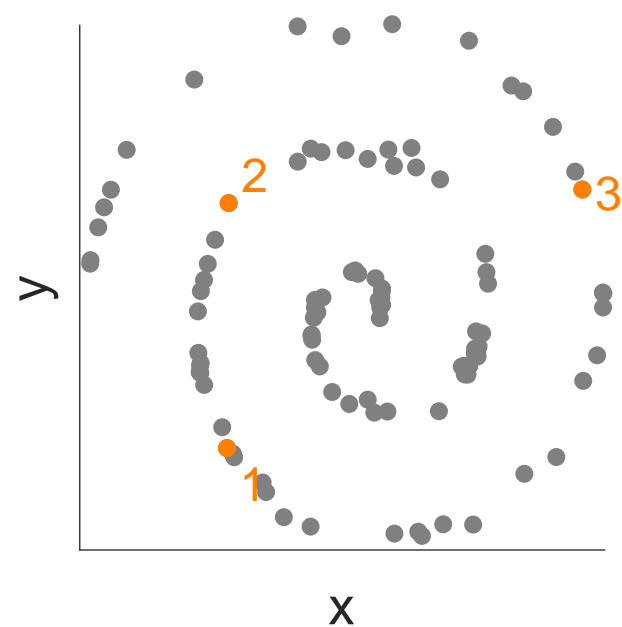
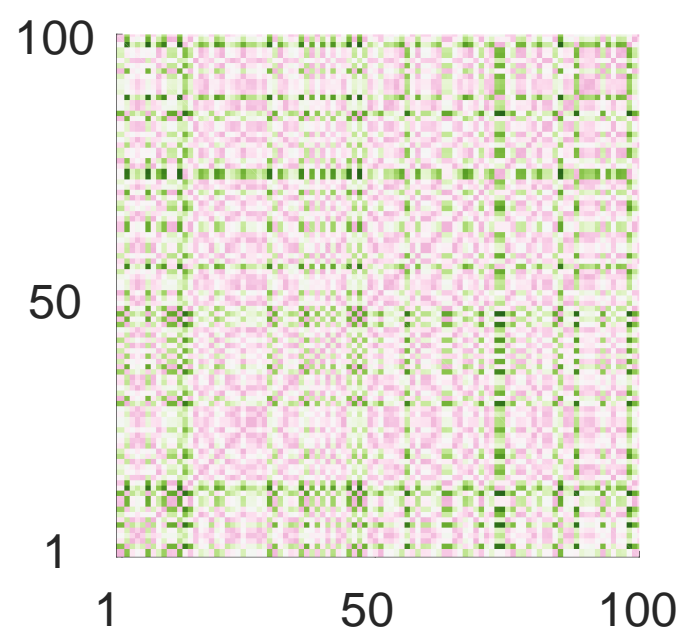


## 0. Sample Data



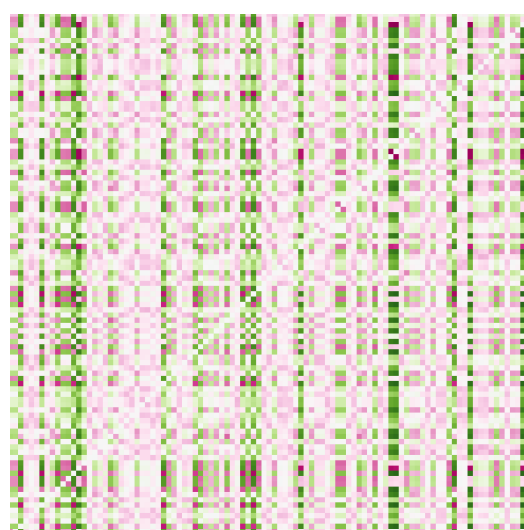
## 1. Mantel (pairwise distances)

$A$



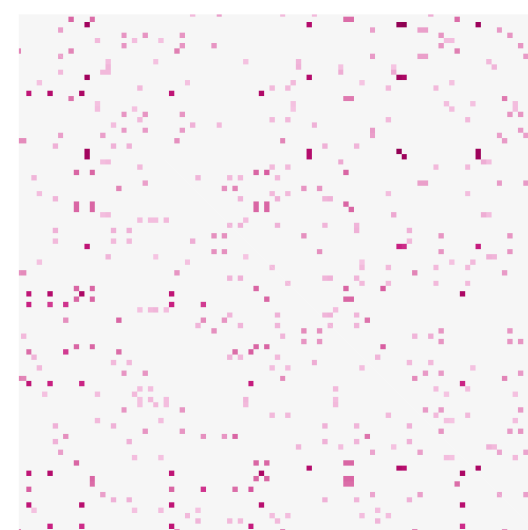
## 2. Mcorr (single center)

$A$



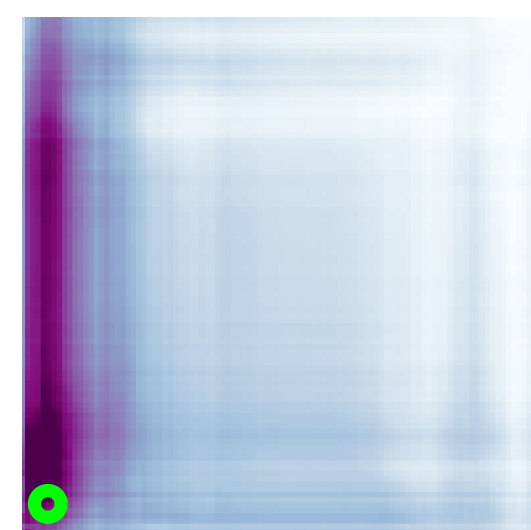
## 3. MGC<sup>k,l</sup> (local scale)

$A^k$



## 4. Multiscale Maps (all scales)

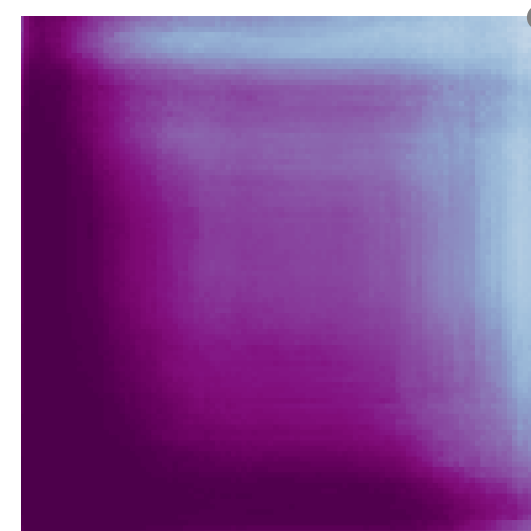
Test Statistics



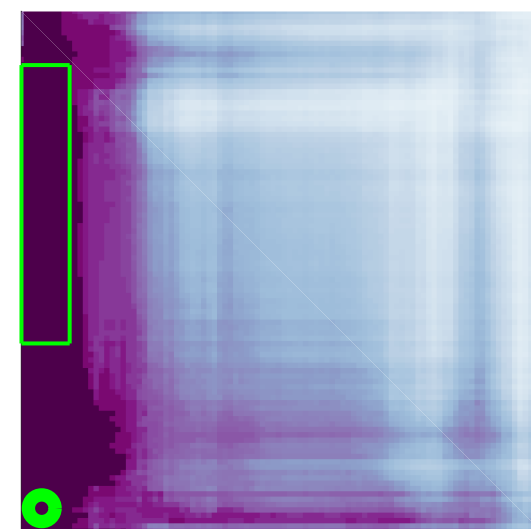
# Y Neighbors

# X Neighbors

Powers



P-Values



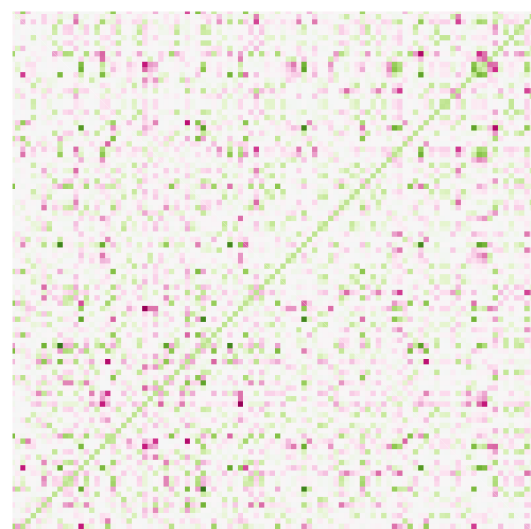
0.11  
0.055  
0

1  
0.5  
0

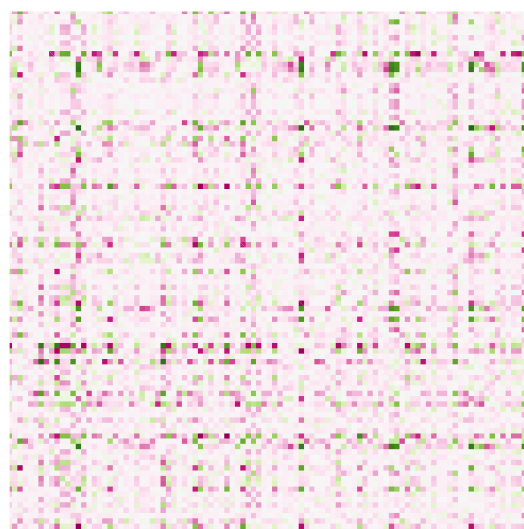
0.5  
0.1  
0.01  
0.001

$$\tilde{C} = \tilde{A} \circ \tilde{B}$$

15  
10  
5  
0  
-5  
-10  
-15



$$C = A \circ B$$



$$C^{kl} = A^k \circ B^l$$

