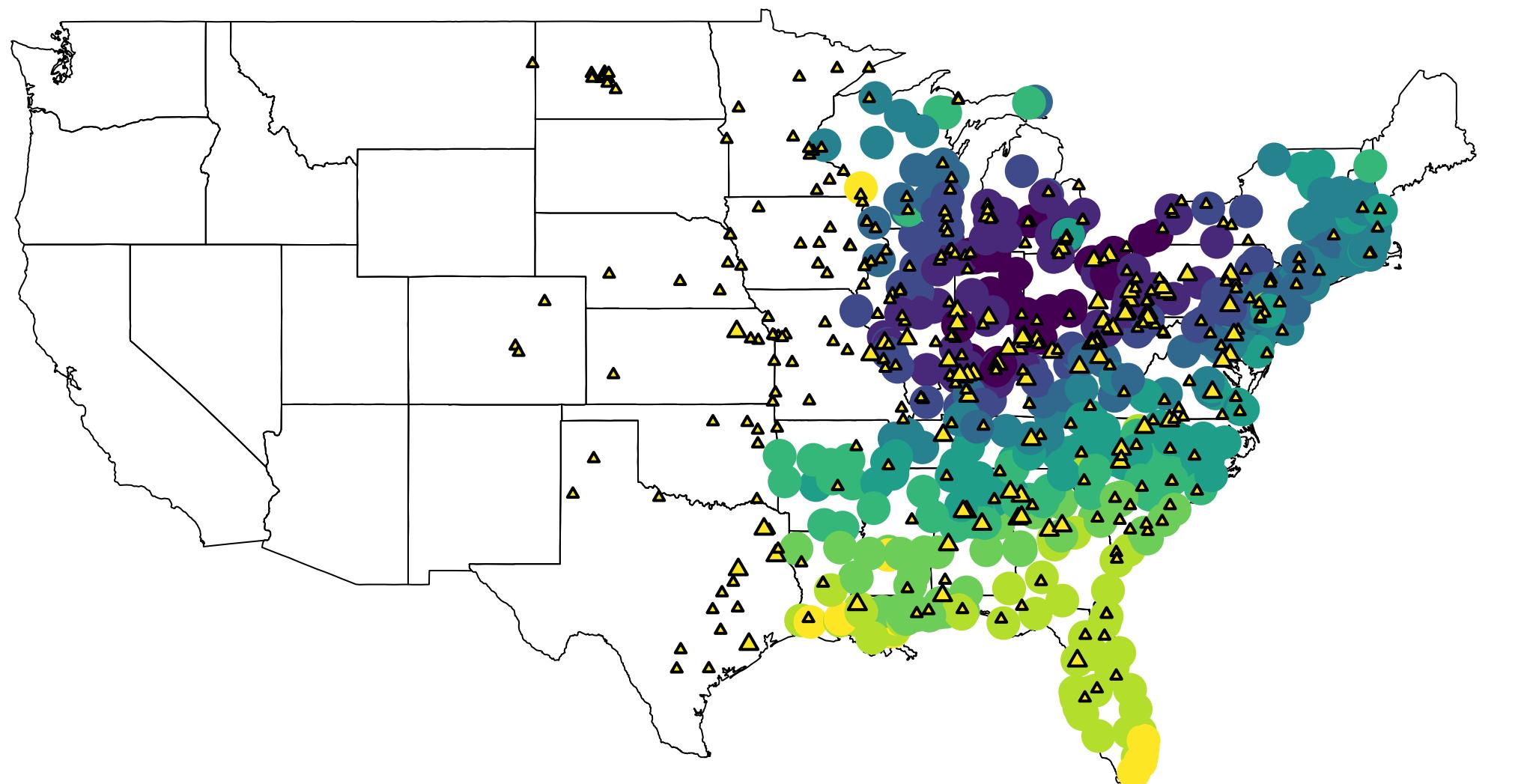
avgPM, decomposed75 year_test_distLag 2005



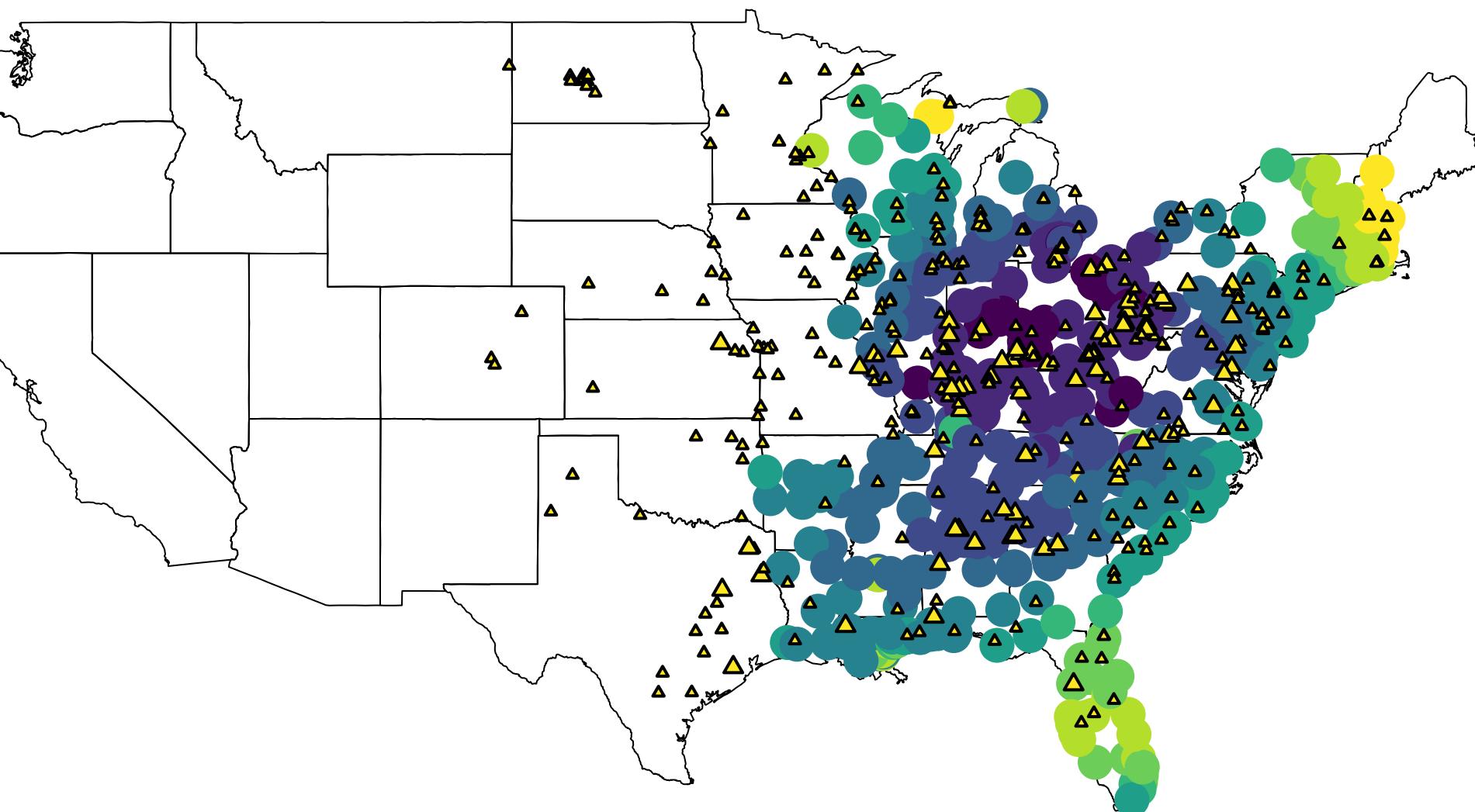
Comparison of coal emissions exposure (sum of $(1/\log(\text{distance})) * \text{avgemissions}$ vs. low freq PM)



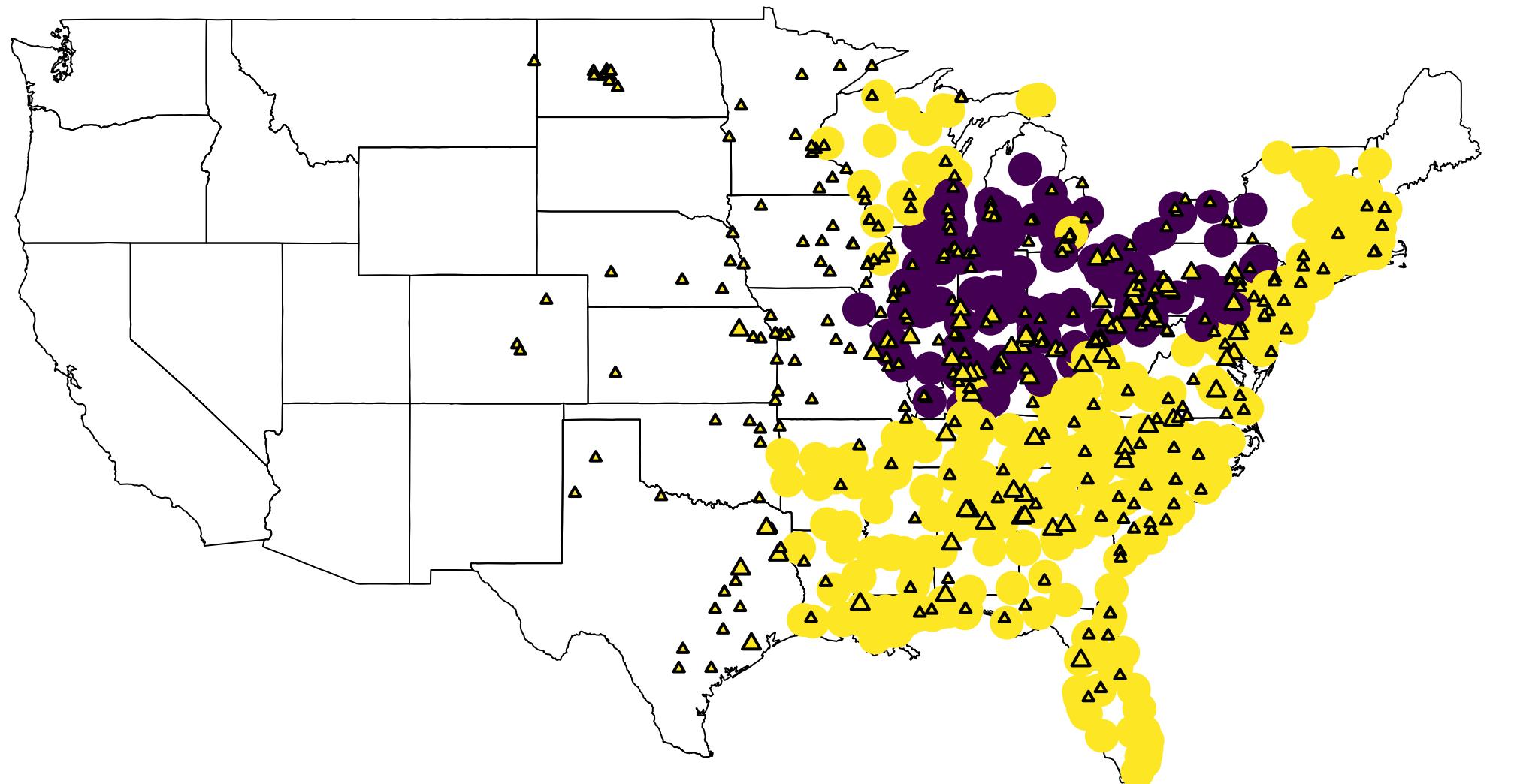
Monitor exposure: num_edges, year_test_distLag 2005



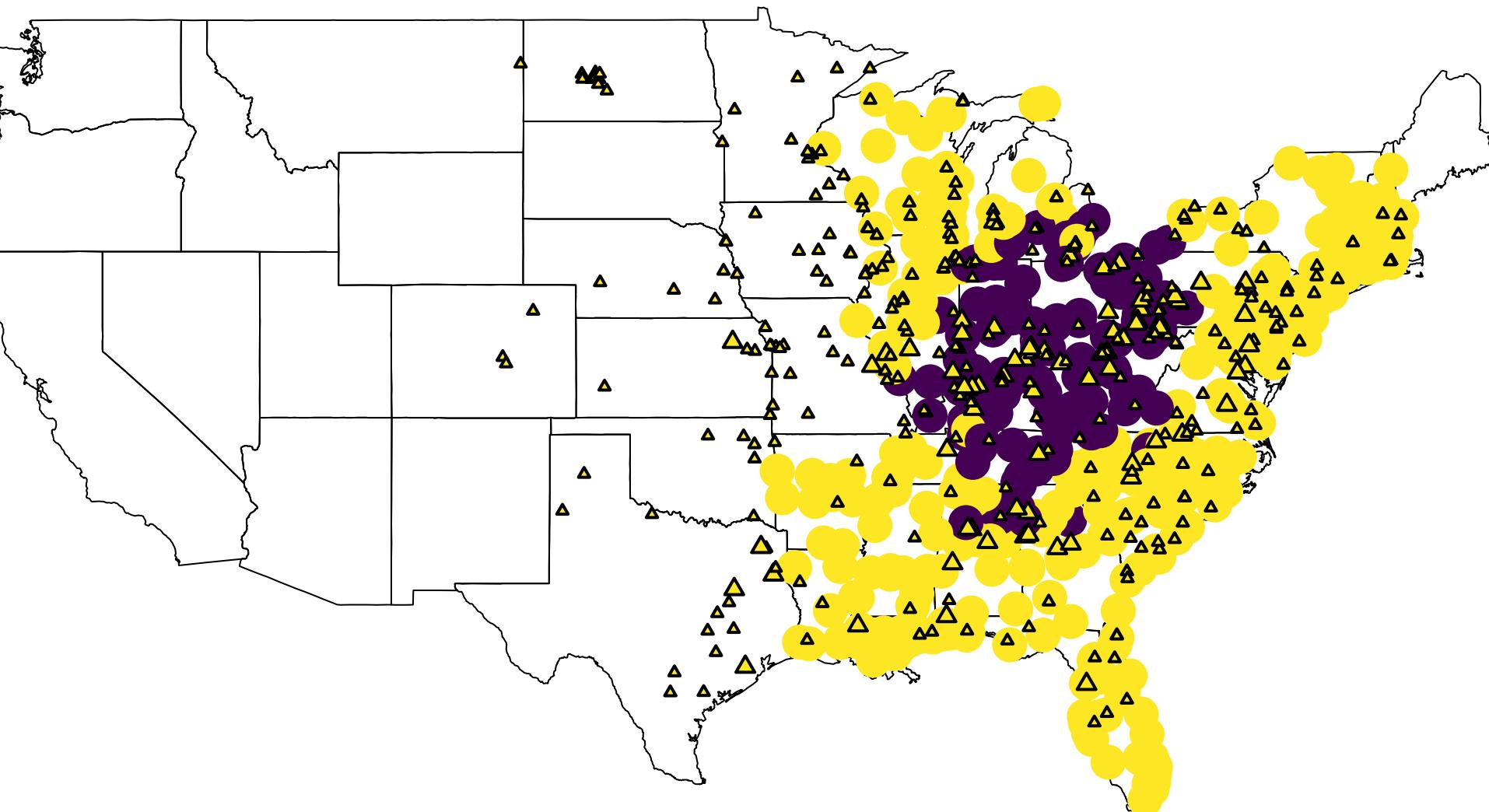
Monitor exposure: avgPM, decomposed75 year_test_distLag 2005



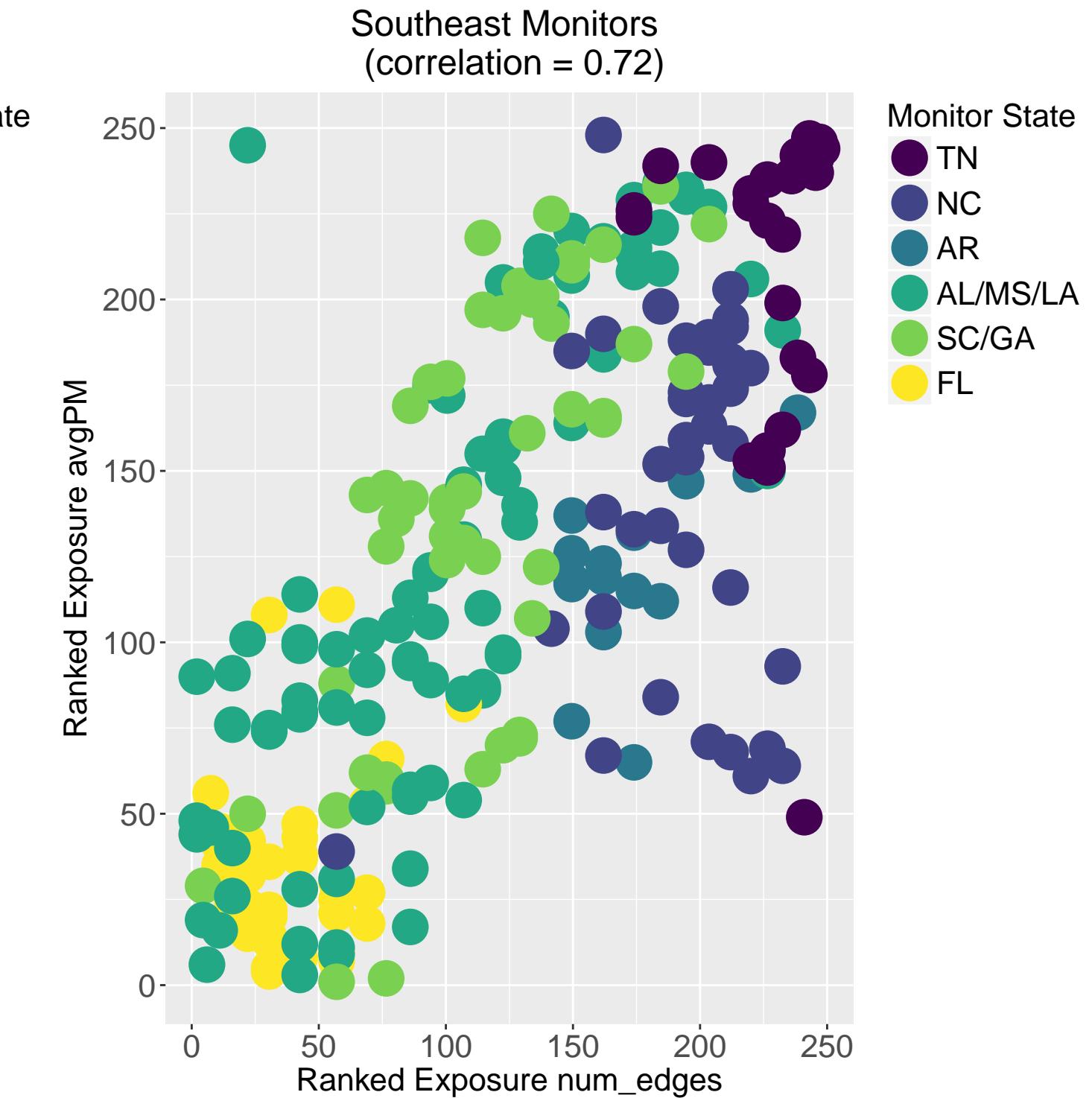
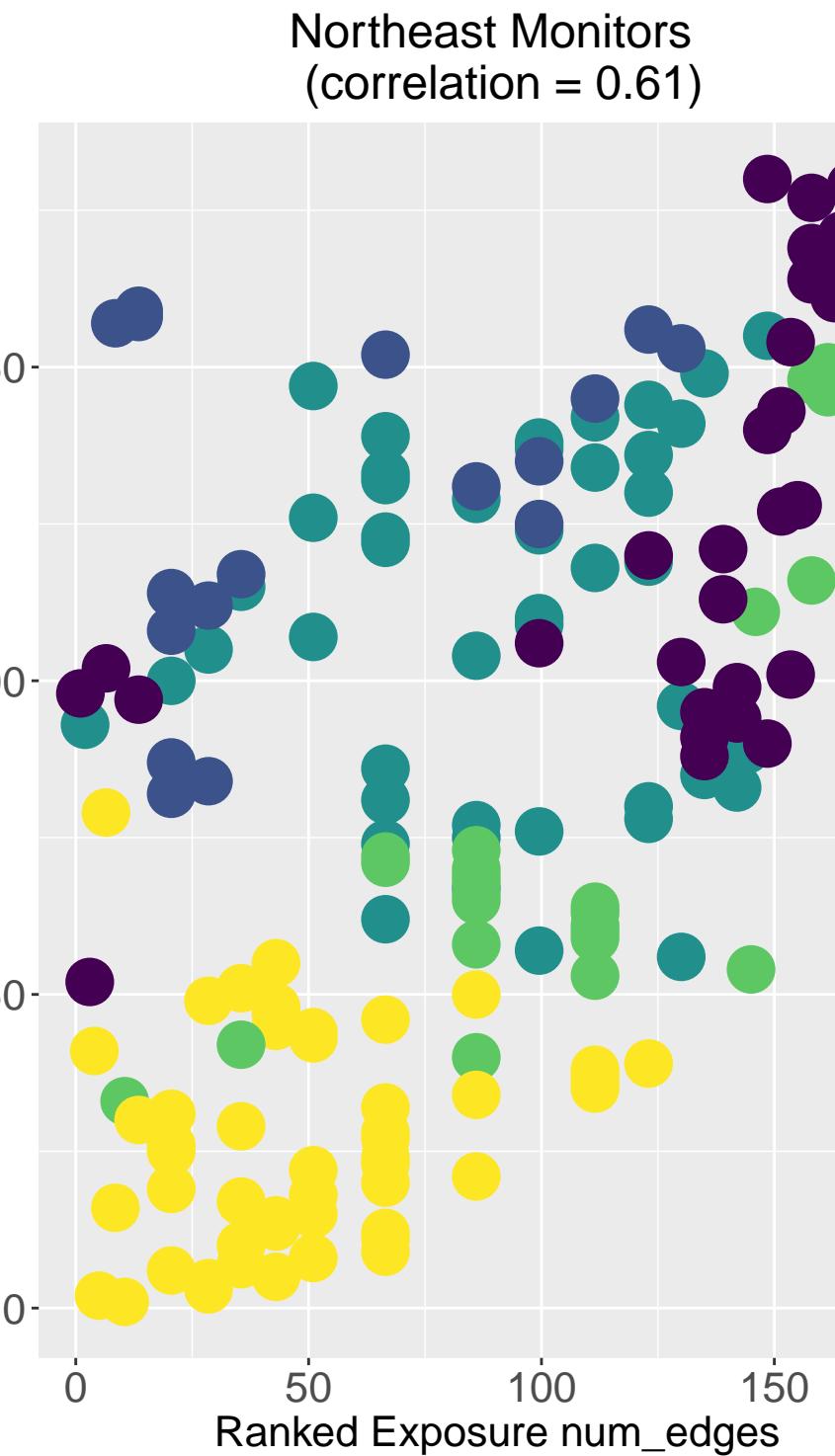
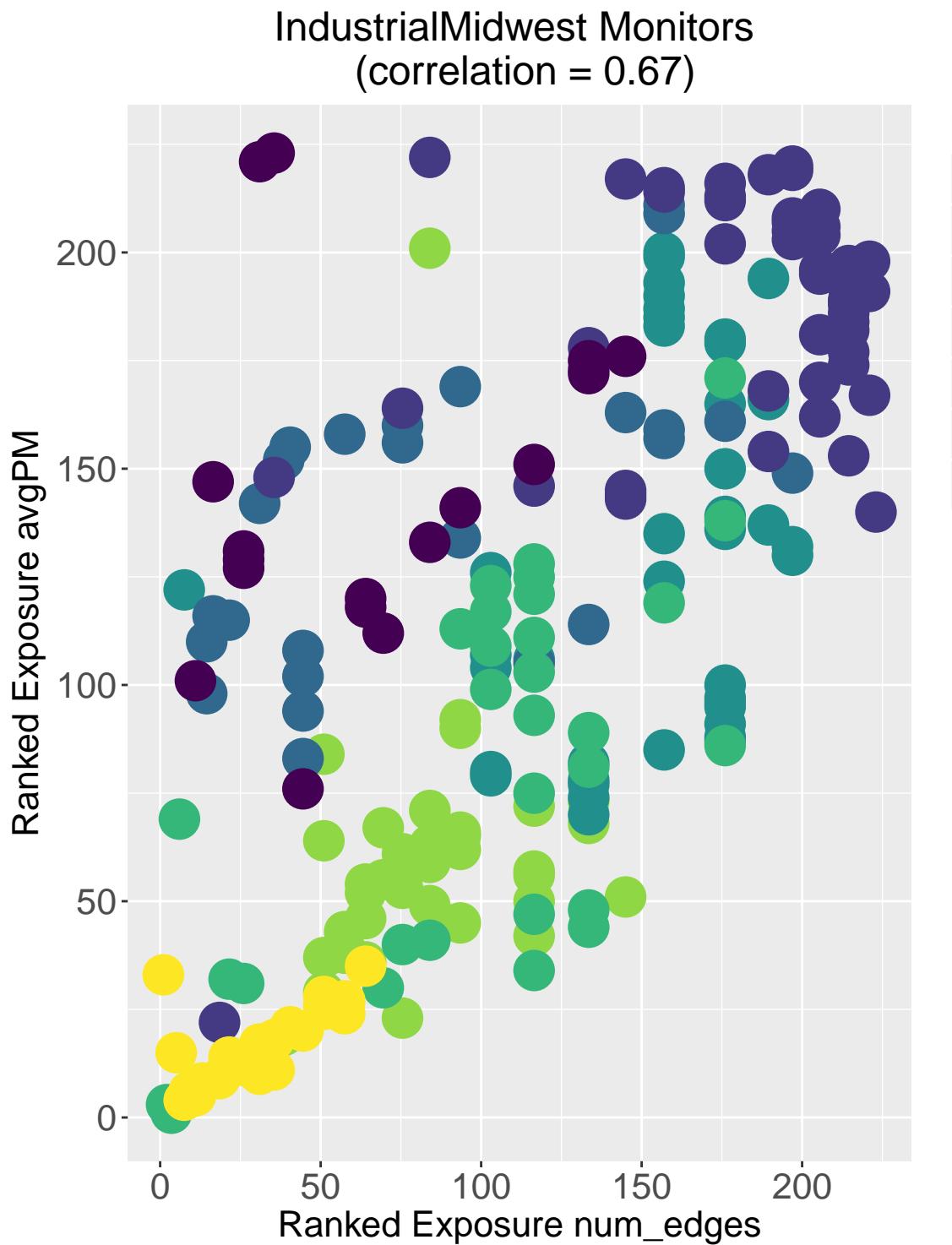
Highest exposed: num_edges, year_test_distLag 2005



Highest exposed: avgPM, decomposed75 year_test_distLag 2005



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



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

