
Subject: Re: KMean Clustering of RGB Images
Posted by [Mort Canty](#) on Tue, 08 May 2007 13:13:38 GMT
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helaha@gmx.net schrieb:

> Recently I tested the Kmeans clustering of an RGB image with the
> CLUSTER and CLUST_WTR commands.
> The results were not very promising, because they depended on the
> image orientation and on the number of image pixels.
> I'm not a specialist in clustering, but in my opinion the results
> should be identical, especially regardless of the order of the data
> points.
>

Not sure what you mean by "order of the data points". But any clustering algorithm that minimizes a cost function (like k-means) can get trapped in a local minimum. The IDL help for CLUST_WTR says

"Because the initial clusters are chosen randomly, your results may differ slightly each time the CLUST_WTS routine is invoked, even for the same input data. For data with well-defined clusters the differences should be slight. For randomly-scattered data (no distinguishable clusters), the results may be significantly different, which may indicate that k-means clustering is not appropriate for your data."

- Mort
