
Subject: Re: Clustering x,y coordinates with IDL?
Posted by [Mort Canty](#) on Mon, 29 Mar 2010 15:38:08 GMT
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Am 29.03.2010 11:44, schrieb Maxwell Peck:

> Hi All, This is not strictly an IDL question but I'm hoping it's
> something simple to do and I'm not missing something painfully
> obvious!
>
> I have a set of x,y values e.g.
>
> x = [34.5,36.7,35.6,80.5,81.2,79.3]
> y = [50.6,51.2,53.2,48.5,50.3,51.2]
>
> The values will be sparsely clustered overall but tightly within an
> approximate 10x10 box. What I'd like to do is replace each clusters
> values with the average x,y value. This doesn't have to be 'perfect',
> the edges aren't that important.
>
> My initial thought was to use hist_2d or hist_nd to try and calculate
> the 2d histogram with a binsize of 10 and use this to average the
> values but I can't get it to work. My other thought was using griddata
> or something similar, or at worst generating an approximate binary
> image and running a window over it.
>
> Any advice or suggestions would be appreciated.
>
> Regards
>
> Max
>

The IDL function CLUSTER() implements k-means clustering. I think that's what you want.

Mort
