

**SUPPLEMENTAL MATERIALS FOR**  
**MAPPING LEXICAL INNOVATION ON AMERICAN SOCIAL MEDIA**  
**Jack Grieve, Andrea Nini, and Diansheng Guo**

**APPENDIX I**

Lexical emergence maps for the 54 emerging words

Based on a 3<sup>rd</sup> quartile relative frequency threshold

**APPENDIX II**

Getis-Ord  $G_i^*$  local spatial autocorrelation maps for the 54 lexical emergence maps

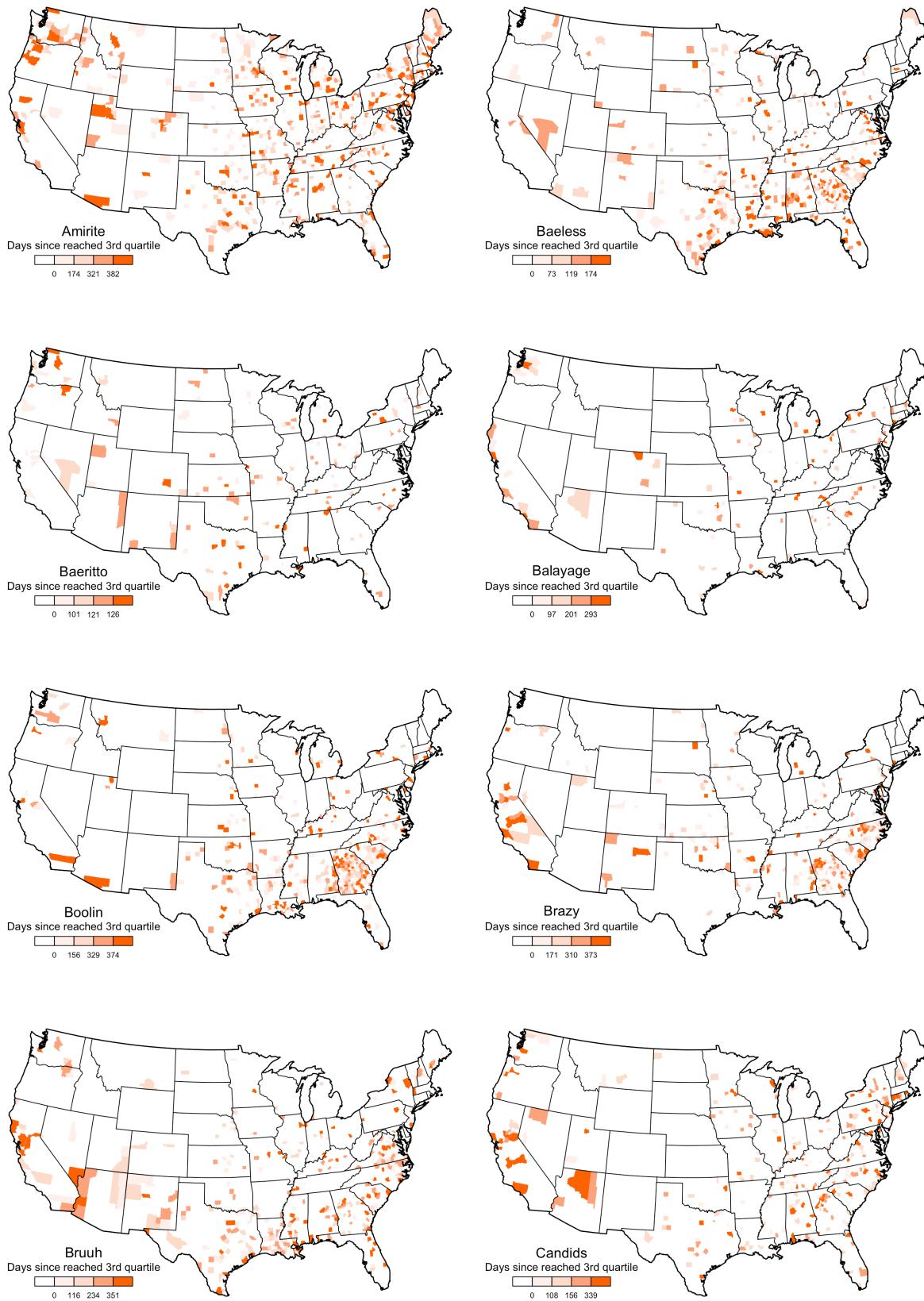
Based on a 25 nearest neighbour spatial weights matrix

**APPENDIX III**

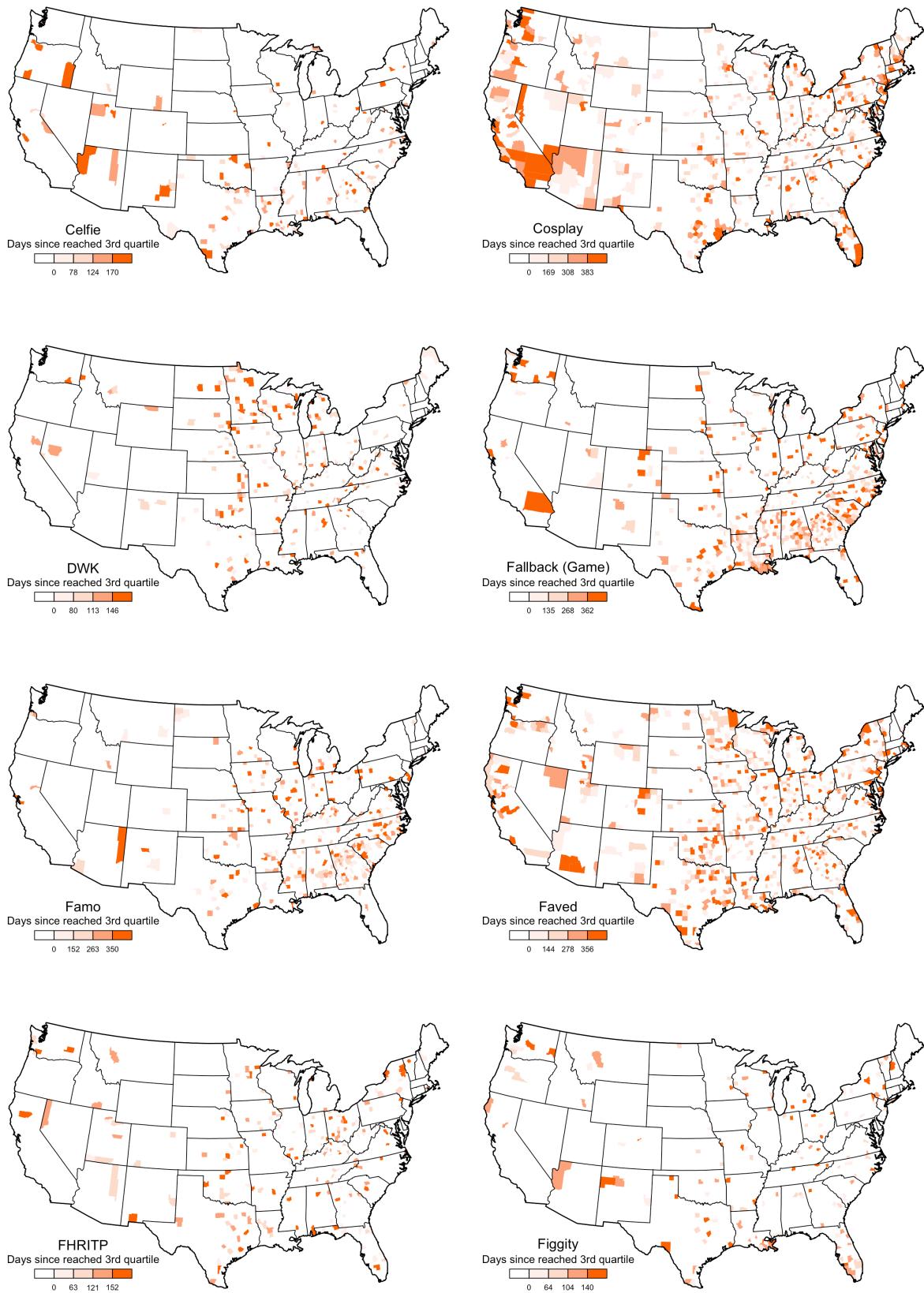
Common patterns of lexical innovation

Generated through a multivariate spatial analysis of the 54 lexical emergence maps

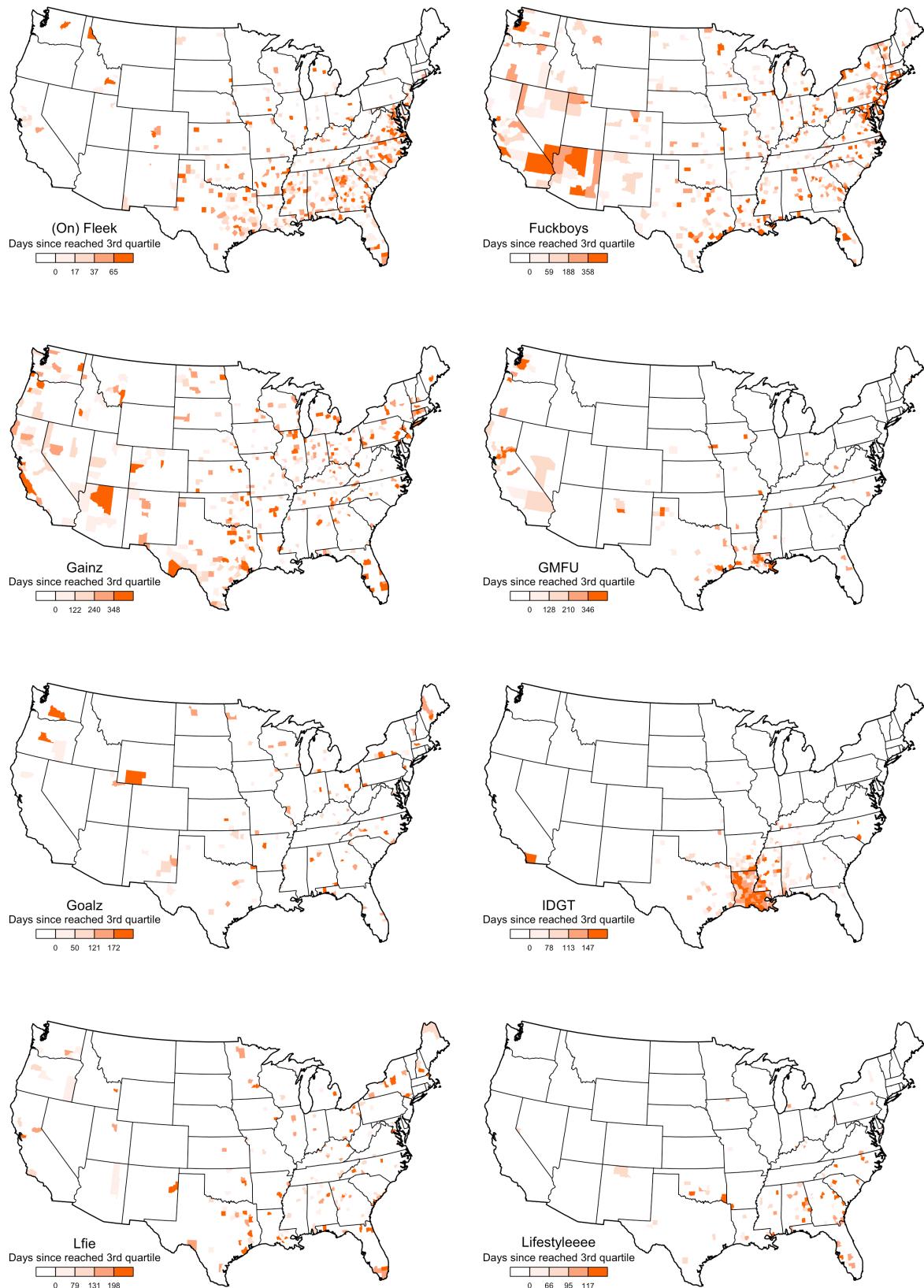
Showing the effect of varying a range of parameter settings



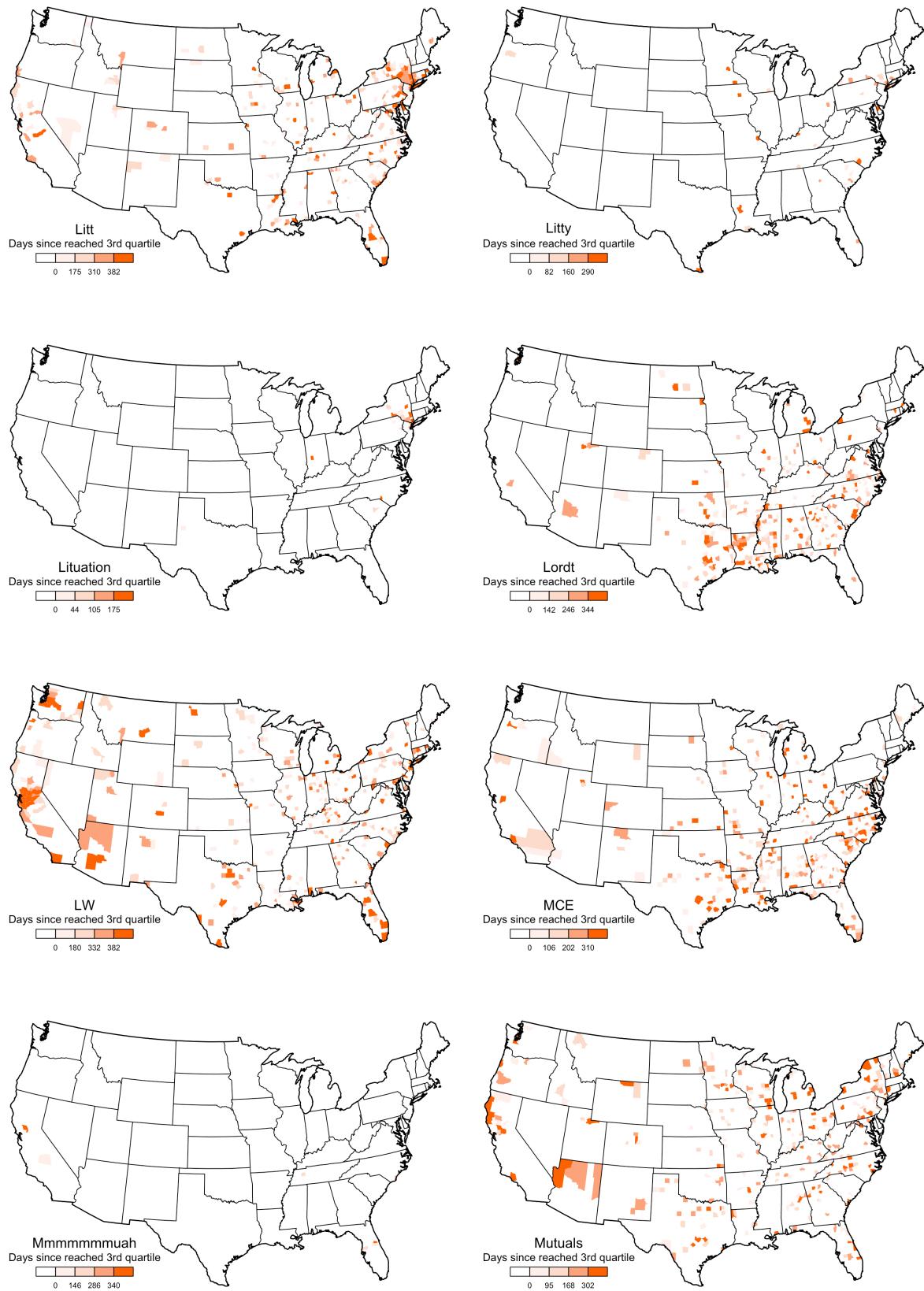
Appendix I: Lexical Emergence Maps (Part 1)



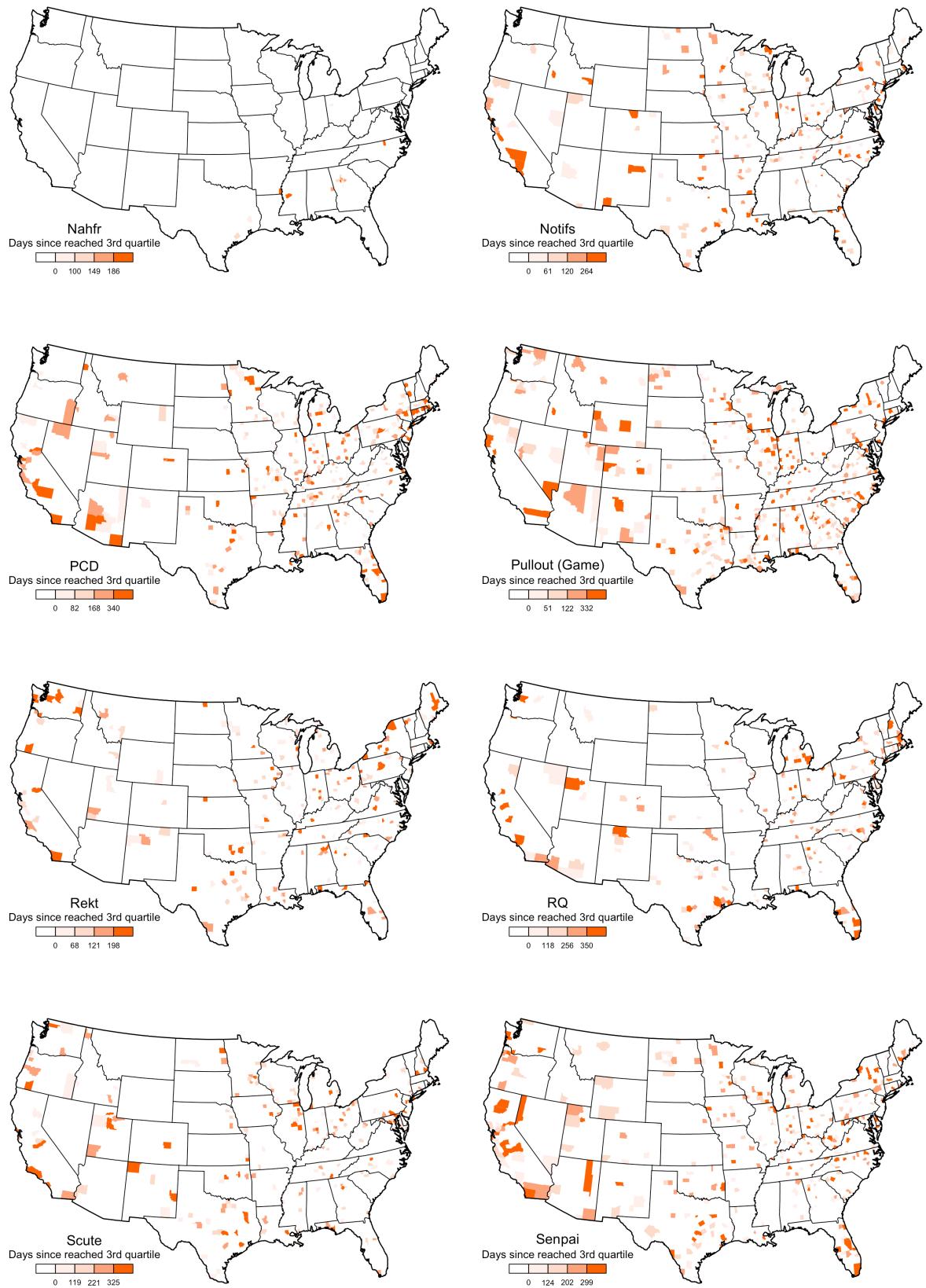
Appendix I: Lexical Emergence Maps (Part 2)



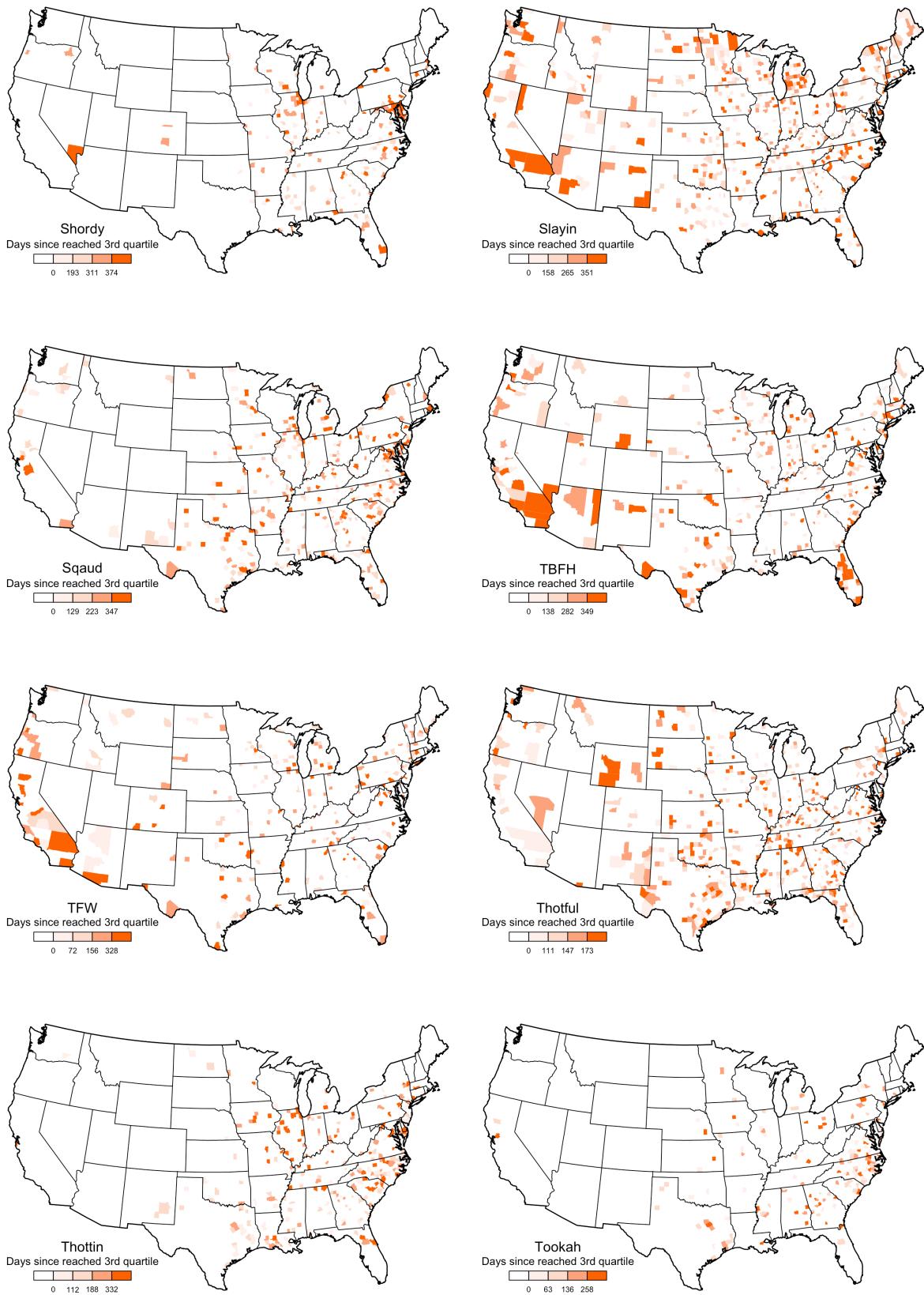
Appendix I: Lexical Emergence Maps (Part 3)



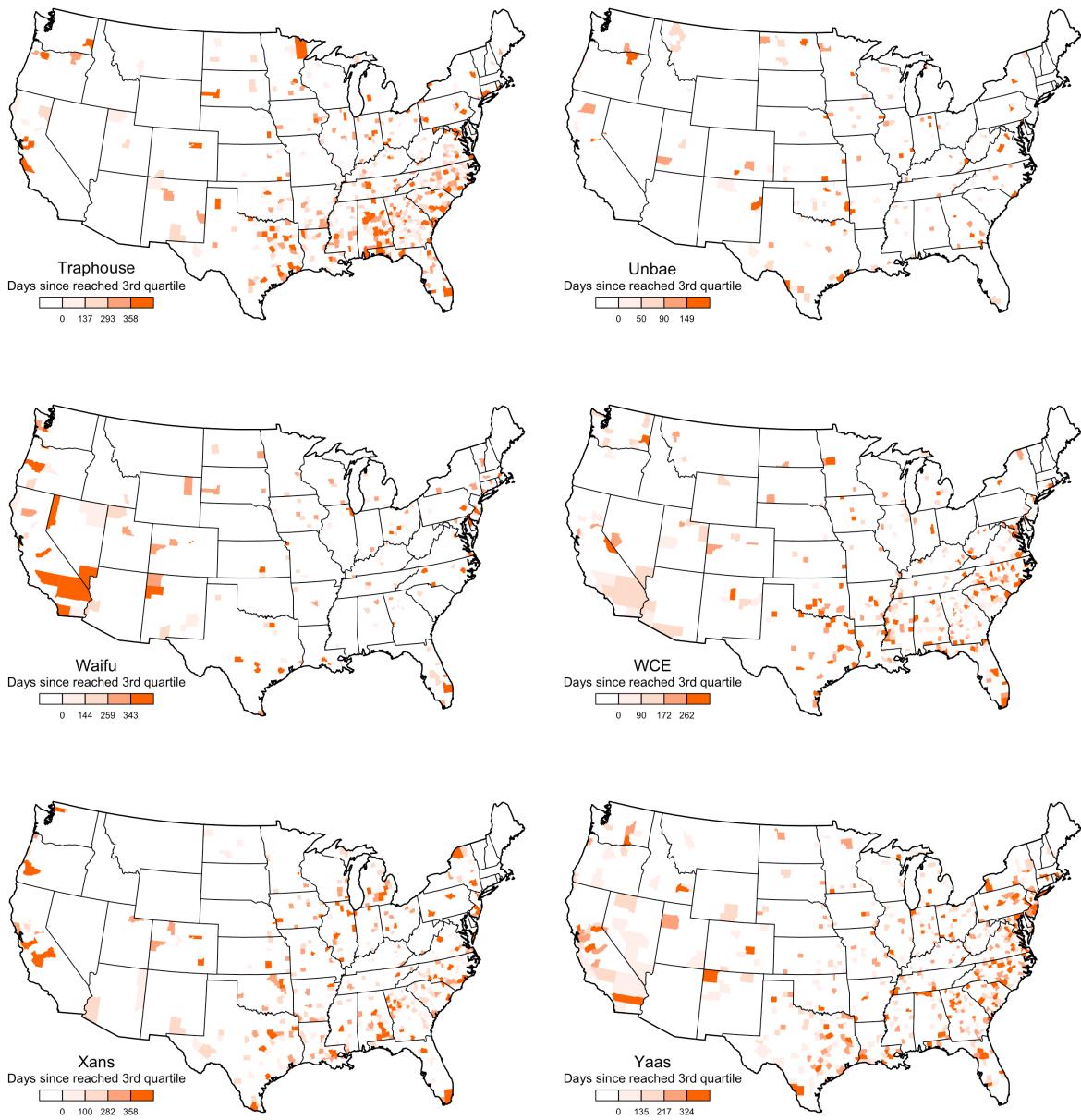
Appendix I: Lexical Emergence Maps (Part 4)



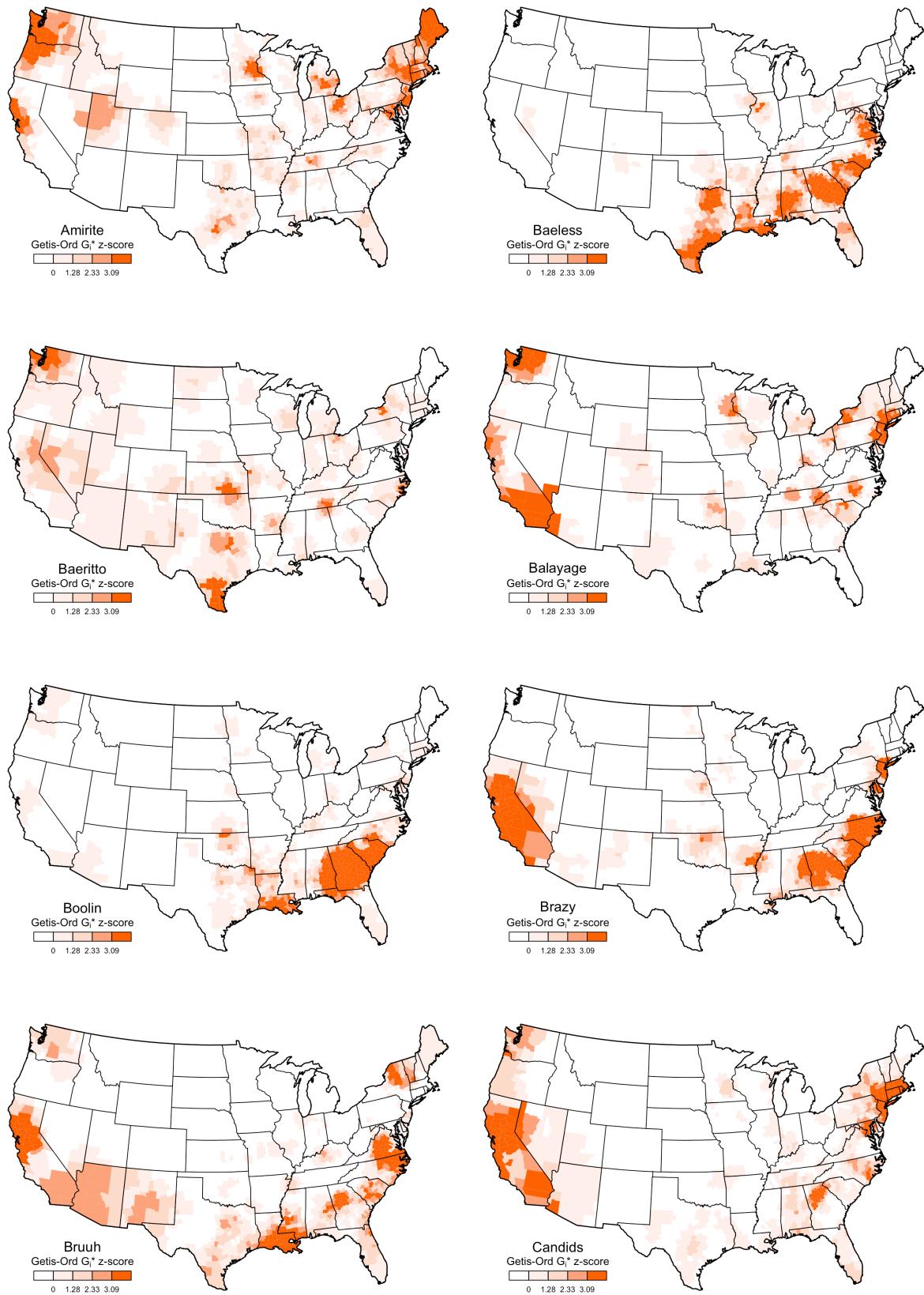
Appendix I: Lexical Emergence Maps (Part 5)



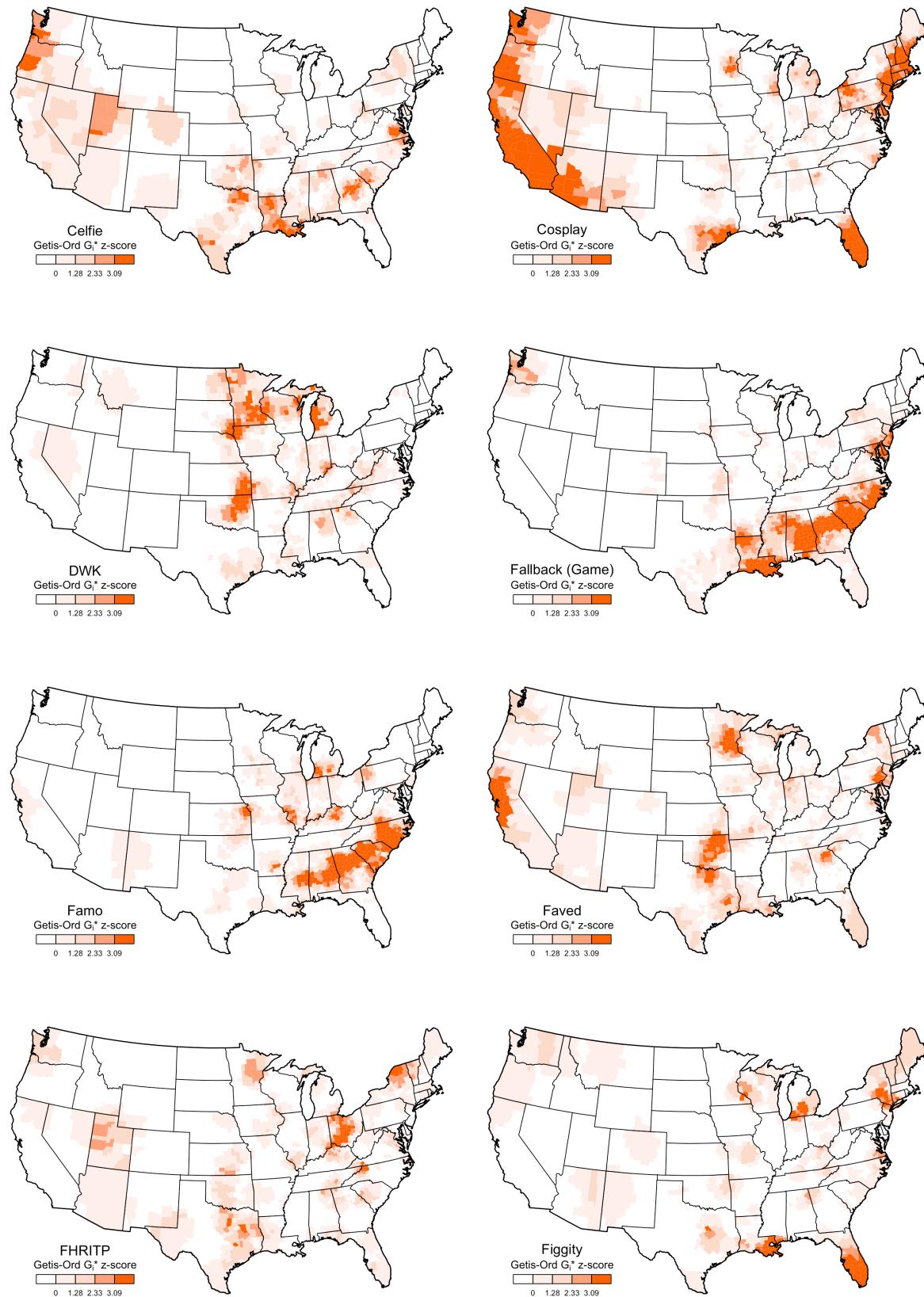
Appendix I: Lexical Emergence Maps (Part 6)



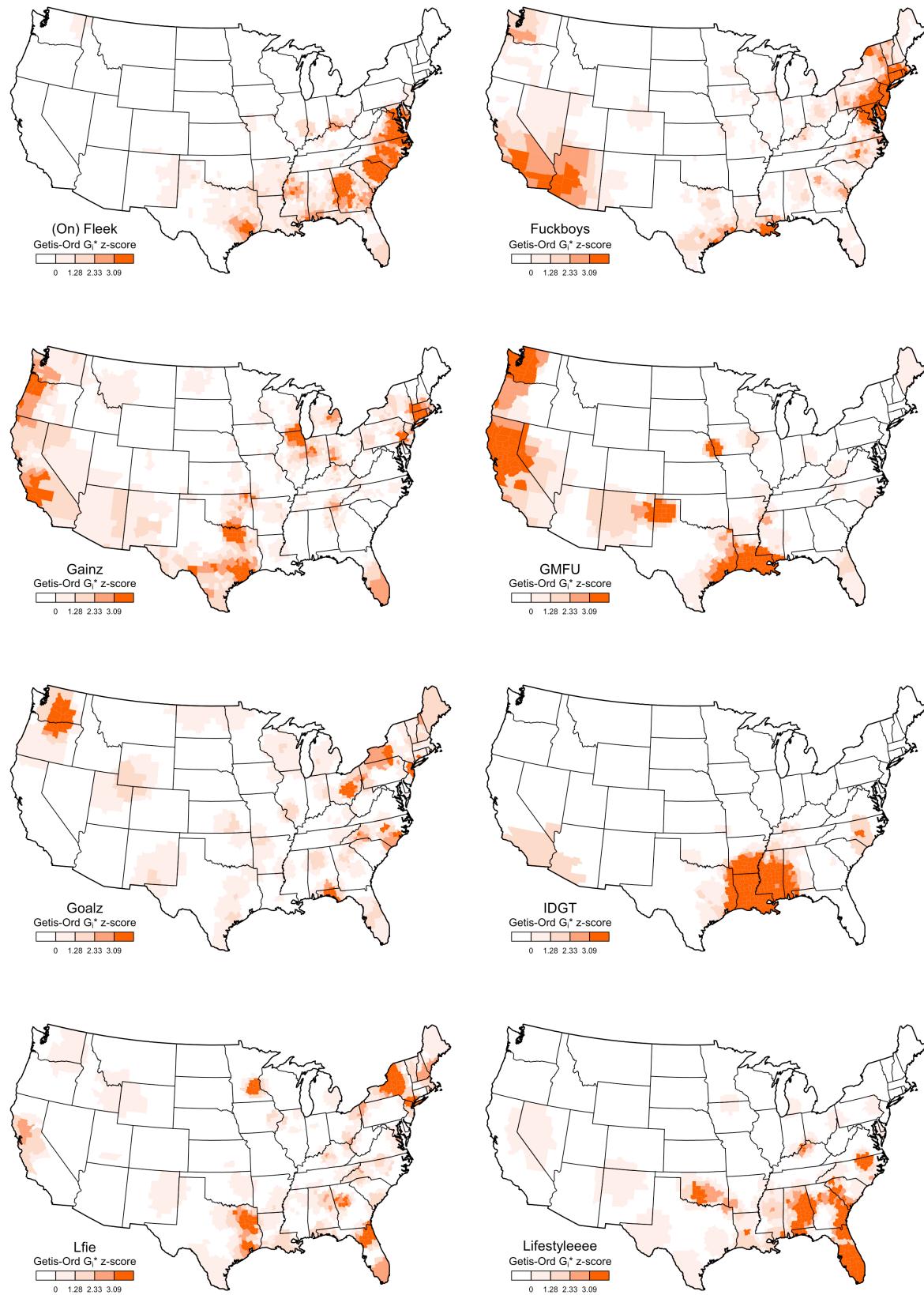
Appendix I: Lexical Emergence Maps (Part 7)



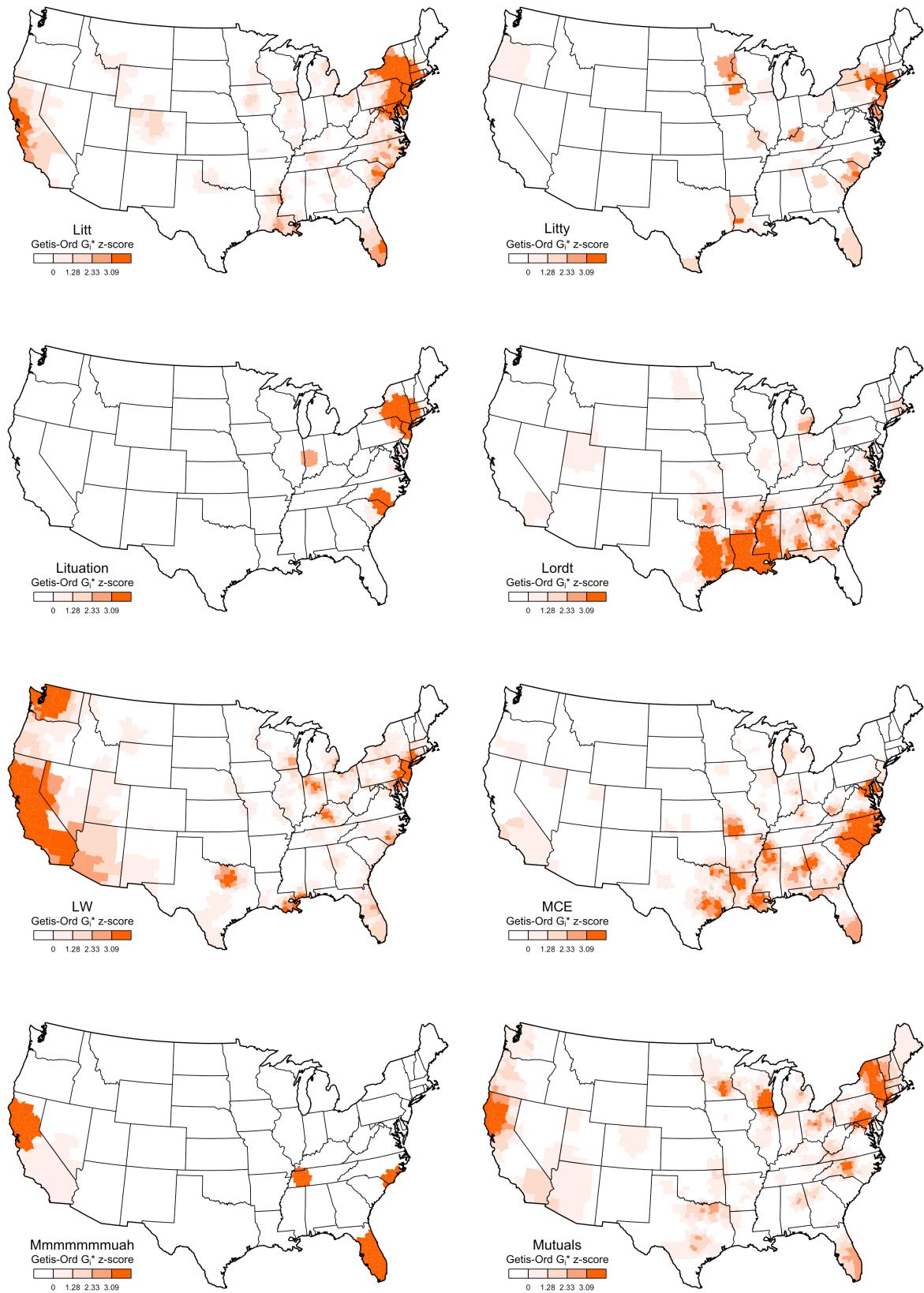
Appendix II: Local Spatial Autocorrelation Maps (Part 1)



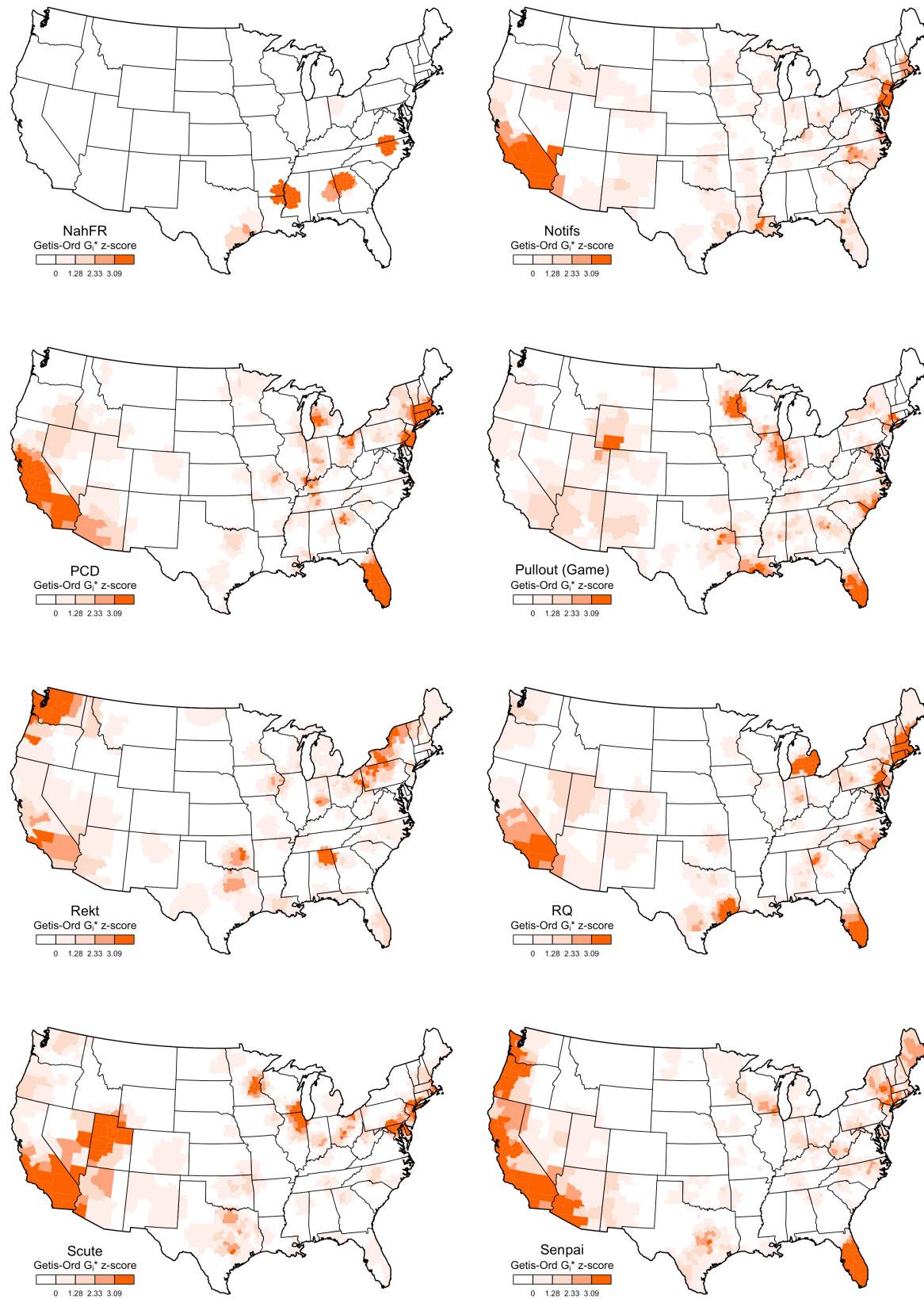
Appendix II: Local Spatial Autocorrelation Maps (Part 2)



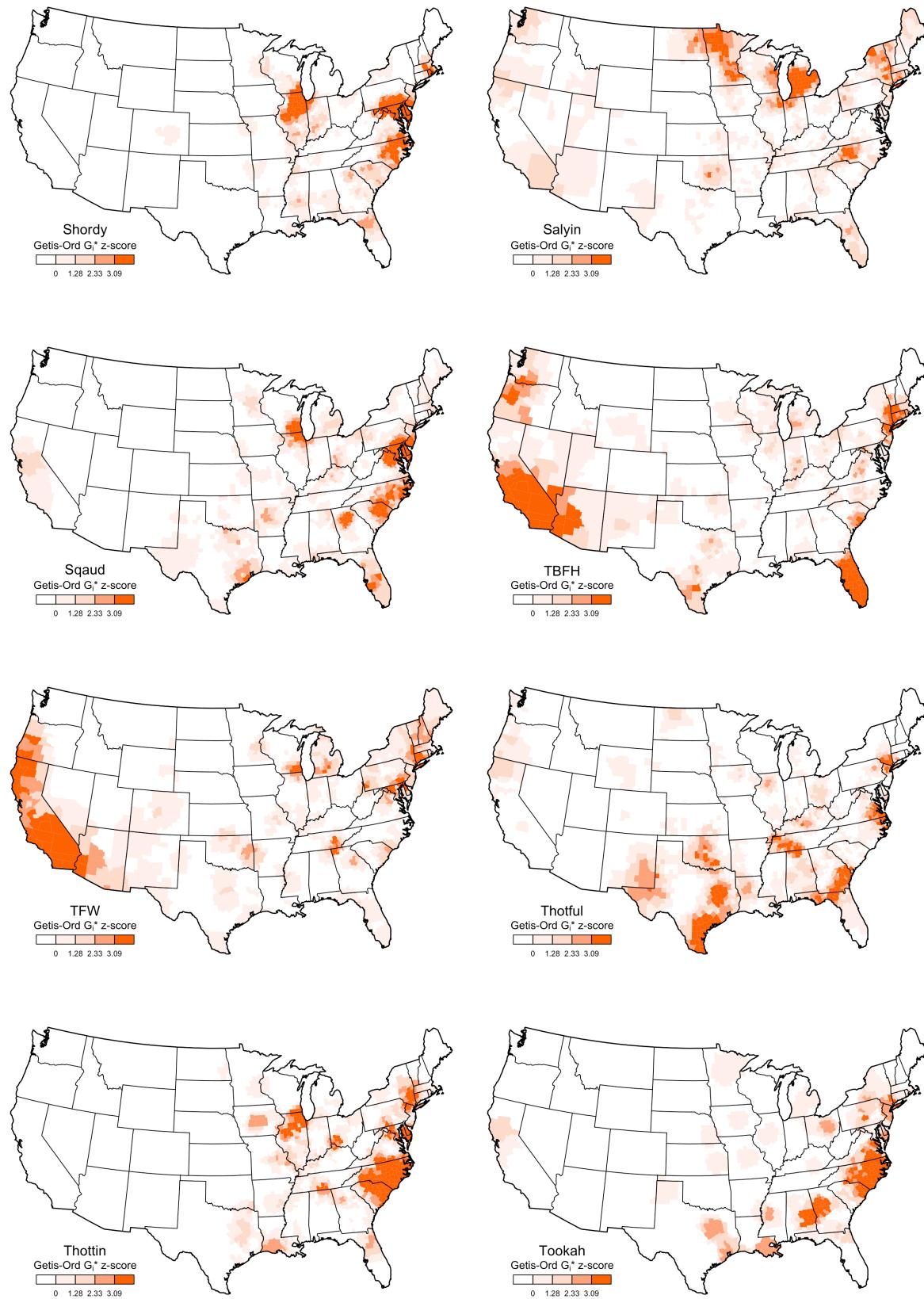
Appendix II: Local Spatial Autocorrelation Maps (Part 3)



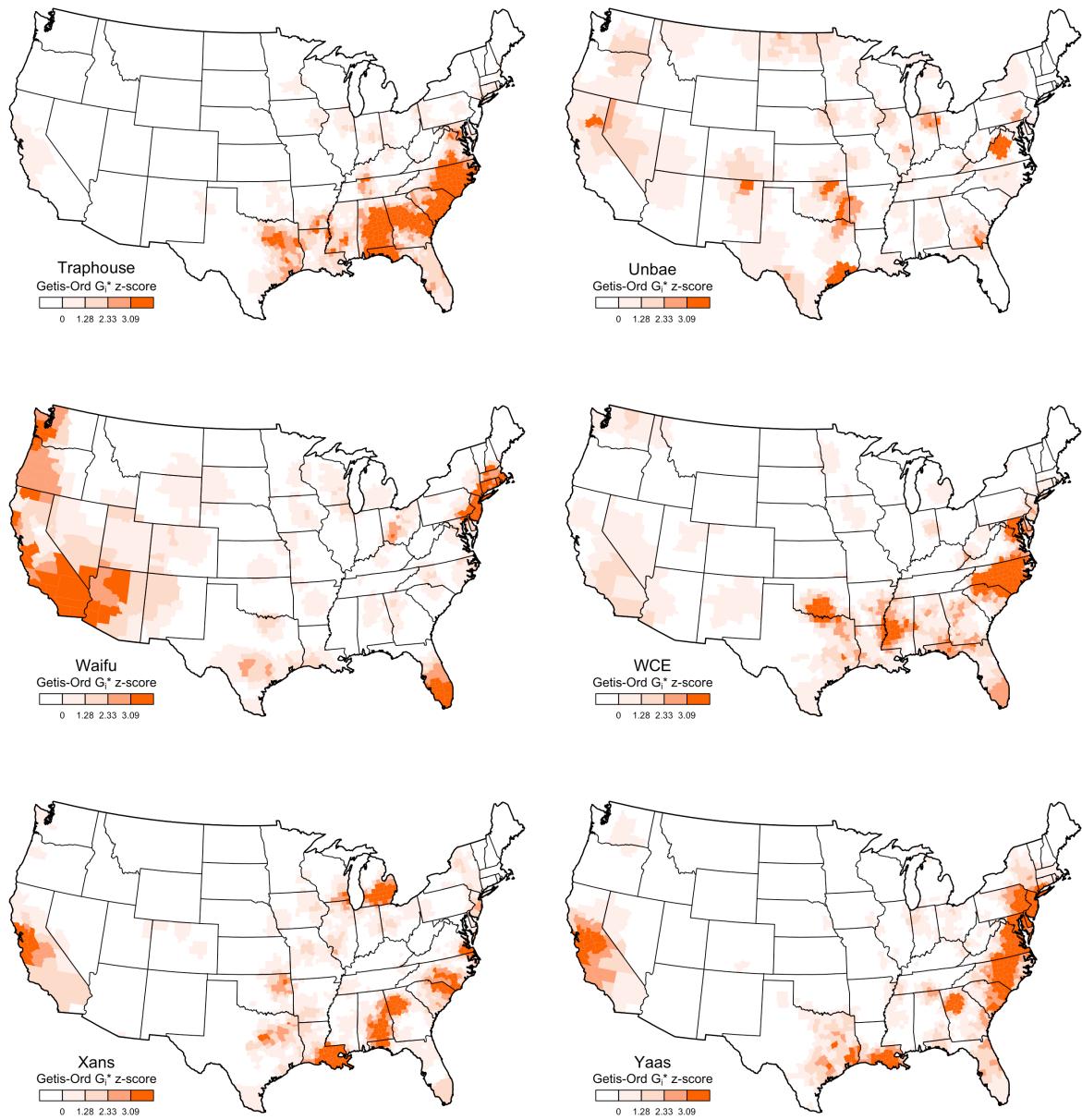
Appendix II: Local Spatial Autocorrelation Maps (Part 4)



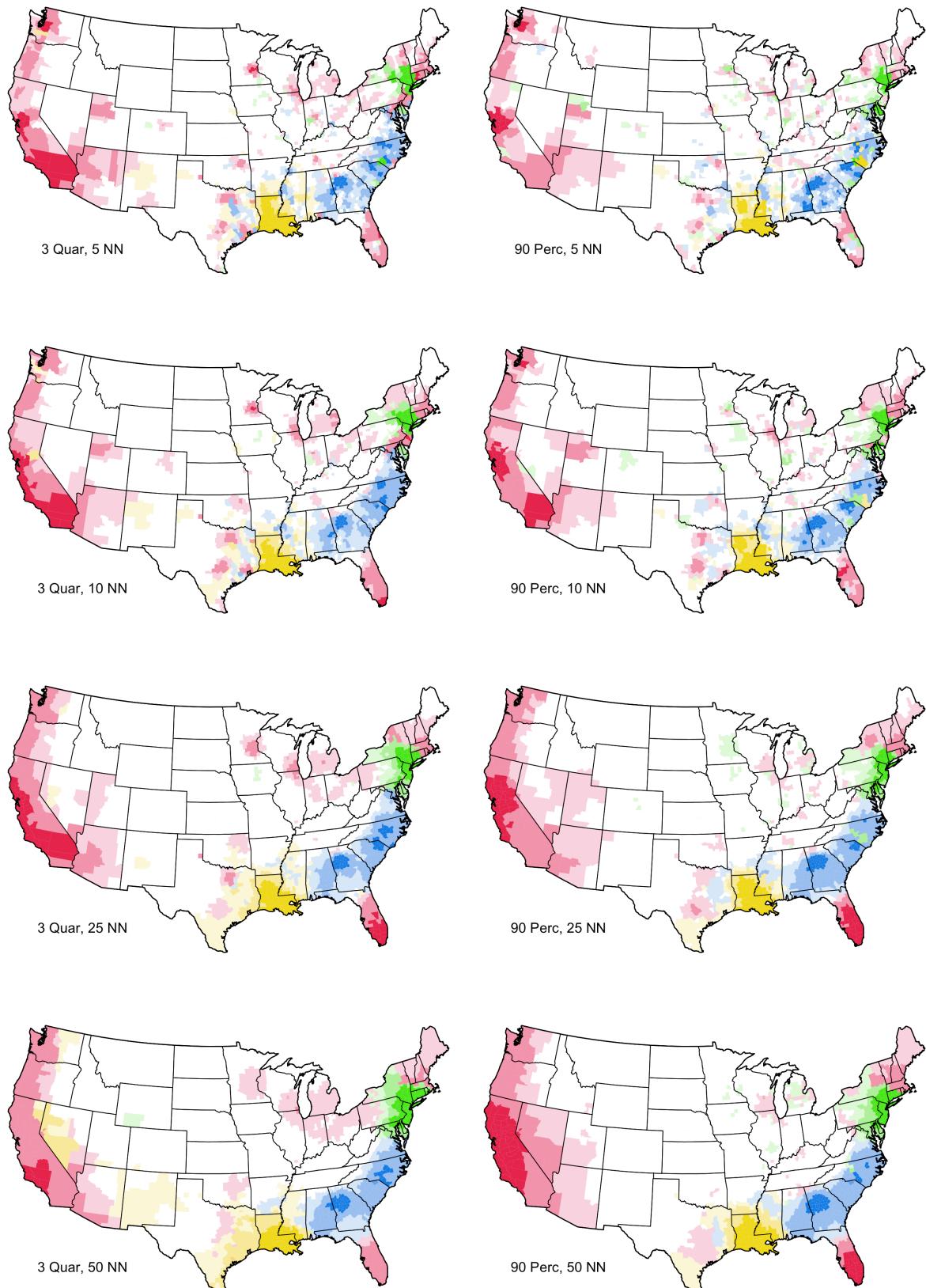
Appendix II: Local Spatial Autocorrelation Maps (Part 5)



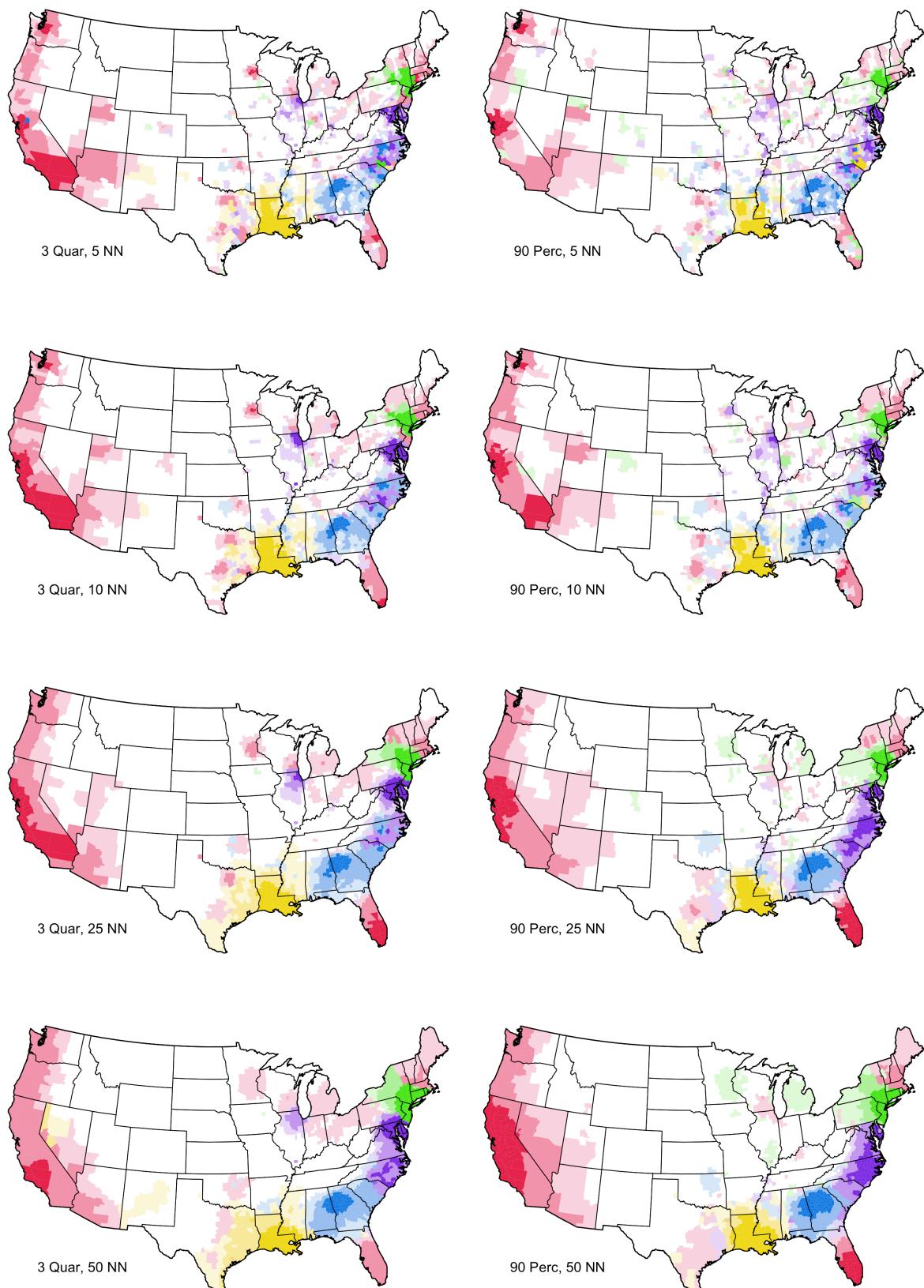
Appendix II: Local Spatial Autocorrelation Maps (Part 6)



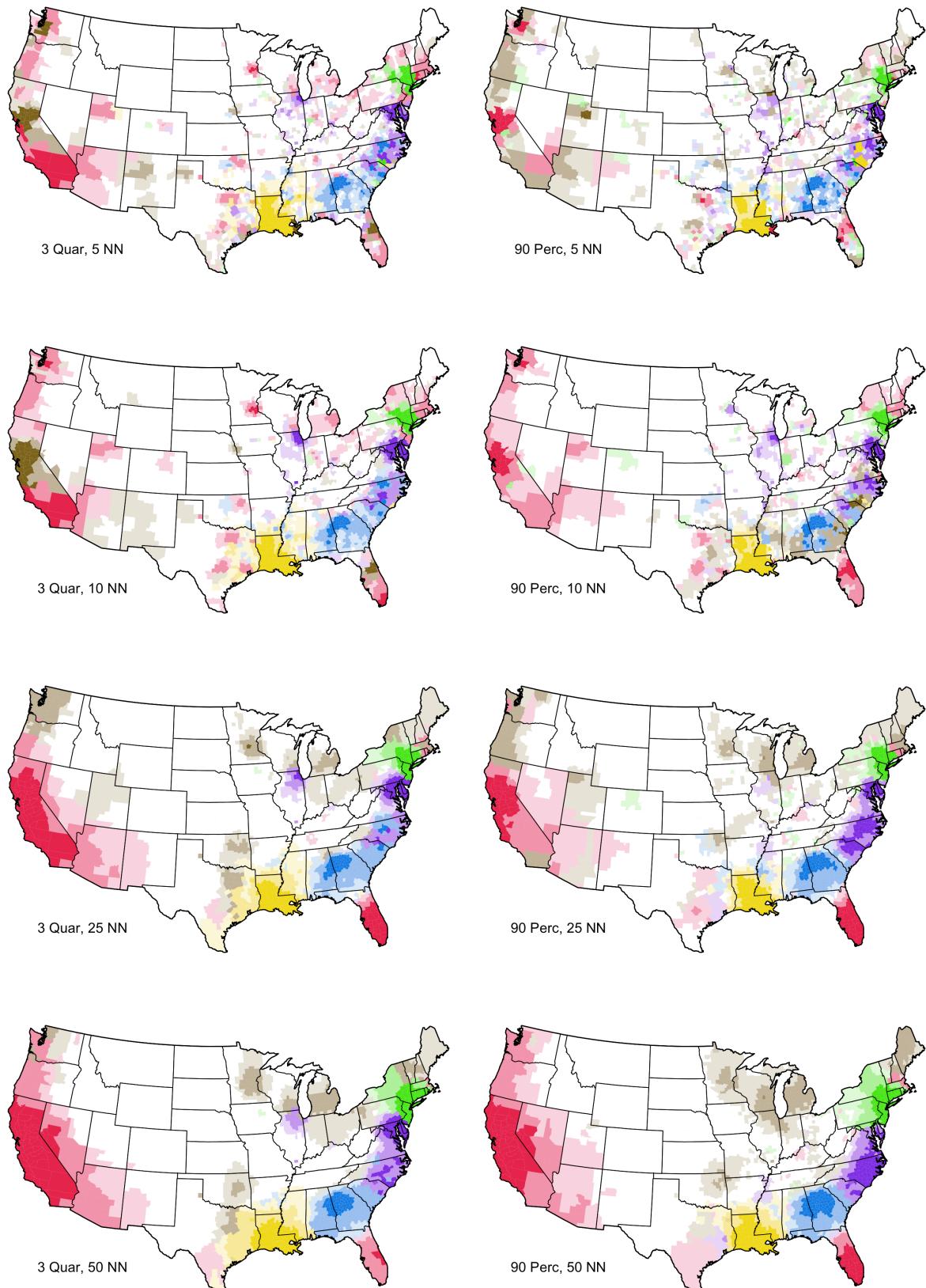
Appendix II: Local Spatial Autocorrelation Maps (Part 7)



### Appendix III: Multivariate Spatial Analysis (4 Dimensions)



### Appendix III: Multivariate Spatial Analysis (5 Dimensions)



### Appendix III: Multivariate Spatial Analysis (6 Dimensions)