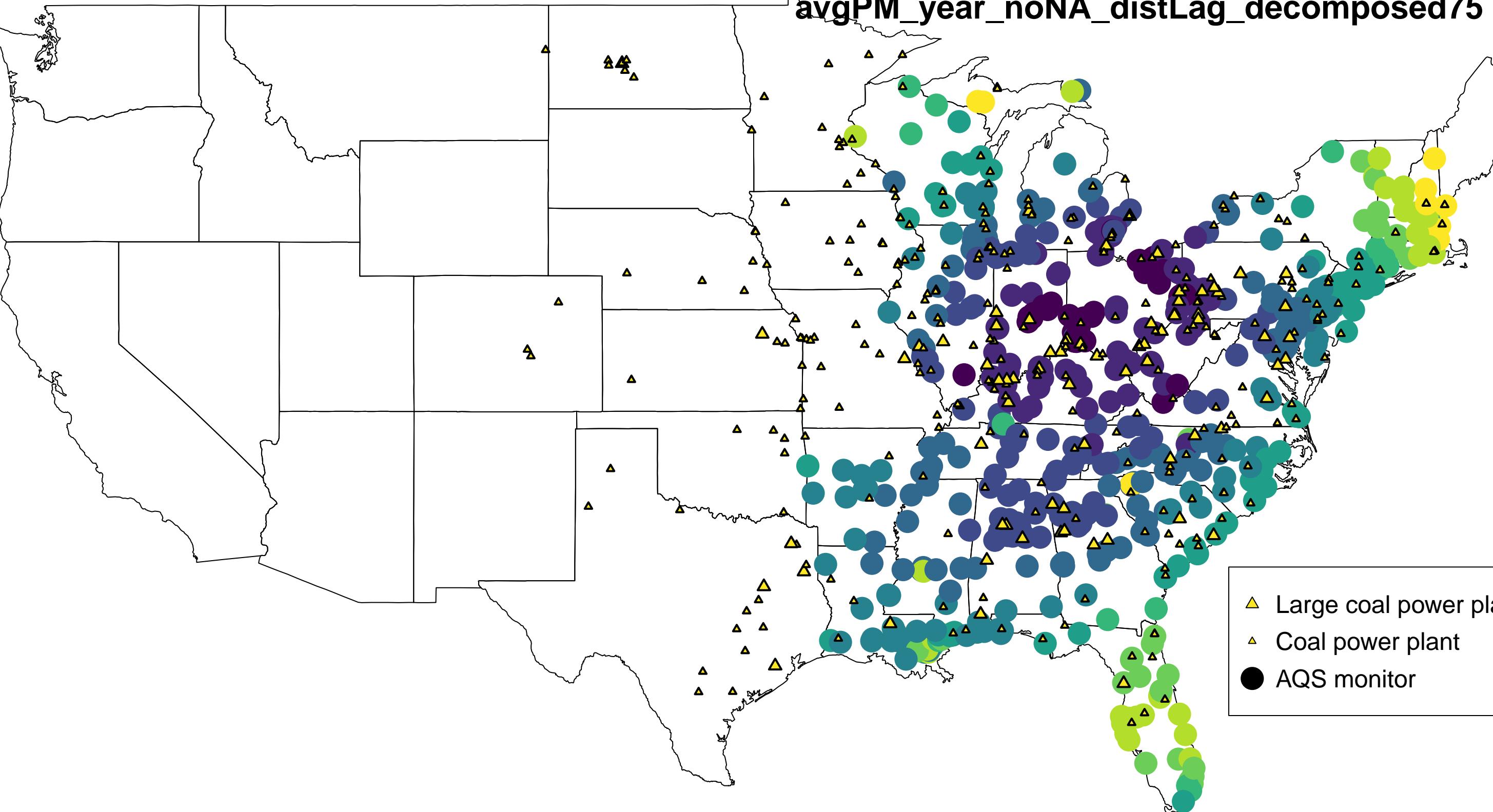
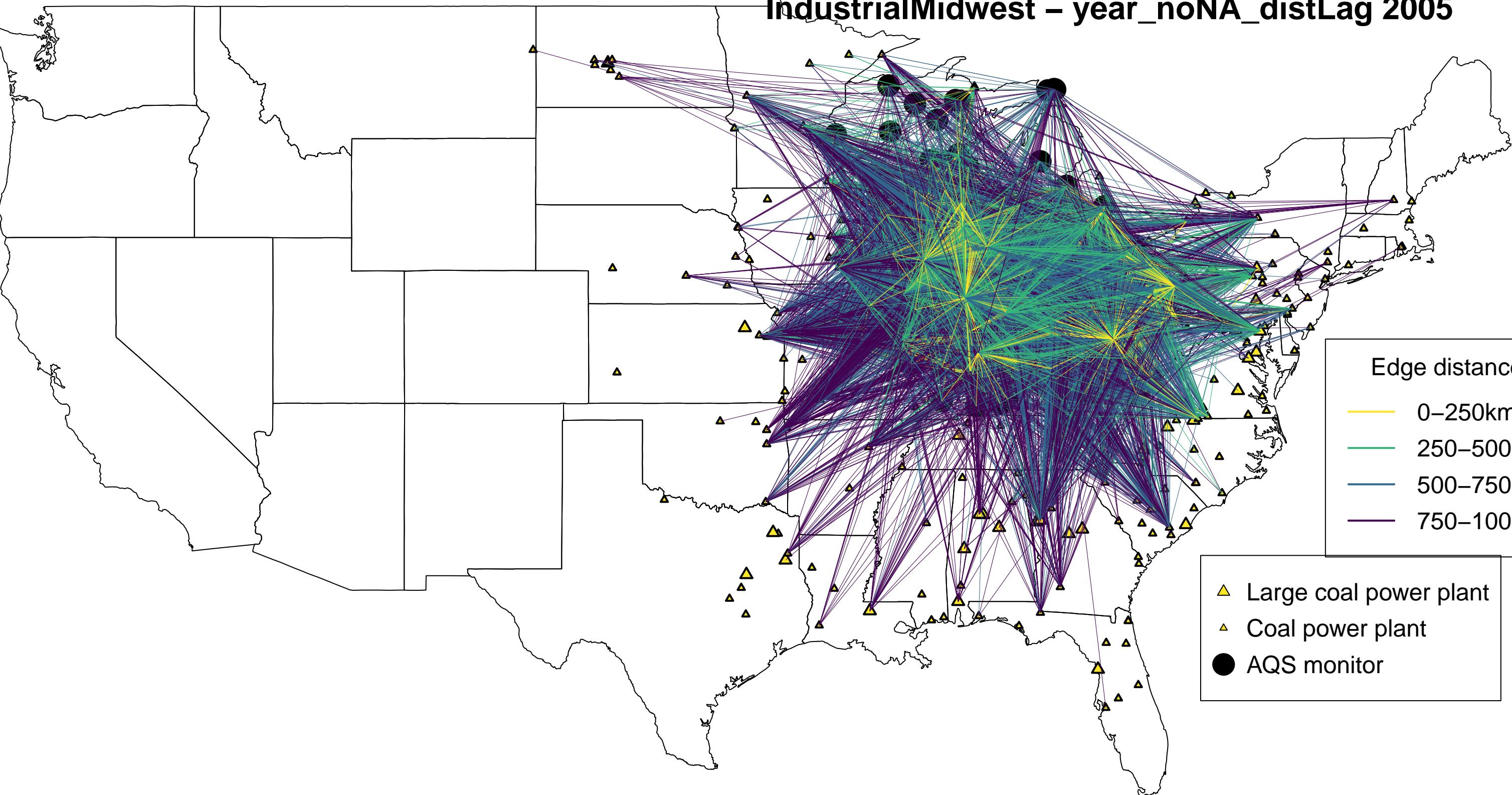


- ▲ Large coal power plant
- ▼ Coal power plant
- AQS monitor

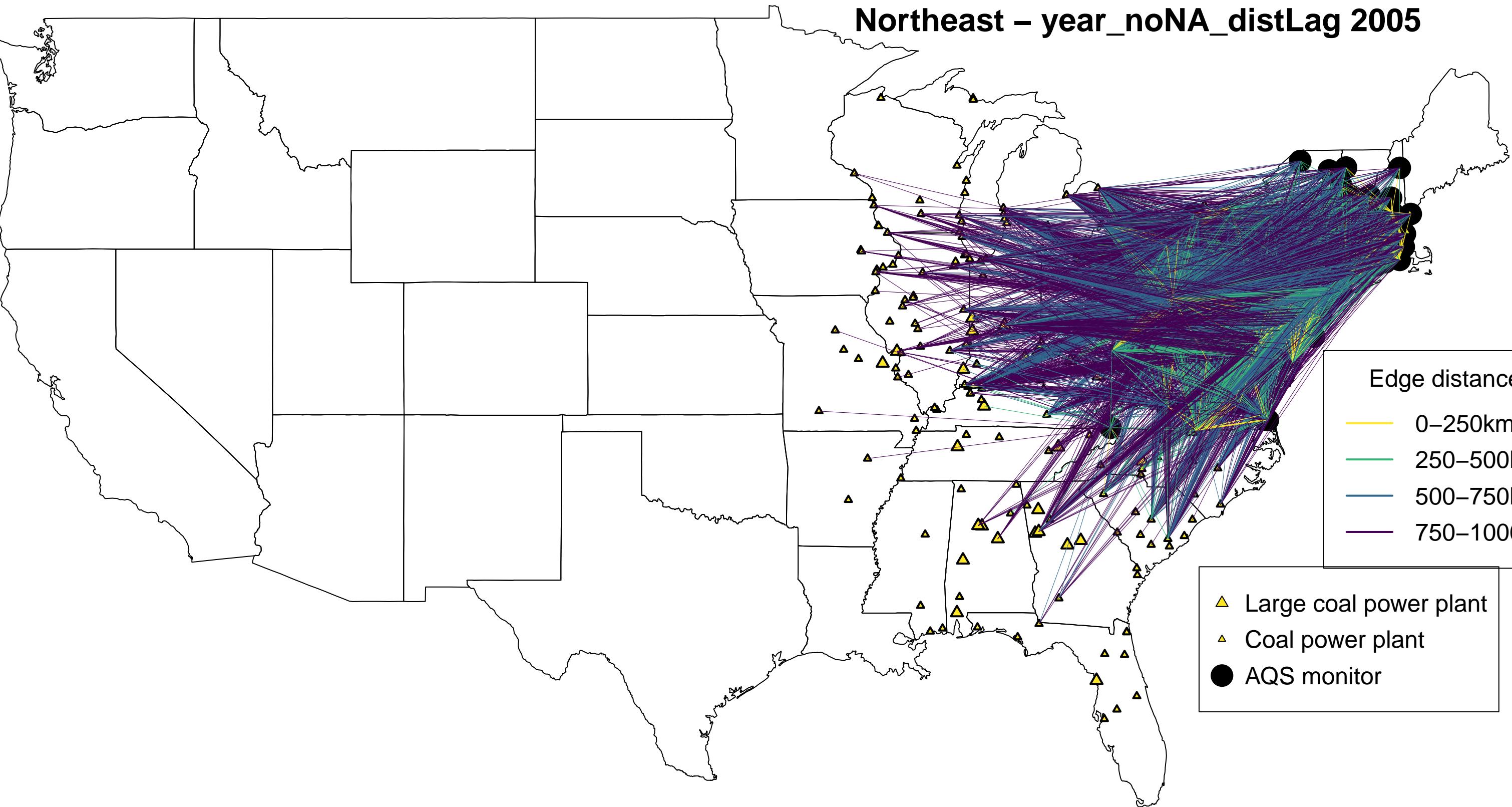
avgPM_year_noNA_distLag_decomposed75



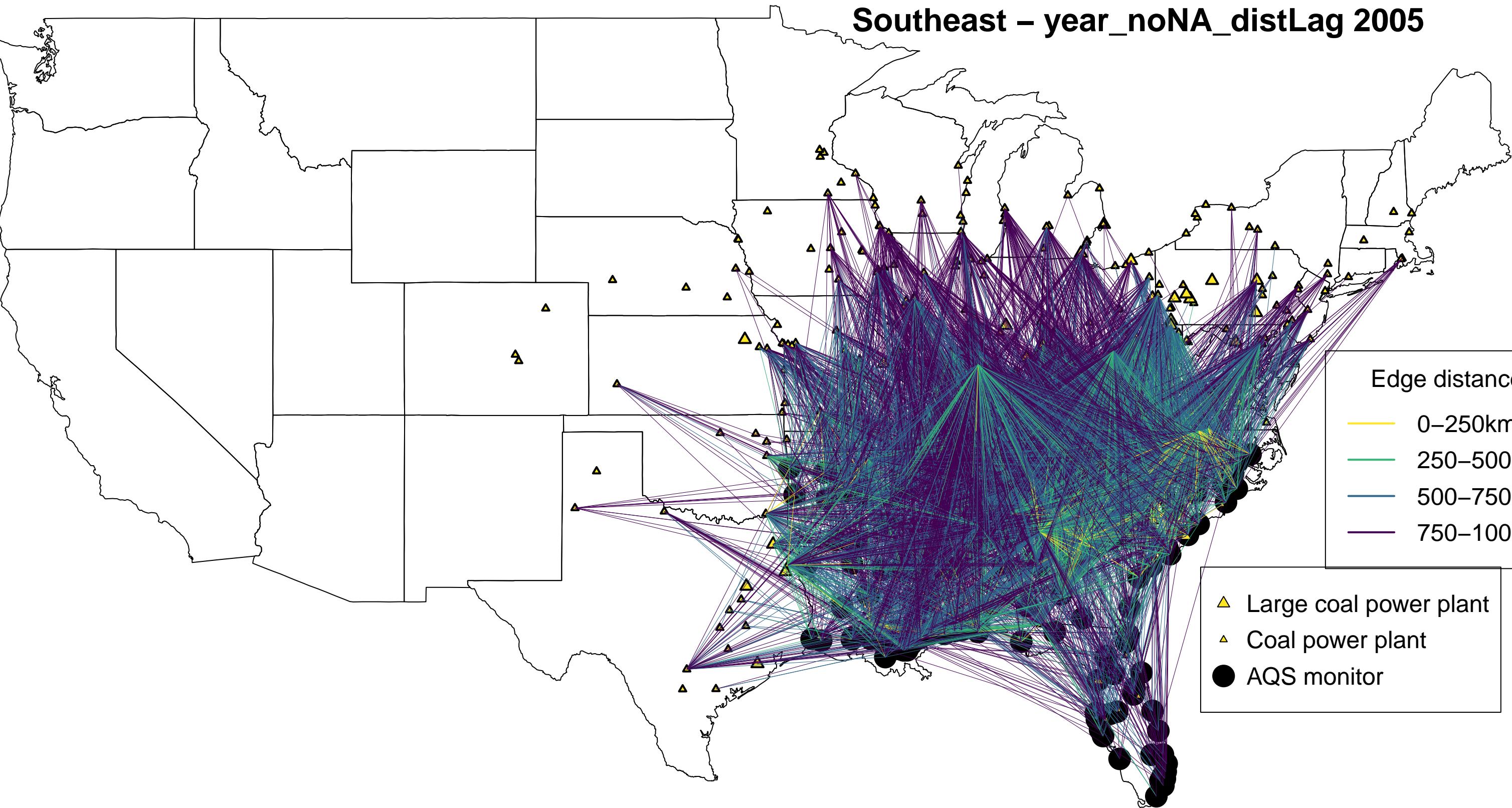
IndustrialMidwest – year_noNA_distLag 2005



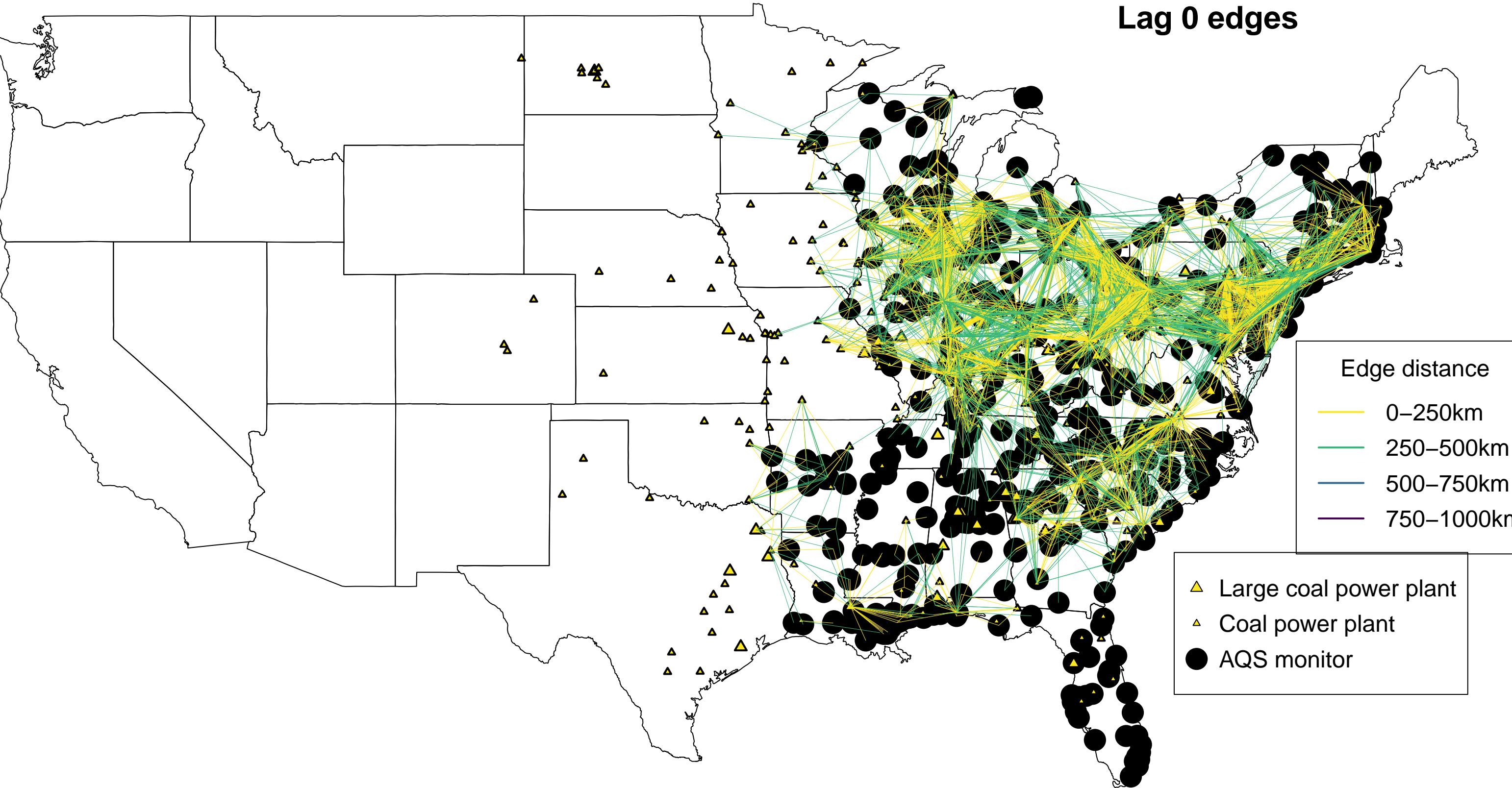
Northeast – year_noNA_distLag 2005



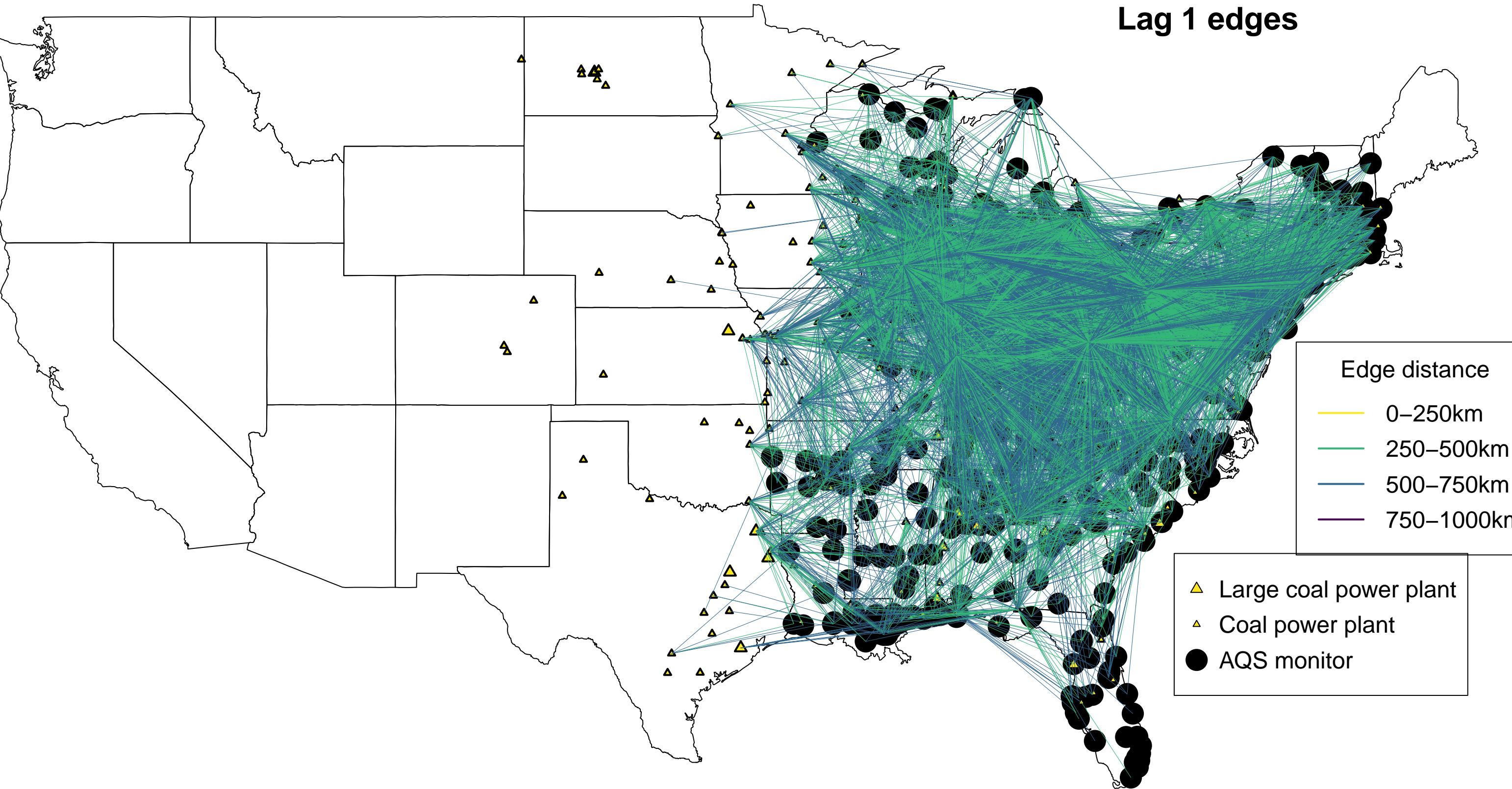
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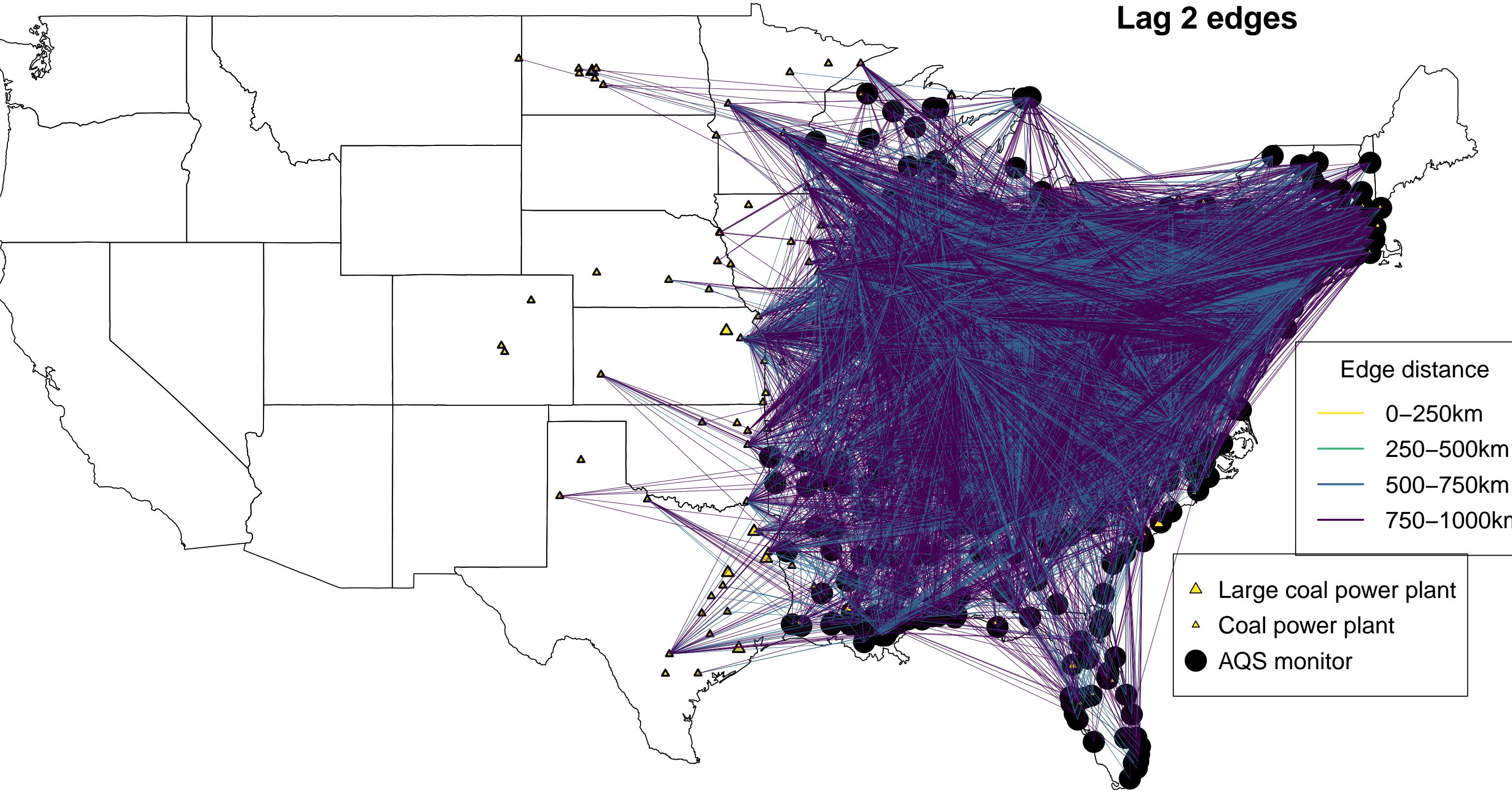
Lag 0 edges



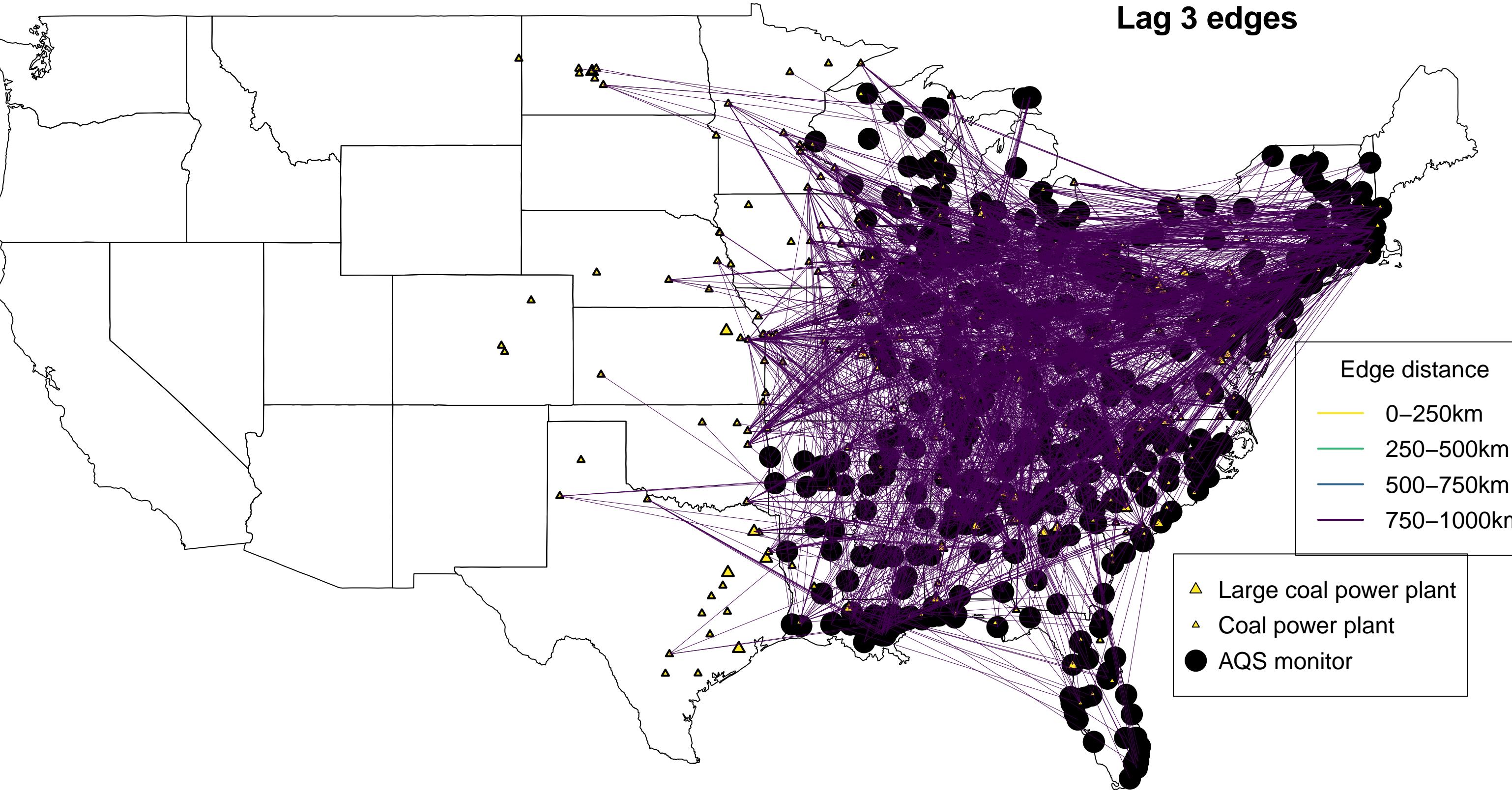
Lag 1 edges

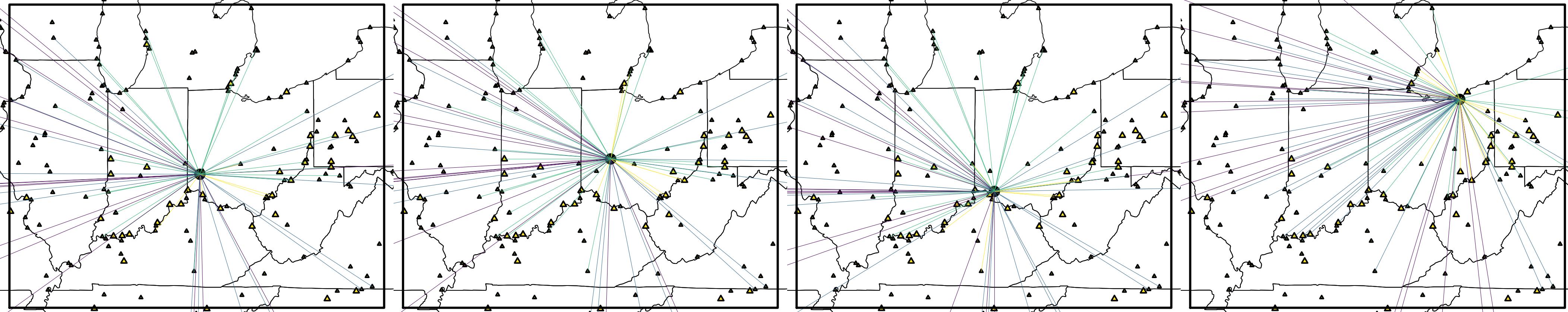
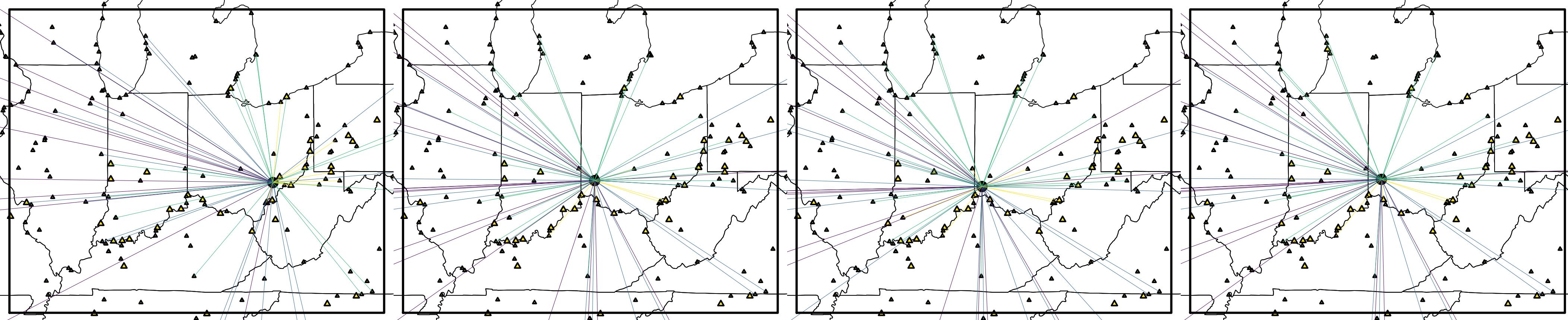


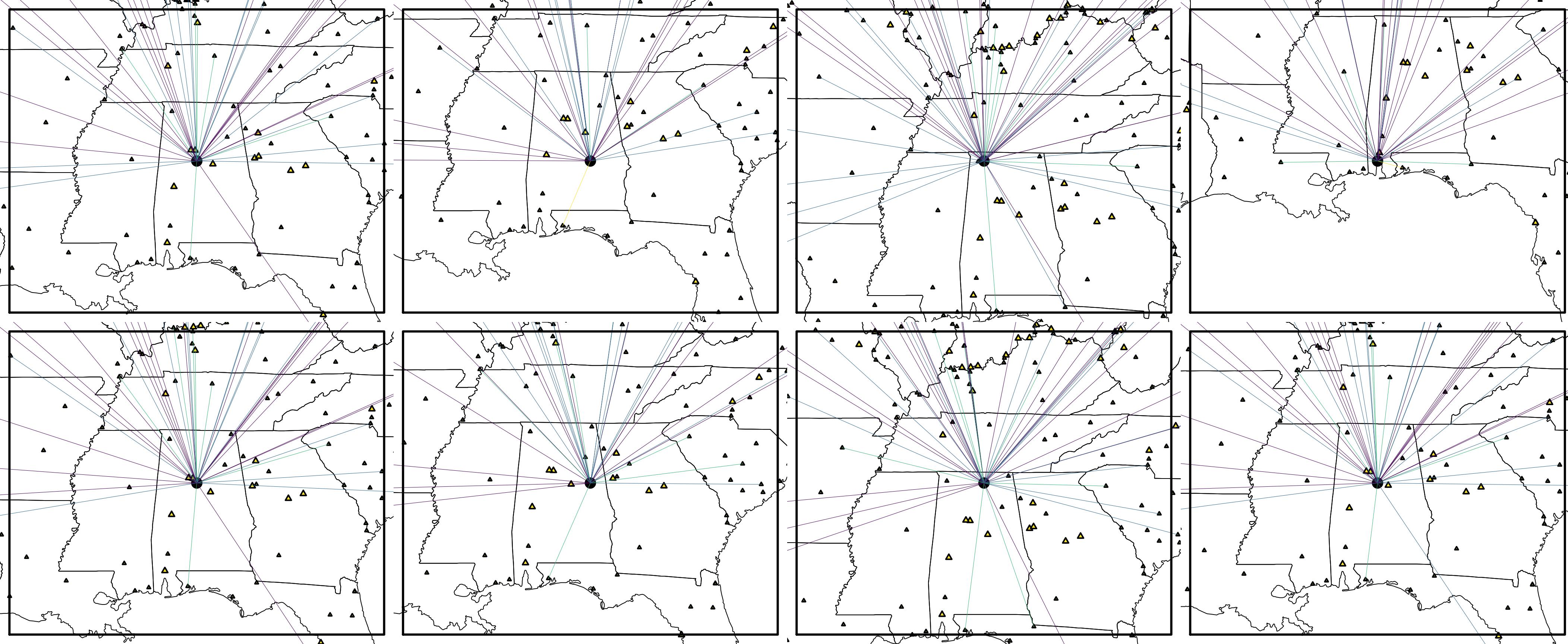
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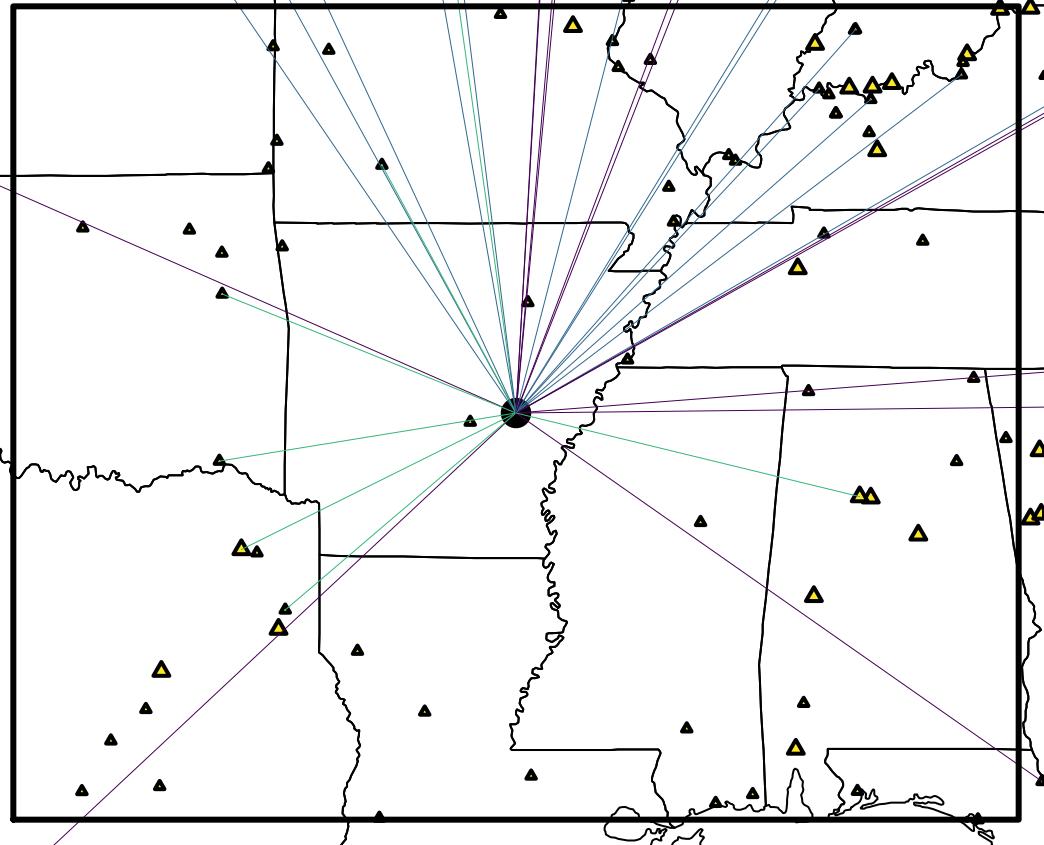
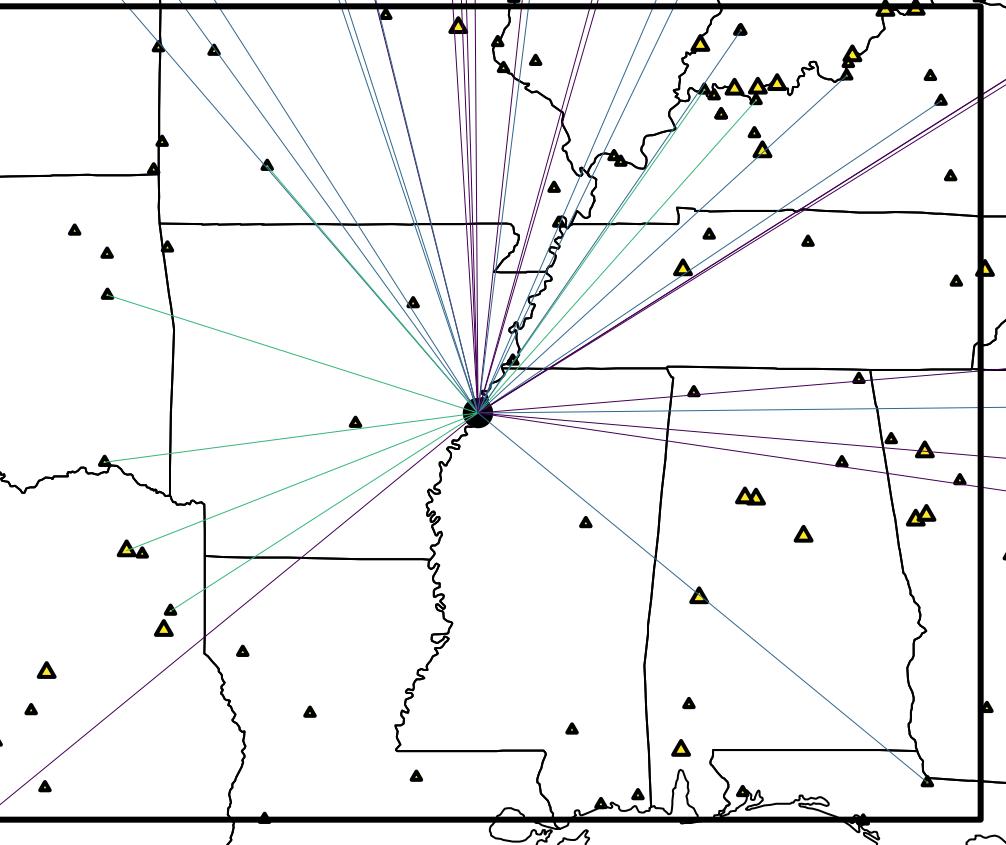
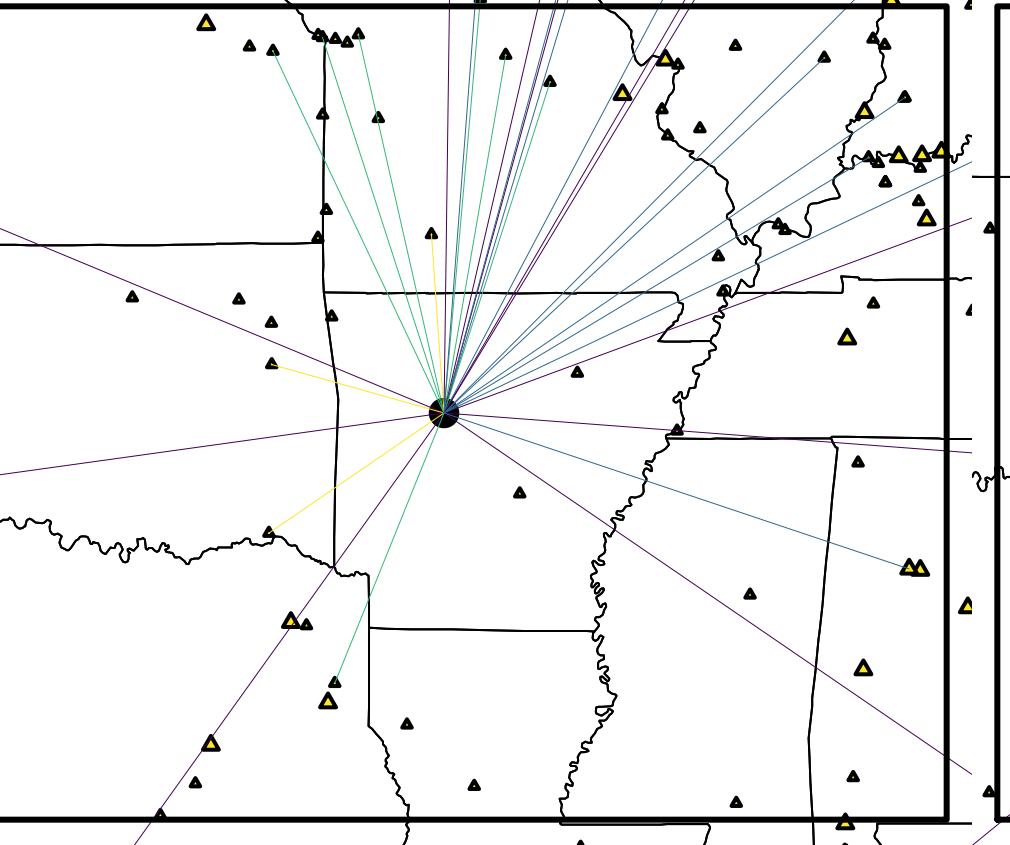
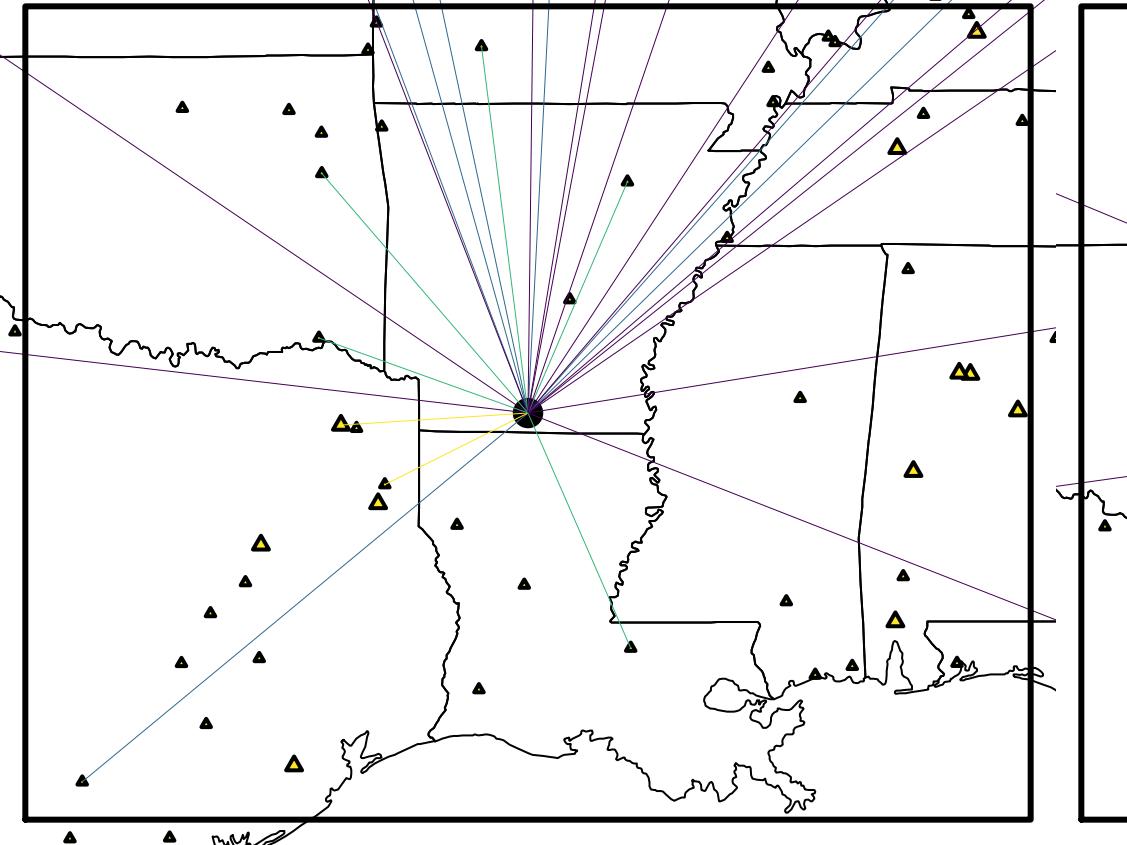
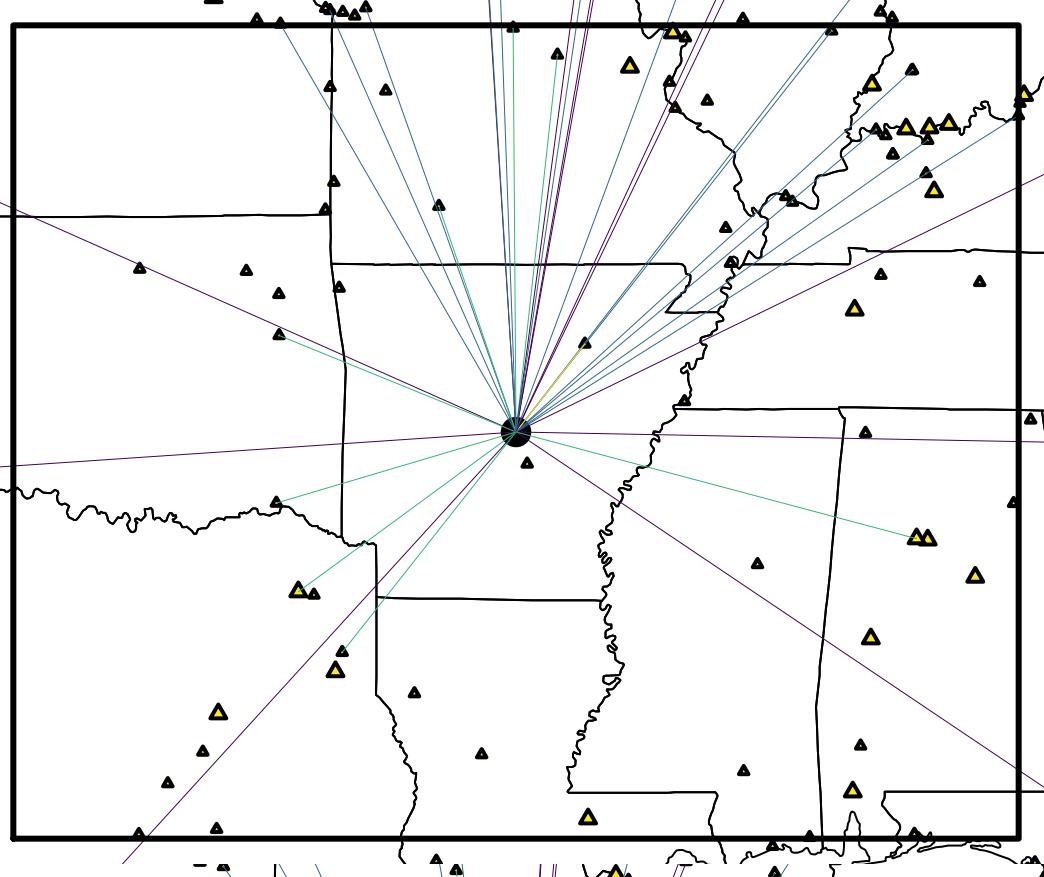
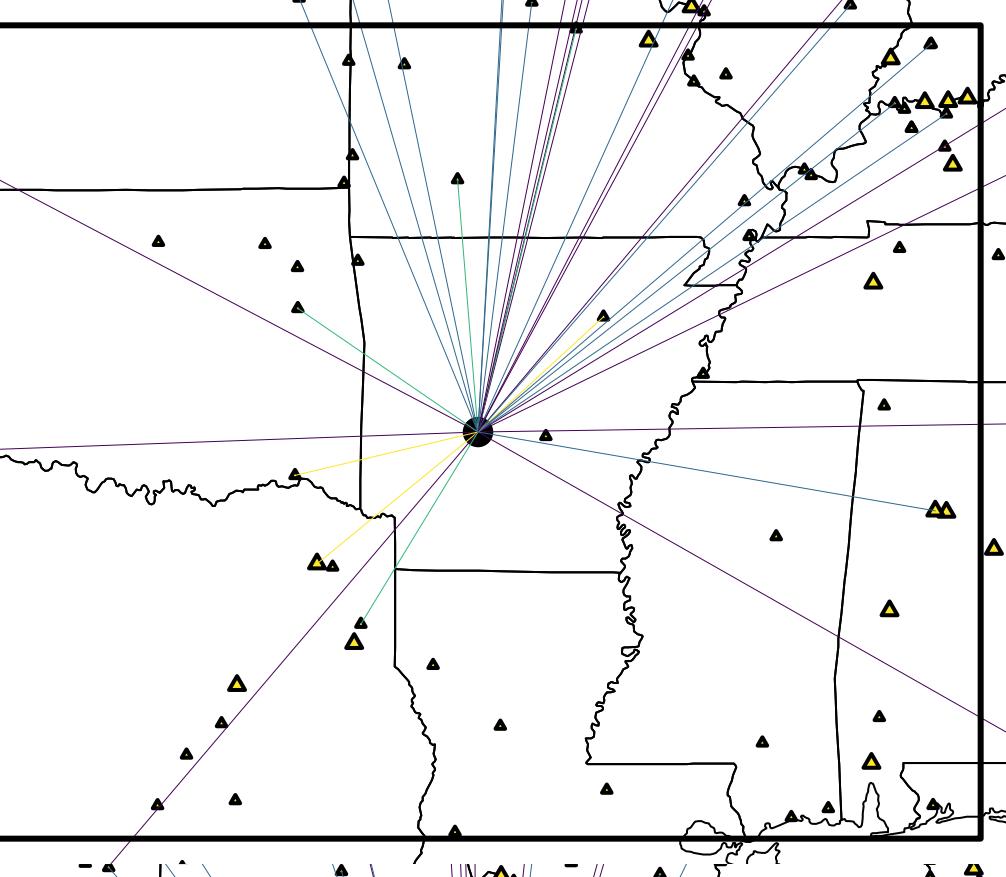
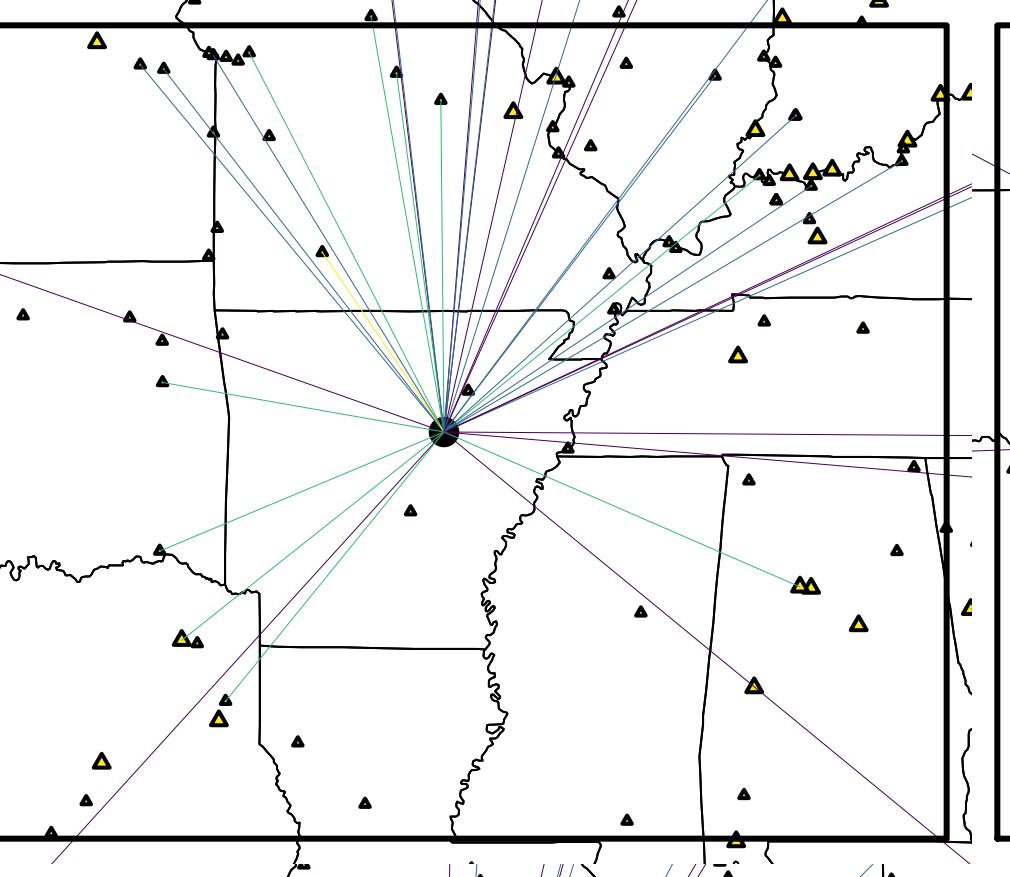
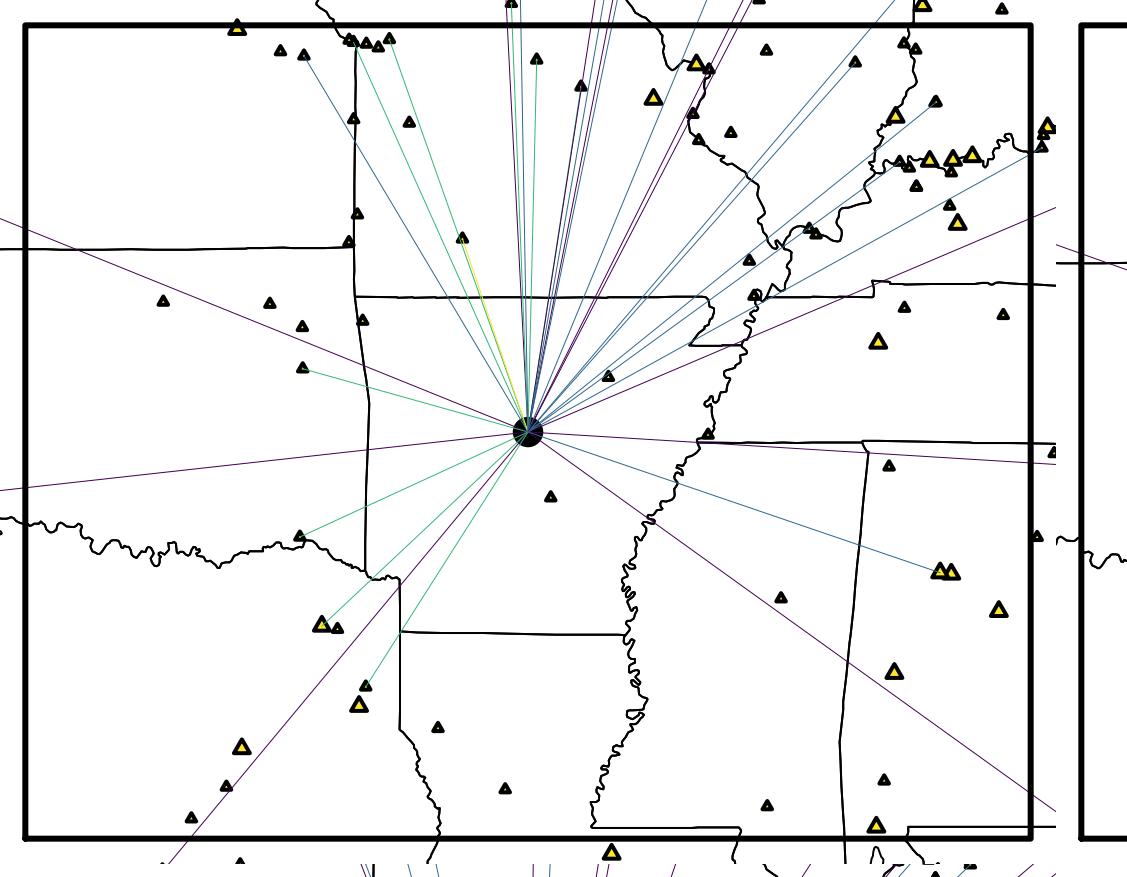


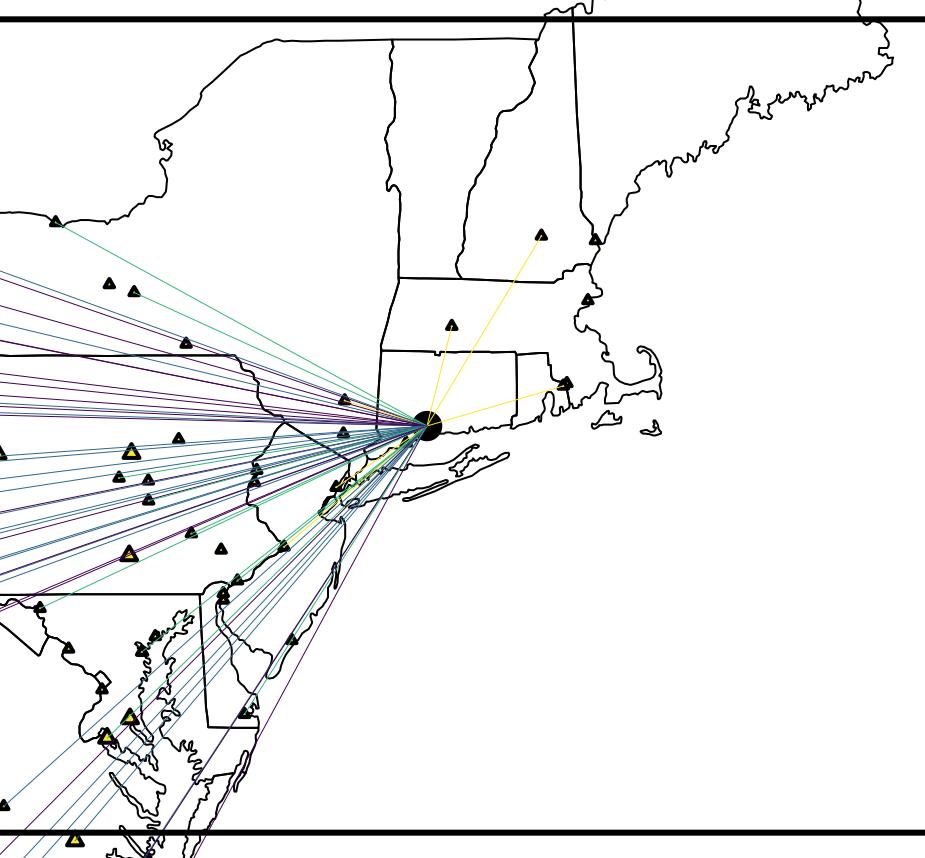
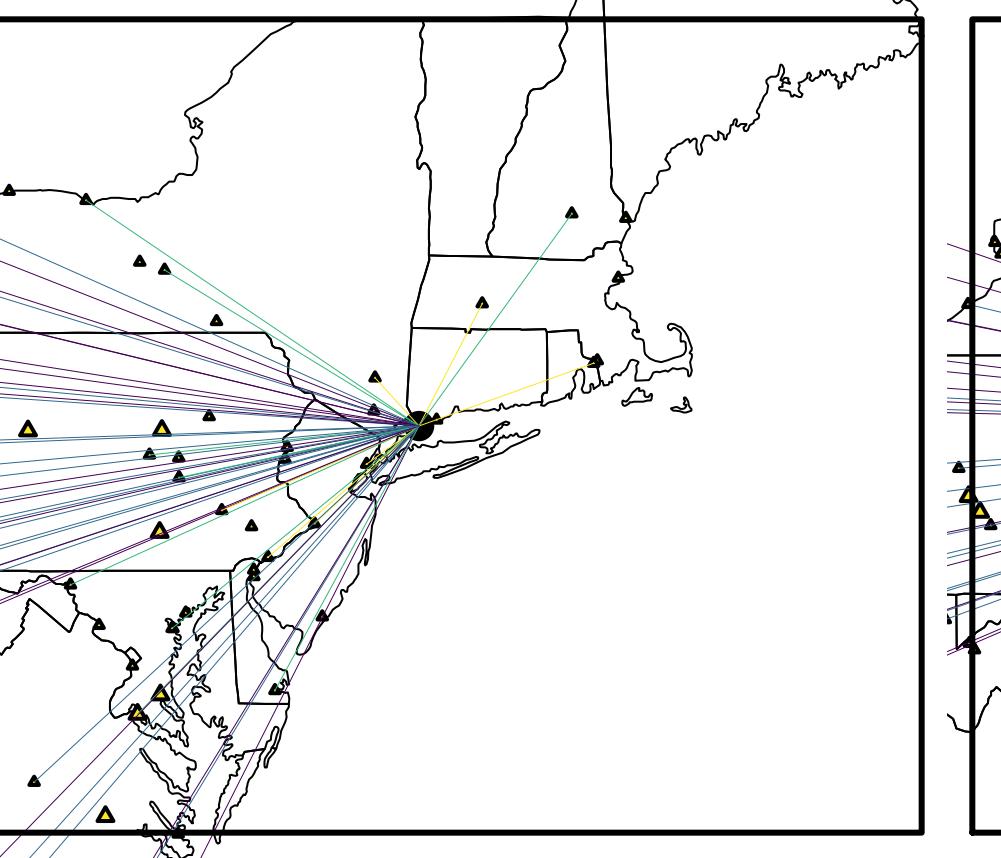
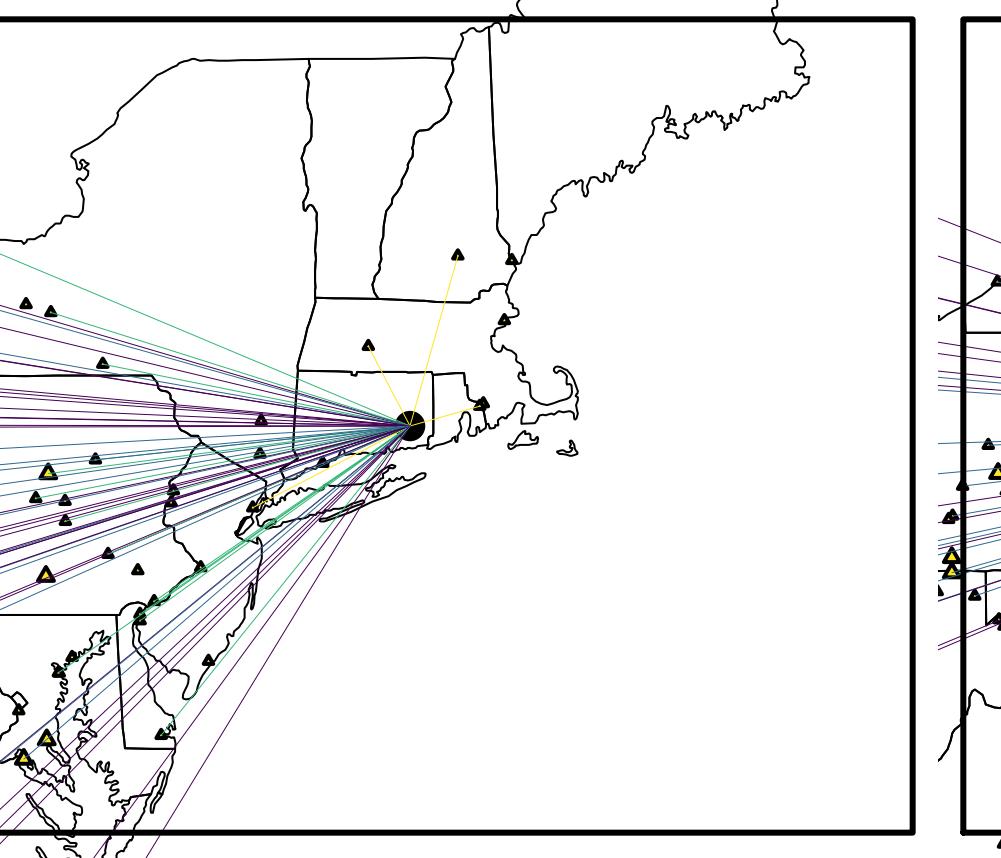
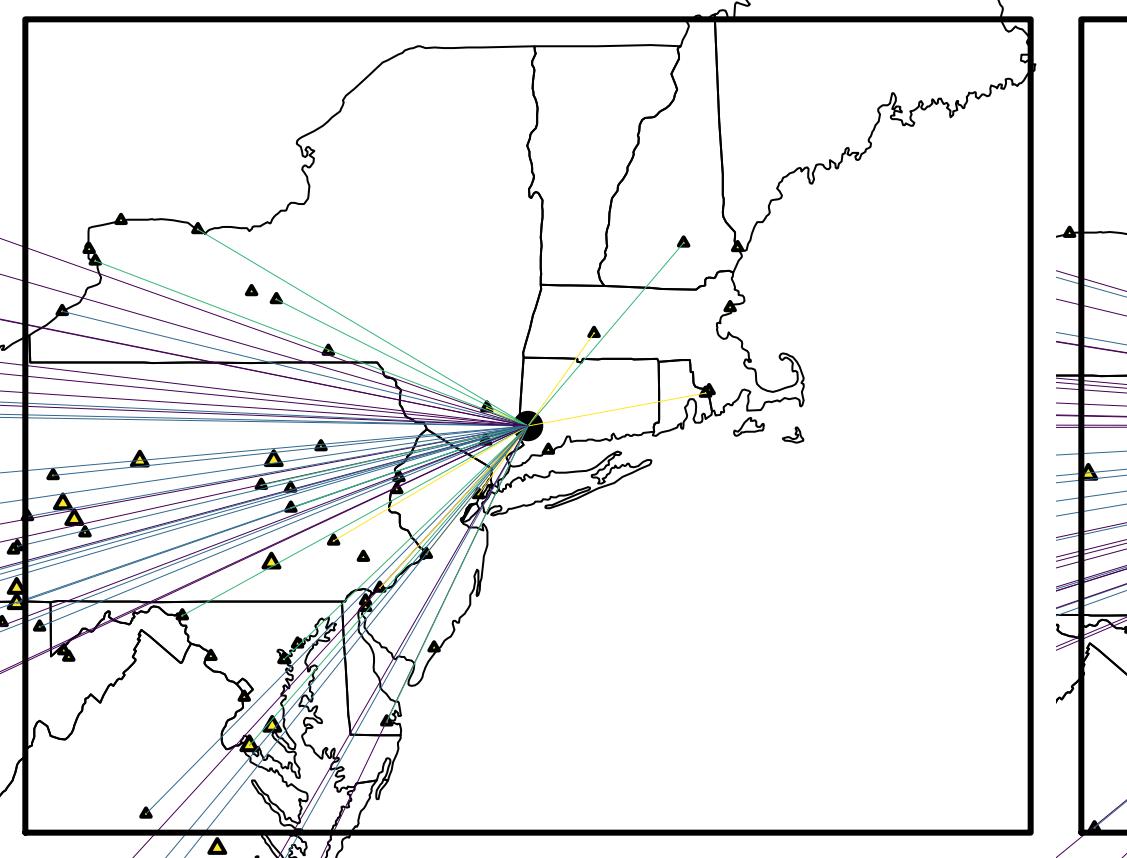
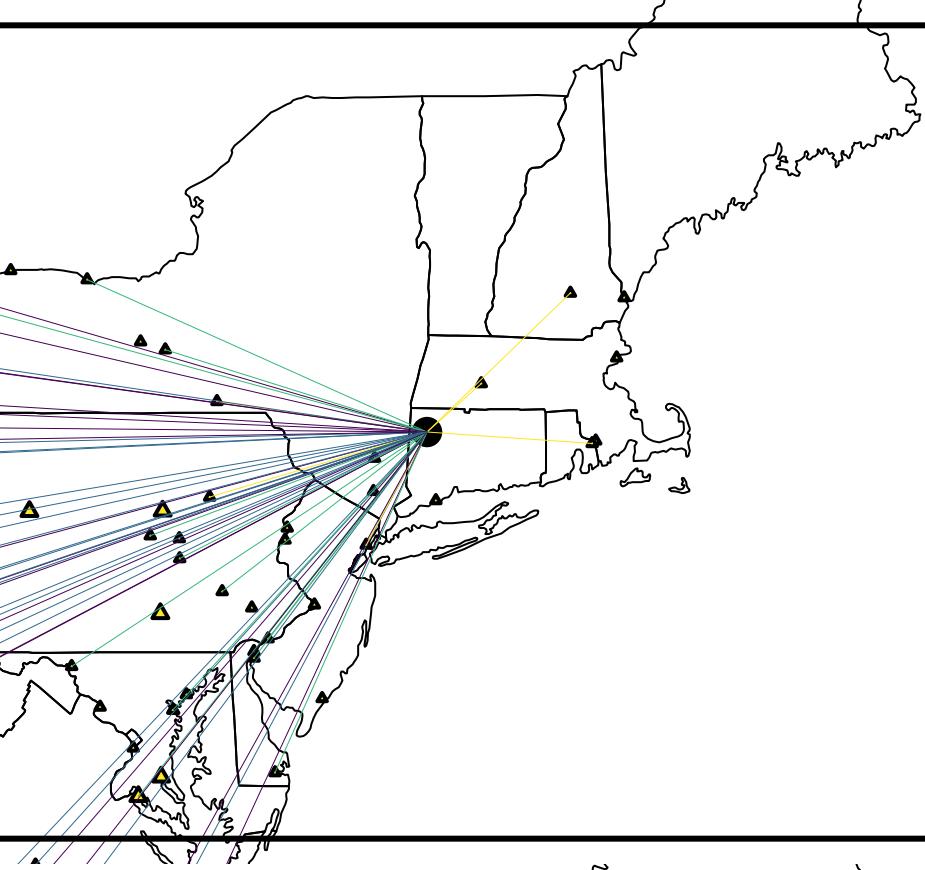
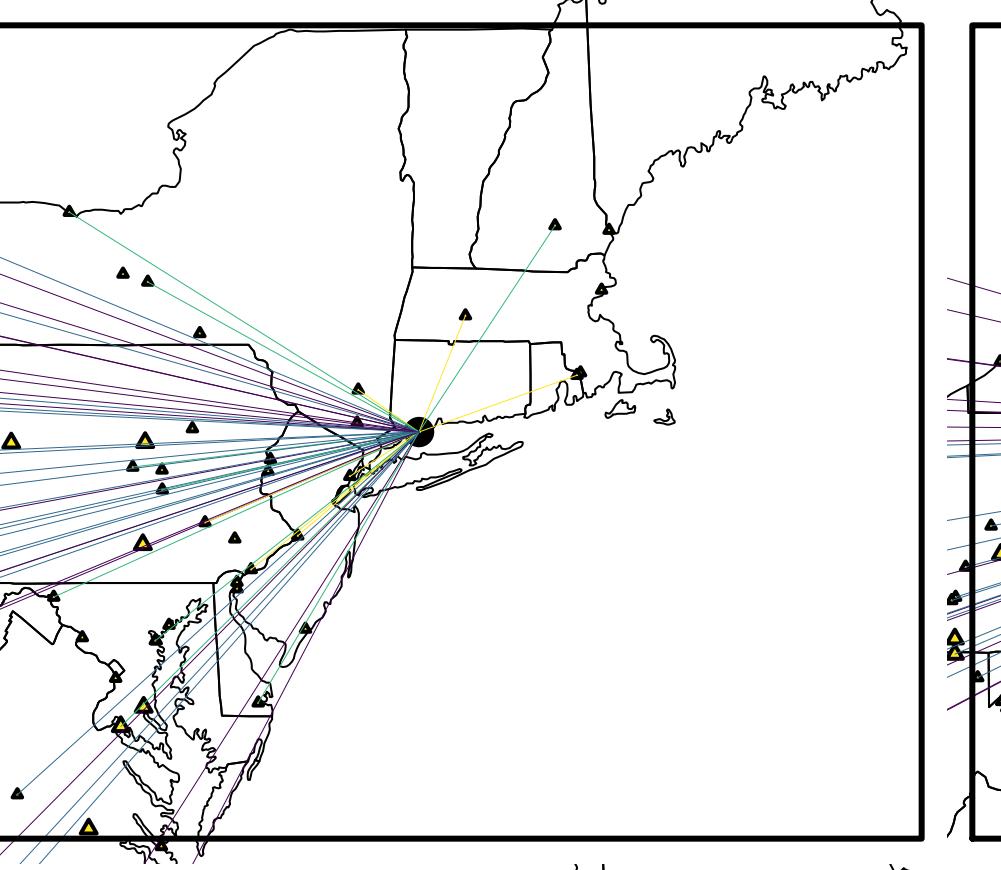
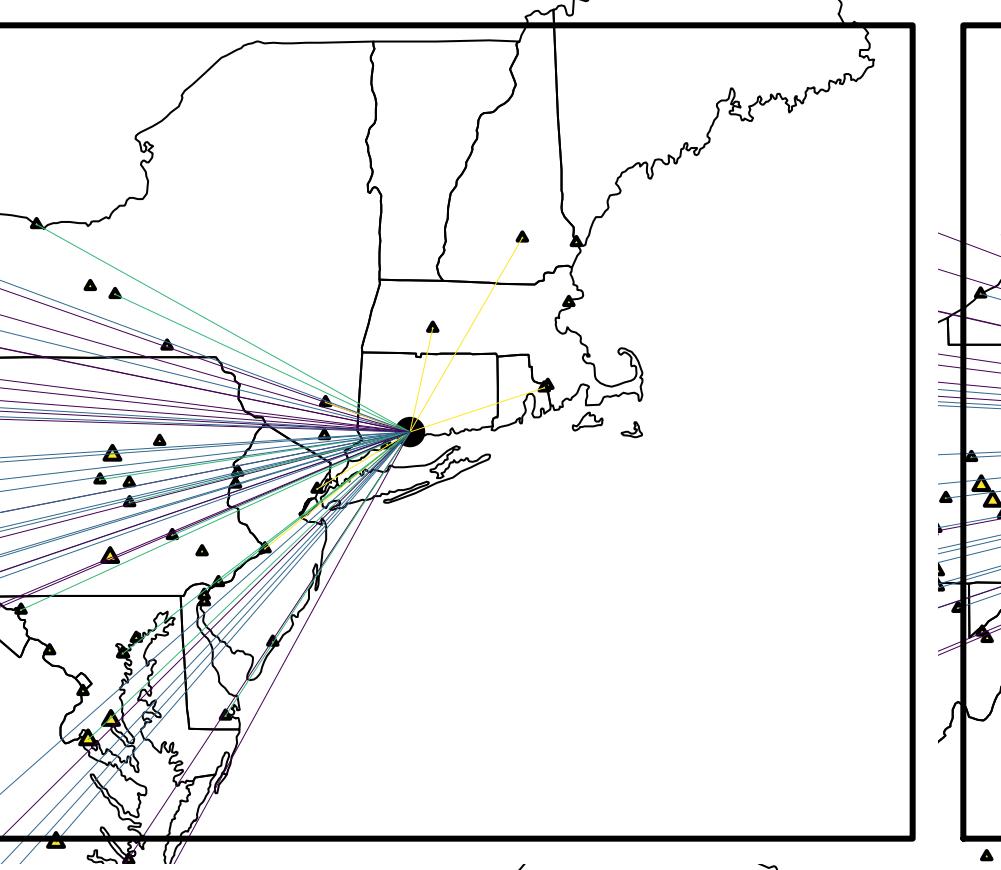
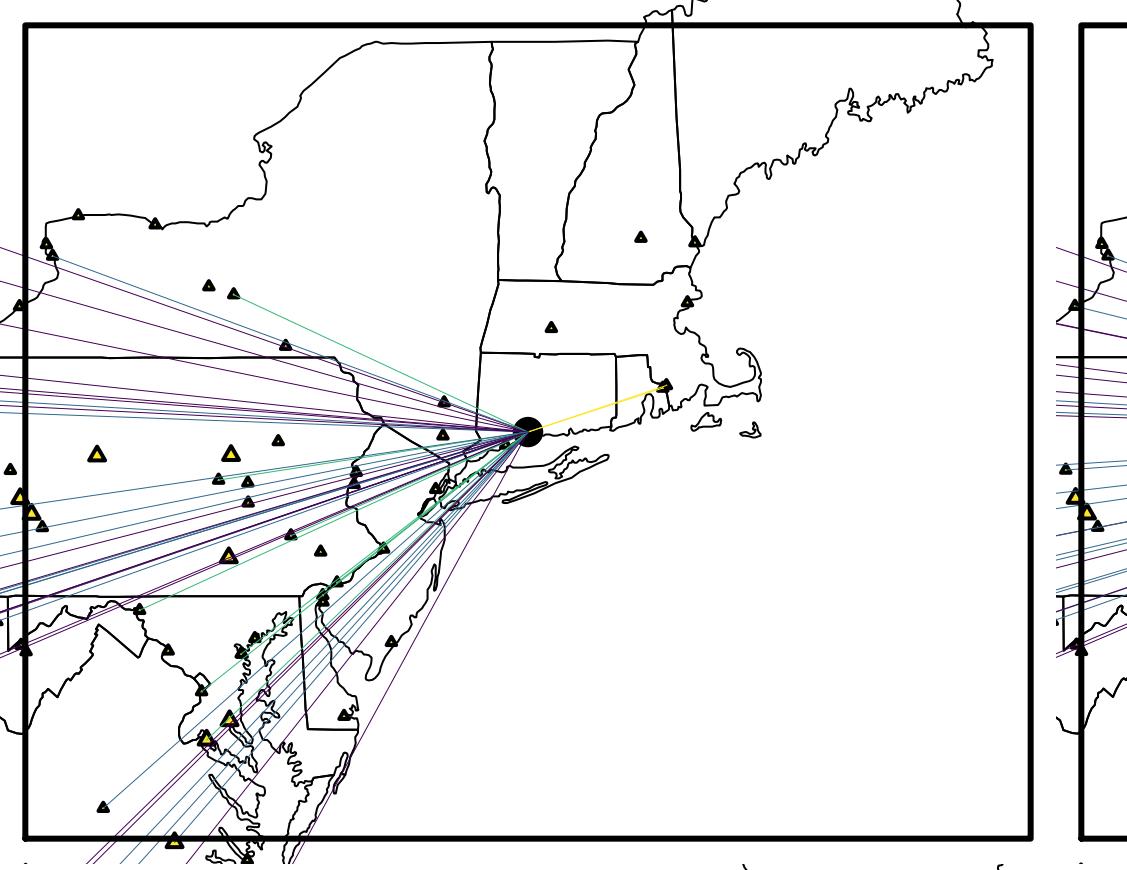
Lag 3 edges

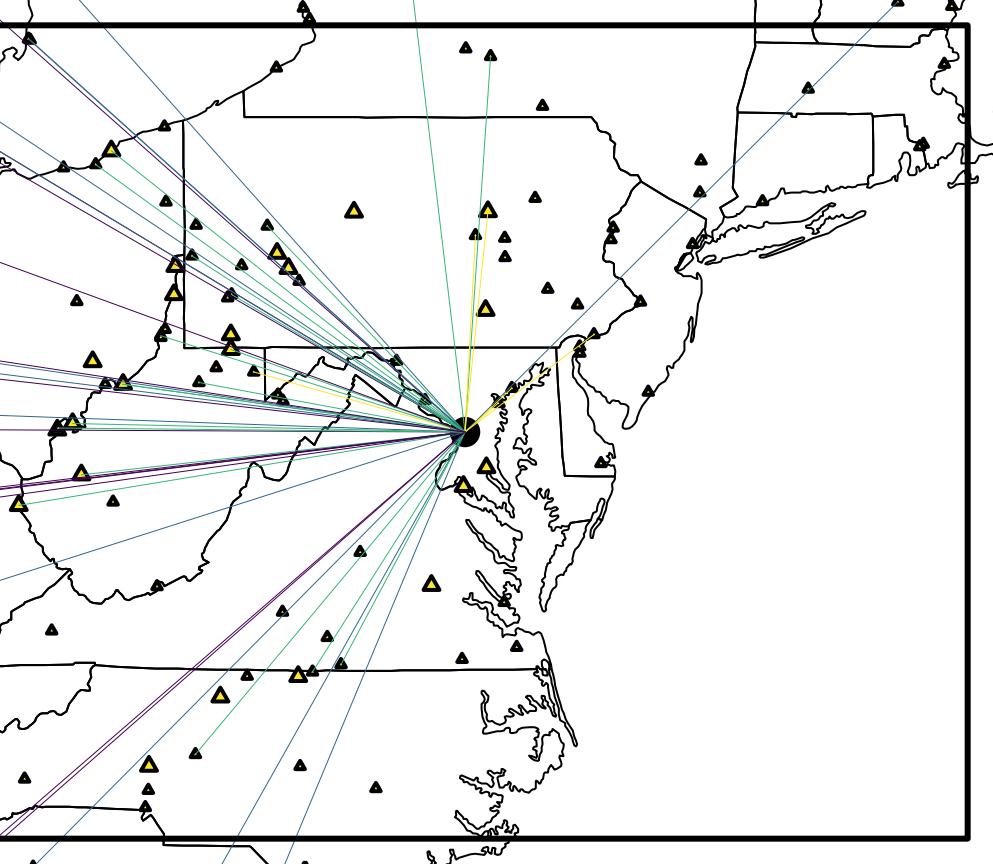
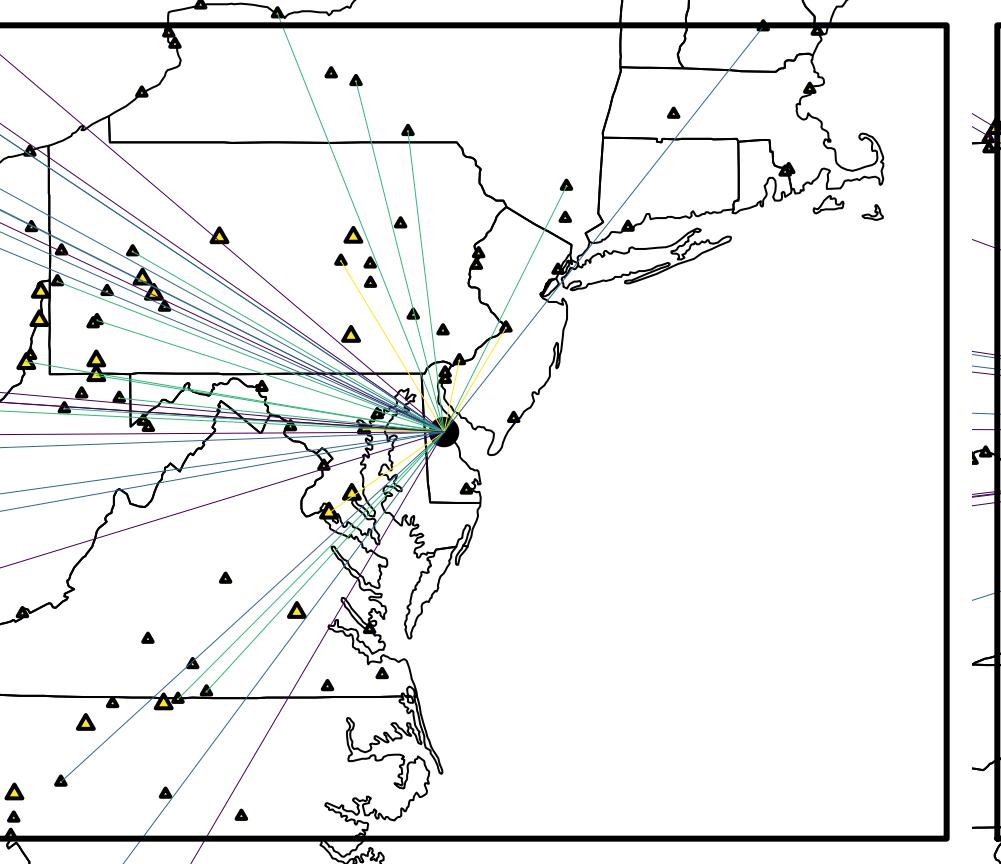
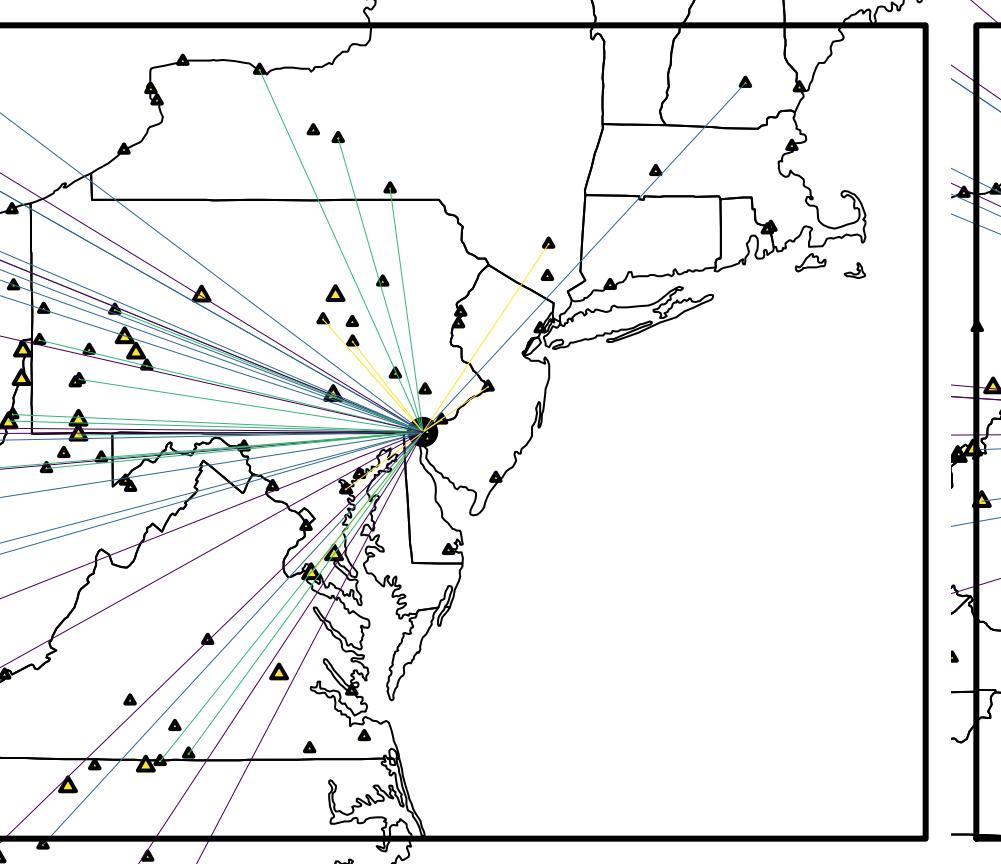
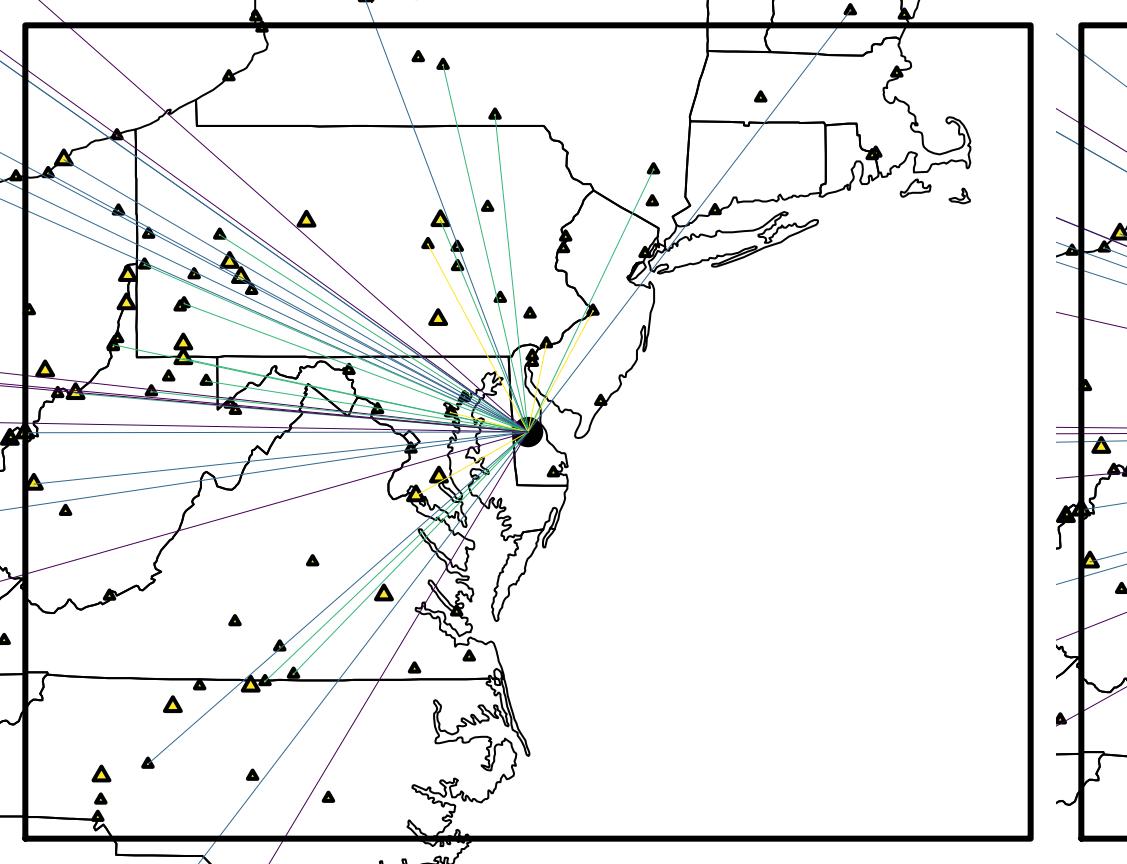
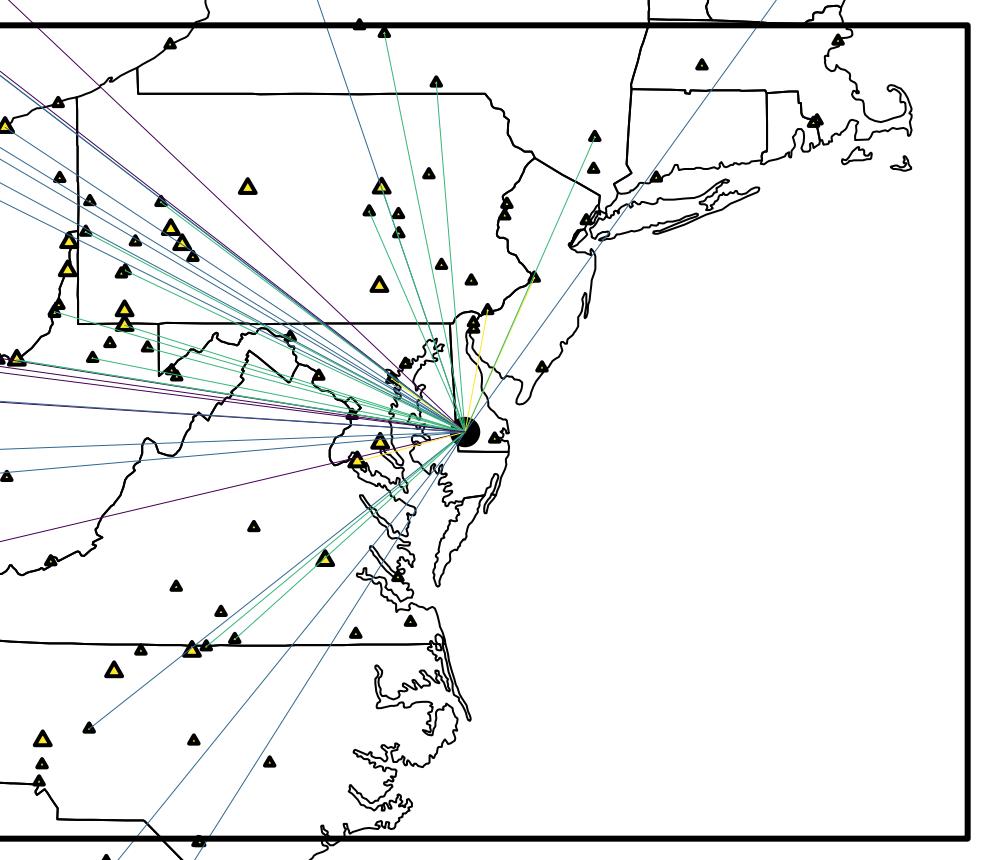
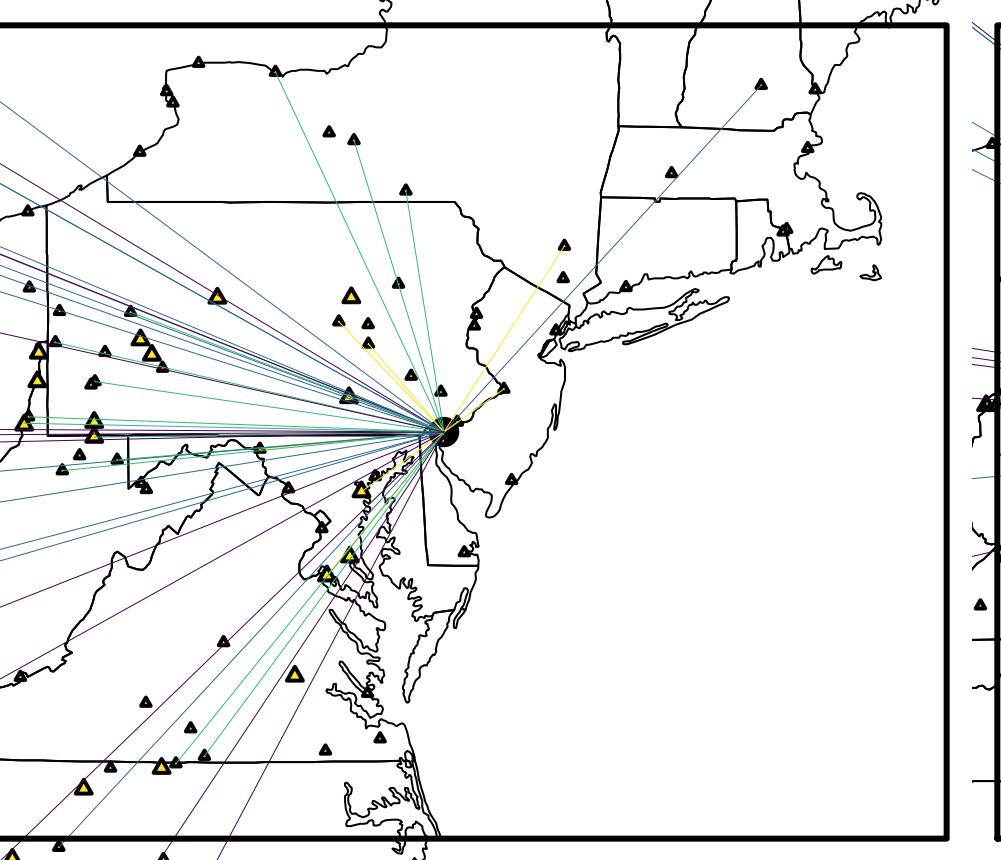
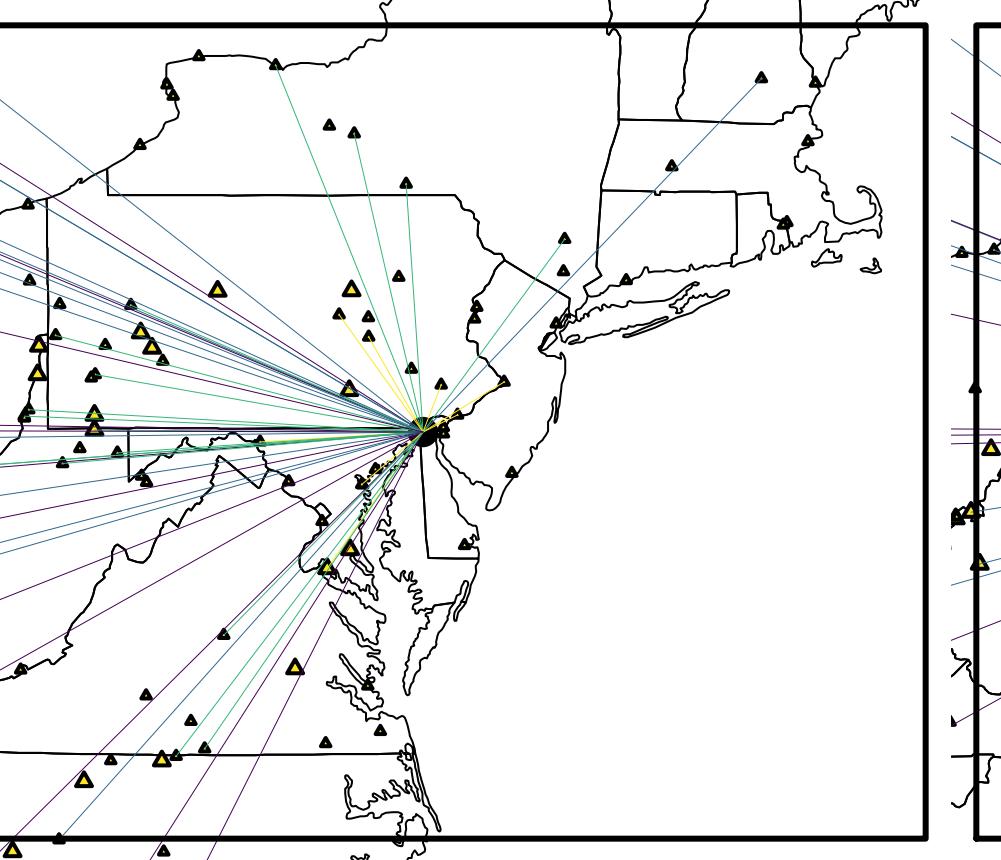
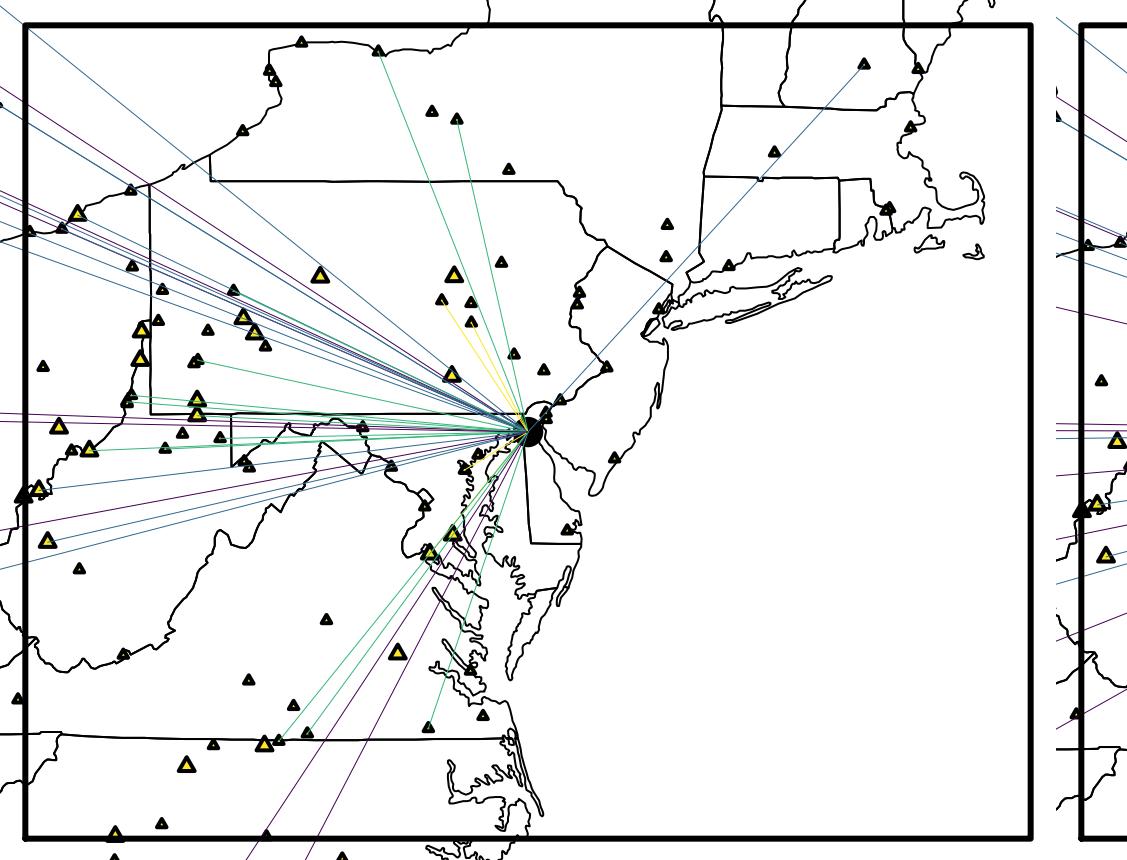


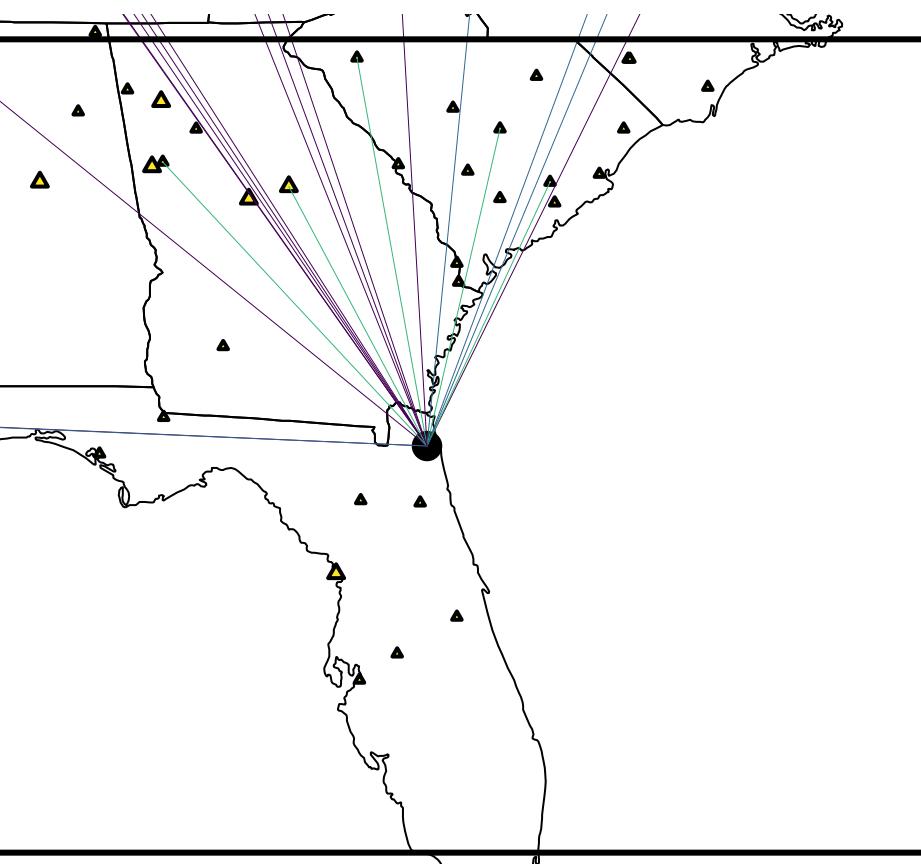
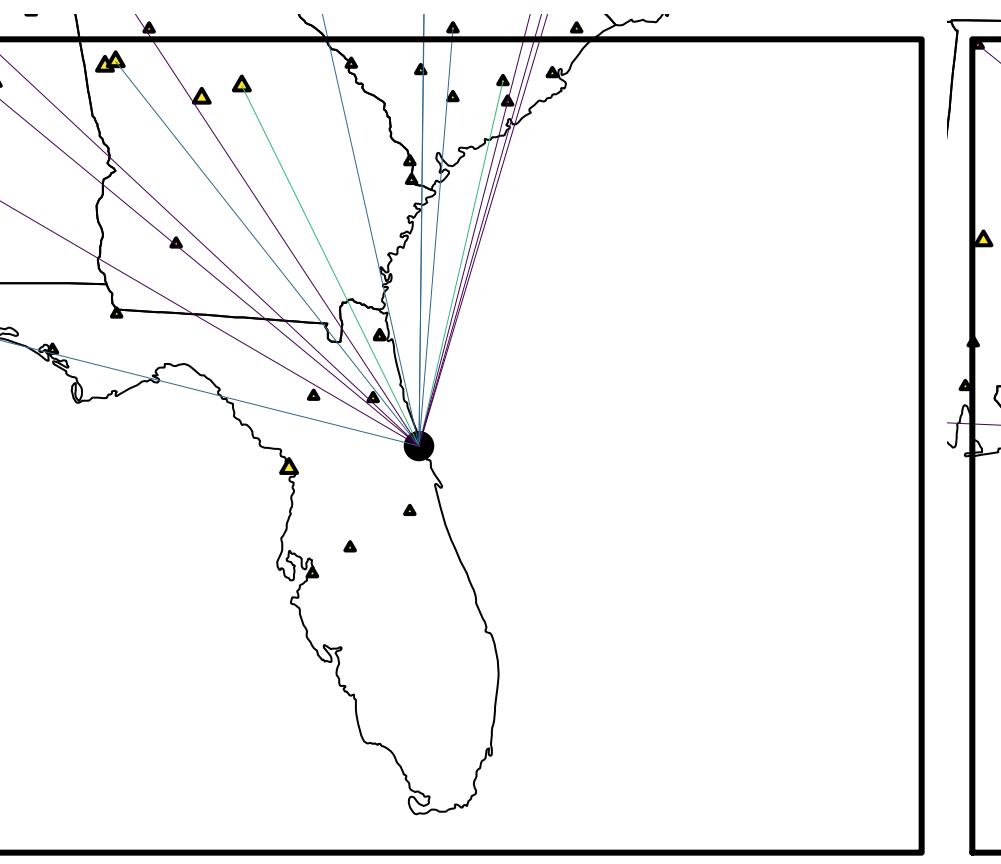
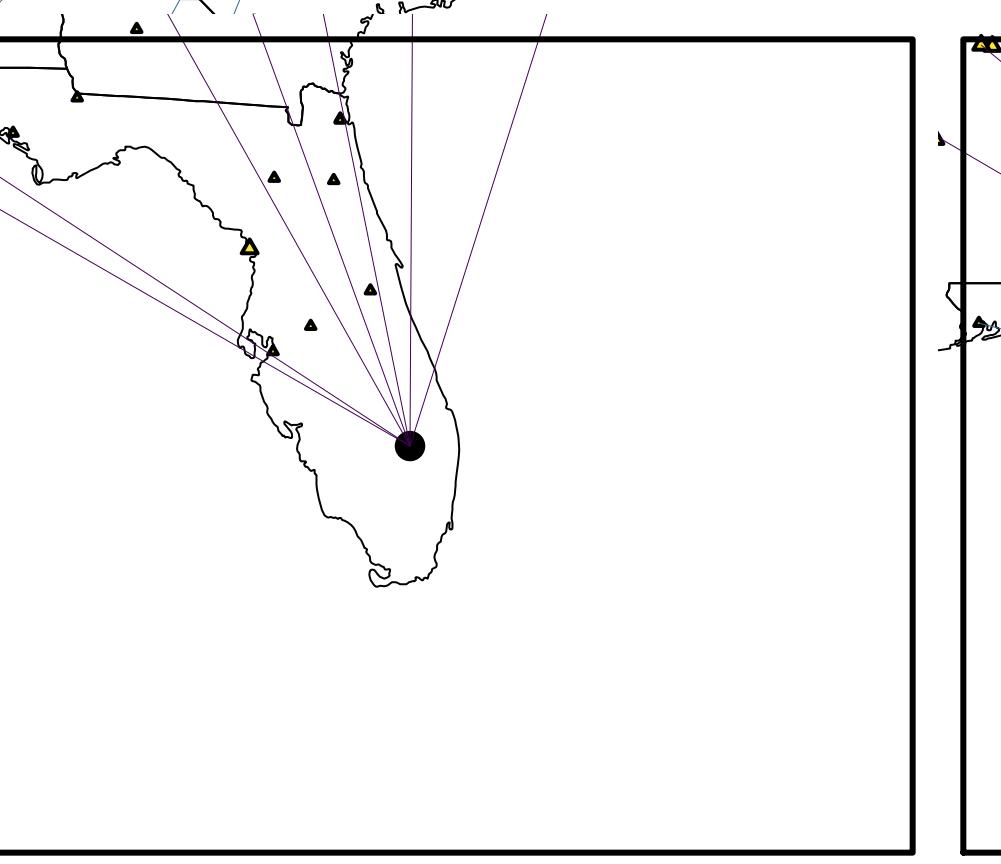
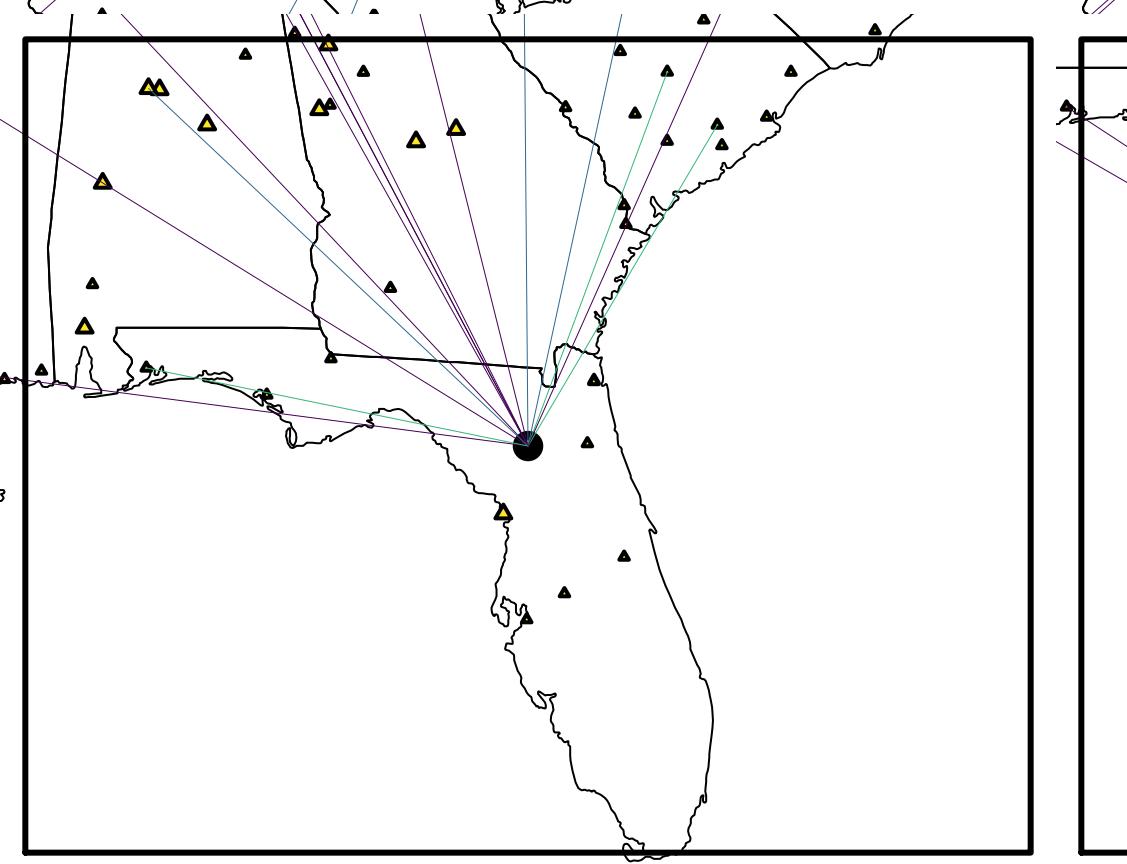
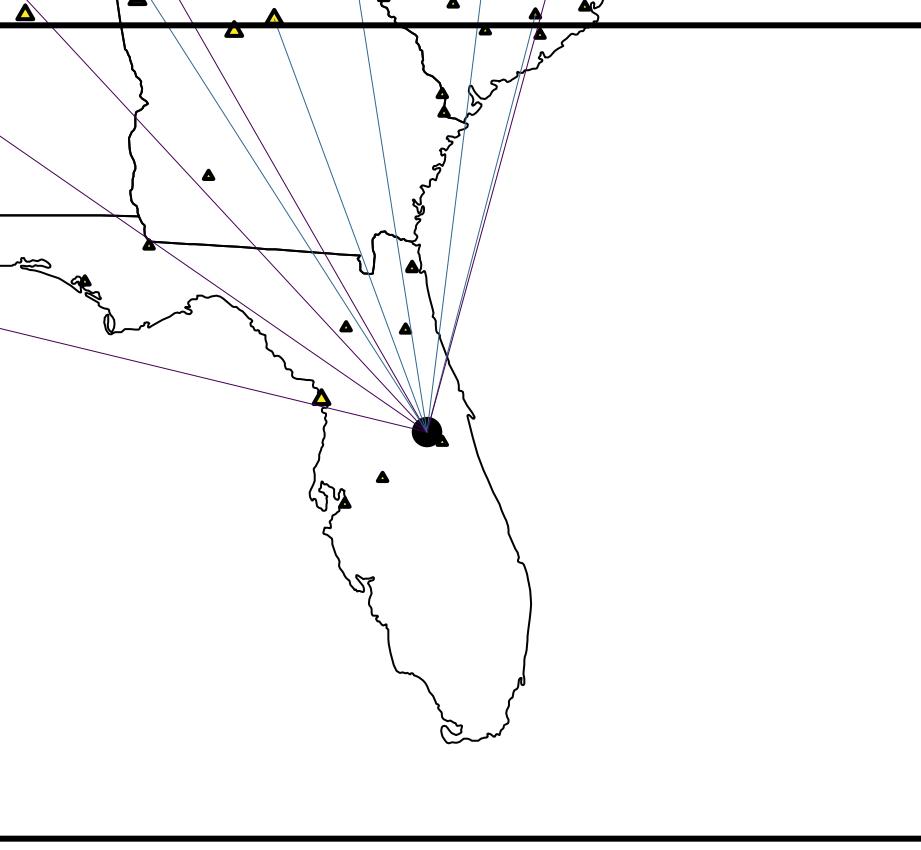
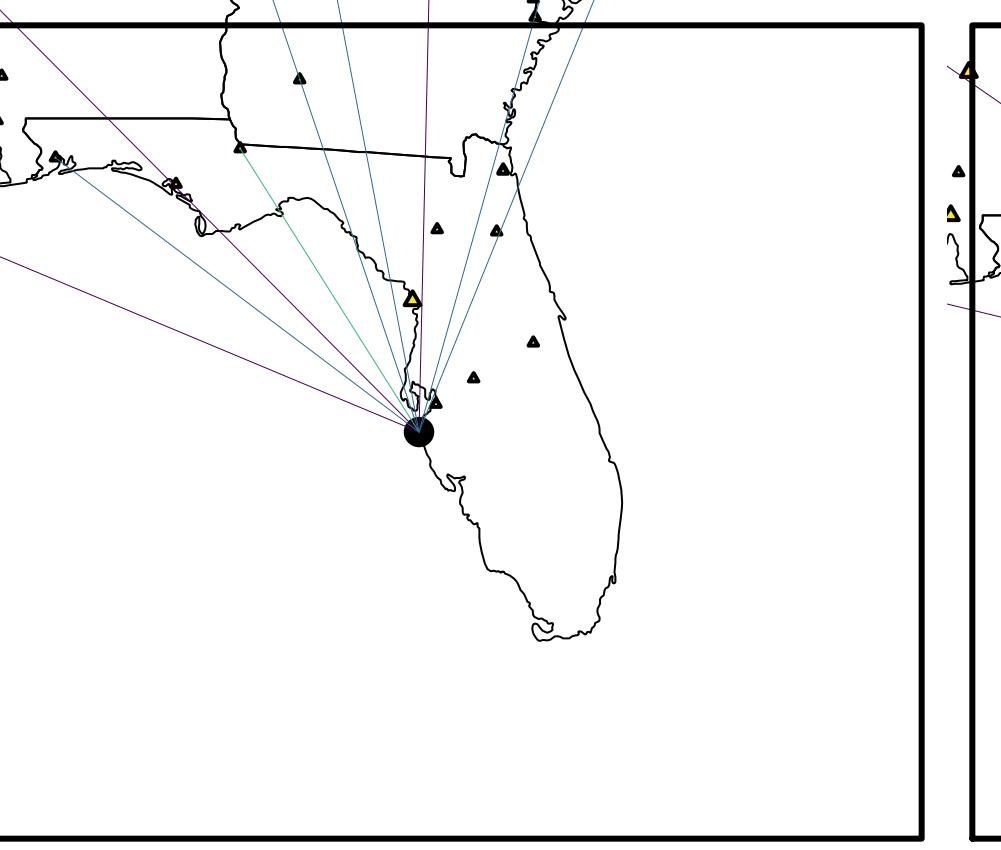
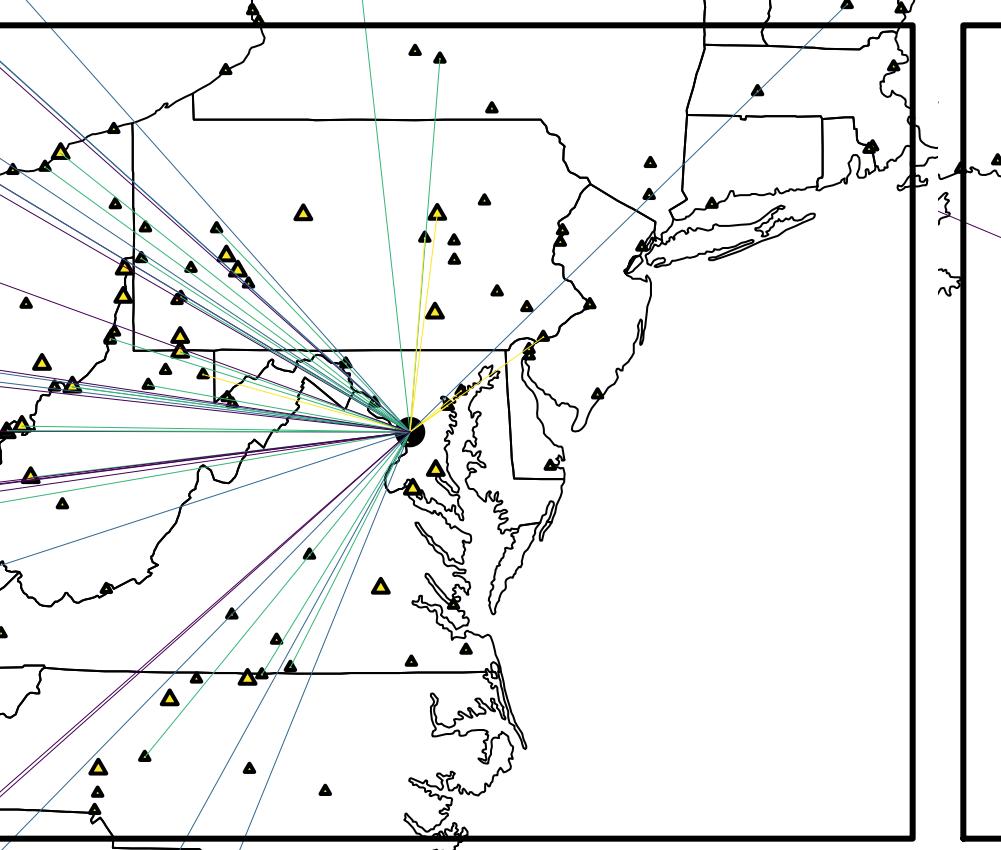
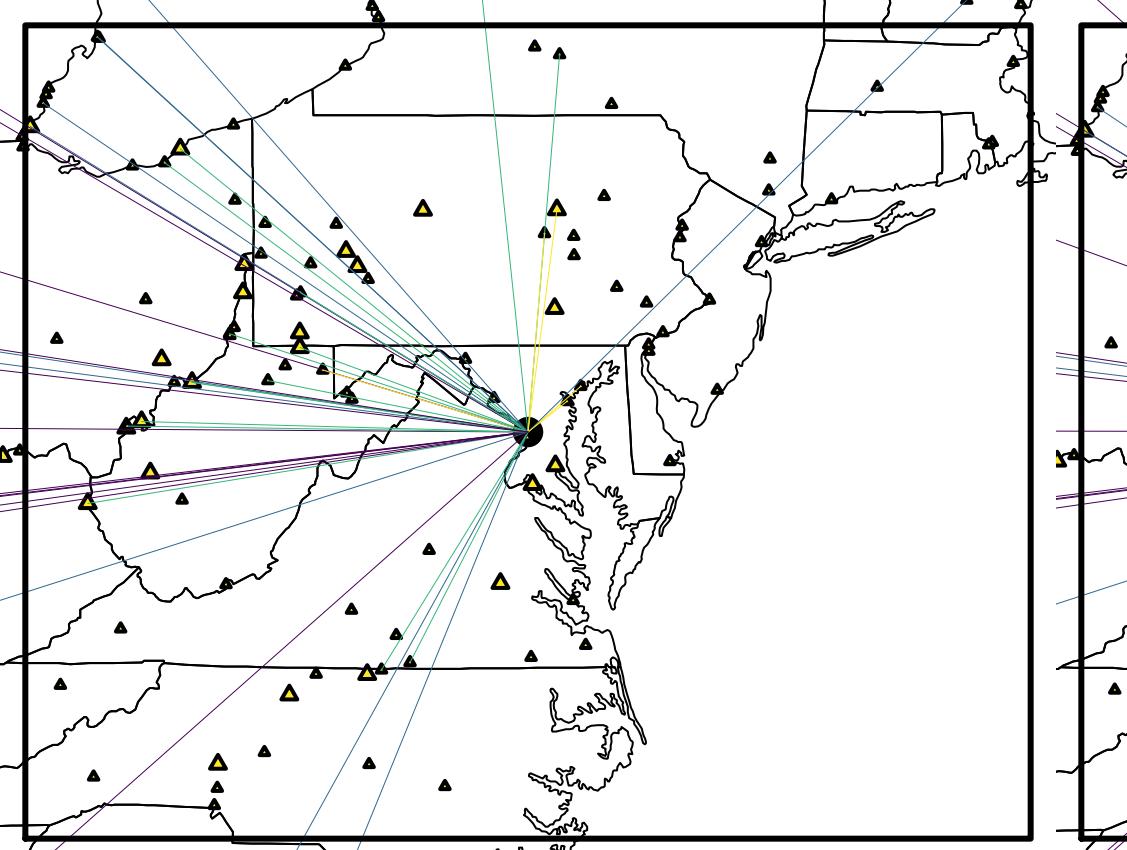


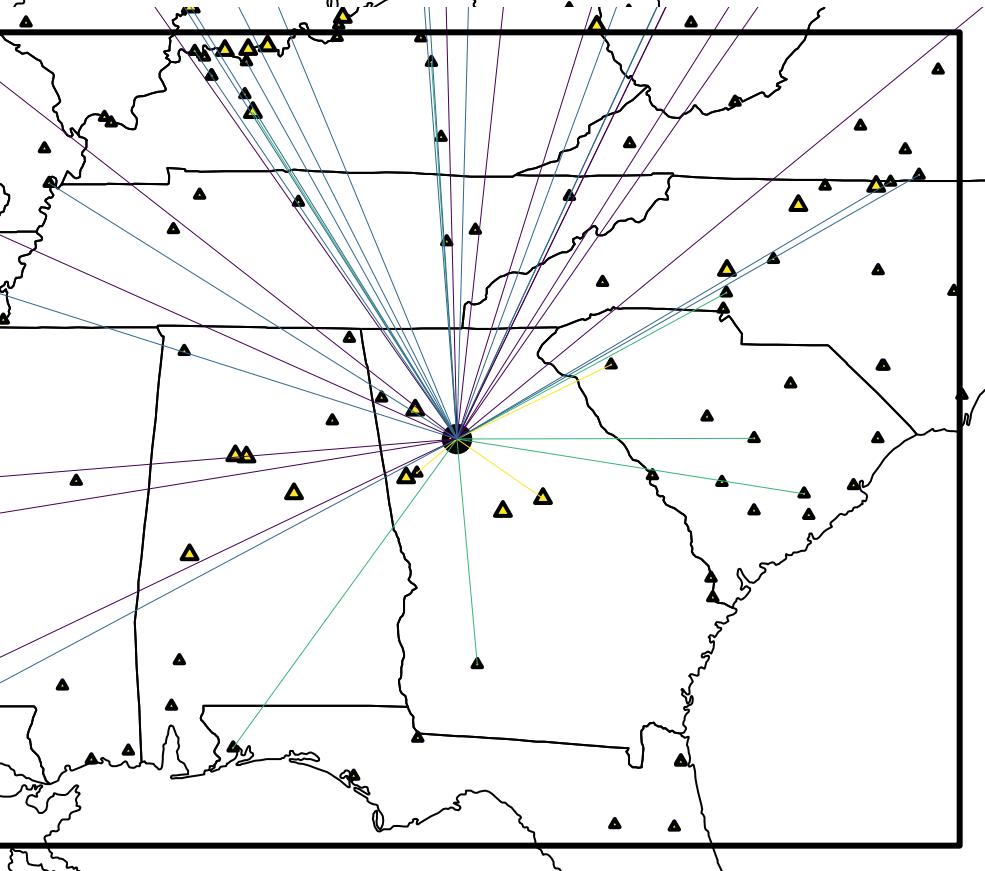
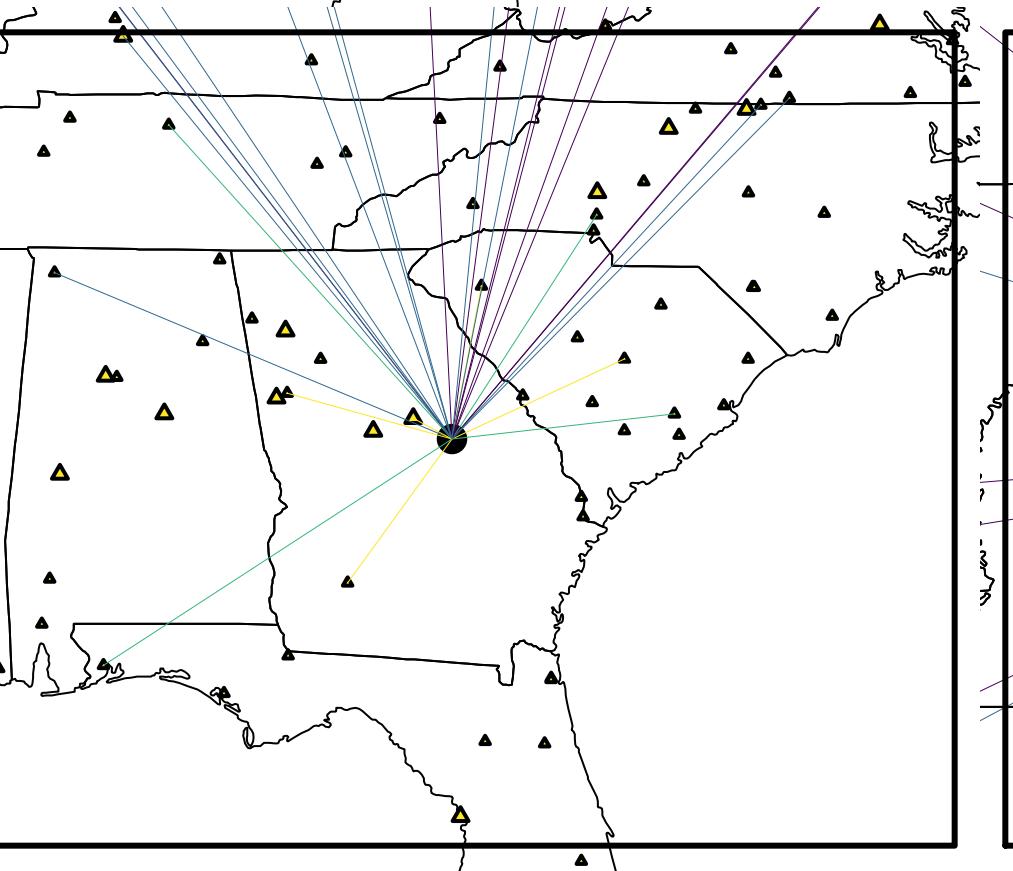
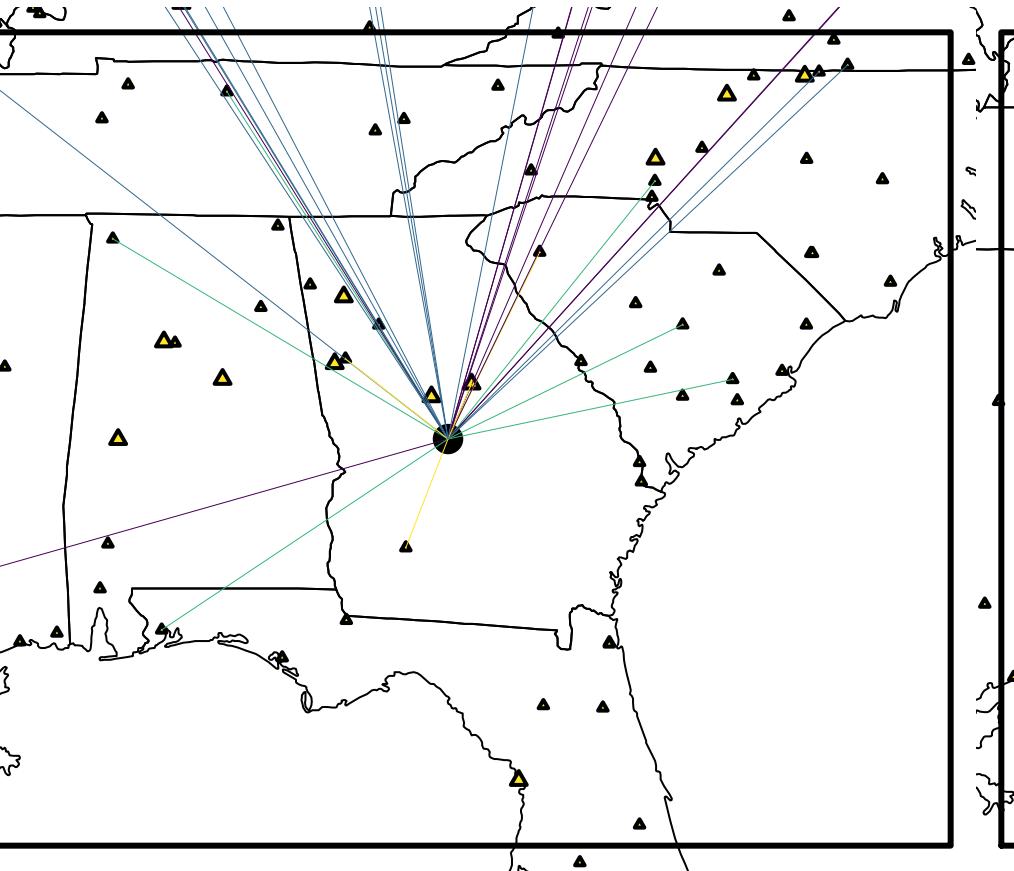
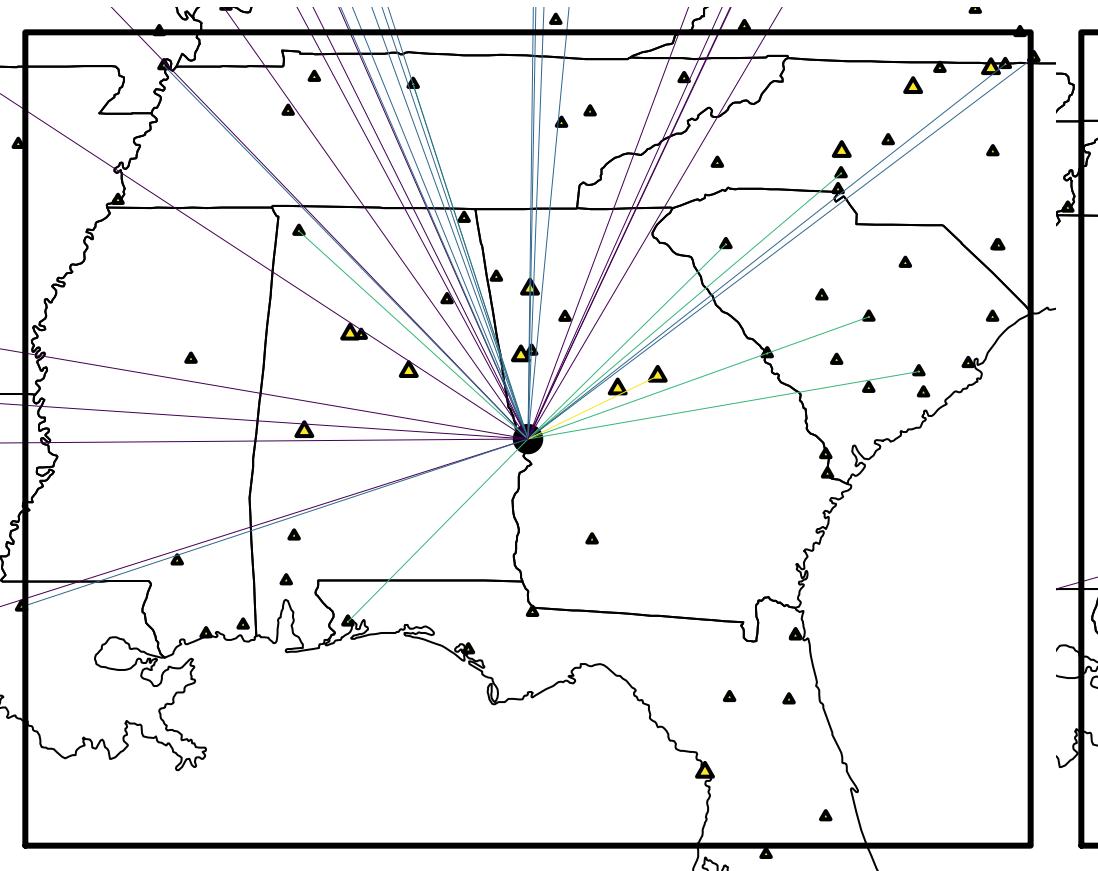
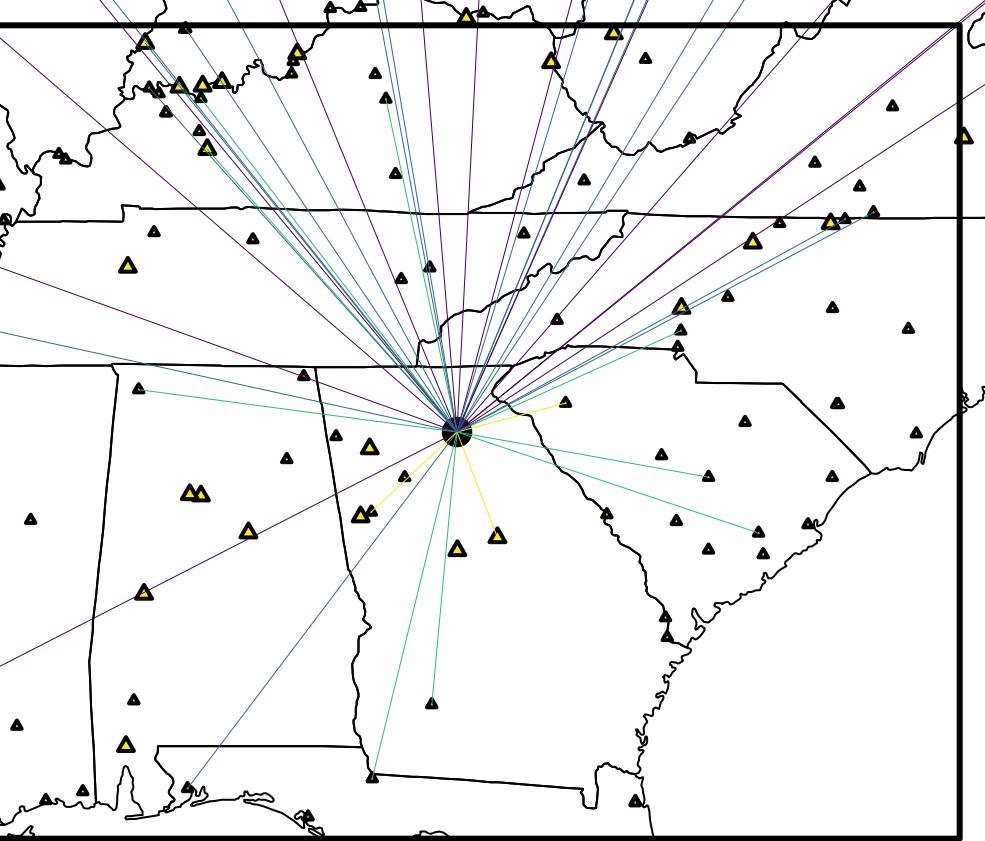
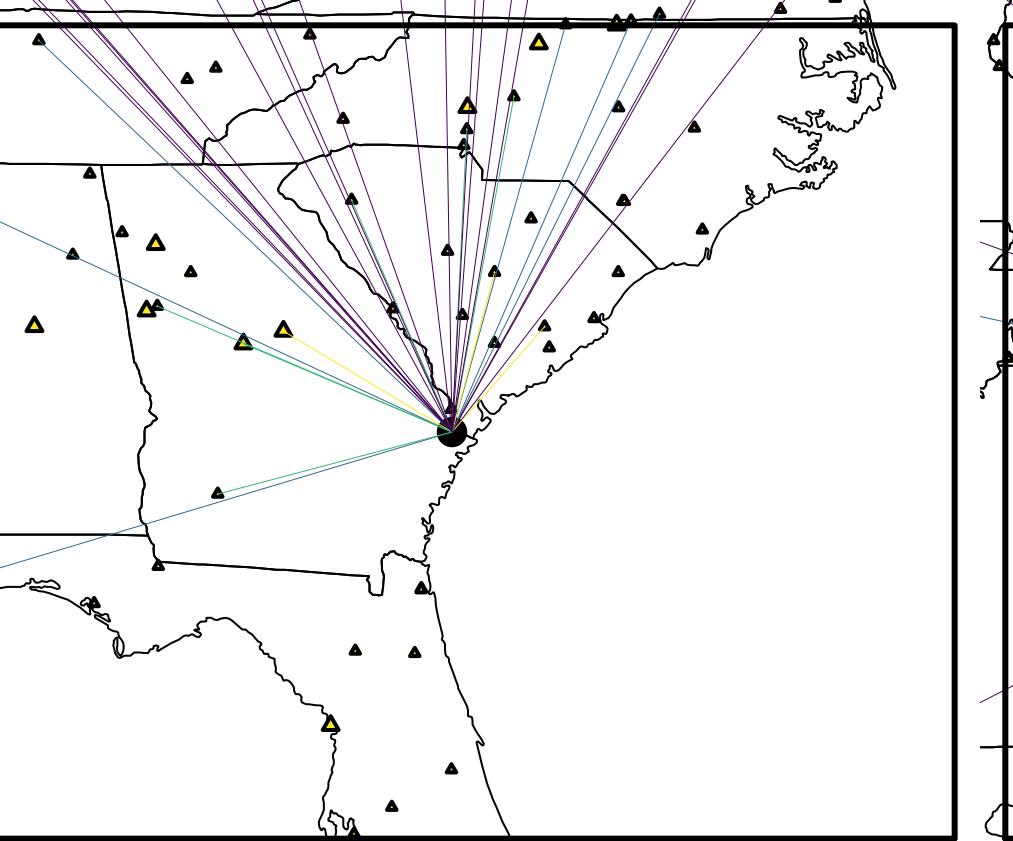
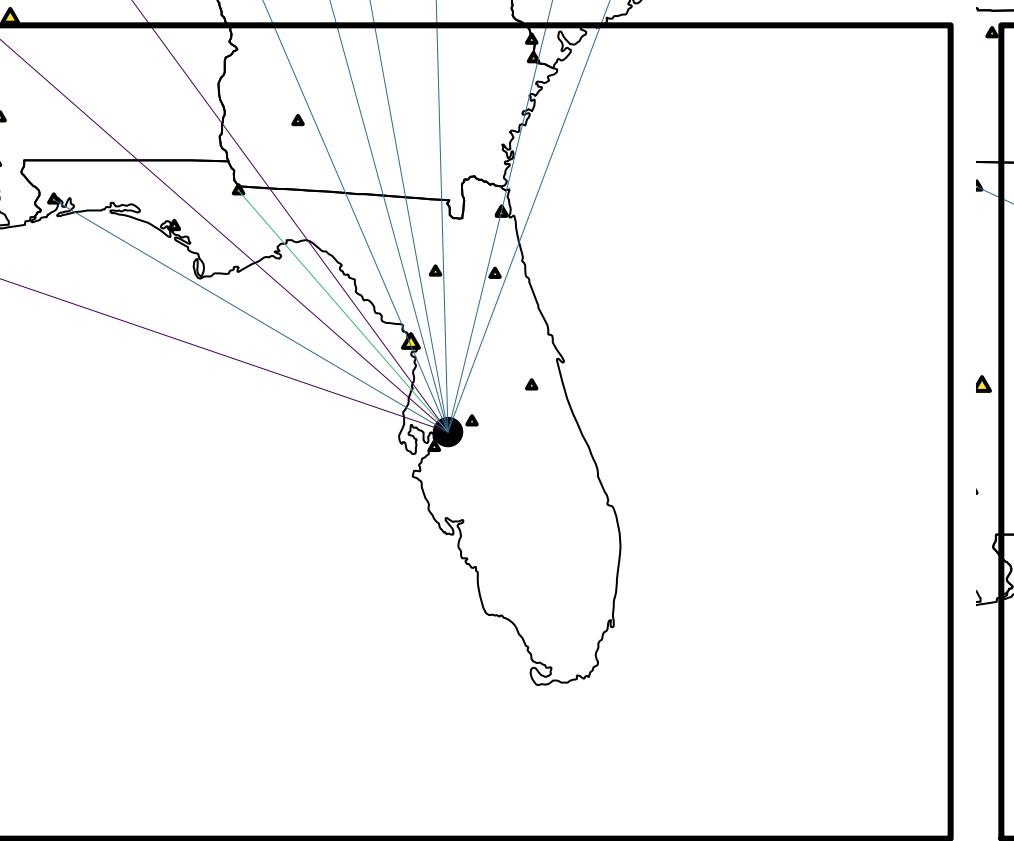
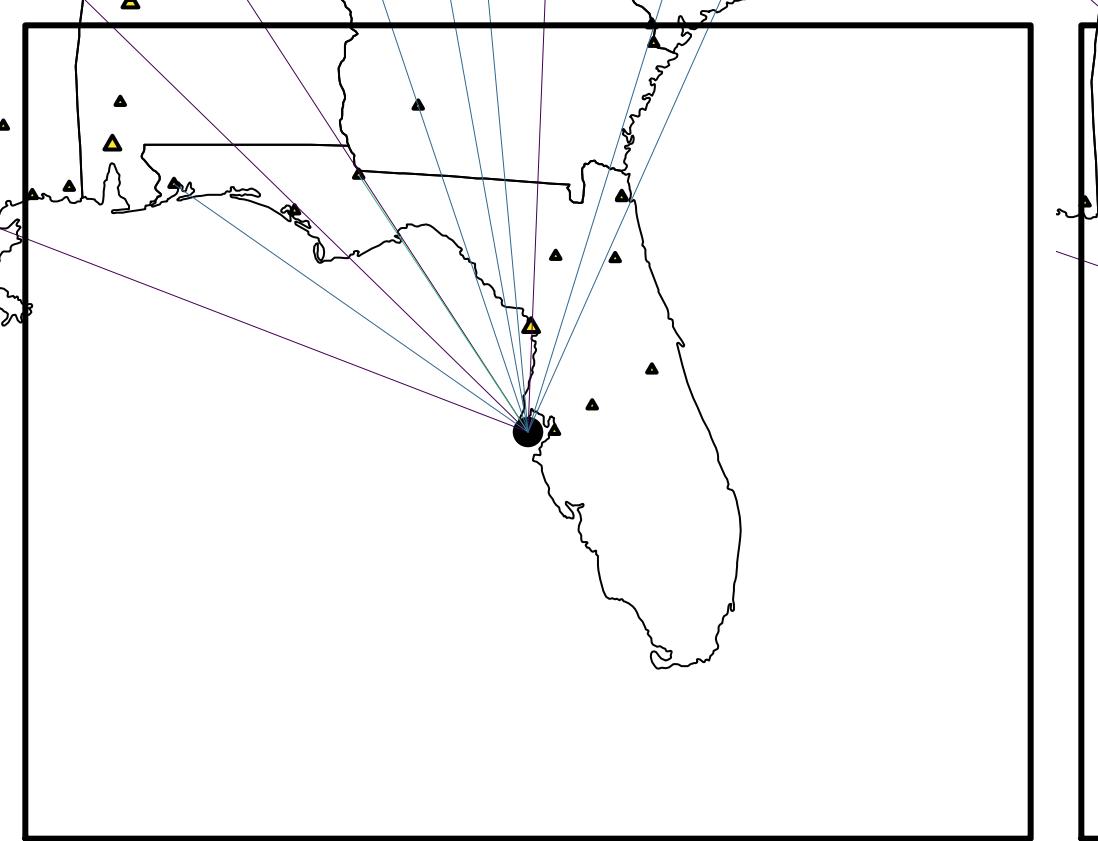


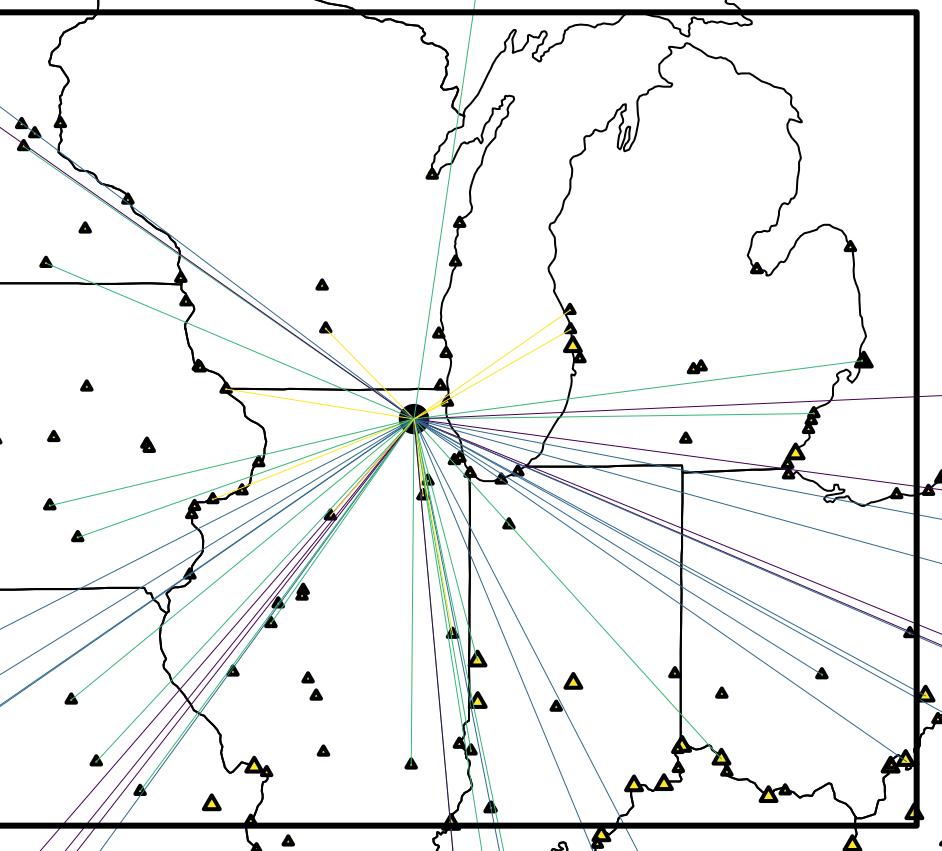
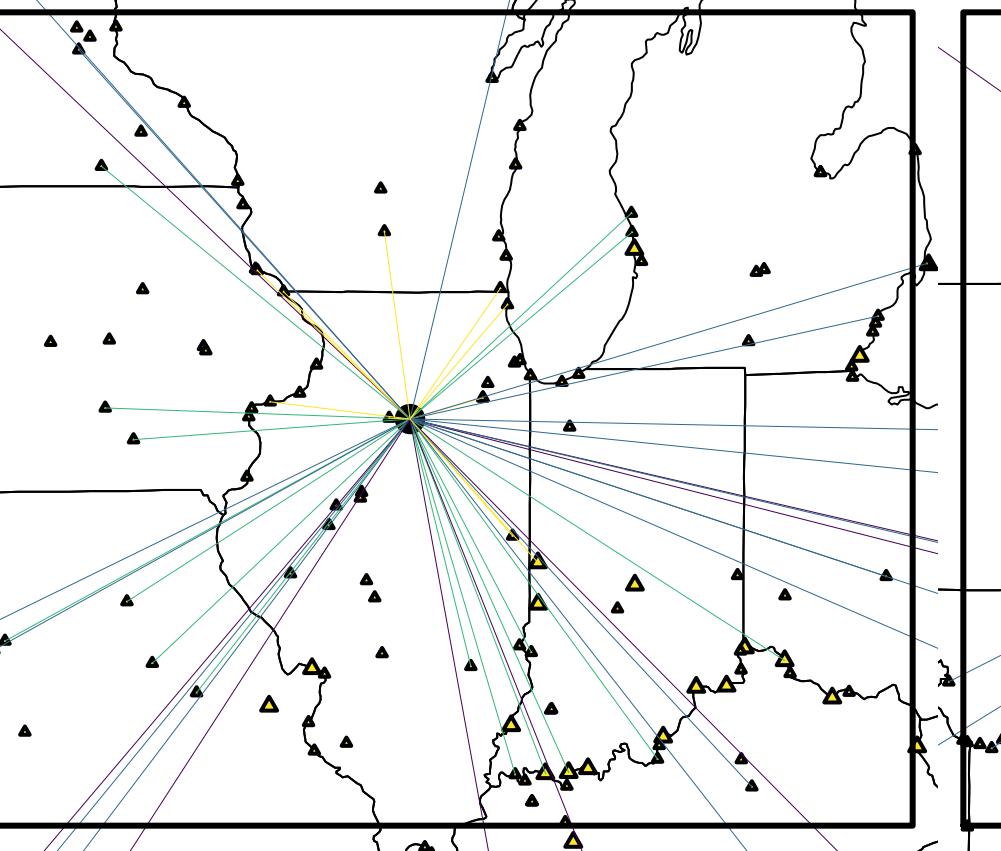
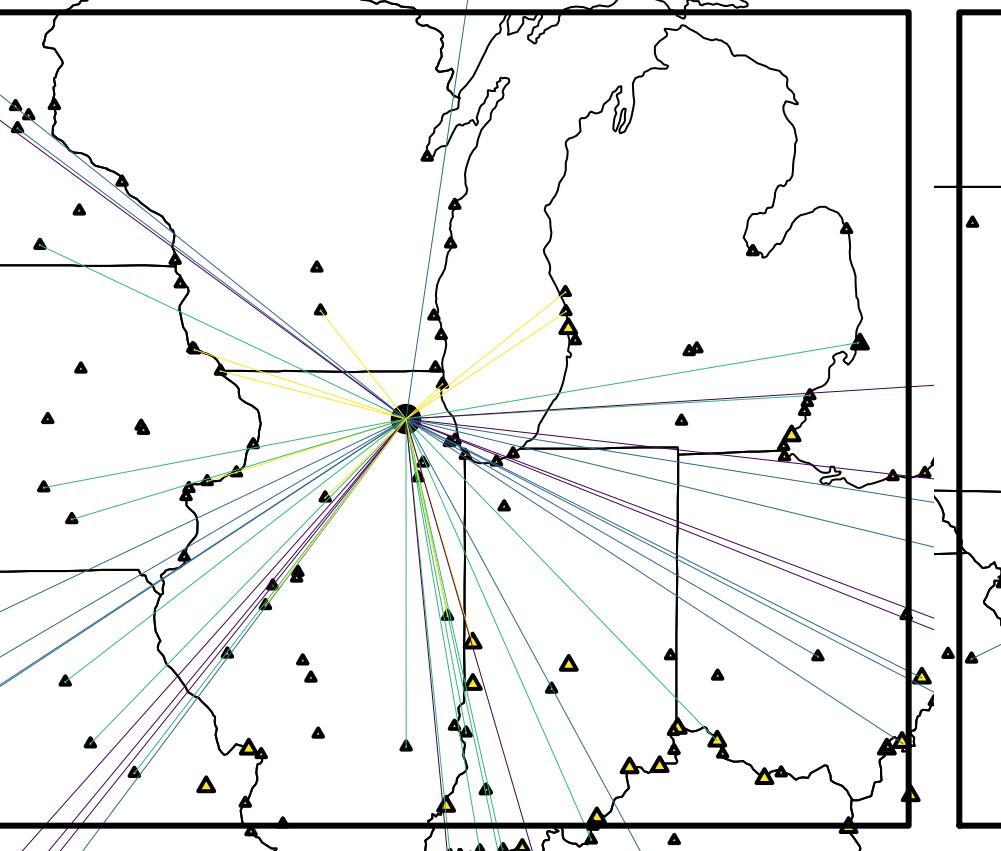
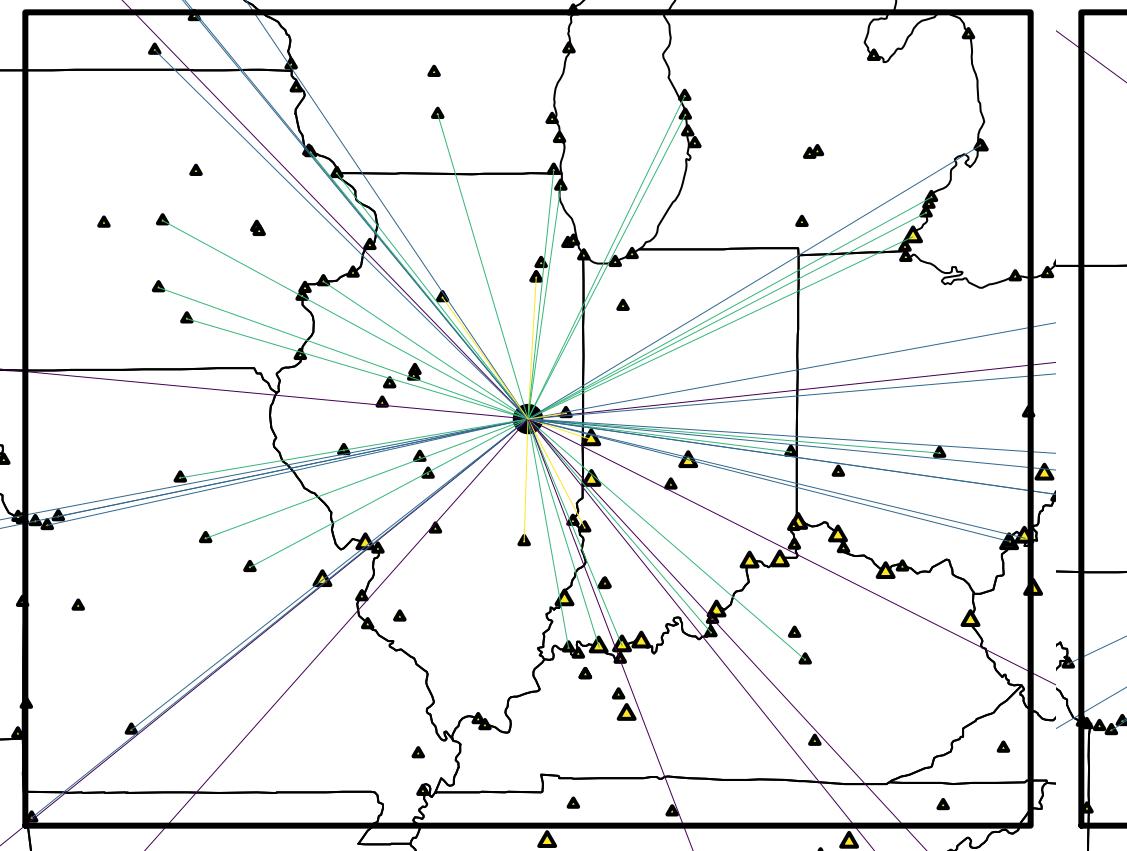
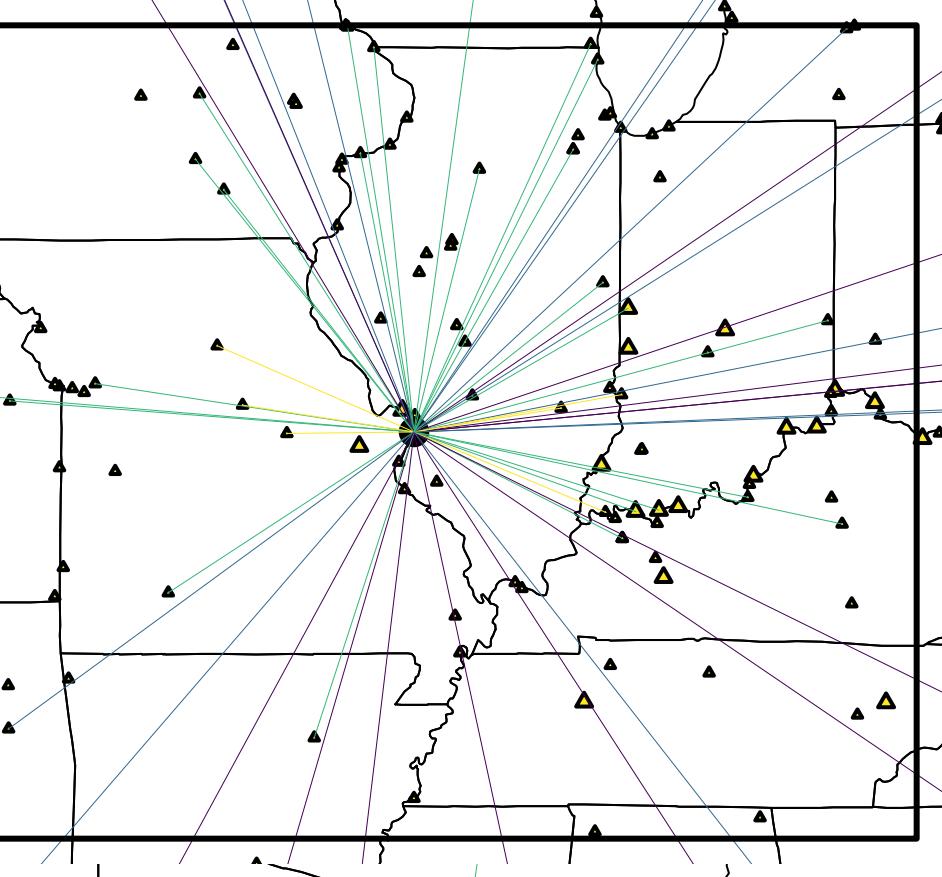
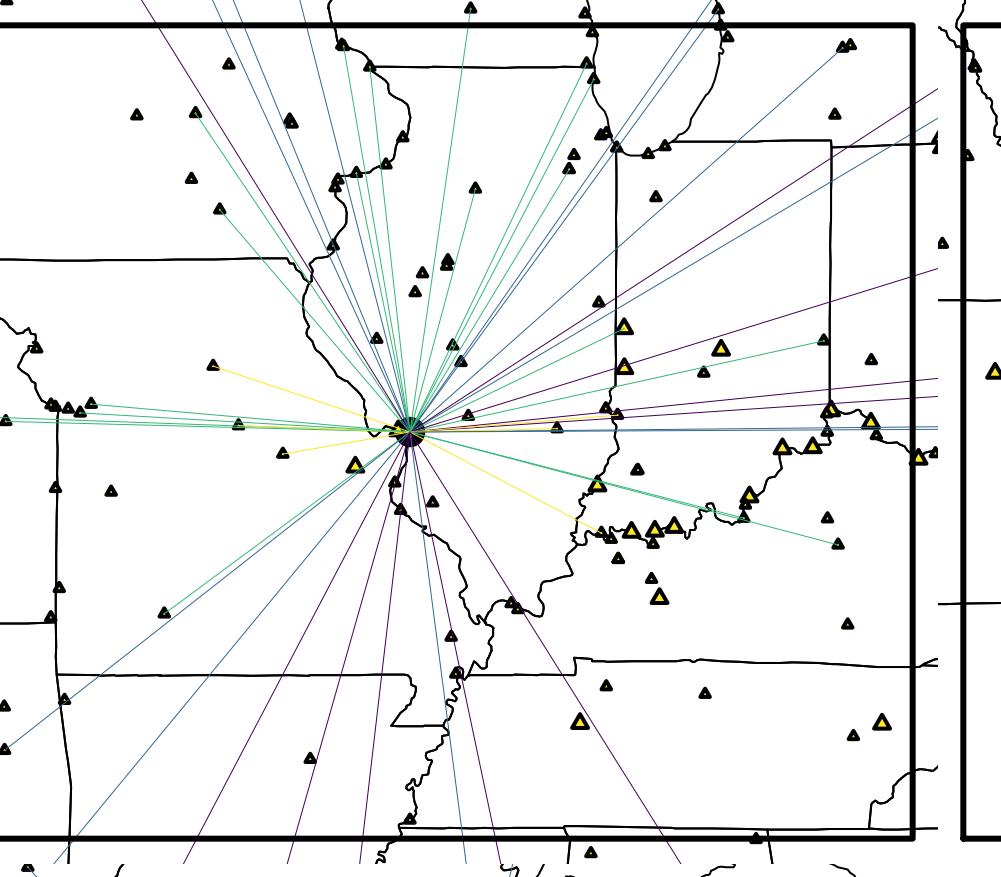
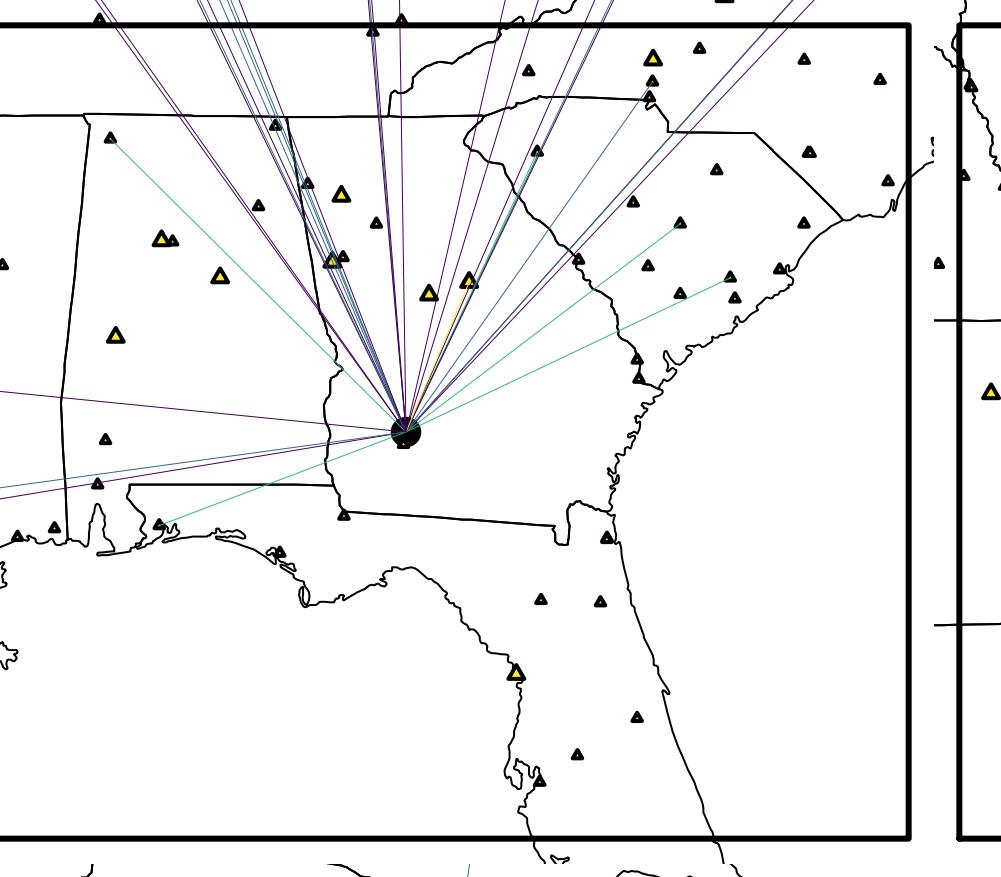
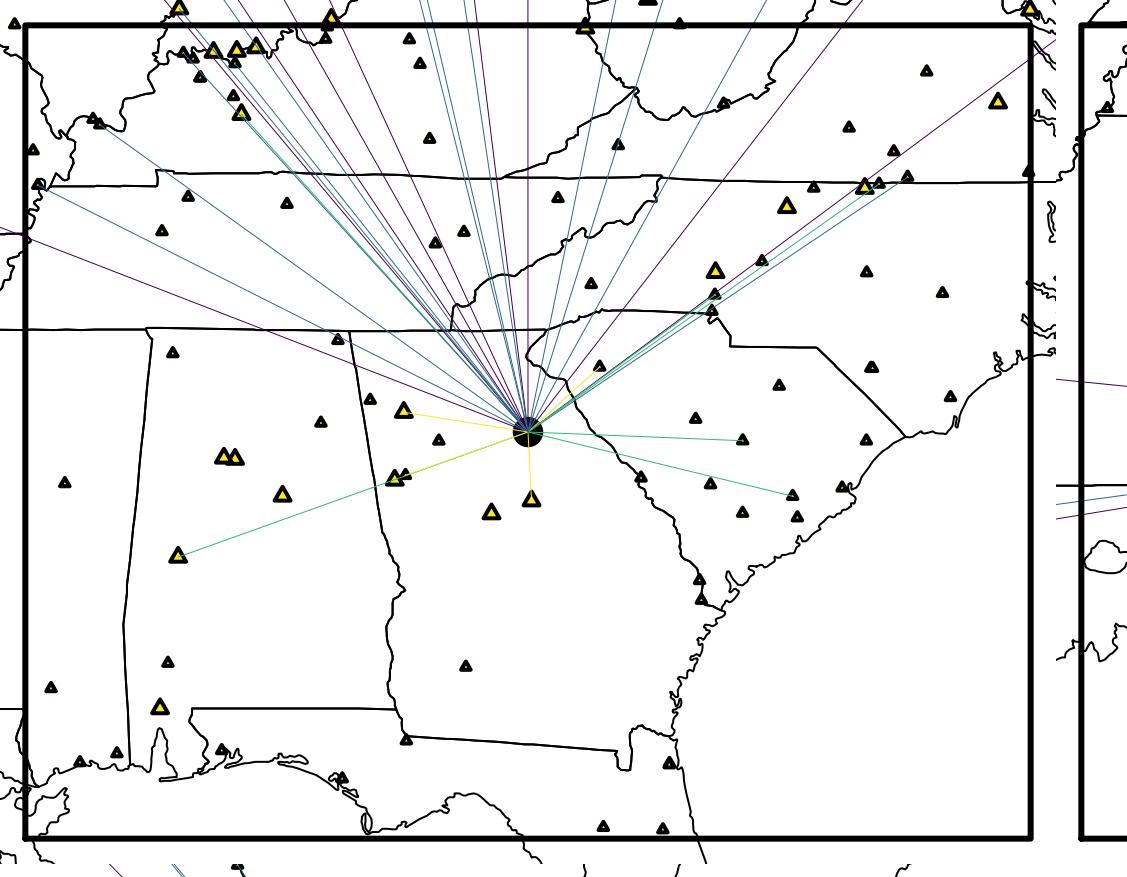


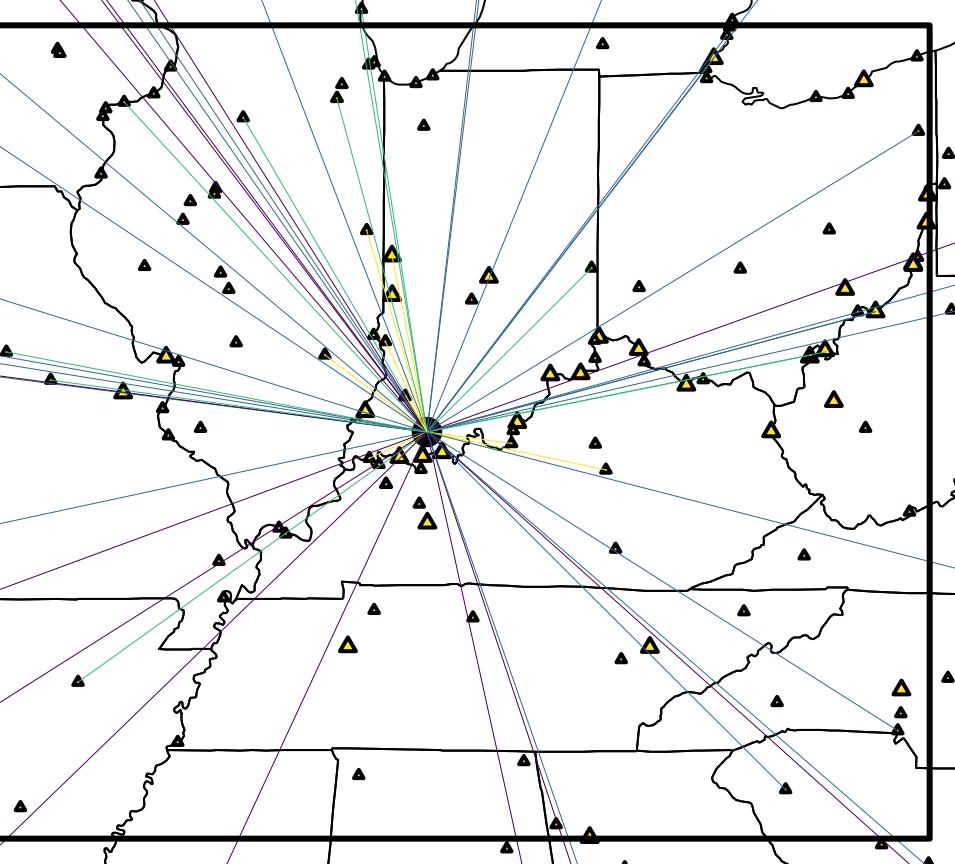
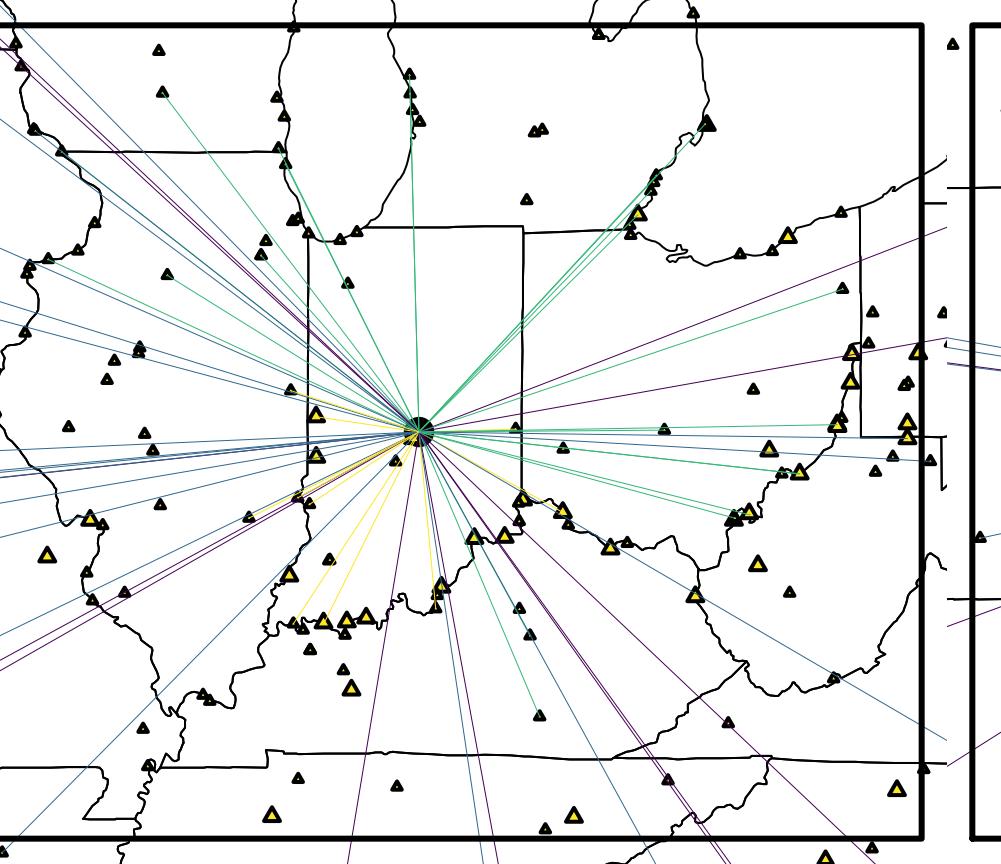
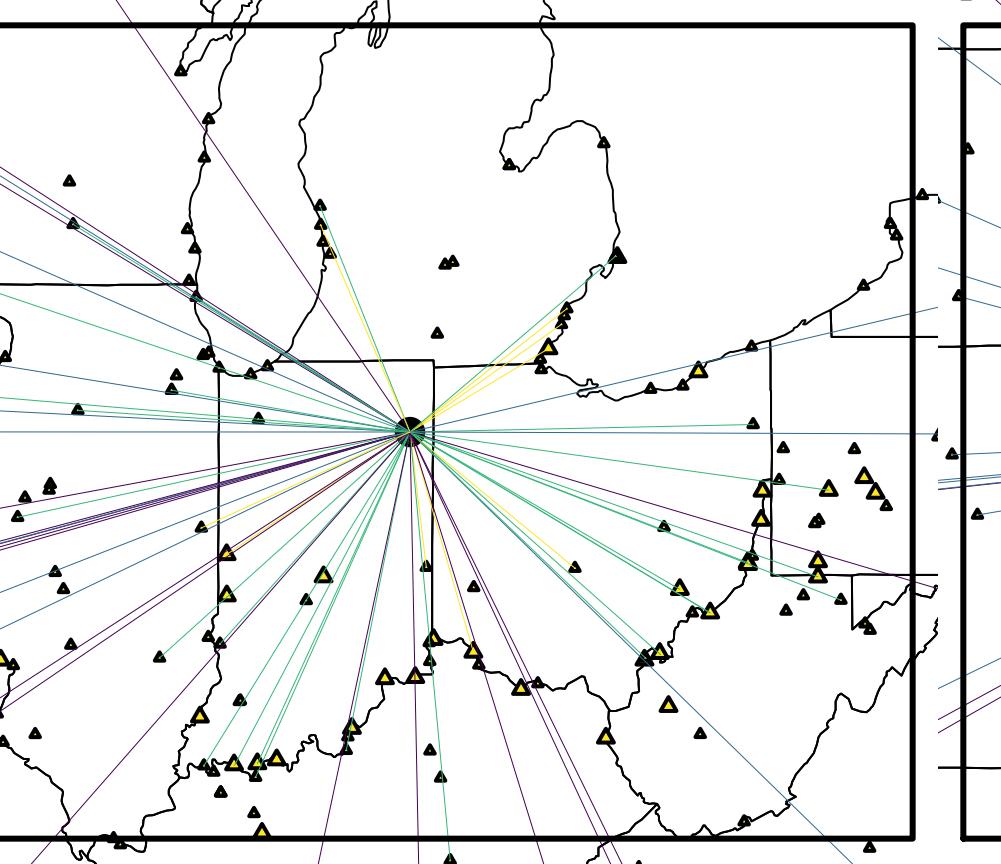
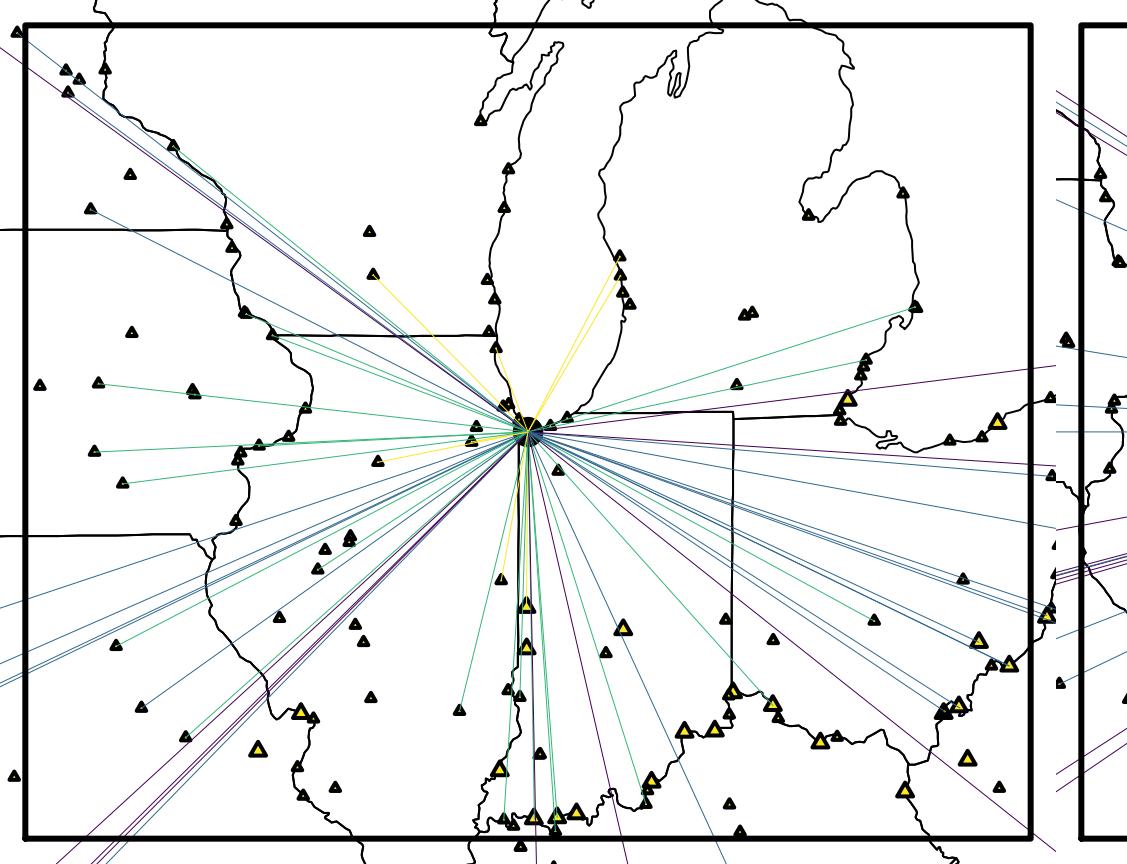
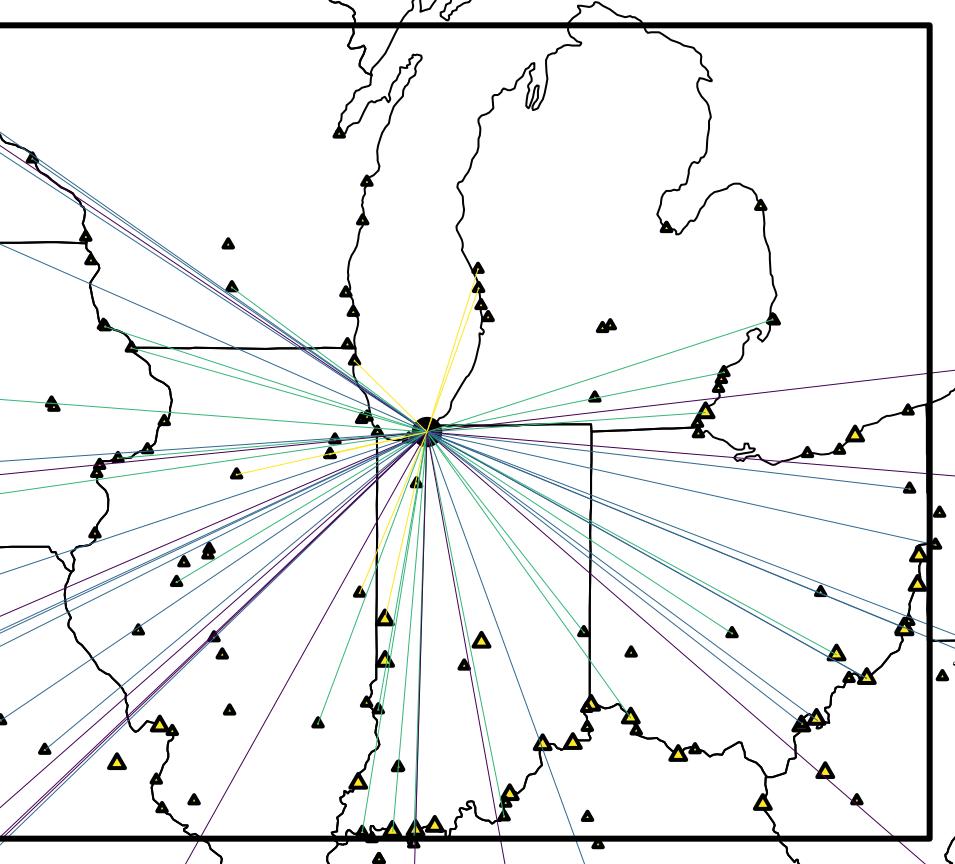
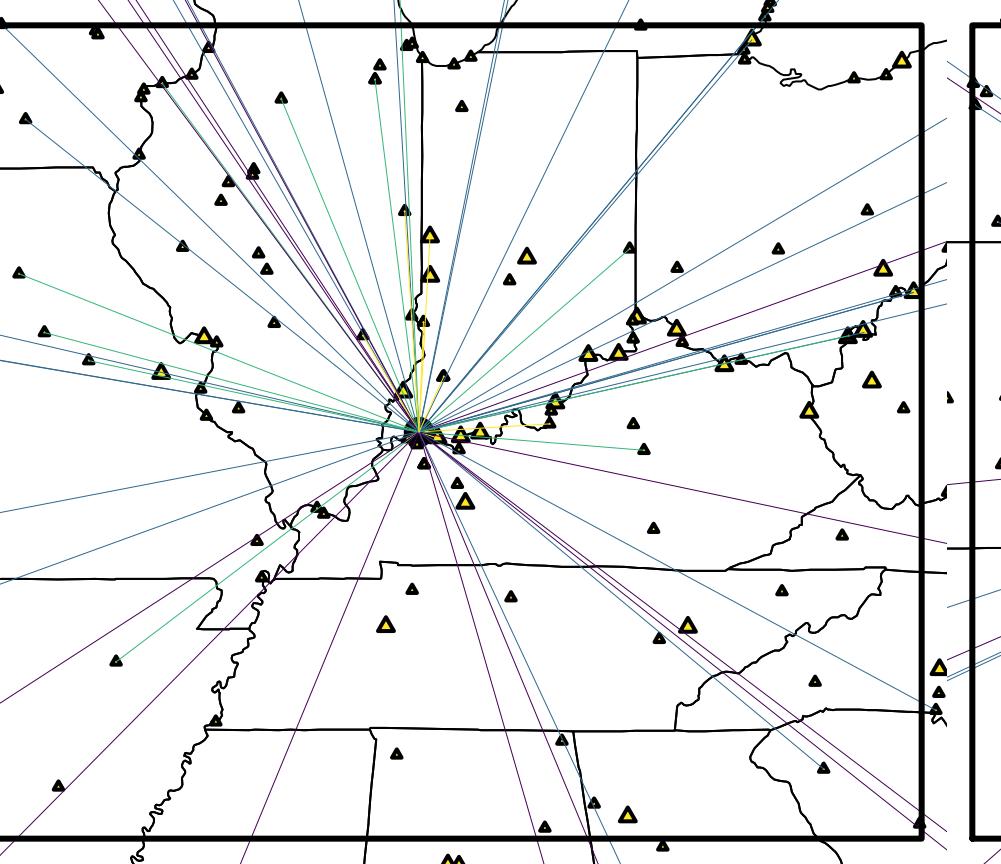
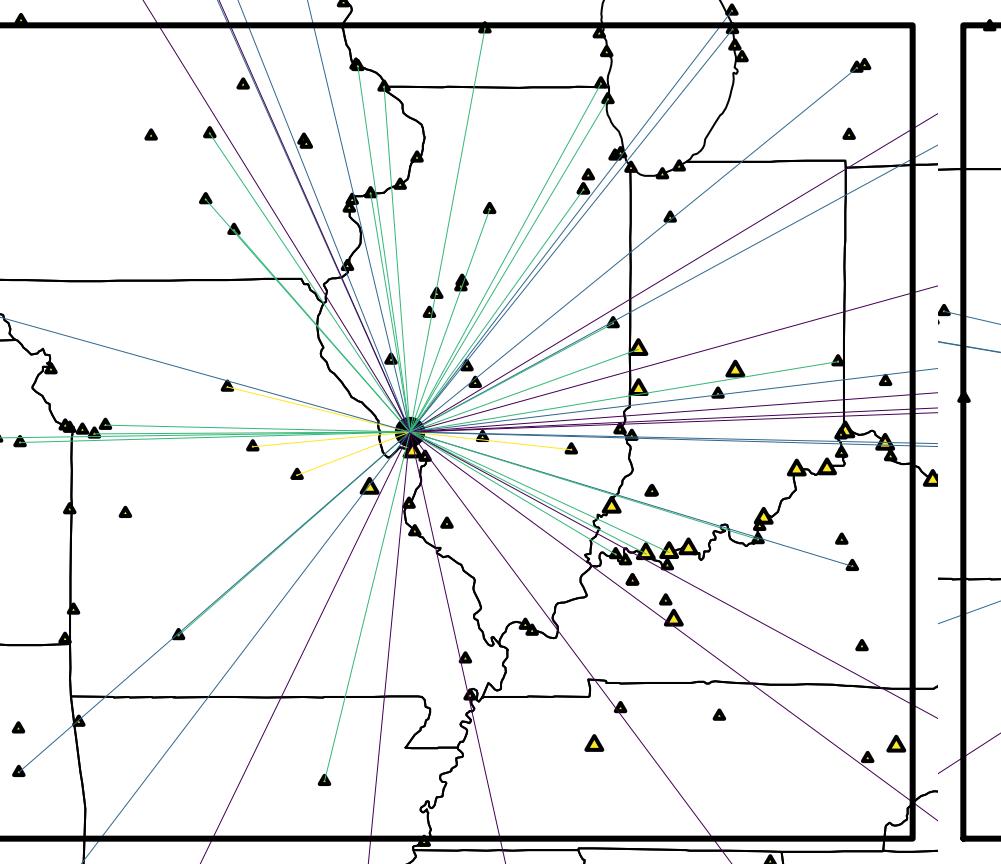
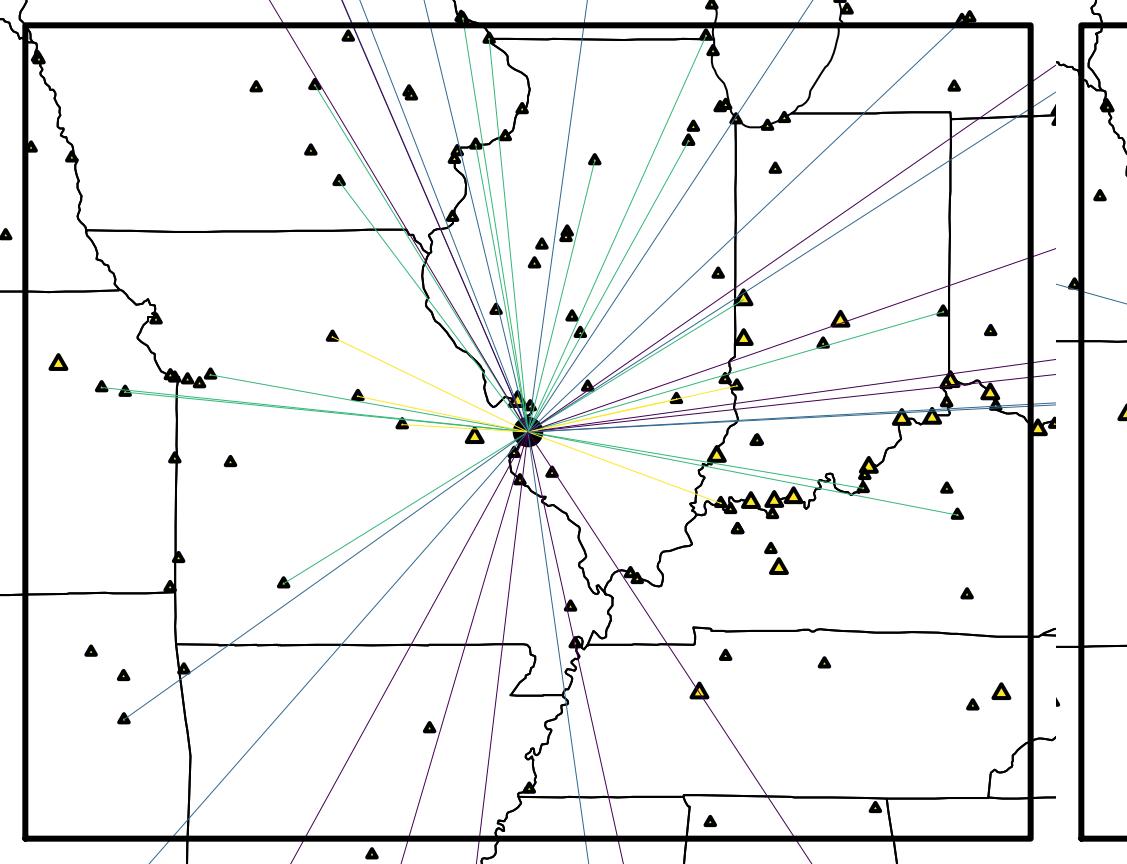


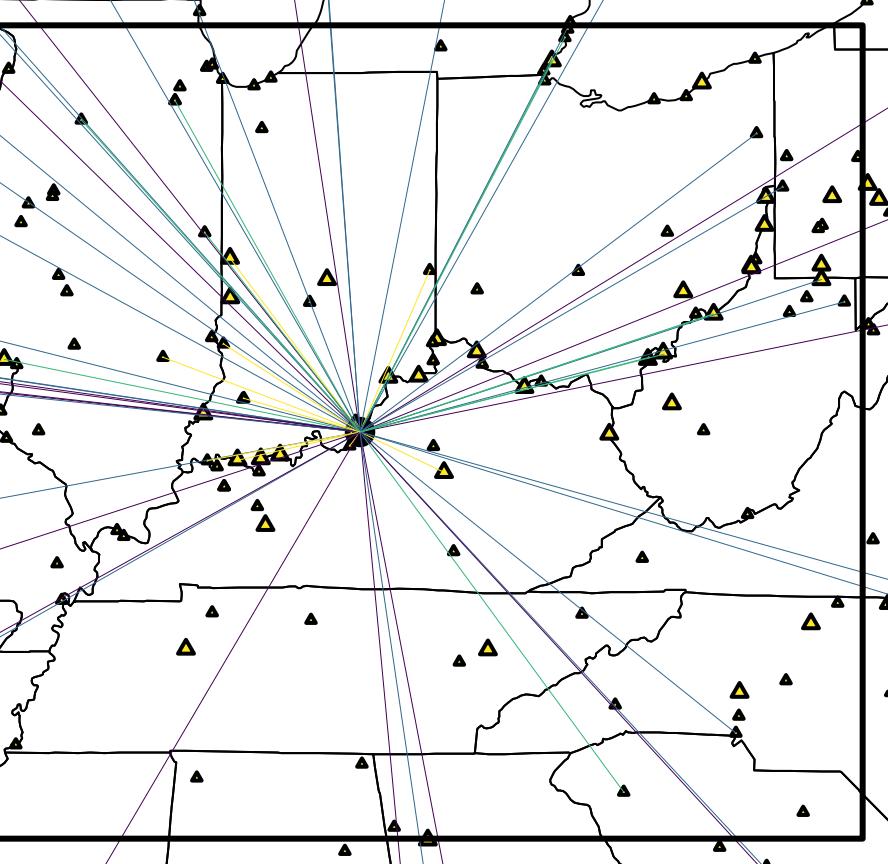
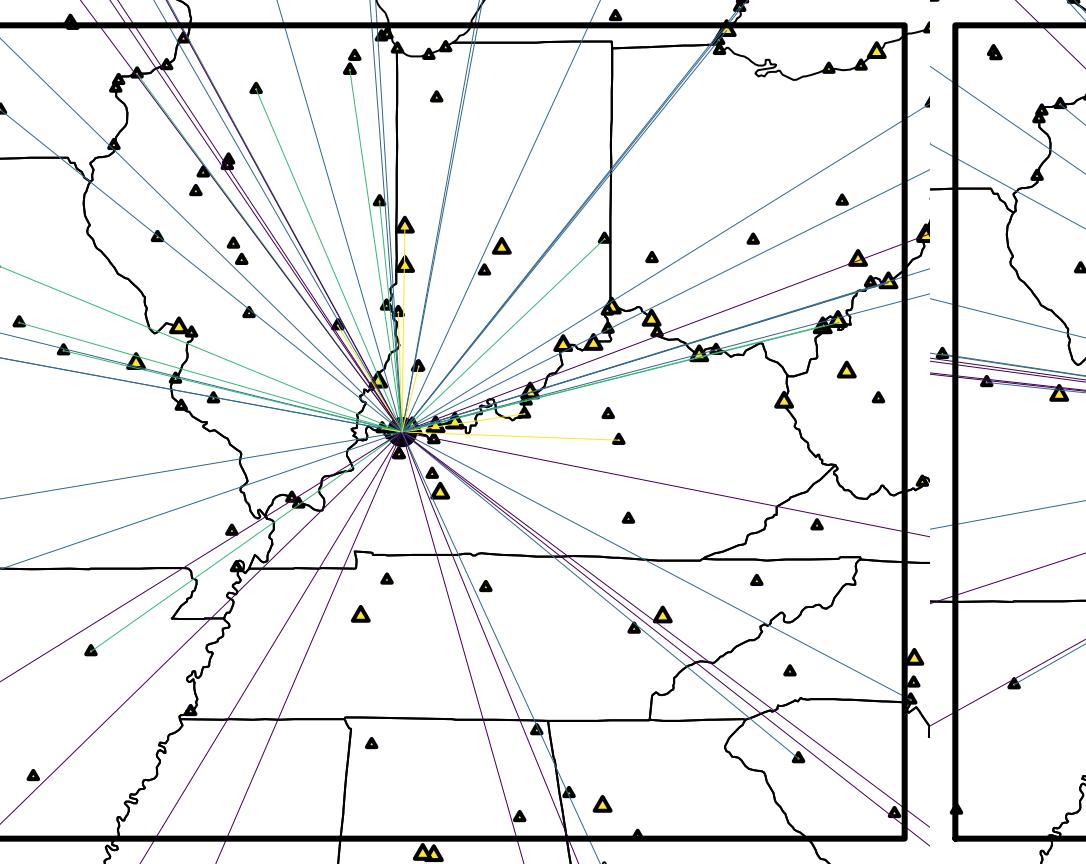
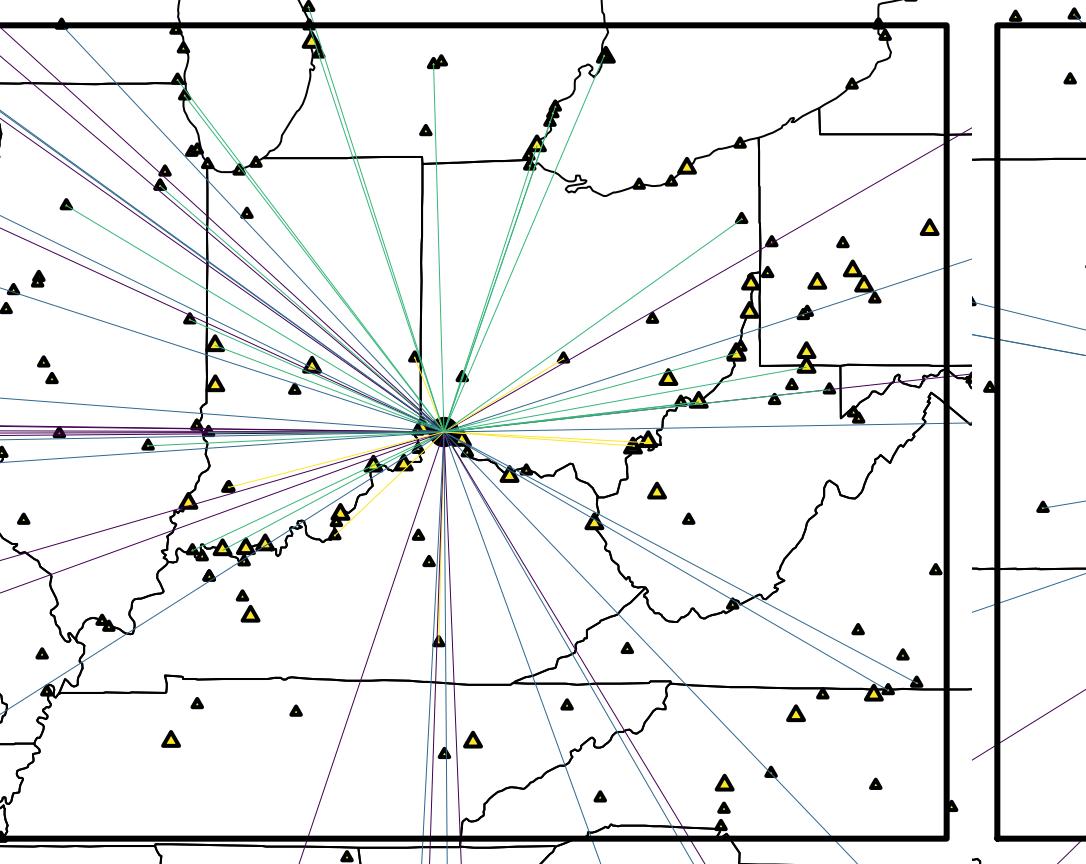
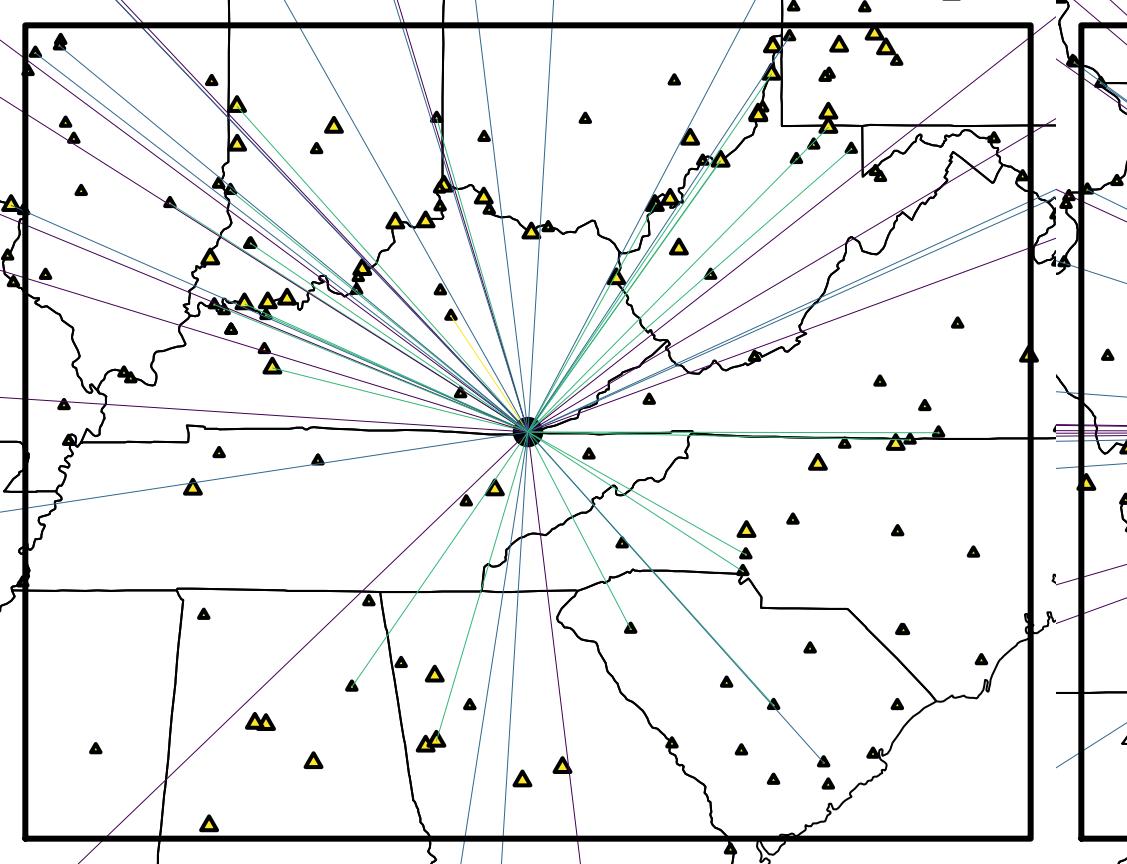
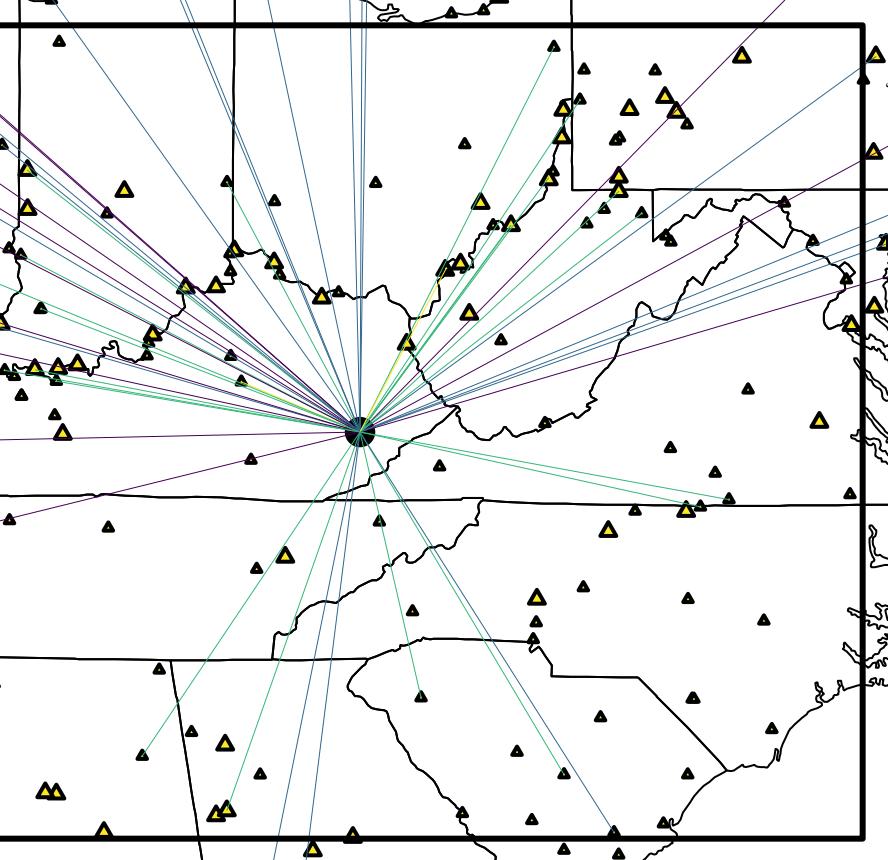
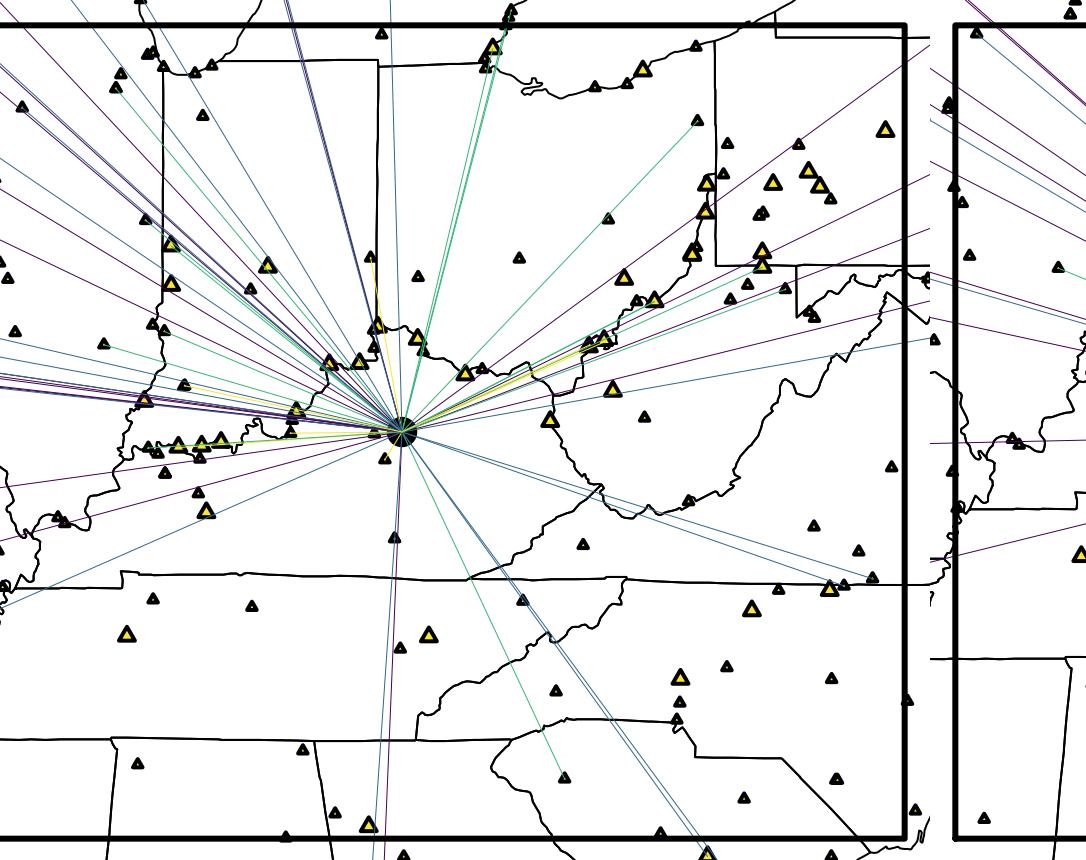
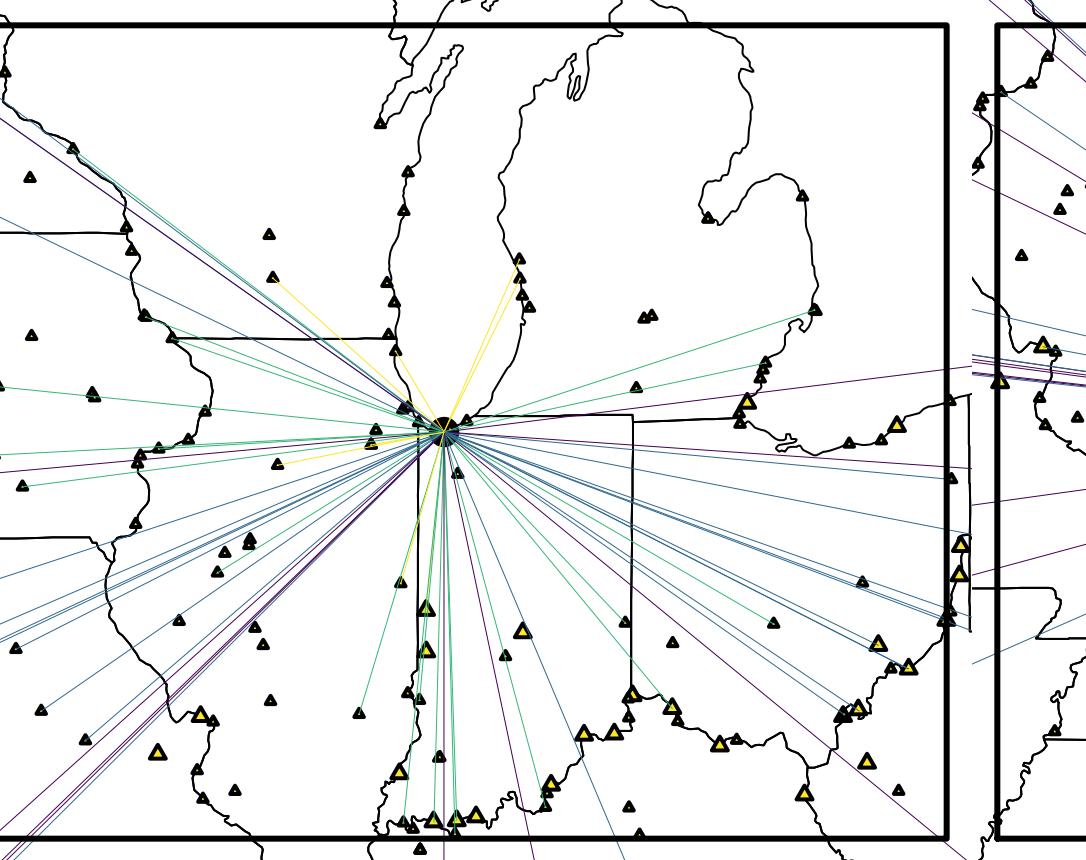
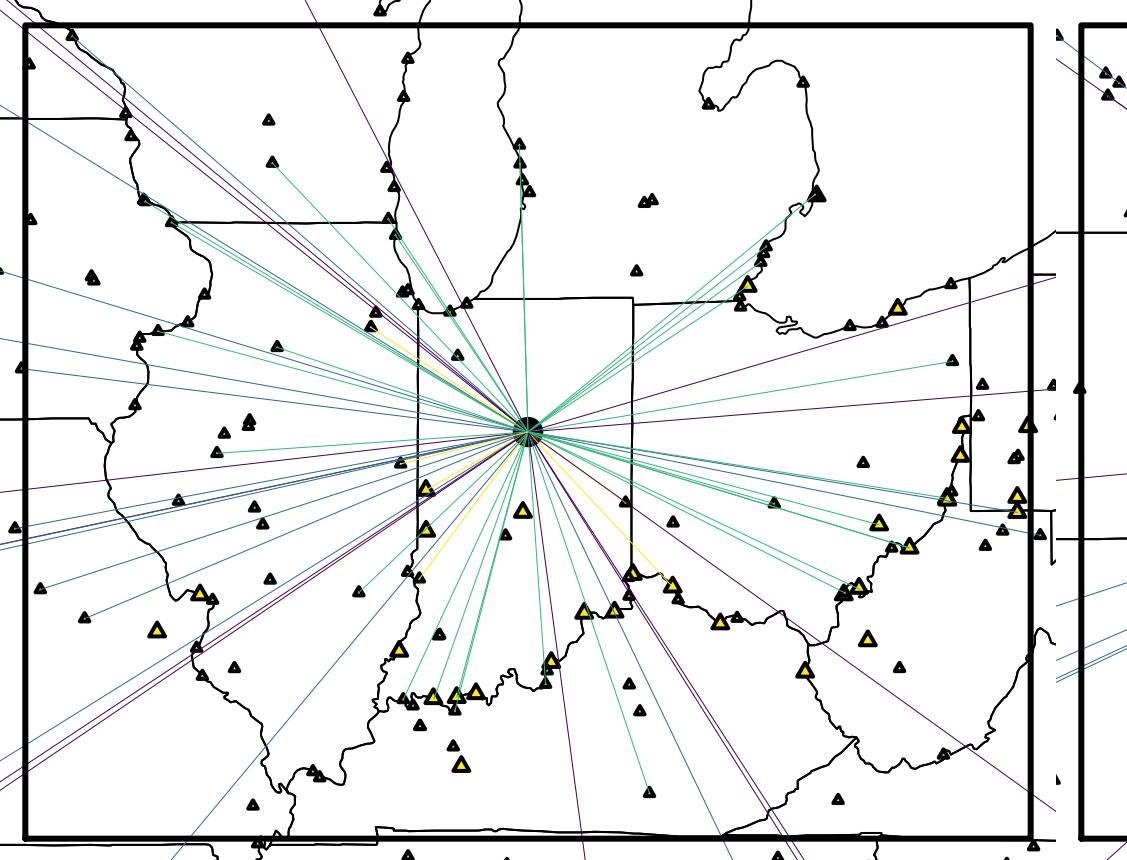


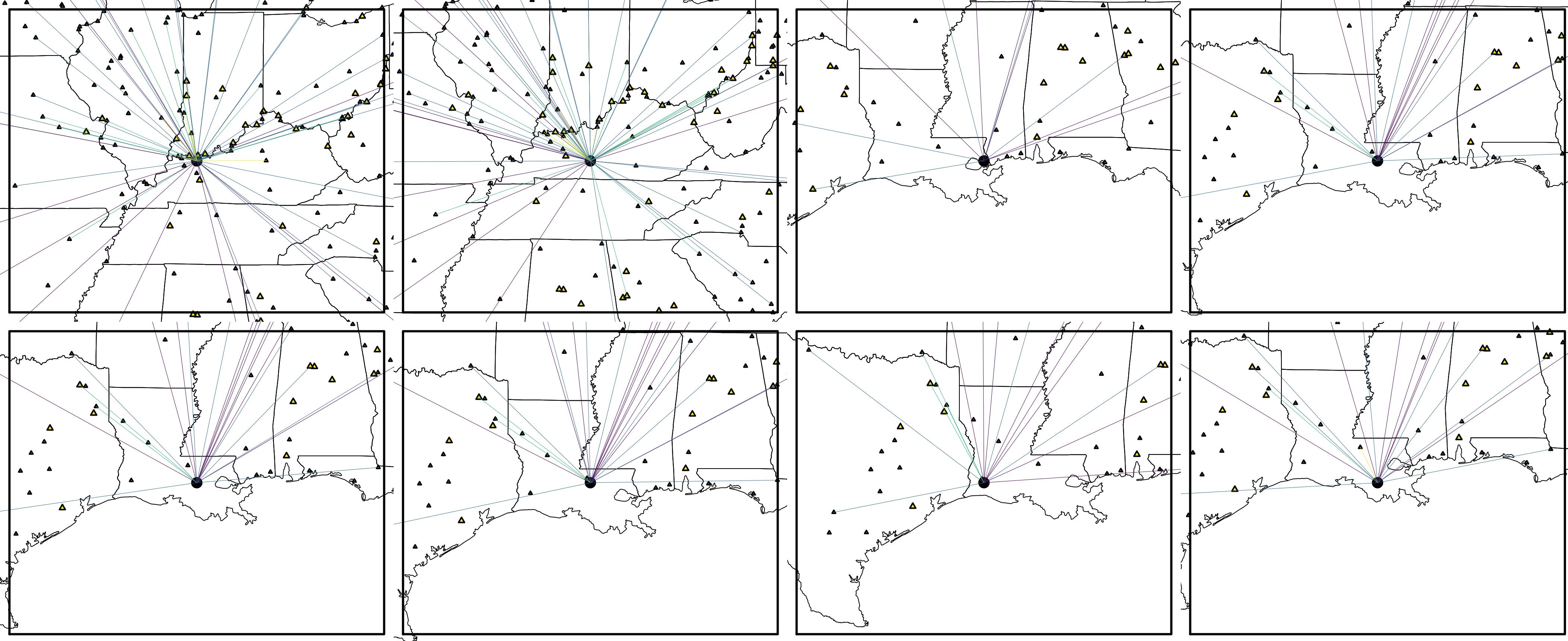


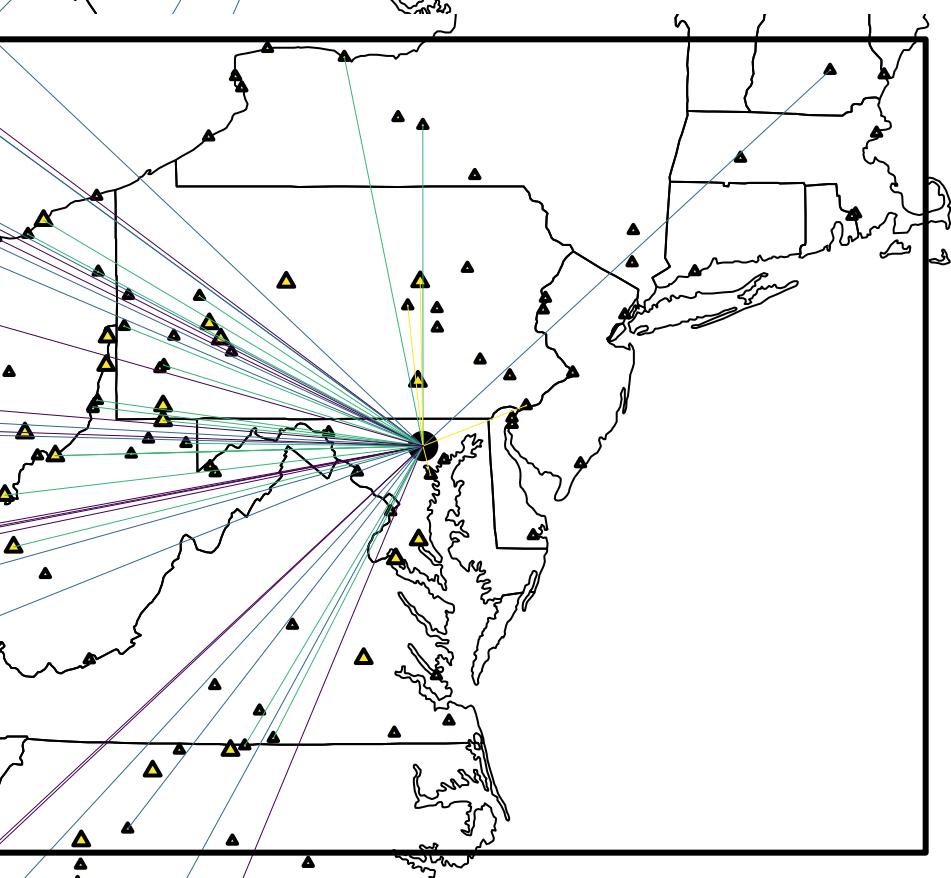
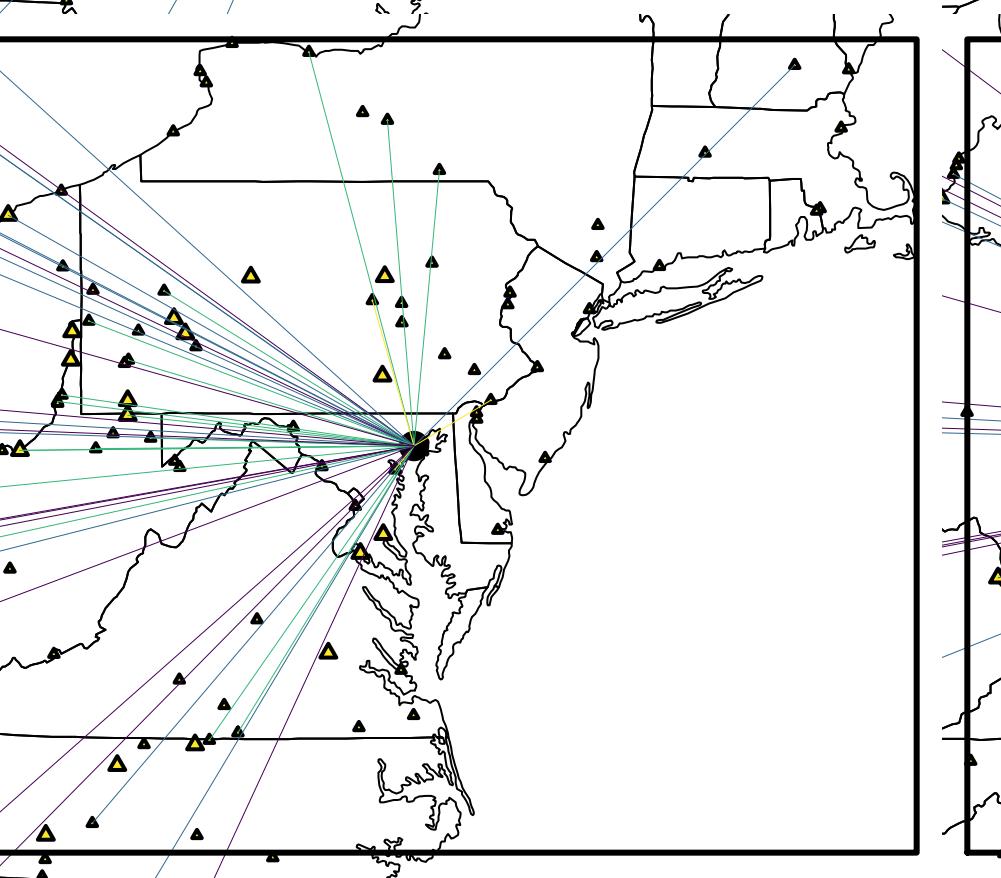
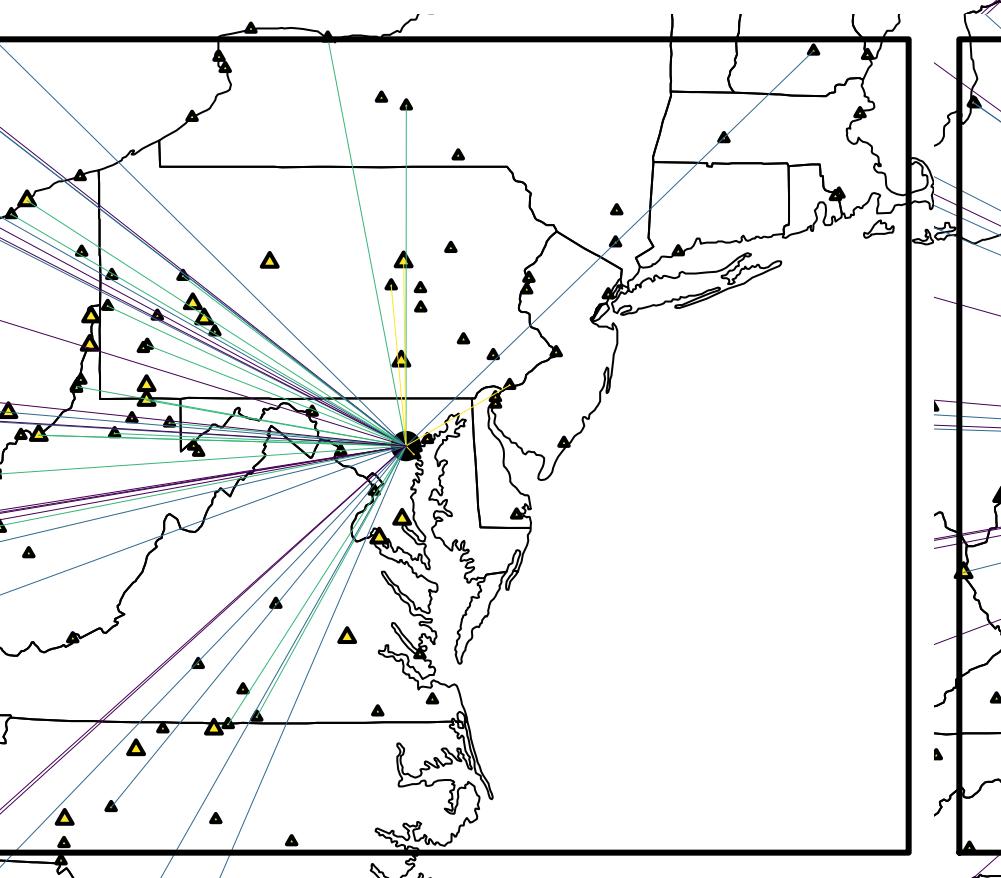
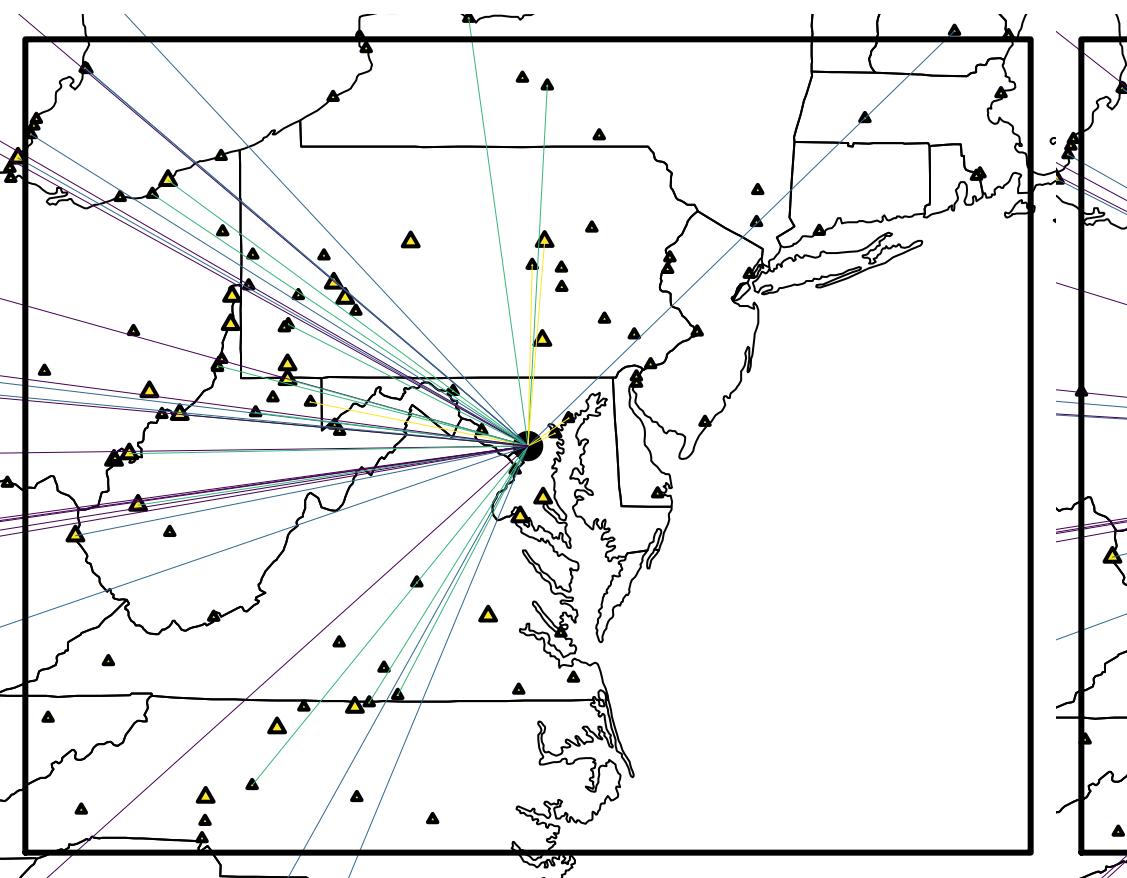
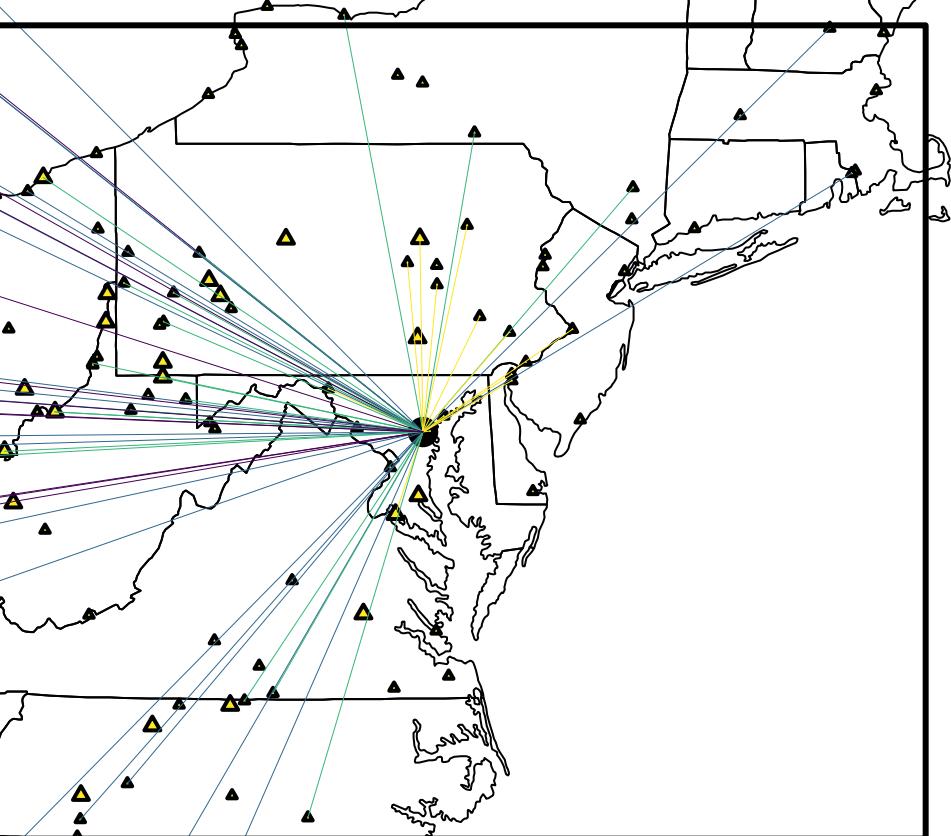
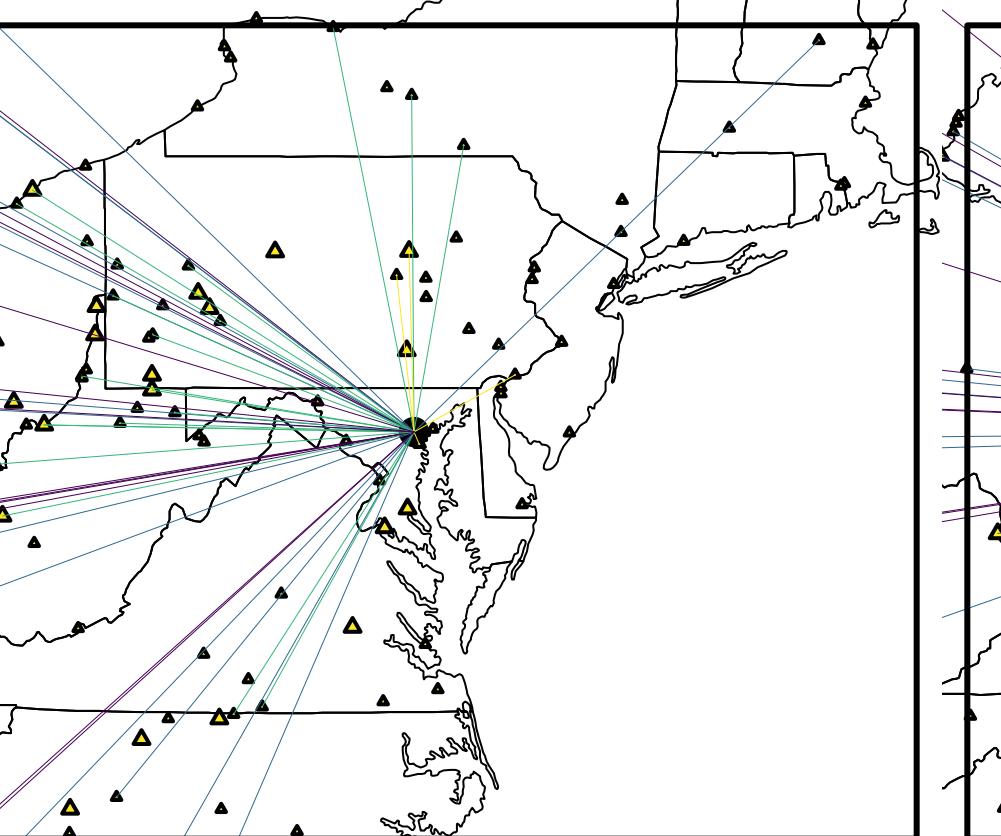
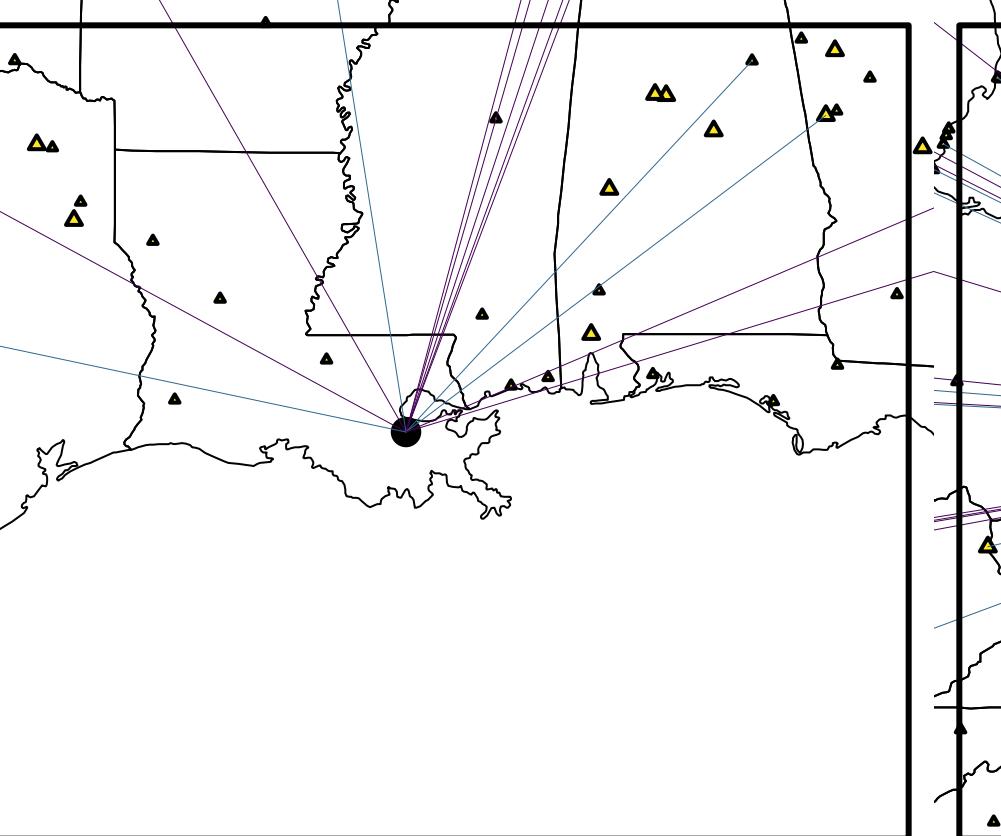
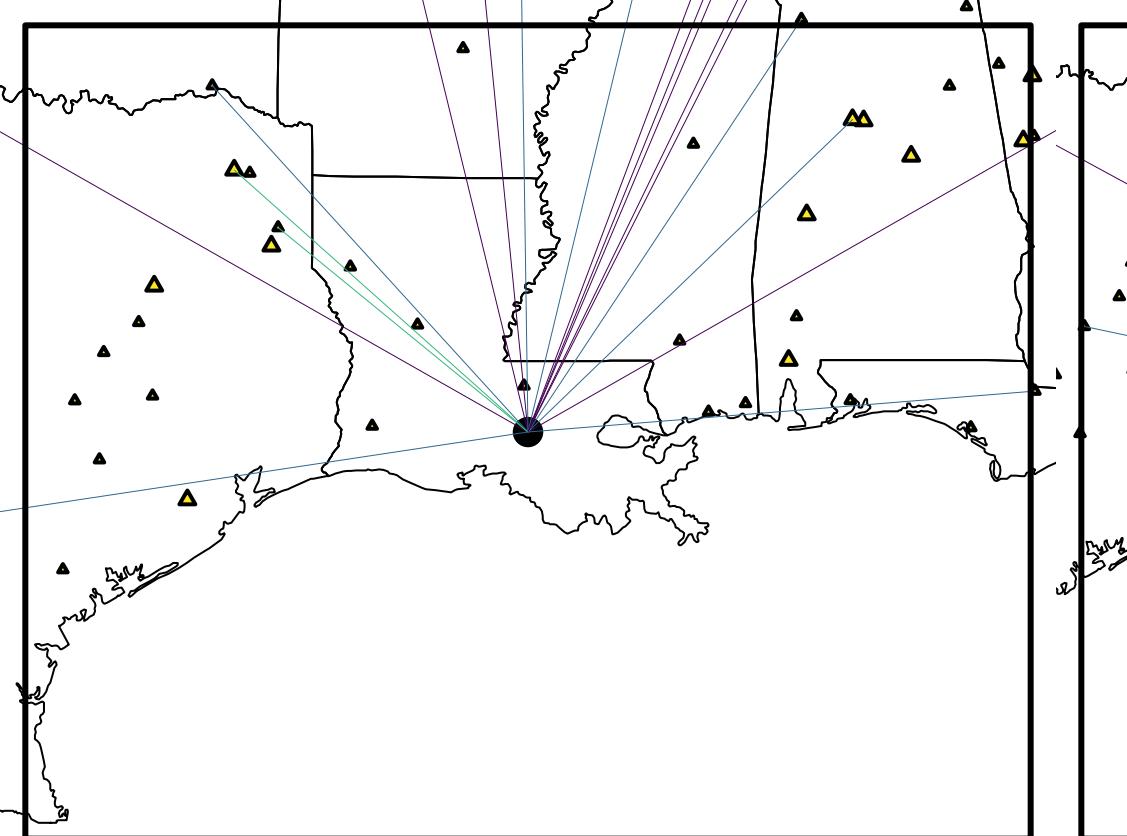


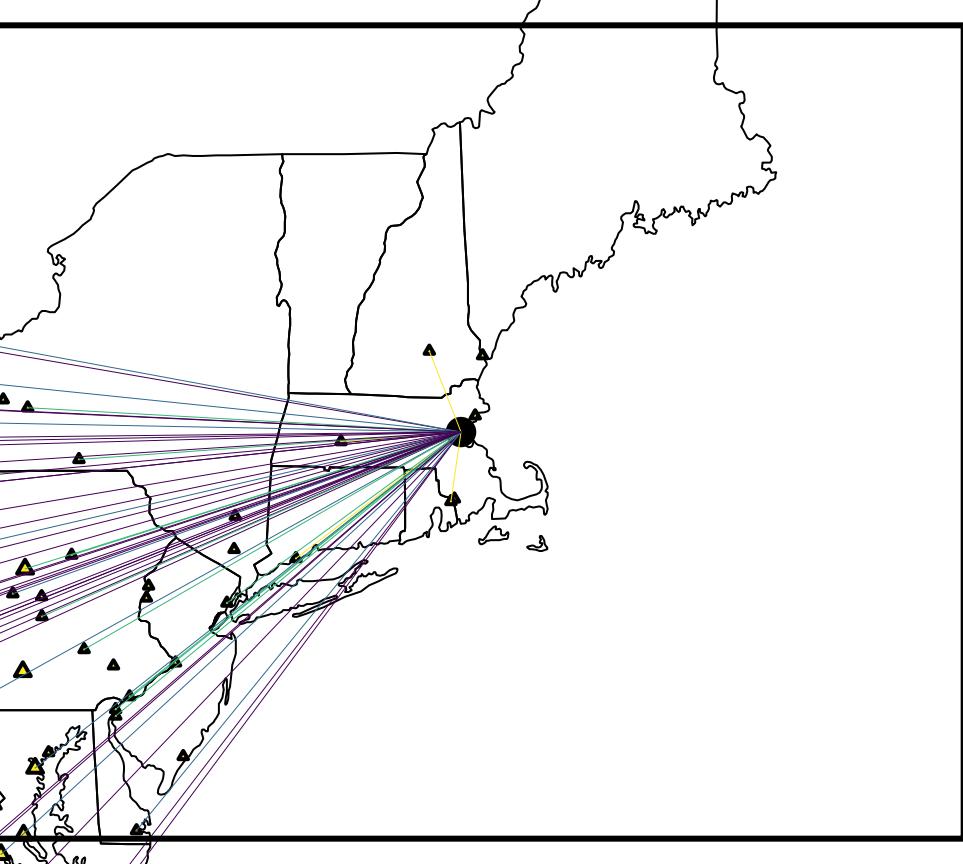
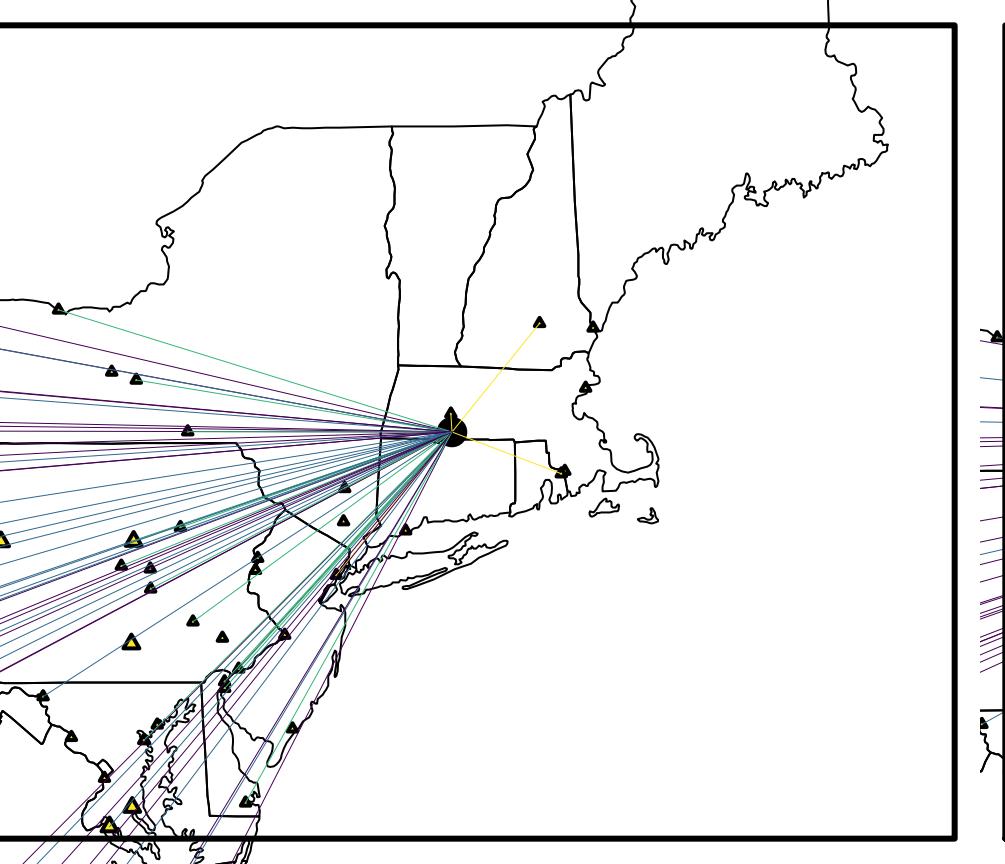
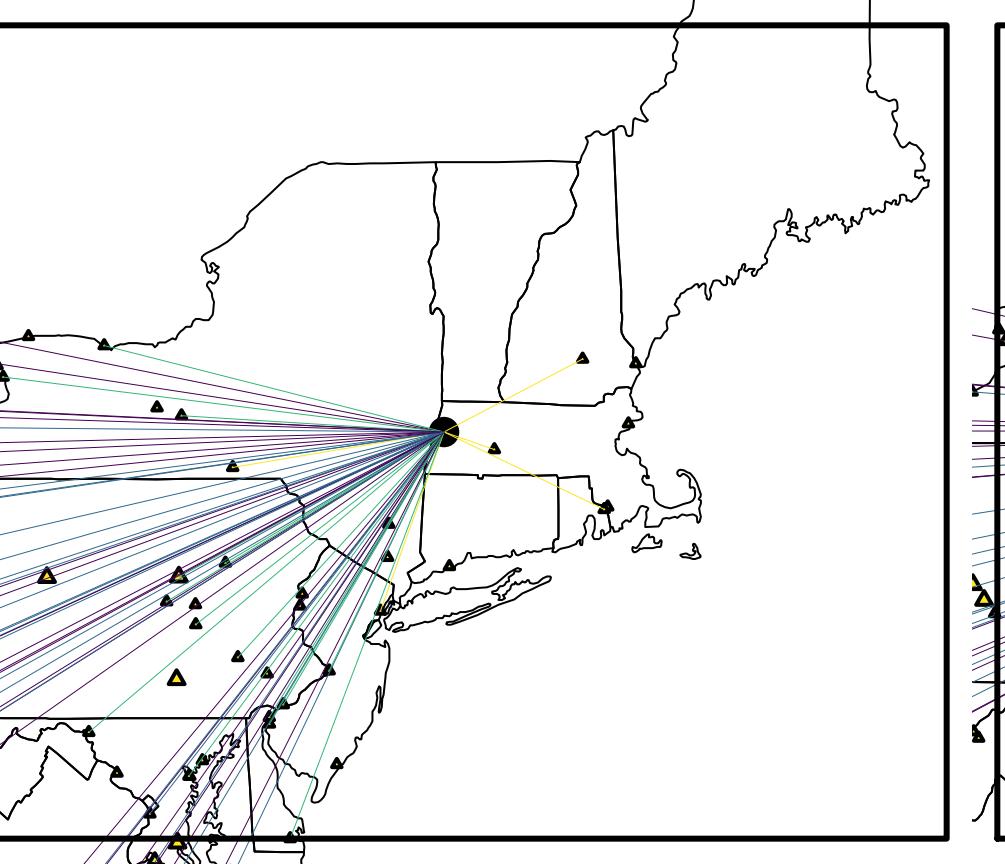
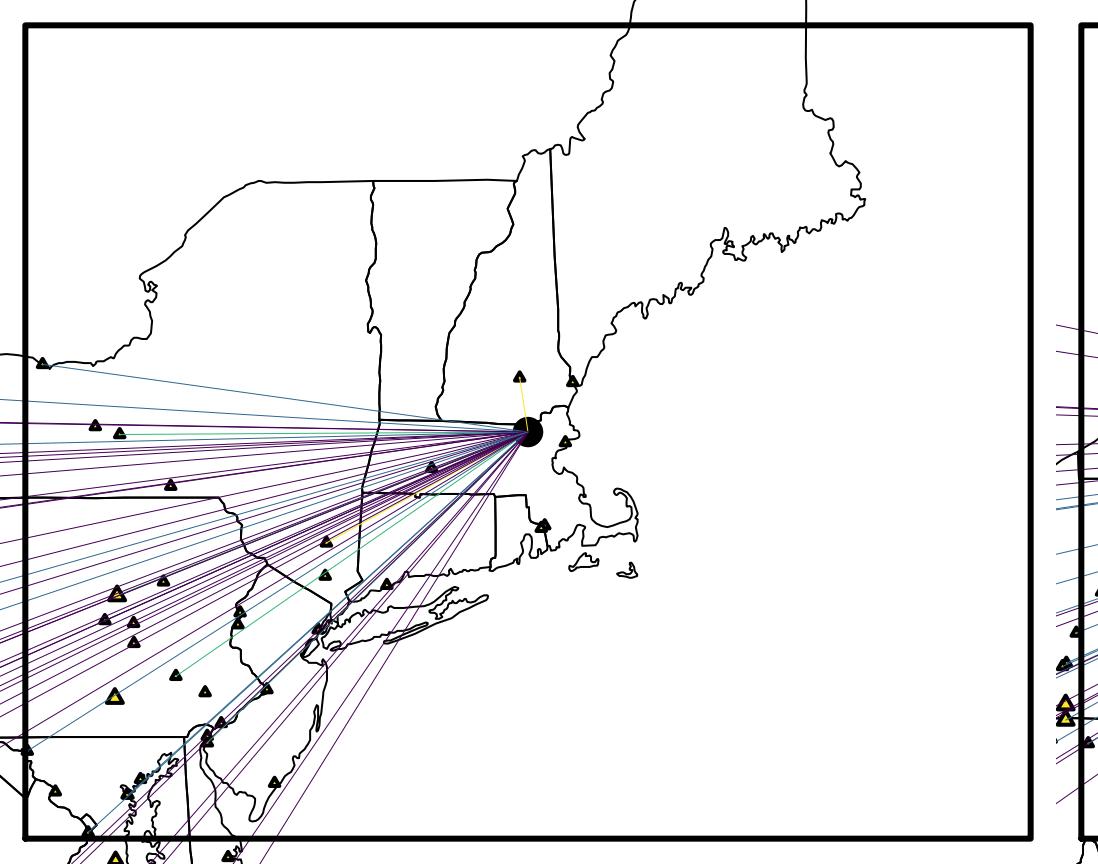
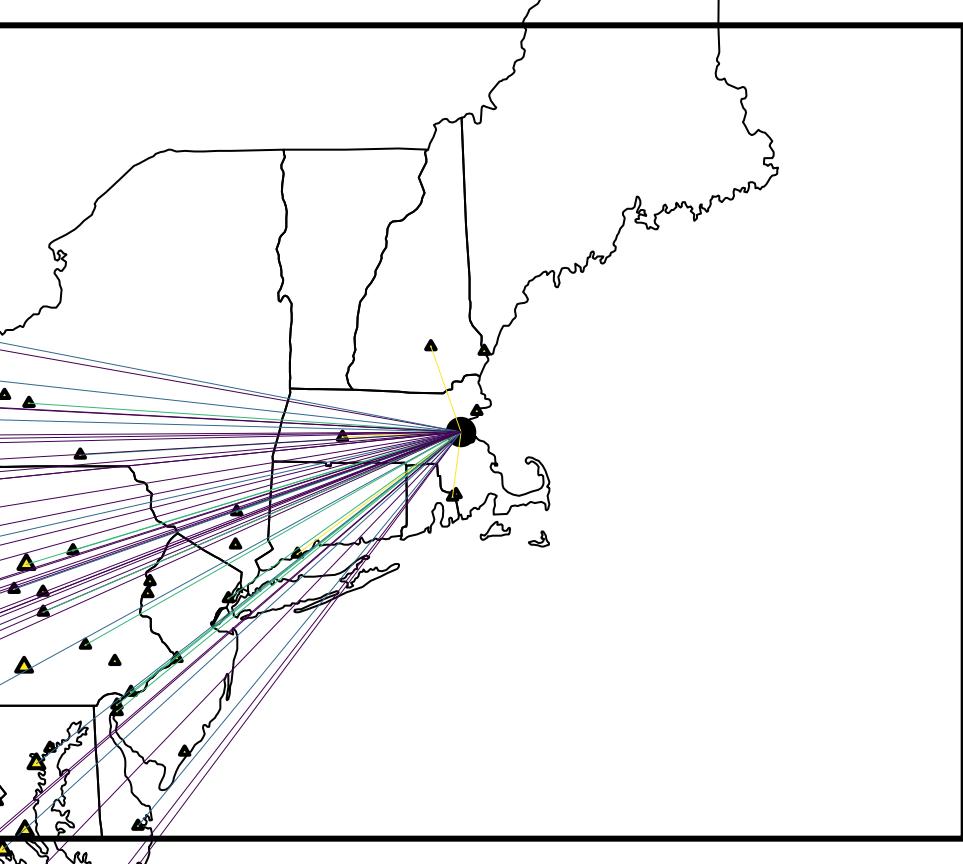
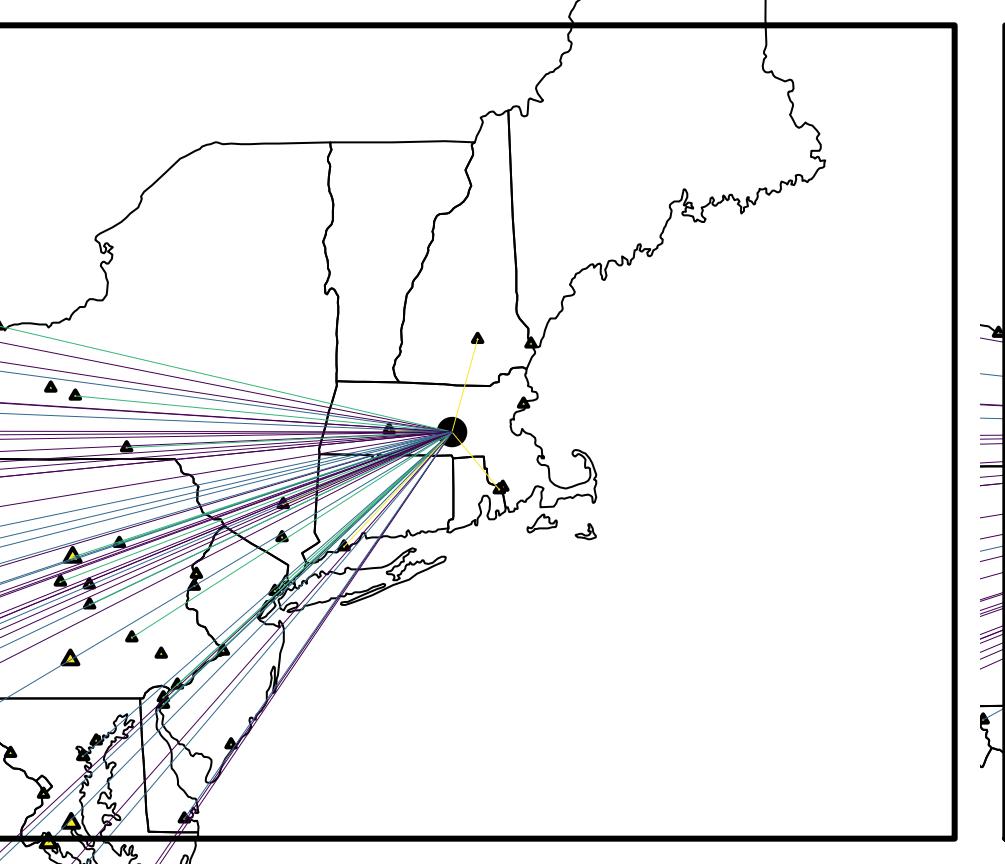
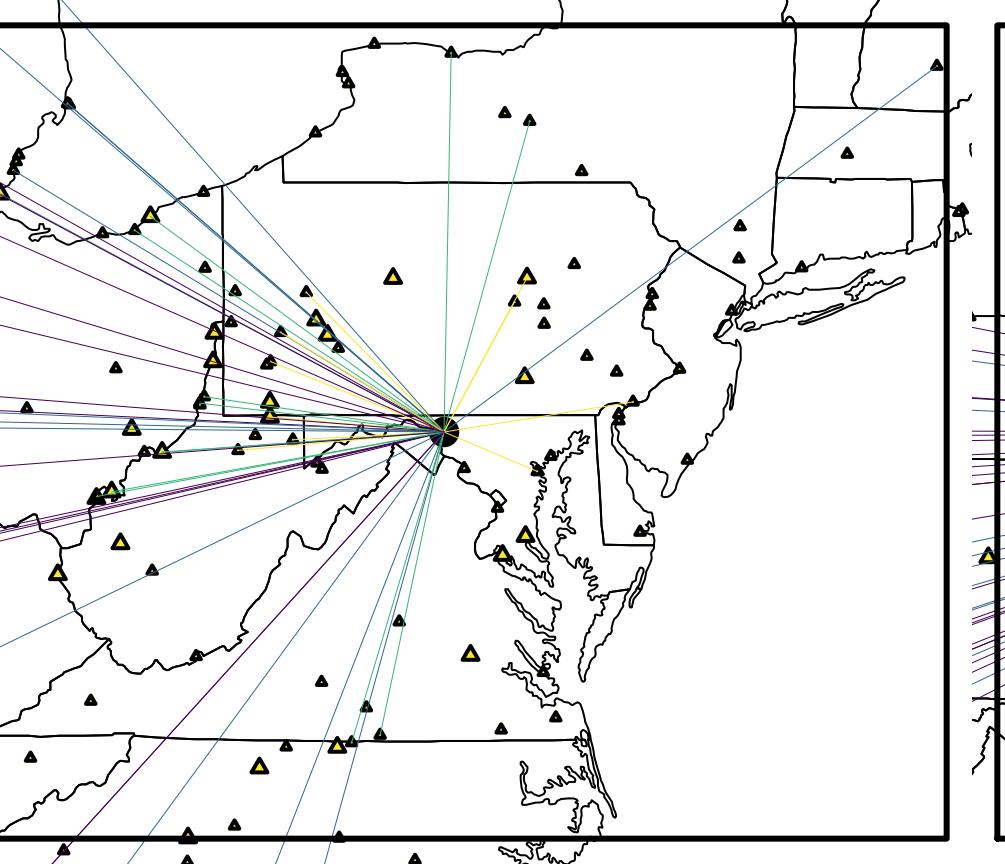
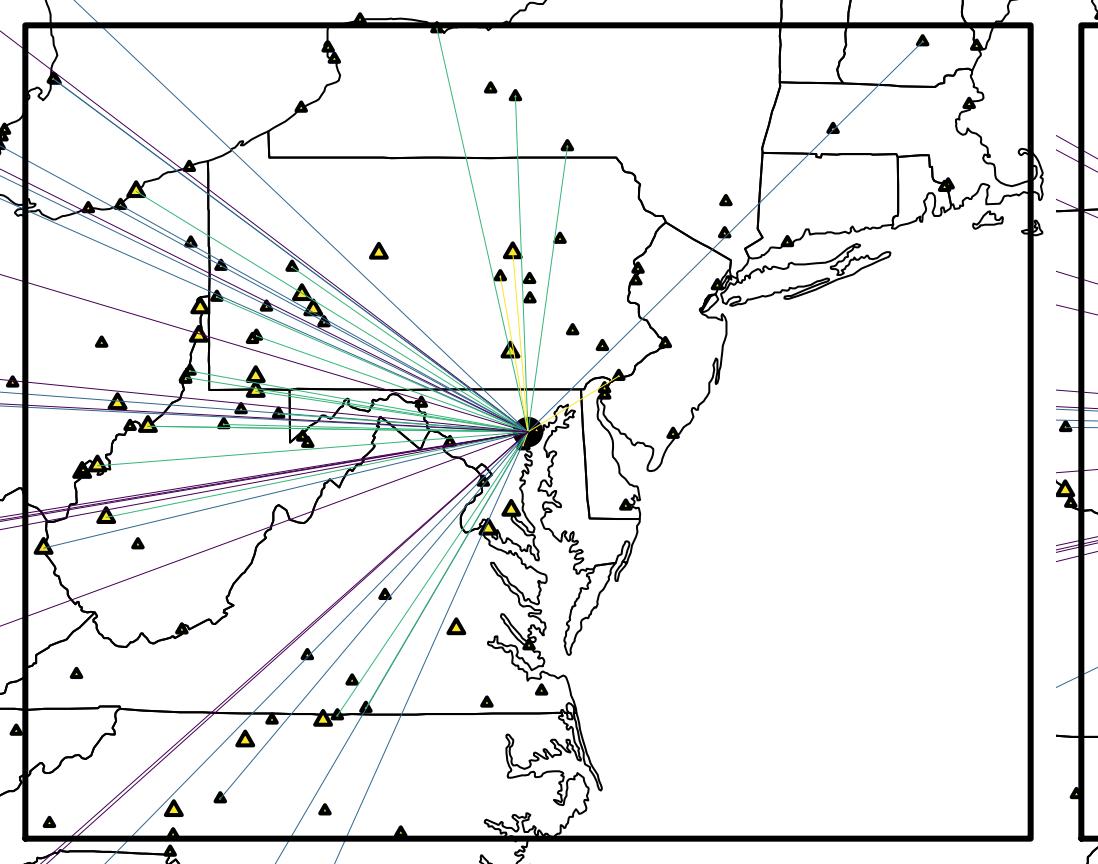


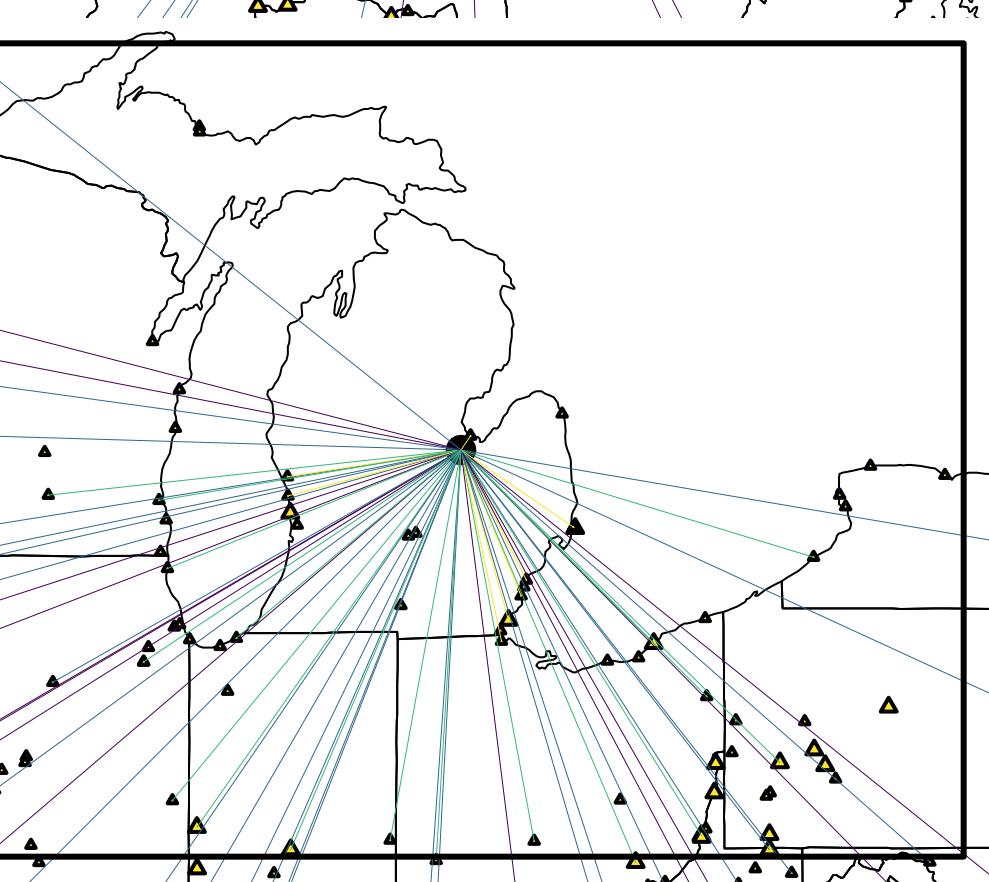
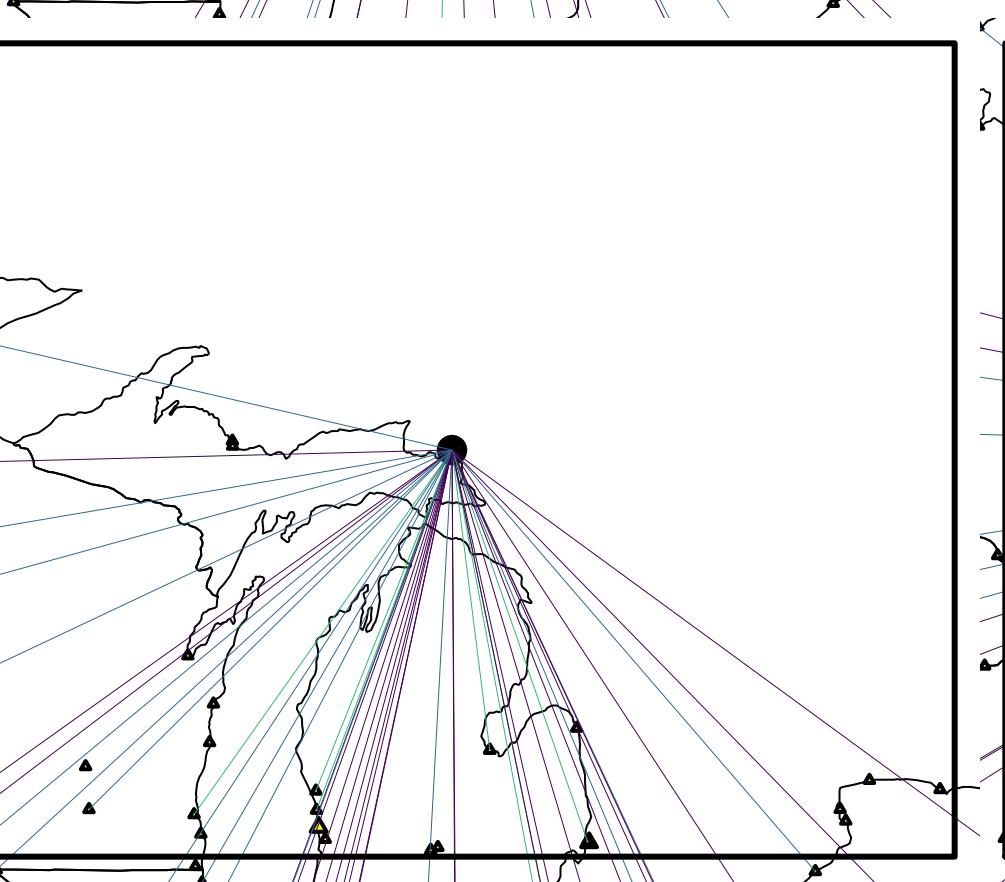
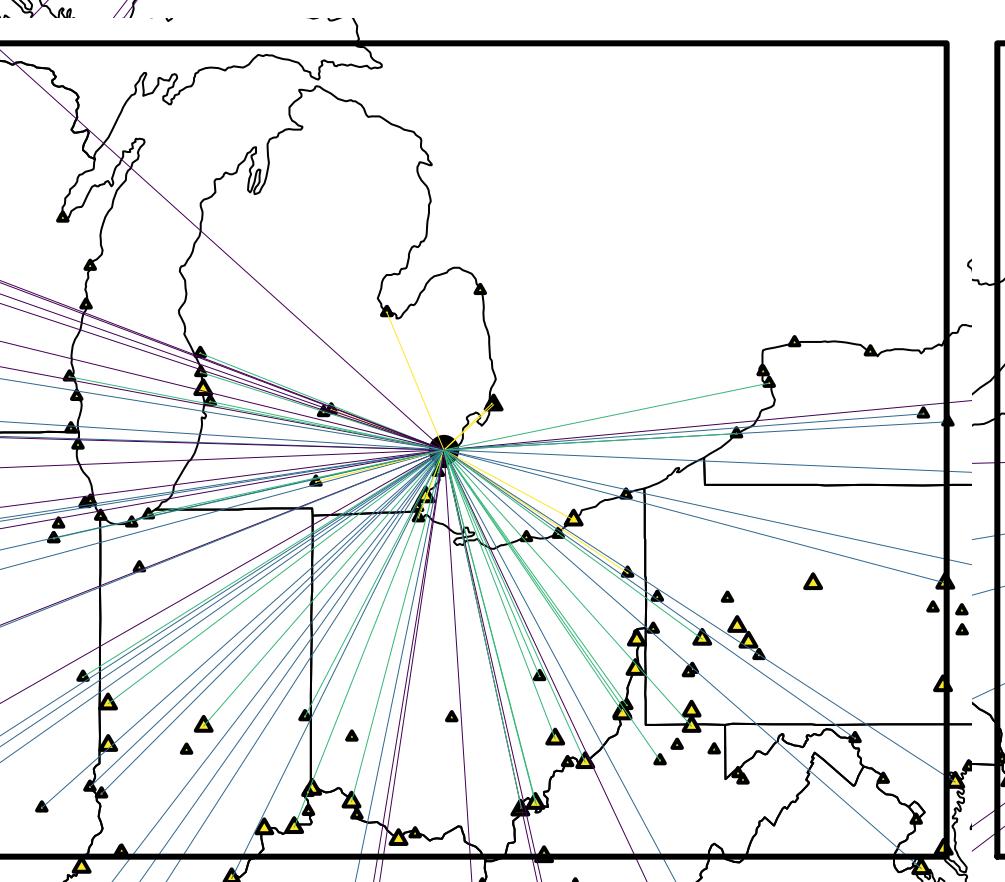
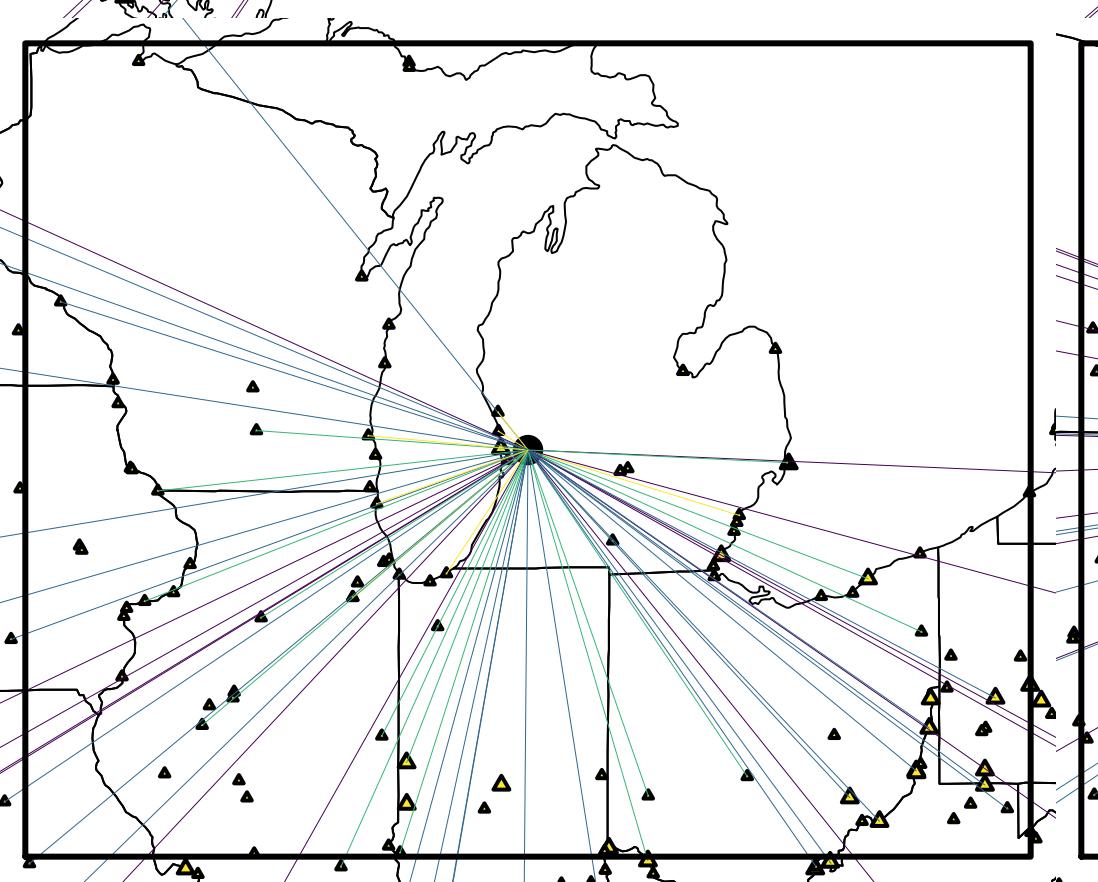
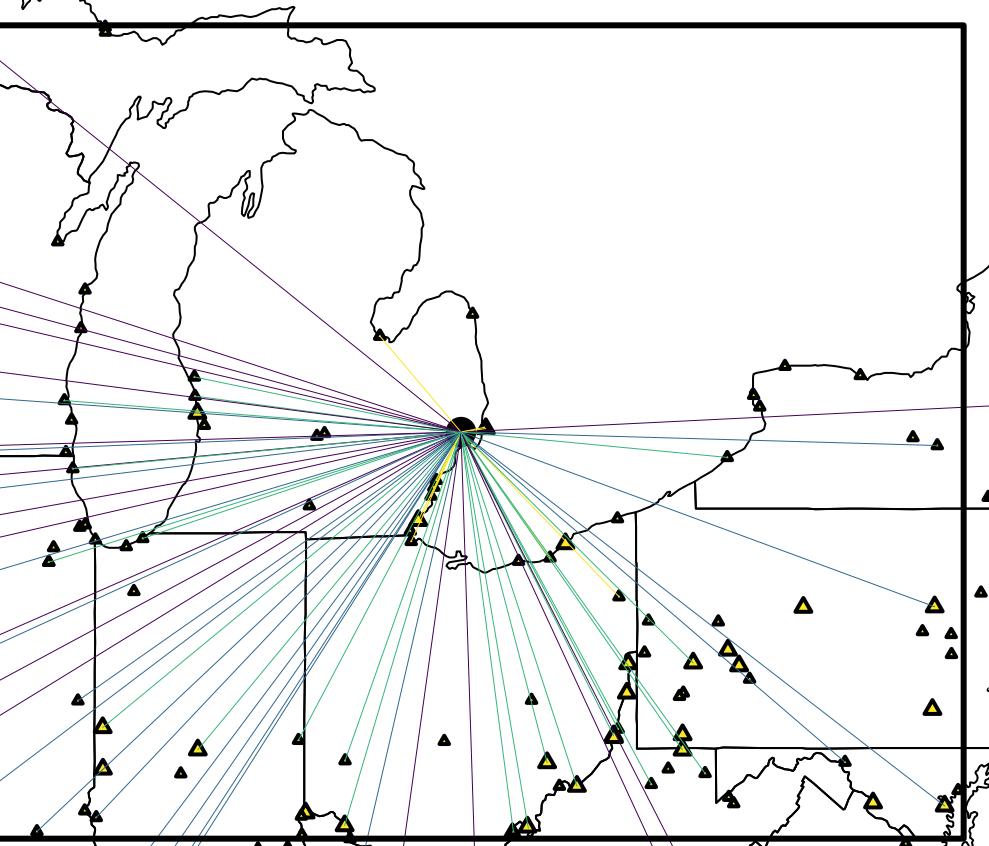
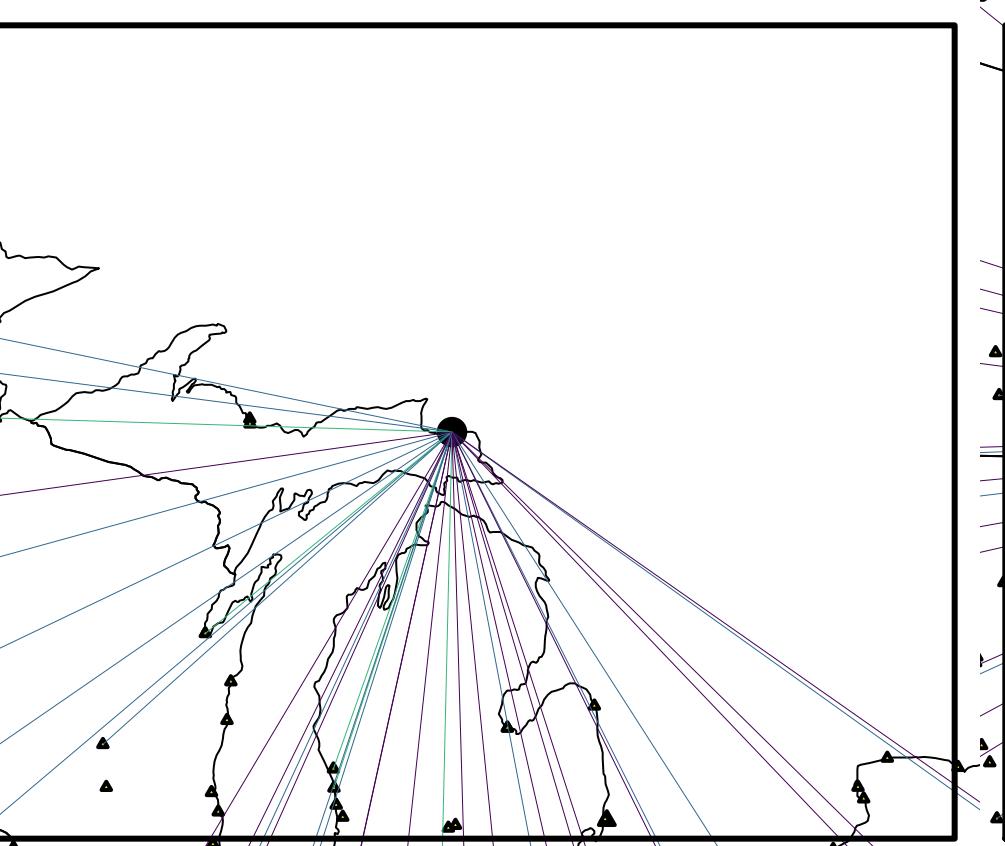
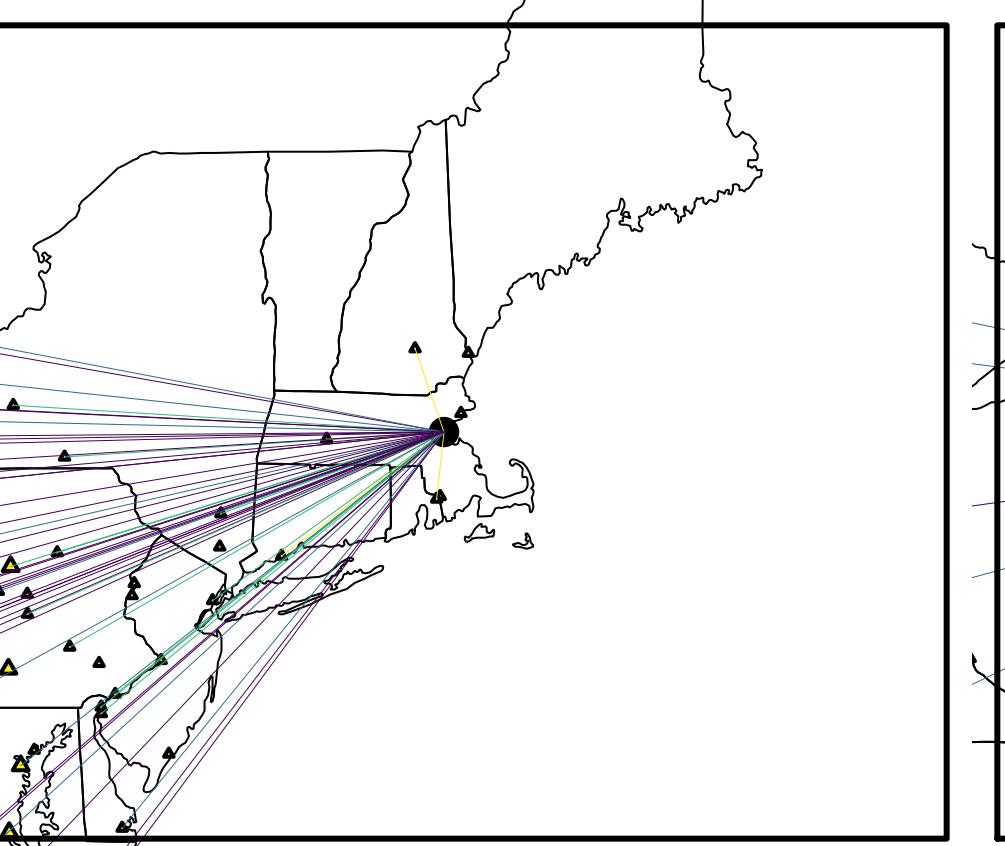
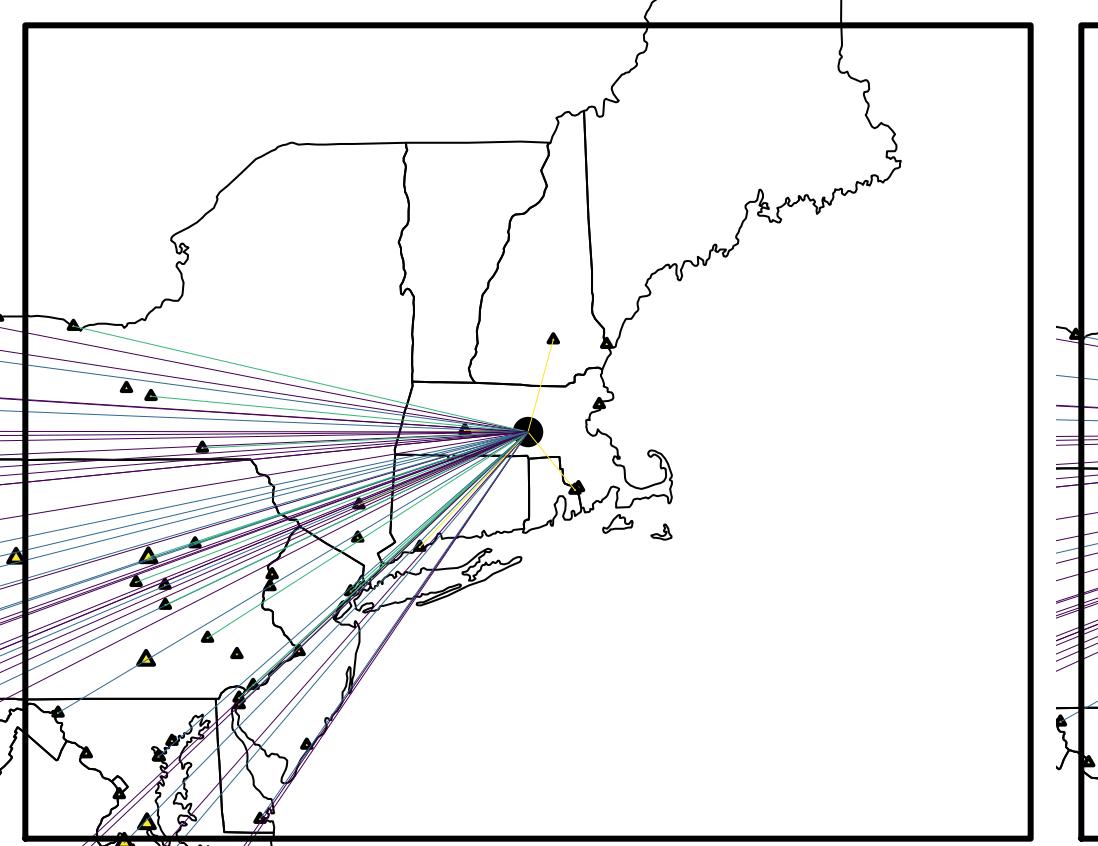


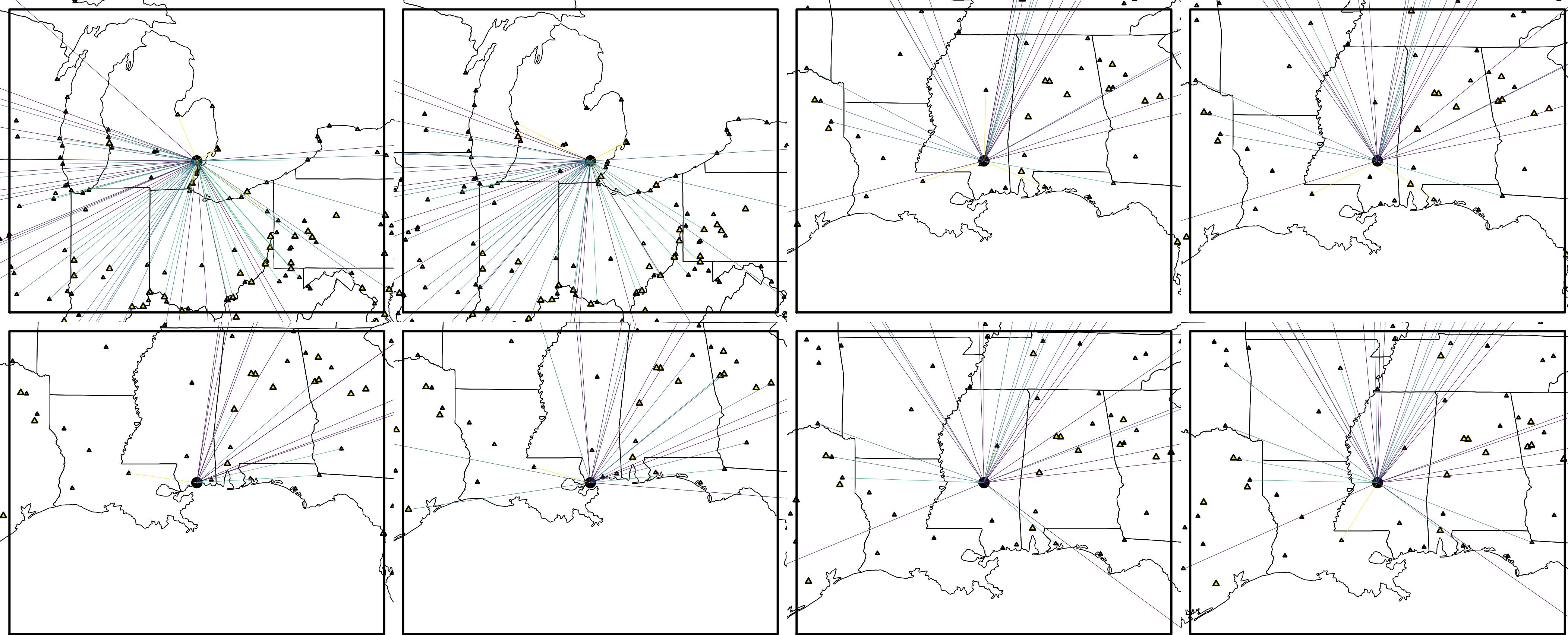


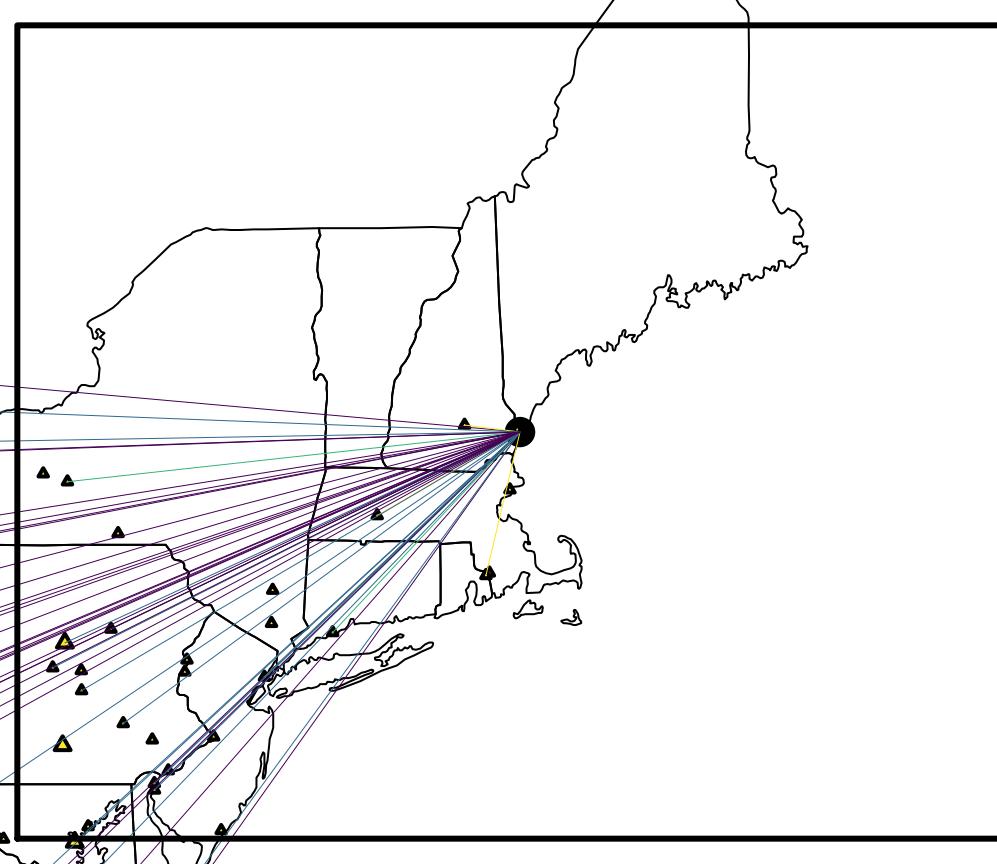
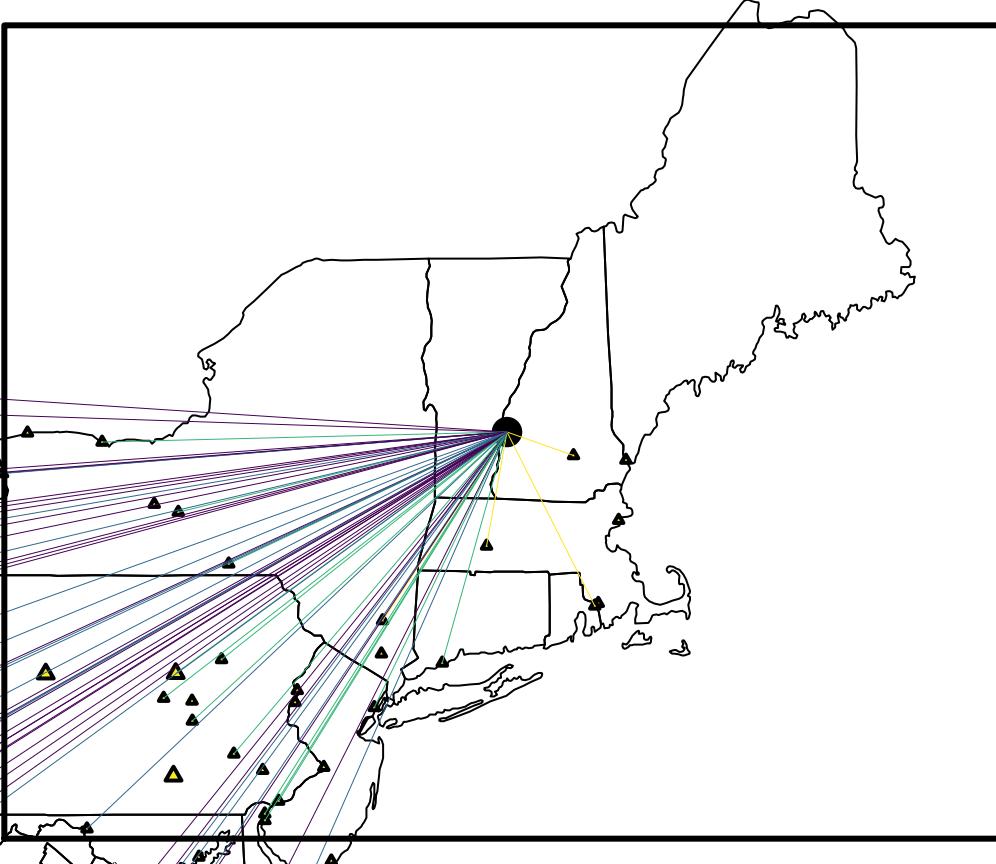
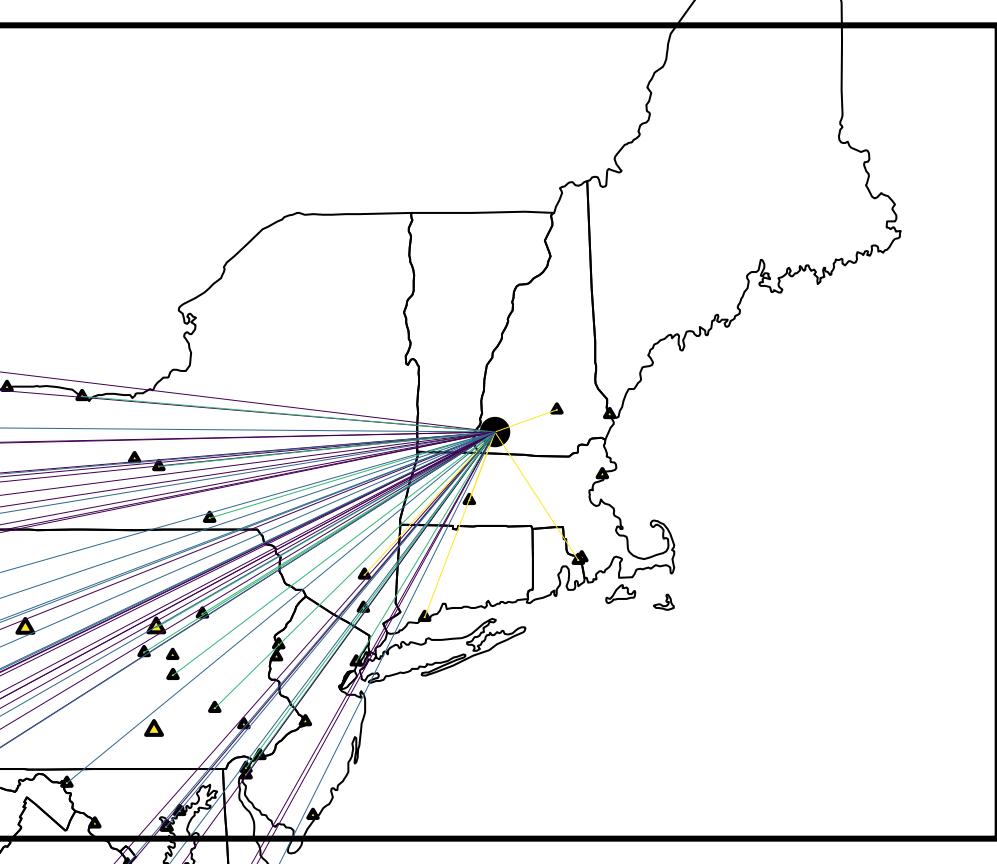
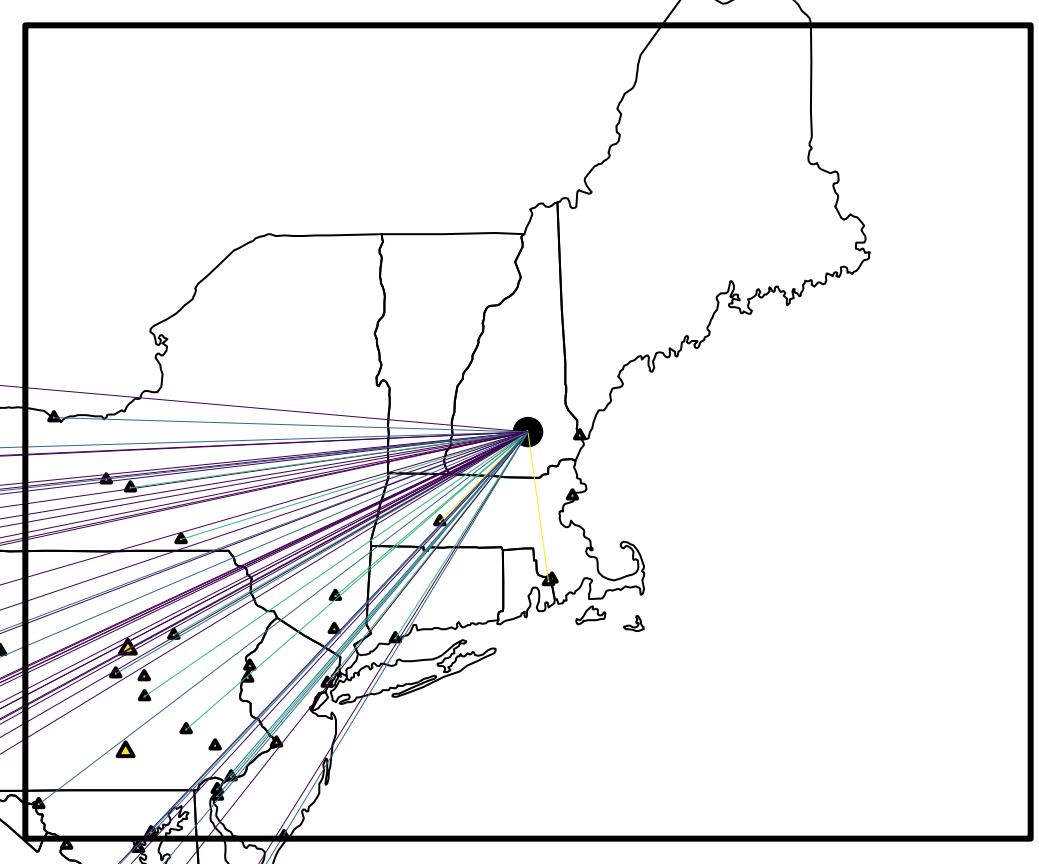
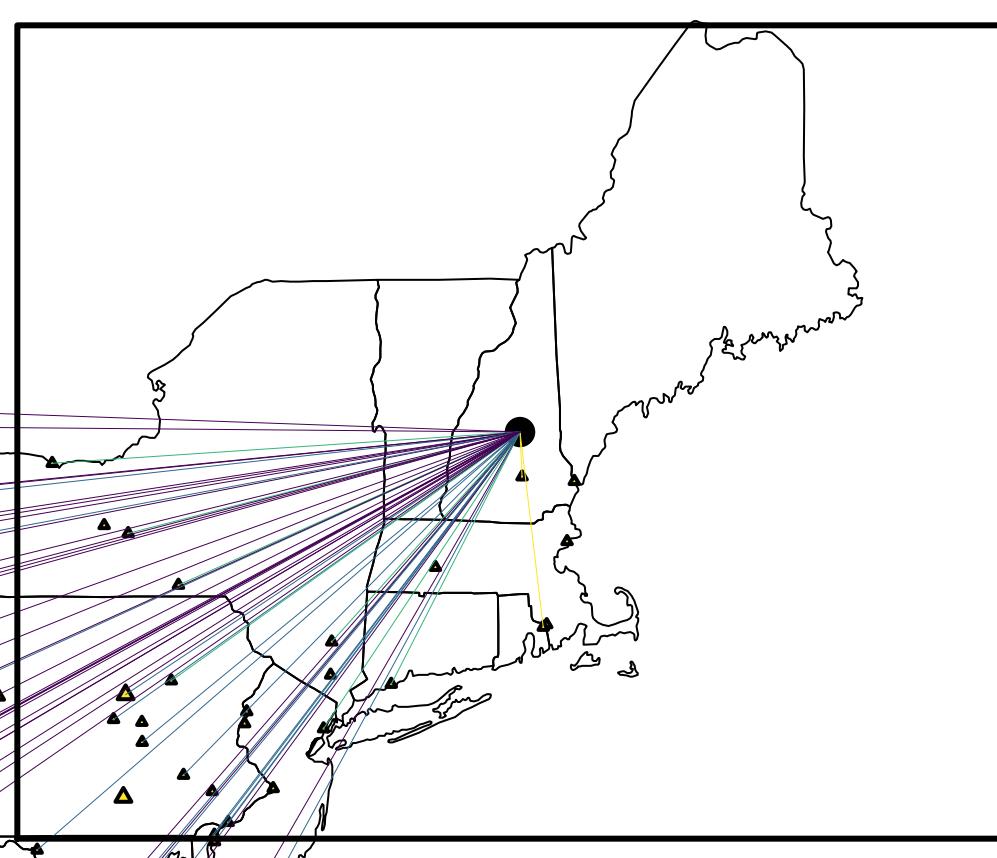
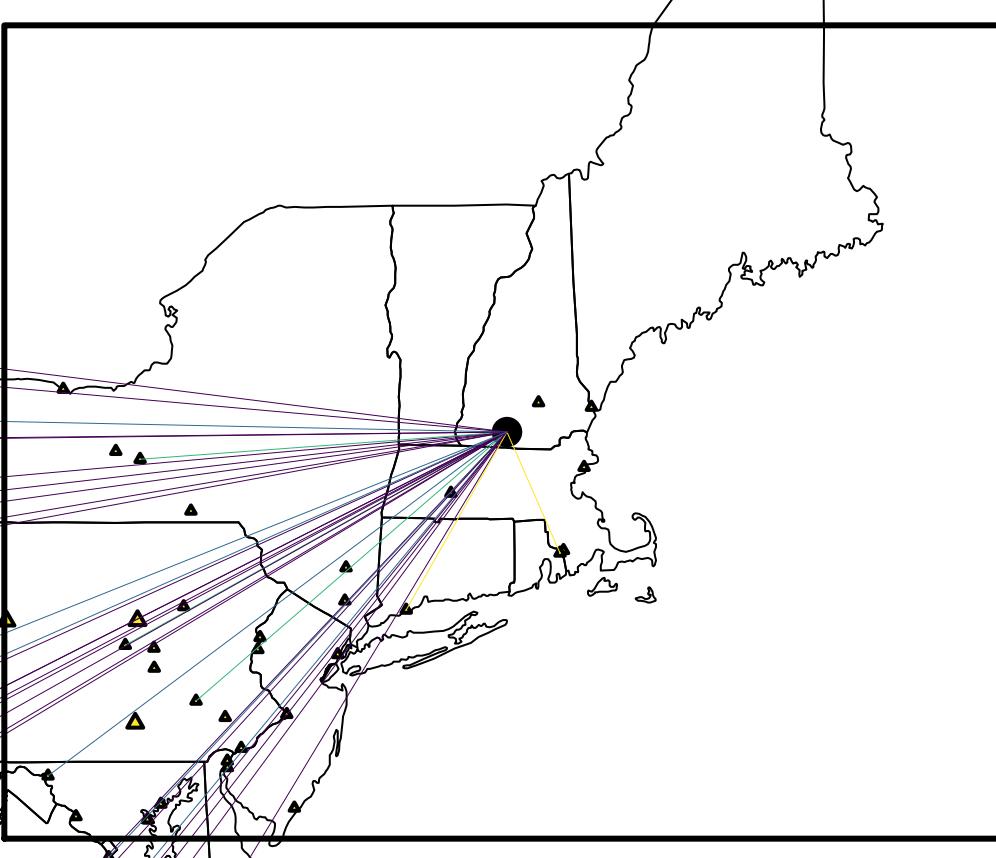
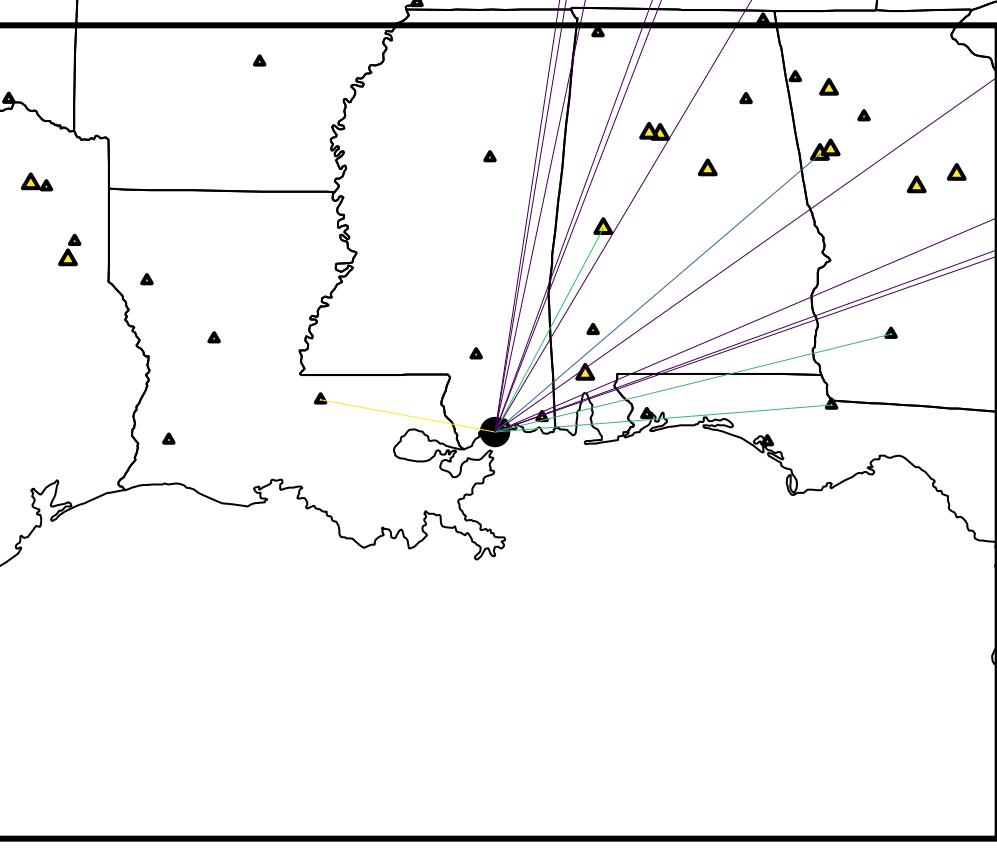
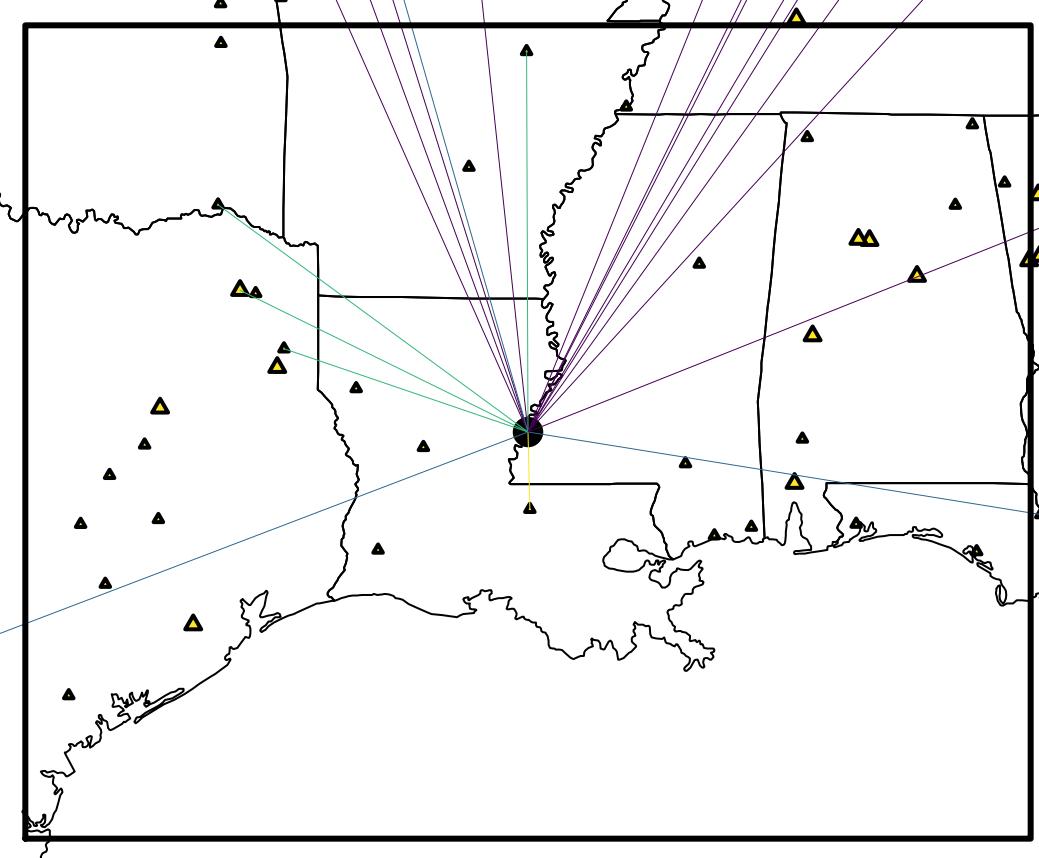


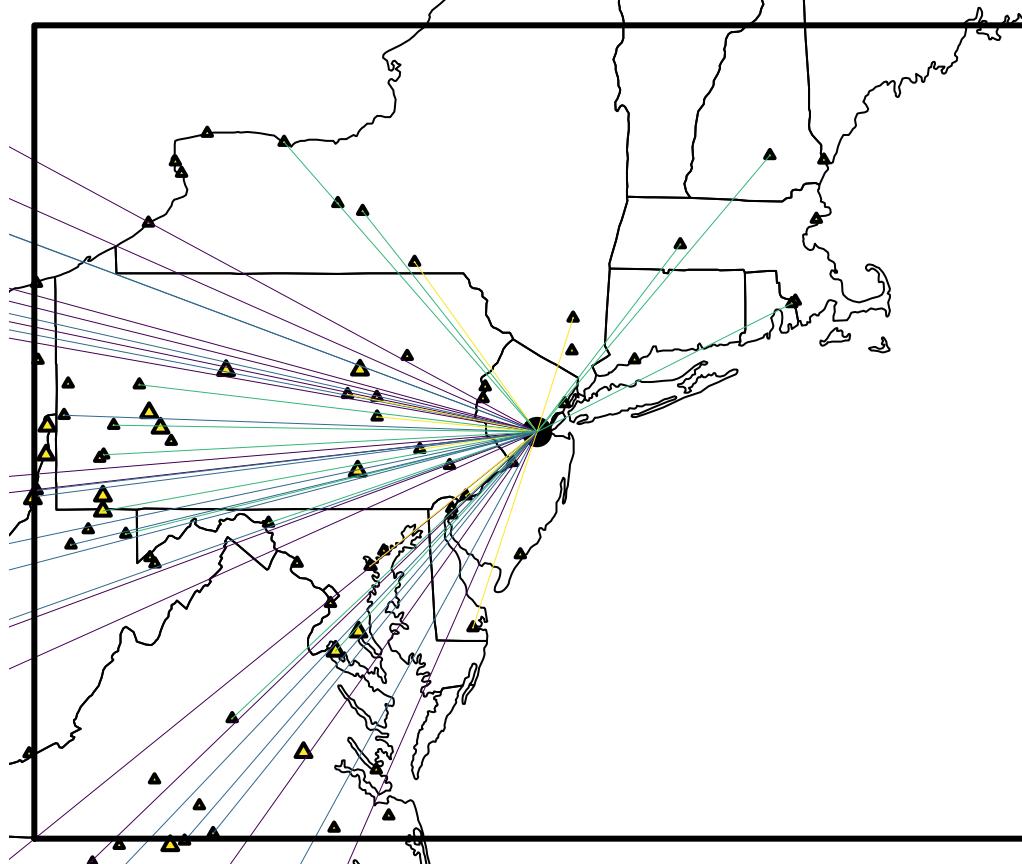
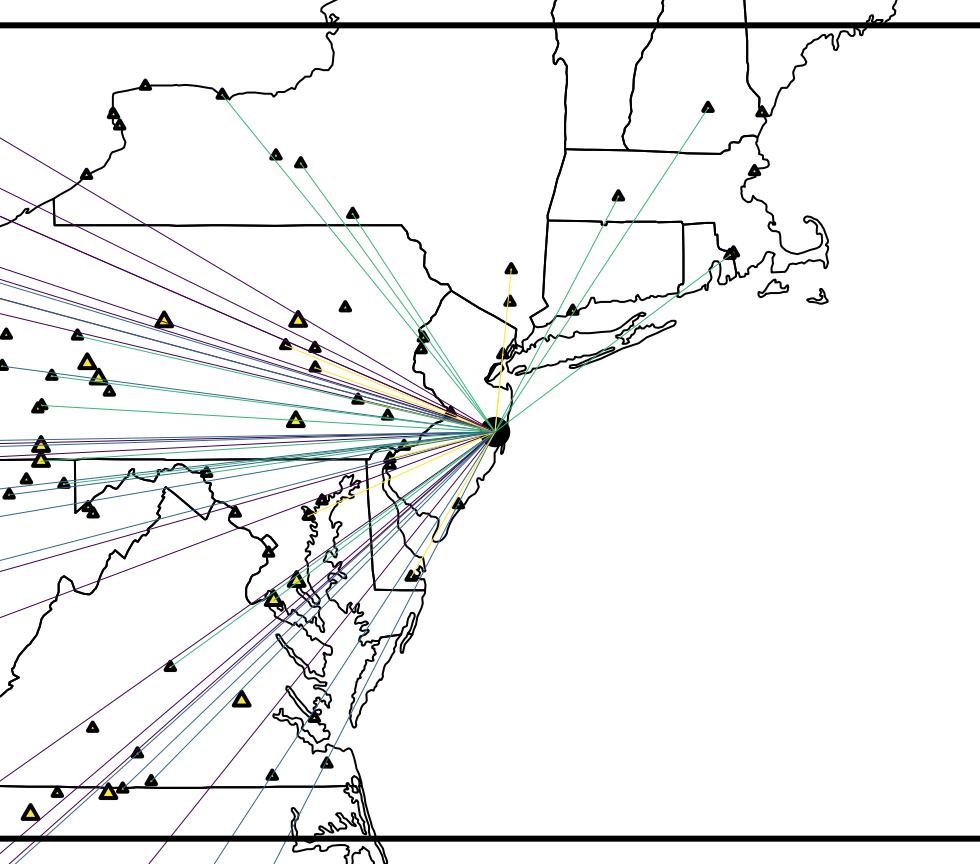
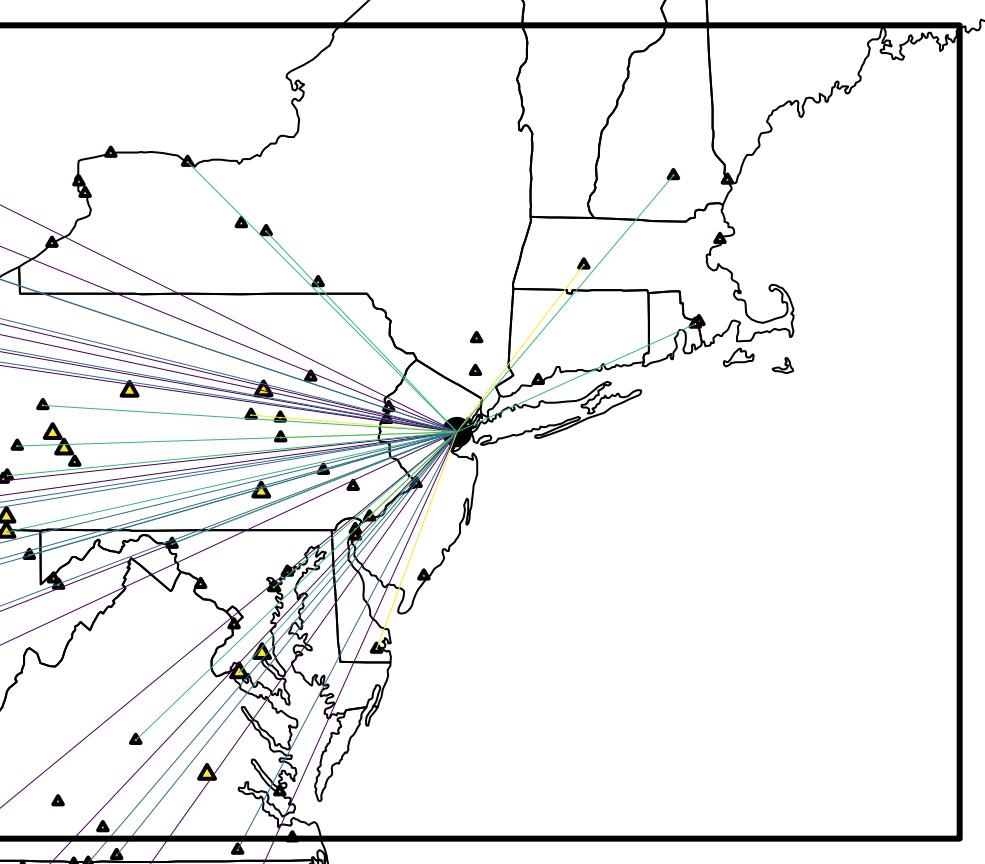
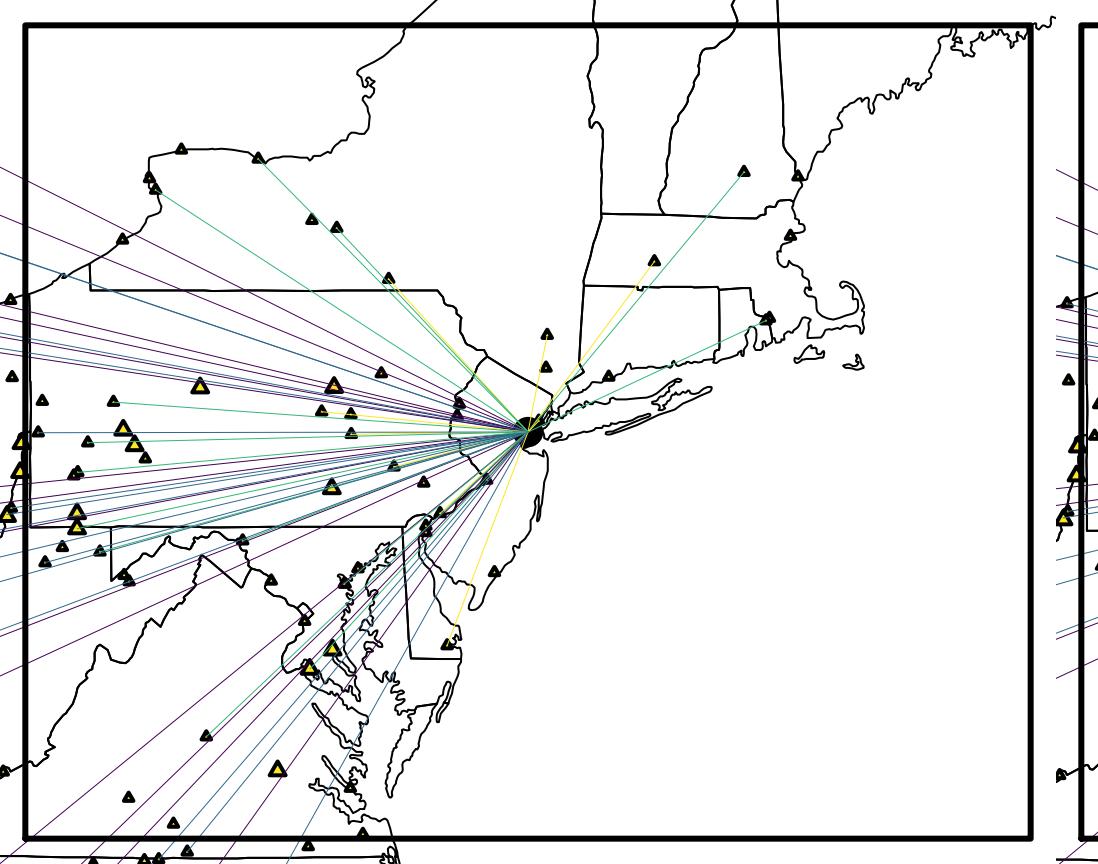
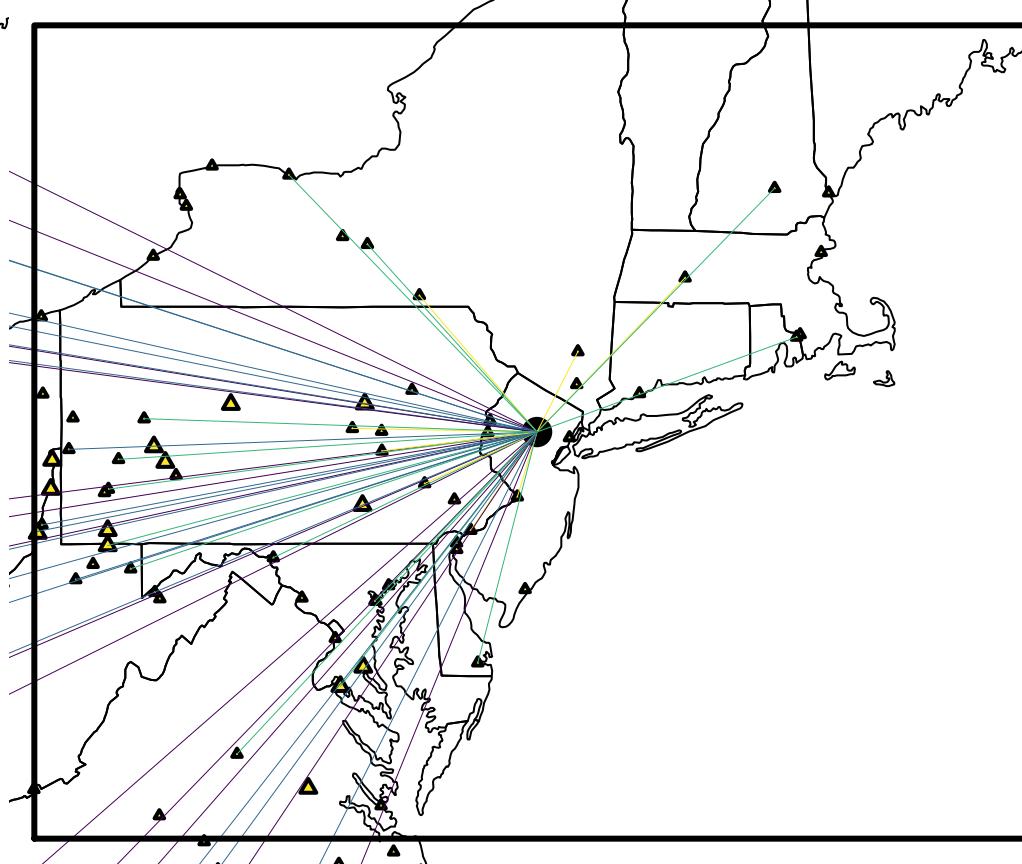
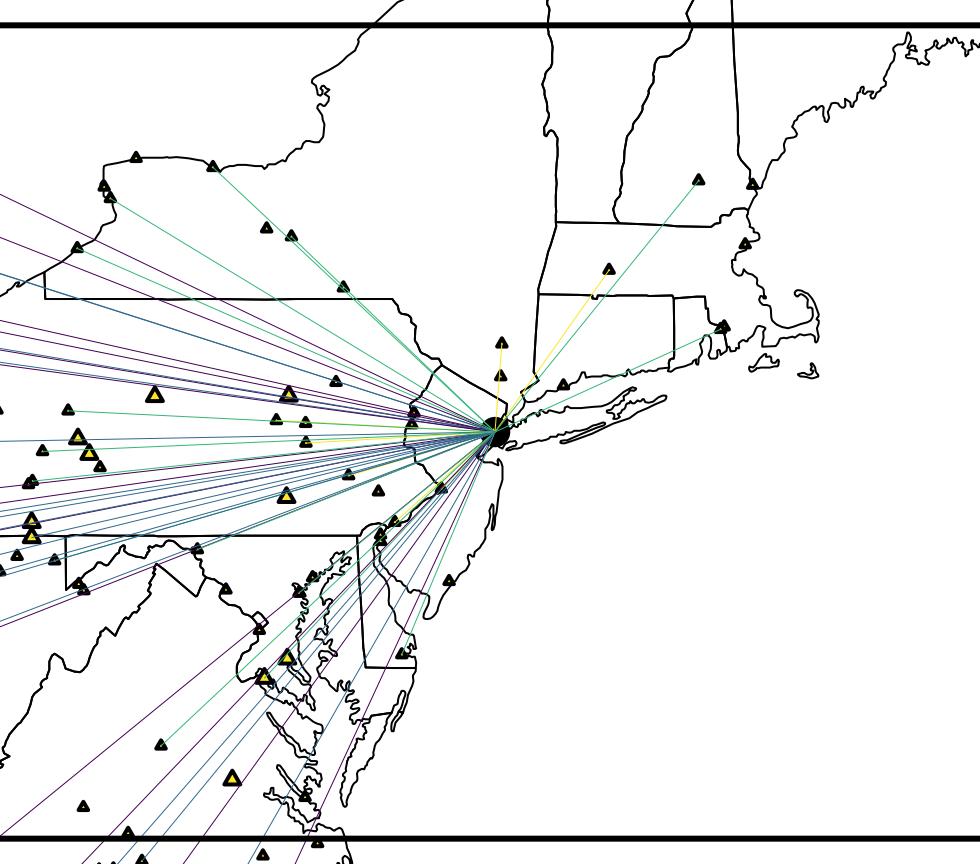
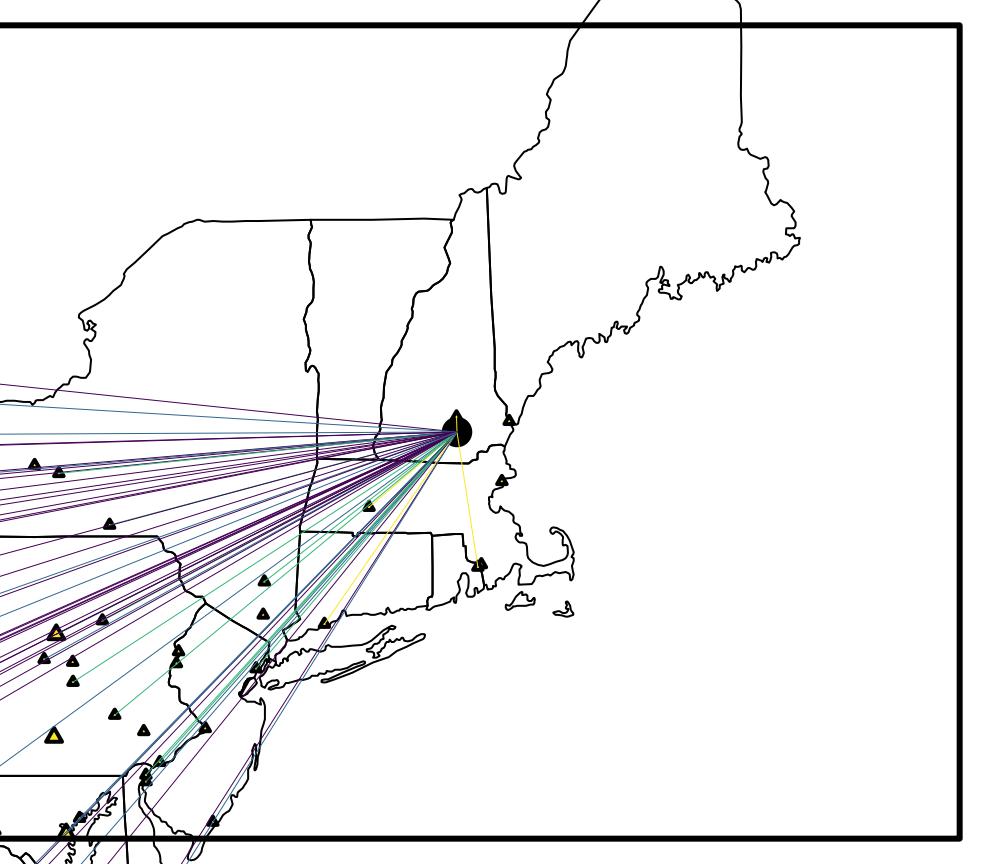
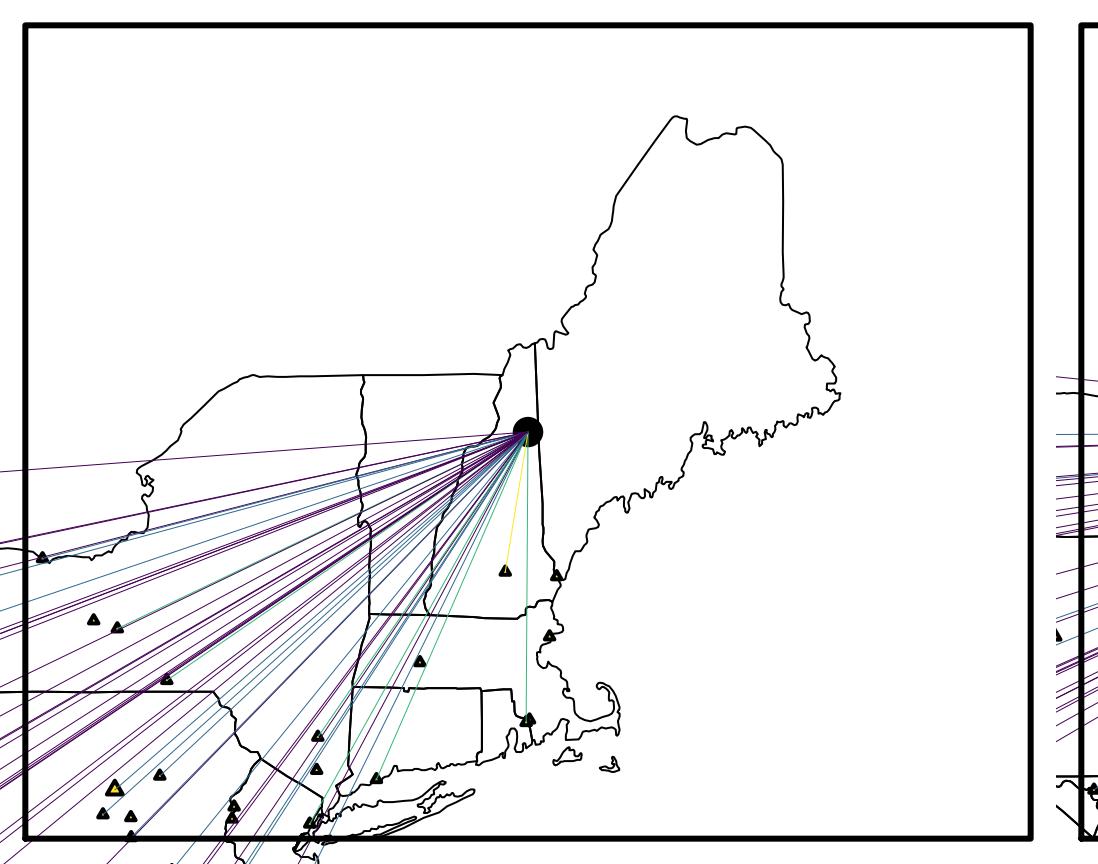


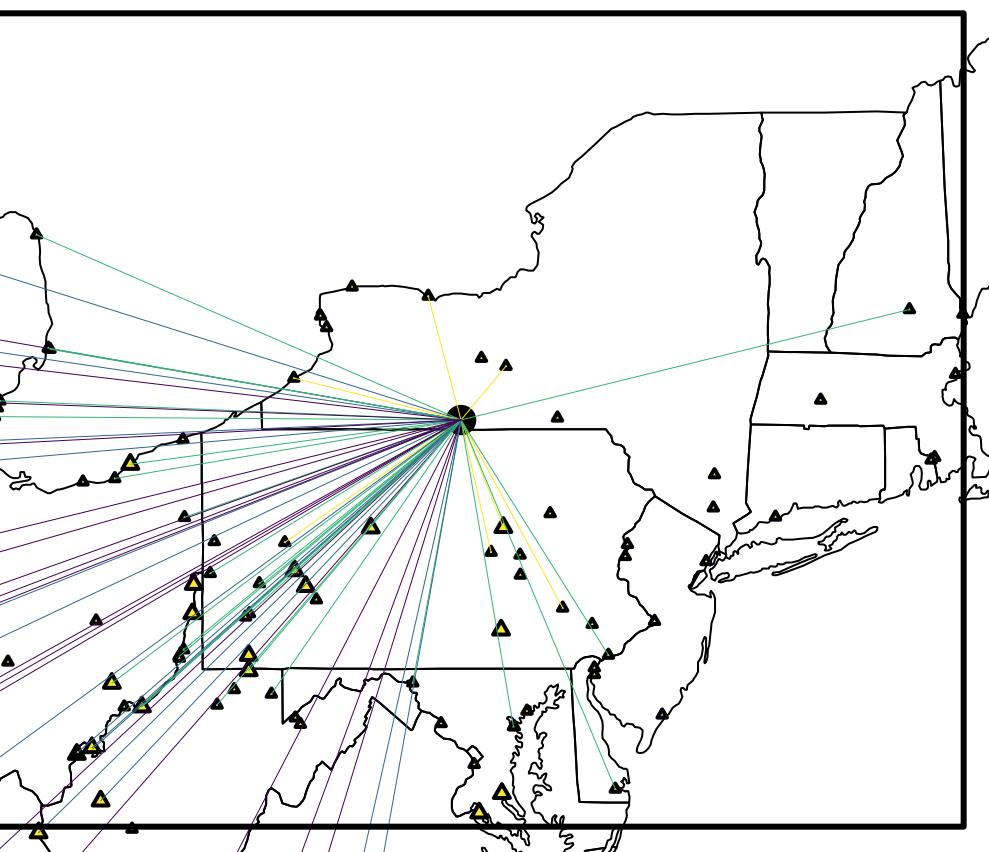
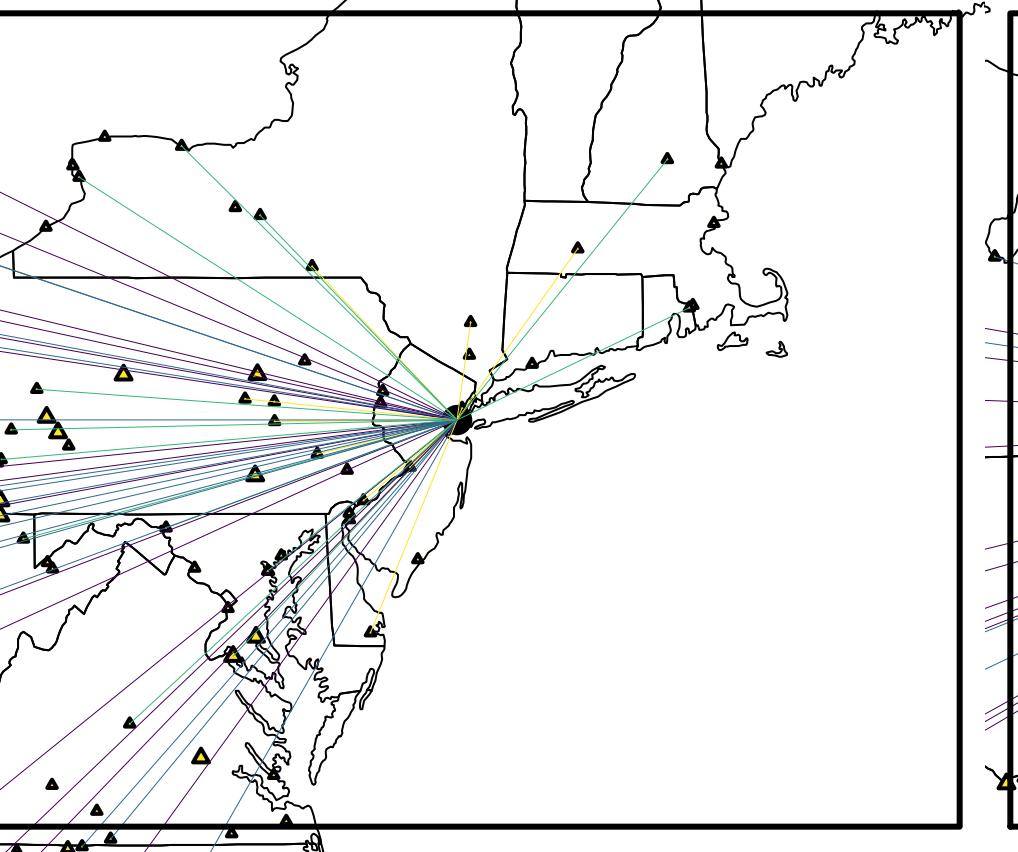
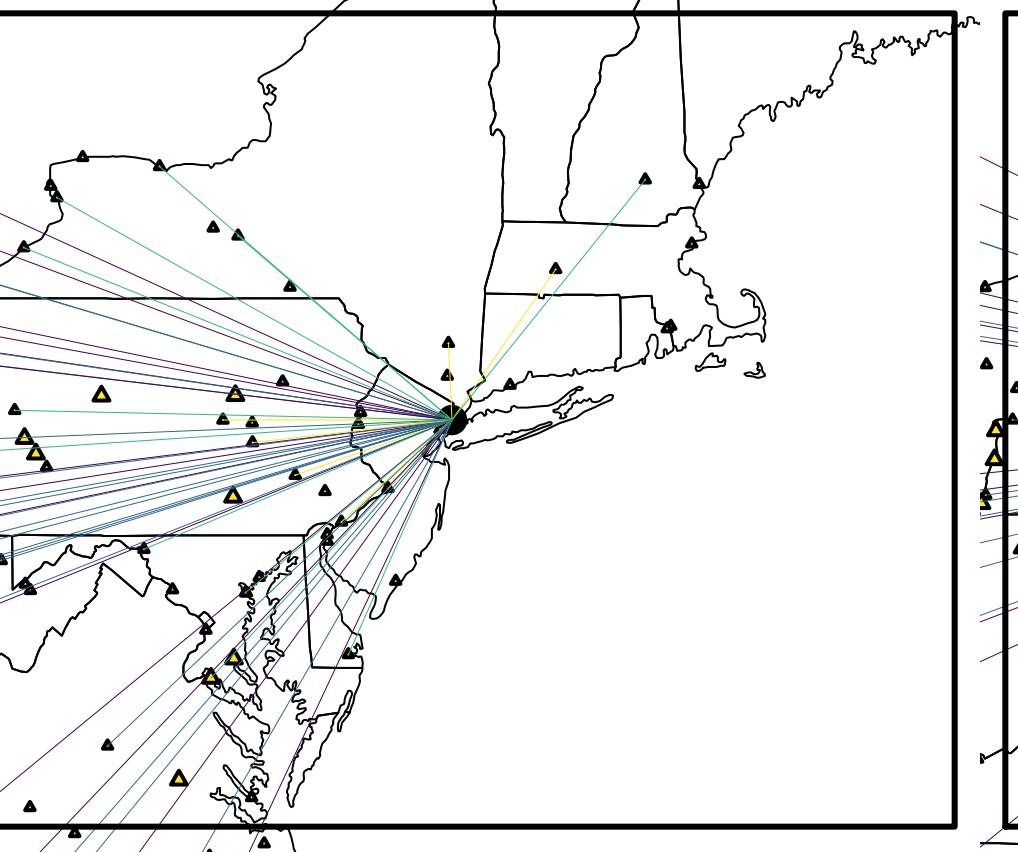
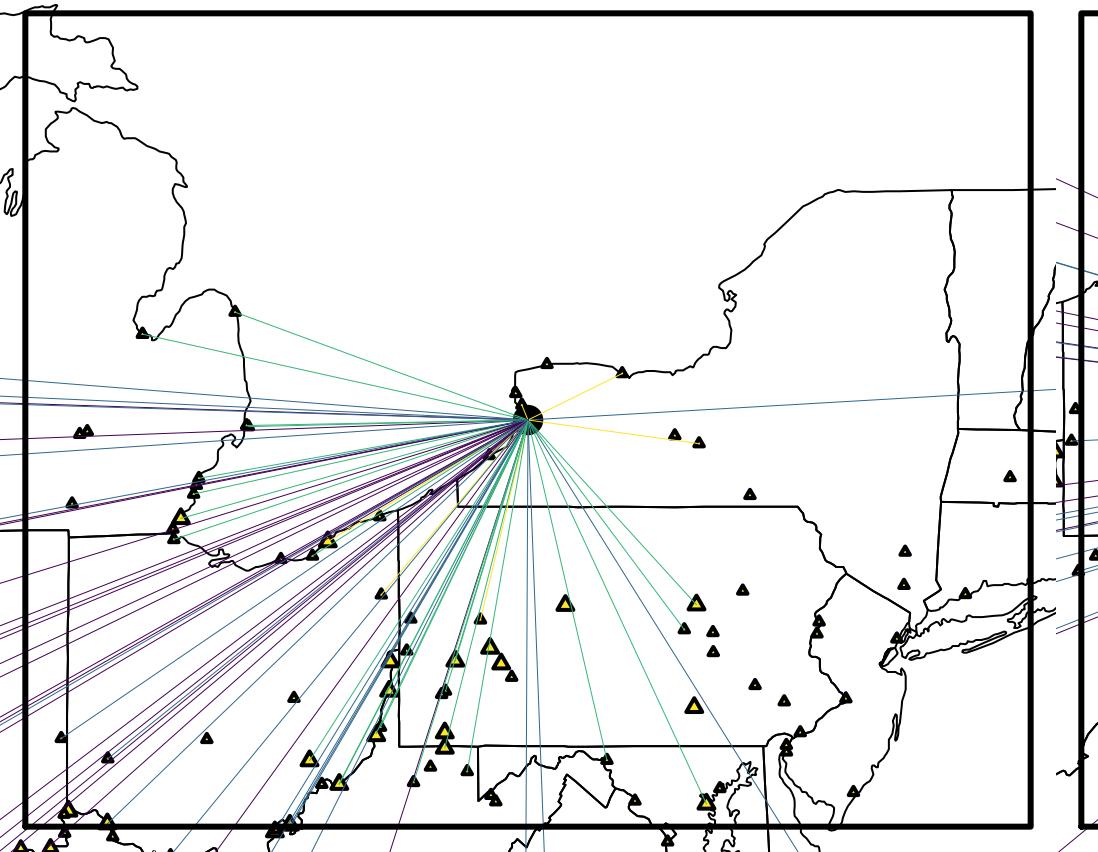
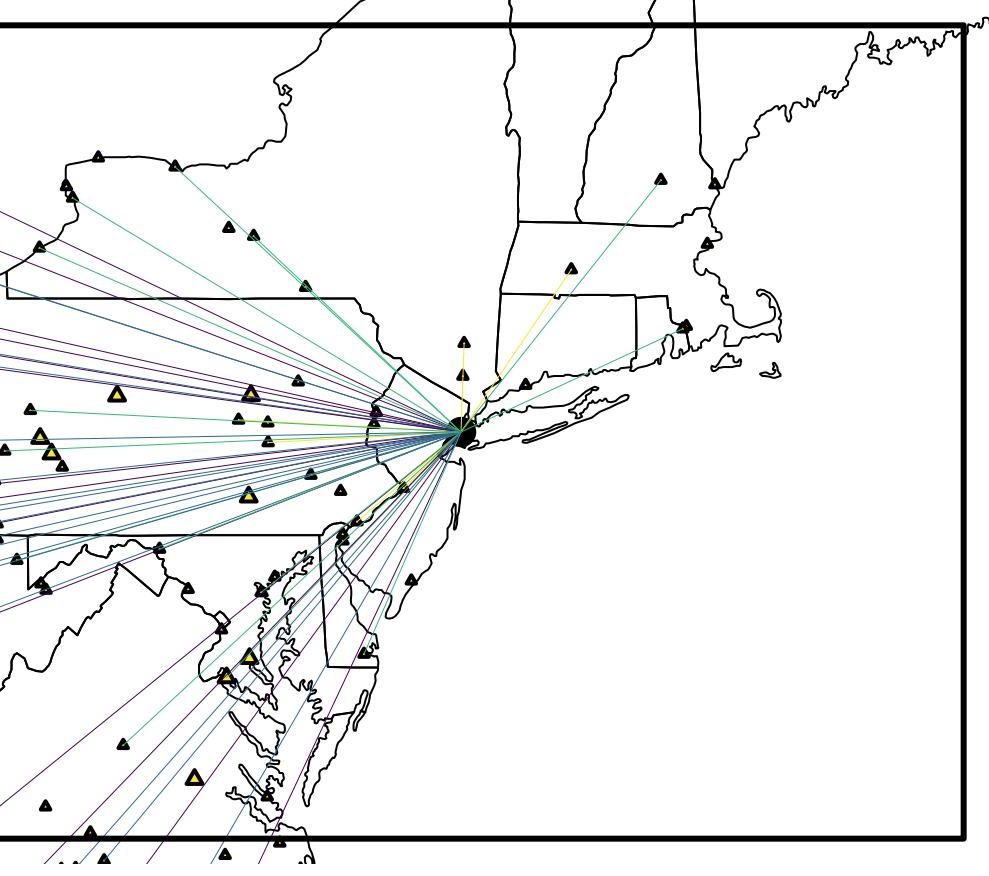
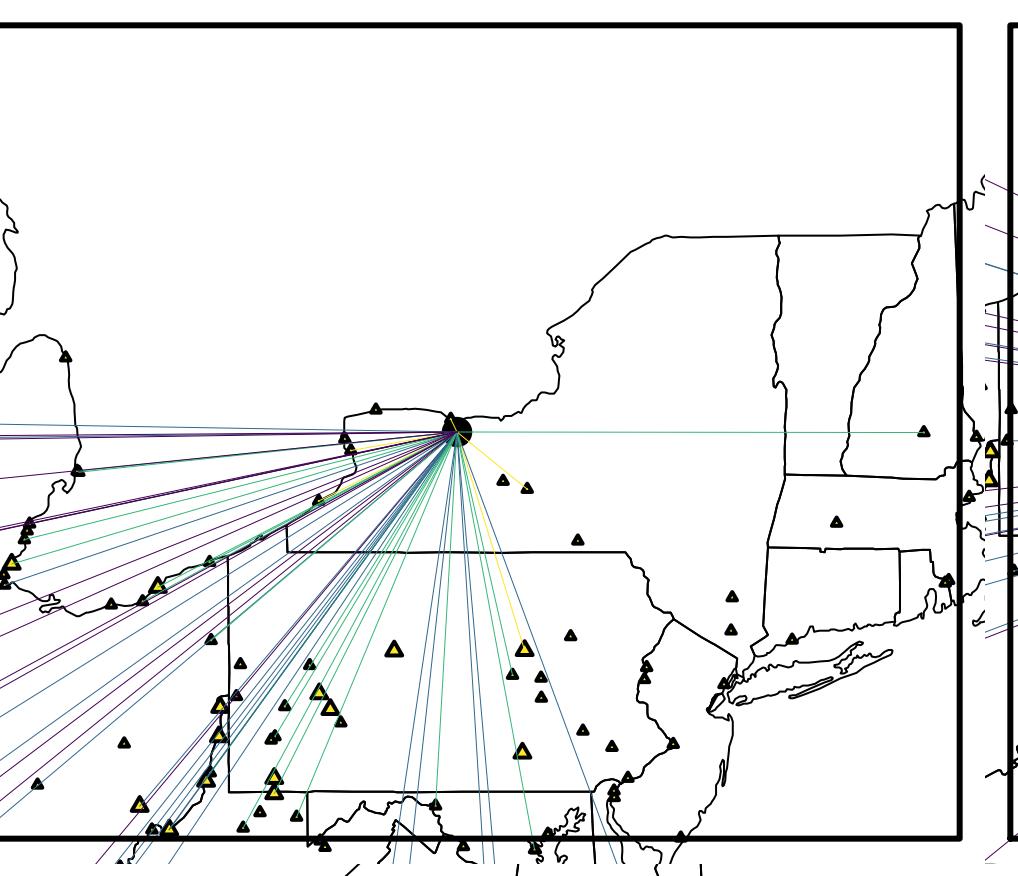
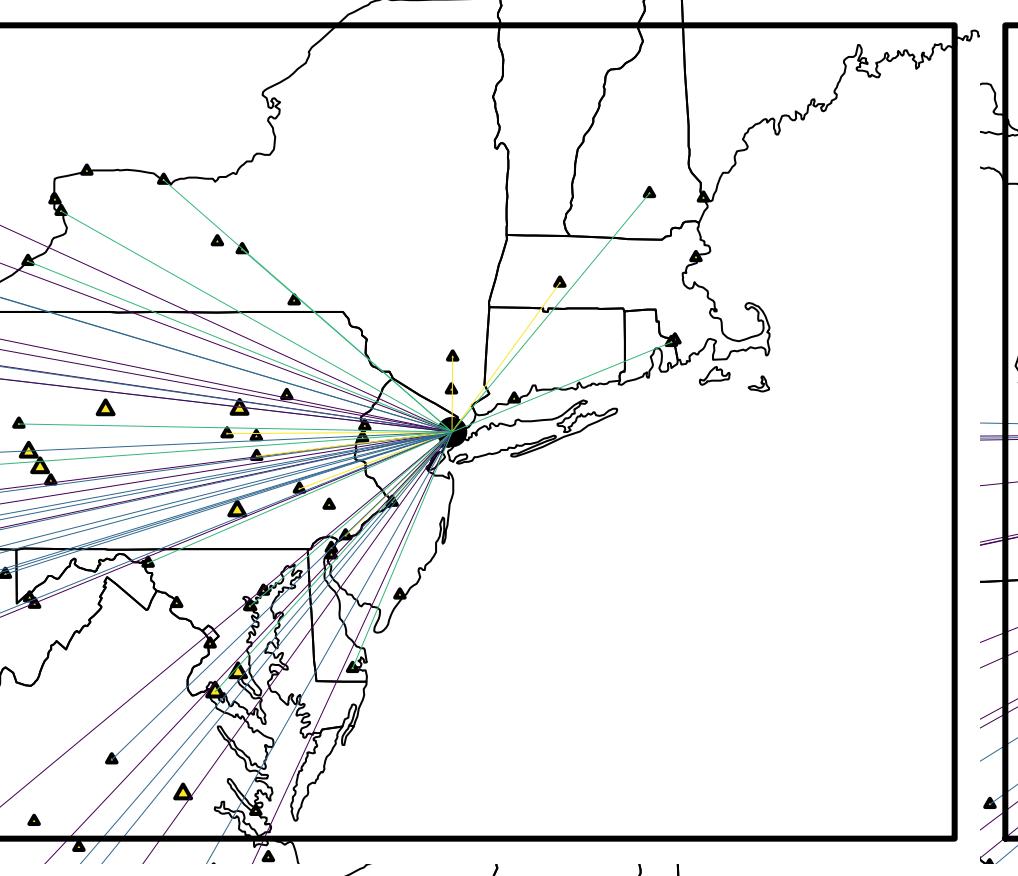
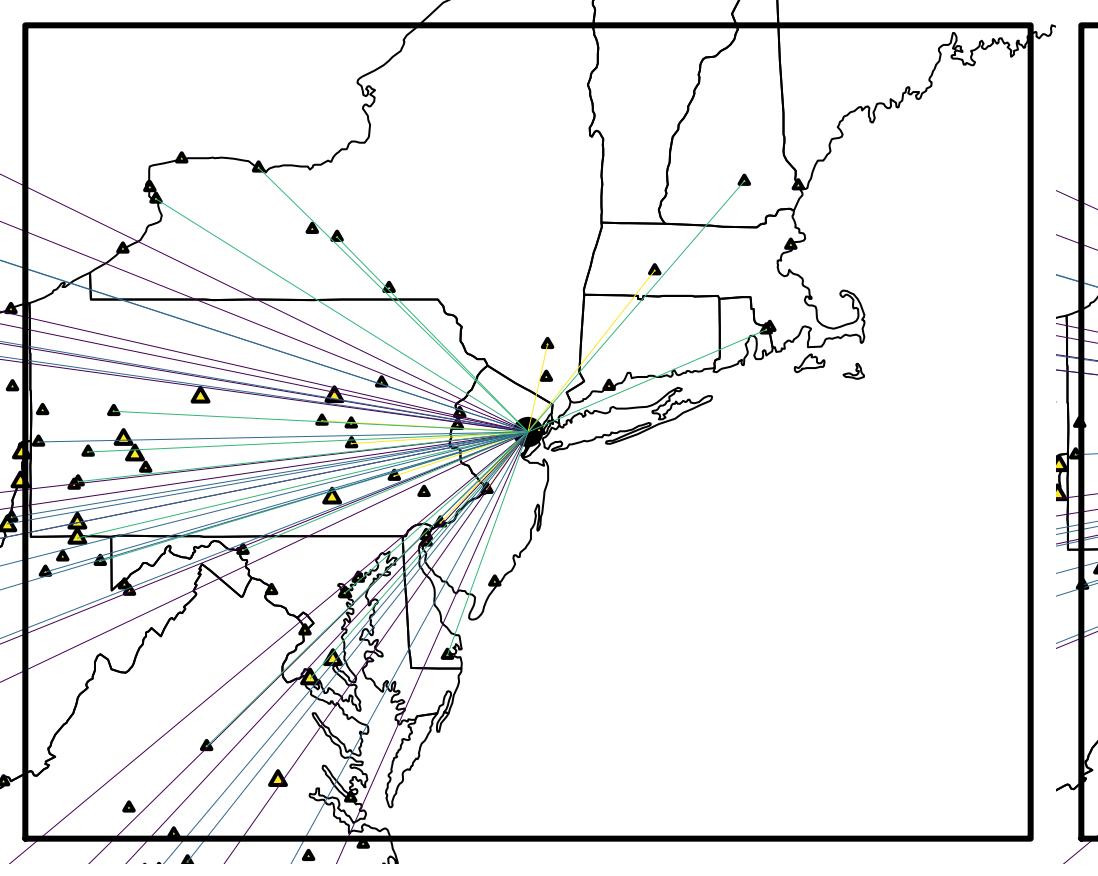


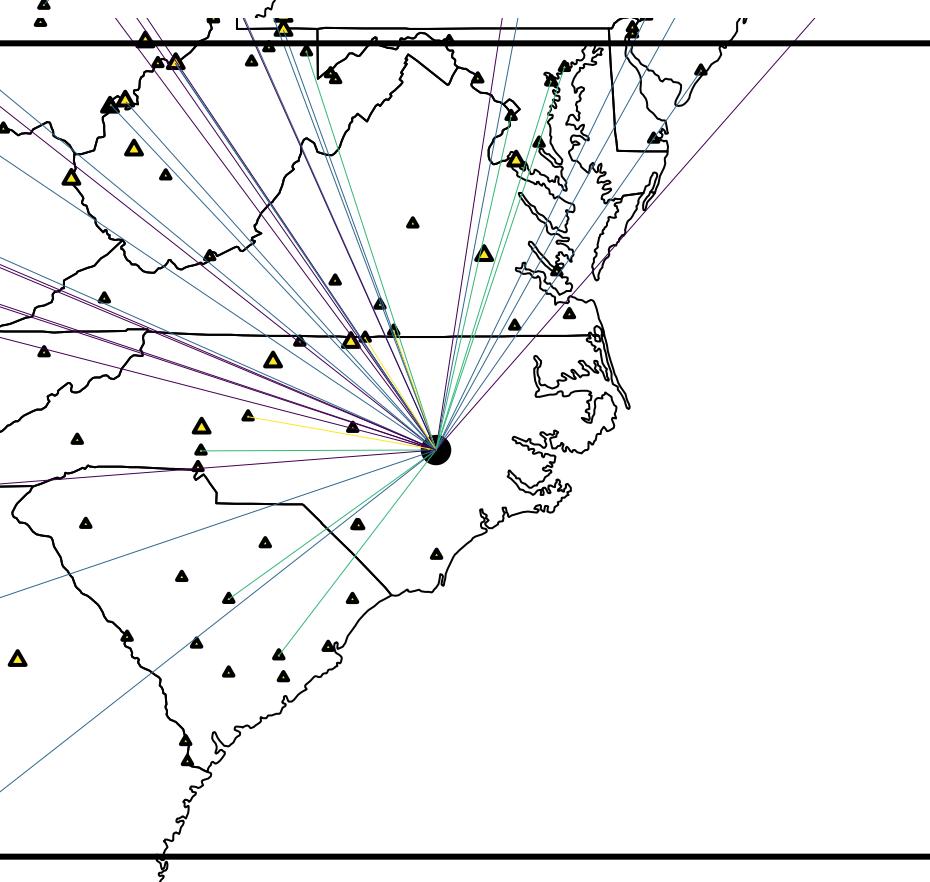
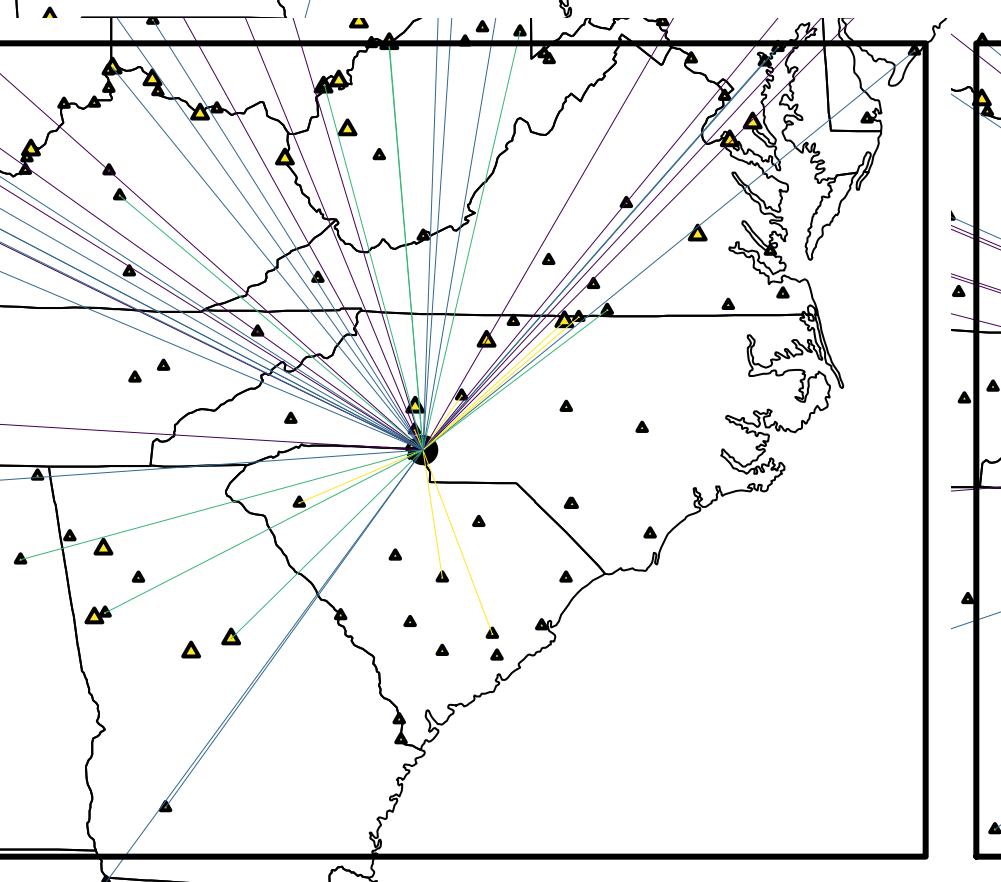
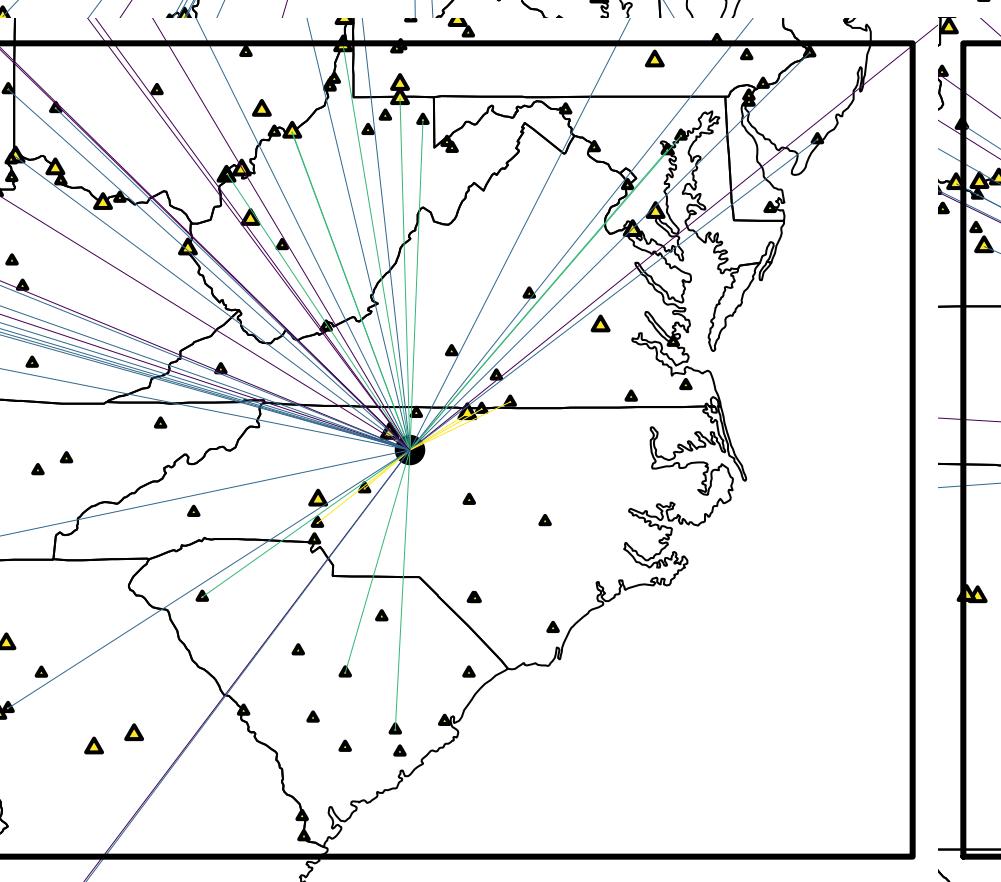
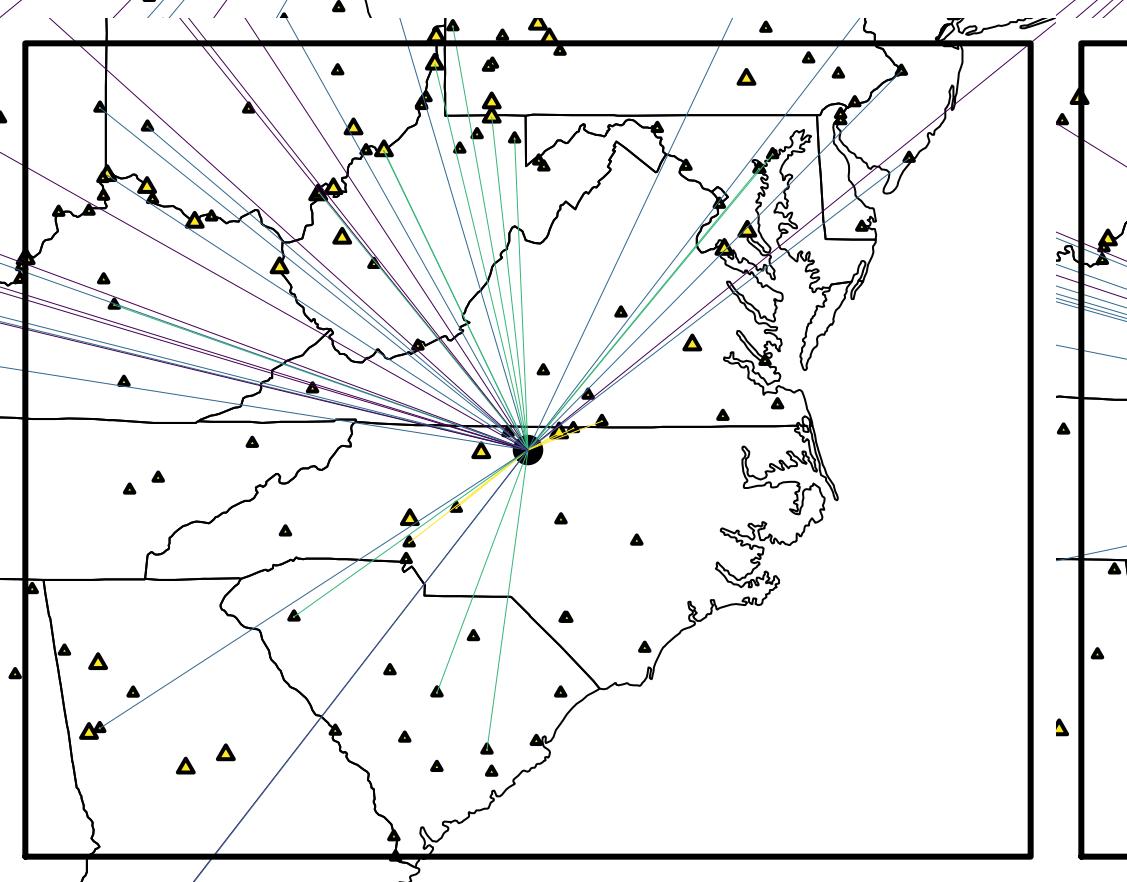
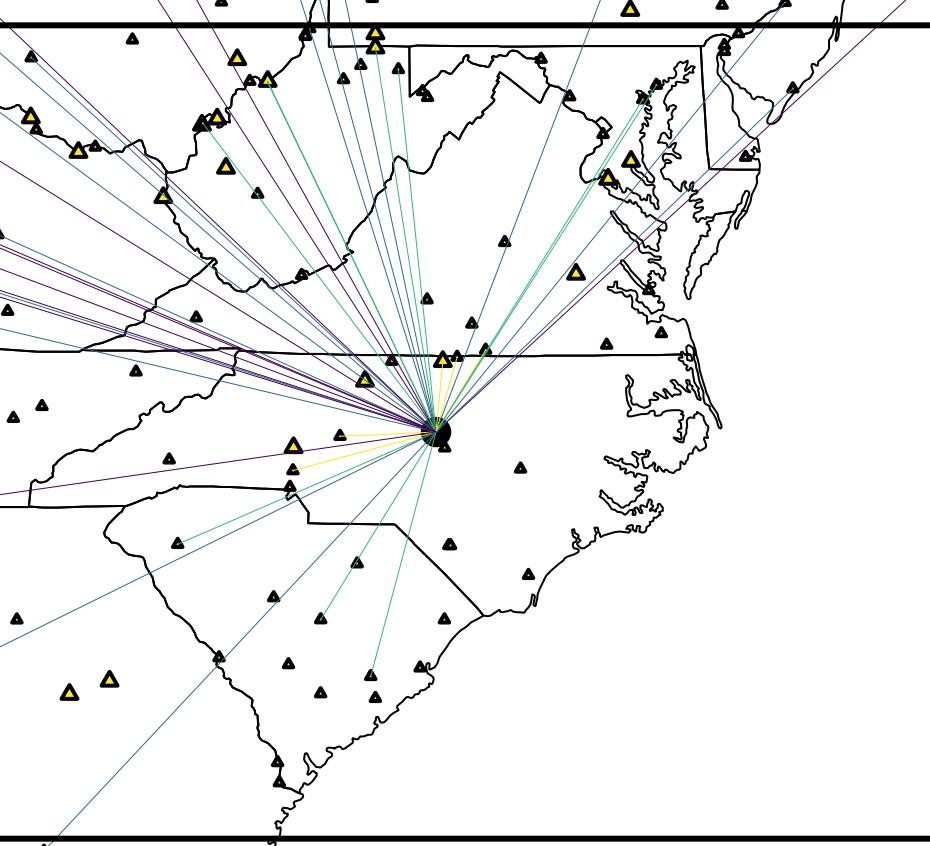
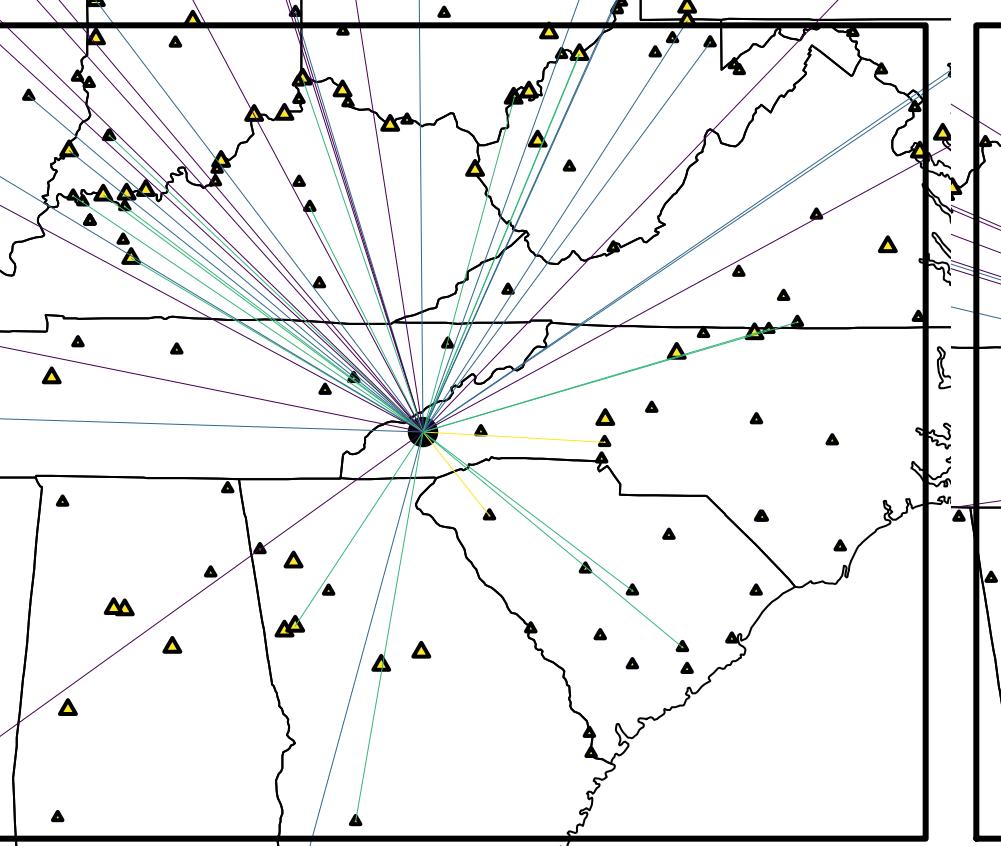
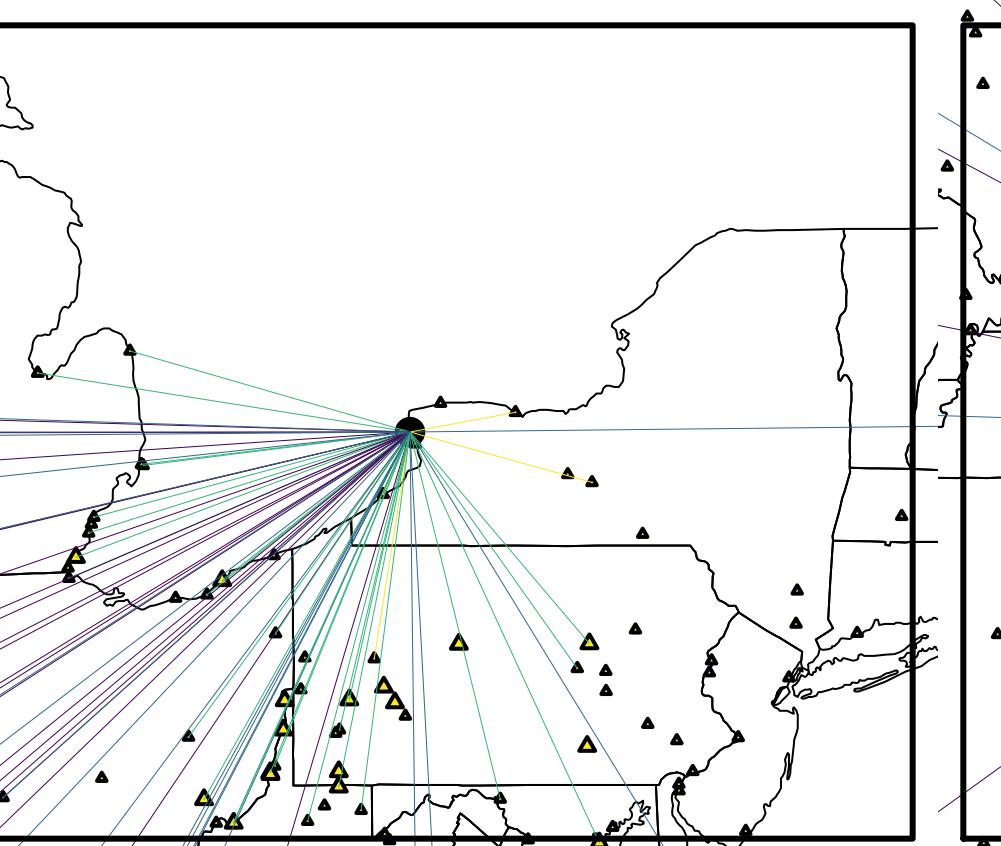
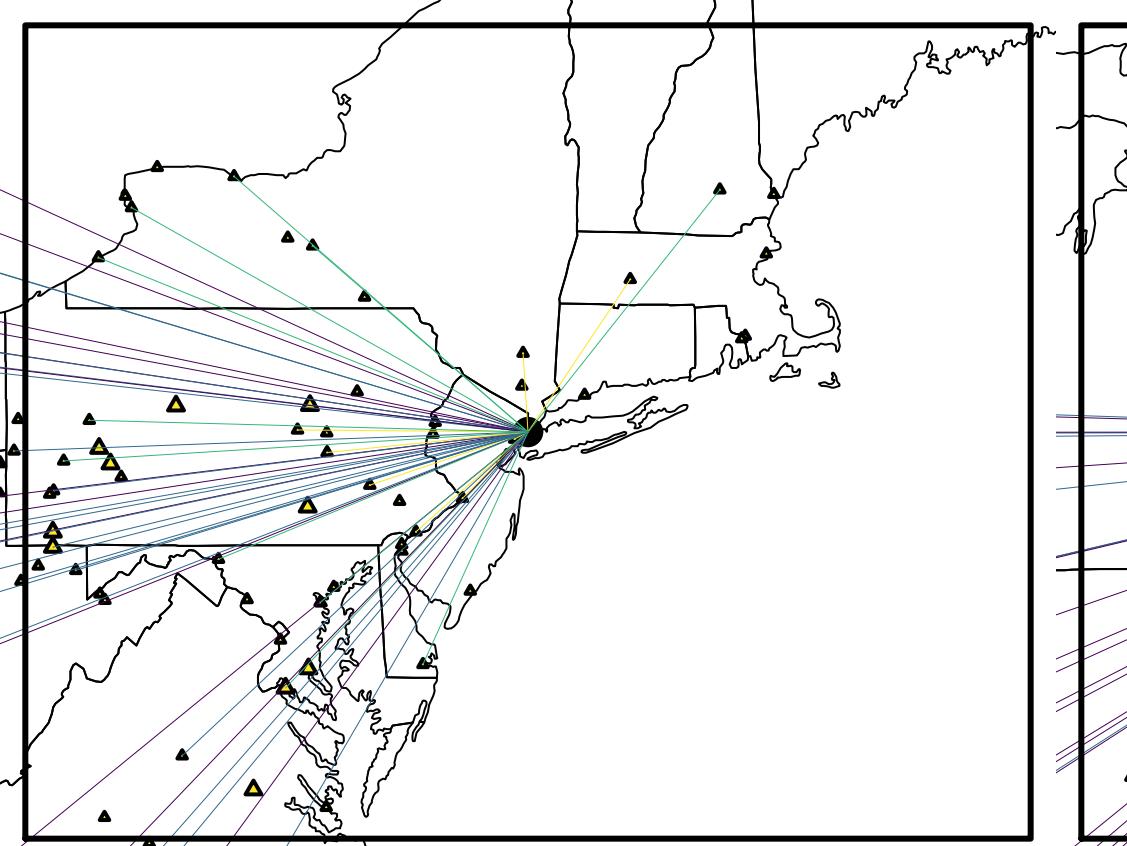


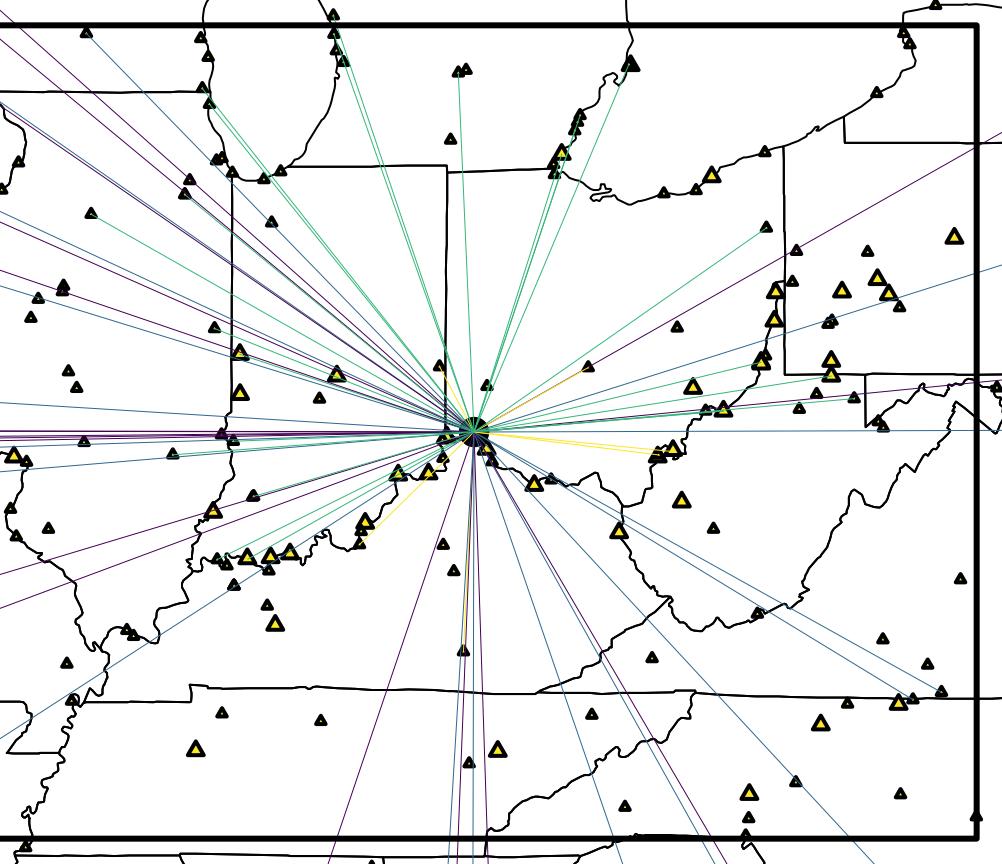
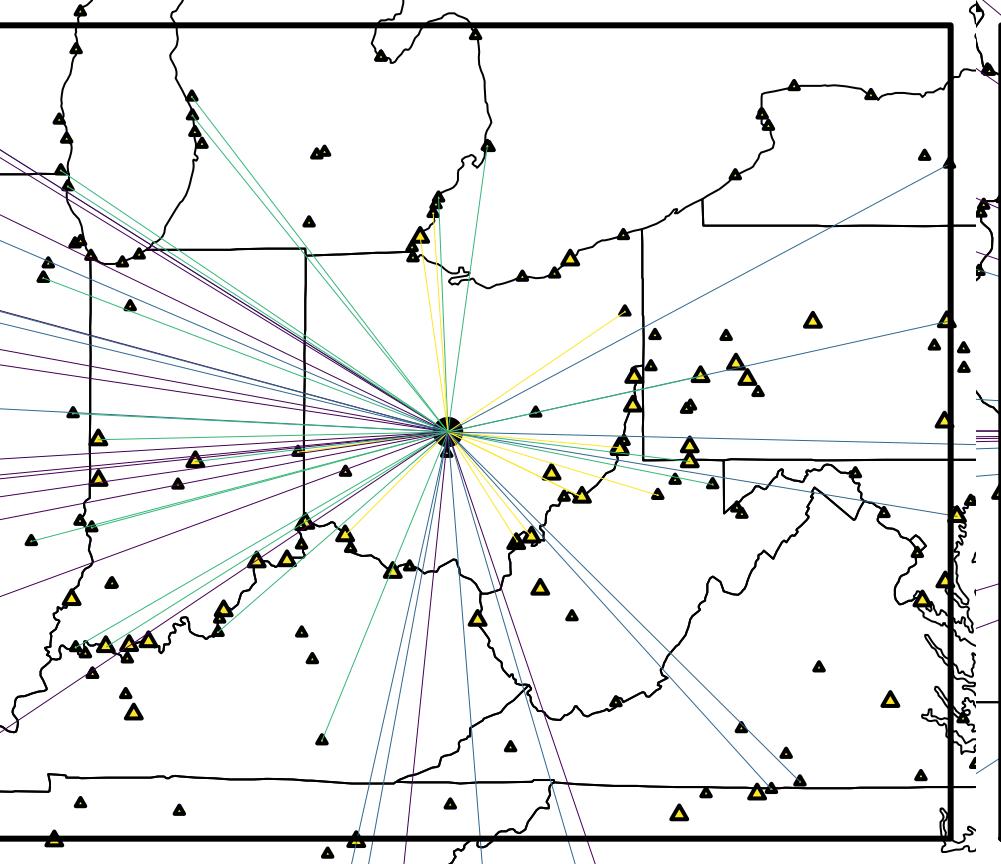
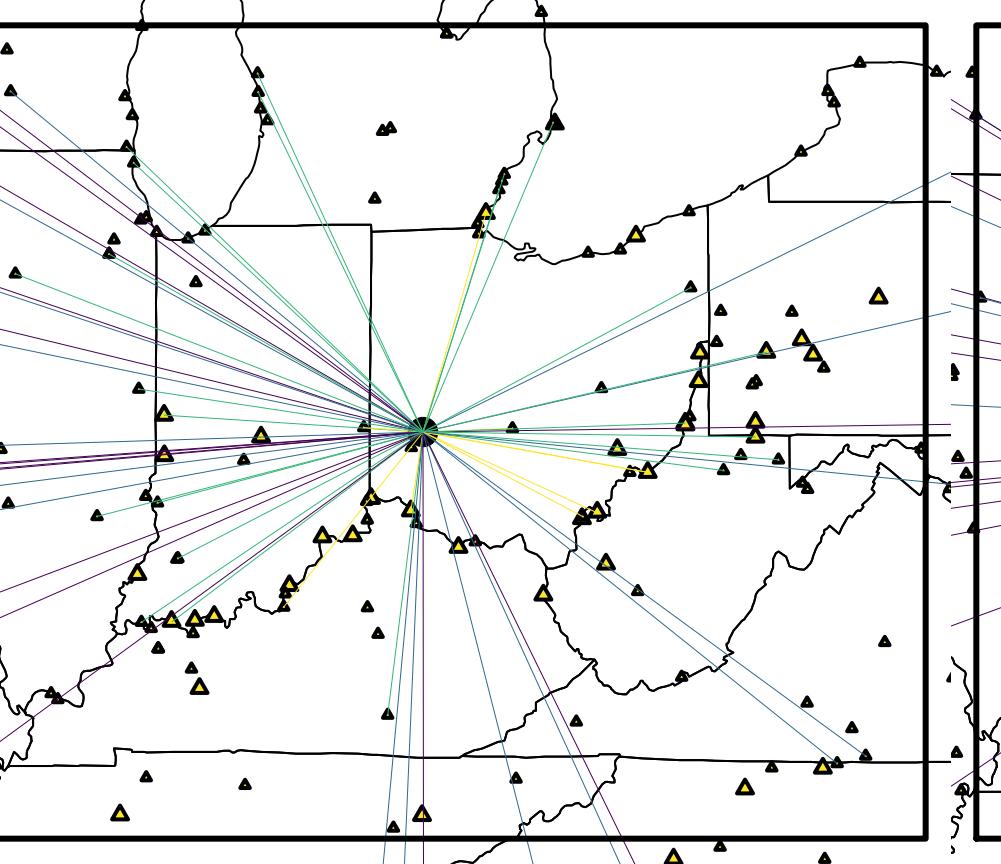
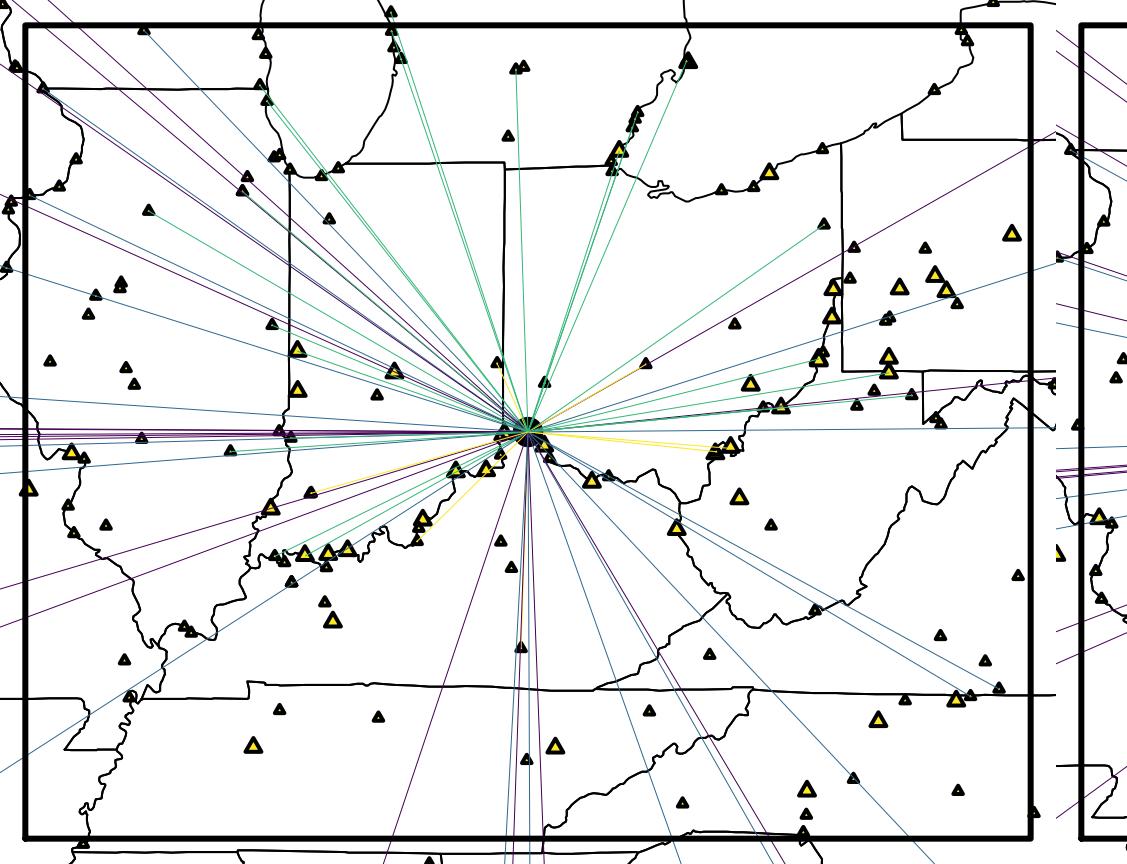
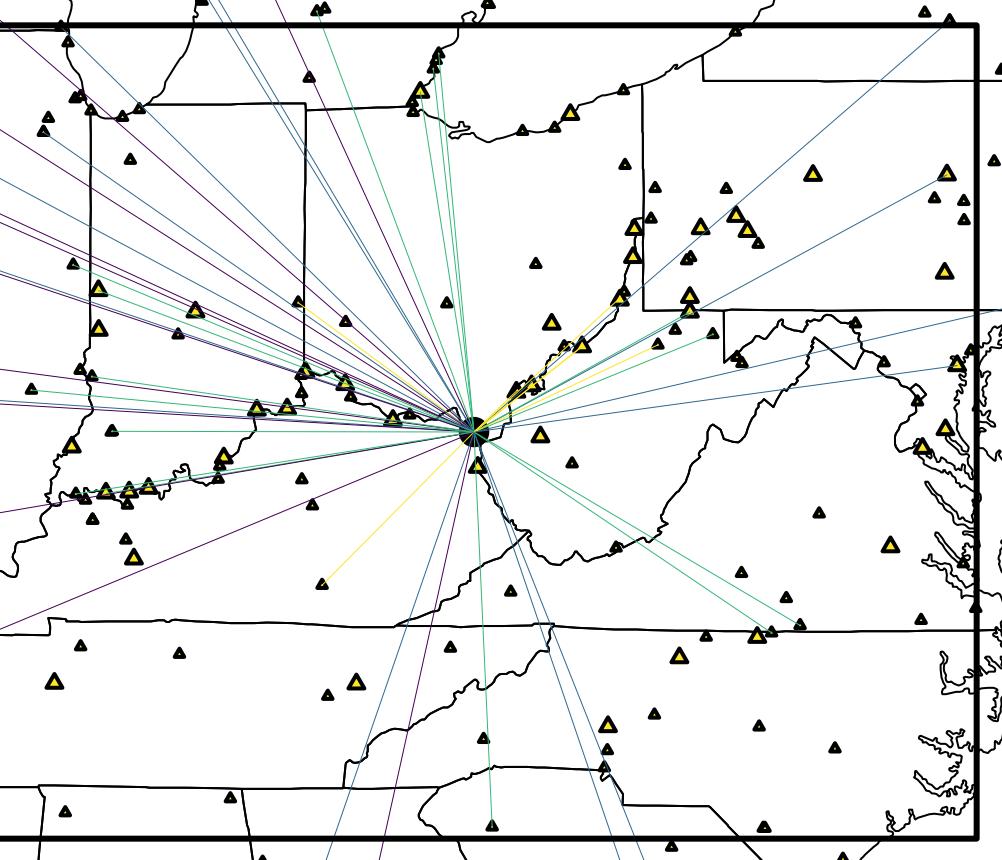
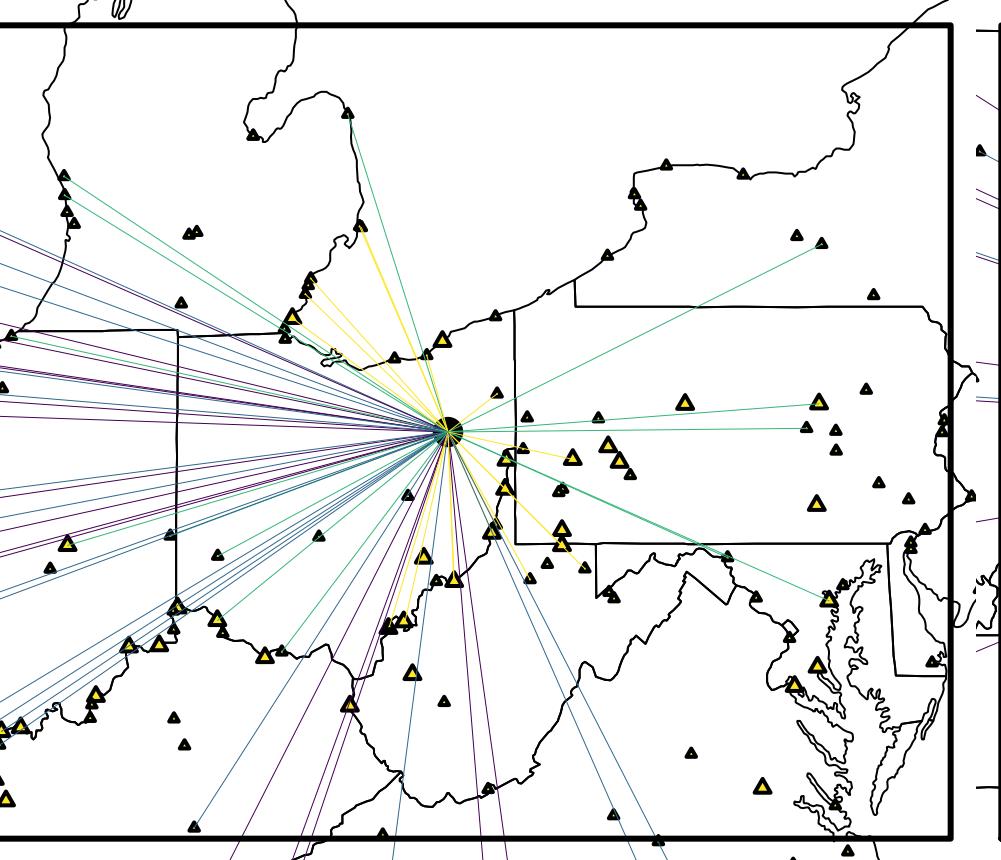
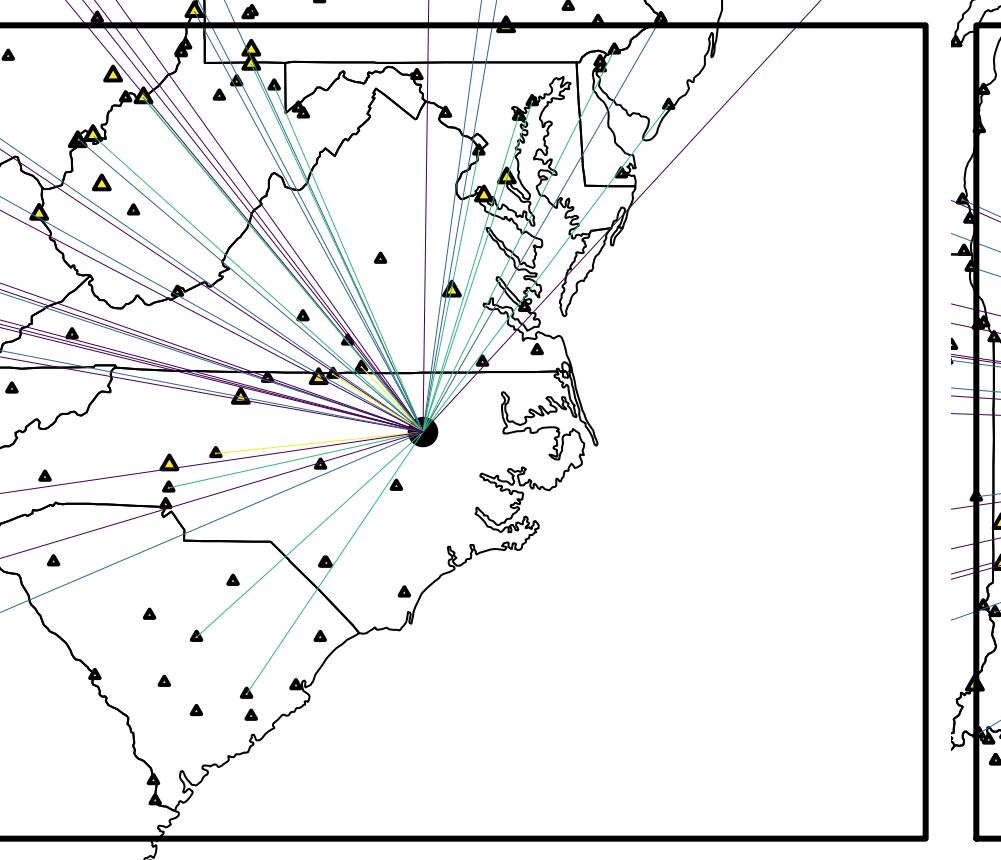
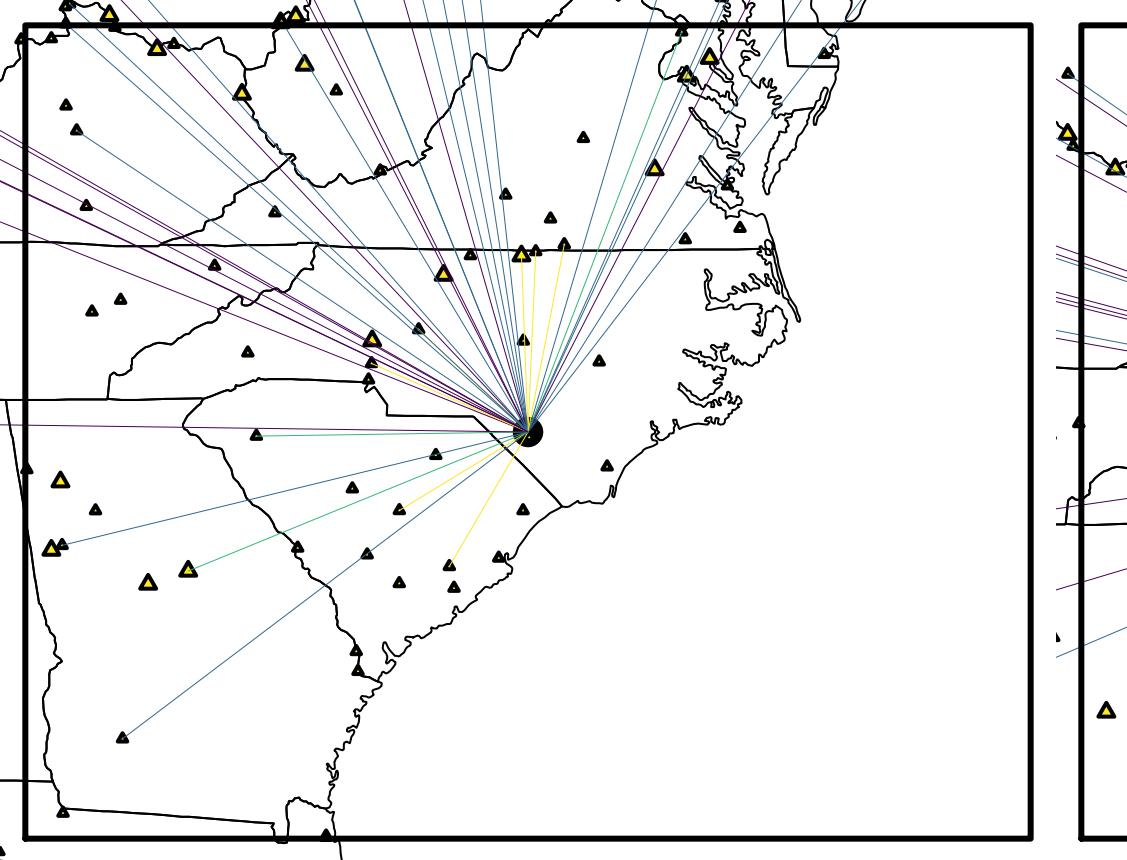


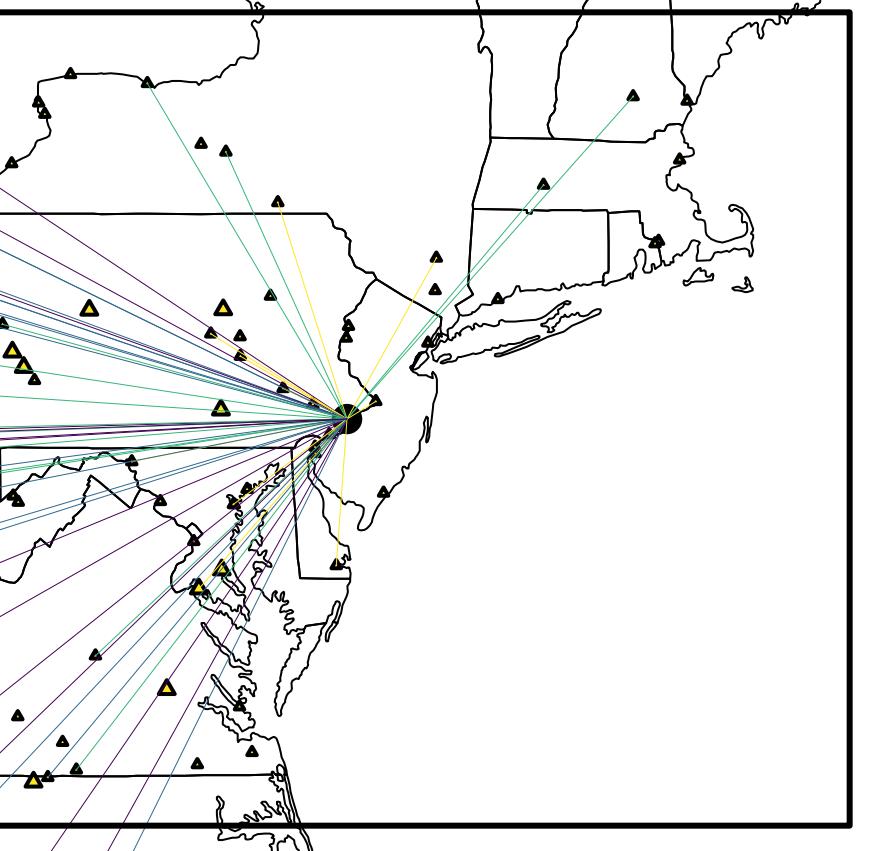
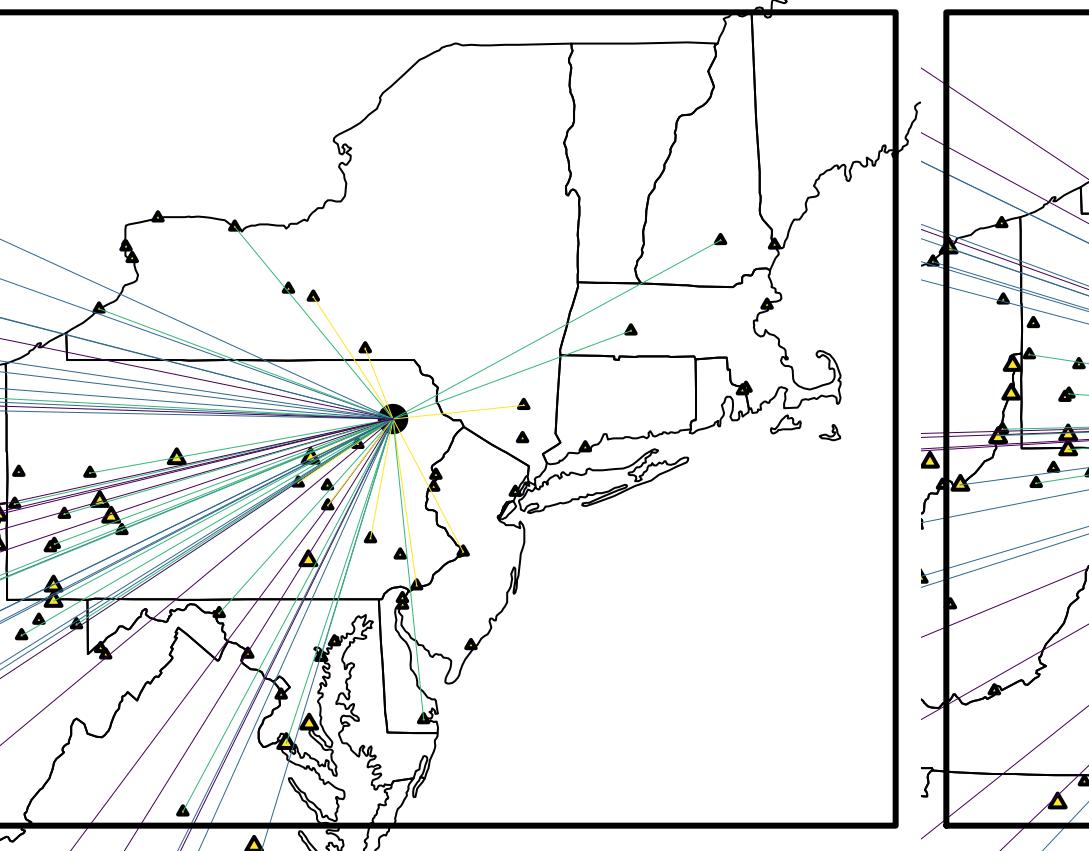
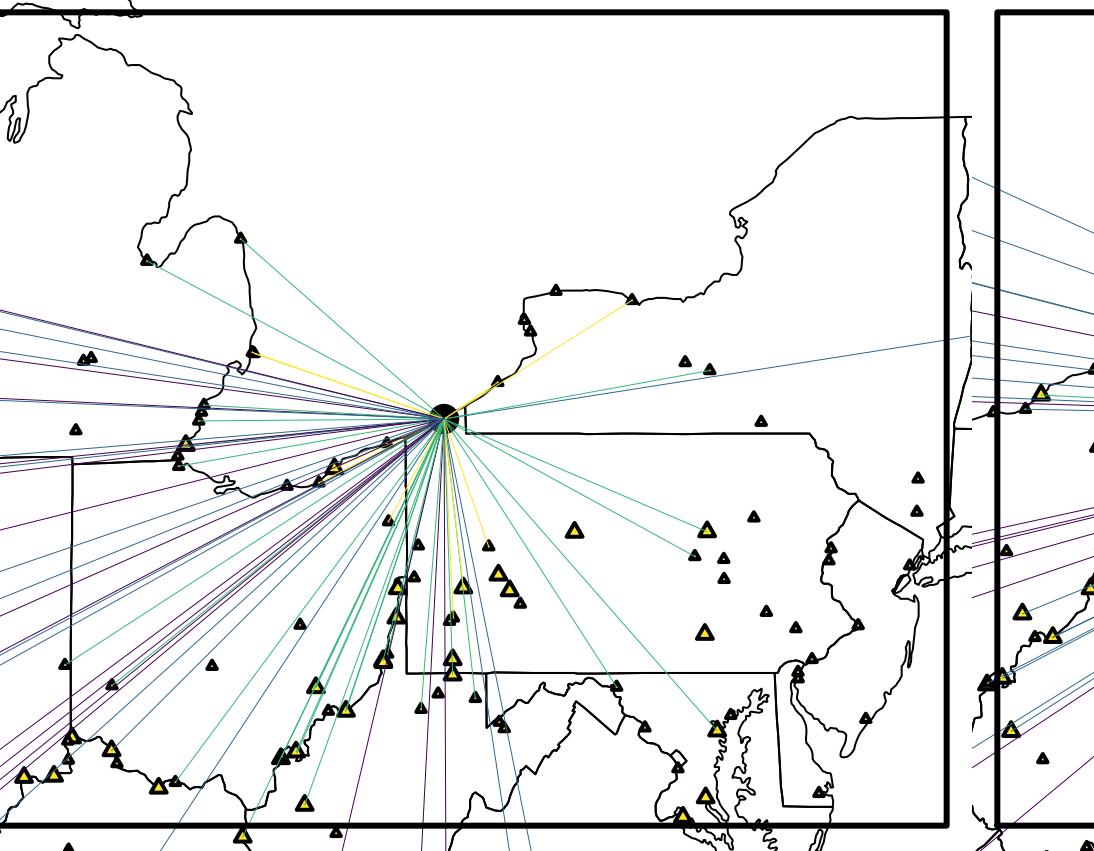
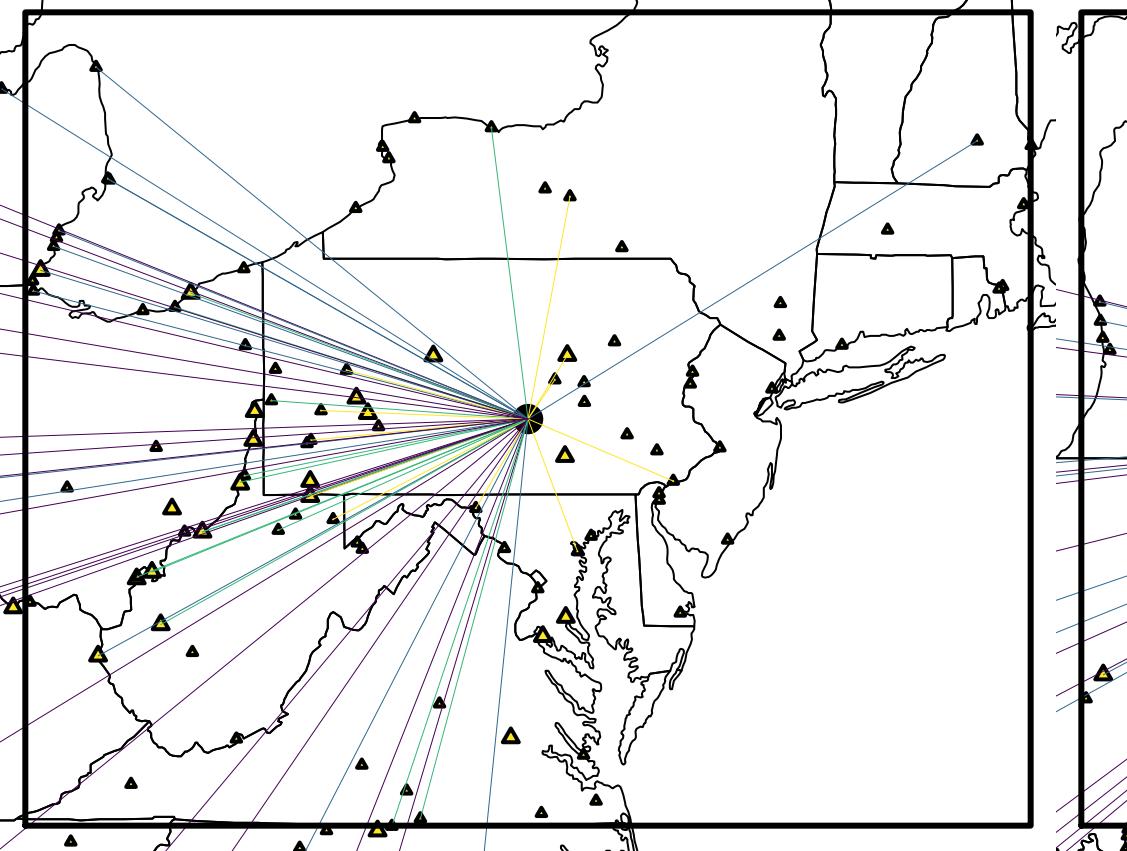
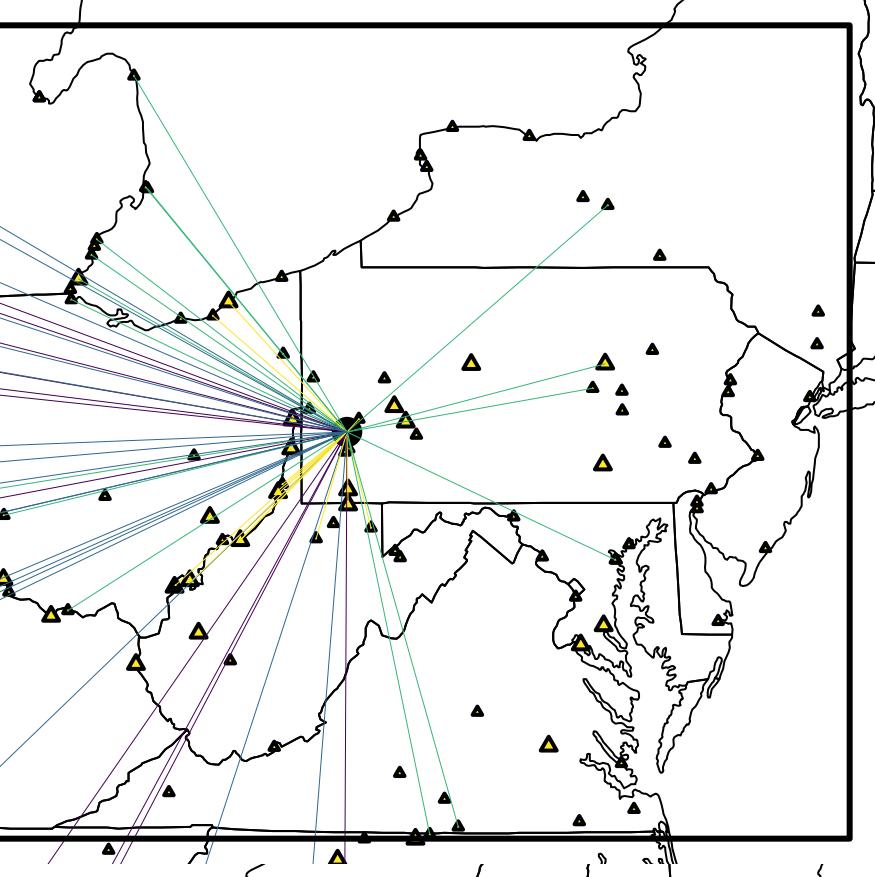
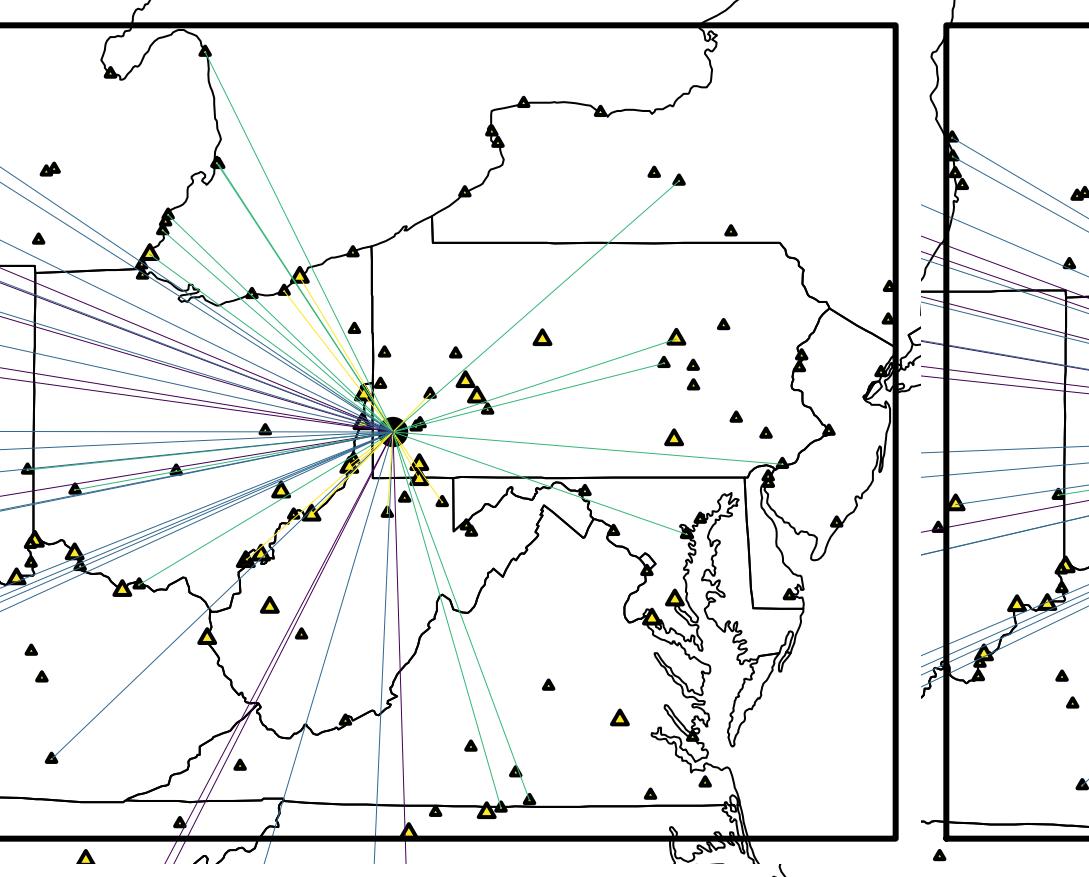
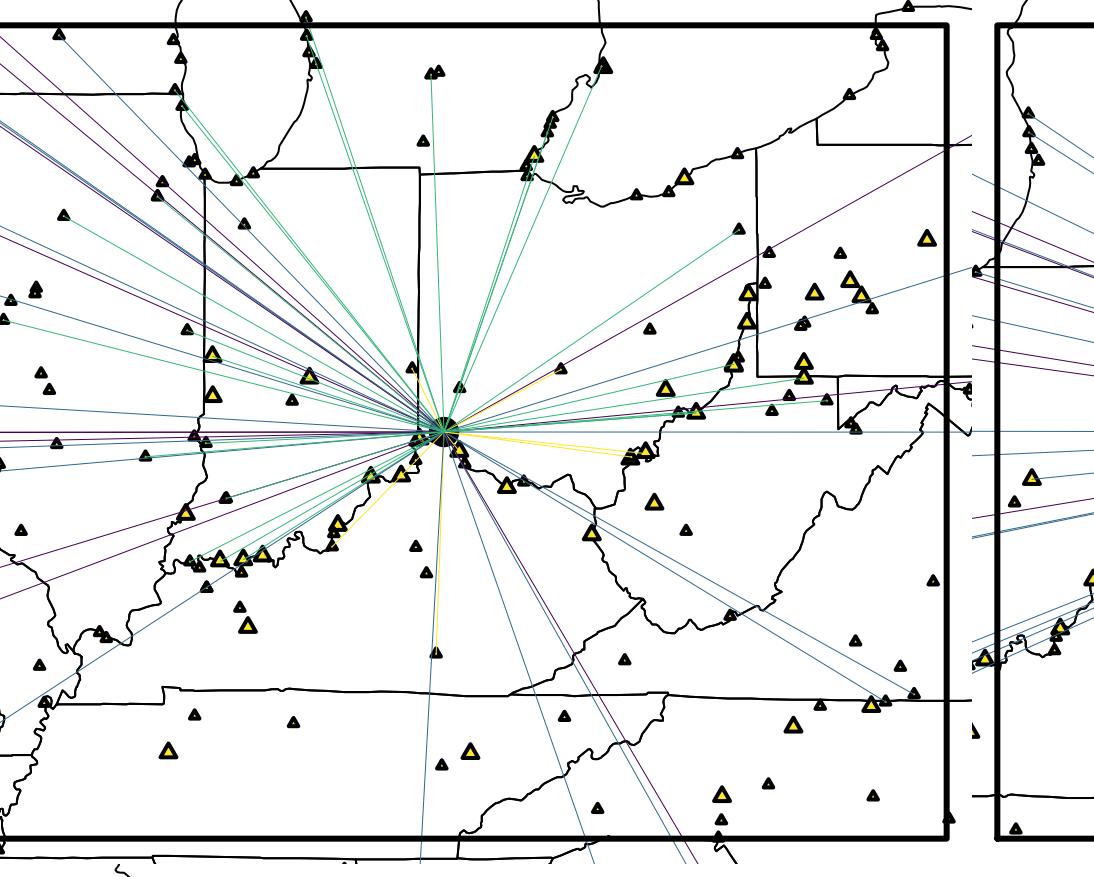
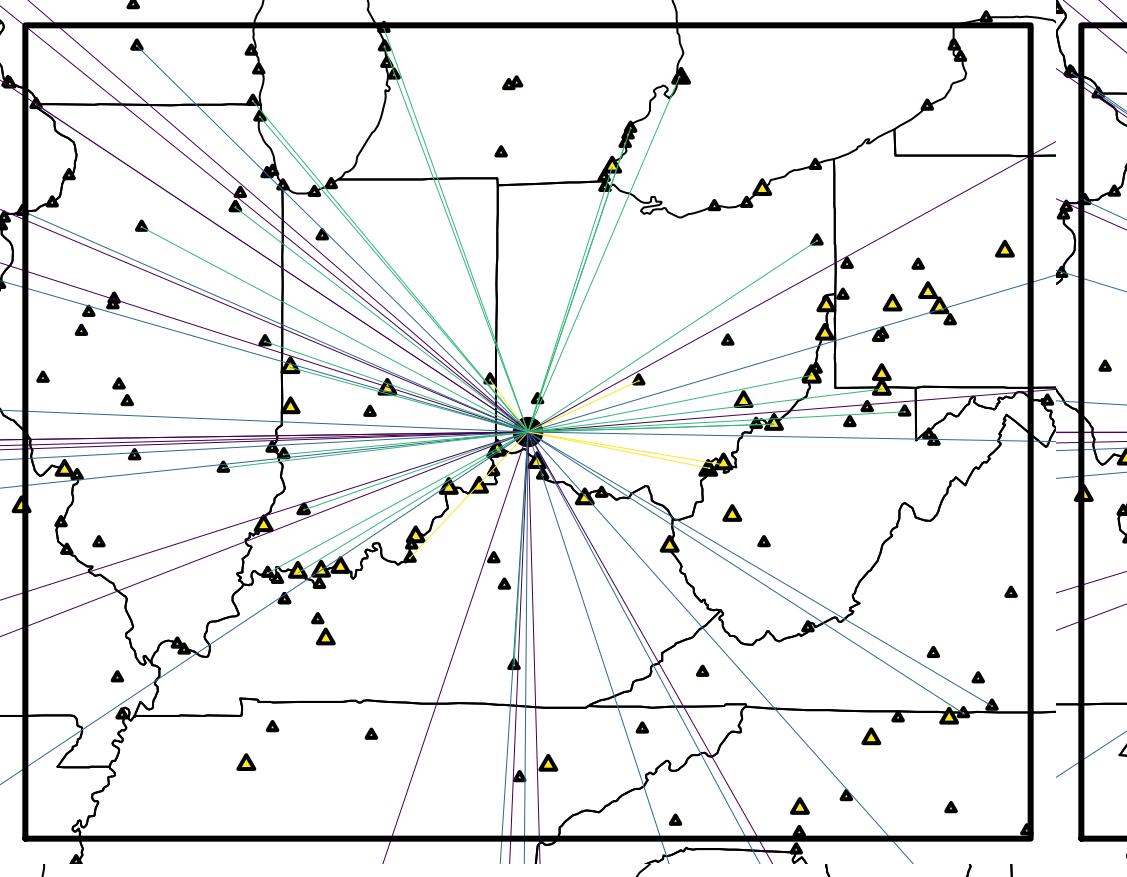


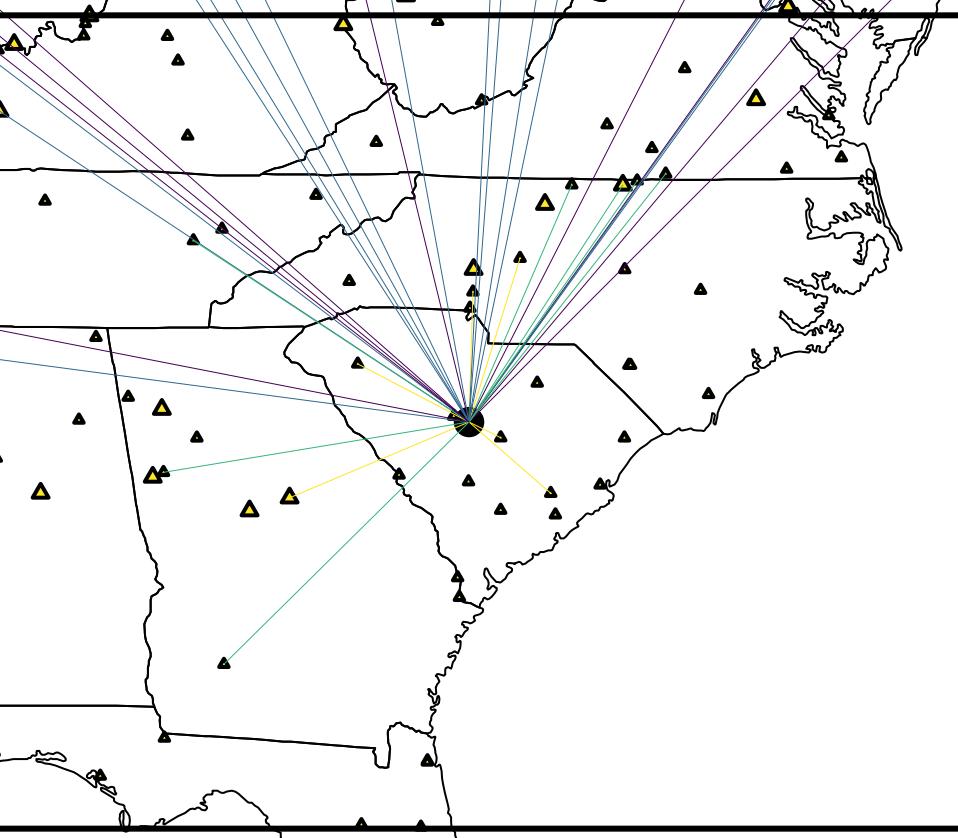
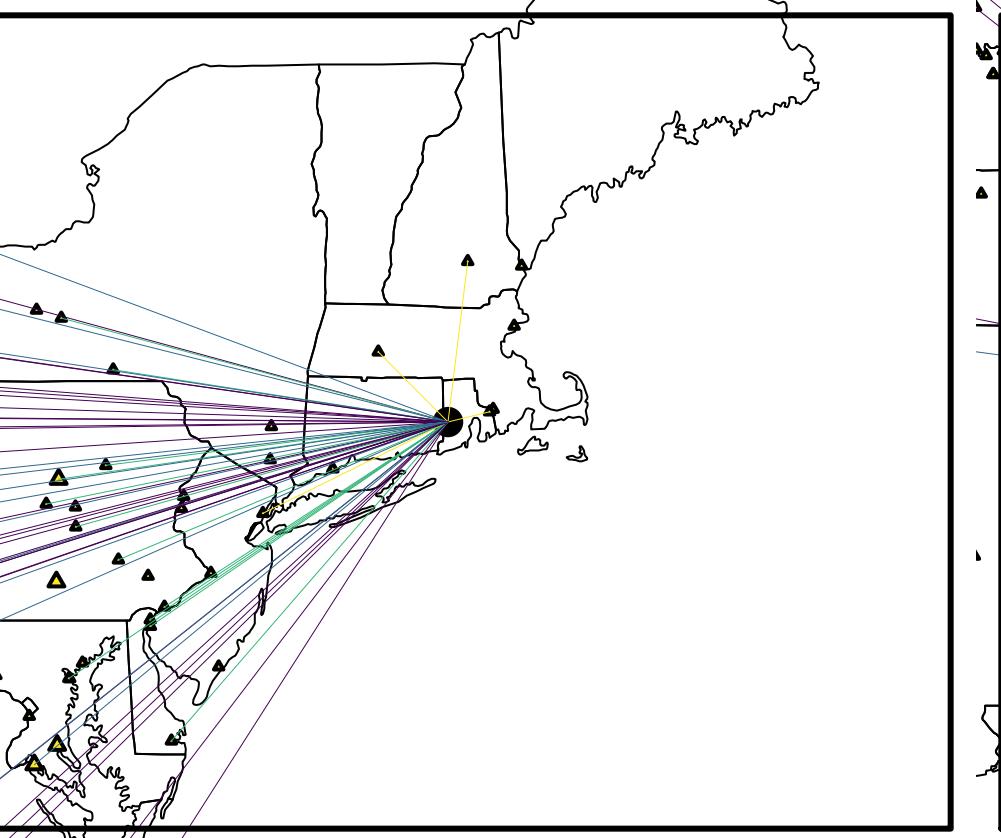
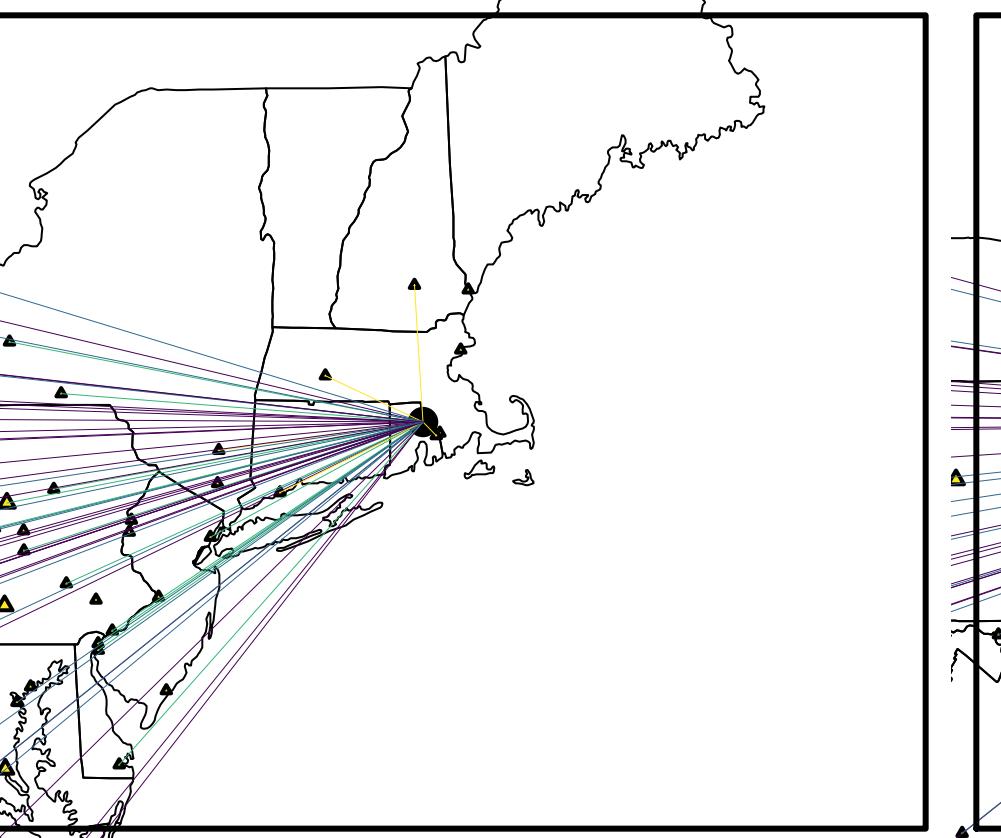
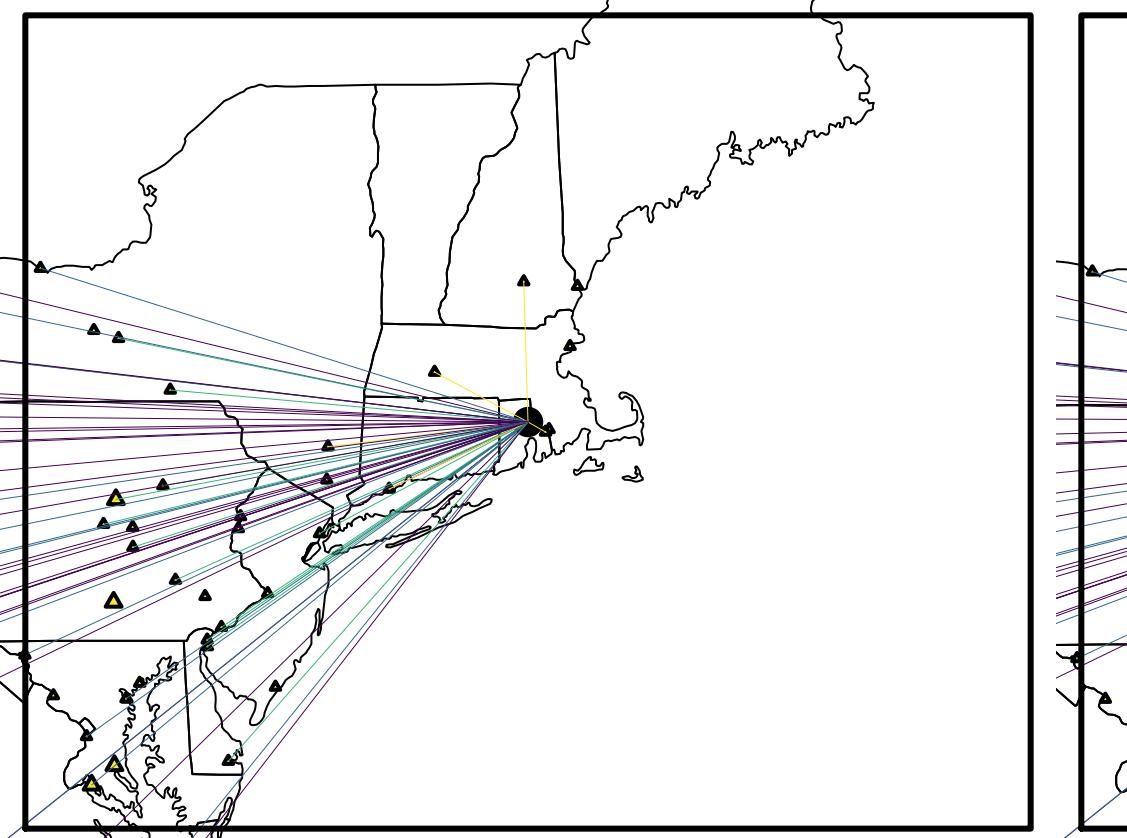
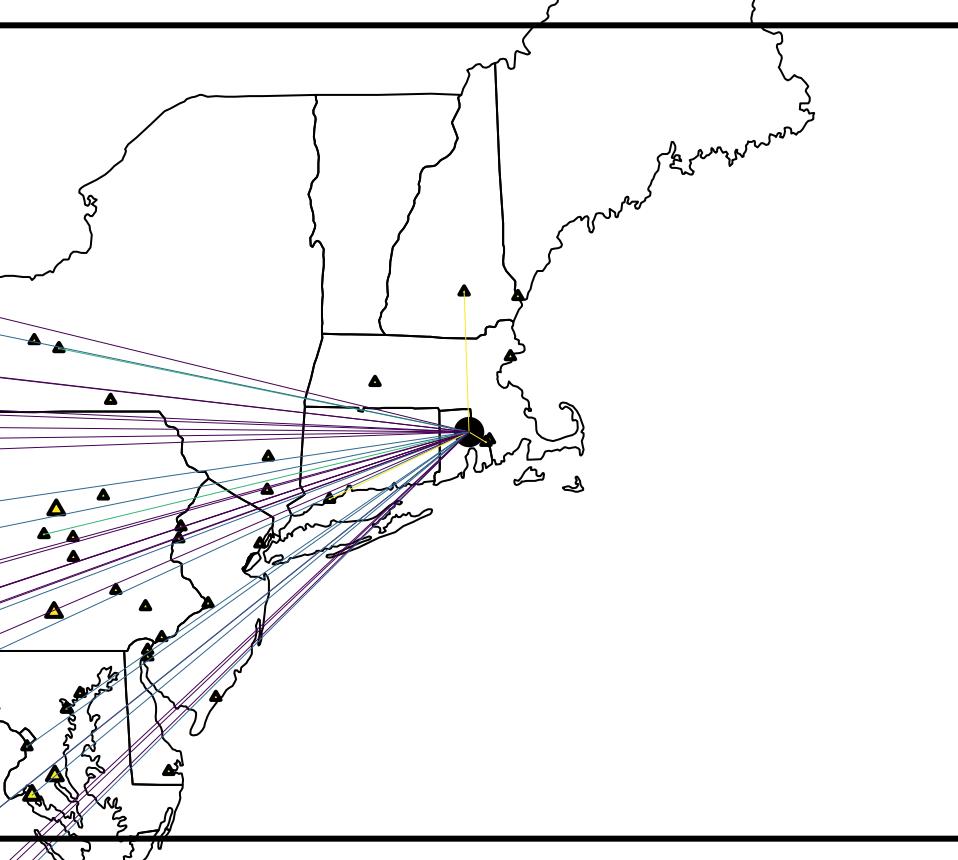
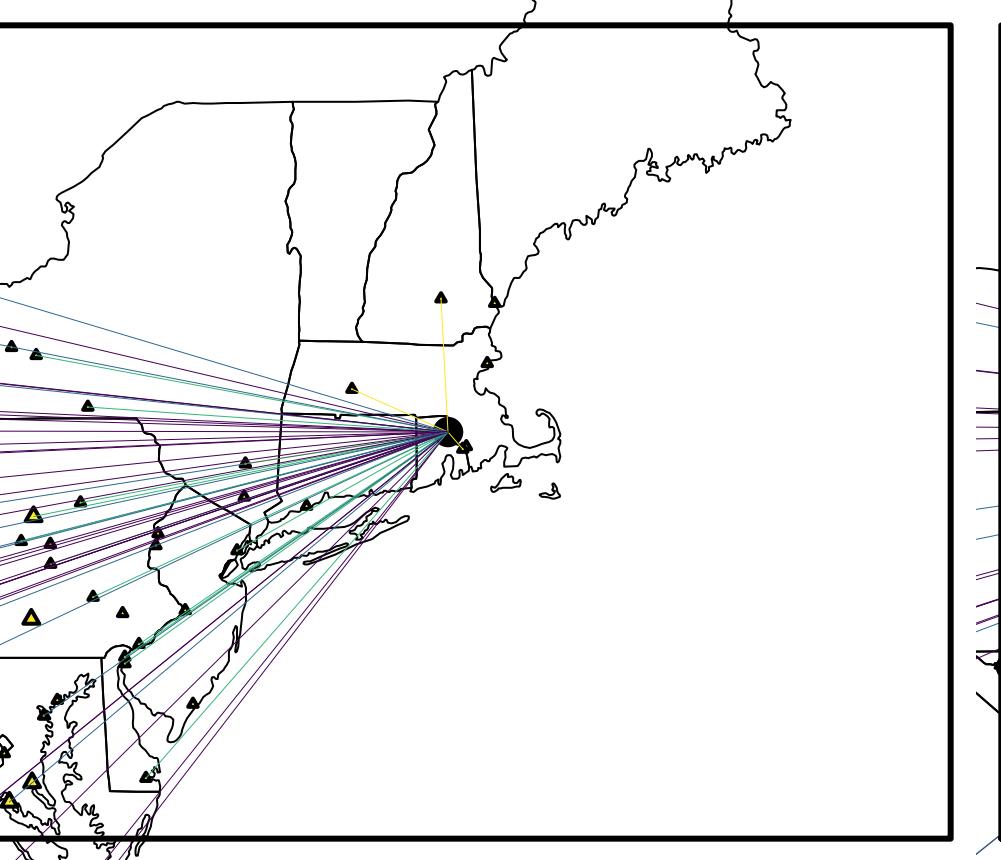
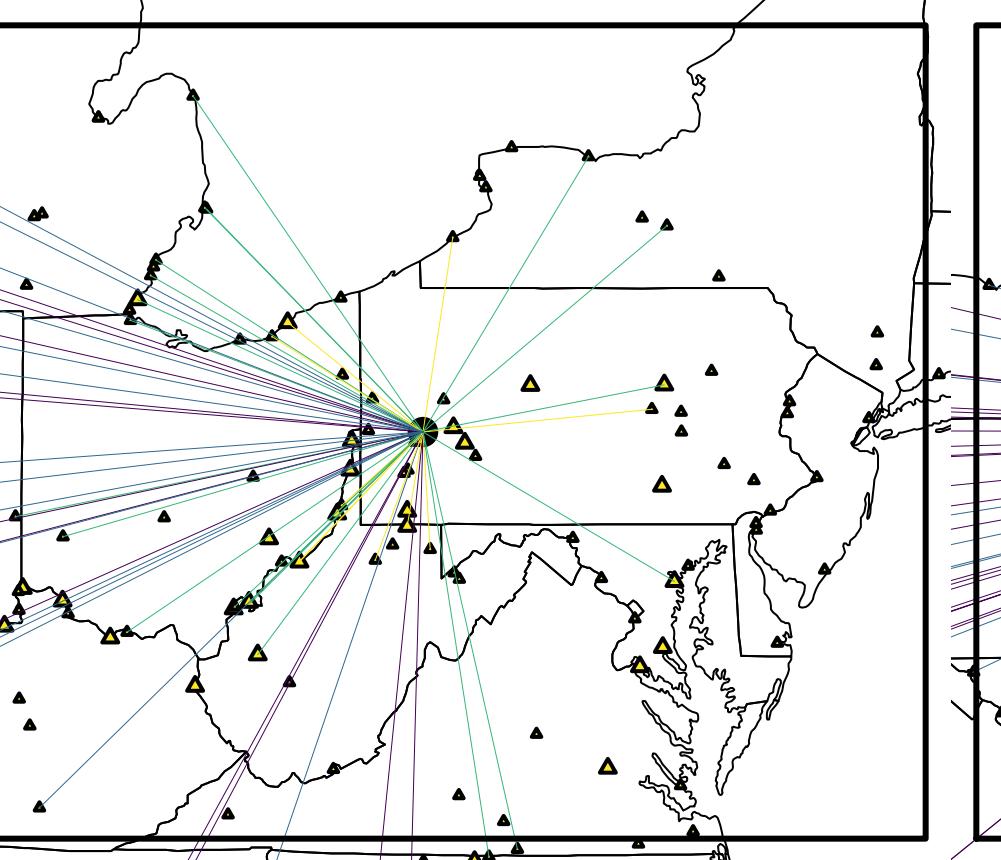
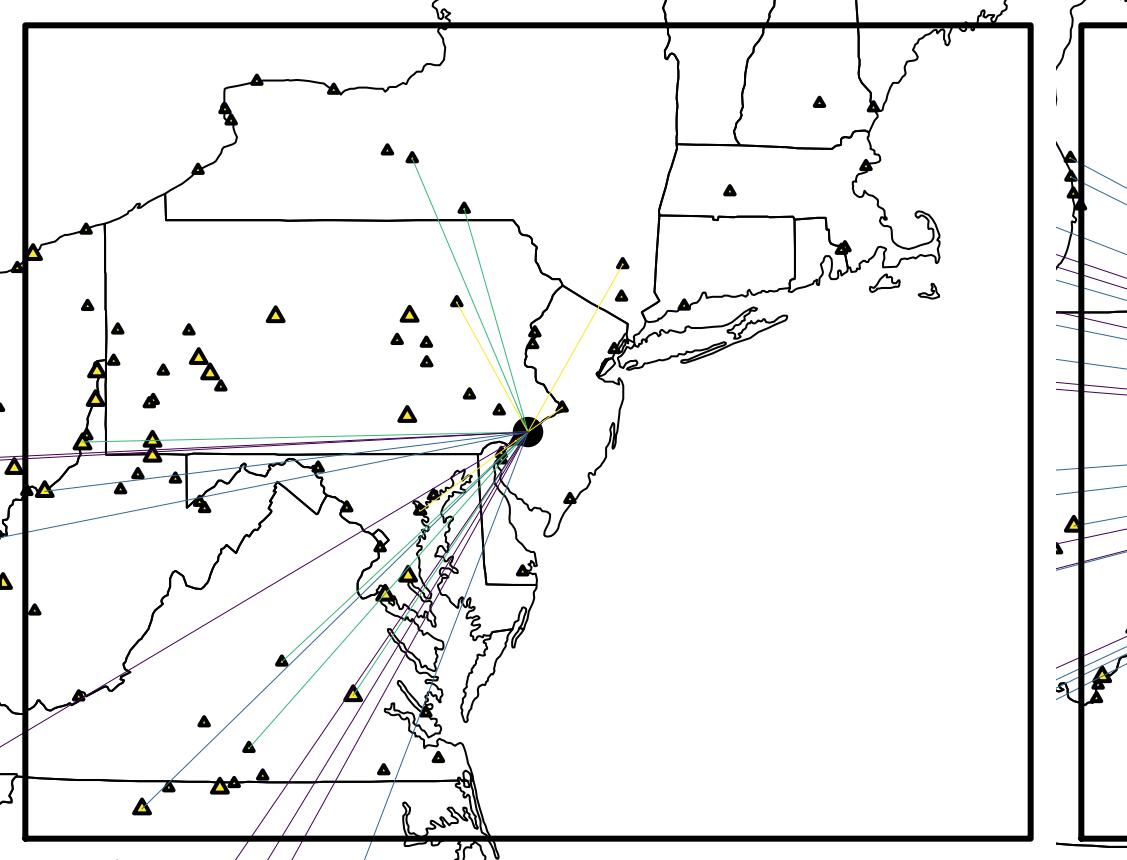


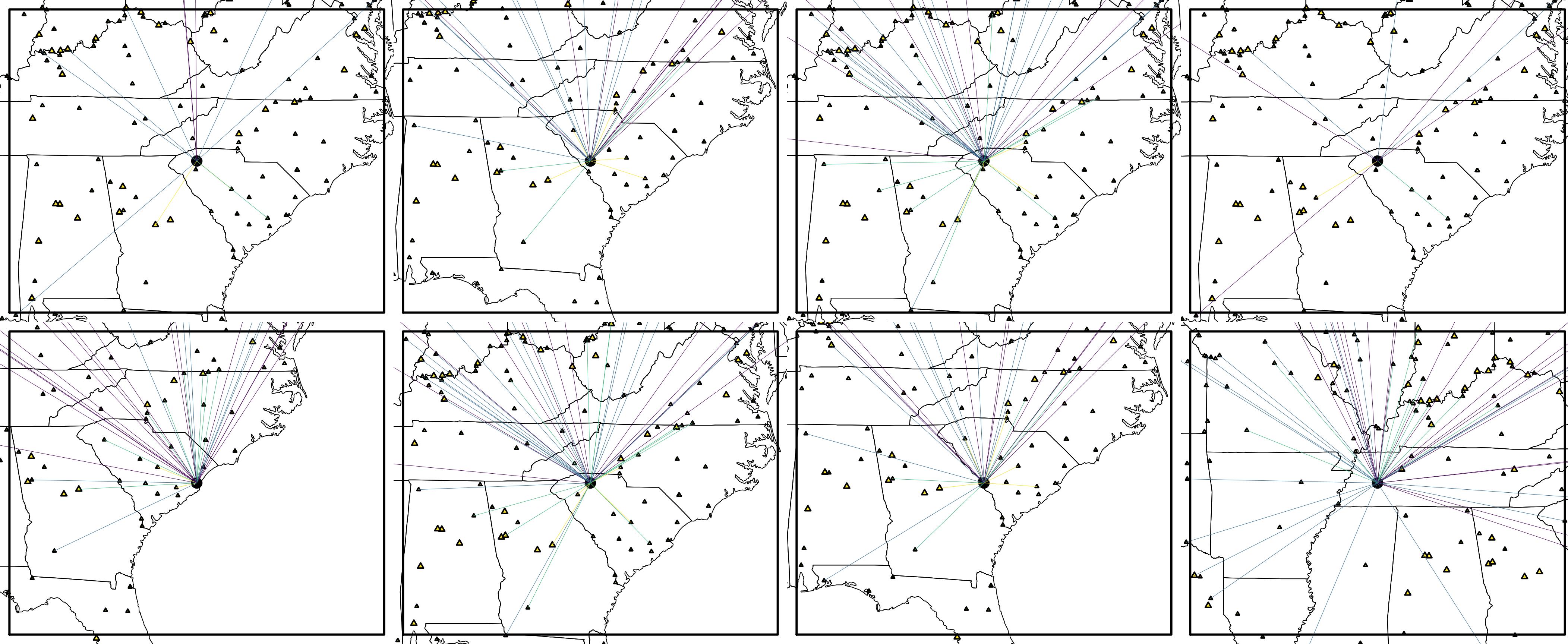


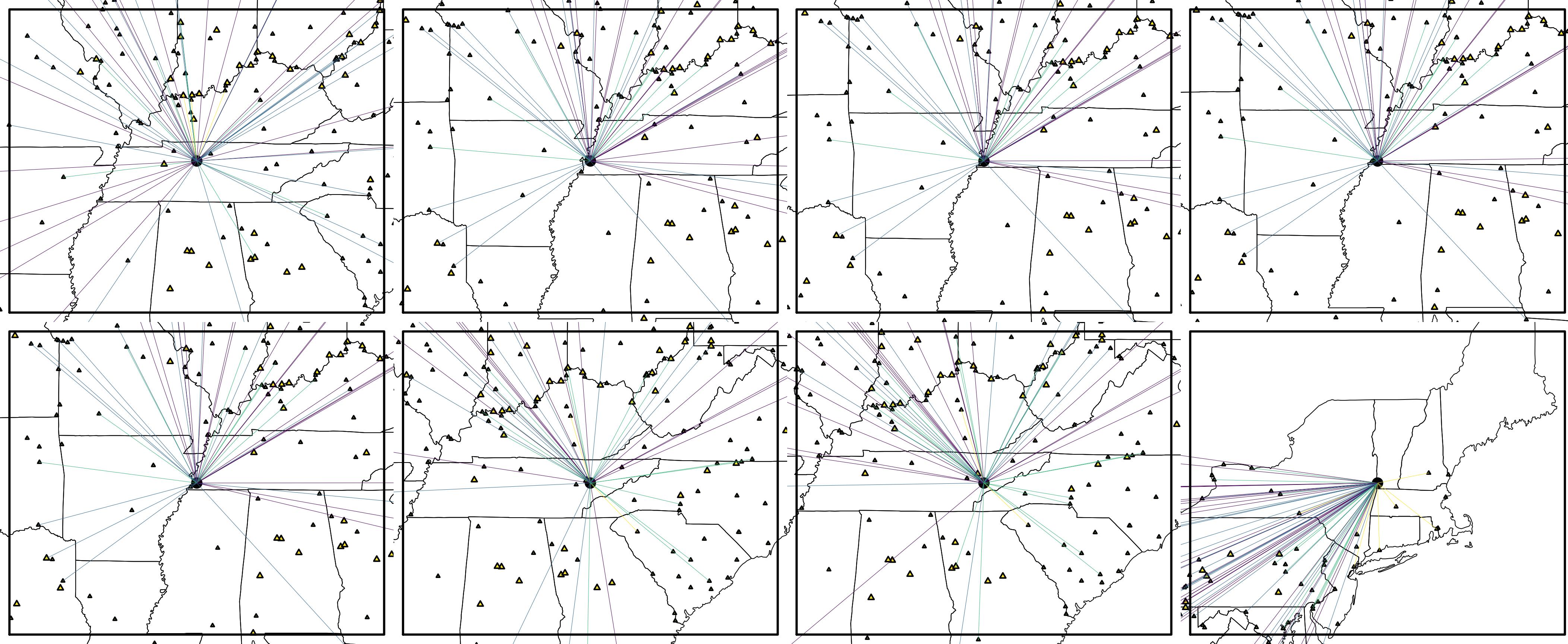


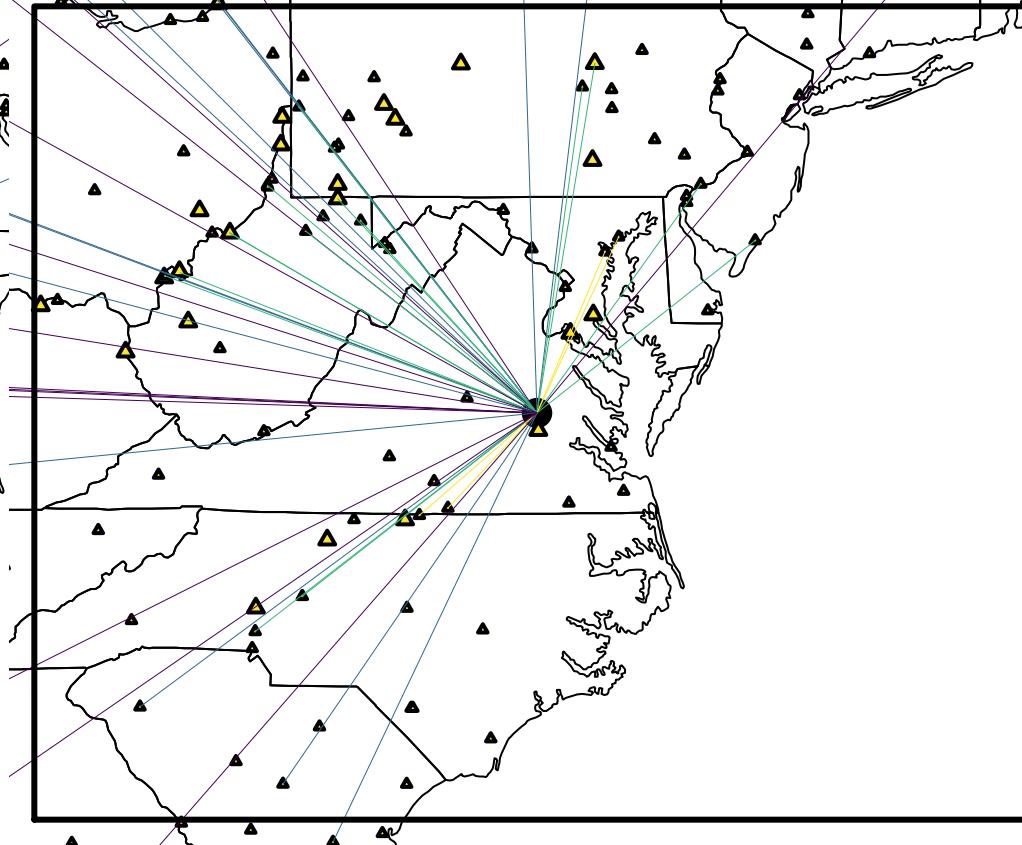
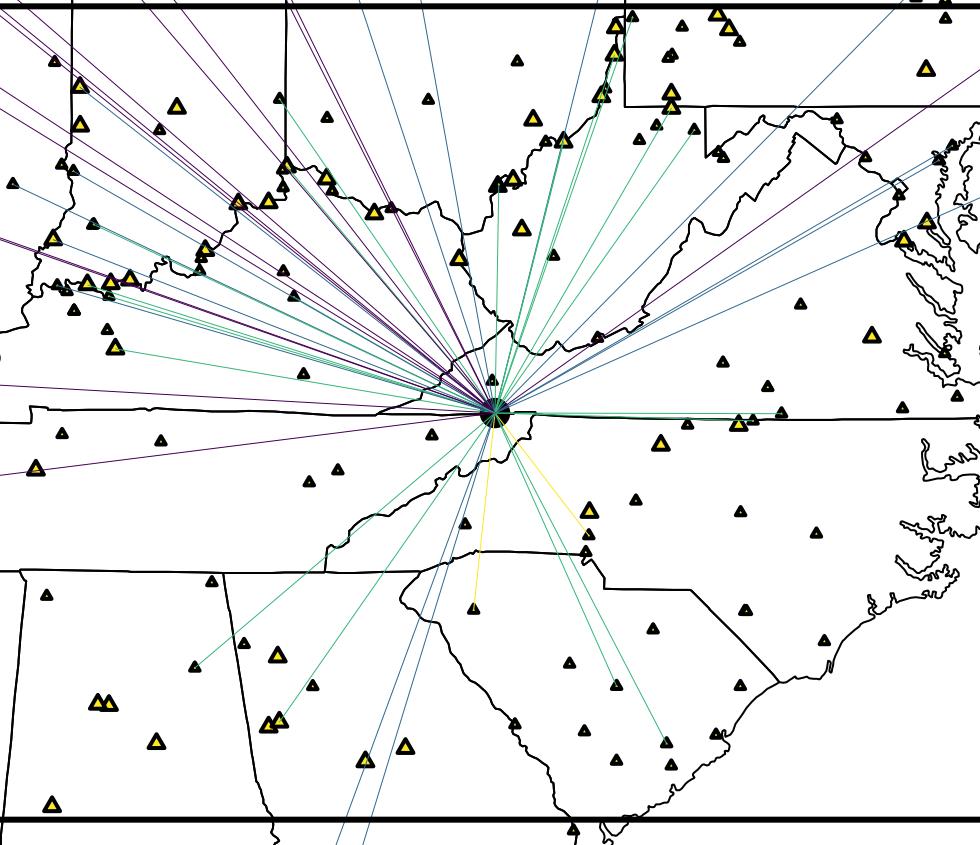
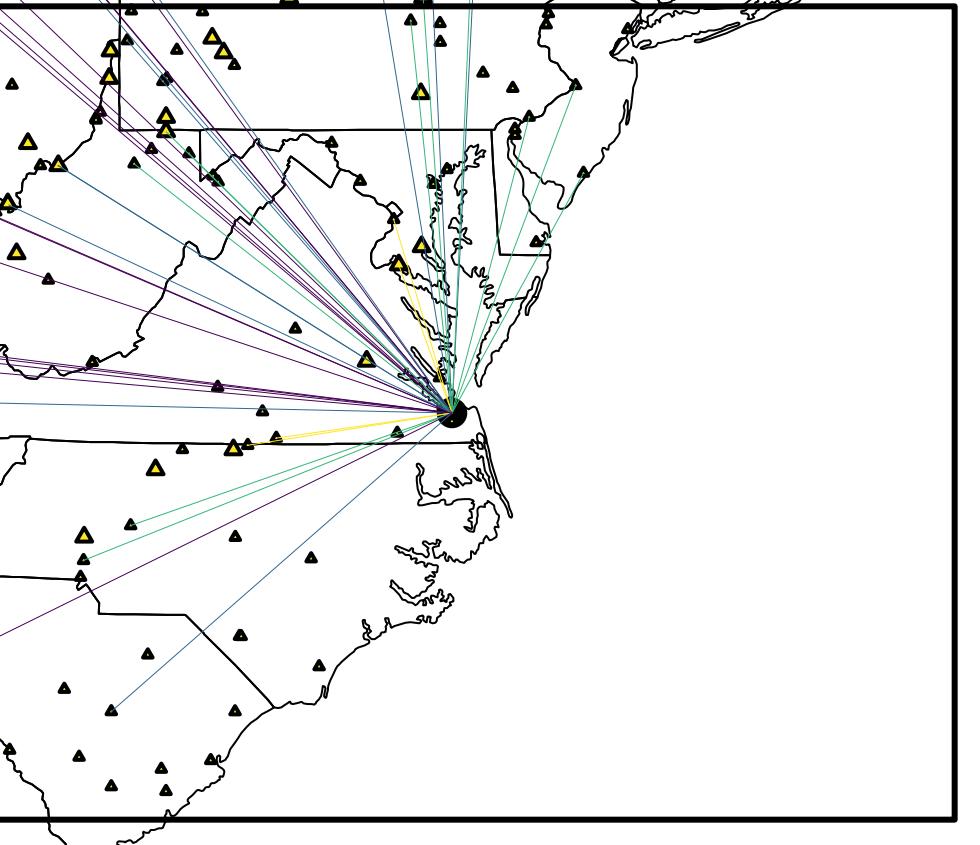
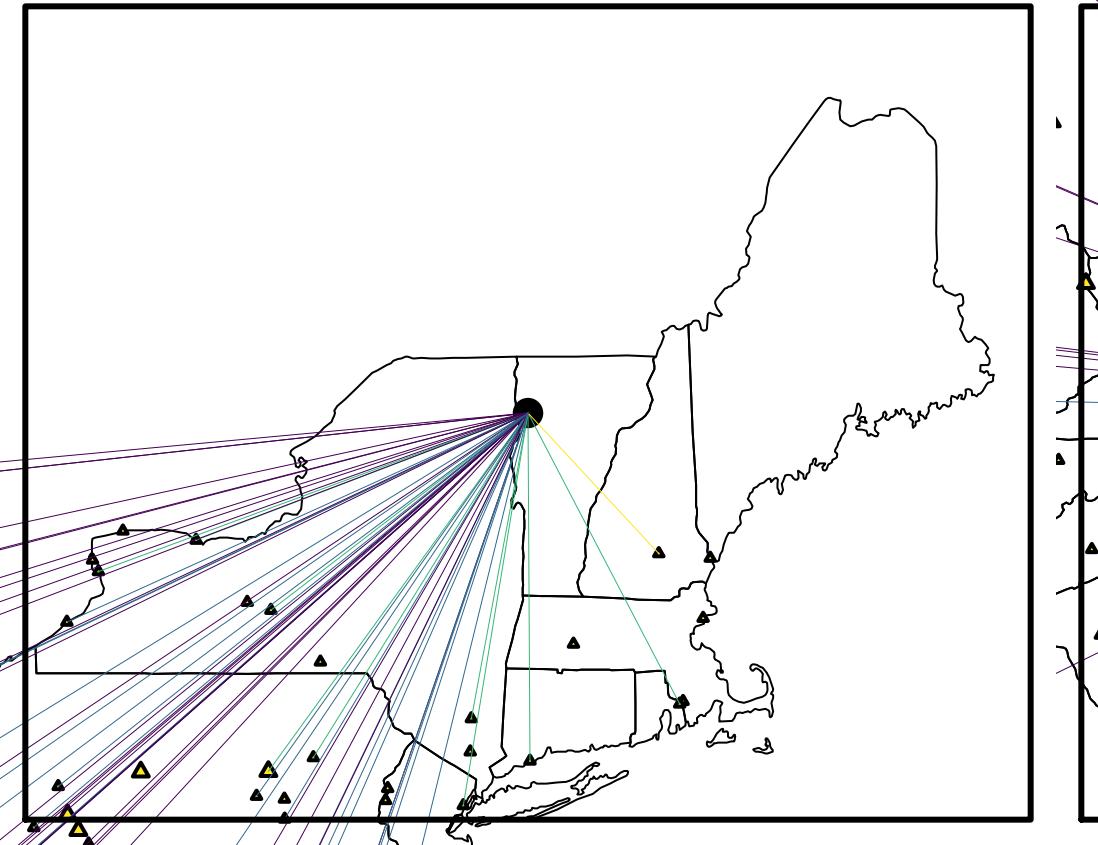
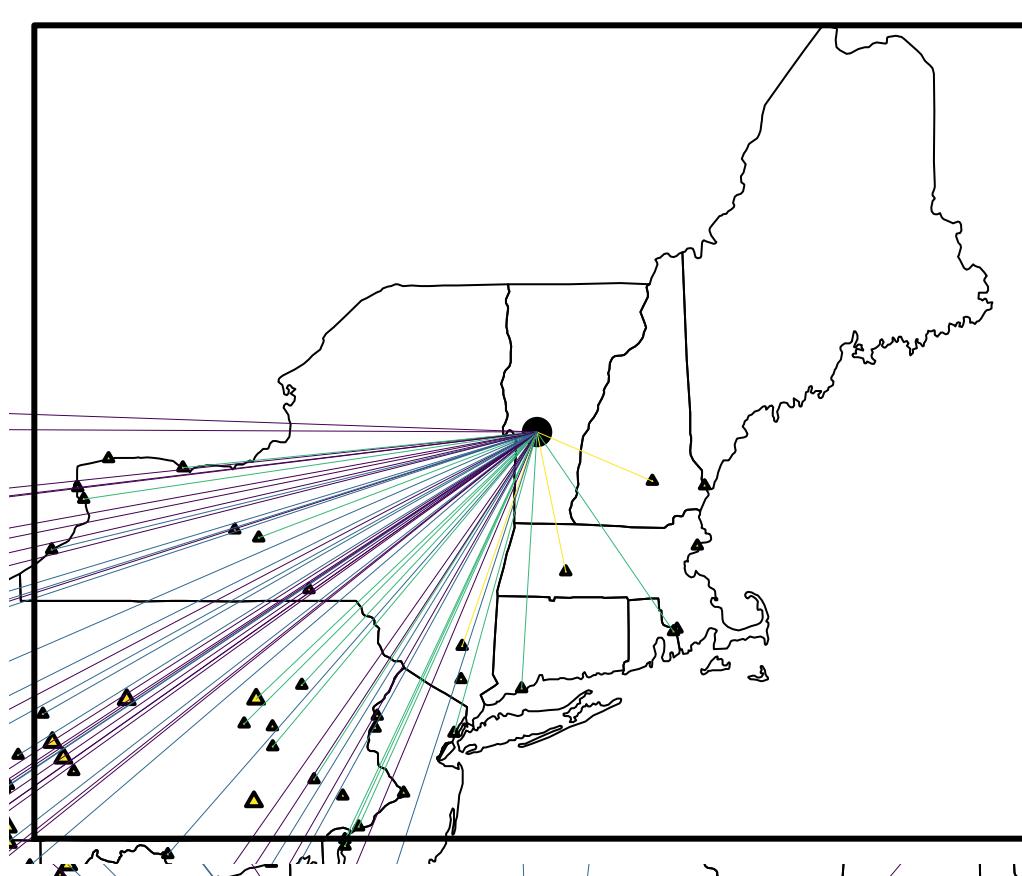
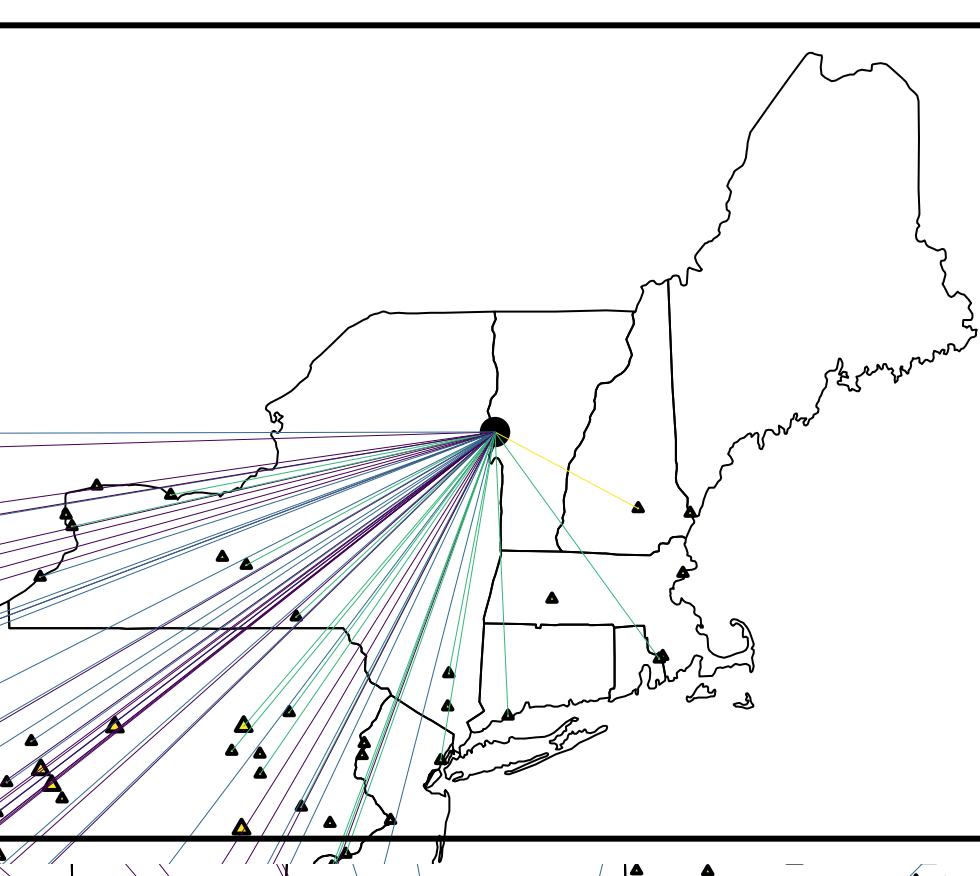
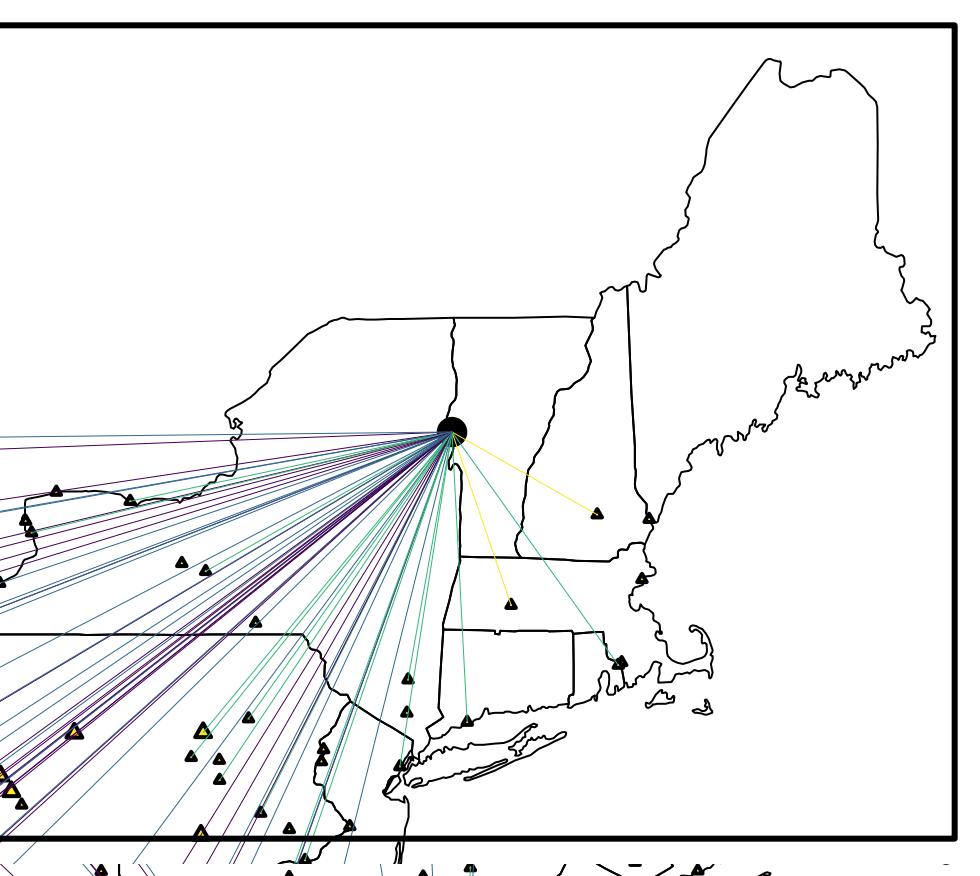
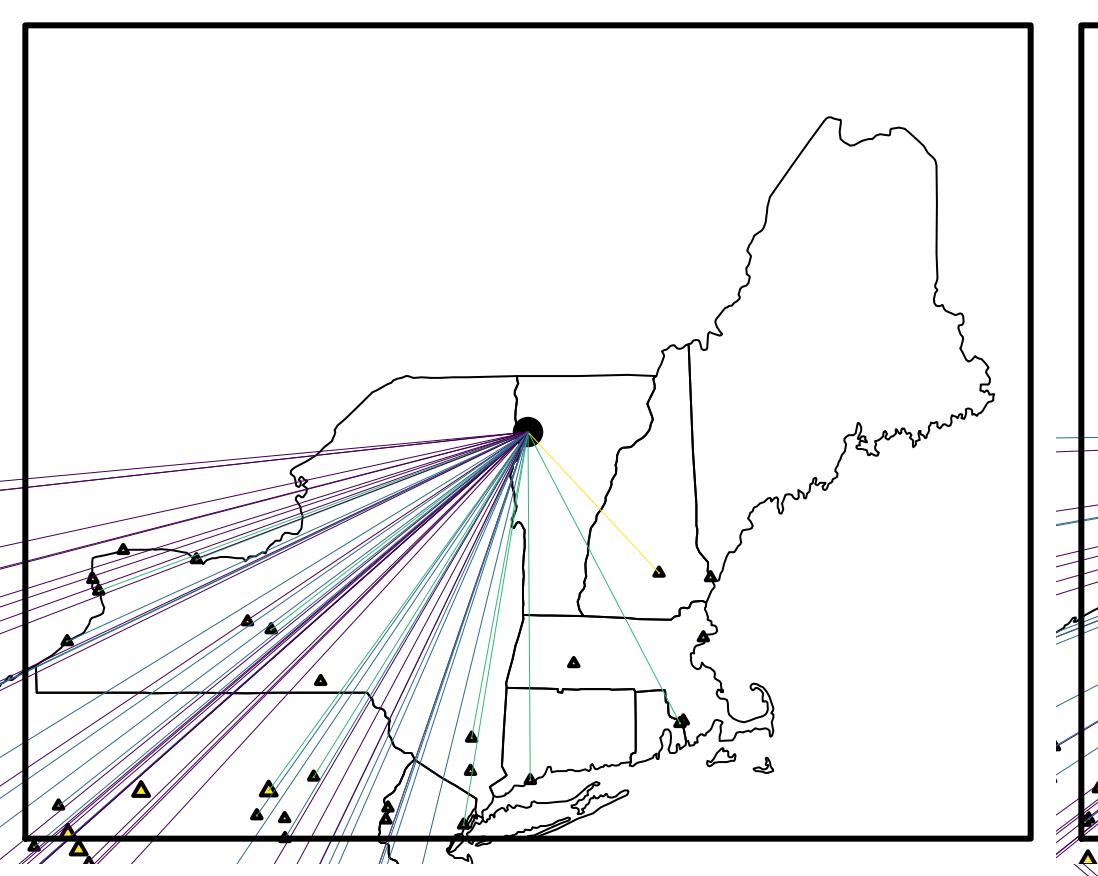


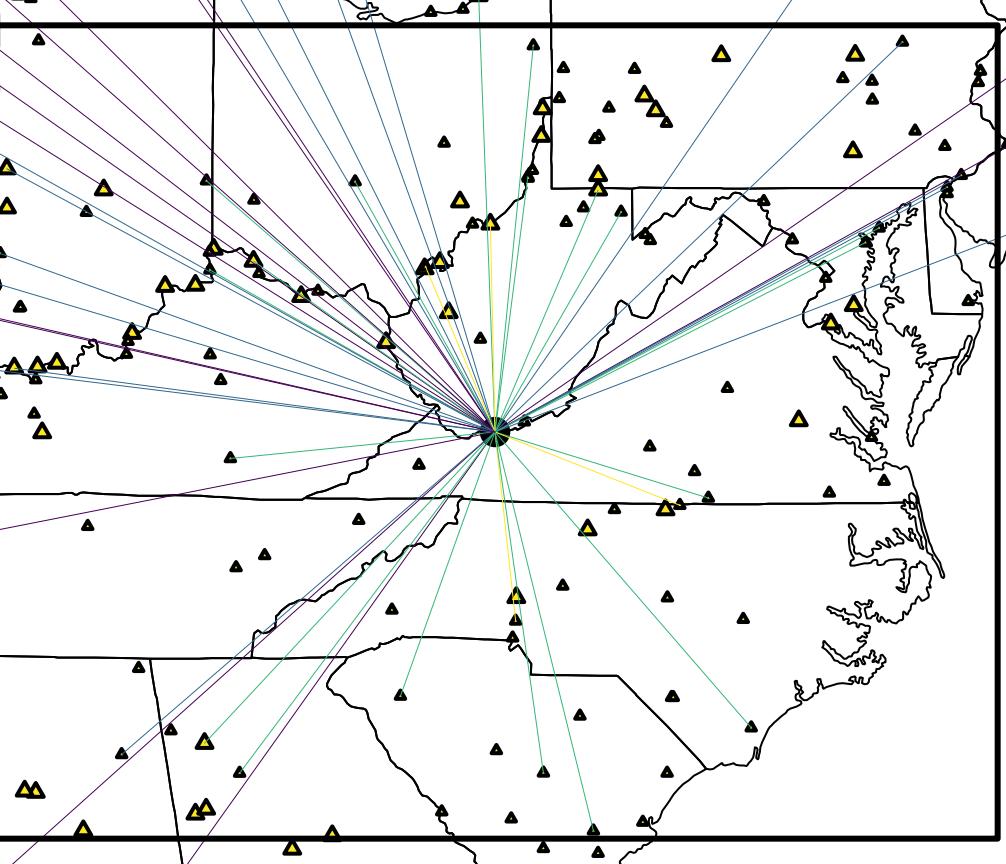
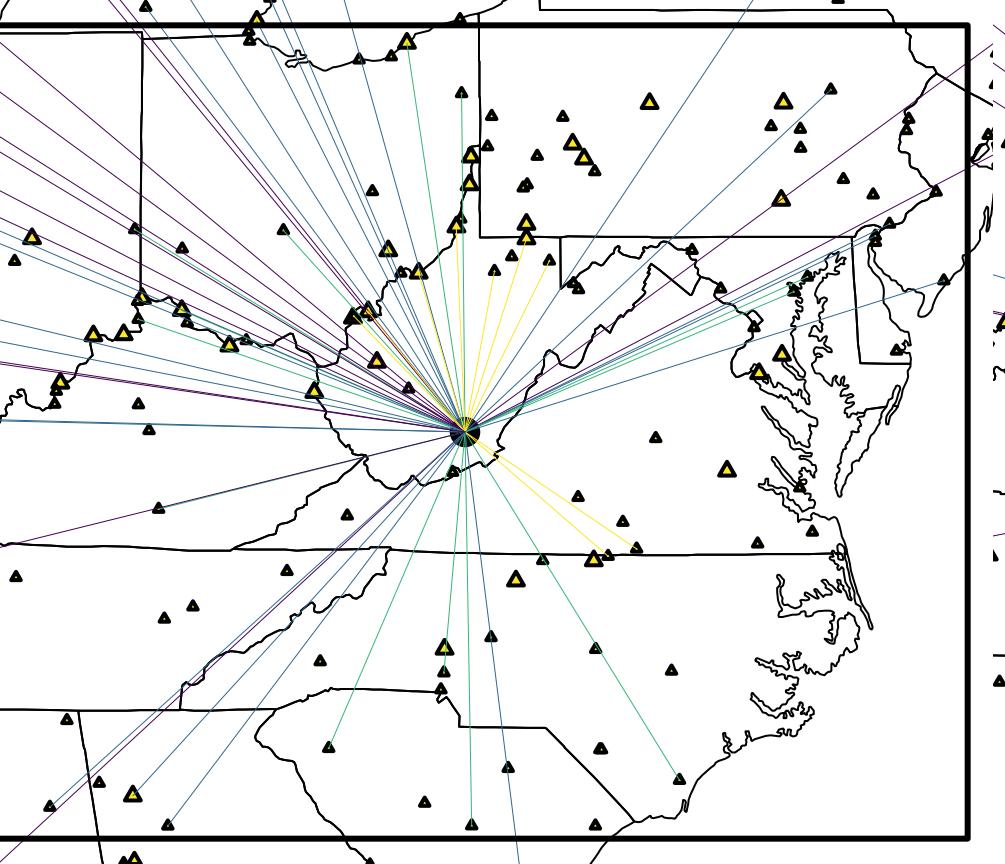
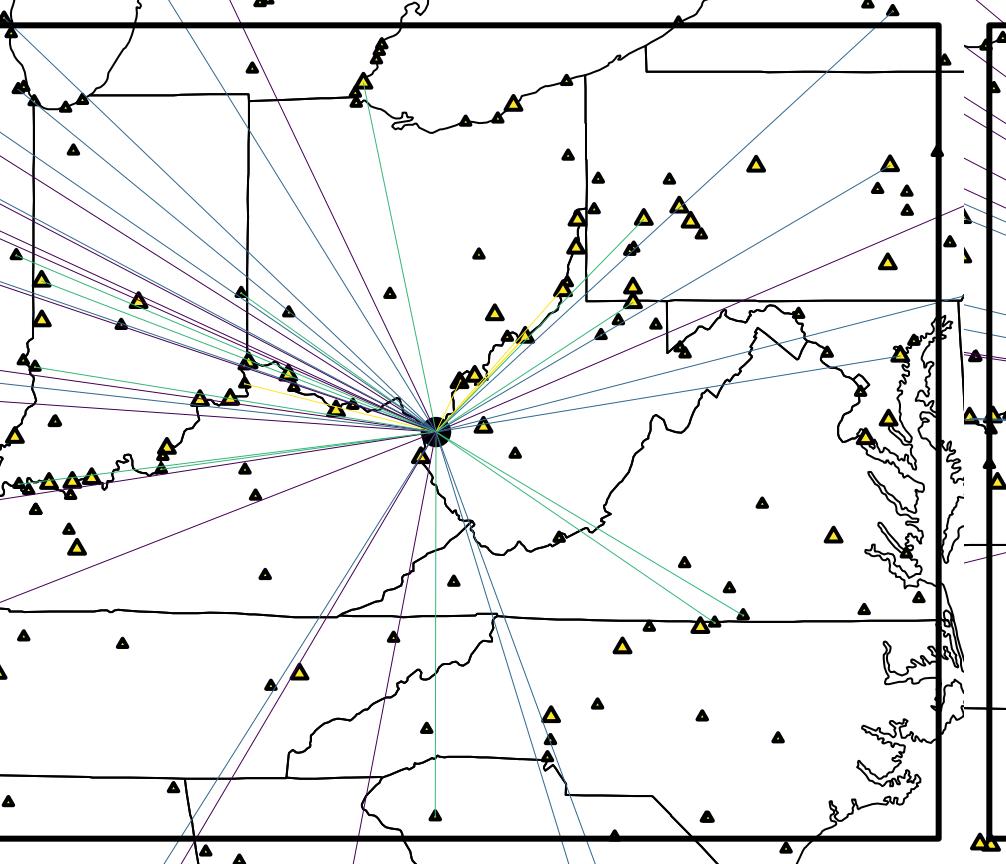
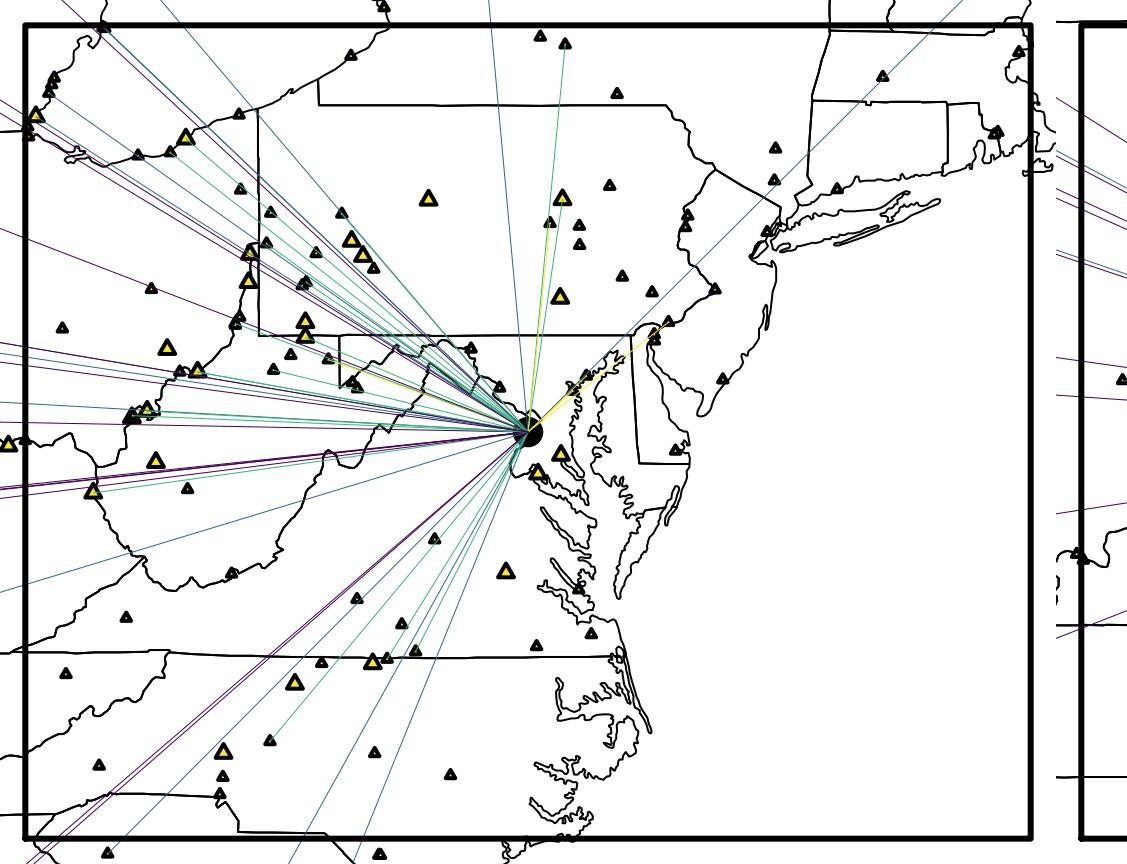
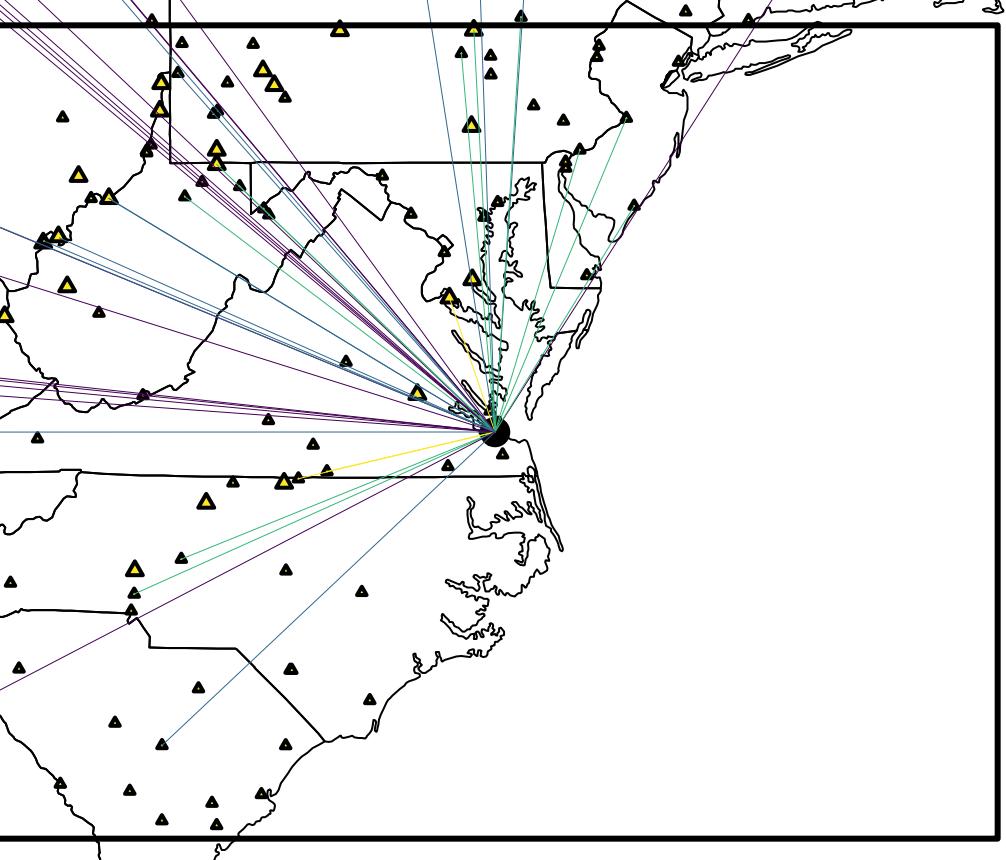
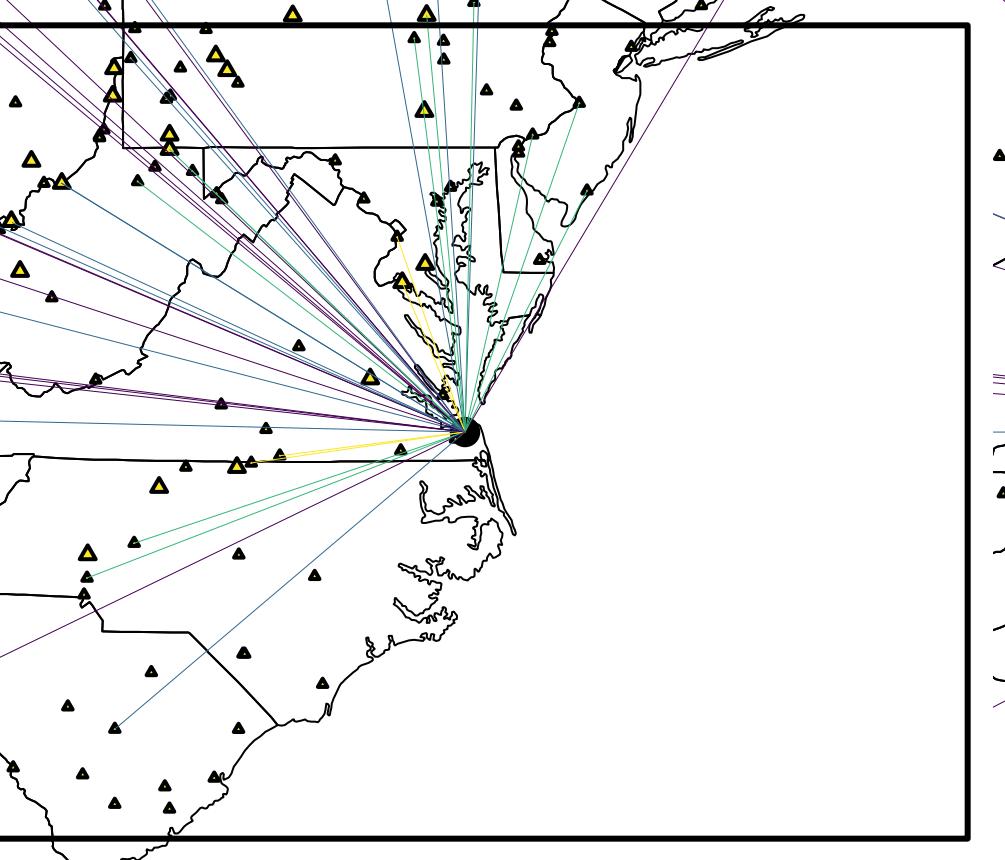
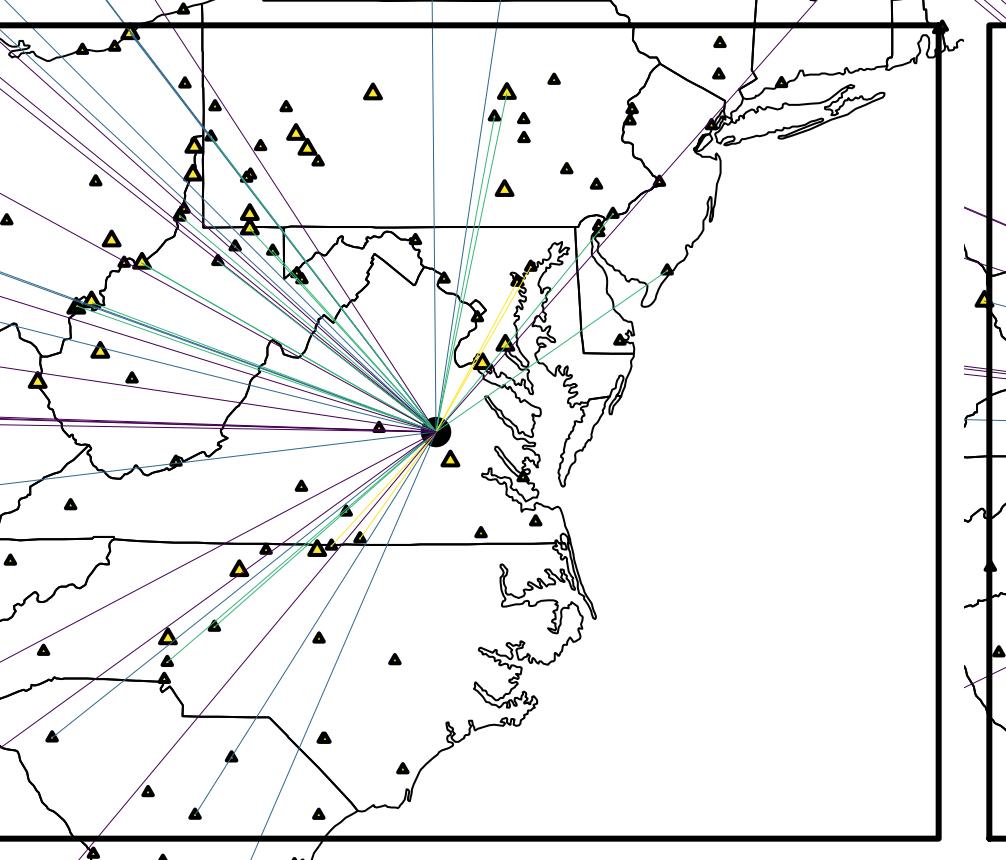
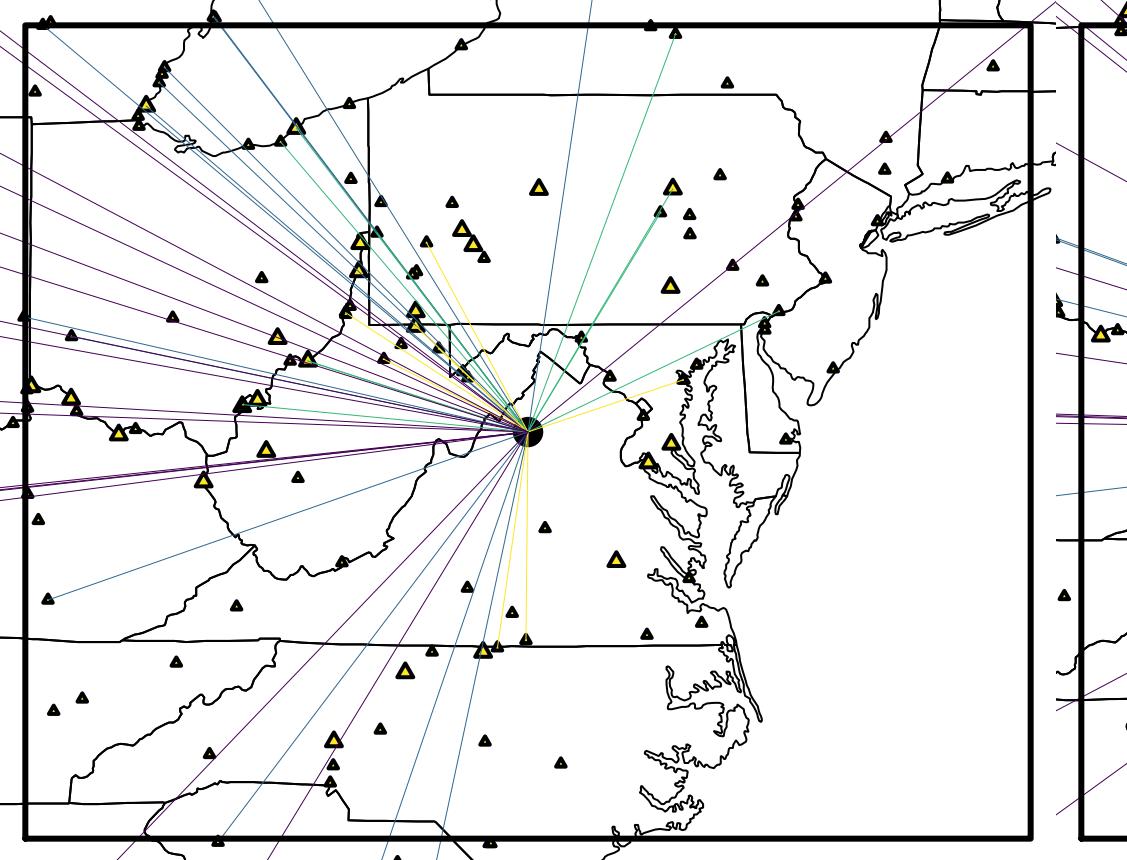


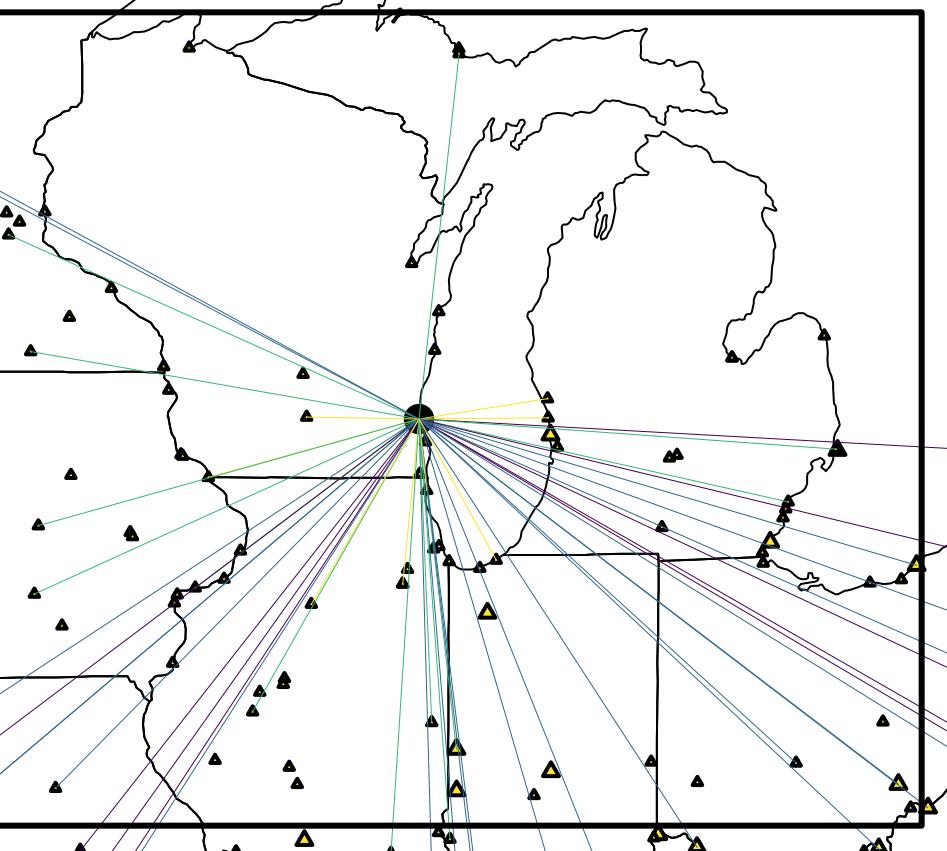
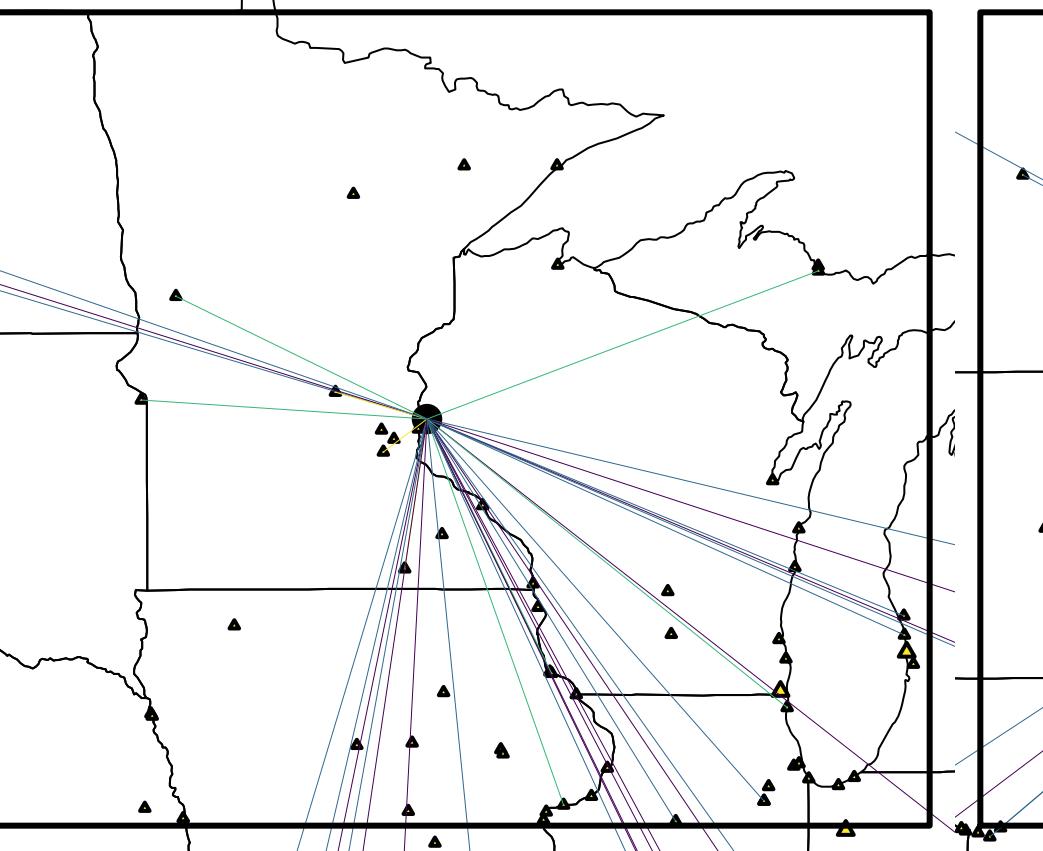
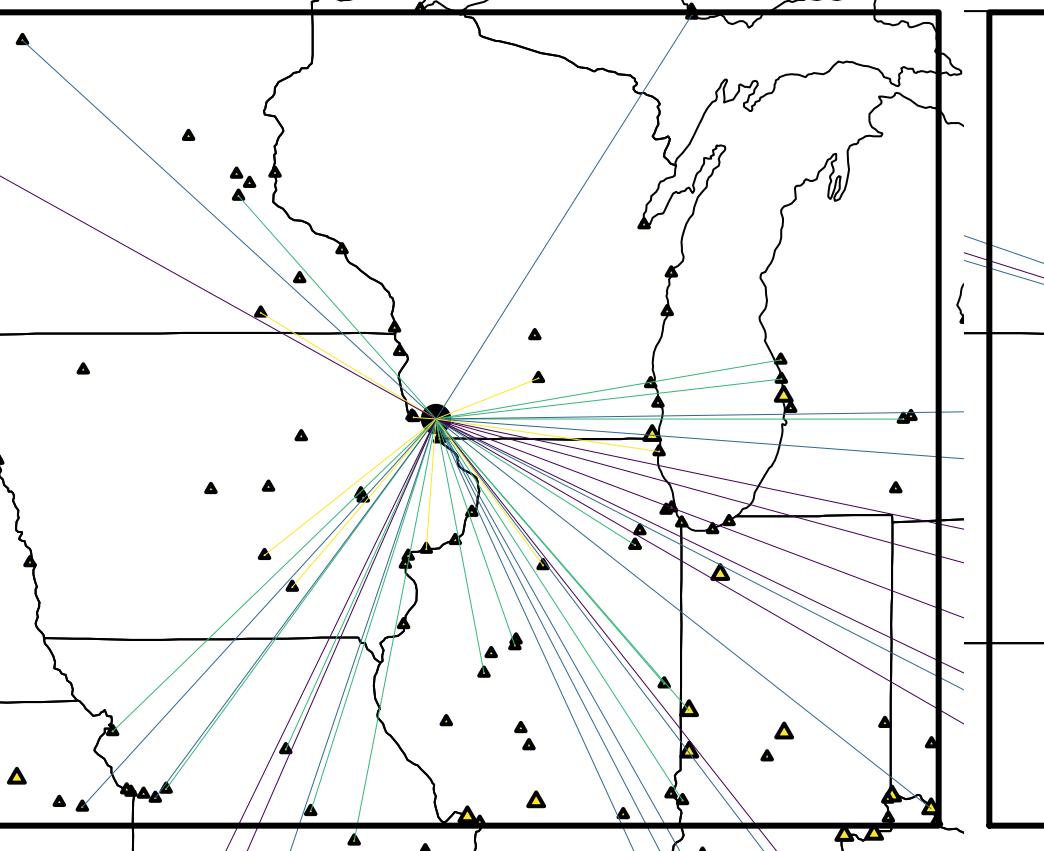
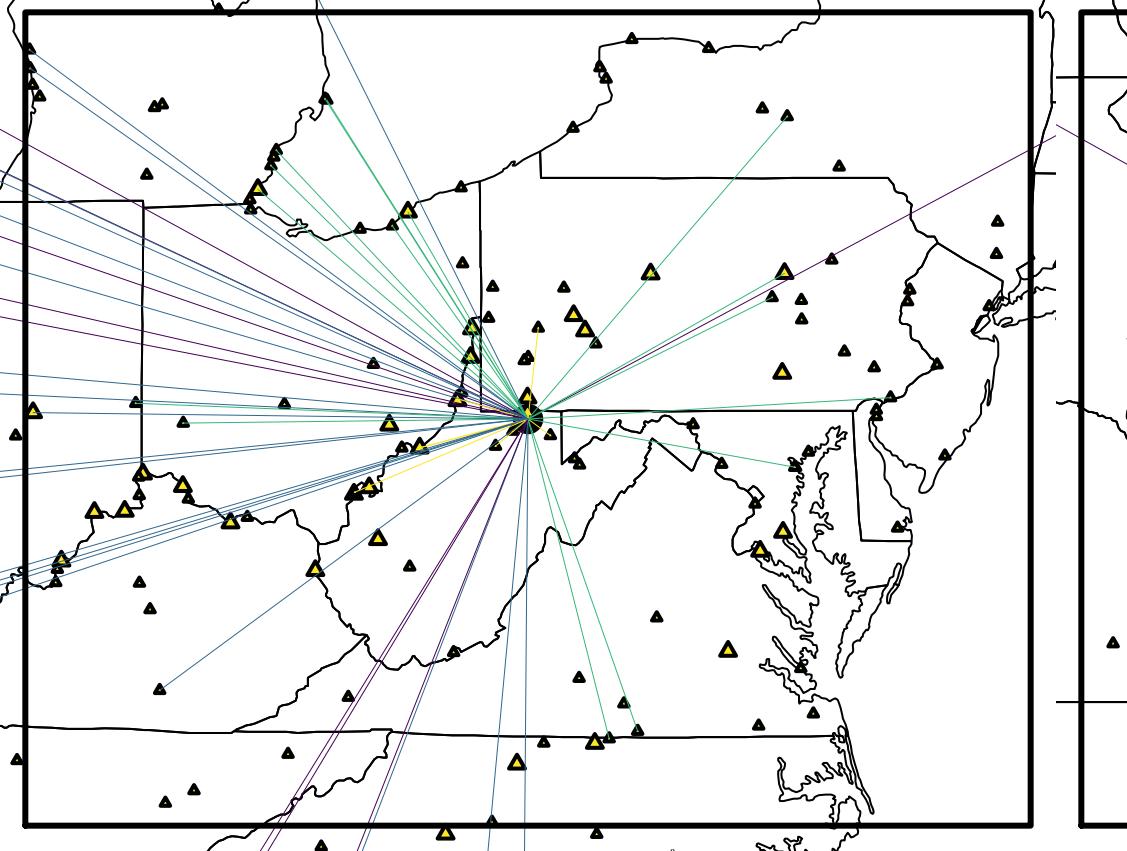
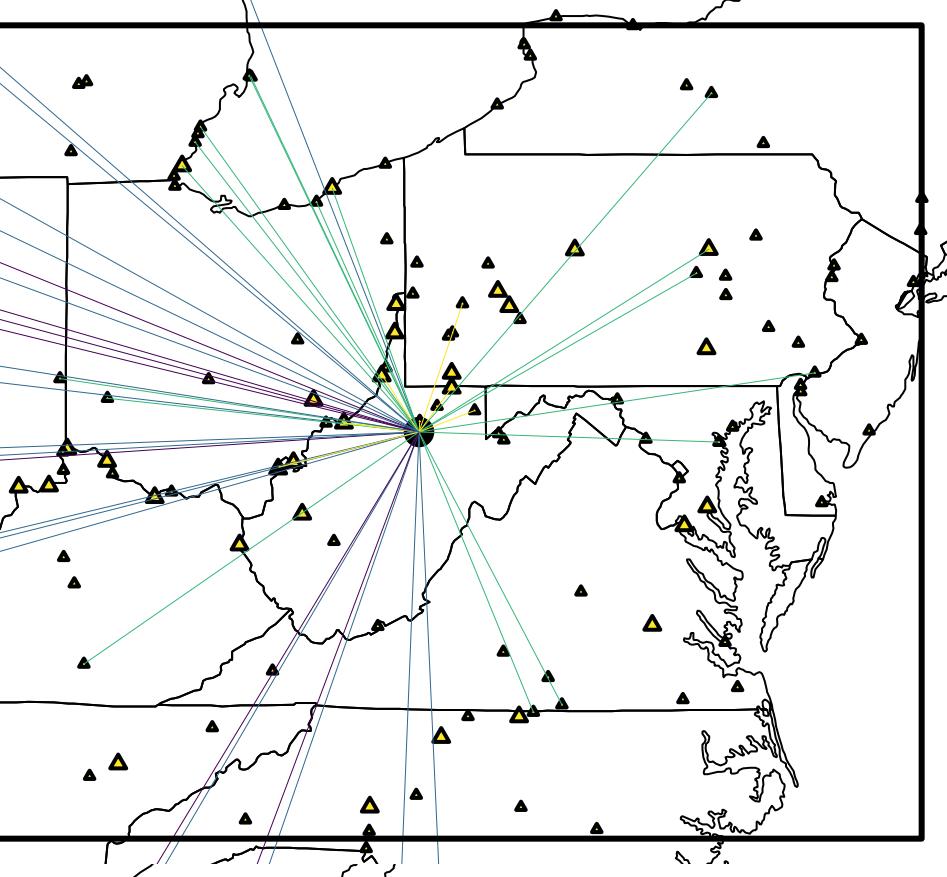
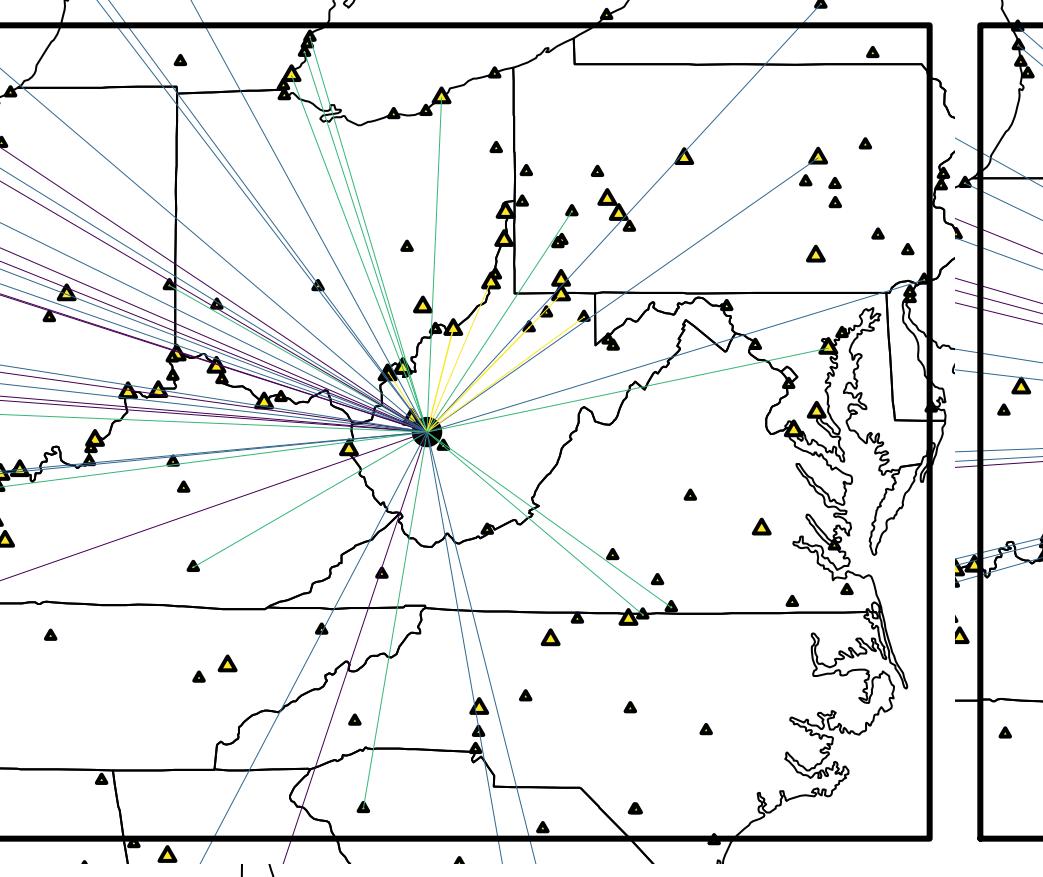
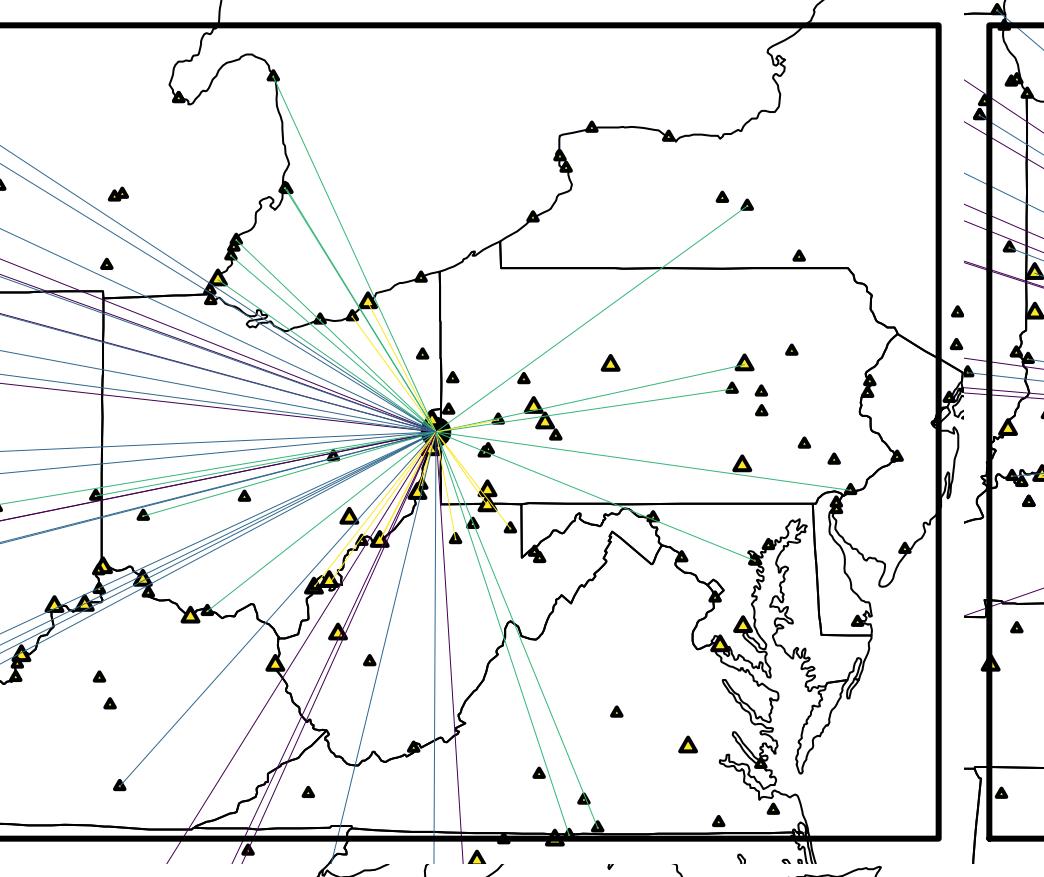
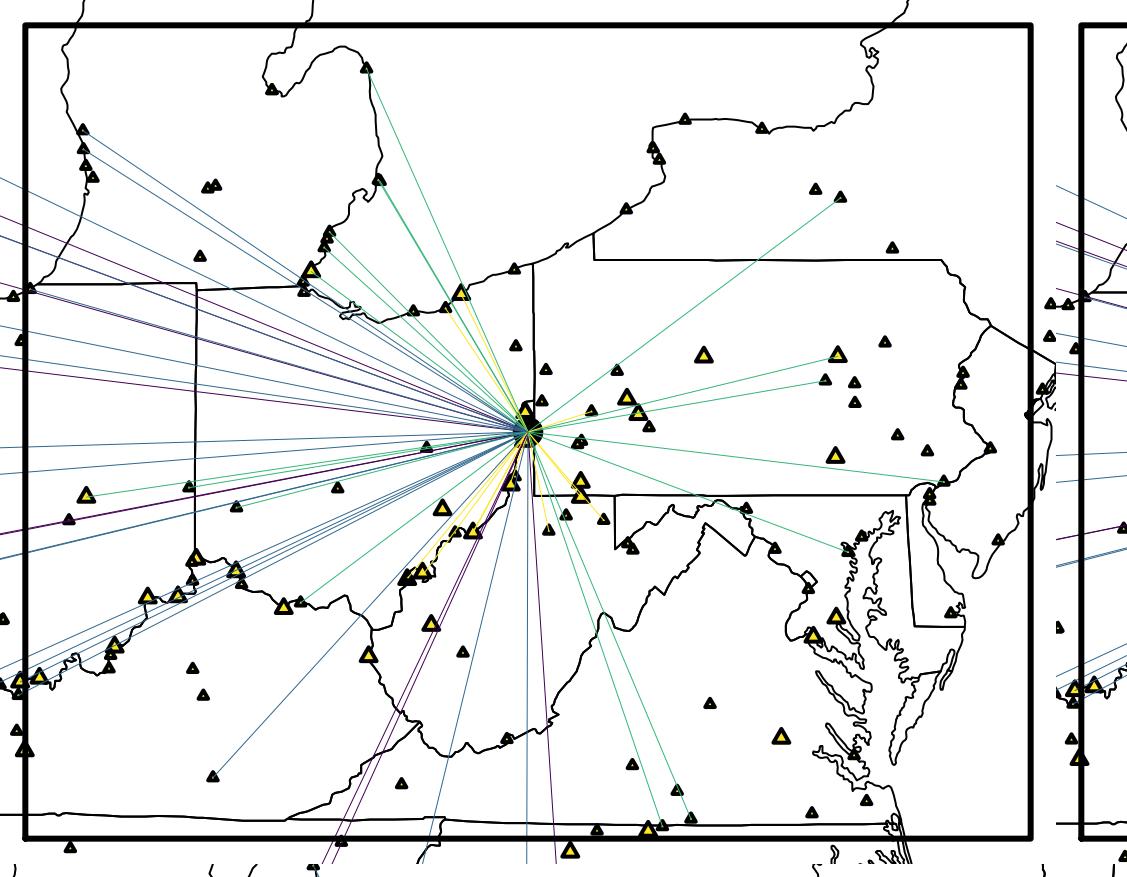


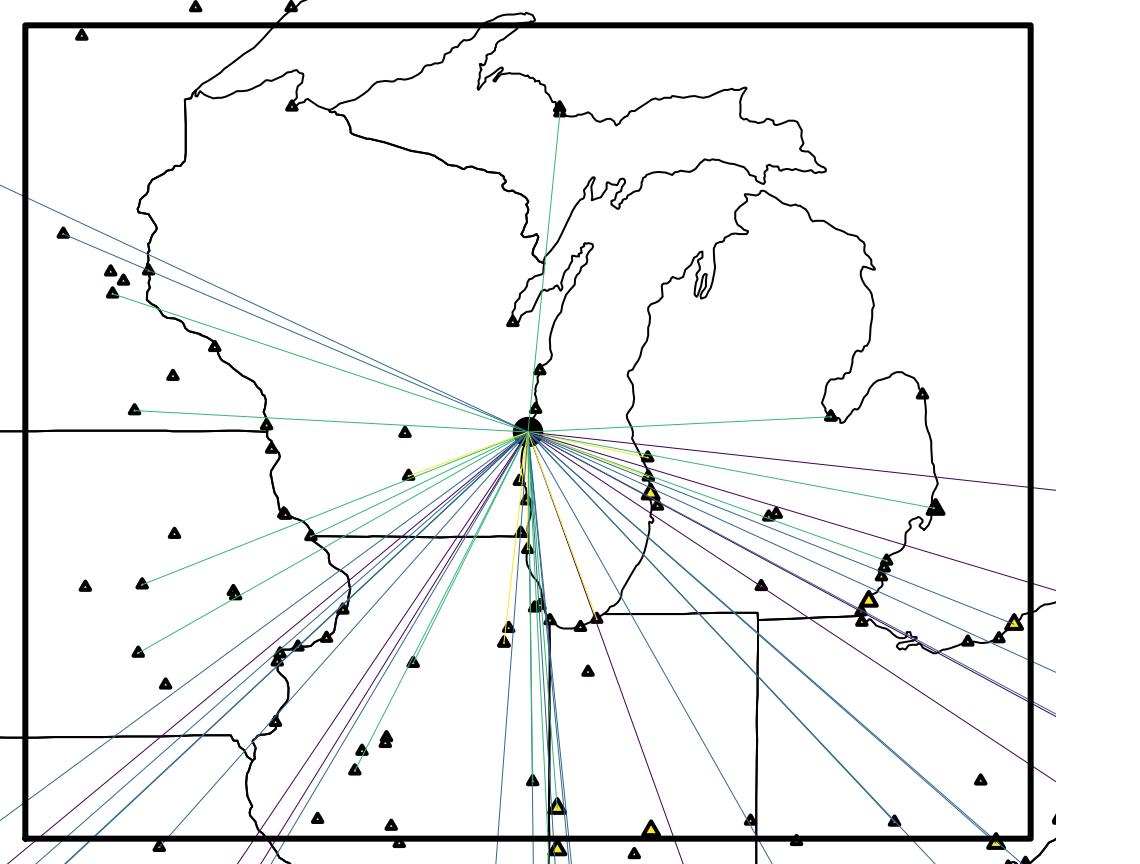
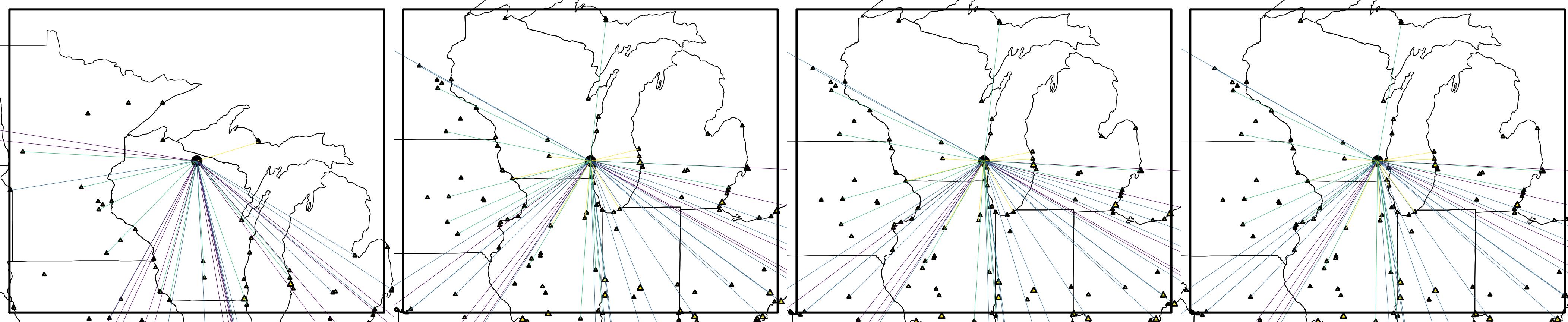




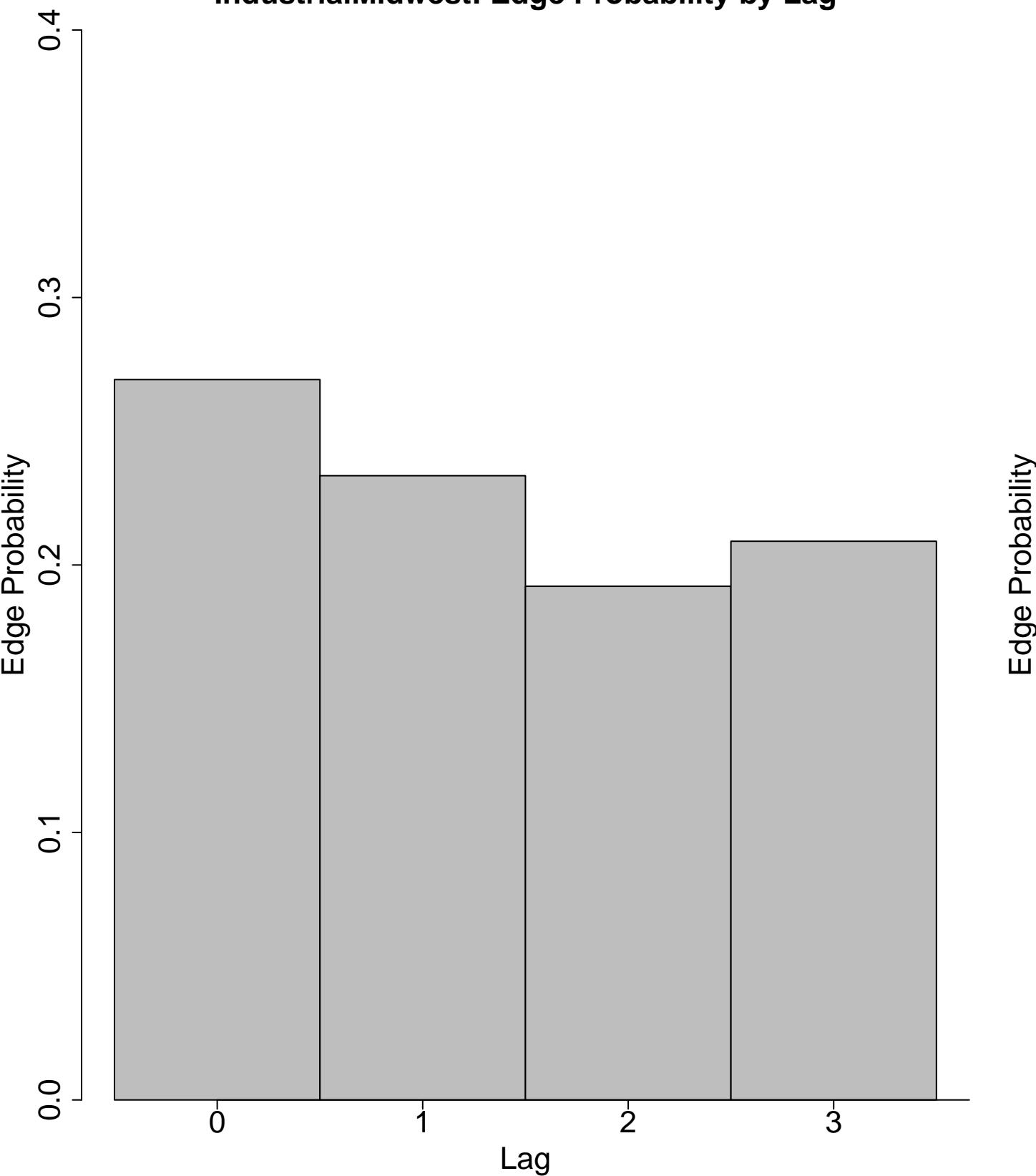




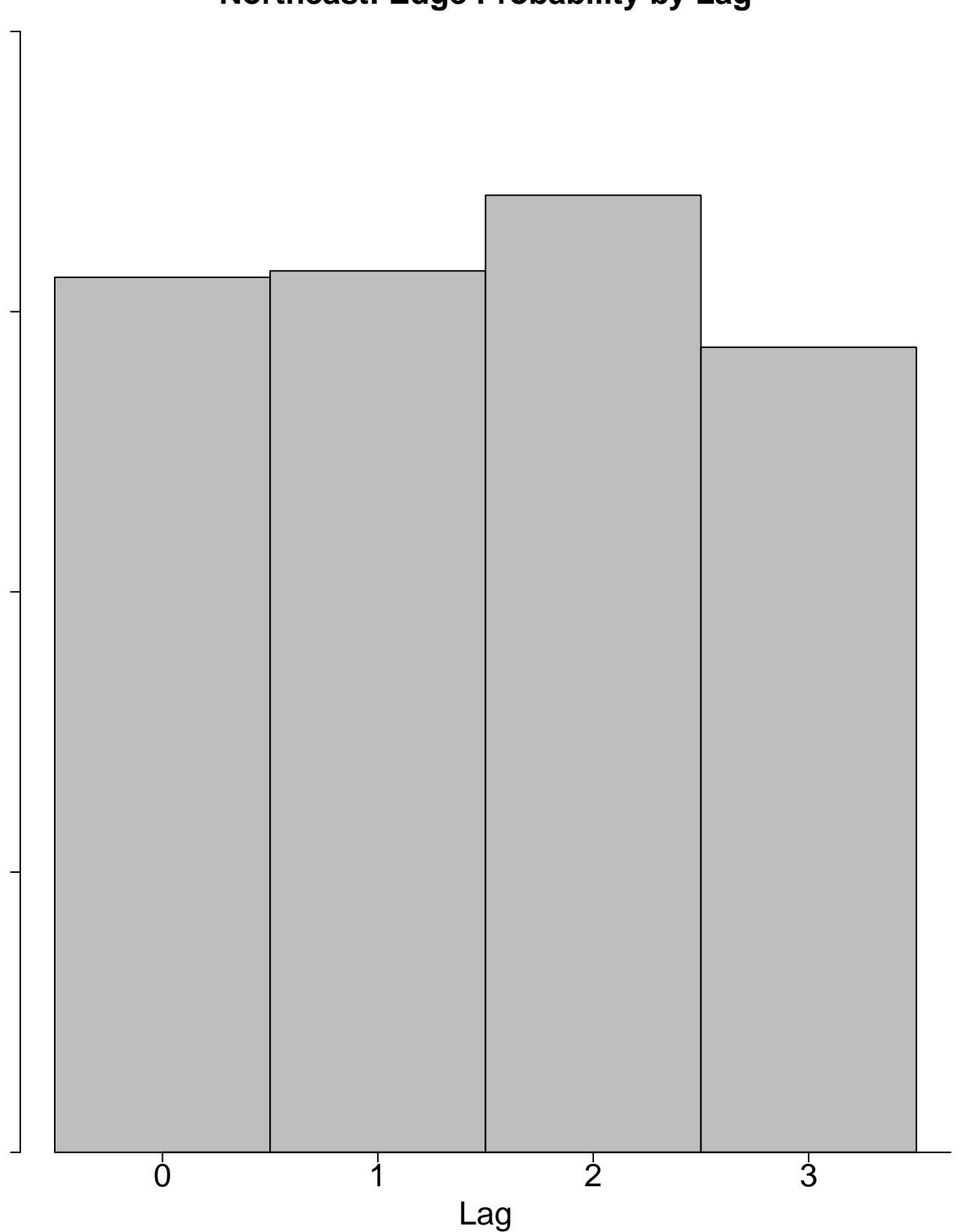




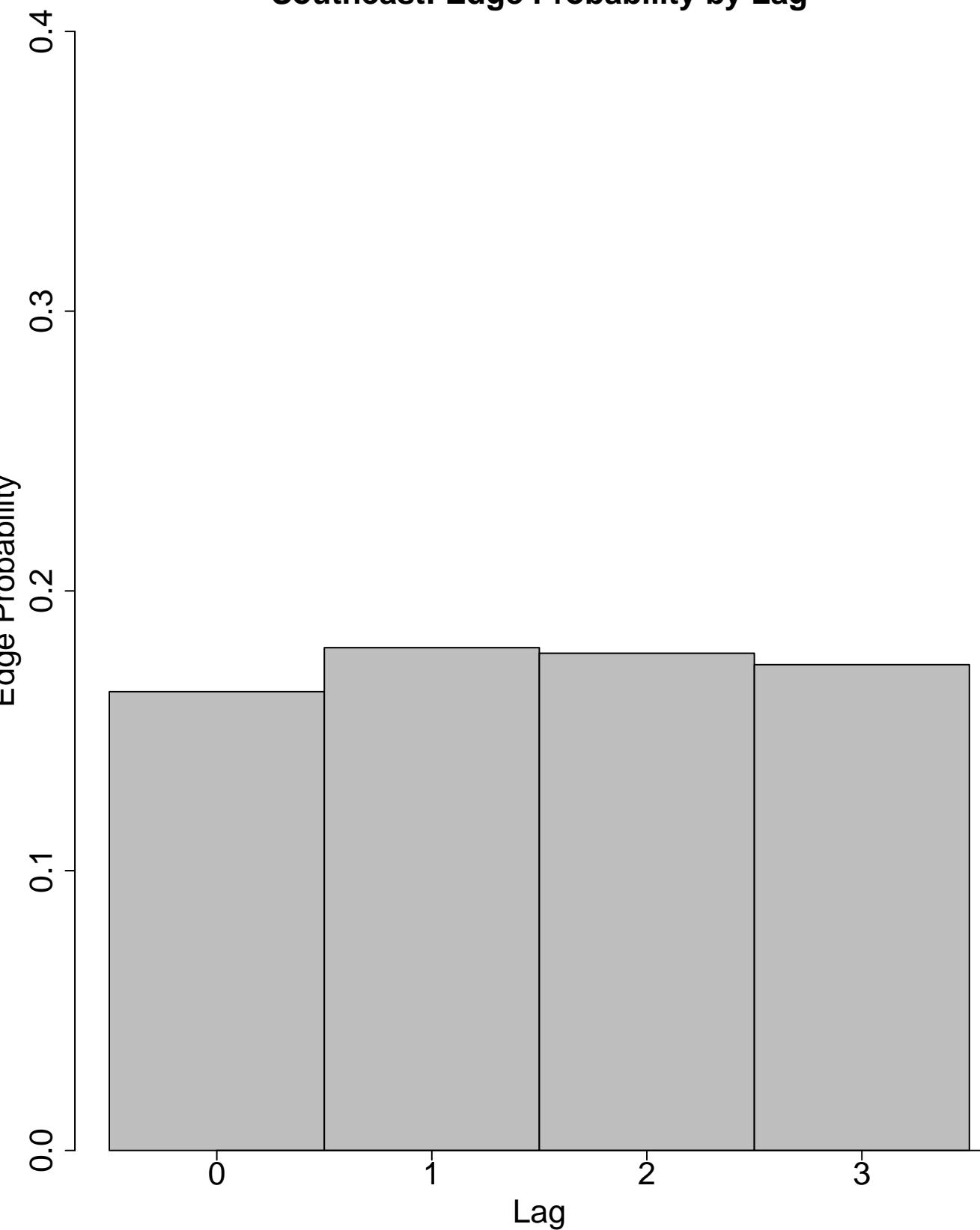
IndustrialMidwest: Edge Probability by Lag



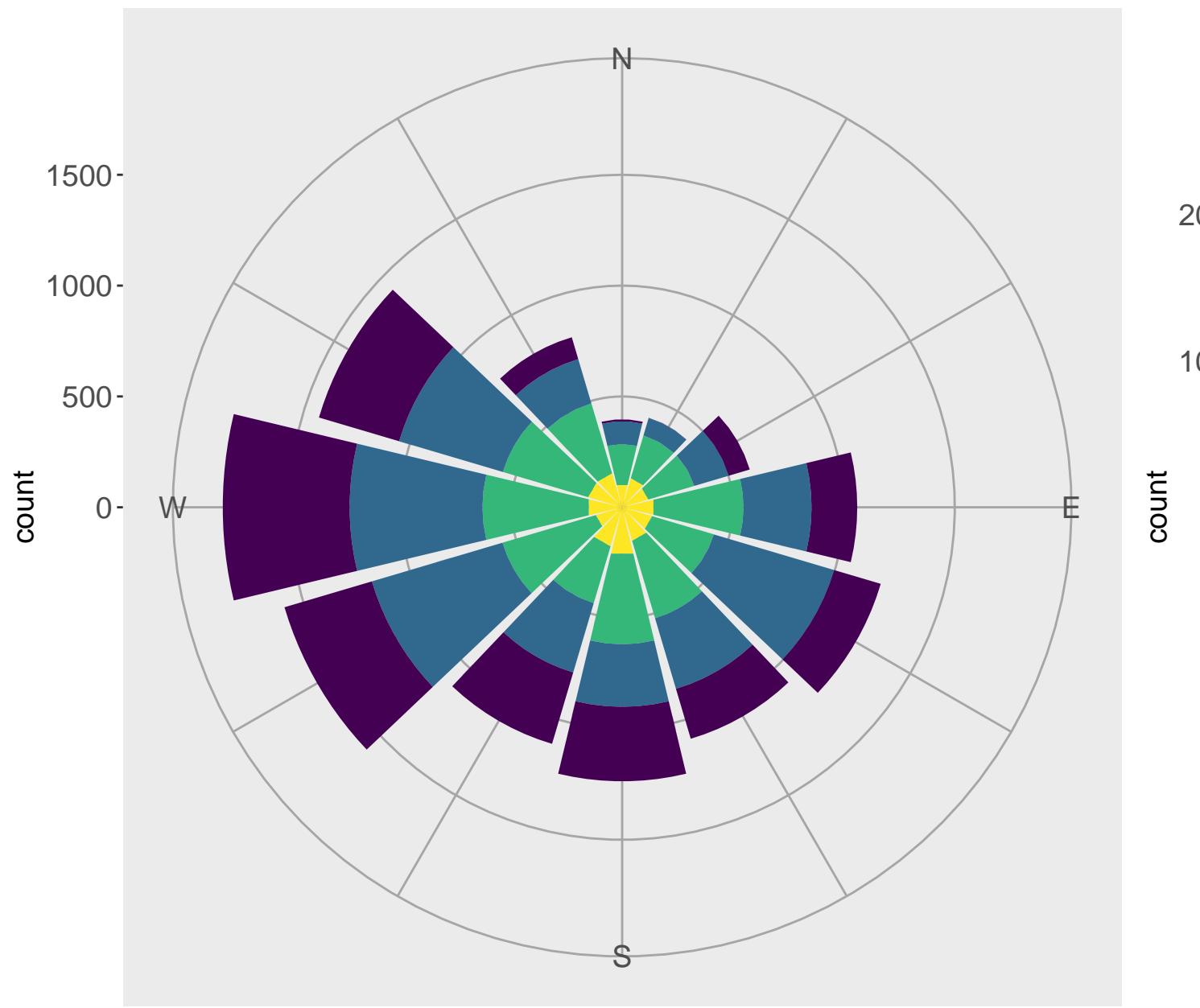
Northeast: Edge Probability by Lag



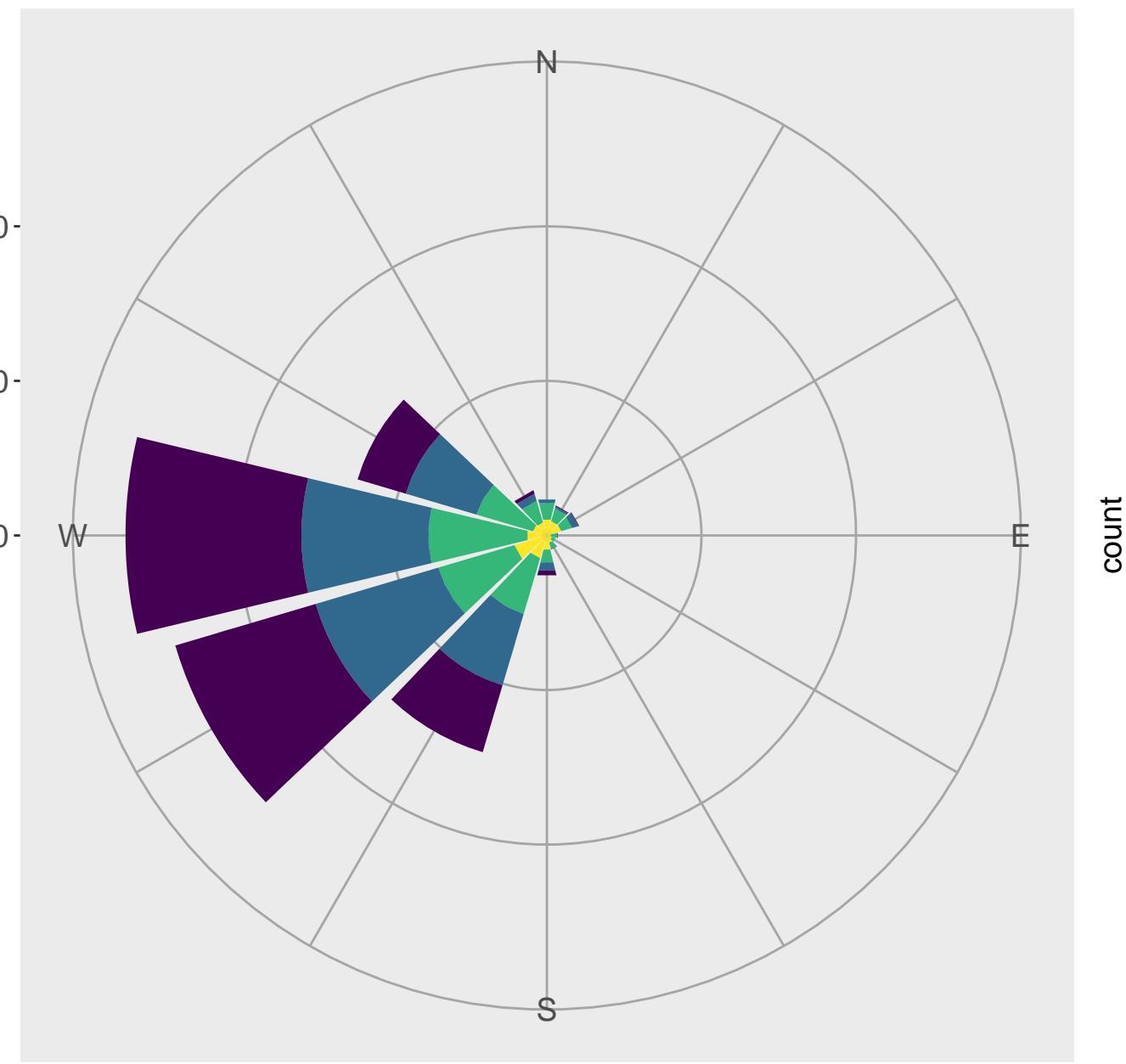
Southeast: Edge Probability by Lag



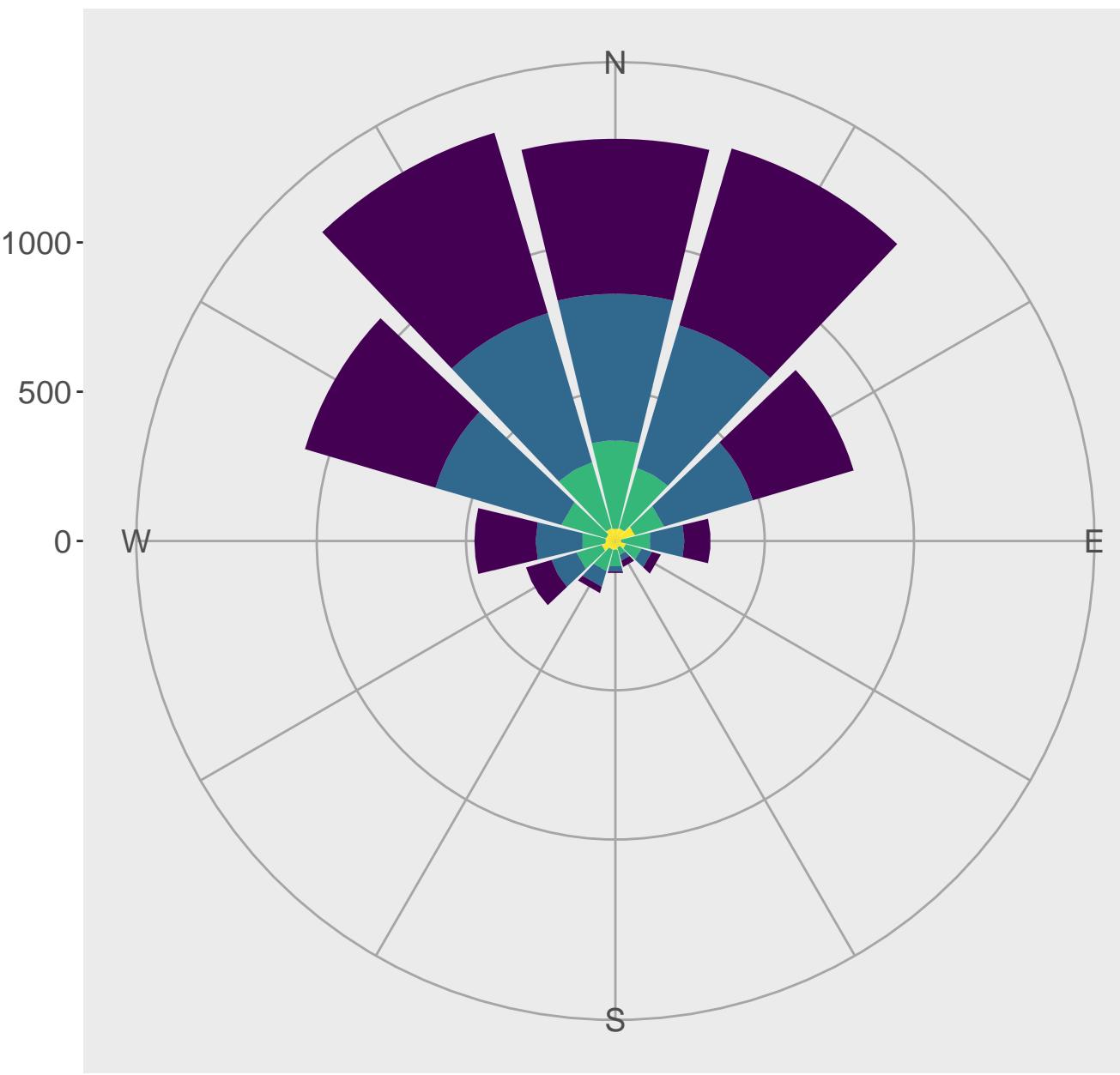
Edge counts by distance/direction to source
Industrial Midwest receptors



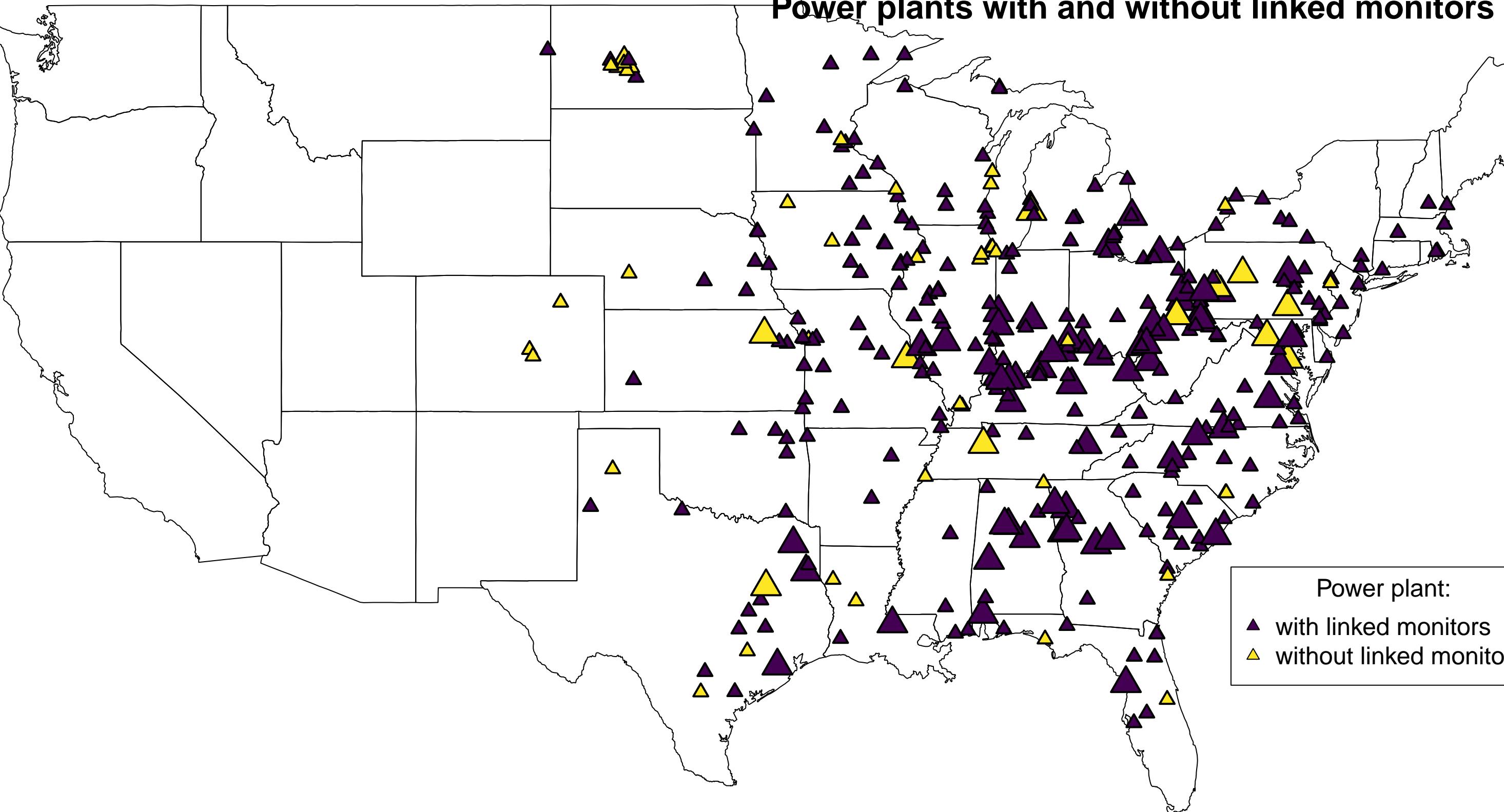
Edge counts by distance/direction to source
Northeast receptors



Edge counts by distance/direction to source
Southeast receptors

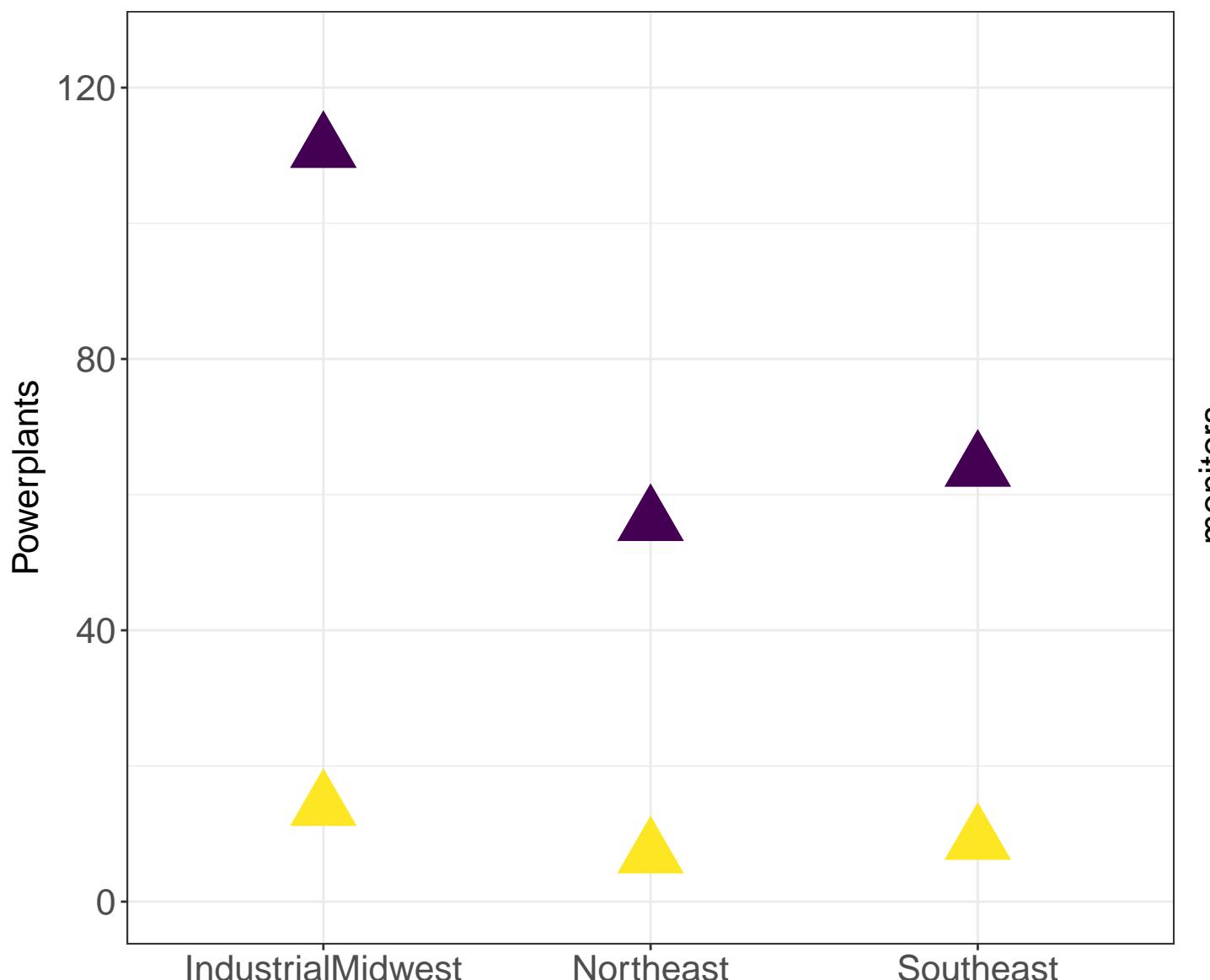


Power plants with and without linked monitors

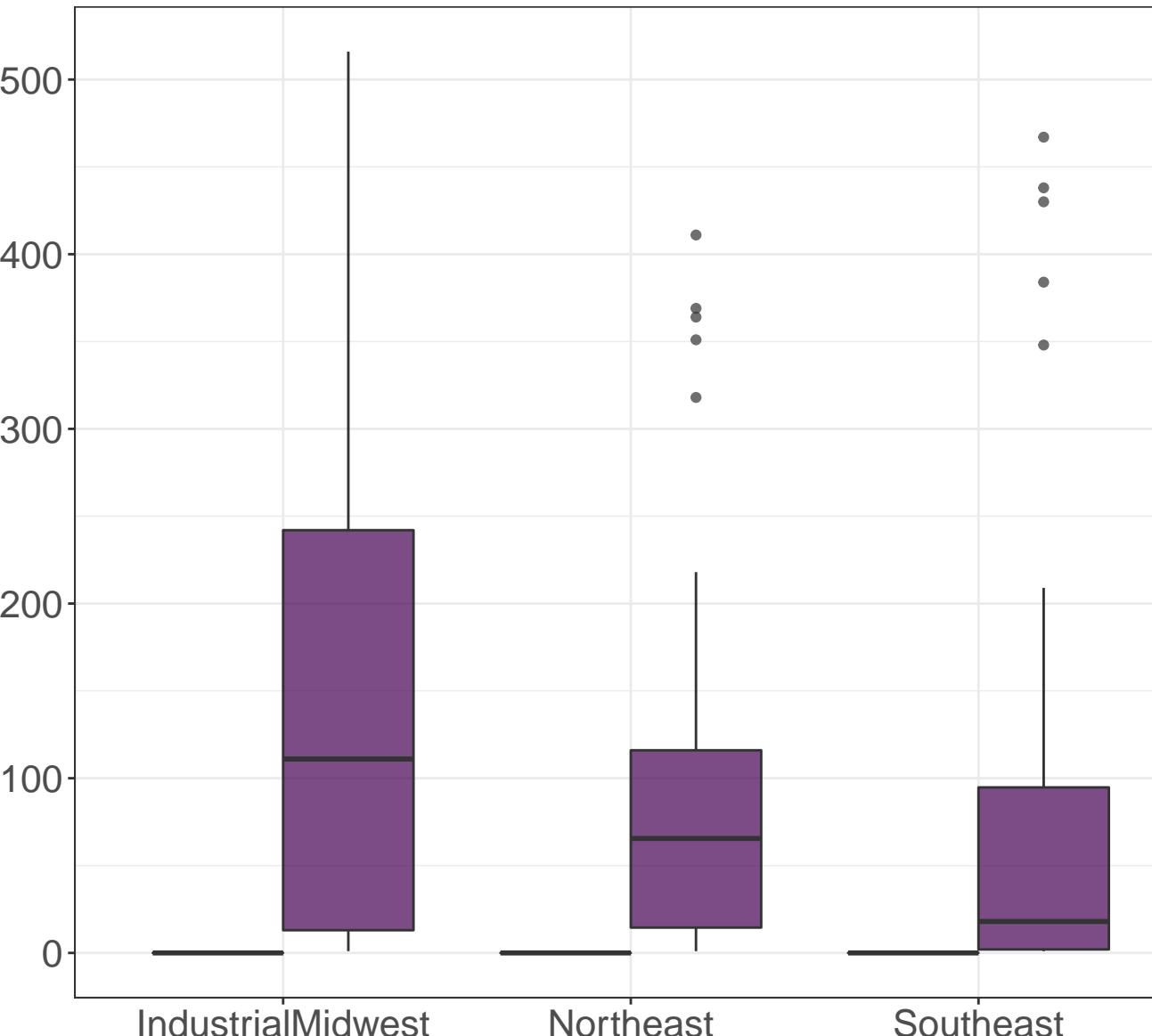


Why do some power plants have linked monitors and others do not?

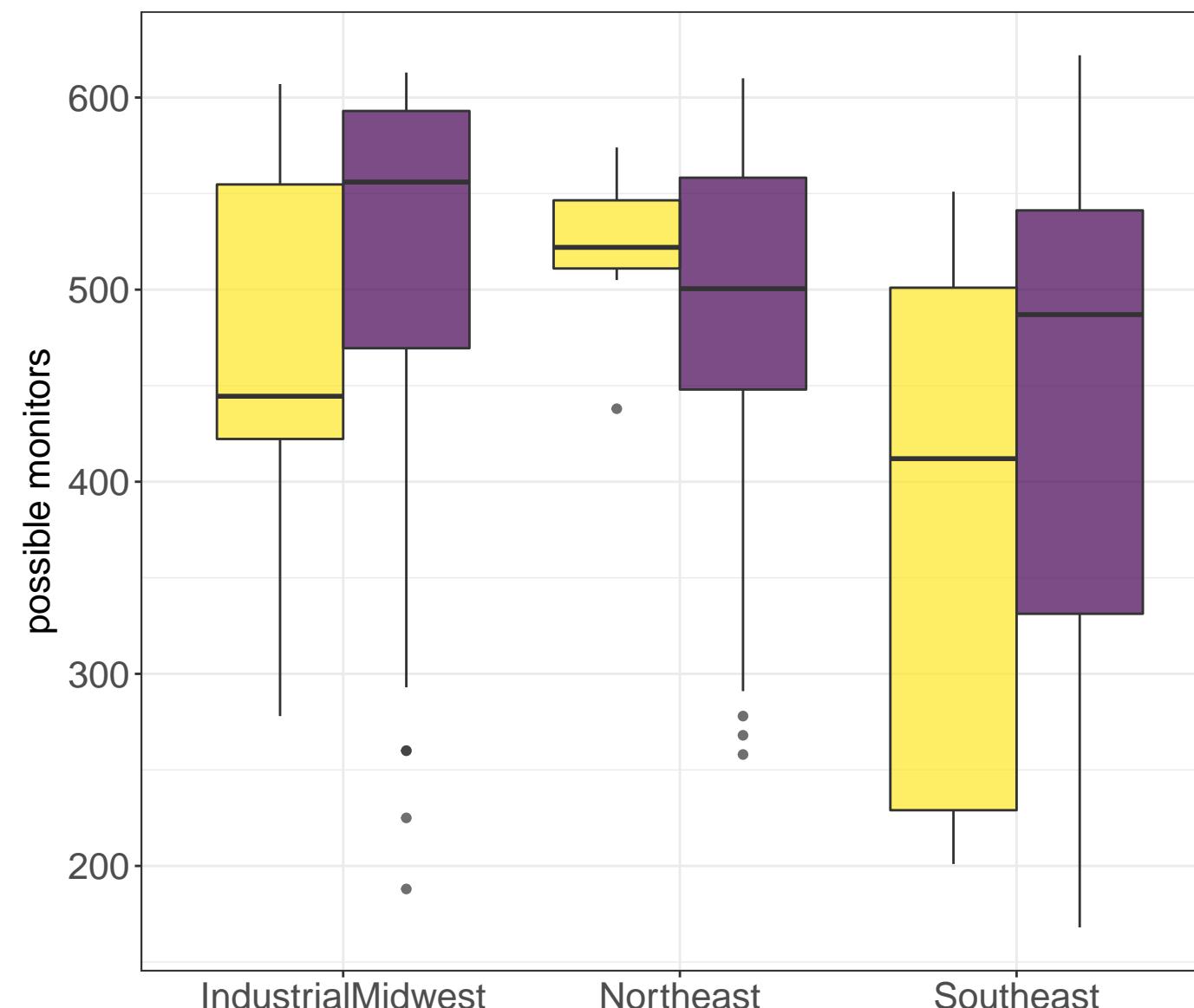
Number of powerplants



Number of linked monitors



Number of possible linked monitors

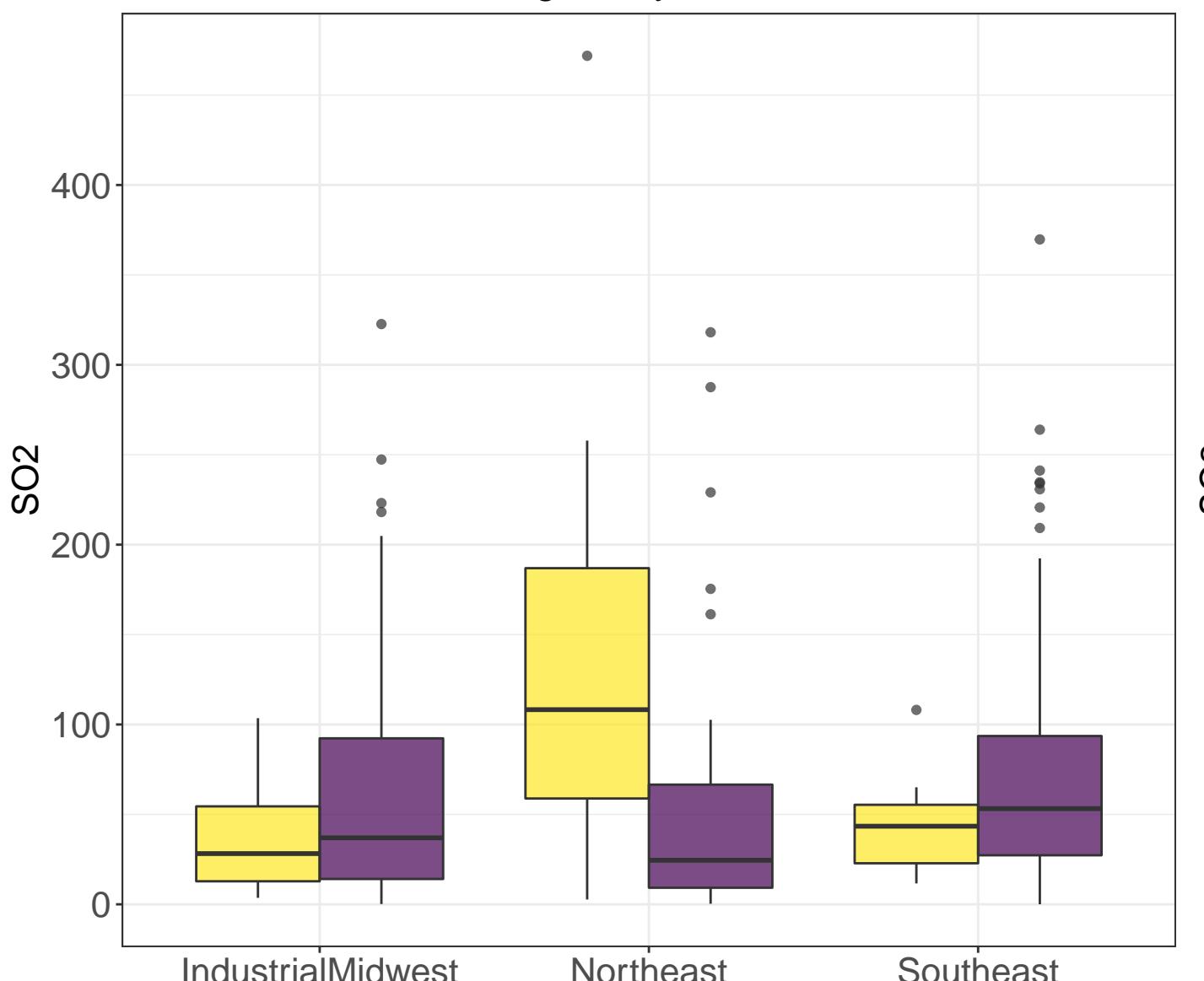


Powerplants: without edges

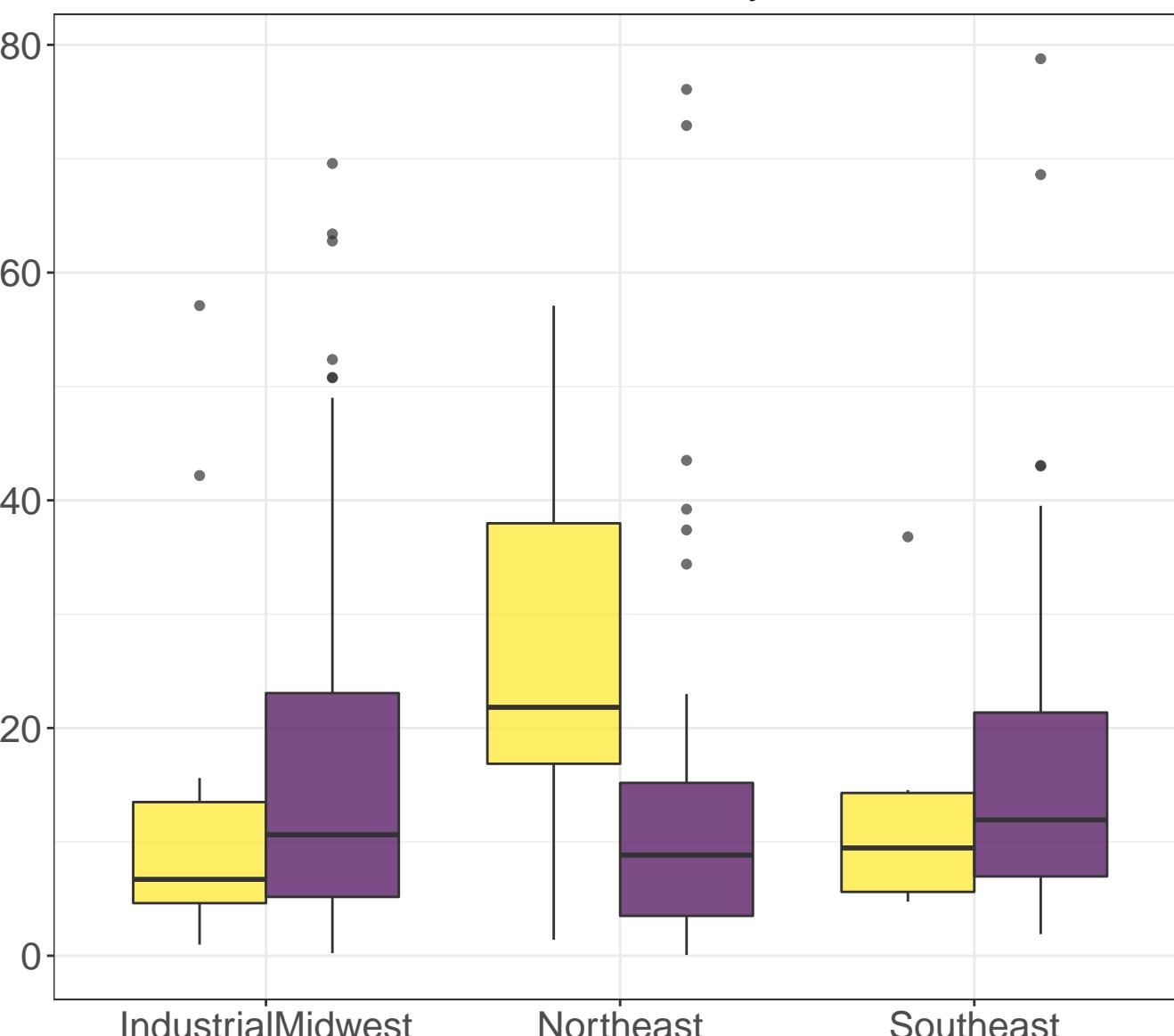


Why do some power plants have linked monitors and others do not?

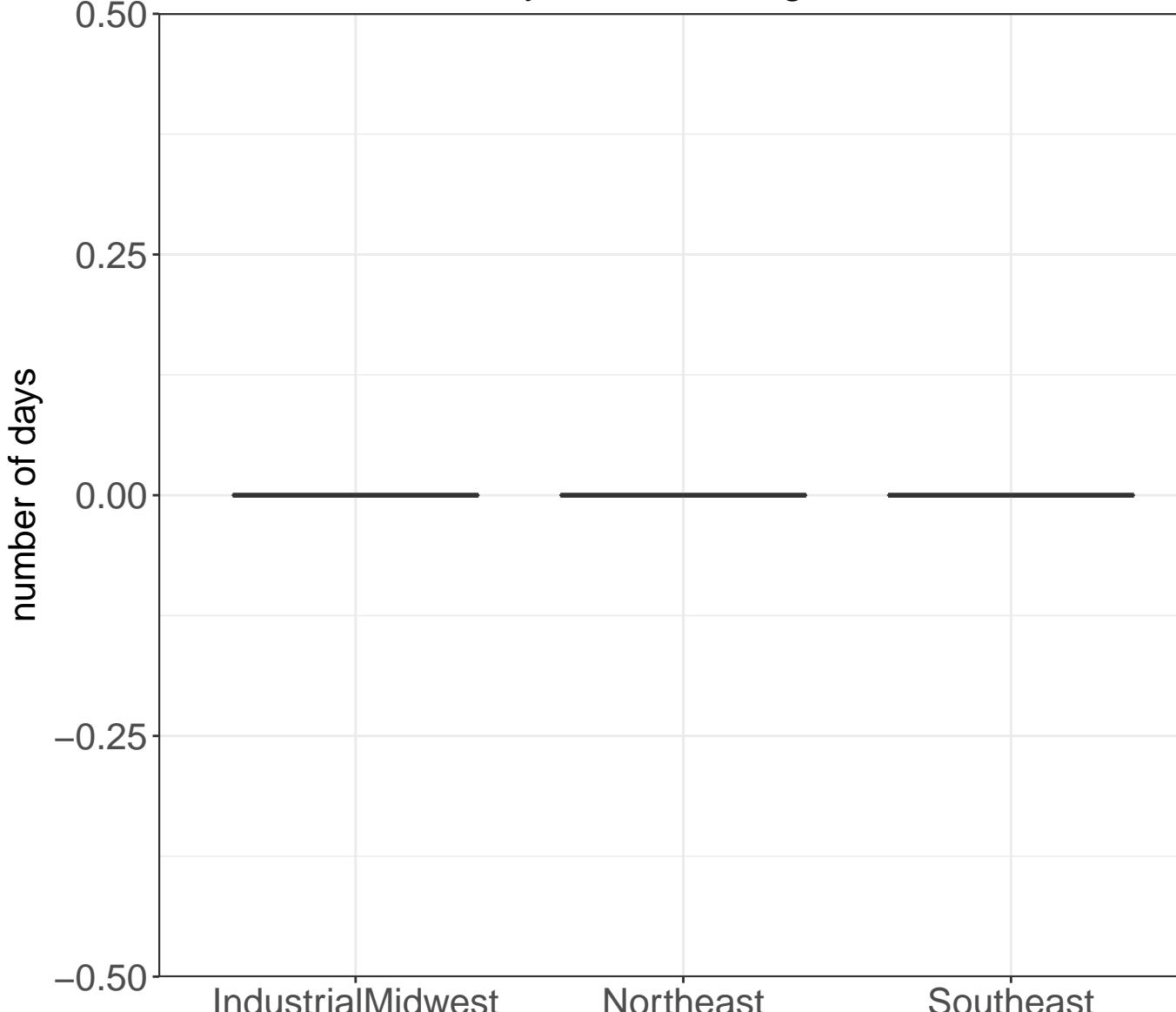
Average daily emissions



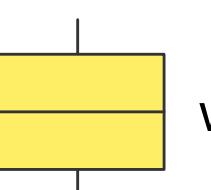
Standard deviation in daily emissions



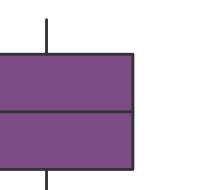
Number of days with missing emissions data



Powerplants: without edges

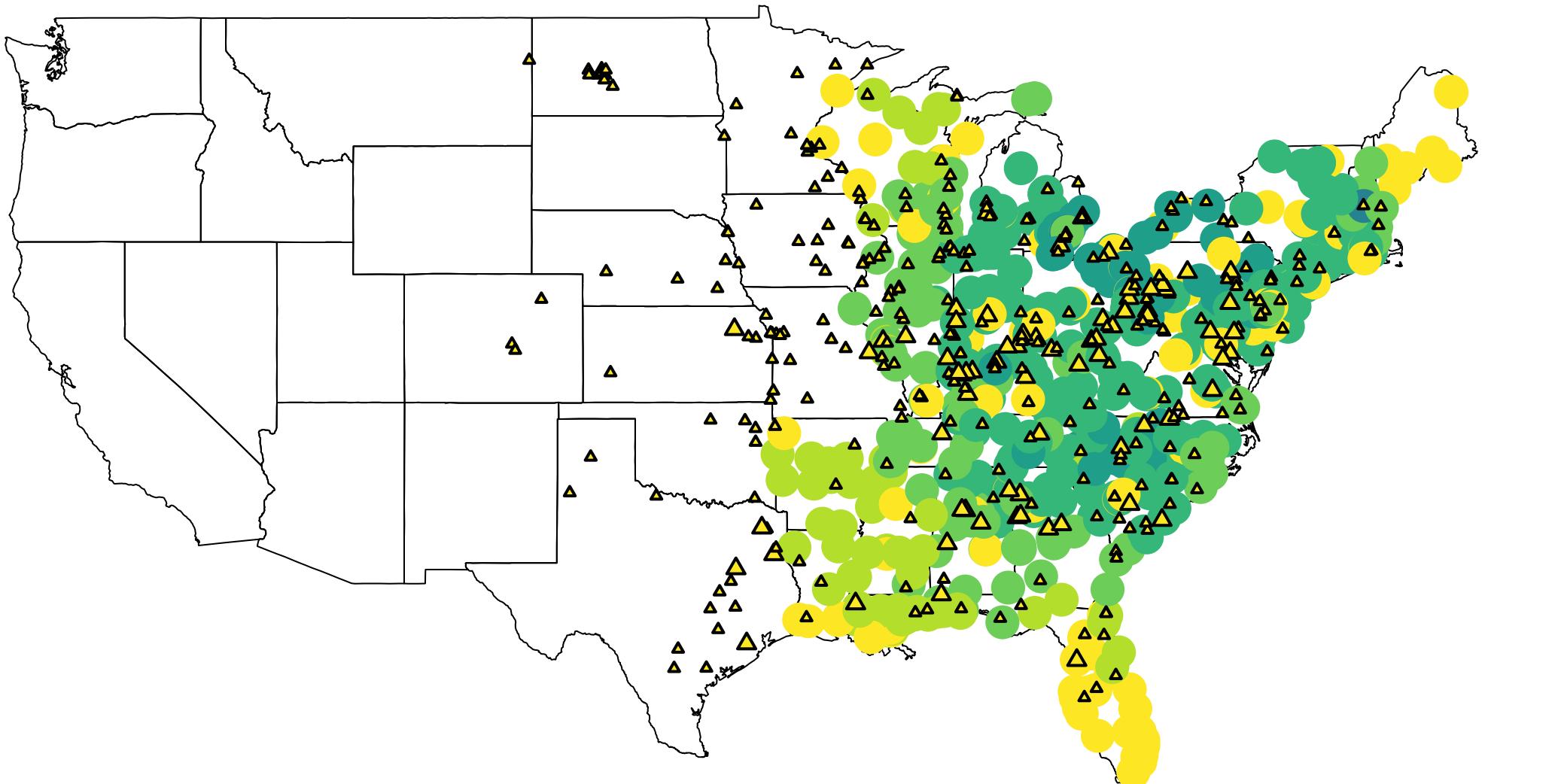


with edges



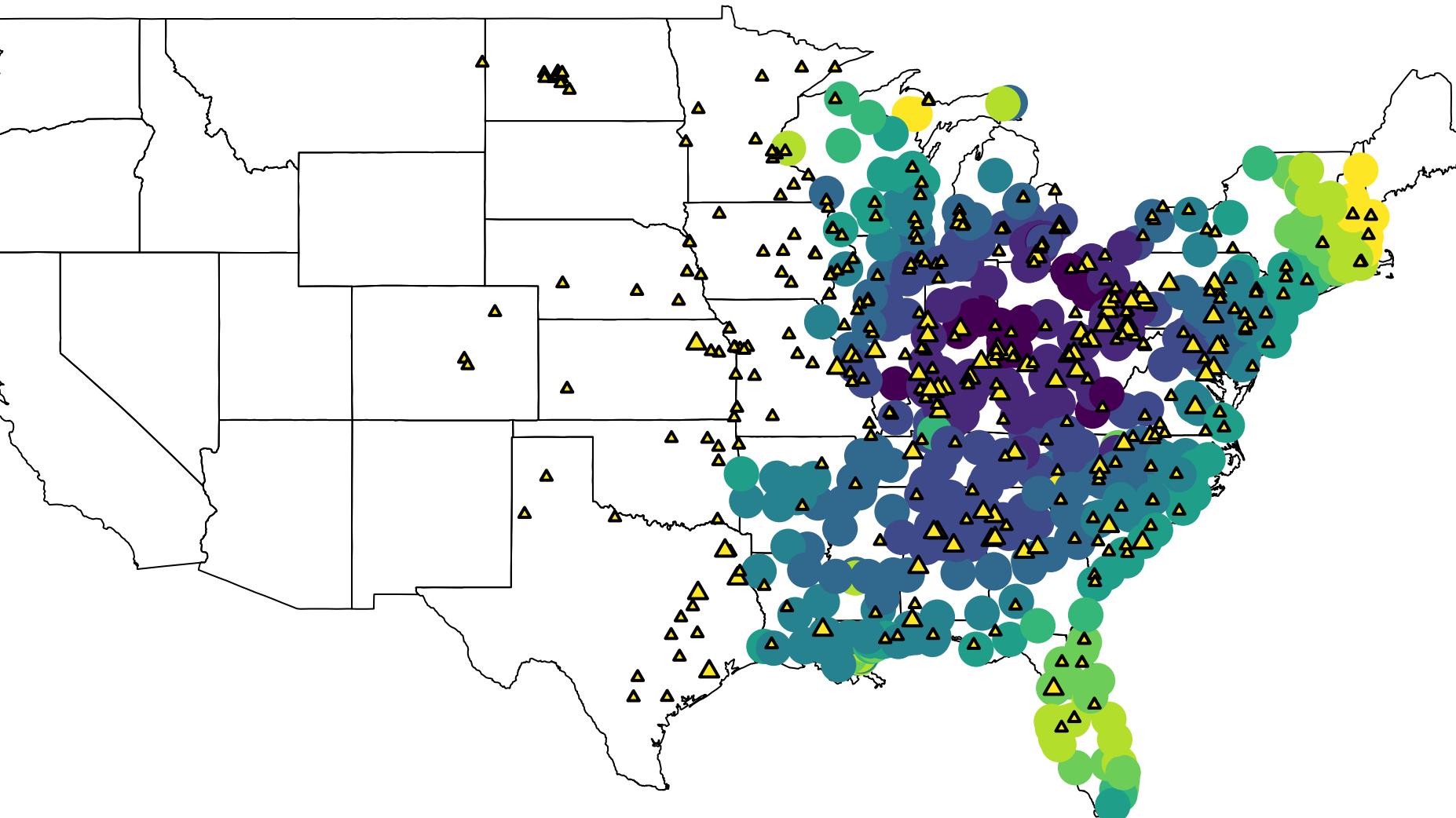
Monitor exposure:

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

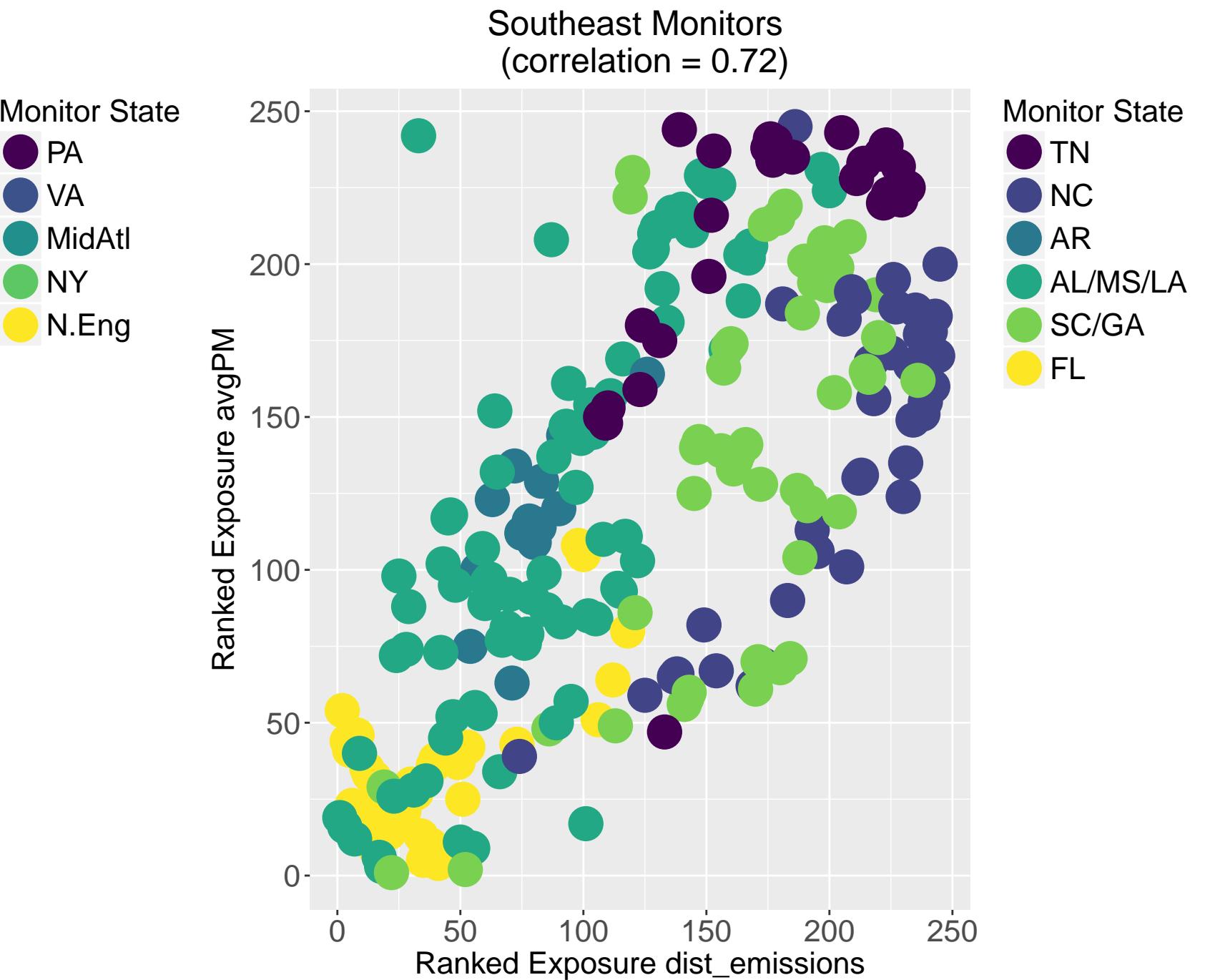
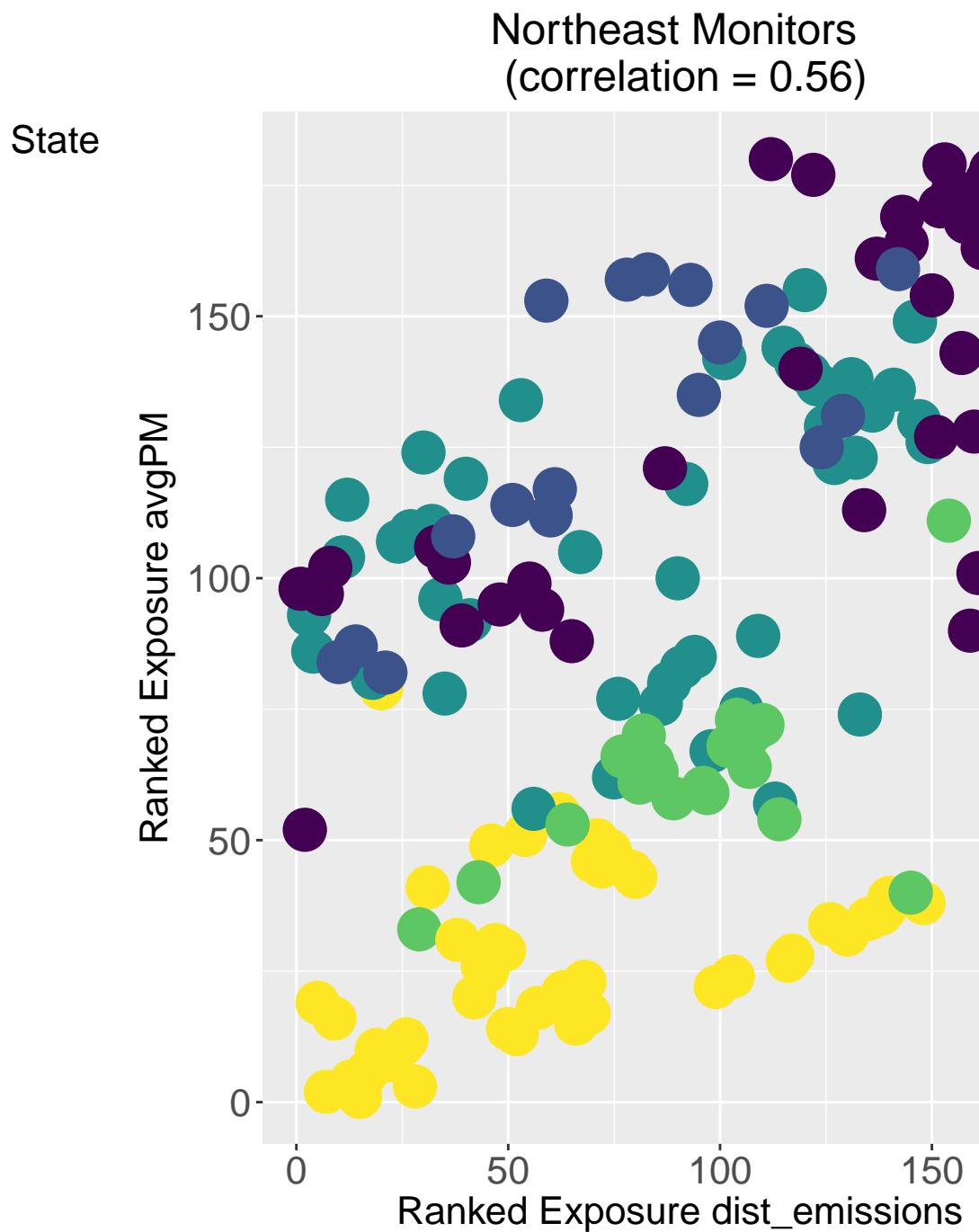
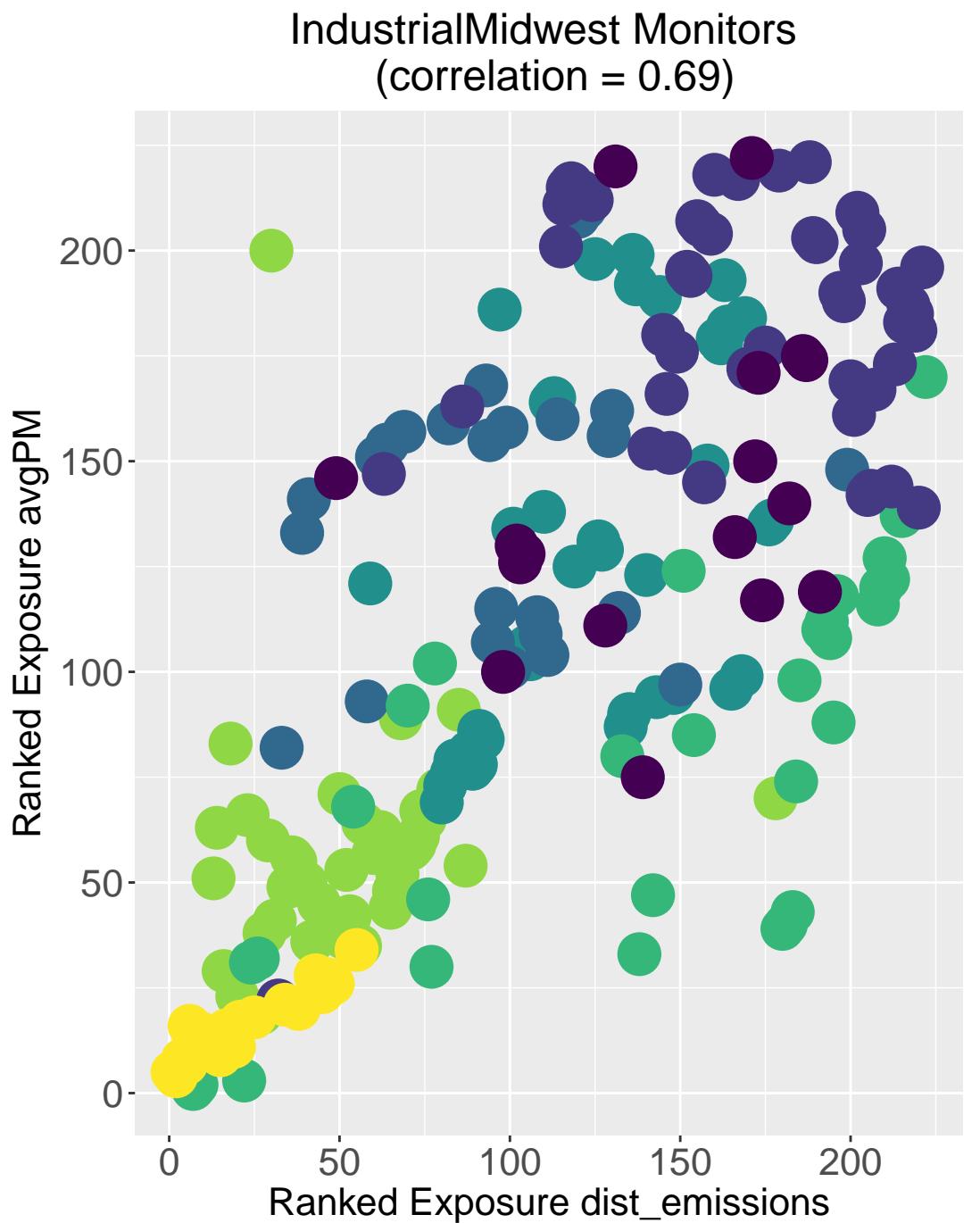


Monitor exposure:

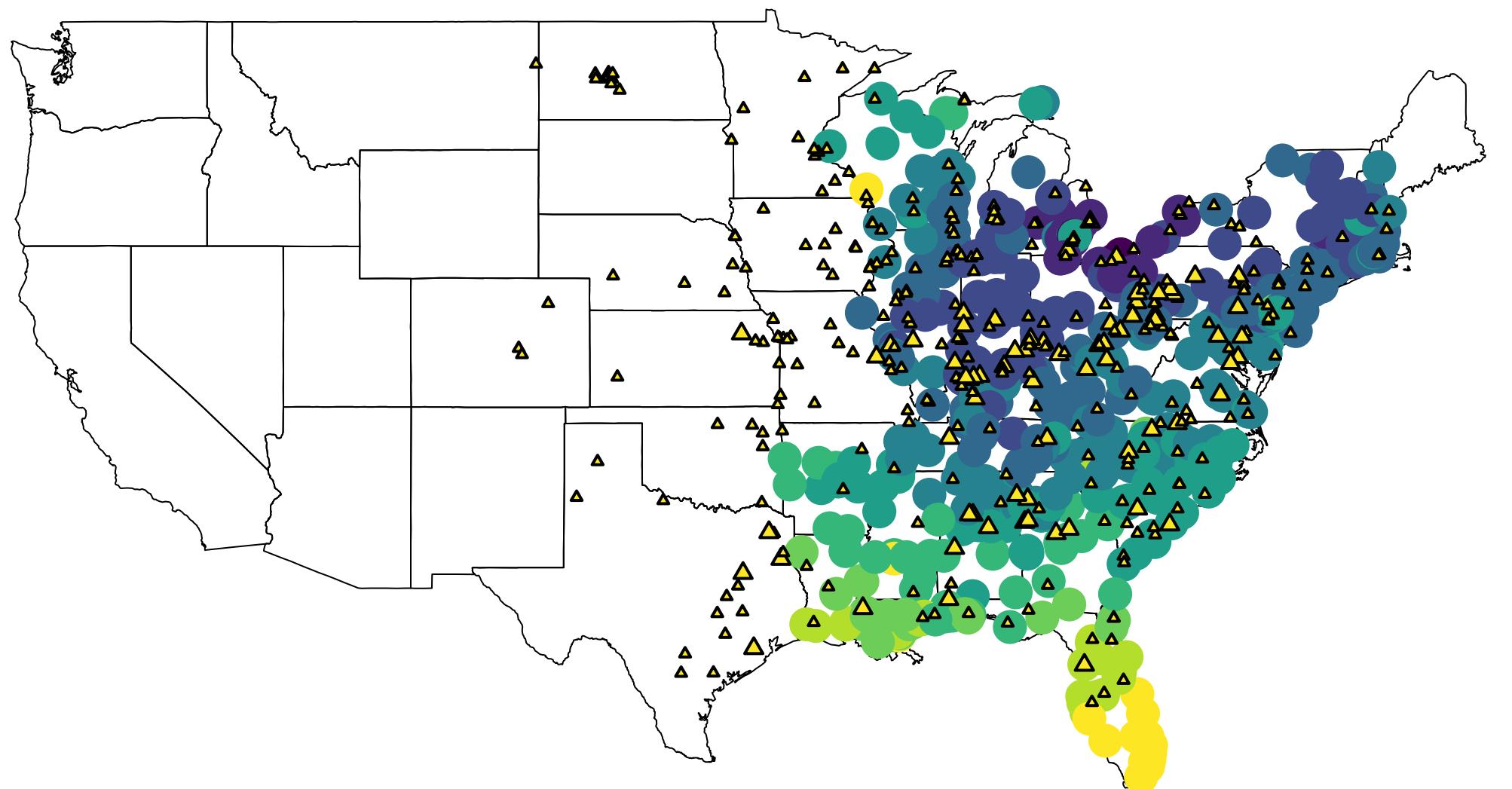
avgPM, decomposed75 year_noNA_distLag 2005



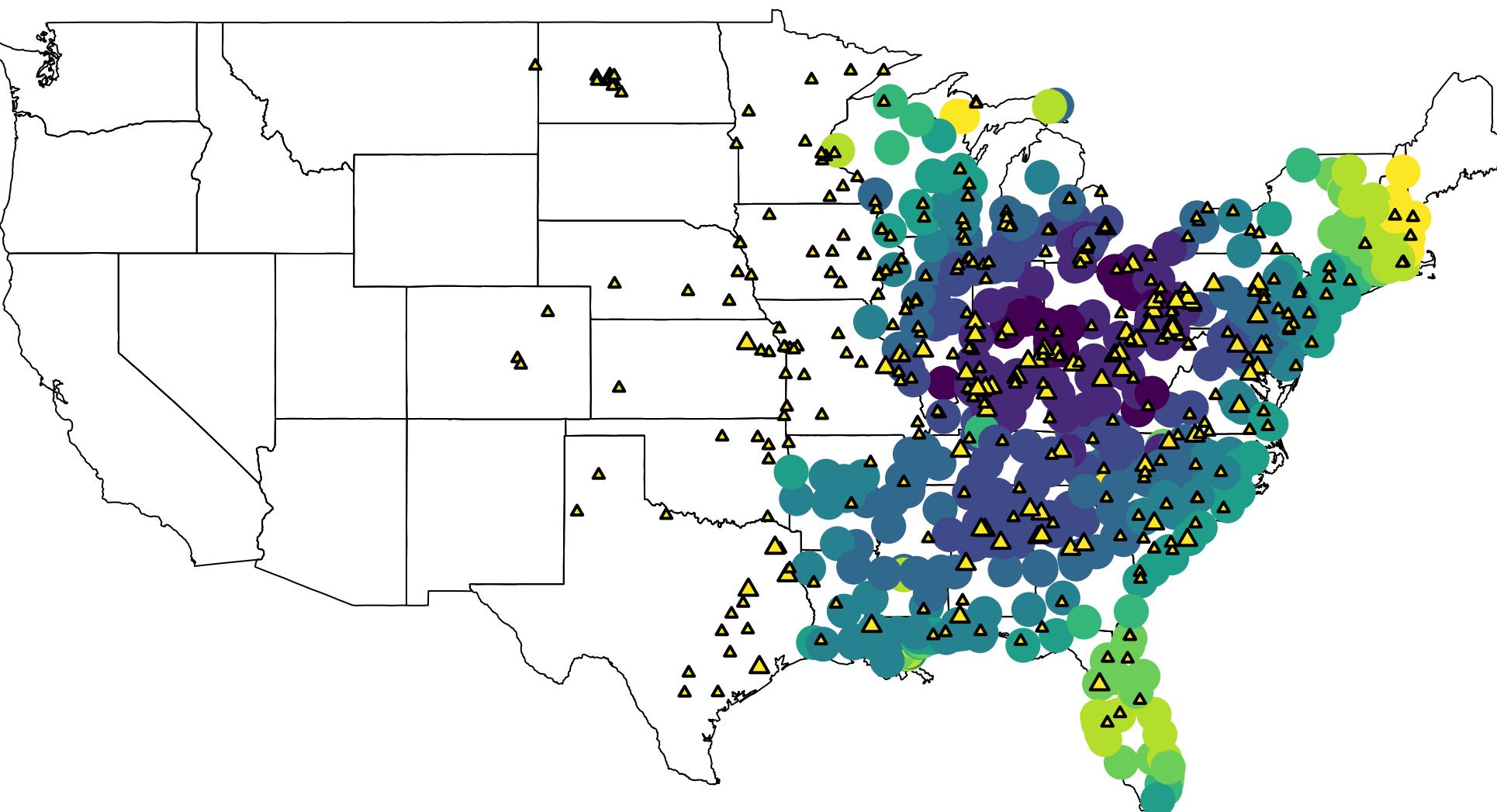
Comparison of coal emissions exposure (sum of $(1/\log(\text{distance})) * \text{avgemissions}$ vs. low freq PM)



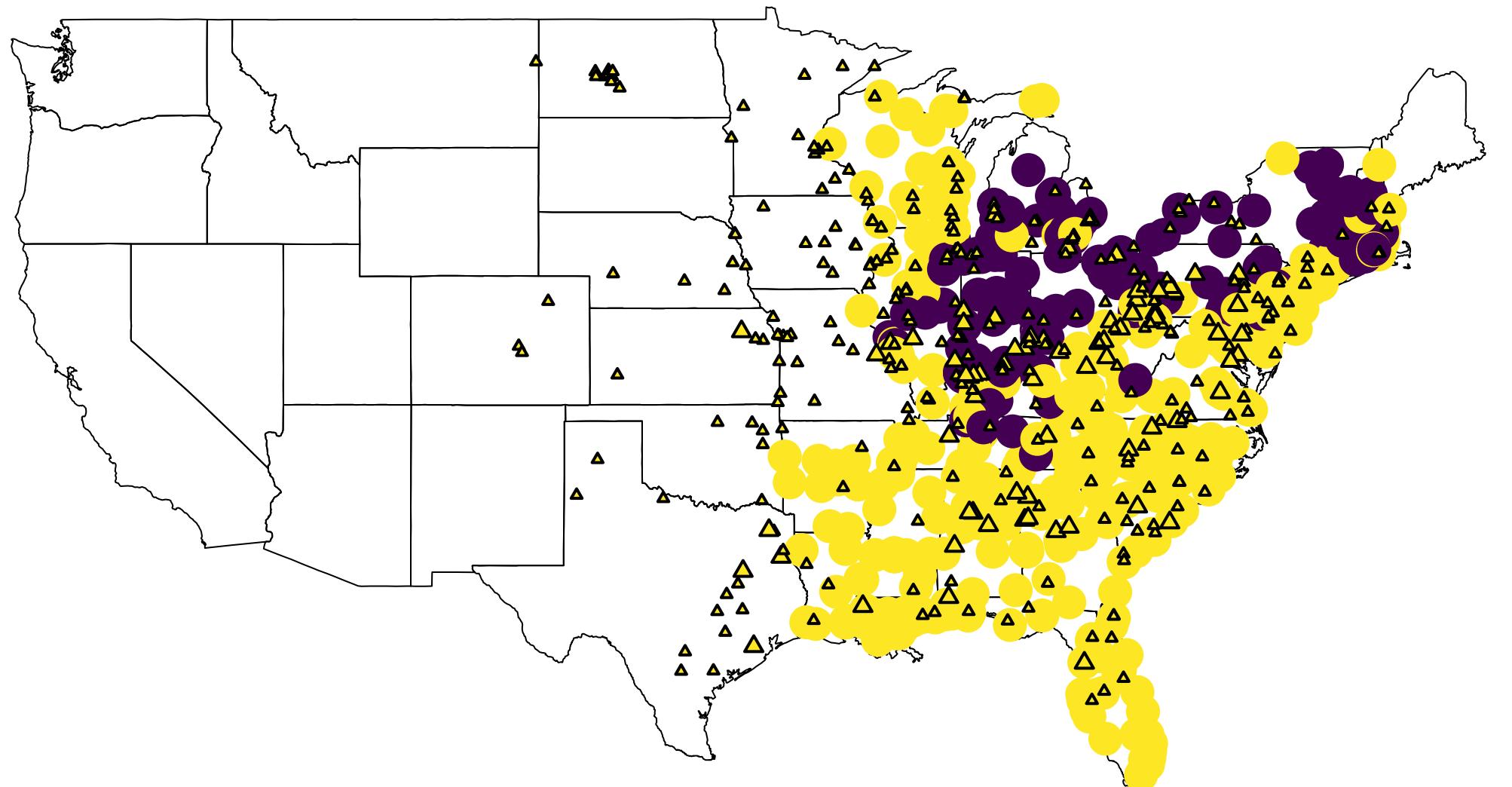
Monitor exposure: num_edges, year_noNA_distLag 2005



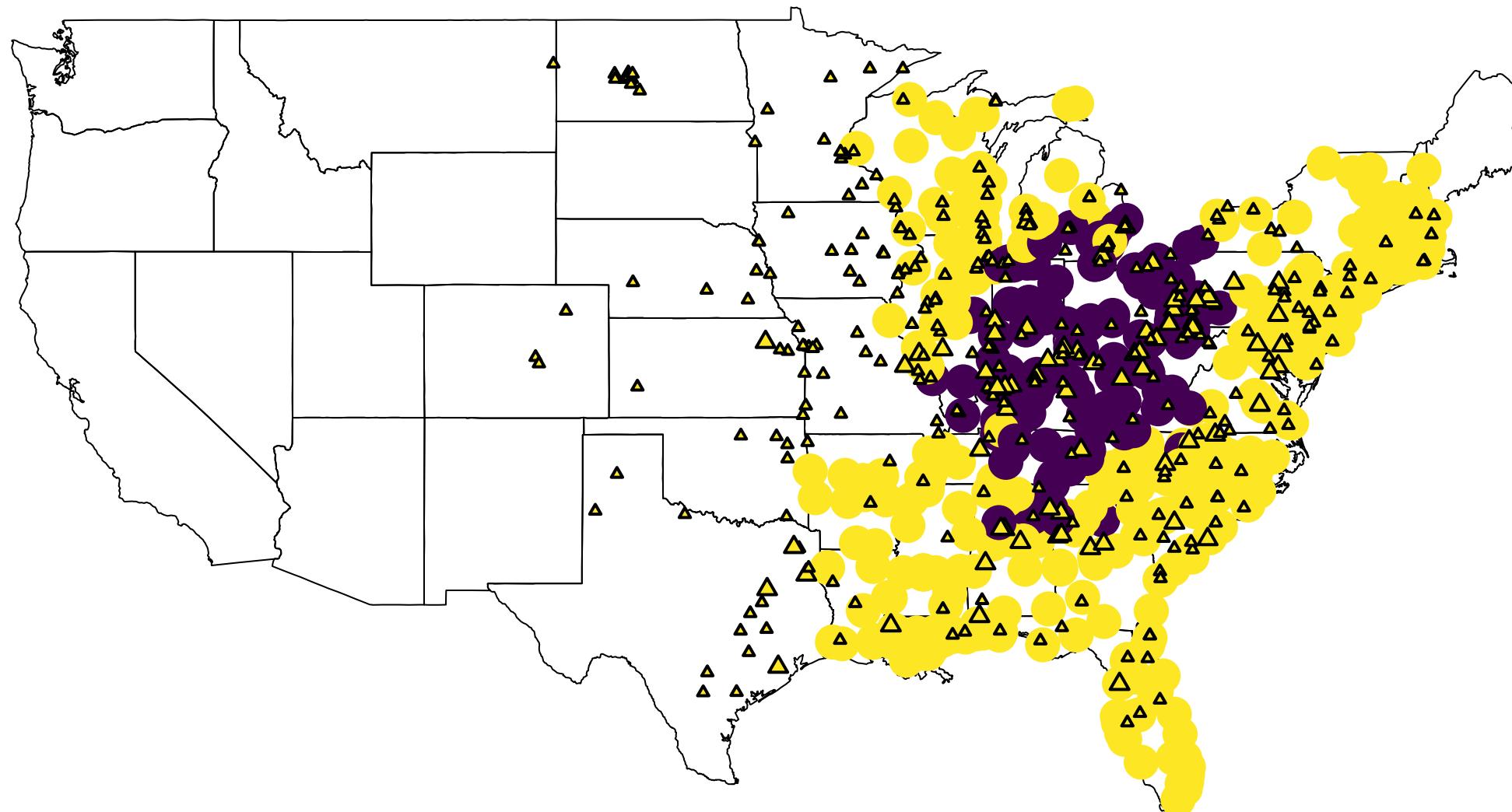
Monitor exposure: avgPM, decomposed75 year_noNA_distLag 2005



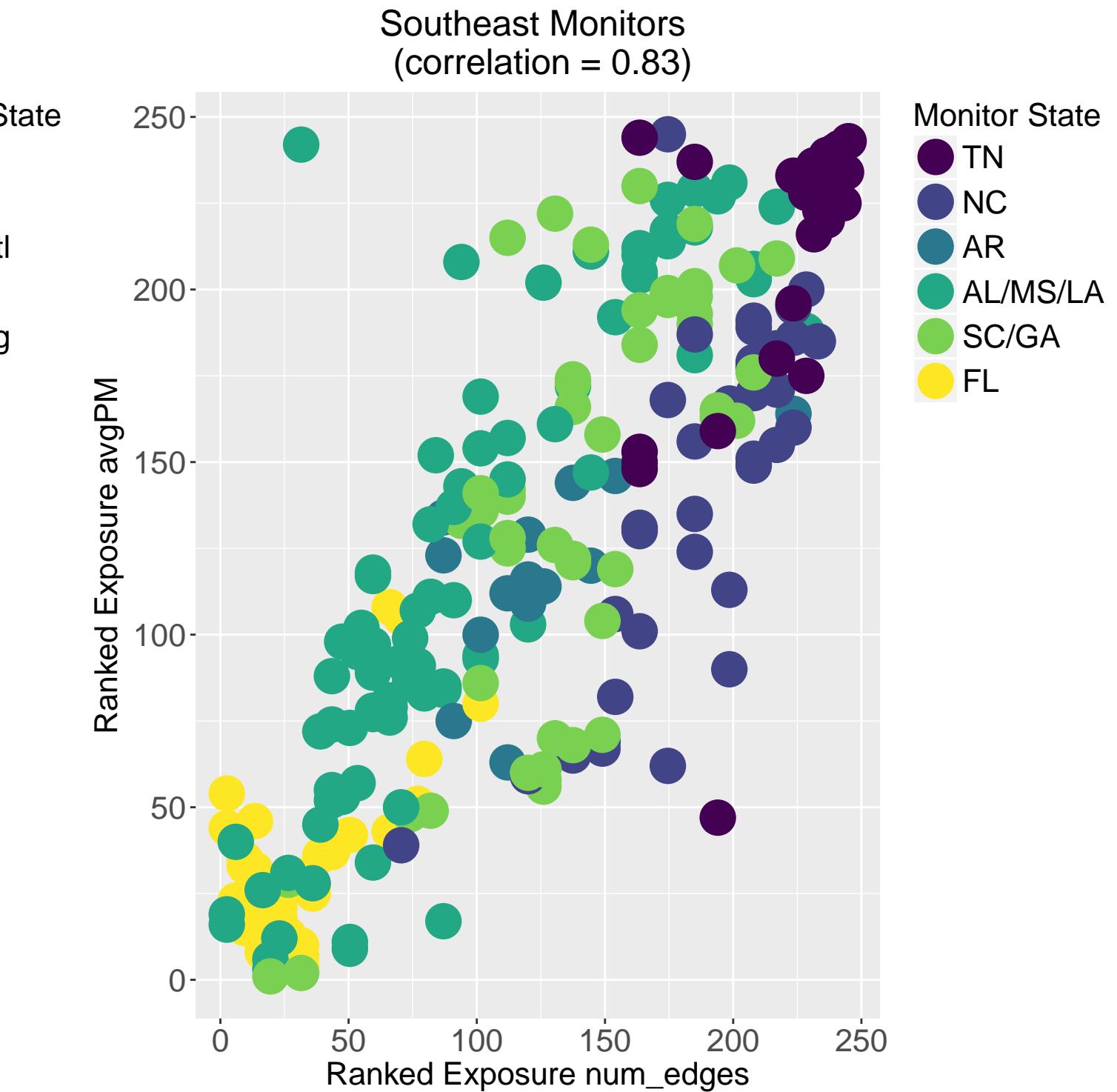
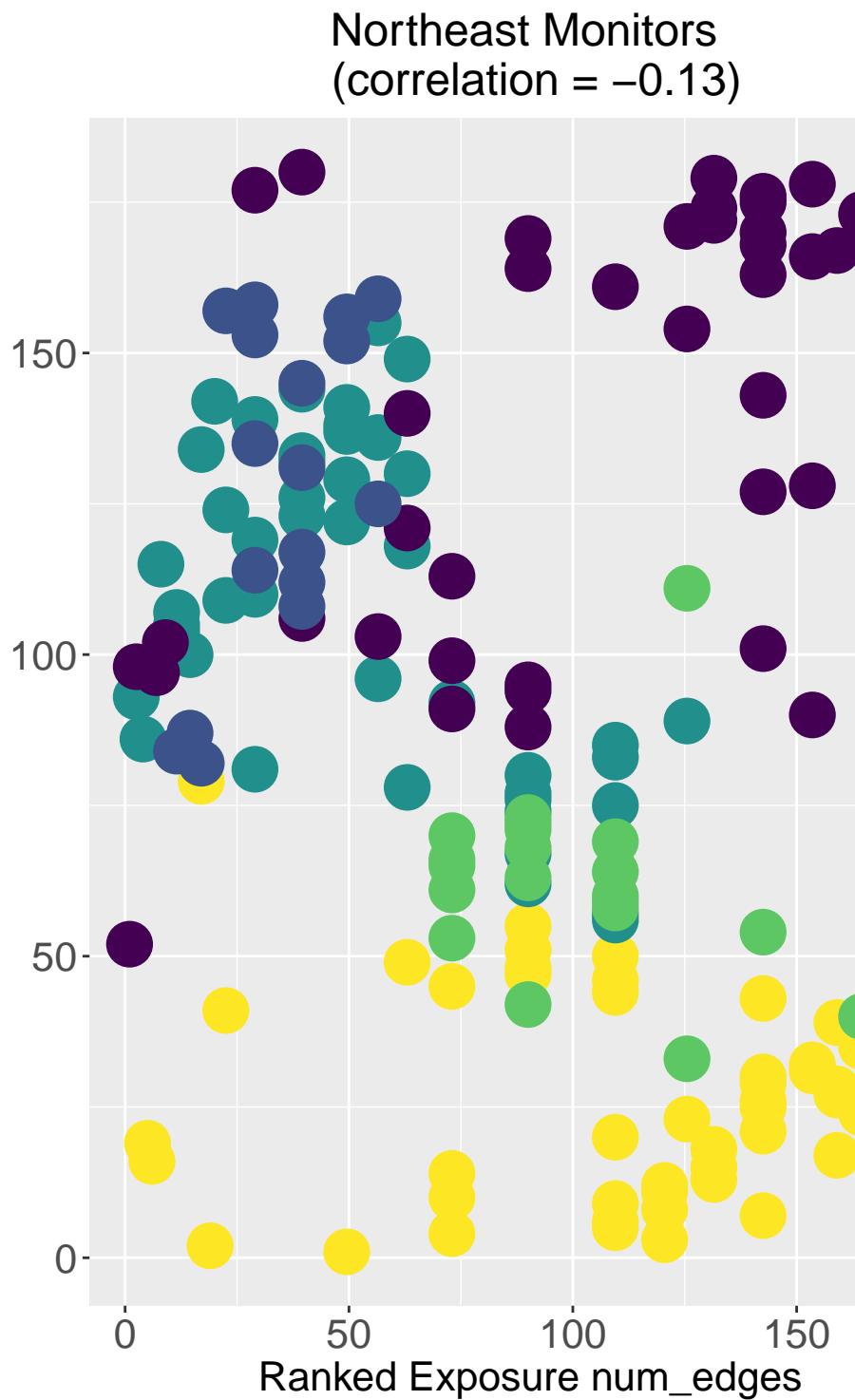
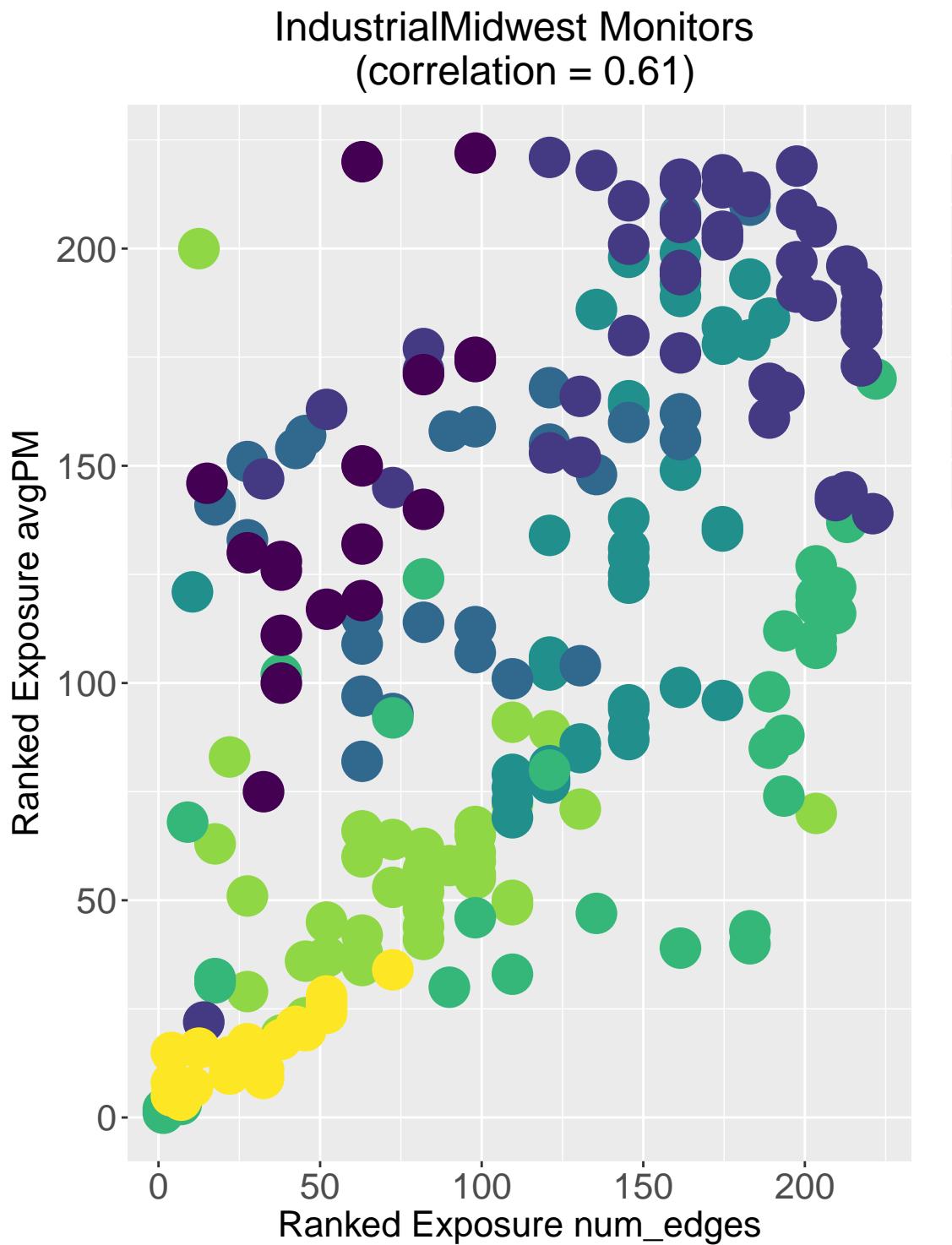
Highest exposed: num_edges, year_noNA_distLag 2005



Highest exposed: avgPM, decomposed75 year_noNA_distLag 2005



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



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

