

In this paper it is shown a process to demarcate areas with analogous wind conditions. For this purpose the daily mean wind directions of 88 measuring stations, located in Andalusia, from 2005 to 2008 were utilized. A dispersion graph between wind directions of two random days will be traced for all stations placed in the studied zone. These distributions will be compared among themselves using the hierarchical clustering algorithm. This information will be used to build a matrix, letting us work with all relations simultaneously. By permutation of elements in this matrix it is possible to group related stations. Although the permutation of rows and columns to put in order the matrix seems to be a simple problem; the reality proves that this process could be compared with a Rubik cube, since the order in a part of the matrix could involve the disorder in other one. We propose to resolve this problem using genetic algorithms (GA).