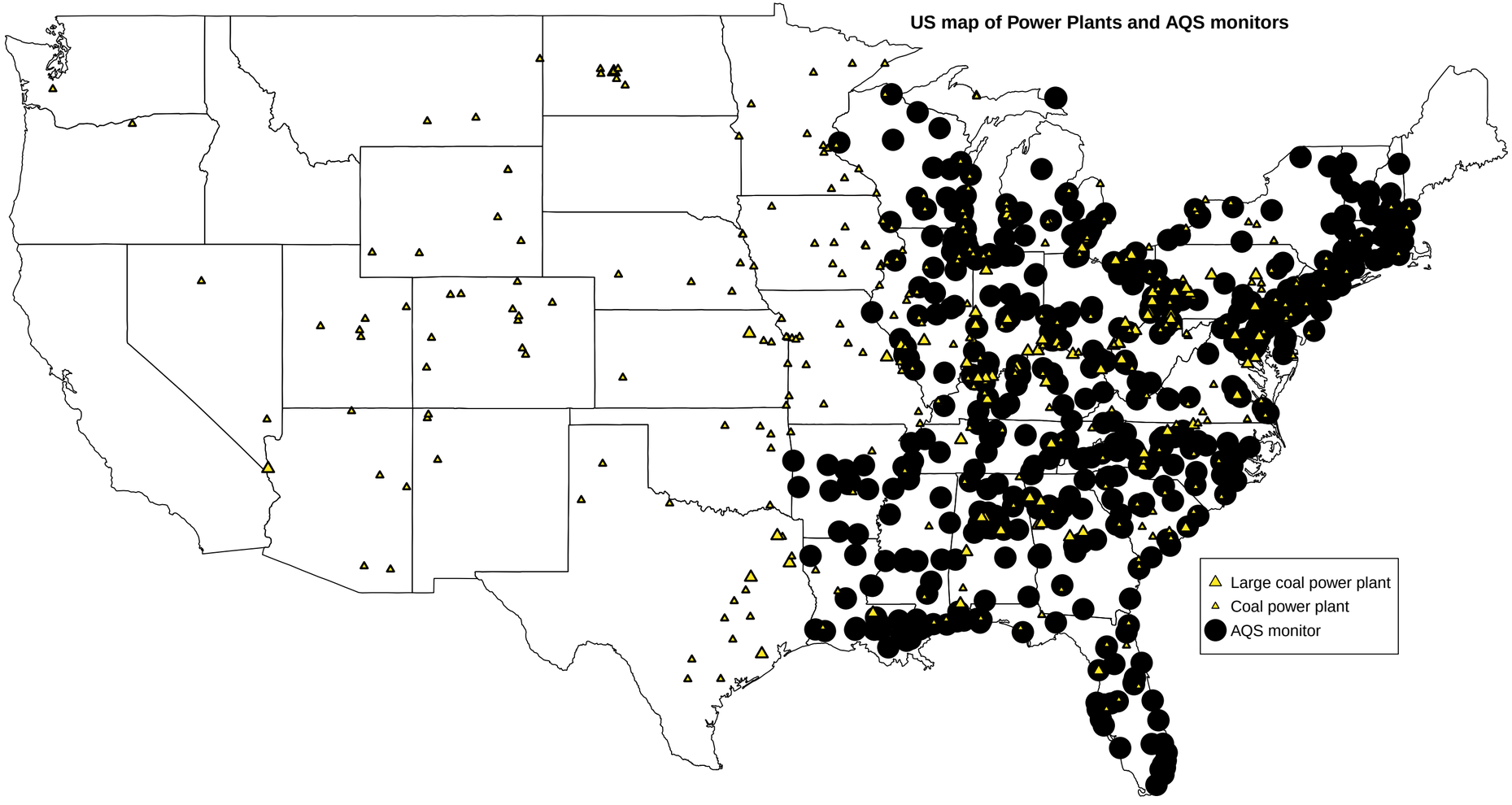
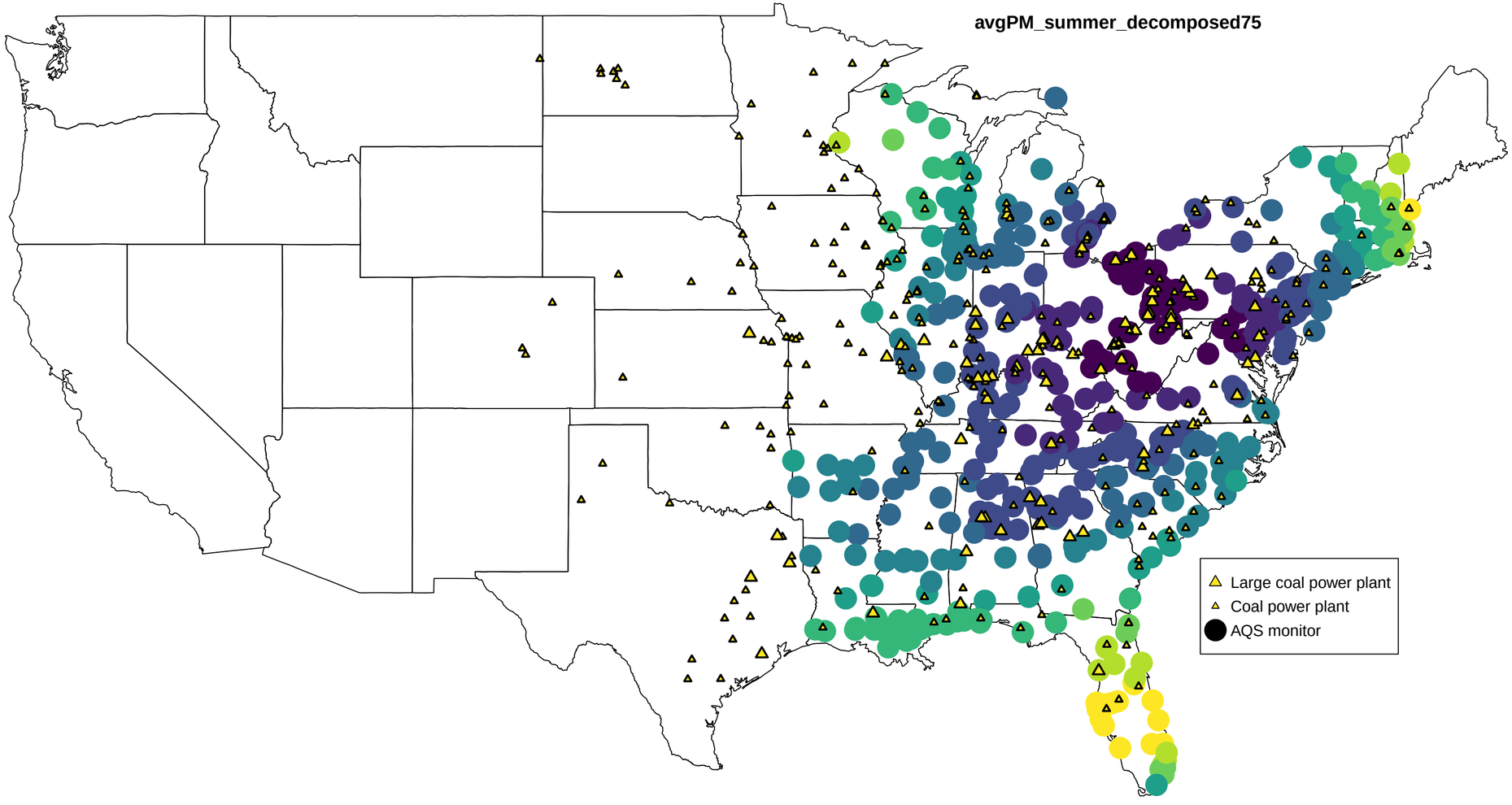
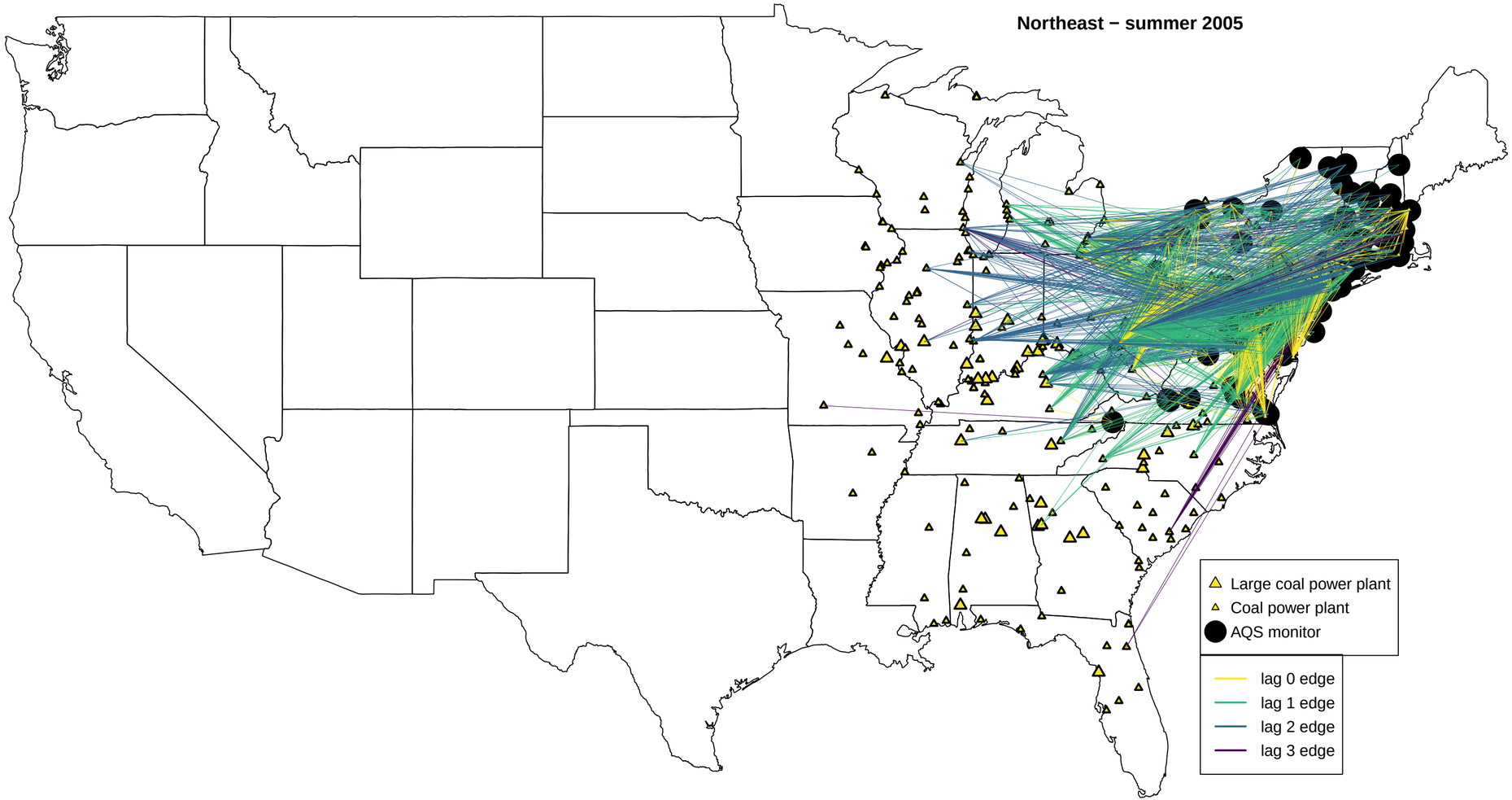
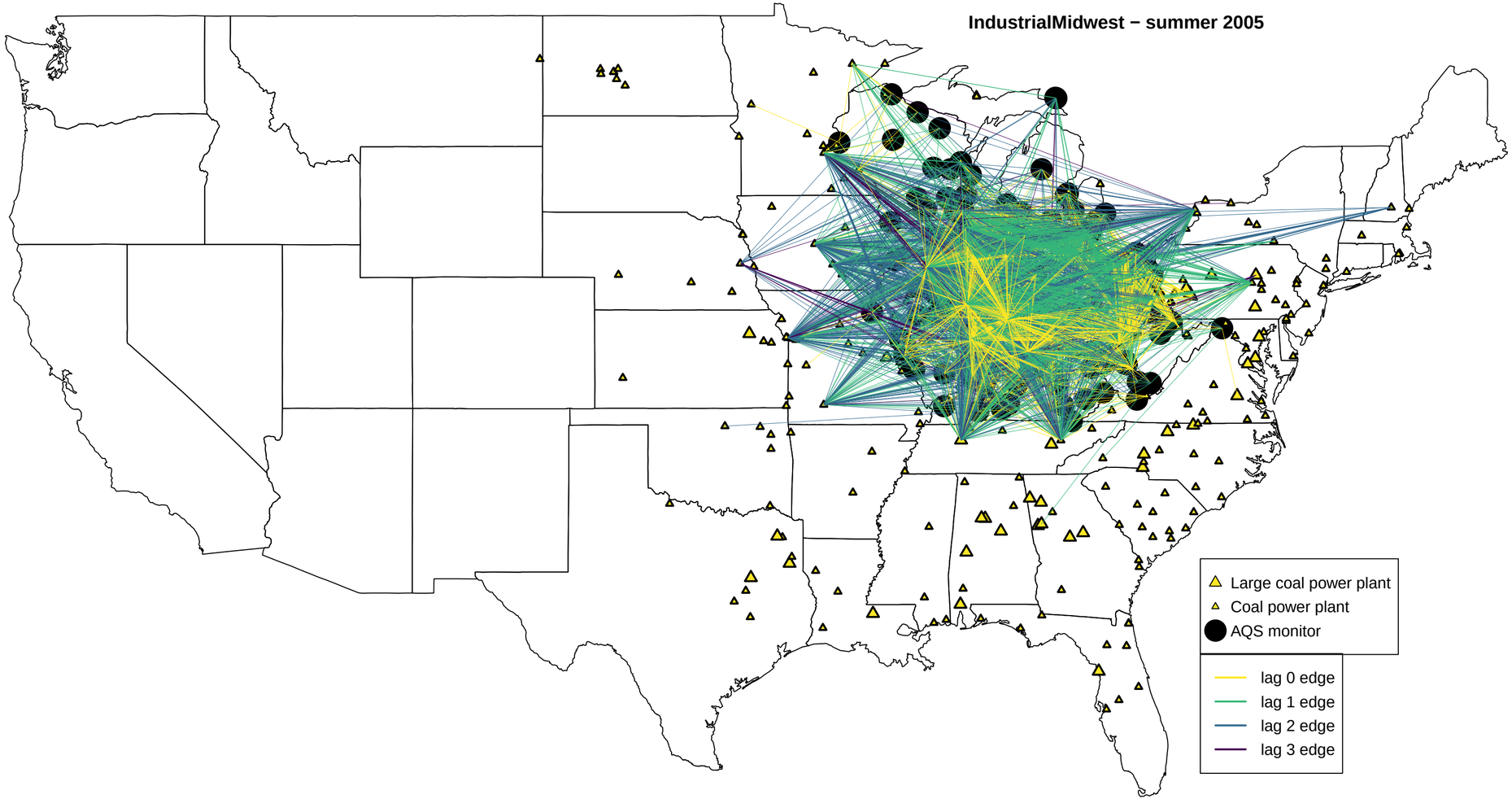
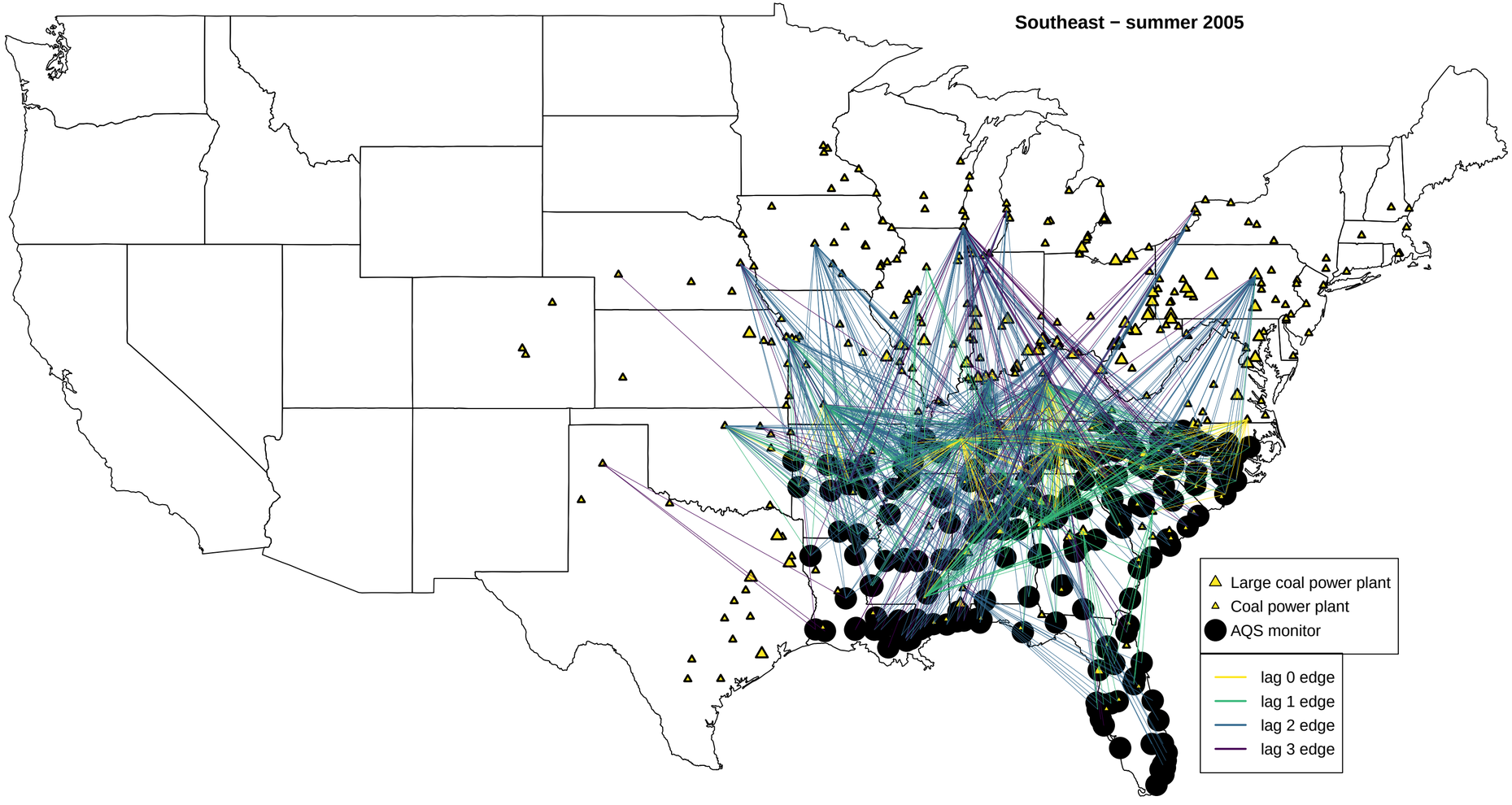
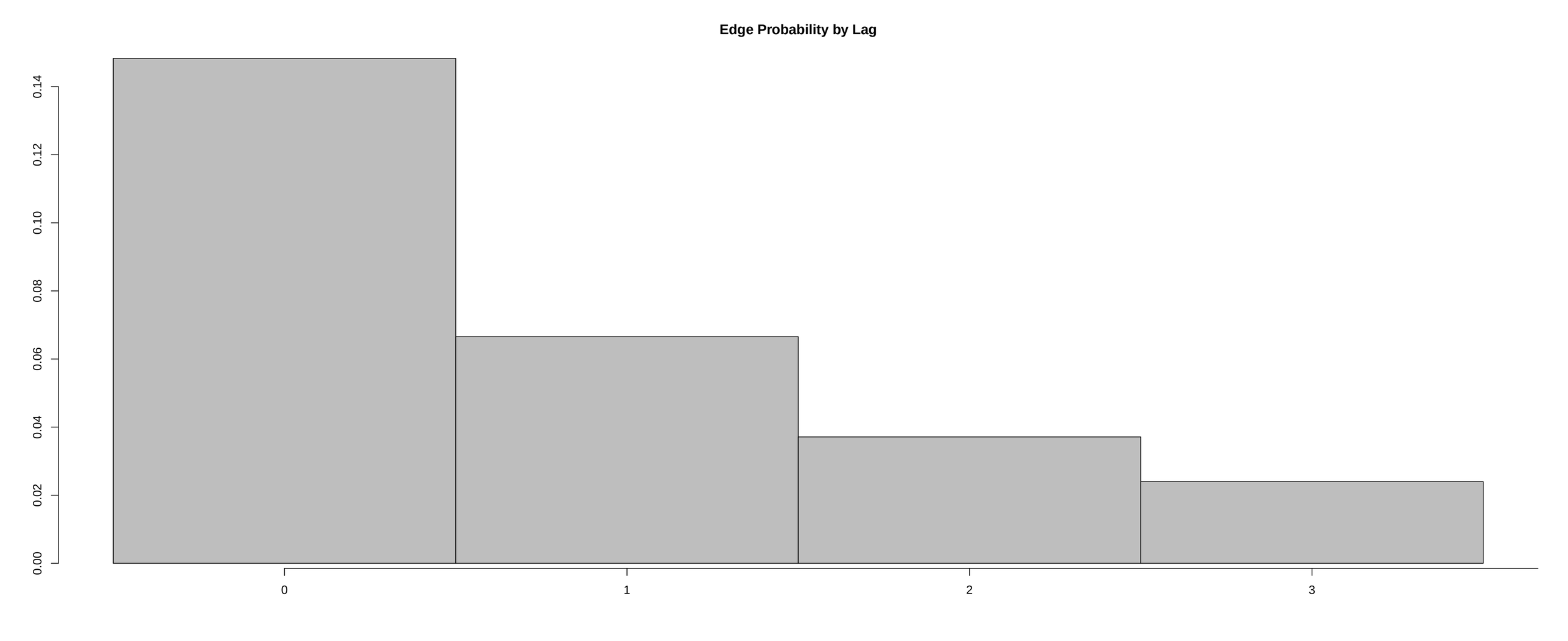

US map of Power Plants and AQS monitors
Large coal power plant
Coal power plant
AQS monitor

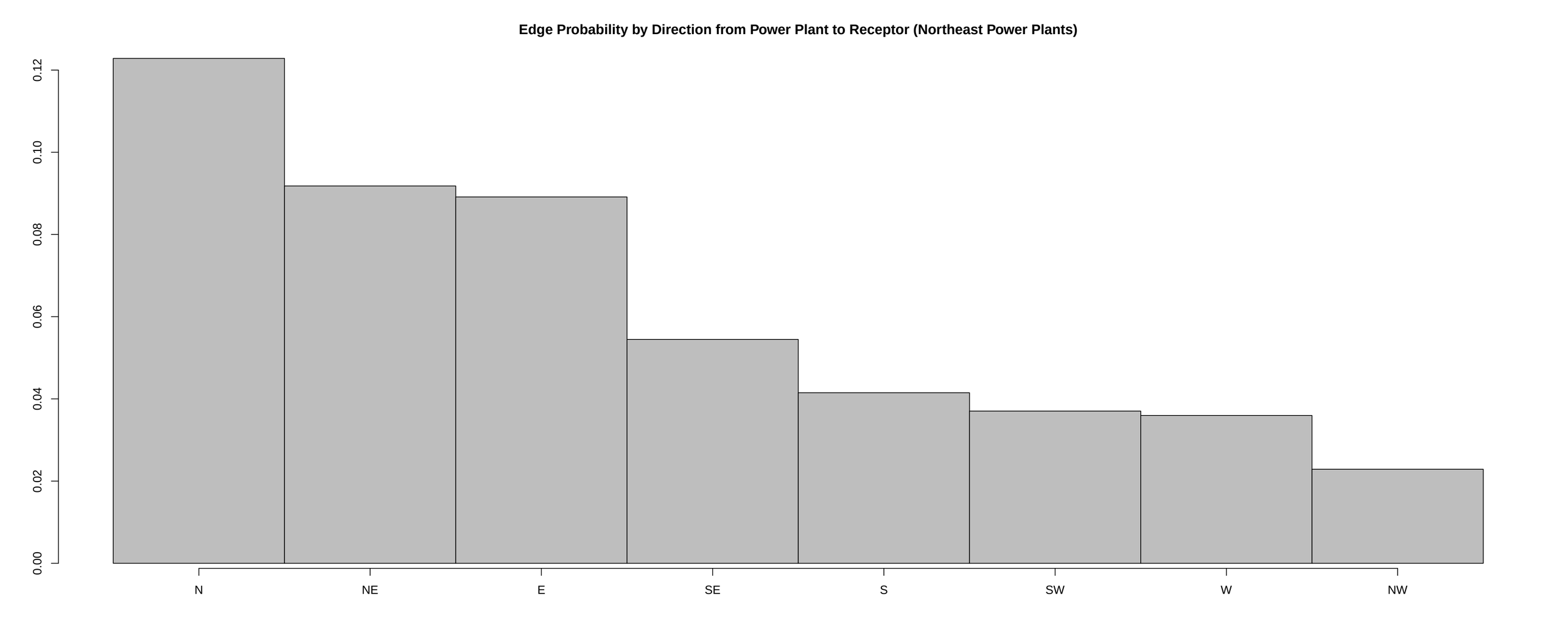

avgPM_summer_decomposed75
Large coal power plant
Coal power plant
AQS monitor

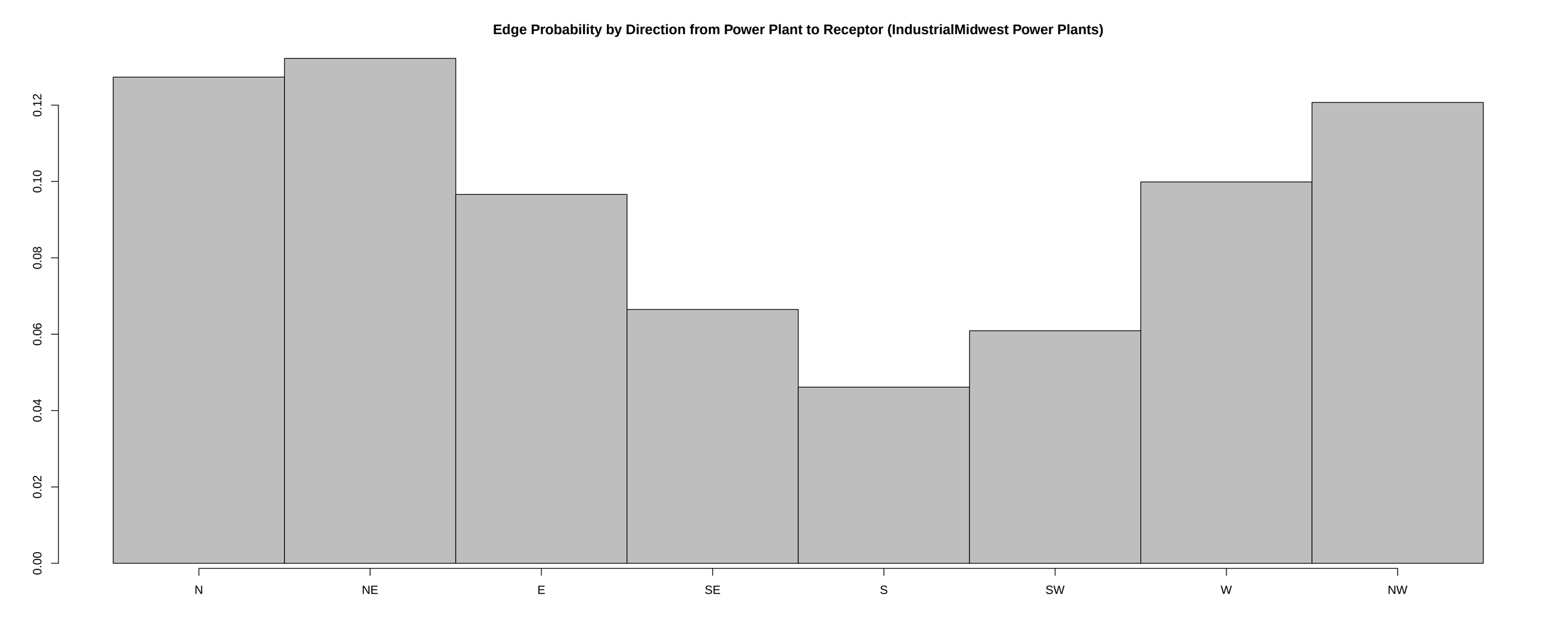

Northeast − summer 2005
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge

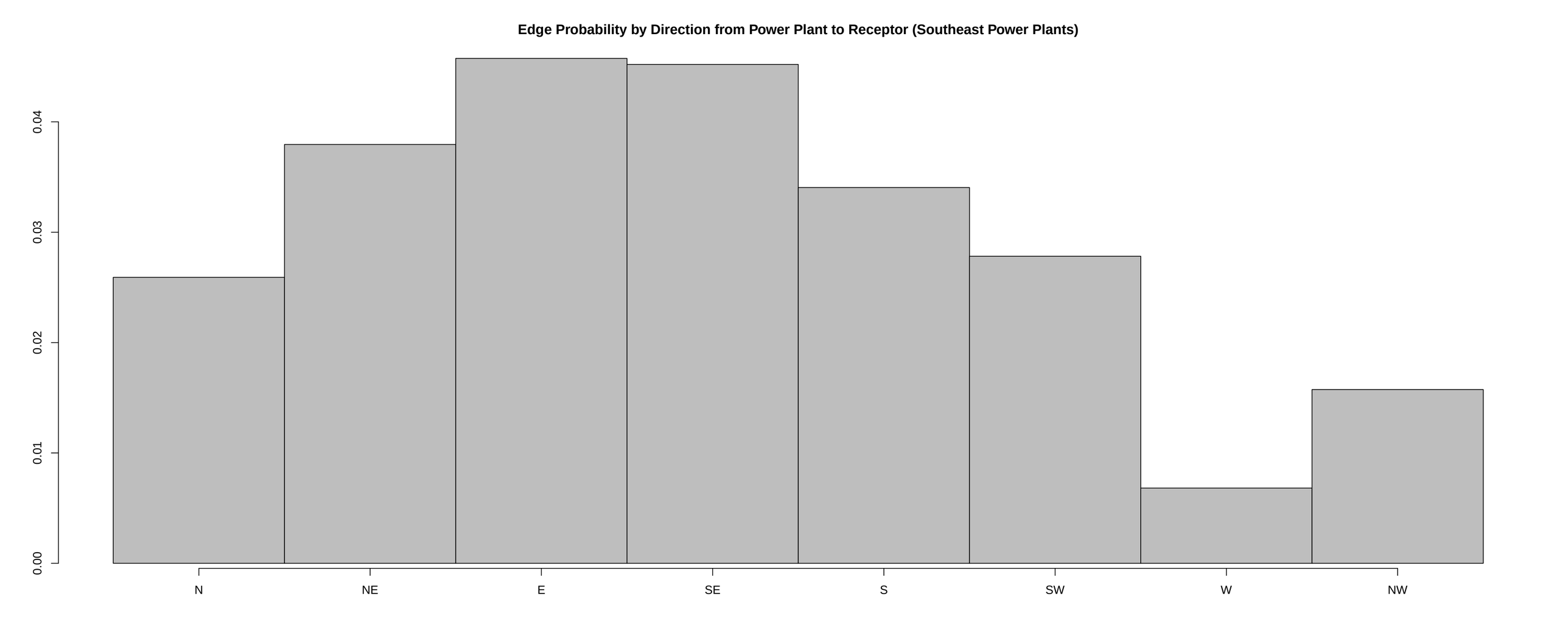

IndustrialMidwest − summer 2005
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge

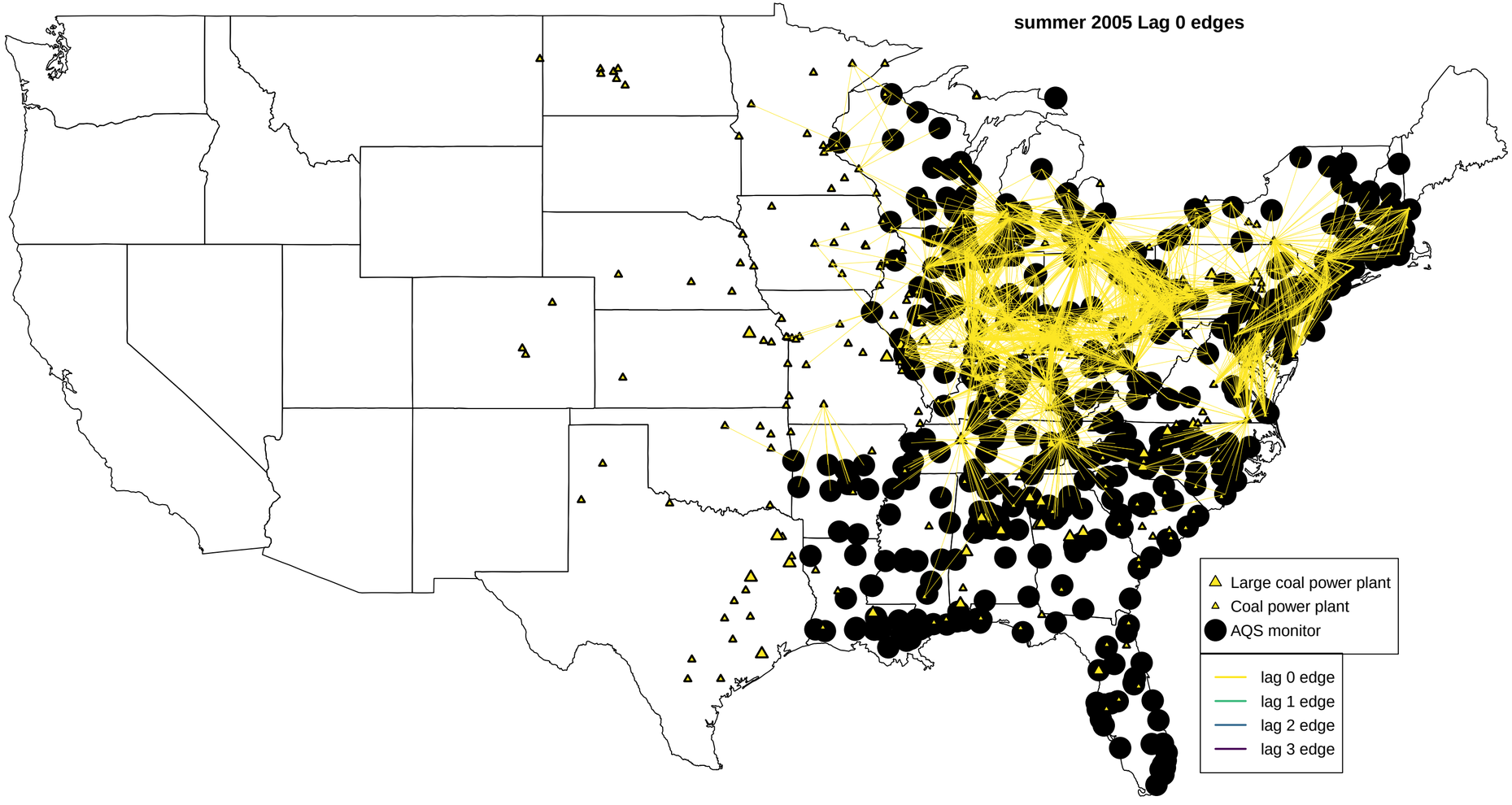

Southeast − summer 2005
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge

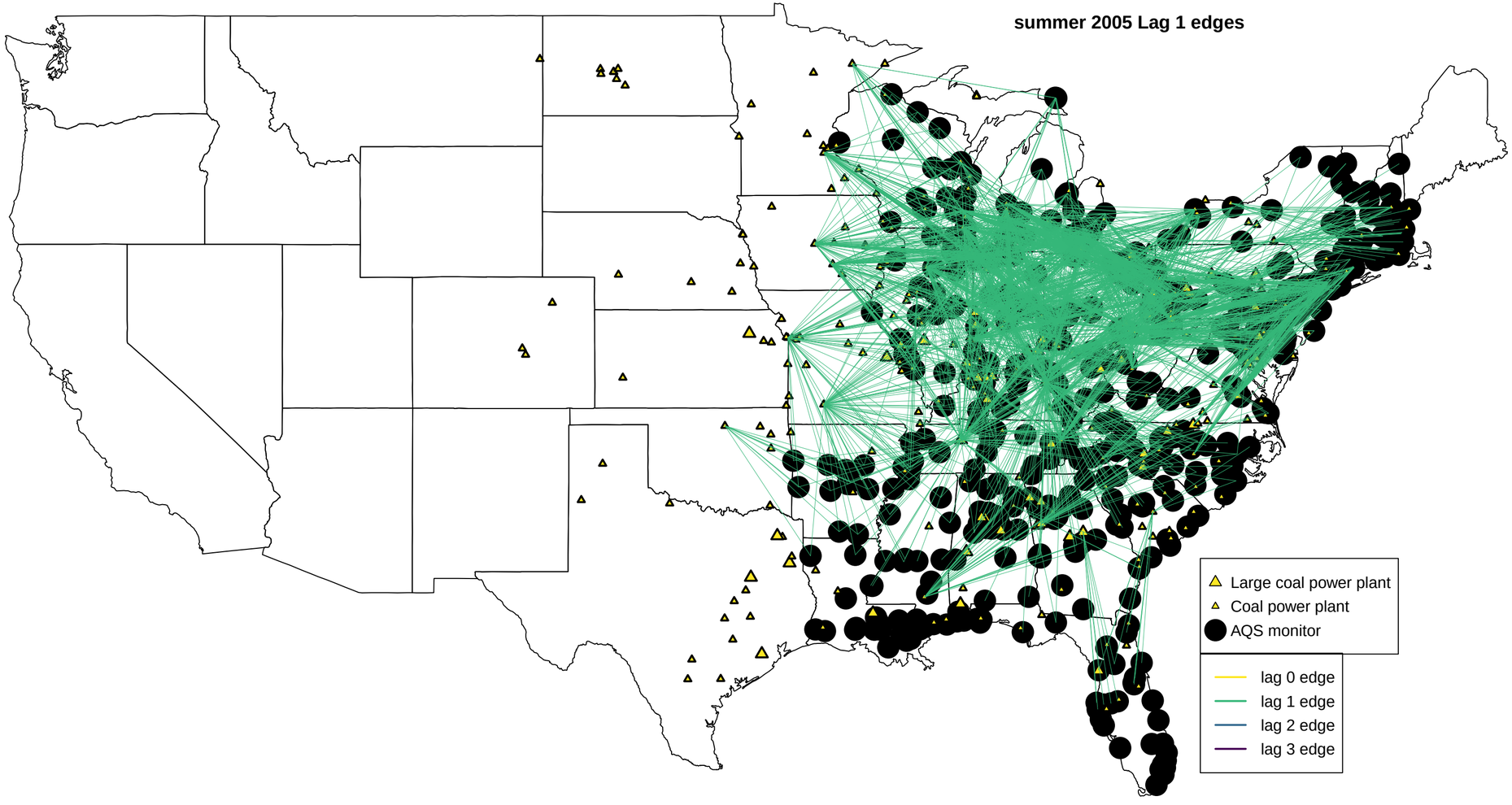

Edge Probability by Lag
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0
1
2
3

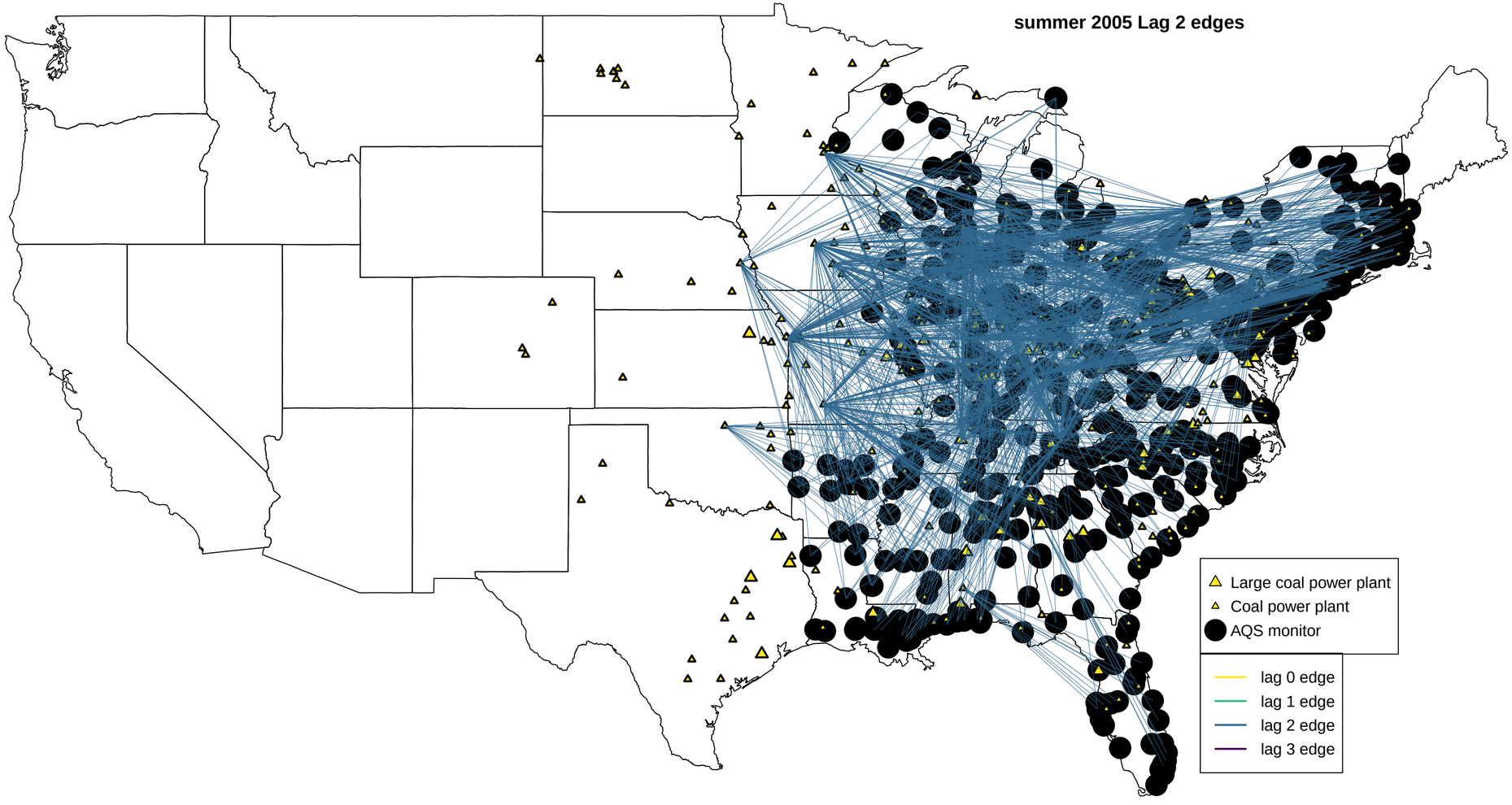

Edge Probability by Direction from Power Plant to Receptor (Northeast Power Plants)
0.00
0.02
0.04
0.06
0.08
0.10
0.12
N
NE
E
SE
S
SW
W
NW

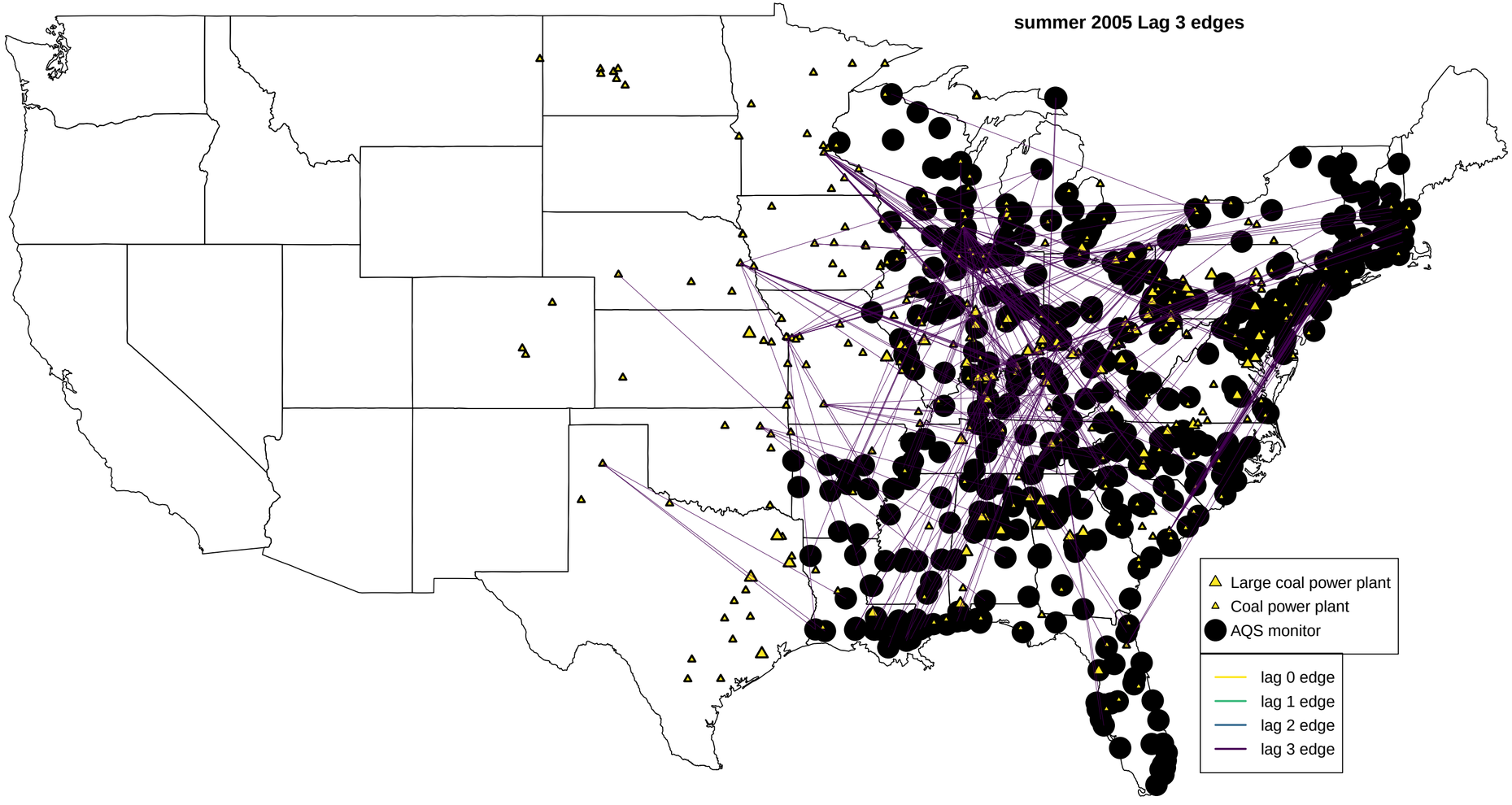

Edge Probability by Direction from Power Plant to Receptor (IndustrialMidwest Power Plants)
0.00
0.02
0.04
0.06
0.08
0.10
0.12
N
NE
E
SE
S
SW
W
NW


Edge Probability by Direction from Power Plant to Receptor (Southeast Power Plants)
0.00
0.01
0.02
0.03
0.04
N
NE
E
SE
S
SW
W
NW

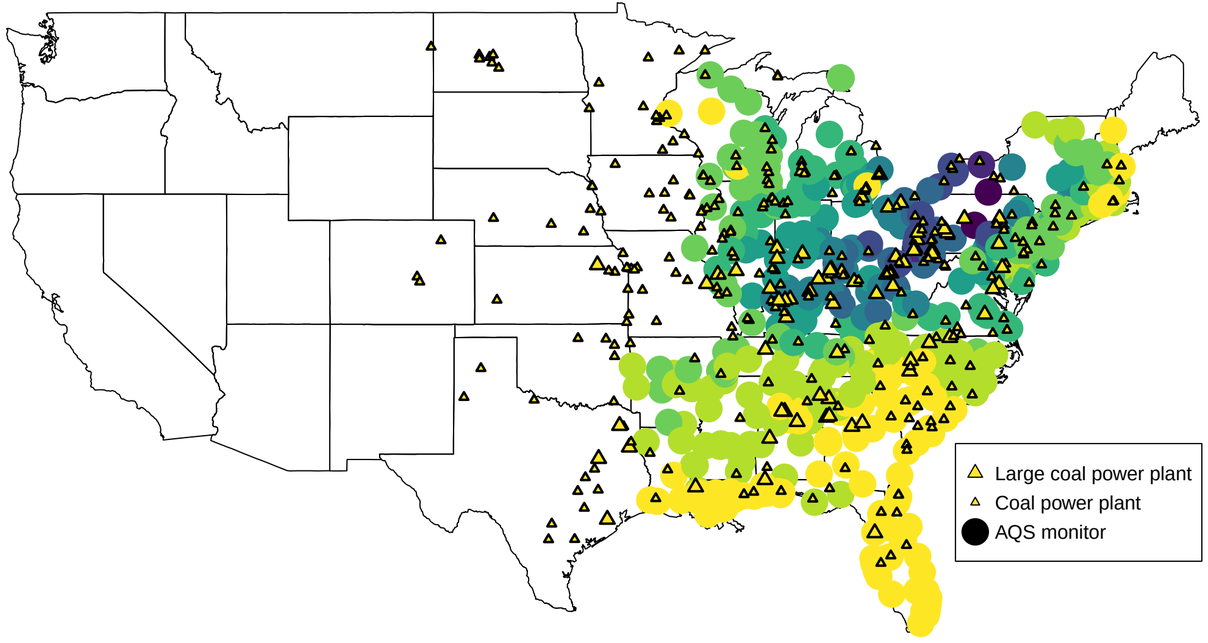

summer 2005 Lag 0 edges
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge


summer 2005 Lag 1 edges
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge

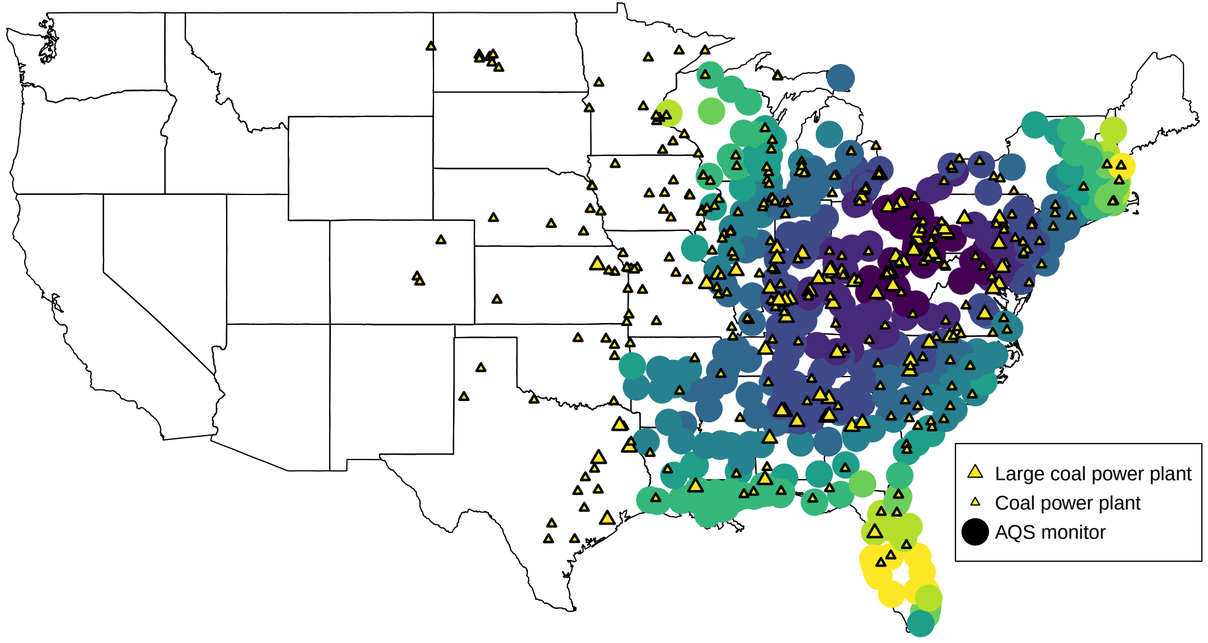

summer 2005 Lag 2 edges
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge


summer 2005 Lag 3 edges
Large coal power plant
Coal power plant
AQS monitor
lag 0 edge
lag 1 edge
lag 2 edge
lag 3 edge

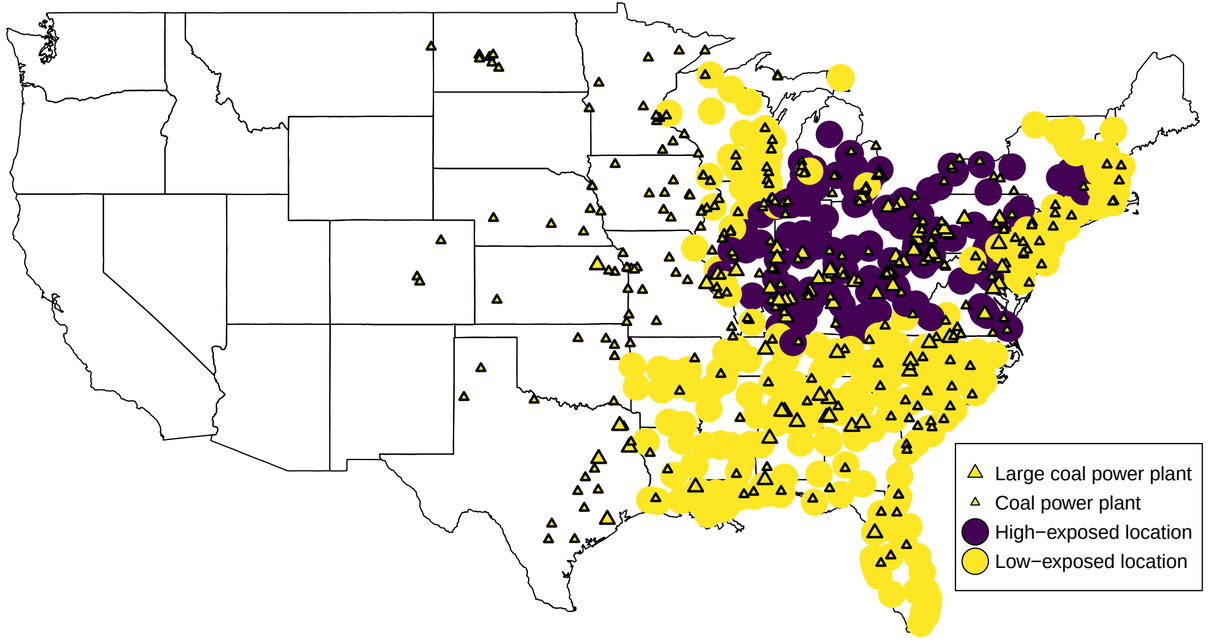
sum of gams.coeff summer 2005



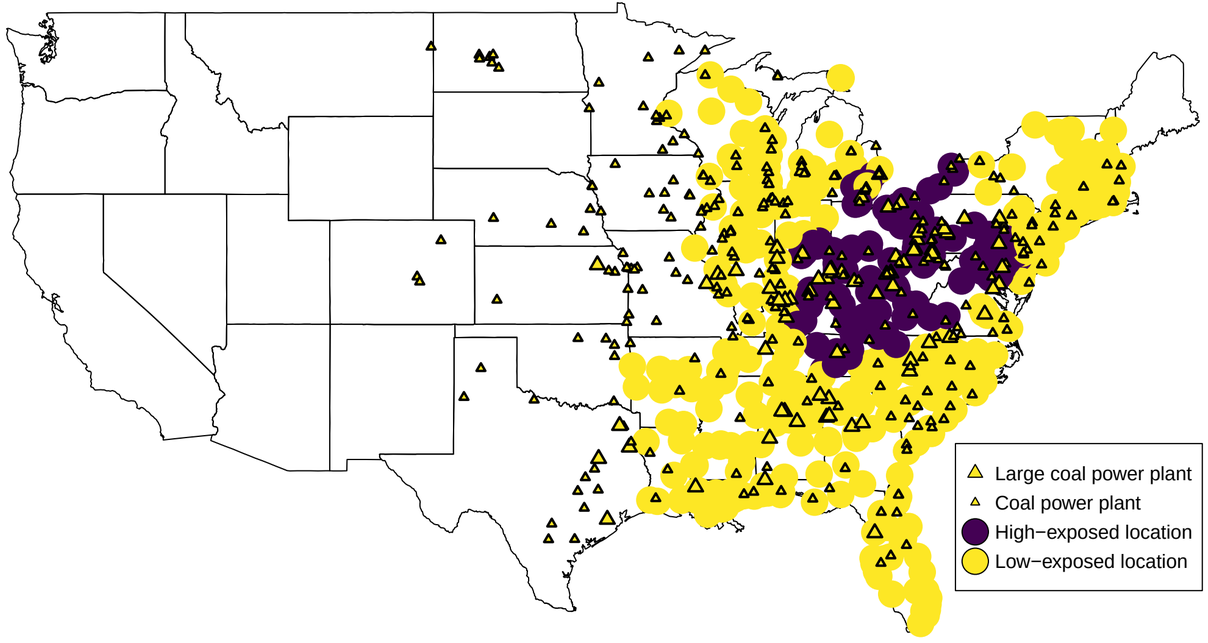
avgPM_decomposed75 summer 2005



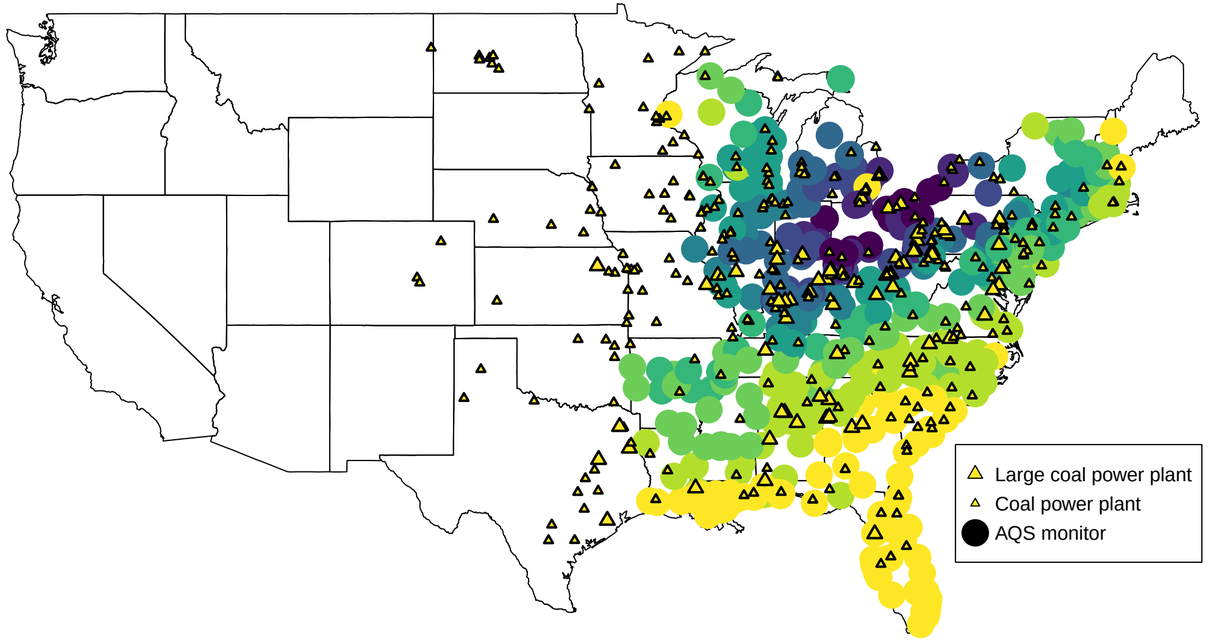
sum of gams.coeff summer 2005



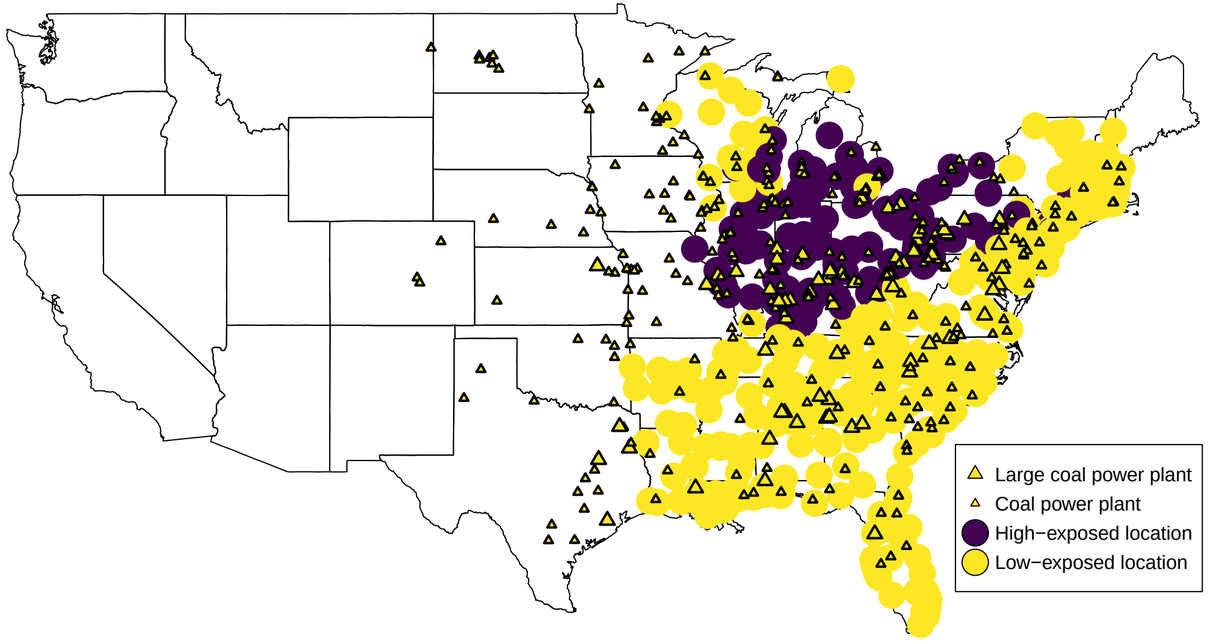
avgPM_decomposed75 summer 2005

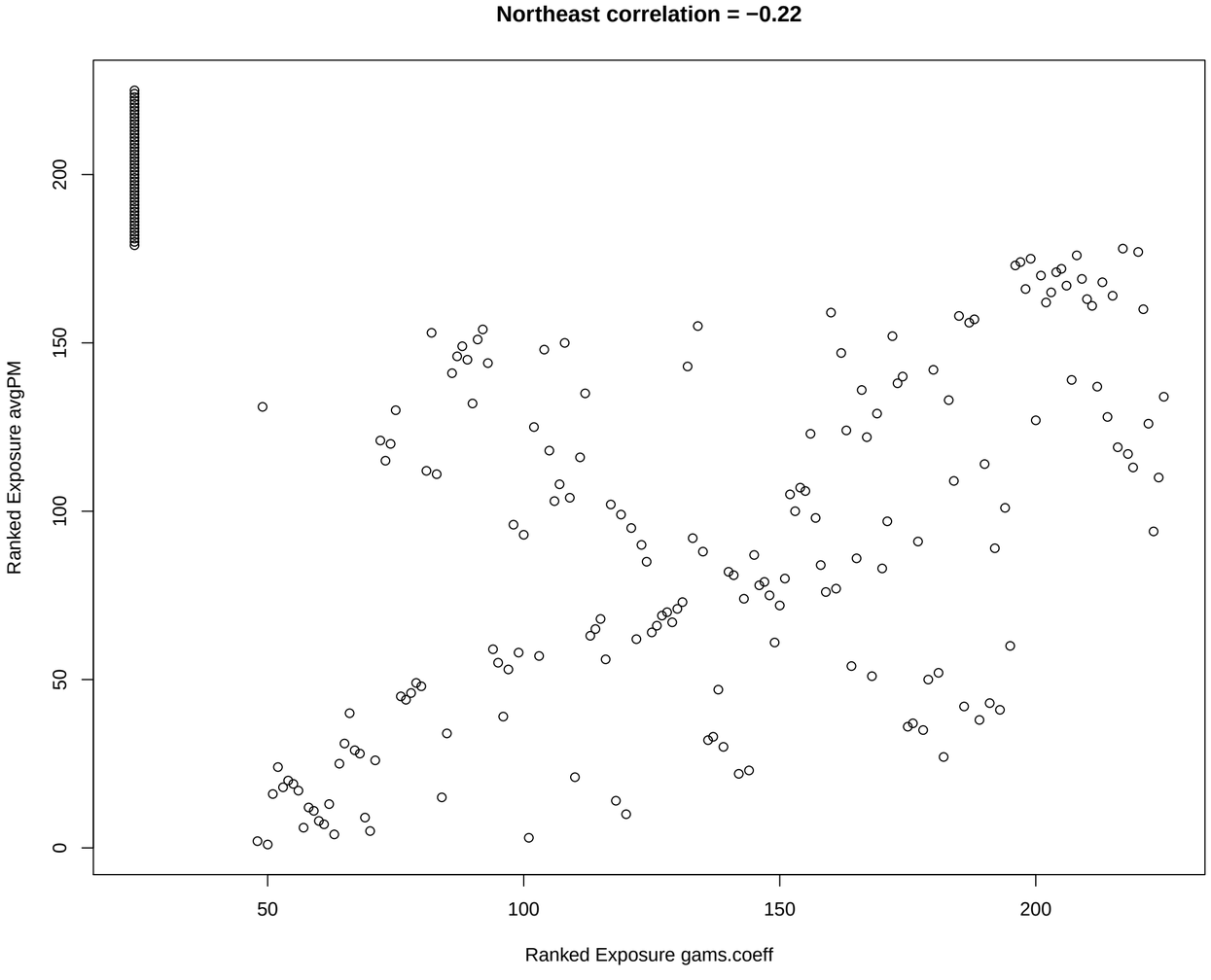


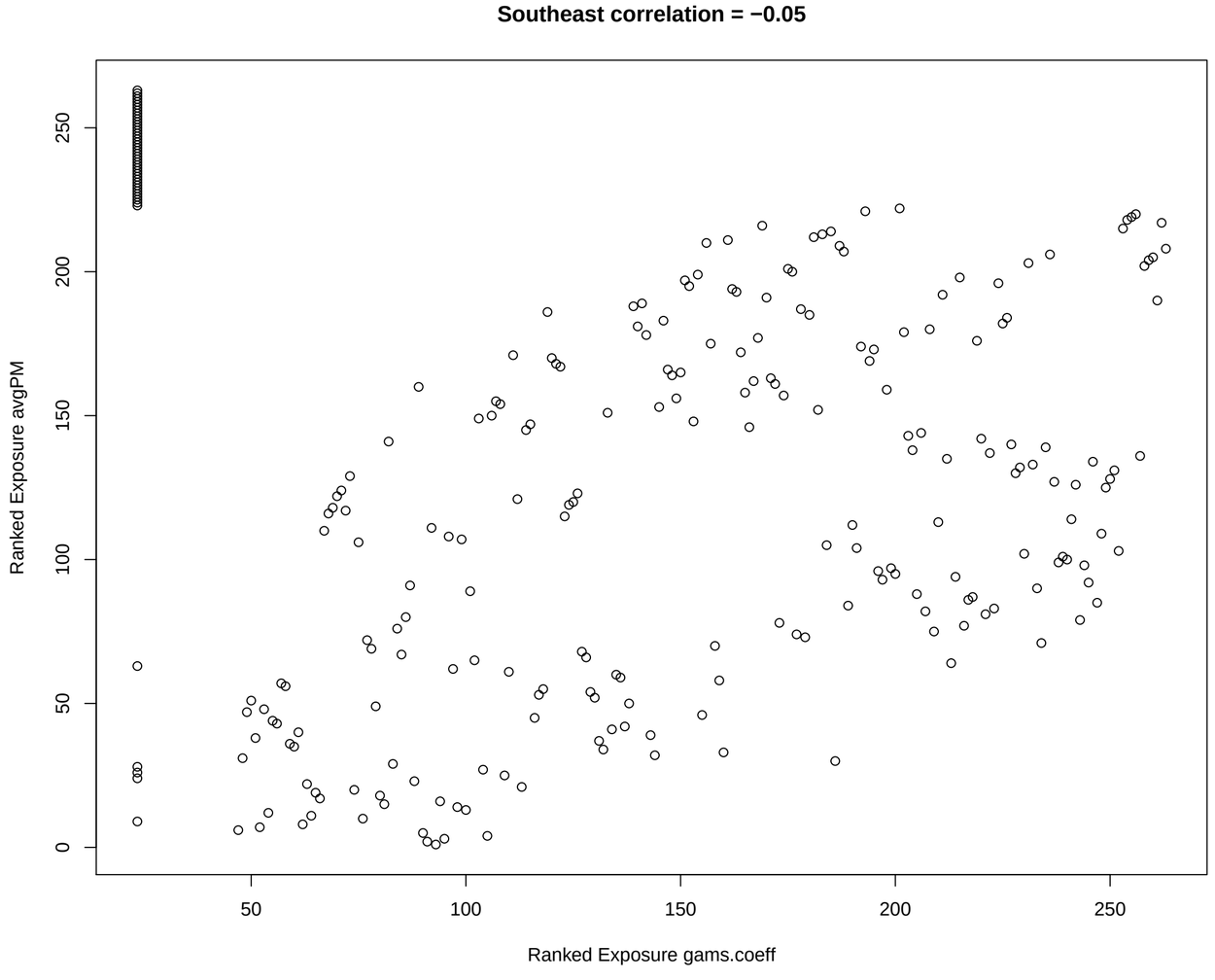
num_edges summer 2005

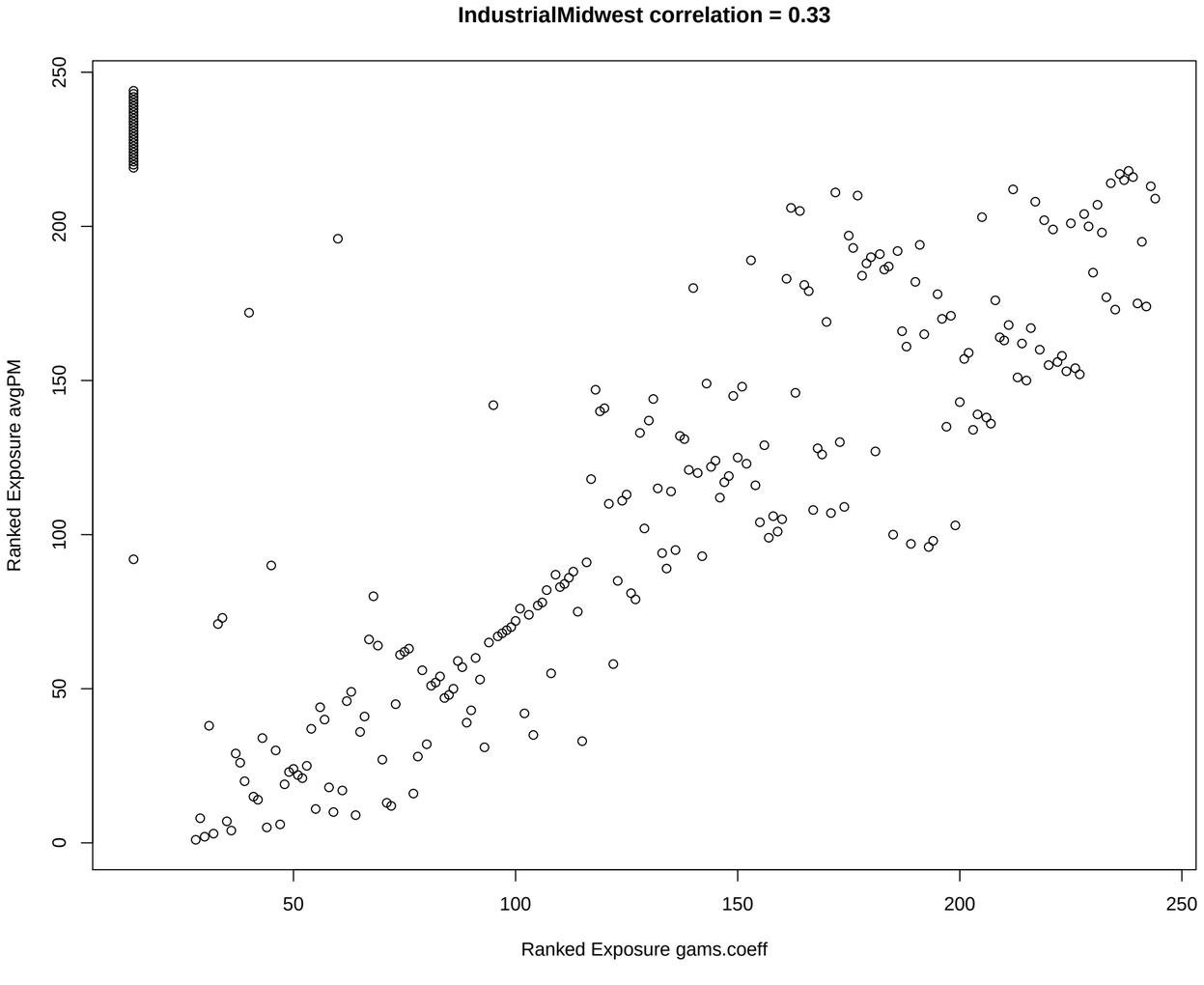


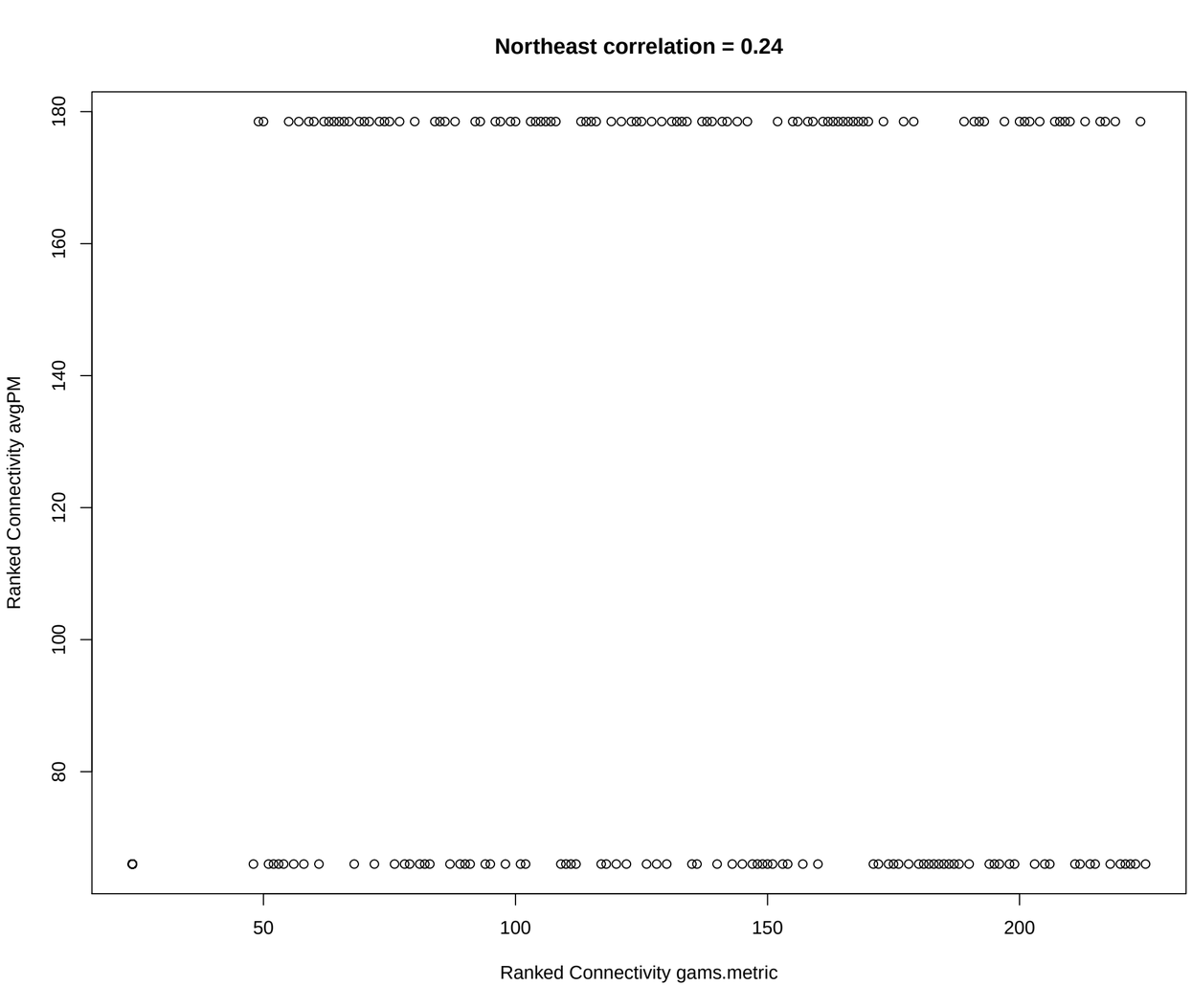
num_edges summer 2005

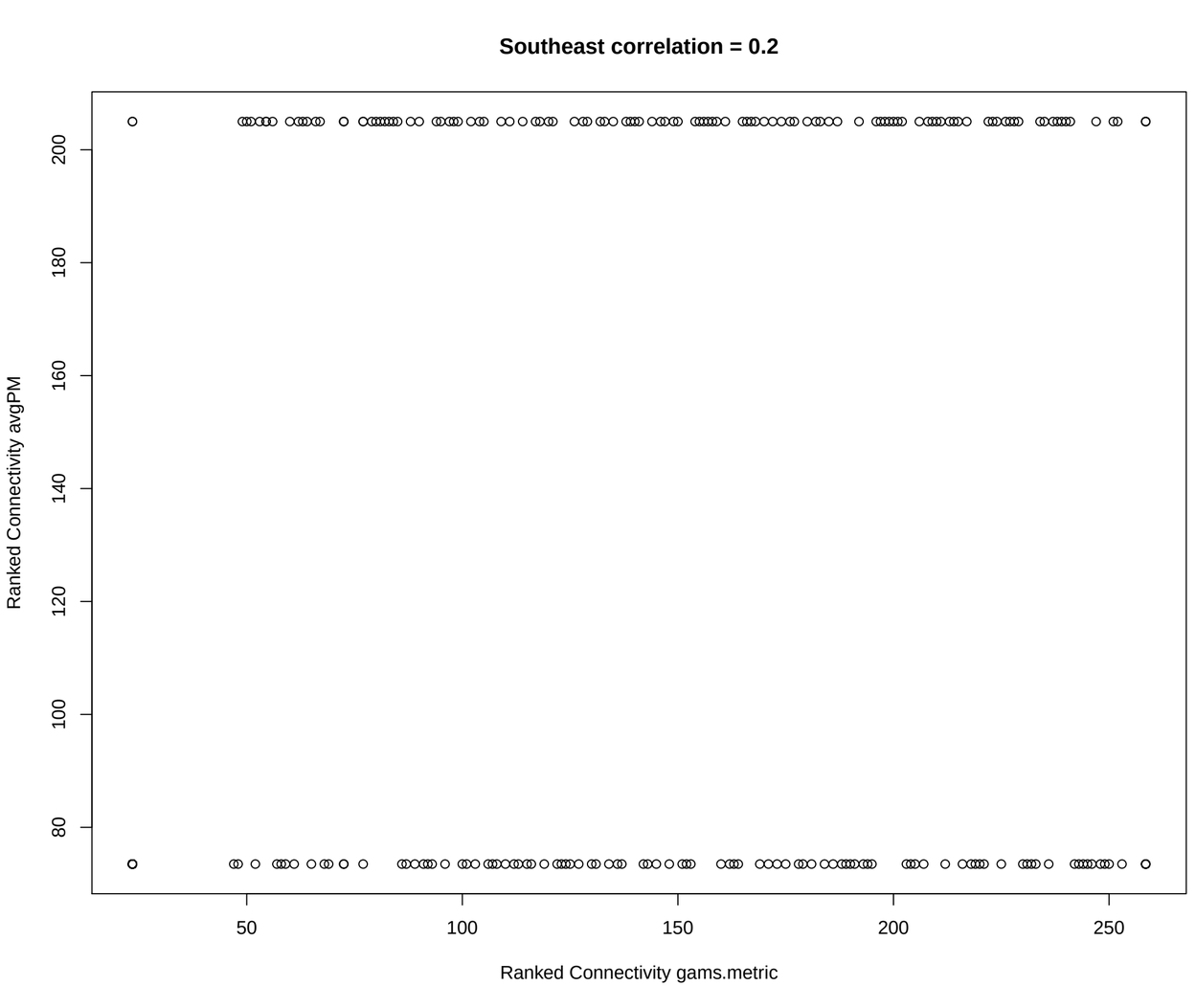


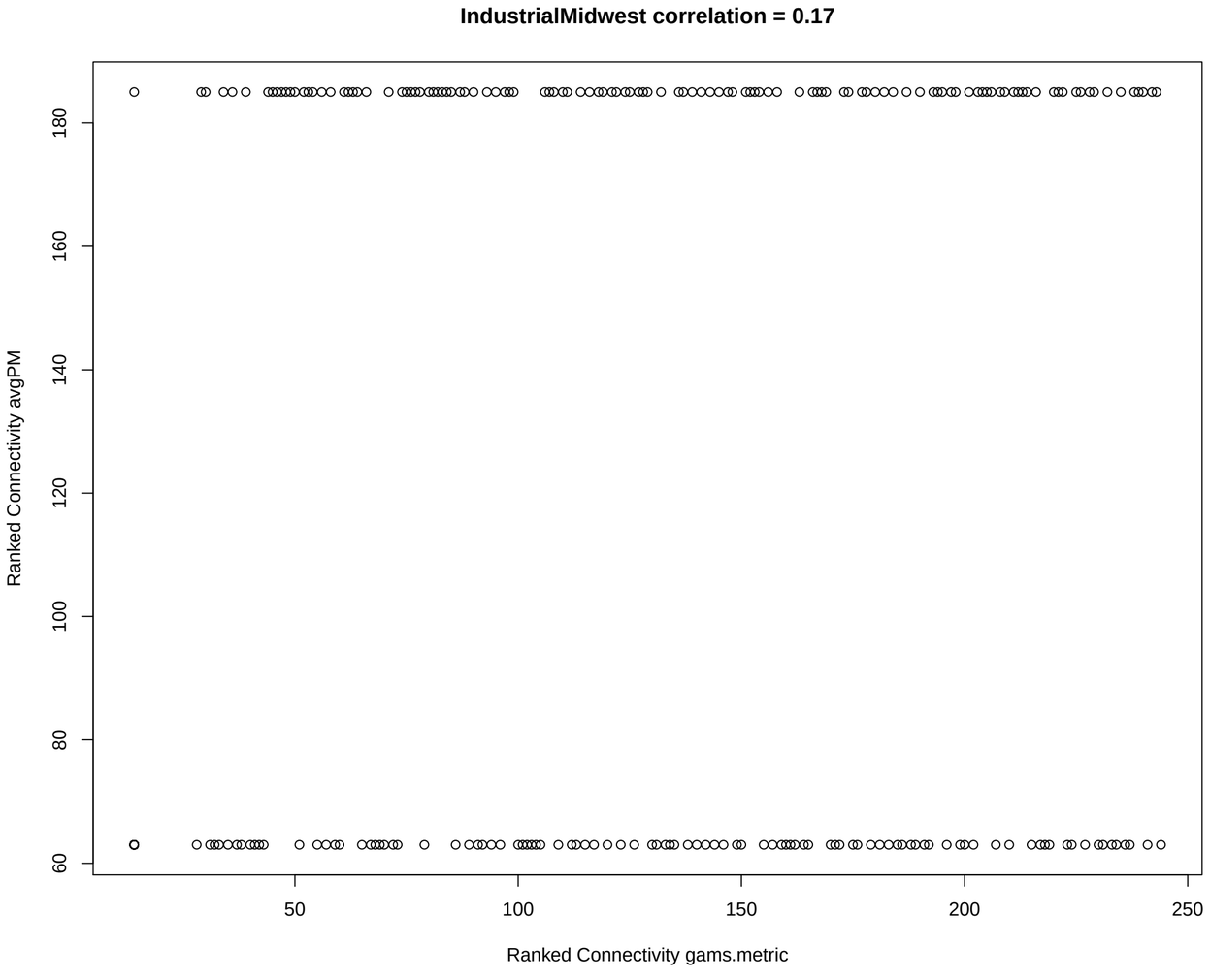

Northeast correlation = −0.22
Ranked Exposure avgPM
Ranked Exposure gams.coeff
0
50
100
150
200
50
100
150
200

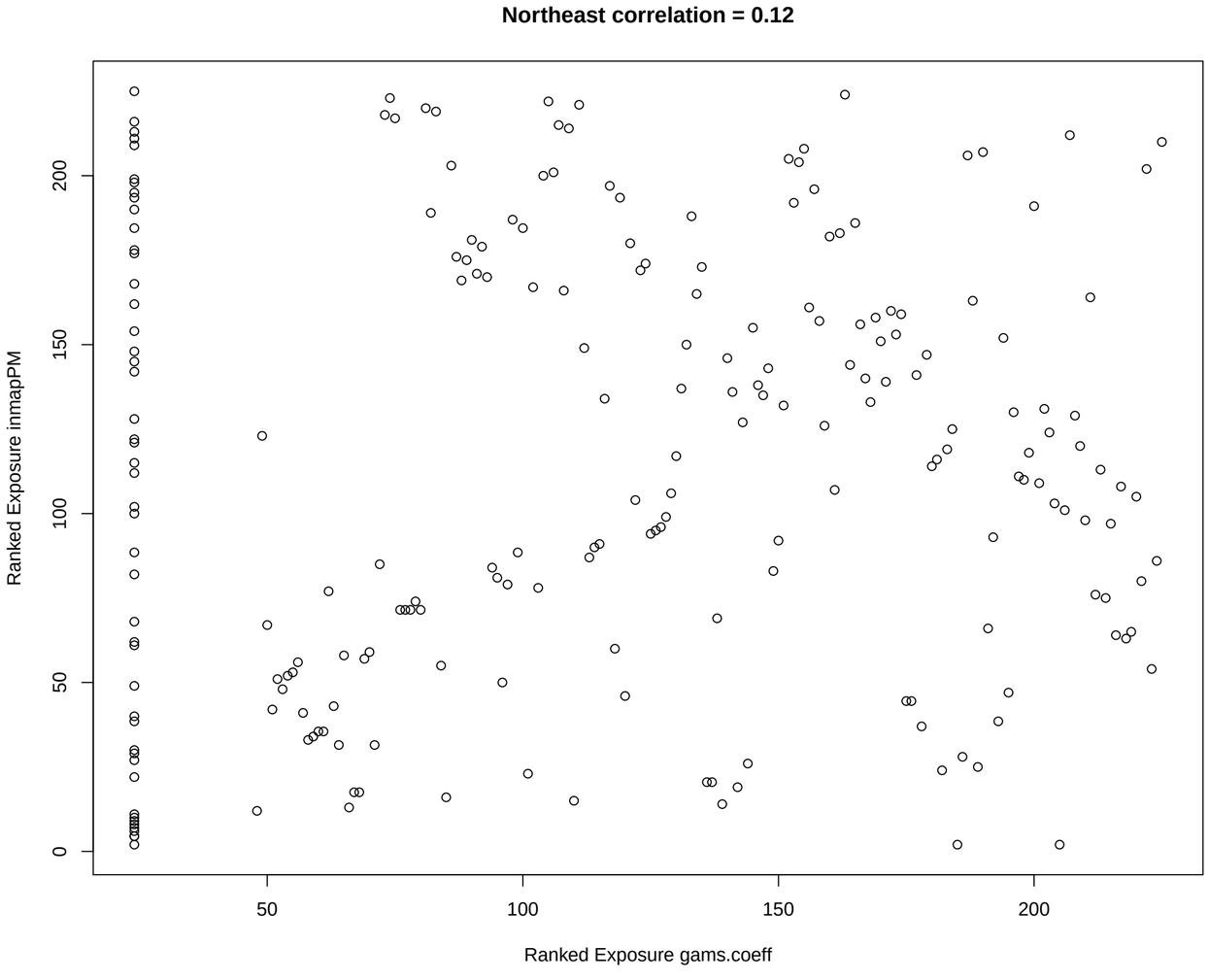

Southeast correlation = −0.05
Ranked Exposure avgPM
Ranked Exposure gams.coeff
0
50
100
150
200
250
50
100
150
200
250

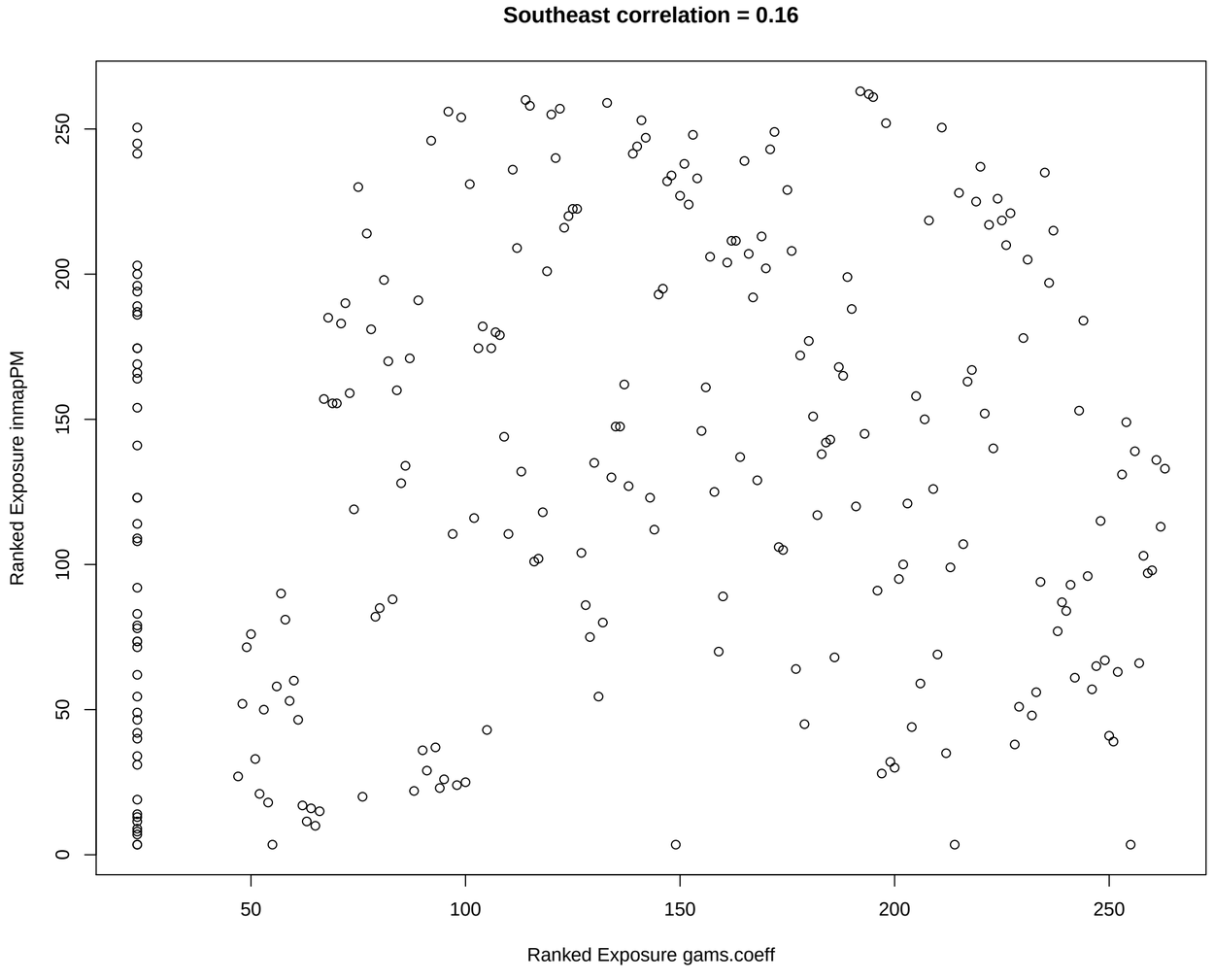

IndustrialMidwest correlation = 0.33
Ranked Exposure avgPM
Ranked Exposure gams.coeff
0
50
100
150
200
250
50
100
150
200
250

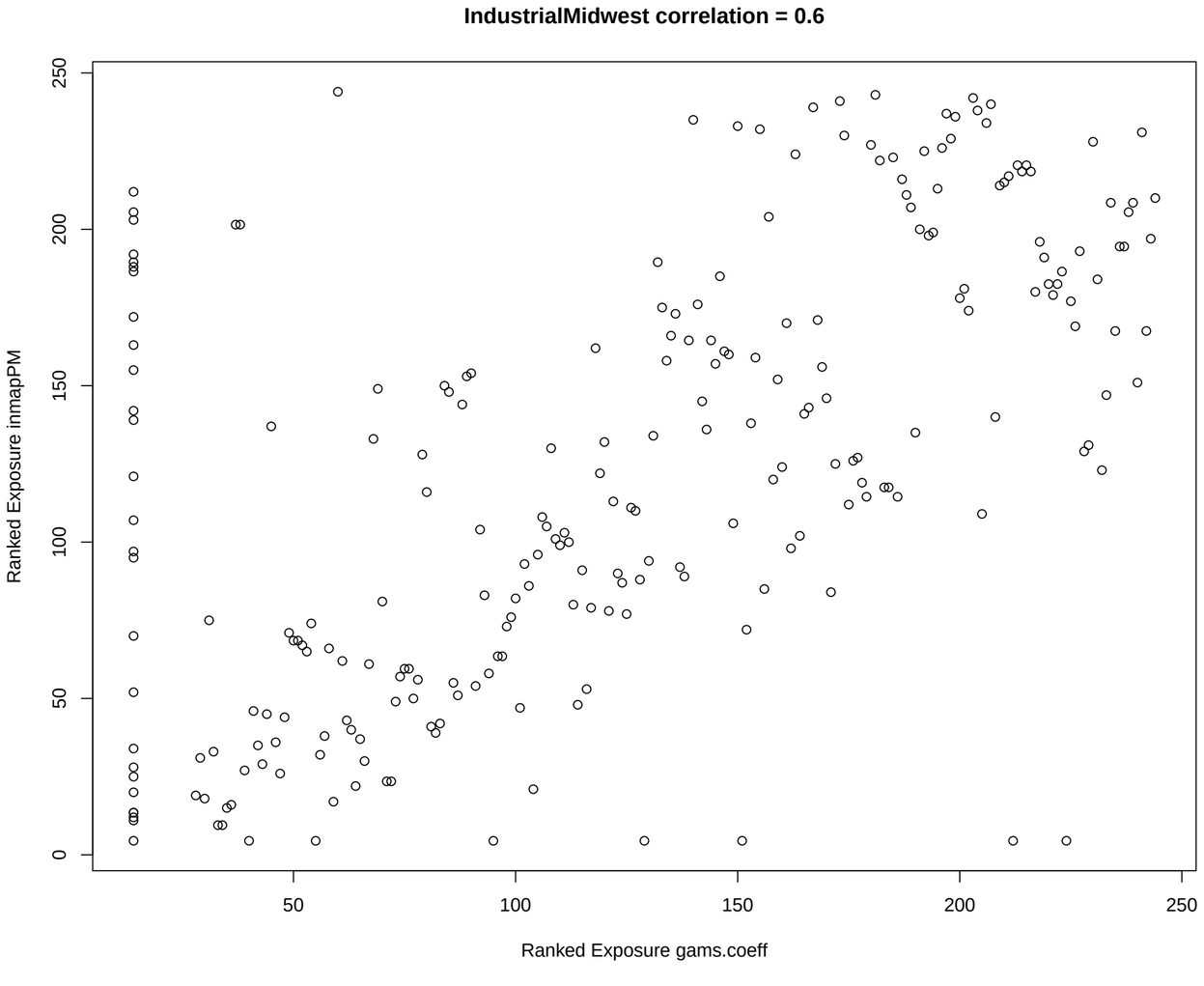

Northeast correlation = 0.24
Ranked Connectivity avgPM
Ranked Connectivity gams.metric
80
100
120
140
160
180
50
100
150
200


Southeast correlation = 0.2
Ranked Connectivity avgPM
Ranked Connectivity gams.metric
80
100
120
140
160
180
200
50
100
150
200
250


IndustrialMidwest correlation = 0.17
Ranked Connectivity avgPM
60
80
100
120
140
160
180
50
100
150
200
250
Ranked Connectivity gams.metric


Northeast correlation = 0.12
Ranked Exposure inmapPM
Ranked Exposure gams.coeff
0
50
100
150
200
50
100
150
200


Southeast correlation = 0.16
Ranked Exposure inmapPM
Ranked Exposure gams.coeff
0
50
100
150
200
250
50
100
150
200
250


IndustrialMidwest correlation = 0.6
Ranked Exposure inmapPM
Ranked Exposure gams.coeff
0
50
100
150
200
250