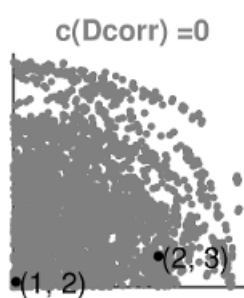
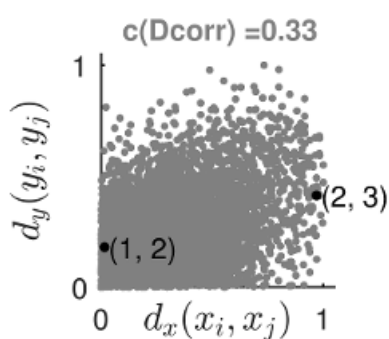
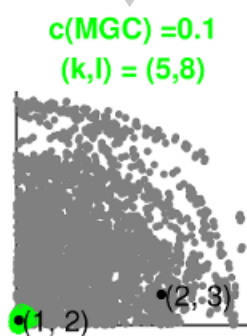
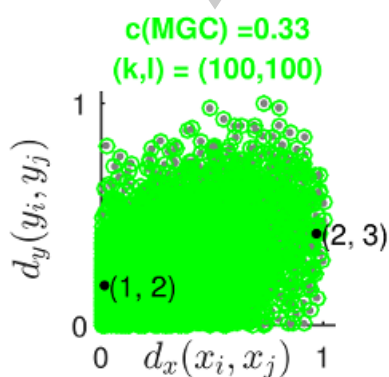


**(A)** Compute the distances between all pairs of  $x_i$ , and all pairs of  $y_i$ . Denote those distances by  $d_x(x_i, x_j)$  and  $d_y(y_i, y_j)$ , respectively.



**(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.

