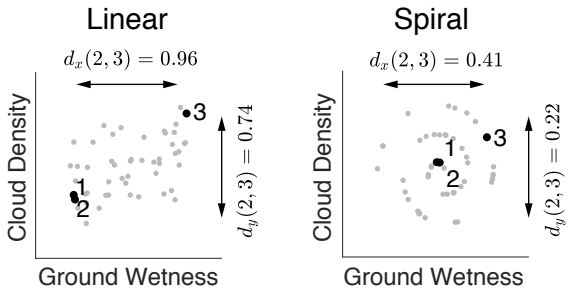
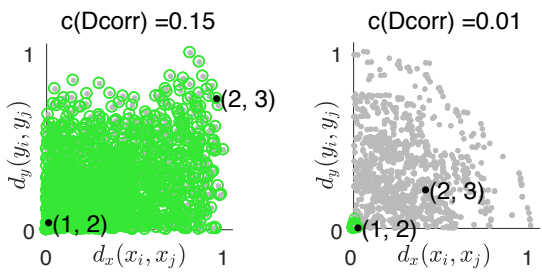
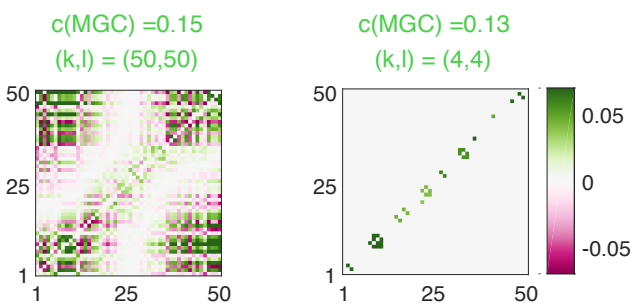



**A.** Compute the distances between all pairs of $x_i$, and all pairs of $y_i$. Denote those distances by $d_x$ $(x_i,x_i')$ and $d_y(y_i,y_i')$, respectively.




**B.** Compute the local generalized correlation between $d_x$ and $d_y$, i.e., only including $(k,l)$ smallest values for each sample, and find max.




**C.** Determine whether the relationship is significant and characterize the geometry of the relationship.