Subject: Re: isodensity contours
Posted by pgrigis on Wed, 23 Feb 2011 20:24:10 GMT
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On Feb 23, 3:06 pm, Gray <graylikethec...@gmail.com> wrote:
> On Feb 23, 2:12 pm, Paolo <pgri...@gmail.com> wrote:
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>> On Feb 23, 1:24 pm, Gray <graylikethec...@gmail.com> wrote:
>
>>> Hi all,
>
>>> I have a scatterplot with a bunch of points on it. I'd like to plot
>>> isodensity contours to include 99%, 90%, 75%, and 50% of my points.
>>> How do I set up my data to give to cgContour? Thanks!
>
>>> --Gray
>
>> If I understand this correctly, you have two arrays
>> x and y of coordinates of N points.
>
>> To contour them, you need first to create a
>> density array from your dataset - basically
>> you divide the xrange and yrange of your data
>> in a number of bins and the density array will
>> tell you how many points lie in each bin.
>
>> Then you can use the normal contour procedures.
>
>> So how you do partition the data into the density
>> array? hist_2d will do that for you.
>
>> Ciao,
>> Paolo
>
> I thought I posted this already... if it shows up twice, I'm sorry.
>
> Upon further reflection, I think that "isodensity contours" are not
> exactly what I want, though I may need to use them anyway (as
> described by Paolo) if I can't figure out a way to do EXACTLY what I
> want.

>
> Here's some more detail on my issue. I have a plot for which the x-
> axis is stellar magnitude in one image, and the y-axis is stellar
> magnitude in a different image. I have two populations of stars (pop
> A and pop B). Pop A is pretty clustered, but the cluster is sort of
> smeared out so I can't use a simple centroid. I'd like to see where
> the pop B stars lay on the plot in relation to the pop A stars by
> plotting contours showing what percentage of pop A stars are within
> them (99%,90%,75%,50%). Is this doable without getting really
> complicated, or should I use the isodensity contours instead?
>
> An example image is athttp://tinypic.com/r/2mepz4/7
> The black points are pop A and the colored symbols are pop B.
>
> Thanks for your help!
>
> --Gray

I would at least try to get the density for the pop A
stars - will take only a few minutes to do. You may want
to smooth the contours a bit. But it looks like it should
come out reasonably well...

Ciao,
Paolo
