Subject: Re: Clustering x,y coordinates with IDL?
Posted by Maxwell Peck on Mon, 29 Mar 2010 20:20:17 GMT
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On Mar 30, 2:38 am, Mort Canty <m.ca...@fz-juelich.de> wrote:
> 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

Thanks Mort. I had seen this I am concerned though about how it will deal with single/a few points as opposed to real 'clusters'. Also the distance with which points are considered to be a cluster as well is concerning. I will give it a bash anyway and see how it looks. I had thought there must be a nice way to do it with histogram but I just can't get it to work.

Regards