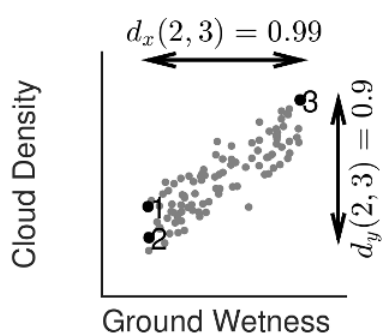
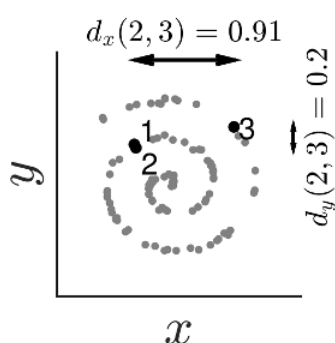


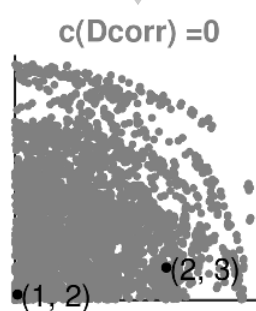
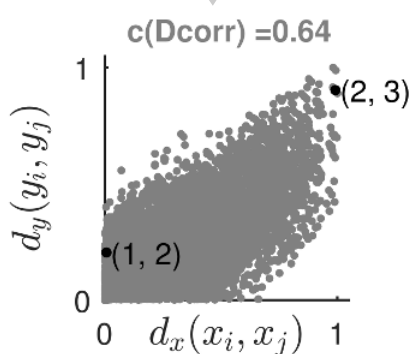
## A. Linear



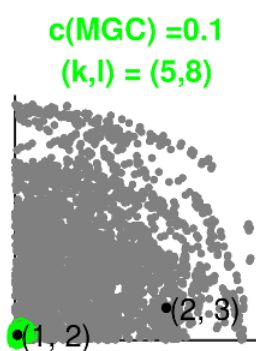
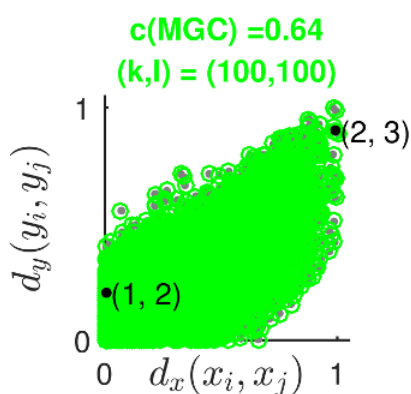
## B. Spiral



(i) Compute the distances between all pairs, specifically all pairs of  $x_i$ ,  $d_x(x_i, x_j)$ , and all pairs of  $y_i$ ,  $d_y(y_i, y_j)$ .



(ii) Find max local correlation between  $dx$  and  $dy$ , i.e., only including  $(k, l)$  smallest values for each sample



(iii) Compute the p-value via permutation test, determine the informative scales (those with small p-values)

