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Subject: Re: Need Some Advice on Seperating Out Some Data  
Posted by [btt](#) on Tue, 08 Aug 2006 20:57:28 GMT

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rdellsy@gmail.com wrote:

> I considered that. Unfortunately, ambient conditions can vary the x and  
> y positions of the data by as much as a factor of ten. That is why I am  
> trying to figure out a method to compute it on the fly, since going  
> through the process for just five movies can take up to half an hour,  
> and dealing with fifty movies can be a full day's work.  
> Thanks,  
> Rob

>

> adisn123@yahoo.com wrote:

>> I used to have a similar problem. One of the simplest thing that I did  
>> was using a simple  
>> linear equation such as  $y = ax + b$ .  
>>  
>> Overplot the linear equation in your original plot in such a way that  
>> the linear line is placed  
>> just above the red polygon (the data points that you want to throw out)  
>> then  
>>  
>> simply you can throw out whatever the y values are below the linear  
>> line.

>>

>>

>>

>>

>>

>> rdellsy@gmail.com wrote:

>>> <http://photos1.blogger.com/blogger/4016/2263/320/graphroi.png>

>>>

>>> The above is a plot of my data (minus the red polygon). I need to  
>>> separate the data inside the red polygon (real data) from the data  
>>> outside the red polygon (noise, for lack of a better term) All of these  
>>> points are already contained in an array. I'm just trying to figure  
>>> out a way for the computer to automatically figure out what is noise  
>>> and what isn't based on that plot distribution. Each data set is  
>>> slightly different, but has the same overall distribution, and, for  
>>> properly dialed in data, there is always that characteristic separation  
>>> between the good stuff and the bad stuff. Currently, we are manually  
>>> setting x-boundaries and y-boundaries on our data.

Hi,

Just an end-of-the-day wildcard, but I would bin the data into a 2d  
histogram (ala JD's HIST\_ND or the built-in HIST\_2D). Then I would try

to find the "saddle" between the data and noise. You'll have to fiddle with the binsize a bit to balance "lumping" and "splitting" - maybe that can be done dynamically. I dunno. But it should be quick.

It is an interesting problem that we have face here with flow cytometry - but we work the region manually as you do. I'll be interested to see what your final solution is.

Cheers,  
Ben

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