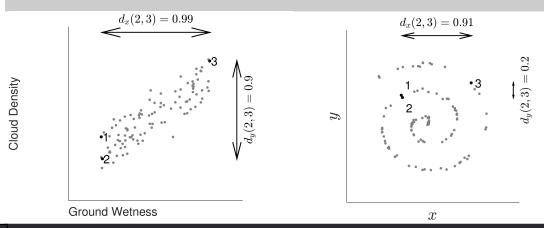
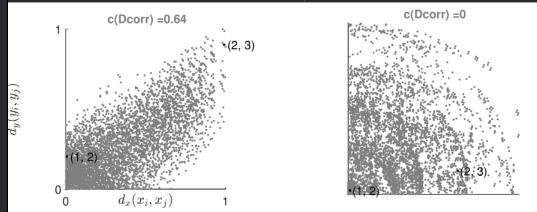
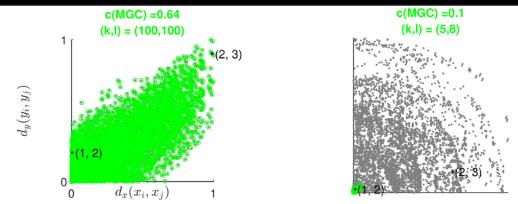
## Obtain n samples of cloud shape on day $i(x_i)$ and grass wetness on day $i(y_i)$ .



## Step i: Compute the distances between all pairs, specifically all pairs of $x_i$ , $d_x(x_i, x_{i'})$ , and all pairs of $y_i$ , $d_y(y_i, y_{i'})$ .



## Step ii: Find max local correlation between $d_x$ and $d_y$ , i.e., only including (k,l) smallest values for each sample.



0.1

0.01

0.001

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

