

K-Means Algorithm

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Questions

What is an appropriate value for K?

There is no existing method which can tell the exact value of K. But there are some methods which can tell the quality of clusters. One such method is inertia which tells how far away the points within a cluster are. Having a small value of K and a small value of inertia is good for clustering. The value of inertia is inverse proportional to the value of K. So the elbow point of the inertia graph is a good choice because after that the change of inertia value is not significant.

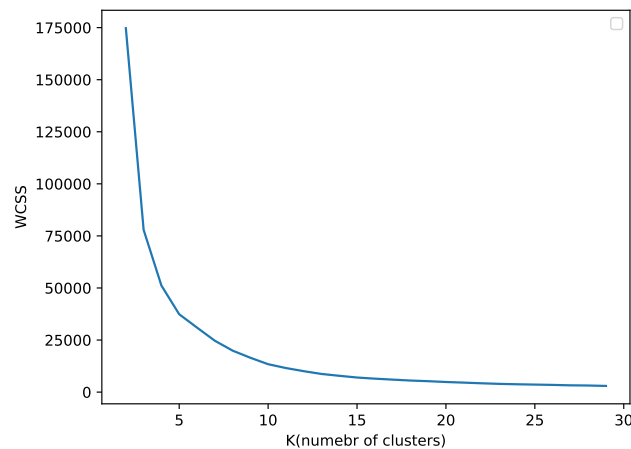


Figure 1: Elbow point

Do you believe the output of the clustering is meaningful?

I think clustering is meaningful. Cluster analysis is an exploratory analysis which tries to identify structures within the data to find a homogeneous group of cases. In our case from the cluster learning, we can infer that the time when the weather pattern is very much close.