Subject: Re: Clsuter analysis wiht IDL
Posted by Benno Puetz on Wed, 28 Feb 2001 17:09:36 GMT
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Dorthe Wildenschild wrote:

> I am trying to use the cluster analysis utility in IDL, and I can't work it
> out. Perhaps due to my lack of knowledge in the statistical field.....
>
> I have a 2D-image (658x658) with a single band of info (CT x-ray
> intentities) that I want to classify (into three classes) using cluster
> analysis. I assume I have to use the CLUST_WTS function first and then the
> CLUSTER function, but I can't work it out.
> The on-line help isn't very helpful on this topic....
>
> If I use
> weights = clust_wts(image, n_clusters=3), with image= intarr(658x658) I get
> alot of floating errors.
> Do I need to reform the image to (658x658,1) before using the clust_wts
> function? Doesn't seem to work either, though.

What you want is probably REFORM the image to (1,658x658), one variable (intensity) and 432964 observations (pixels)

Using three clusters you will (likely) end up with one for background and two for low and high intensities in the CT image, respectively, ...

> Also how do I get the
> cluster numbers back as an overlay of my image? so that I can actually see
> the result of the classification.

use something like

```
ref_img=REFORM(image,1,658*658)
weights = clust_wts(ref_img, n_clusters=3)
cls=cluster(ref_img,weights,n_cluster=3)
tvscl,reform(cls,658,658)
```

and you should have the clusters in different grays (or colors, depending on your settings)

>
>
> Has anybody worked on cluster analysis using IDL?
>

Your question showed me that such a command exists in IDL ...

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